

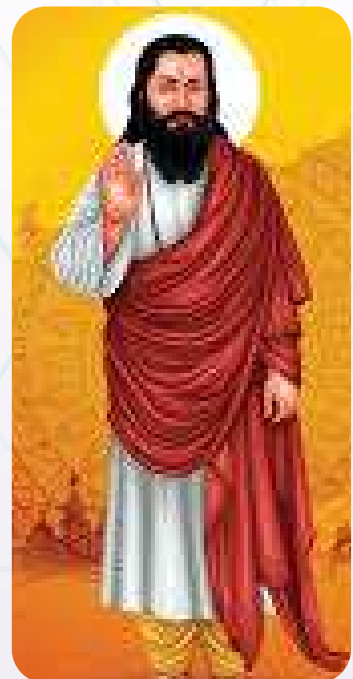


SHAPING TALENT SINCE 2009

MONTHLY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

FEBRUARY 2025



$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

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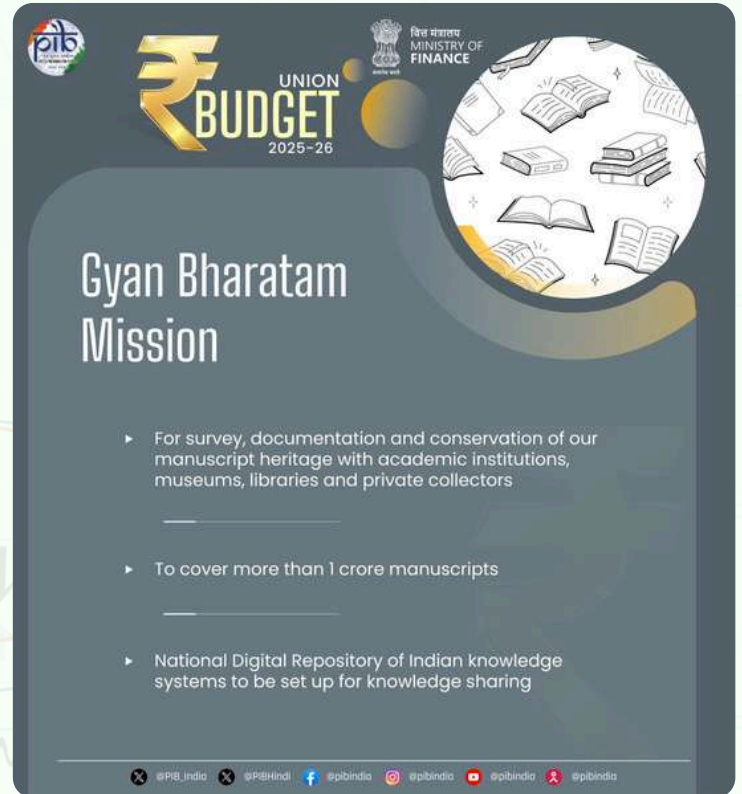
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Gyan Bharatam Mission

Context: The Union Budget 2025-26 introduced the Gyan Bharatam Mission to preserve India's manuscript heritage.

About the Mission:

- Aims to survey, document, and conserve manuscripts held by institutions, museums, libraries, and private collectors.
- Targets over 1 crore manuscripts for long-term preservation and accessibility.
- Promotes India's literary and intellectual heritage on a global scale.
- Revives the National Manuscripts Mission (NMM), launched in 2003 but largely inactive.
- Budget increased from ₹3.5 crore to ₹60 crore in the 2025-26 budget.
- Implemented by the Ministry of Culture.



What are Manuscripts?

- Handwritten documents on materials like paper, bark, and palm leaves.
- Must be at least 75 years old and hold scientific, historical, or aesthetic significance.
- Written in ancient scripts like Brahmi, Kushan, Gaudi, Lepcha, Maithili, Grantha, and Sharada.

Dokra Metal Craft

Context: During the AI Summit in Paris, Prime Minister Narendra Modi gifted a Dokra artwork to French President Emmanuel Macron, highlighting India's rich handicraft heritage.

About Dokra Metal Craft:

- Named after the Dhokra Damar tribes, traditional metal smiths of Central India.
- Uses the lost-wax casting technique, a non-ferrous metal casting method.
- Dates back over 4,000 years, with roots in the Indus Valley Civilization (e.g., Mohenjo-daro's Dancing Girl figurine).
- Recognized for folk motifs, handcrafted designs, and primitive simplicity without joints.
- Found in Jharkhand, Chhattisgarh, Odisha, West Bengal, Telangana, Madhya Pradesh, Rajasthan, and Tamil Nadu.
 - Geographical Indication (GI) tags: Adilabad Dokra (Telangana) - 2018
 - Dokra craft from West Bengal - 2018



Dokra Metal Craft:

Key Features:

- Unique Pieces: Each artwork is one of a kind, as the mould is destroyed after casting.
- Handcrafted Metalwork: Made from brass and copper-based alloys.
- Intricate Designs: Includes elephants, horses, deities, lamps, jewellery, and tribal motifs.

The Buddhist Relics of Ratnagiri

Context: Recent archaeological excavations at Ratnagiri, Odisha, have uncovered significant artefacts, highlighting its rich Buddhist heritage.

About Ratnagiri:

- Located in Jajpur district, Odisha, surrounded by the Brahmani, Kimiria, and Birupa rivers.
- A major Buddhist site, known for its monasteries, stupas, and sculptures.



Historical Significance:

- Ratnagiri means "Hill of Jewels" and thrived as a Buddhist center from the 5th to 13th centuries CE.
- Played a crucial role in the development of Vajrayana (Tantrayana) Buddhism.

Key Archaeological Findings:

- Buddha Head (1.4m tall): The largest ever found in Odisha, possibly all of India.
- Votive Stupas: Arranged in sequence, indicating its role as a pilgrimage site.
- Monasteries & Stupa: Two monasteries and a central shrine complex used for religious practices.
- Stone Tablets & Inscriptions: Written in Kutila script (Siddhamatrika), confirming deep Buddhist ties.
- Buddhist Sculptures: Features deities like Amoghasiddhi, Ratnasambhava, Akshobhya, Amitabha, Tara, and Marici.
- Brick & Stone Structures: Showcases advanced ancient masonry.
- Unique Shrine Complex: Unlike chaitya grihas, Ratnagiri has a distinct shrine structure with arranged votive stupas.



Kalyana Chalukya Era Inscriptions

Context: Three Kannada inscriptions from the Kalyana Chalukya era (12th century CE) were discovered for the first time in Kankal village, Telangana.

About the Inscriptions:

- Dated 1129 CE, 1130 CE, and 1132 CE, during the reign of Emperor Someswara-III Bhulokamalla.

First Inscription:

- Mentions the construction of the Bijjeswara Temple and consecration of a Shivalinga.
- Records a land donation (100 martars) by a local chief.

Second & Third Inscriptions:

- Document land and cash donations made to the Bijjeswara temple.



About the Kalyana Chalukyas (Later Western Chalukyas):

- **Dynastic Background:** One of the three Chalukyan dynasties:
 - Chalukyas of Badami (6th-8th century CE).
 - Eastern Chalukyas of Vengi (7th-12th century CE).
 - Western Chalukyas (Kalyana Chalukyas) (10th-12th century CE).
- **Founder: Tailapa II, who overthrew the Rashtrakuta ruler Kakka II (Karaka)**
 - **Territorial Control:** Ruled the Western Deccan from the 10th to 12th century CE.
 - **Capital:** Kalyan (present-day Bidar district, Karnataka).
 - **Notable Rulers & Achievements:** Vikramaditya VI (1076-1126 CE): Most powerful ruler, started the Chalukya Vikrama era.
 - **Someswara I & III:** Expanded the empire's territory and cultural influence.
 - **Jayasimha II:** Stabilized the empire after the fall of the Rashtrakutas.
 - **Decline:** After Vikramaditya VI's death, conflicts with the Cholas led to internal rebellions and a rapid decline under Jagadhekamalla II.

Sant Ravidas

Context: On Guru Ravidas Jayanti, President Droupadi Murmu extended greetings, urging people to follow his teachings of equality and social justice.

About Sant Ravidas:

- A 15th-16th century saint and reformer of the Bhakti movement.
- Advocated unity, devotion, and selfless service to humanity.
- Disciple of Jagatguru Ramanand, a renowned spiritual leader.
- Founder of Ravidassia Religion, which emphasizes equality and devotion.
- Promoted Nirguna Bhakti—worship of a formless God, rejecting idol worship.
- Contemporary of Sant Kabir, another prominent Bhakti saint.
- Taught Sahaj, a mystical philosophy representing spiritual harmony.
- Opposed the caste system, advocating that social and spiritual status should not be based on birth.



Context: The Annual Status of Education Report (ASER) 2024 has been released, assessing children's schooling and learning levels in rural India.

About ASER Survey:

- A citizen-led, household-based survey, not school-based.
- Uses the 2011 Census framework to sample 30 villages per district, covering about 300,000 households nationwide.
- Assesses basic literacy and numeracy among 6.5 lakh children aged 3-16 years.
- Conducted by the ASER Centre in partnership with the NGO Pratham.



Key Findings of ASER 2024:

Foundational Literacy & Numeracy (FLN):

- Many students in Classes 3 and 5 still struggle to read a Class 2-level text or solve basic math problems.

Government School Enrollment:

- Enrollment rates have returned to pre-pandemic levels.
 - 2018: 65.6% (Govt. schools)
 - 2022: 72.9% (Rise due to pandemic disruptions)
 - 2024: 66.8%

Reading Skills:

- Slow recovery in reading post-COVID, but major gaps remain.
 - Class 3: 23.4% can read a Class 2-level text (up from 20.9% in 2018).
 - 76.6% of Class 3 students still unable to read simple texts in their native languages.

Basic Numeracy Skills:

- Improvement in arithmetic skills, but gaps persist.
 - Class 5 students solving division problems: 30.7% (2024) vs. 27.9% (2018).
 - Nearly 70% of students still struggle with basic math.

State-wise Performance in Reading:

- 4-5.9% increase: Himachal Pradesh, Bihar.
- 6-9.9% increase: Odisha, Haryana, West Bengal, Jharkhand.
- 10%+ increase: Uttarakhand, Maharashtra, Odisha, Uttar Pradesh.
 - Uttar Pradesh: Biggest jump—from 12.3% in 2018 to 27.9% in 2024.

Digital Literacy:

- 89% of teenagers (14-16 years) have smartphone access at home.
- 31.4% own a personal phone.

Conclusion:

While there is gradual progress in learning levels, foundational literacy and numeracy gaps remain significant. Efforts to strengthen early education and digital accessibility are crucial for future improvements.

Soliga Tribe: Guardians of BRT Tiger Reserve

Context: The Prime Minister praised the Soliga Tribe for their efforts in tiger conservation and biodiversity protection in the Biligiri Rangaswamy Temple (BRT) Tiger Reserve, Karnataka.

About the Soliga Tribe:

- **Location:** Inhabit the BRT Tiger Reserve (Karnataka) and the Cauvery Basin across Tamil Nadu and Karnataka.
 - **Cultural Significance:** The name "Soliga" means "Children of Bamboo," highlighting their deep connection with nature.
 - They believe they originated from nature, fostering a harmonious relationship with forests.
- **First Tribal Community in India to have their forest rights recognized within a tiger reserve.**
- **Language:** Speak Sholaga (a Dravidian language) and are also fluent in Kannada and Tamil.
 - **Religious Beliefs:** Follow Hindu traditions, blended with naturism and animism, reflecting their spiritual bond with nature.
- **Traditional Livelihood:** Practice shifting cultivation and depend on minor forest produce for survival.
 - Honey collection is an essential part of their diet, and they forage extensively in the biodiversity-rich Western Ghats.



Significance:

The Soliga Tribe's sustainable practices showcase their eco-friendly lifestyle, making them key contributors to forest conservation.

Stampede and Crowd Management

Context:

A stampede at New Delhi Railway Station recently claimed 18 lives, highlighting the need for better crowd management strategies.





What is a Stampede?

A stampede is a mass impulsive movement triggered by panic or fear, often leading to injuries or fatalities.

Types of Stampedes:

1. **Unidirectional Stampede:** Occurs when a moving crowd faces sudden resistance, altering its momentum.
2. **Turbulent Stampede:** This happens when crowds merge from different directions, often due to panic.

Psychology of Stampedes:

- **Craze Behavior:** A desire-driven movement where people rush toward a goal (e.g., free giveaways, religious offerings).
- **Black Hole Phenomenon:** Physical force transmission among densely packed individuals can create "force chains", leading to sudden collapses.

Factors Leading to Stampedes:

- **Panic & Fear:** Rapid spread of fear-driven movements leads to chaos. (e.g., Hathras Stampede, 2024)
- **High Crowd Density:** More than 4 people/sq. meter significantly increases stampede risk. (e.g., Vaishno Devi, 2022)
- **Poor Crowd Management:** Lack of coordination between security, event organizers, and authorities worsens crisis response. (e.g., Maha Kumbh Mela, 2015)
- **Rumors & Misinformation:** False alarms like bomb threats or structural collapses incite sudden panic. (e.g., Chamunda Devi Temple, 2008)

Impact of Stampedes:

- **Loss of Lives & Injuries:** Crushing and suffocation cause mass casualties.
- **Psychological Trauma:** Survivors often suffer from PTSD and anxiety.
- **Infrastructure Damage:** Barriers, bridges, and temporary structures collapse, causing financial losses.
- **Public Trust Erosion:** Failure to manage crowds leads to public outrage and political backlash.

Status of Stampedes in India:

- NCRB (2000-2013): Nearly 2,000 deaths due to stampedes.
- IJDRR Study (2013): 79% of stampedes occurred at religious gatherings.

NDMA Guidelines for Crowd Management:

- Capacity Planning: Monitor visitor flow, provide adequate facilities, and establish multiple exit routes.
- Hazard, Risk & Vulnerability Analysis (HRVA): Identify high-risk zones and develop mitigation plans.
- Live Surveillance & Monitoring: Use CCTV, AI-based crowd analysis, and real-time alerts.
- Inter-Agency Coordination: Police, local administration, and medical teams must work together.
- Emergency Preparedness: Ensure on-site ambulances, trauma care units, and trained first responders.
- Public Awareness: Educate attendees on safe crowd behavior and emergency evacuation procedures.

Legal and Constitutional Provisions:

- Article 21: Right to life and personal liberty, ensuring public safety.
- Article 19(1)(b): Right to peaceful assembly, subject to public order regulations.
- Disaster Management Act, 2005: Empowers NDMA, SDMA, and DDMA to manage disasters, including crowd-related incidents.
- Police Act, 1861: Grants law enforcement power to regulate large gatherings.
- Epidemic Diseases Act, 1897: Used to restrict gatherings during health crises (e.g., COVID-19 regulations).

Conclusion:

- Given India's frequent mass gatherings, authorities must enforce strict crowd control, better space design, real-time monitoring, and emergency preparedness to prevent tragedies.

Draft Legal Metrology (Indian Standard Time) Rules, 2025

Context:

The Legal Metrology Division, Department of Consumer Affairs has recently published the Draft Legal Metrology (Indian Standard Time) Rules, 2025, as part of efforts to establish a uniform national time system.

Key Highlights of the Draft Rules:

- **Objective:** To achieve 'One Nation, One Time' by disseminating Indian Standard Time (IST) with millisecond to microsecond accuracy.
- **IST as the Mandatory Reference:** All legal, administrative, and official documents must adhere to IST as the standard time reference.
- **Nationwide Synchronization:** Legal, administrative, and commercial activities must synchronize with IST, with no alternative time references unless specifically permitted.
- **Technology & Infrastructure:** The project aims to develop five Legal Metrology laboratories across India to ensure accurate IST dissemination.
- **Exceptions:** Certain sectors, such as scientific research, astronomy, and navigation, can use alternative timescales (e.g., GMT) but require prior government approval.

About Legal Metrology:

- **Definition:** Metrology is the scientific study of measurement, while Legal Metrology applies legal standards to measurements and measuring instruments.
 - **Legal Framework:** Legal Metrology Act, 2009: Governs the sale, distribution, and certification of packaged goods in India, including export goods, food products, and consumer items.
 - **Regulating Authority:** Director of Legal Metrology oversees inter-state trade and commerce related to weights, measures, and packaged commodities.
 - **State Governments** enforce legal metrology through Controllers and Legal Metrology Officers.
 - **Significance:** Ensures fair trade and protects public safety, consumers, and the environment.

Significance of the Draft Rules:

- **Uniform & Precise Timekeeping:** Standardizes IST across telecom, banking, digital governance, power grids, and scientific research.
- **National Security:** Reduces dependence on foreign time sources (e.g., GPS), making telecom and internet services more secure.
- **Critical Infrastructure:** Synchronizes networks essential for 5G, AI, IoT, and public services, enhancing efficiency.
- **Economic & Industrial Competitiveness:** Ensures accurate financial transactions, optimized manufacturing, and smooth global business operations.
- **Administrative Efficiency:** Enhances law enforcement, emergency response, and public transport scheduling.



About Indian Standard Time (IST):

- Adopted: 1 January 1906 (during British rule); officially recognized for the whole country after Independence in 1947.
- IST Offset: UTC +5:30 hours, based on Coordinated Universal Time (UTC).
- Reference Longitude: 82°30' E, passing near Mirzapur Clock Tower (Uttar Pradesh).
- Implementing Agency: CSIR-National Physical Laboratory (CSIR-NPL) maintains IST with Allahabad Observatory ensuring its traceability to UTC.
- Global Time Database: IST is recognized as Asia/Kolkata in the IANA Time Zone Database.

Conclusion:

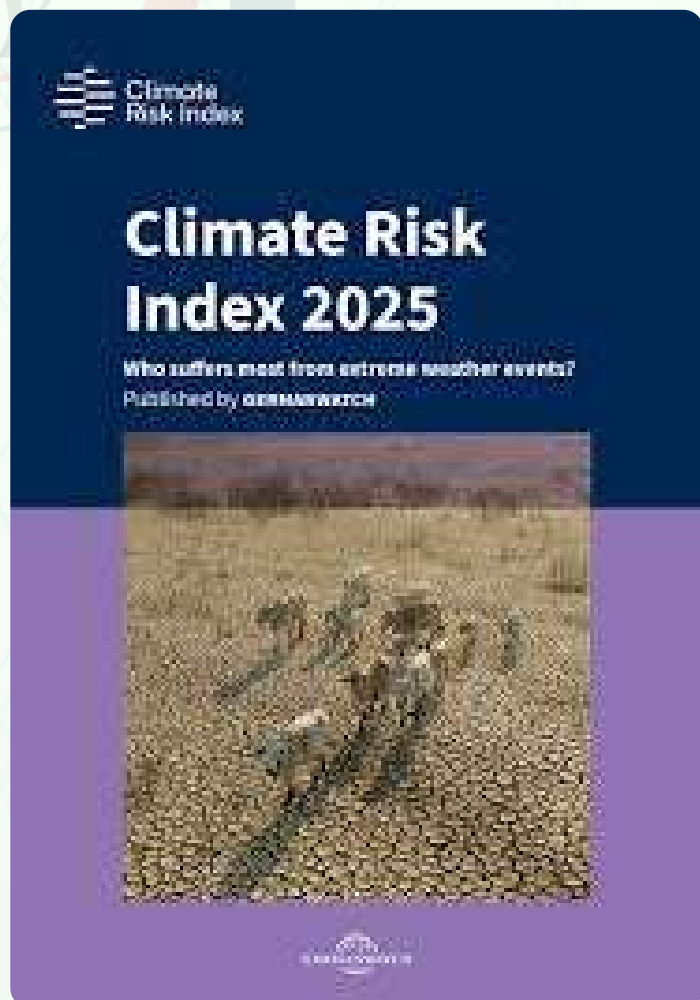
The Legal Metrology (IST) Rules, 2025 will ensure a uniform and precise time system, benefiting economic, scientific, and administrative sectors while enhancing national security and efficiency.

Climate Risk Index (CRI) 2025

Context: India has been ranked 6th in the Climate Risk Index (CRI) 2025, underscoring its high vulnerability to extreme weather events.

About the Climate Risk Index (CRI):

- The CRI is an annual report that evaluates the impact of extreme weather events on countries globally.
- Published by: Germanwatch (since 2006).
 - Methodology: Assesses weather-related hazards using three categories:
 - Hydrological: Floods, landslides, storm surges.
 - Meteorological: Storms, extreme temperatures.
 - Climatological: Droughts, wildfires, and heatwaves.
 - The index evaluates short-term (past two years) and long-term (past 30 years) trends.
 - Indicators Considered: Economic loss (absolute & relative).
 - Number of fatalities (absolute & relative).
 - Number of affected people (absolute & relative).



Key Findings from CRI 2025:

India's Performance:

- Ranked: 6th most affected country by extreme weather events between 1993 and 2022.

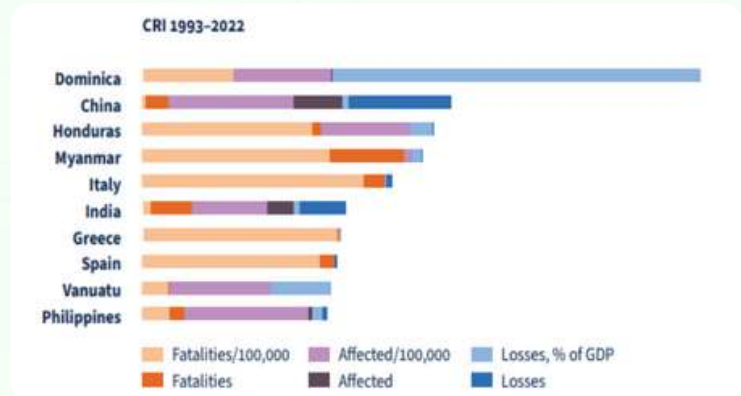
Most Affected Countries:

1. Top 5 countries above India:

- a. Dominica
- b. China
- c. Honduras
- d. Myanmar
- e. Italy

Global Impact of Extreme Weather Events:

- 800,000 deaths recorded worldwide.
- \$4.2 trillion in economic losses globally.



Conclusion:

India's high CRI ranking highlights the urgent need for climate resilience measures, disaster preparedness, and mitigation strategies to reduce the impact of extreme weather events on lives and the economy.

Earthquake in Delhi-NCR

Context: According to the National Center for Seismology (NCS), a shallow earthquake of 4.0 magnitude struck Delhi-NCR, with a focal depth of 5 km.



About Earthquakes:

- An earthquake is the shaking of the Earth's crust caused by a sudden release of energy along a fault line.
- Faults are fractures in the Earth's crust, where tectonic plates move against each other.

How Do Earthquakes Occur?

- Tectonic Plate Movement: Earth's lithosphere is divided into tectonic plates that are in constant motion.
- When two plates slide past, collide, or move apart, stress builds up until it is released as seismic waves, causing an earthquake.
- Other Causes of Earthquakes: Magma Movement: Volcanic activity can trigger earthquakes.
- Human Activities: Mining, reservoir-induced seismicity (dams), and nuclear explosions can cause earthquakes.

Types of Earthquakes:

- Based on Depth: Shallow Earthquakes: 0-70 km below the surface.
- Intermediate Earthquakes: 70-300 km deep.
- Deep Earthquakes: 300-700 km deep.
- Intensity & Impact: Shallow earthquakes are more destructive as seismic waves lose less energy before reaching the surface.
- Example: A 5.6 magnitude earthquake in Indonesia (November 2022) killed over 160 people.

Significance of the Delhi-NCR Earthquake:

- The Delhi-NCR region lies in Seismic Zone IV, making it highly prone to earthquakes.
- A low-depth (5 km) earthquake can cause significant shaking, even with a moderate magnitude.
- Highlights the need for earthquake preparedness, strict building codes, and disaster mitigation strategies.

Conclusion:

Frequent earthquakes in the Delhi-NCR region emphasize the importance of seismic monitoring, urban planning, and public awareness to mitigate risks associated with future seismic events.

Asteroid 2024 YR4 May Hit Earth in 2032

Context:

- A newly detected near-Earth asteroid, 2024 YR4, has a slightly more than 1% chance of colliding with Earth in 2032.

More About the Discovery:

- Detected in December 2024 by the Asteroid Terrestrial-impact Last Alert System (ATLAS) telescope in Río Hurtado, Chile.
- Astronomers are closely monitoring its trajectory and potential impact risks.

About Asteroids:

- Asteroids are rocky remnants left over from the formation of the Solar System about 4.6 billion years ago.
- Scientists believe they brought complex molecules and possibly early life to Earth.
- Asteroid Belt: Most asteroids are found in the main asteroid belt between Mars and Jupiter, though some travel closer to Earth.



How Do Space Agencies Plan to Avert Asteroid Crashes?

Planetary Defense Initiatives:

- Space agencies like NASA and ESA are actively developing strategies to prevent asteroid collisions with Earth.

Double Asteroid Redirection Test (DART):

- DART Mission (2022): A NASA and Johns Hopkins APL mission.
- The DART spacecraft deliberately crashed into asteroid Dimorphos to alter its orbit.
- Success: Proved that asteroid trajectories can be changed through impact.

Other Proposed Deflection Methods:

- Laser-Based Deflection: Using high-powered lasers to vaporize asteroid surfaces, creating a thrust effect that alters its course.
- Gravity Tractor: A spacecraft that flies near an asteroid and uses its gravitational pull to slowly shift the asteroid's path.

About the Asteroid Terrestrial-Impact Last Alert System (ATLAS):

- ATLAS is an asteroid impact early warning system developed by the University of Hawaii and funded by NASA.
 - How It Works: Four telescopes (Hawaii ×2, Chile, South Africa) scan the sky several times per night for moving objects.
 - Provides early warnings based on the asteroid's size and distance from Earth.
 - Larger asteroids can be detected farther away, allowing more time for response.

Conclusion:

- While the 1% impact probability of 2024 YR4 is low, continuous monitoring is essential.
- Advances in planetary defense (DART, laser deflection, gravity tractors) could help prevent catastrophic asteroid impacts in the future.

Exoplanet WASP-127b: Fastest Planetary Winds Ever Recorded

Context: Astronomers have detected jet-stream winds reaching speeds of 33,000 km/h on the exoplanet WASP-127b, making them the fastest planetary winds ever recorded.

More About the Discovery:

- Location: 520 light-years away in the Milky Way galaxy.
- Observation: Studied using spectroscopy and advanced astronomical instruments.
- Significance: Provides valuable insights into atmospheric dynamics and planetary evolution.



What is WASP-127b?

- Type: A "Hot Jupiter" gas giant orbiting extremely close to its star.
- Discovery: 2016
- Size & Composition: 30% larger than Jupiter but with only 16% of its mass, making it puffy and composed mainly of hydrogen and helium.
- Orbit & Temperature: Completes one orbit in four days, staying 5% of Earth-Sun distance, with surface temperatures around 1,127°C.

Why Are Winds So Fast?

- Extreme Heat: Close proximity to its star creates large temperature variations.
- Tidal Locking: One side is permanently exposed to heat while the other remains dark, causing a thermal imbalance.
- Low Mass & Large Size: The thin atmosphere allows high-speed wind circulation.
- Complex Atmospheric Dynamics: Heat, pressure, and rotation contribute to intense wind patterns.

Significance of the Discovery:

- Helps in understanding atmospheric behavior in extreme conditions.
- Provides insights into planet formation and evolution.
- Expands knowledge of exoplanet habitability, offering clues about conditions beyond our solar system.

This discovery sheds light on the diverse nature of exoplanets and the forces shaping their atmospheres.

Expenditure on Higher Education in India

Context: NITI Aayog has released a report titled "Expanding Quality Higher Education through States and State Public Universities", highlighting trends in education spending and key challenges in India's higher education system.

Key Findings on Education Spending

- States with High Education Expenditure (% of State GDP): Jammu & Kashmir (8.11%), Manipur (7.25%), Meghalaya (6.64%), Tripura (6.19%).
- States with Low Education Expenditure: Delhi (1.67%), Telangana (2%), Karnataka (2.01%).



Higher Education Trends

- Per youth spending on higher education has more than doubled from ₹2,174 (2005-06) to ₹4,921 (2019-20).
- Top Spenders: Kerala, Tamil Nadu, Maharashtra, Andhra Pradesh, Telangana.
- Lowest Spending States: Rajasthan, Punjab, Chhattisgarh.
 - Higher Education Spending as % of GSDP: Highest: Bihar (1.56%)
 - Lowest: Telangana (0.18%)
 - University Density (per lakh population): Highest: Sikkim (10.3)
 - Lowest: Bihar (0.2)

Major Recommendations of Education Commissions

- Radhakrishnan Commission (1948-49): Established UGC (1956) for academic regulation.
- Emphasized regional languages and research in higher education.
- Kothari Commission (1964-66): Recommended 6% of GDP for education (not yet achieved).
- Advocated for science & technology focus in education.
- National Knowledge Commission (2005): Suggested 1,500 new universities to increase GER to 15% by 2015.
- Recommended university autonomy and regulatory reforms.

Key Challenges in Higher Education

- Inadequate Infrastructure: Many State Public Universities (SPUs) lack labs, libraries, and research facilities.
- Regional Disparities: Higher education is concentrated in urban areas, limiting access in rural regions.
 - Low Gross Enrollment Ratio (GER): India: 28.4%, compared to 50%+ in developed nations.
 - NEP 2020 target: 50% GER by 2035.
 - Insufficient Funding & Research: India spends ~4.5% of GDP on education (target: 6%).
 - R&D investment is 0.7% of GDP (China: 2.4%, USA: 3%).
 - Governance Issues: Excessive regulation by UGC & state governments delays reforms.
 - Political interference in university leadership.
 - Skill Mismatch & Employability Concerns: Outdated curricula fail to meet industry demands.
 - Over 50% of graduates are unemployable due to lack of soft skills & practical training.
 - Internationalization Issues: Few Indian universities rank in the global top 500.
 - India hosts only 50,000 international students, compared to China (500,000+) and the USA (1 million).
 - Other Challenges: Low Research Output: India lags in global patents & publications.
 - Gender & Social Gaps: Higher female enrolment in some states (Kerala, Chhattisgarh) but low in others (Bihar, Rajasthan).
 - Faculty Shortage: 40% of faculty positions remain vacant.

Way Forward

Increase Education & Research Funding:

- Allocate 6% of GDP to education as per NEP 2020.
- Boost R&D investment to 2% of GDP.
- Encourage private sector investment through tax incentives.

Industry-Aligned Curriculum & Skill Development:

- Integrate AI, Data Science, Cybersecurity, and Green Technologies.
- Strengthen internships & practical training programs.

Faculty Recruitment & Training:

- Fill vacancies with transparent, merit-based hiring.
- Offer competitive salaries to attract global talent.

Strengthen Digital Infrastructure:

- Improve internet access & smart classrooms, especially in rural areas.
- Use AI-driven learning tools for personalized education.

Boost Research & Innovation:

- Create specialized research clusters in AI, space, healthcare, and renewable energy.
- Provide financial incentives for high-quality research.

Autonomy & Governance Reforms:

- Reduce bureaucratic interference in universities.
- Grant more autonomy to State Public Universities (SPUs).

Conclusion: India must implement comprehensive reforms in funding, governance, research, infrastructure, and employability to strengthen higher education. With these changes, India can achieve its "Viksit Bharat @2047" vision and become a global education and innovation hub.

Appointment of Ad-Hoc Judges in High Courts

Context: The Supreme Court recently allowed High Courts to appoint retired judges on an ad-hoc basis to address the growing backlog of criminal cases.

About Ad-Hoc Judges

Ad-hoc judges are retired judges temporarily reappointed to clear case backlogs or fill gaps when permanent judges are unavailable.

- Memorandum of Procedure (MoP), 1998: Governs ad-hoc appointments, formulated after the Supreme Court Advocates-on-Record Association v. Union of India (1993) case.



Conditions for Ad-hoc Appointments

Lok Prahari v. Union of India (2021):

Ad-hoc judges can be appointed when:

- Vacancies exceed 20% of the sanctioned strength.
- Cases in a specific category have been pending for over five years.
- More than 10% of the High Court's cases have been pending for over five years.
- Case disposal rate is lower than the rate at which new cases are filed (case clearance rate).

Other Conditions:

- Panel Formation: Chief Justices should form a panel of retired and soon-to-retire judges, evaluating their past performance.
- Tenure: Typically 2 to 3 years, with 2 to 5 ad-hoc judges per High Court.
- Timeframe: The entire process should be completed within three months.

Supreme Court Order (January 30, 2025):

- Relaxed the condition that ad-hoc appointments require vacancies exceeding 20% of the sanctioned strength.
- Ad-hoc judges can now be appointed even if vacancies are below 20%.
- Restrictions:
 - Can only hear criminal appeals and must be part of a Bench led by a sitting judge.
 - The number of ad-hoc judges cannot exceed 10% of the sanctioned strength (2 to 5 judges per High Court).

Allowances and Benefits: (Lok Prahari Case, 2021)

- Same pay and allowances as permanent High Court judges, excluding pension.
- Payments drawn from the Consolidated Fund of India.
- Entitled to rent-free accommodation or a housing allowance.

Historical Instances of Ad-hoc Appointments

- 1972: Justice Suraj Bhan (Madhya Pradesh High Court, election petitions).
- 1982: Justice P. Venugopal (Madras High Court).
- 2007: Justice O.P. Srivastava (Allahabad High Court, Ayodhya title suits).

Arguments in Favor of Ad-hoc Judges

- Addressing Judicial Backlog: 62 lakh pending cases in High Courts (as of January 2025).
- Utilizing Experienced Judges: Retired judges bring decades of experience and can handle complex cases efficiently.
- Temporary Solution for Vacancies: 30% vacancy rate in High Courts (367 out of 1,122 sanctioned posts).
- Faster Disposal of Criminal Appeals: Focused hearings on cases pending for over five years.
- No Interference with Regular Appointments: Ad-hoc appointments do not affect seniority or promotion of sitting judges.
- Strengthening Public Trust in Judiciary: India ranks 111th in civil justice and 93rd in criminal justice (World Justice Project's Rule of Law Index, 2023).

Arguments Against Ad-hoc Judges

- **Temporary Fix, Not a Long-Term Solution:** Does not address root causes like inadequate regular appointments and poor judicial infrastructure.
- **Risk of Undermining Judicial Independence:** Retired judges may face conflicts of interest or executive pressure.
- **Lack of Accountability:** The 245th Law Commission Report (2014) raised concerns over inconsistent judicial decisions.
- **Strain on Judicial Infrastructure:** Overcrowded courtrooms and inadequate support staff.
- **Discouragement of Regular Judicial Appointments:** May lead to a reliance on temporary measures rather than filling permanent vacancies.

Global Practices of Ad-hoc and Temporary Judicial Appointments

- **United Kingdom:** Uses Deputy High Court Judges and Recorders (part-time judges, including retired judges and senior lawyers).
- **United States:** Senior Judges (retired judges handling reduced caseloads).
- **Australia:** Acting Judges (retired judges or senior legal practitioners appointed temporarily).
- **Germany:** Honorary Judges (Schöffen) (experienced legal professionals or scholars assisting professional judges).

Way Forward for Ad-hoc Judges

- **Increase Regular Judicial Appointments:** India has 21 judges per million people, far below the recommended 50 judges per million (Law Commission's 120th Report).
- **Improve Judicial Infrastructure:**
 - Expand e-courts and video conferencing to reduce adjournments.
 - Implement AI-based case prioritization for clearing backlogs.
- **Enhance Training & Capacity Building:** Expand training programs at the National Judicial Academy (NJA).
- **Implement Judicial Impact Assessment:** As recommended by the Justice M. Jagannadha Rao Committee, assess new legislation's impact on judicial workload.
- **Leverage Technology:** Fully implement the E-Courts Mission Mode Project to digitize case records across all High Courts.
- **Periodic Review & Monitoring:** Ensure timely appointments and assess their effectiveness in reducing case backlogs.

Conclusion: The Supreme Court's ruling on ad-hoc judge appointments provides temporary relief to the mounting backlog of cases, especially criminal appeals. However, long-term judicial reforms, faster regular appointments, and improved infrastructure are essential for sustainable justice delivery. Ad-hoc judges should be a supplementary measure, not a substitute for systemic improvements in India's judiciary.

CJI's Role in Executive Appointments

Context: Recently, the Vice-President of India questioned the role of the Chief Justice of India (CJI) in executive appointments, including the selection of the CBI director.



Chief Justice of India's (CJI's) Consultation in Executive Appointments:

- **Appointment of Judges to the Supreme Court and High Courts:** The CJI, along with a collegium of four senior Supreme Court judges, is consulted by the President for judicial appointments.
- **Appointment of Lokpal:** The CJI is a member of the selection committee for appointing the Lokpal, alongside the Prime Minister, Speaker of the Lok Sabha, Leader of Opposition, and an eminent jurist.
- **Appointment of the Director of the Central Bureau of Investigation (CBI):** The appointment committee includes the Prime Minister (Chairperson), the Leader of Opposition (LoP) in the Lok Sabha, and the Chief Justice of India (or a Supreme Court judge nominated by the CJI).

Positive Implications of CJI's Involvement in Executive Appointments:

- **Checks and Balances:** Ensures judicial oversight in key appointments.
- **Judicial Independence:** Reinforces the judiciary's independence through the collegium system.
- **Merit-Based Appointments:** Ensures that selections are based on competence, integrity, and experience rather than political considerations.
- **Transparency and Accountability:** The CJI's participation in committees for Lokpal, CBI Director, and Election Commissioners enhances transparency and accountability in appointments.

Judicial Activism vs. Judicial Overreach

Basis	Judicial Activism	Judicial Overreach
Definition	Courts proactively interpret laws to address legislative or executive inaction.	Courts exceed their constitutional mandate and encroach upon legislative or executive functions.
Nature	Enabling in nature	Encroaching and predatory in nature
Example	Vishaka Guidelines (1997) on sexual harassment were issued due to a legislative vacuum.	Striking down NJAC (2015) despite parliamentary consensus.

Concerns Associated with CJI's Involvement in Executive Appointments:

- **Undermining Democratic Principles:** The CJI's role in selecting the CBI director is inconsistent with democratic principles and requires reconsideration.
- **Judicial Overreach:** Governance by judicial decree creates a "constitutional paradox" that may undermine democracy.
- **Threat to Separation of Powers:** Judicial involvement in executive appointments disrupts the constitutional balance of power.
- **Judiciary's Public Engagement:** Judges making statements beyond judgments may impact institutional dignity.
- **Blurred Separation of Powers:** The judiciary's role should remain that of an independent arbiter rather than a participant in executive decisions.
- **Accountability Concerns:** While ensuring executive accountability, the CJI's role lacks a formal mechanism for review.
- **Potential Conflict of Interest:** The CJI's involvement in appointing officials who may later appear before the courts could create conflicts of interest.

Way Forward:

- **Clear Guidelines:** Establish codified guidelines for the CJI's role in executive appointments to ensure consistency and limit discretionary power.
- **Structured Consultation:** Make the CJI's consultation more structured and documented, ensuring transparency without compromising confidentiality.
- **Periodic Review:** Regularly review appointment processes to ensure fairness and efficiency.
- **Broader Participation:** Involve other senior judges in consultations to make the process more collective and transparent.
- **Inclusion of Neutral Members:** Selection committees for key appointments like Lokpal, CBI Director, and Chief Election Commissioner (CEC) should include diverse members to prevent institutional dominance.
- **Parliamentary Oversight:** Introduce a parliamentary committee to scrutinize recommendations while preserving judicial independence.

Delhi Gets a New Chief Minister

Context: Rekha Gupta, a first-time MLA from Shalimar Bagh, has been appointed as the Chief Minister of Delhi.

Special Status of Delhi

- **69th Amendment Act, 1991:** Introduced Article 239AA, granting Delhi the status of the National Capital Territory (NCT).
- **Lieutenant Governor (LG):** The President appoints an Administrator, designated as the LG.



Delhi's Administrative Framework

- **Union Territory Status:** Delhi is a Union Territory under the First Schedule of the Constitution.
- **Governance:** As per Article 239, the President administers Union Territories through an appointed Administrator.
- **Legislature & Council of Ministers:** Article 239A allows UTs to have a legislature and a Council of Ministers.

Governance Structure in Delhi

- Delhi has:
 - A Lieutenant Governor (LG)
 - A Legislative Assembly
 - Legislative Powers (Article 239AA(3)): Can make laws on State List and Concurrent List, except on:
 - Public Order
 - Police
 - Land

Role of Parliament in Delhi's Governance

- **Parliamentary Supremacy:** Can legislate on any subject, including those under the Delhi Assembly.
- **Conflicts in Law:** If a Delhi law contradicts a Parliamentary law, the latter prevails.
- **Presidential Assent:** A Delhi law approved by the President remains valid but can be altered by Parliament.

Council of Ministers & CM's Powers

- **Council Strength:** Limited to 10% of Assembly members (Article 239AA(4)).
- **Advisory Role:** The CM and Council advise the LG on matters under Delhi's legislative authority.

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Delhi CM vs. Other State CMs

Feature	Delhi CM	State CM
Appointment	By the President	By the Governor
Tenure	Serves at President's pleasure	Serves at Governor's pleasure
Control Over Law & Order	No control (Police, Public Order, and Land under LG)	Full control over law and order
Bureaucratic Control	Limited (under LG)	Full control over state officials
LG/Governor's Role	LG can override CM's decisions	Governor acts on CM's advice

Income-Tax Bill, 2025

Context: The Income-Tax Bill, 2025, aims to simplify tax reporting by introducing a 'Tax Year' concept, replacing the Assessment Year (AY) system.

Key Highlights of the Bill:



Simplification & Modernization:

- Updates the Income-Tax Act, 1961 by removing outdated provisions.
- Addresses new income sources like digital assets and modern financial practices.

New 'Tax Year' Concept:

- Tax Year: A 12-month period from April 1 to March 31, aligning tax assessment and financial reporting.
- No Change in Financial Year (FY): Remains April 1 – March 31.
- Calendar Year Not Adopted: India continues with its April-March cycle instead of January-December.

Virtual Digital Assets (VDAs) as Capital Assets:

- Recognition: Cryptocurrencies, NFTs, and digital assets are now capital assets like stocks, land, and jewelry.
- Taxation: Similar to traditional assets, ensuring clarity in tax treatment.

Expanded 'Virtual Digital Space' Definition:

- Taxpayers under investigation must provide access to their digital records (emails, online investments, cloud servers, social media accounts).
- Extends beyond laptops and hard drives currently checked during tax searches.

Capital Gains Exemptions Streamlined:

- Section 54E (pre-1992 capital gains exemptions) removed.
- Outdated tax benefits eliminated for a simplified structure.

Dispute Resolution & Compliance:

- Dispute Resolution Panel (DRP) guidelines improved to minimize litigation.
- More transparent tax rates, deductions, TDS/TCS rules in structured schedules.

New Tax Regime Focus:

- Shift towards the new tax regime, as old regime rates are omitted.
- No major changes in tax slabs, penalties, or compliance rules.

Impact:

- Reduces confusion in tax filing with Tax Year replacing AY.
- Enhances transparency in digital asset taxation.
- Simplifies compliance with modernized tax laws.

President's Rule Imposed in Manipur

Context: The central government has imposed President's Rule in Manipur due to ongoing ethnic violence that has persisted for two years.

What is President's Rule?

- President's Rule, also known as State Emergency, is imposed when a state government fails to function as per the Constitution.

Constitutional Provisions:

Article 355: The Centre's duty to protect states from internal disturbances and ensure governance as per the Constitution.

Article 356: The President can impose State Emergency if:

- The Governor reports that the state government cannot function constitutionally.
- The President is otherwise satisfied that governance in the state has failed.

Article 365: If a state fails to comply with the Centre's directions, President's Rule may be imposed.

Approval & Duration:

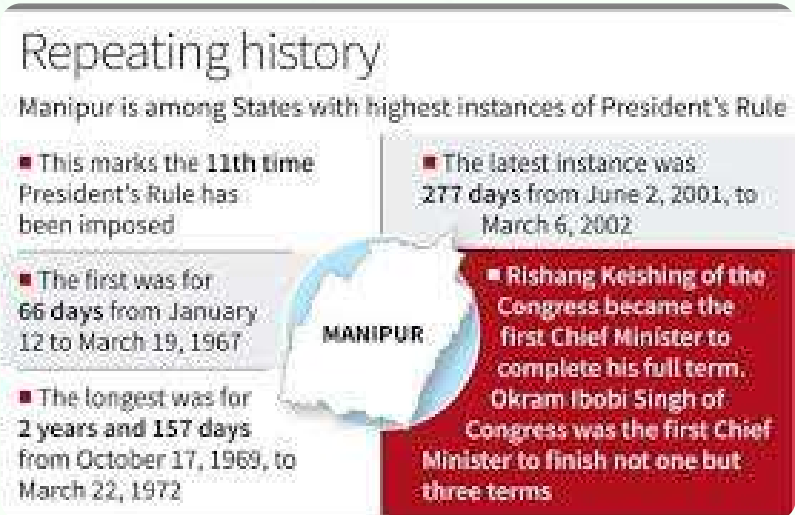
- Parliamentary Approval: Requires simple majority in both Houses within two months.
- Duration: Initially 6 months, extendable up to 3 years with Parliament's approval every six months.
- 4th Amendment: Extending beyond one year requires:
 - A National Emergency in the country or the state.
 - Election Commission's confirmation that elections are not feasible.

Judicial Review & Revocation:

- 38th Amendment: Initially made the President's decision immune from judicial review.
- 44th Amendment: Allowed courts to review the reasons behind imposing President's Rule.
- Revocation: The President can revoke it anytime without parliamentary approval.

Implications for Manipur:

- State government dissolved, and governance is now under the Central government's control.
- Elections may be delayed if conditions remain unstable.
- Restoration of normalcy is essential before lifting the emergency.



Appointment of Chief Election Commissioner

Context: Election Commissioner Gyanesh Kumar has been appointed as the Chief Election Commissioner (CEC), making him the first CEC to be appointed under the Chief Election Commissioner and Other Election Commissioner Act, 2023.



Election Commission of India (ECI):

- Constitutional Authority responsible for conducting free and fair elections.

Structure: One CEC and a number of Election Commissioners (ECs) as decided by the President.

- Current Setup: One CEC and two ECs.
- Legal Basis: Articles 324-329 (Part XV) of the Indian Constitution.

Key Features of the 2023 Act:

Enhanced Autonomy:

- CEC & ECs receive Supreme Court judge-level salary & benefits.
- Immunity from civil/criminal cases for official decisions.
- Search & Selection Committee introduced for appointments.
- Fixed tenure for CEC & ECs to ensure stability.

Challenges in ECI's Functioning:

Independence Concerns:

- Selection Process: Majority members in the selection panel are government representatives, raising bias concerns.
- Removal of ECs: Unlike the CEC, Election Commissioners can be removed based on the CEC's recommendation.

Limited Powers:

- Cannot de-register political parties, even for serious violations.

Lack of Independent Staff:

- Relies on government employees, affecting its autonomy.

Conclusion: The appointment of Gyanesh Kumar as CEC under the new law marks a major shift in election governance. While reforms enhance autonomy, concerns about independence and authority remain critical for ensuring free and fair elections in India.

Whip System in Indian Parliament

Context: Vice President Jagdeep Dhankhar recently criticized the party whip system, arguing that it limits MPs' freedom by enforcing a strict party line.

What is a Whip?

- A whip is a written directive issued by a political party instructing its members how to vote on specific matters.

Origin of the Term 'Whip'

- Derived from hunting traditions in England, where a whipper-in controlled hounds.
- Edmund Burke, an Anglo-Irish politician, popularized the term in politics to describe party discipline.

Constitutional Status in India

- The whip system is not mentioned in the Constitution, Rules of Procedure of the House, or any law.
- It is based purely on parliamentary conventions.

Types of Whips in India

- One-Line Whip: Members are informed about an upcoming vote but can abstain if they wish.
- Two-Line Whip: Members must be present for voting but can vote as they choose.
- Three-Line Whip: The strictest directive, used for critical votes (e.g., no-confidence motions).
- Non-compliance may lead to disqualification under the anti-defection law.

Who Enforces the Whip System?

- Chief Whip - Ensures party members follow voting instructions.
- Additional Whips - Assist in managing party discipline.
- Minister of Parliamentary Affairs - Acts as the government's chief whip in Lok Sabha.
- Minister of State for Parliamentary Affairs - Government's chief whip in Rajya Sabha.

Conclusion: The whip system ensures party discipline, but concerns remain about its impact on MPs' independence in decision-making.



Ban on Begging in Bhopal

Context: Bhopal, Madhya Pradesh, has completely banned begging in all public places.

Legal Basis for the Ban

- Enforced under Section 163 of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023.
- Authorities empowered: District magistrates, sub-divisional magistrates, or executive magistrates can issue orders in cases of nuisance or potential danger.
- Applicability: The ban applies to residents, visitors, and the general public in specific areas.



Who is Considered a Beggar?

- As per the Bombay Prevention of Begging Act, 1959, a beggar is anyone who:
 1. Solicits alms in any form.
 2. Performs or sells items for money.
 3. Appears destitute with no visible means of subsistence.

Historical & Legal Background

- Colonial Influence: The Criminal Tribes Act, 1871 criminalized nomadic tribes, linking them with vagrancy and begging.
- Constitutional Provision:
- Beggary laws fall under the Concurrent List (List III, Entry 15), allowing both Union & state governments to legislate.
- No National Law: India lacks a uniform anti-begging law; most states follow the Bombay Prevention of Begging Act, 1959.

Conclusion: The ban aims to address public nuisance, but concerns remain regarding rehabilitation measures for affected individuals.

National Commission for Safai Karamcharis (NCSK)

Context: The Union Cabinet has extended the tenure of the National Commission for Safai Karamcharis (NCSK) until March 31, 2028.



About NCSK:

- Established in 1994 under the National Commission for Safai Karamcharis Act, 1993 for a three-year term.
- The Act was extended multiple times but expired in 2004. Since then, the NCSK has functioned as a non-statutory body under the Ministry of Social Justice and Empowerment.

Composition:

- Chairperson: Holds the rank of a Union Minister of State.
- Vice-Chairperson: Secretary-level official.
- Five Members: Includes one woman member, all at Secretary rank.
- Secretary: Joint Secretary-level official.

Functions & Mandate:

- Recommends policies and programs to improve the status and opportunities for Safai Karamcharis (sanitation workers).
- Evaluates the implementation of social and economic rehabilitation schemes for Safai Karamcharis and manual scavengers.

Nari Adalat Programme

Context: The Government of India is seeking proposals from states and Union Territories to expand the Nari Adalat Program.

About Nari Adalat:

- A community-based dispute resolution system for women at the gram panchayat level.
- Objective: Resolve minor disputes through negotiation, mediation, and reconciliation.

Structure:

- Members: 7 to 9 women, including:
 - Elected representatives from the gram panchayat.
 - Socially influential women (e.g., teachers, doctors, social workers) nominated by villagers.
 - Leadership: Headed by Mukhya Nyaya Sakhi (Chief Legal Friend).
 - Selected from among the Nyaya Sakhis for a six-month term.

Implementation & Expansion:

- Launched in 2023 as a pilot project in 50 gram panchayats in Assam and Jammu & Kashmir.
- Planned Expansion: The government aims to introduce it in more states.

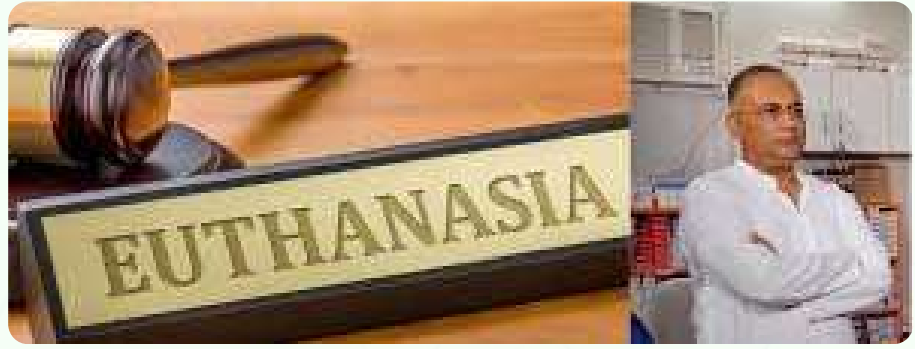
Part of Mission Shakti:

- A sub-scheme (Sambal) under Mission Shakti, led by the Ministry of Women and Child Development.



Karnataka Allows Euthanasia for Terminally Ill Patients

Context: The Karnataka Health Department has implemented the Supreme Court's ruling on passive euthanasia, allowing terminally ill patients to die with dignity.



Key Points:

- Karnataka becomes the second state after Kerala to enforce the directive.
 - Who is eligible? Patients with no hope of recovery.
 - Those in a persistent vegetative state with no medical benefit from life-sustaining treatment.
 - Passive Euthanasia: Involves withdrawing life support or treatment that keeps a terminally ill patient alive.

Supreme Court's Ruling (Common Cause v. Union of India, 2018):

- Recognized the "Right to Die with Dignity" as a Fundamental Right under Article 21.
 - Living Will: Allows individuals to document their medical preferences in advance.
 - Asserts bodily autonomy and self-determination.
- Passive euthanasia and living wills were legalized under strict guidelines.

India-Indonesia Relations

Context: Indonesian President Prabowo Subianto attended India's 76th Republic Day as the Chief Guest, marking stronger diplomatic ties.



Key Agreements During the Visit:

South China Sea Cooperation:

- Support for a Code of Conduct (COC) under UNCLOS 1982 for peace and stability.
- Emphasis on lawful maritime commerce and peaceful dispute resolution.

- **Maritime Security:**
 - An Indonesian liaison officer will be stationed at India's IFC-IOR in Gurugram.
 - Agreements on hydrography, submarine search & rescue, and cybersecurity.
- **Defence Cooperation:**
 - Ratification of the Defence Cooperation Agreement (DCA) for deeper strategic ties.
 - India's BrahMos missile export deal worth ₹3,800 crore to Indonesia.
- **Economic Partnerships:**
 - Agreement to use local currencies for bilateral trade.
 - Commitment to conclude the ASEAN-India Trade Agreement (AITIGA) review by 2025.
 - BPCL's \$121 million investment in Indonesia's Nunukan oil and gas block.
- **Space Collaboration:**
 - ISRO-Indonesia partnership to use Biak Station for satellite operations.
- **Cultural & Historic Ties:**
 - Agreements on maritime, health, digital development, and cultural exchanges.
 - Strong historical influence of Indian epics like the Ramayana and Mahabharata in Indonesian culture.

India-Indonesia Bilateral Relations: Historical & Strategic Ties

- 2,000+ years of cultural ties, with the influence of Hinduism, Buddhism, and Islam.
- 'Look East' Policy (1990s) and the Comprehensive Strategic Partnership (2018) focused on defence, trade, and maritime security.
- Shared maritime boundary in the Indian Ocean, with strategic importance in the Strait of Malacca.

Defence & Security Cooperation

- Military Exercises: Garuda Shakti (Army) and Samudra Shakti (Navy) for interoperability.
- Maritime Patrols (IND-INDO CORPAT) for securing sea lanes.
- Collaboration on hydrography and submarine operations.

Economic & Trade Relations

- Indonesia is India's 2nd largest ASEAN trading partner after Singapore.
 - Bilateral trade: 2005-06: \$4.3 billion
 - 2022-23: \$38.84 billion
 - 2023-24 (so far): \$29.40 billion
- Focus on renewable energy, IT, and critical minerals.

Multilateral Engagement

- Both nations collaborate in ASEAN, G20, IORA, and BRICS.
- India supports ASEAN Centrality and Indonesia's growing role in global forums.

Challenges in Relations:

- **Trade Deficit:** India's imports (\$20B) exceed exports (\$9B), mainly due to palm oil and coal imports.
- **Limited Connectivity:** Poor air links between Indian and Indonesian cities affect trade and tourism.
- **China's Dominance:** Indonesia has \$20B Chinese investments, outpacing India's \$1.56B investments.
- **Geopolitical Differences: South China Sea:** Indonesia's closer ties with China raise concerns.
- **Jammu & Kashmir Issue & CAA:** Indonesia had criticized India, leading to economic retaliation on Indonesian palm oil.
- **Maritime Security Threats:** Piracy, illegal fishing, and smuggling in the Indian Ocean need joint efforts.

Way Forward:

- **Balance Trade:** Reduce dependence on palm oil & coal, expand renewable energy & IT sectors.
- **Enhance Defence Ties:** Expedite the BrahMos deal, boost joint military production.
- **Improve Connectivity:** Strengthen direct air links between secondary cities.
- **Counter China's Influence:** Ensure balanced foreign investments in infrastructure.
- **Strengthen Maritime Security:** Collaborate on Strait of Malacca security & Indo-Pacific strategy.

India-France Relations

Context: Prime Minister of India visited France to attend the AI Action Summit at the invitation of President Emmanuel Macron. Both leaders reviewed progress on the Horizon 2047 Strategic Roadmap for India-France relations.



Horizon 2047 - India-France Strategic Roadmap

- **Purpose:** Strengthen bilateral ties until 2047, marking 100 years of India's independence and diplomatic relations.
- **Adopted:** July 2023 during PM Modi's visit to France.
- **Objectives:** Strategic autonomy, global challenge response, fostering innovation.

Key Outcomes of the Visit

1. Nuclear Cooperation

- Jaitapur Nuclear Power Plant (JNPP): Agreement to build six European Pressurized Reactors (EPRs) in India.
- Special Task Force on Civil Nuclear Energy formed for project oversight.
- Future Cooperation in Nuclear Technology: Letter of Intent for Small Modular Reactors (SMRs) & Advanced Modular Reactors (AMRs).

2. Artificial Intelligence & Innovation

- India-France AI Roadmap: Collaboration on safe, open, and trustworthy AI.
- Next AI Summit: To be hosted by India.
- India-France Year of Innovation (2026): Focus on technology, culture, and education.

3. Indo-Pacific & Global Cooperation

- Indo-Pacific Triangular Development Cooperation: Joint efforts in climate and SDG projects in third countries.
- Strengthening India-Middle East-Europe Corridor (IMEEC) for trade connectivity.
- UNSC Membership: France reaffirmed support for India's permanent membership.

4. People-to-People & Cultural Ties

- 60th Anniversary of Cultural Agreement (1966): Plans for cultural exchanges.
- New Indian Consulate in Marseille to boost ties.
- Indian Student Mobility Target: 30,000 Indian students in France by 2030, with streamlined visas & scholarships.
- Olympics Support: France to share expertise for India's 2036 Olympic bid.
- Mazargues War Cemetery, Marseille: Commemorates WWI and WWII soldiers, including 998 Indian soldiers.

Challenges in India-France Relations

- Lack of Free Trade Agreement (FTA) with EU: India-EU Bilateral Trade & Investment Agreement (BTIA) remains stalled.
- Bureaucratic & Regulatory Hurdles: French investors face policy unpredictability and approval delays.
- Visa & Mobility Restrictions: Indian professionals & students struggle with long visa processing times.
- Slow Defence Technology Transfer: Delays in Rafale jet engine and submarine stealth technology.
- Strategic Divergences in Indo-Pacific: France focuses on South Pacific, while India prioritizes Indian Ocean.
- Political & Diplomatic Differences: Climate policy tensions due to Common but Differentiated Responsibilities (CBDR) principle.

Key Areas of India-France Cooperation

1. Defence & Security

- Rafale Jets: India procured 36 Rafale fighter jets.
- Scorpene Submarine Project (P-75): INS Vaghsheer (6th and final) commissioned in 2025.
- India as Observer in Eurodrone Programme: Participation in medium-altitude long-endurance drone project.

- Joint Military Exercises: Varuna (Navy), Garuda (Air Force), Shakti (Army), La Pérouse (Multilateral).
- 2. Civil Nuclear Cooperation**
 - Joint Research in Nuclear Fusion: India is part of the International Thermonuclear Experimental Reactor (ITER) in France.
 - TRISHNA Satellite: Joint Earth observation mission (launch in 2026).
 - 3. Space & Digital Cooperation**
 - 50+ Years of ISRO-CNES Collaboration on space research.
 - UPI Payment Expansion in France for seamless digital transactions.
 - 4. Trade & Economic Cooperation**
 - Bilateral Trade (2024-25): Reached US\$ 13.38 billion in 2023-24.
 - France is India's 11th largest investor with \$10.76 billion FDI.
 - 5. Indo-Pacific & Global Multilateral Cooperation**
 - UNSC Reform: France supports India's permanent membership.
 - Climate Action: Joint leadership in International Solar Alliance (ISA) and Coalition for Disaster Resilient Infrastructure (CDRI).
 - 6. People-to-People & Cultural Cooperation**
 - Young Professionals Scheme (YPS): For employment & migration under the India-France Migration & Mobility Partnership Agreement (MMPA).
 - Museum Collaboration: Agreement between National Museum (Delhi) & France Muséums Développement (Dec 2024).
 - Cultural Events: "Bonjour India" & "Namaste France" festivals.

Way Forward

- 1. Fast-Tracking India-EU FTA**
 - Offer tariff reductions on French exports (wine, dairy, luxury goods).
 - Ease restrictions on Indian IT services, textiles, pharma.
 - Implement a Bilateral Investment Treaty (BIT) for investment stability.
- 2. Addressing Trade Barriers**
 - Regular trade dialogues to resolve sanitary & phytosanitary (SPS) issues on Indian exports.
 - Increase French investment in Make in India to balance trade.
- 3. Strengthening Defence & Technology Transfer**
 - Accelerate Rafale jet engine co-development with Safran-HAL.
 - Fast-track Scorpene submarine collaboration.
 - Joint production of advanced drones, missiles, naval assets for the Indo-Pacific.
- 4. Enhancing Indo-Pacific Cooperation**
 - Increase joint naval exercises & surveillance.
 - Expand India-France-Australia and India-France-UAE trilateral dialogues.
- 5. Expanding Nuclear & Clean Energy Ties**
 - Expedite Jaitapur Nuclear Power Project.
 - Expand cooperation in green hydrogen, battery storage, solar power (ISA).
- 6. Easing Visa & Mobility Restrictions**
 - Implement faster visa processing for Indian professionals & students.
 - Expand Young Professionals Scheme (YPS).
- 7. Advancing AI, Digital & Cybersecurity Collaboration**
 - Implement India-France AI Roadmap for 2026.
 - Expand cybersecurity & data protection agreements.

Conclusion: India-France relations are evolving into a comprehensive strategic partnership covering defence, nuclear energy, AI, trade, Indo-Pacific security, and cultural diplomacy. The Horizon 2047 roadmap will drive cooperation, strengthening sovereignty, technology exchange, and global governance, making this partnership vital for India's foreign policy.

India-USA Relations

Context: The Prime Minister's two-day visit to the US strengthened bilateral ties, focusing on trade, defense, and technology.



Key Takeaways from the Meeting

- **Bilateral Trade Agreement (BTA):** India and the US aim to finalize a sector-specific trade deal by 2025.
- **TRUST Initiative:** Launched to strengthen supply chains for critical minerals and pharmaceuticals.
- **COMPACT Initiative:** Aims to boost defense, commerce, and technology cooperation.

Major Areas of Cooperation

- **Defense & Security:** India procures US defense equipment like Apache and Chinook helicopters. Joint military exercises include Malabar (Navy), Yudh Abhyas (Army), and Cope India (Air Force).
- **Trade & Investment:** The US is India's largest trading partner, with a \$36.8 billion trade surplus. "Mission 500" aims to boost bilateral trade to \$500 billion by 2030.
- **Technology & Innovation:** Collaboration in AI, semiconductors, 5G/6G, and space projects like NASA-ISRO's NISAR satellite.
- **Nuclear Cooperation:** Plans to implement the US-India 123 Civil Nuclear Agreement, with amendments in India's nuclear laws for better industry collaboration.
- **Health & Pharmaceuticals:** India remains a key supplier of generic medicines to the US, with joint research in biotechnology and vaccine development.
- **Regional & Multilateral Cooperation:** India and the US cooperate in the Quad (India, US, Japan, Australia) to maintain a free Indo-Pacific. They also work on the India-Middle East-Europe Corridor (IMEC) and the I2U2 Group (India, Israel, UAE, US) for economic security.

Challenges in India-US Relations

- **Trade Issues:** The US has a trade deficit with India, leading to disputes over tariffs on key goods.
- **Data Localization:** US tech firms oppose India's policy requiring data storage within the country.



- **Defense Ties with Russia:** India's purchase of Russian S-400 missiles has led to potential US sanctions under CAATSA.
- **China Strategy Differences:** India seeks a balanced approach, while the US prefers a tougher stance.
- **Visa & Immigration Issues:** H-1B visa restrictions affect Indian IT professionals, while illegal immigration concerns have led to deportations.

Way Forward

- Fast-track the Bilateral Trade Agreement (BTA) to resolve tariff issues.
- Expand defense co-production under Make in India.
- Seek a long-term CAATSA waiver to balance India's security needs.
- Strengthen Indo-Pacific cooperation with QUAD and maritime security initiatives.
- Improve visa policies for skilled Indian workers and professionals.

Conclusion

India-US ties are critical for global security and economic stability. Addressing trade, defense, and geopolitical challenges through structured dialogue will elevate the partnership into a long-term strategic alliance.

India-Qatar Relations

Context: The Amir of Qatar, Sheikh Tamim bin Hamad Al-Thani, visited India on February 17-18, 2025. This was his second visit as Qatar's head of state, strengthening bilateral ties.

Key Outcomes of the Visit:

- **Strategic Partnership:** India and Qatar upgraded ties to a Strategic Partnership, aligning with other Gulf Cooperation Council (GCC) nations like UAE, Saudi Arabia, Oman, and Kuwait.
- **Energy Cooperation:** Expansion of energy trade and investments, along with regular meetings of the Joint Task Force on Energy.
- **Security & Counter-Terrorism:** Enhanced cooperation in intelligence sharing, cybersecurity, and law enforcement.
- **Economic & Trade Growth:**
 - **Trade Target:** Increase bilateral trade from \$14 billion to \$28 billion by 2030.
 - **Comprehensive Economic Partnership Agreement (CEPA):** Exploring a potential trade pact.
- **Qatar Investment Authority (QIA):** \$10 billion investment in Indian infrastructure, technology, and manufacturing.

- **Digital & Financial Collaboration:**
 - **UPI Integration:** India's Unified Payments Interface (UPI) to be implemented in Qatar for easier financial transactions.
 - **Local Currency Trade:** Exploring trade settlements in Indian Rupees (INR) and Qatari Riyals (QAR) to reduce reliance on third-party currencies.
- **Cultural & People-to-People Ties:**
 - **India-Qatar Year of Culture & Sports:** Strengthening cultural and sports ties.
 - **E-Visa Facility:** Easier travel access for Qatari nationals to India.

Bilateral Relations Overview:

- **Historical Ties:** Strong maritime trade links, with Indian traders historically supplying textiles, spices, and pearls.
- **Multilateral Cooperation:** Regular engagement in organizations like the UN, GCC, and WTO, supporting UN Security Council reforms.
- **Defense & Security:**
 - **Defense Agreement (2008, renewed in 2018):** Strengthened security and maritime cooperation.
 - **Joint Exercises:** Indian Navy and Coast Guard's regular visits and maritime exercise "Za'ir Al-Bahr."
- **Trade & Investment:**
 - India is Qatar's 3rd largest trading partner, with key trade items including LNG, LPG, petrochemicals, and aluminum.
 - India exports cereals, iron, steel, vegetables, fruits, and processed food products.
- **Energy Cooperation:**
 - Qatar is India's largest LNG supplier, accounting for 48% of imports.
- **Cultural Relations:**
 - India-Qatar Year of Culture (2019) hosted 45+ cultural events.
 - Qatar co-sponsored the UN International Day of Yoga resolution.
 - Ayurveda is legally recognized in Qatar.
- **People-to-People Ties:**
 - Over 835,000 Indian nationals live in Qatar, forming 27% of its population.

Challenges in India-Qatar Relations:

- **Energy Dependence & Price Volatility:** India's heavy reliance on Qatari LNG makes it vulnerable to supply disruptions.
- **Trade Imbalance:** India's imports (\$12.3 billion) far exceed its exports (\$1.7 billion). Regulatory hurdles slow investment projects.
- **Geopolitical Concerns:** Qatar's ties with Iran and the Muslim Brotherhood sometimes conflict with India's interests.
- **Security Concerns:** Allegations of Qatar funding radical groups raise concerns for India's security.
- **Migrant Labor Issues:** Reports of poor working conditions and delayed wages for Indian workers.
- **Legal Challenges:**
 - The Kafala System (sponsorship-based employment) creates dependency on employers, leading to exploitation.

- Indian Navy Veterans Case (2022-24): Espionage charges against eight Indian ex-naval personnel strained diplomatic ties.
- Cultural & Diplomatic Sensitivities:
 - India's policies (CAA, NRC, Hijab Ban) have faced criticism in Qatar.
 - Controversial remarks by Indian politicians in 2022 led to diplomatic protests and calls for boycotts in Gulf nations.

Way Forward:

- Diversify Trade & Investment: Fast-track the India-Qatar Free Trade Agreement (FTA) to balance trade.
- Strengthen Energy Cooperation: Expand ties in renewable energy (solar, wind, green hydrogen).
- Boost Defense & Maritime Security: Increase joint military exercises to protect Indian energy interests in the Gulf.
- Improve Migrant Welfare: Strengthen labor agreements for better working conditions.
- Expand Digital & Financial Ties: Increase UPI adoption in Qatar and enable local currency trade settlements.
- Strengthen Cultural Diplomacy: Expand tourism and sports collaborations to deepen bilateral goodwill.
- Manage Geopolitical Risks: Balance relations while securing India's strategic and economic interests.

Conclusion:

India-Qatar relations have been elevated to a Strategic Partnership, with deeper cooperation in trade, investment, energy, security, and culture. Future collaborations in renewable energy, startups, AI, and advanced technology will further enhance economic and diplomatic ties.

India-EFTA Trade and Economic Partnership Agreement

Context: Switzerland and Liechtenstein, part of the European Free Trade Association (EFTA), are seeking a Bilateral Investment Treaty (BIT) with India to ensure better investment protection.

Background:

- EFTA Trade Deal: EFTA nations plan to invest \$100 billion in India over 15 years under the Trade and Economic Partnership Agreement (TEPA).
- Initially, BIT was not included in TEPA, but Switzerland and Liechtenstein are now advocating for it.



What is a Bilateral Investment Treaty (BIT)?

A BIT is an agreement between two countries that defines rules for private investments.

Key Features:

- **Investor Protection:** Safeguards against unfair treatment and expropriation.
- **Non-discriminatory Treatment:** Ensures fair and transparent policies for foreign investors.
- **Most-Favored-Nation (MFN) Clause:** Guarantees equal treatment for investors.
- **National Treatment:** Foreign investors receive the same treatment as domestic ones.
- **Investor-State Dispute Settlement (ISDS):** Allows investors to seek arbitration after exhausting local legal remedies.

Why do Switzerland and Liechtenstein want a BIT?

- **MFN Clause Suspension:** Switzerland suspended the MFN clause in the Double Taxation Avoidance Agreement (DTAA) with India in December 2024 due to an Indian Supreme Court ruling.
- **Higher Taxes:** Swiss companies like Nestlé face higher taxes in India due to changes in DTAA enforcement.
- **Investment Stability:** A BIT would provide legal protection and a stable business environment.

Trade and Economic Partnership Agreement (TEPA)

- **India's First FTA** with four developed European nations.
- **\$100 billion FDI Commitment** from EFTA over 15 years.
- **Job Creation:** Aims to create 1 million direct jobs in India.
- **Key Focus Areas:** Market access, trade facilitation, dispute resolution, and tax clarity.

Conclusion: A Bilateral Investment Treaty between India, Switzerland, and Liechtenstein would strengthen economic ties, resolve tax disputes, and boost investor confidence.

USAID Funding Freeze

Context: U.S. President Donald Trump has signed an executive order freezing funding for the United States Agency for International Development (USAID).



About USAID:

- Established in 1961, USAID is an independent U.S. agency that provides foreign aid and development assistance.
- It promotes democratic values, global peace, prosperity, and U.S. security interests.
- In 2024, USAID had a budget of \$44.20 billion, accounting for 42% of global humanitarian aid tracked by the UN.

Key USAID Programs:

- PEPFAR: Fighting HIV/AIDS.
- Feed the Future: Addressing global hunger.
- Power Africa: Expanding electricity access.
- Water for the World Act: Improving water and sanitation.

Impact on India:

- India has received USAID assistance since 1951 and was allocated \$79.3 million in 2024, mainly for:
 - Health: HIV/AIDS, TB, maternal & child health, and immunization.
 - Economic, energy, and environmental initiatives.

Potential Consequences:

- Minimal Disruption: India now relies more on domestic funding for development projects.
- Healthcare Concerns: Existing health programs might face challenges if alternative funding isn't secured.

Brazil Joins OPEC+

Context: Brazil has officially approved its entry into OPEC+, joining major oil-exporting nations to influence global oil markets.

Significance of Brazil's Membership:

- **Expanding Influence:** As a top oil producer, Brazil strengthens OPEC+'s global market control.
- **Price Stability:** Brazil's inclusion may impact global oil prices and supply strategies.
- **Effect on India:** India, a major oil importer, could face price fluctuations based on OPEC+ decisions.



About OPEC:

- OPEC (Organization of the Petroleum Exporting Countries) is an alliance of 12 oil-exporting nations that coordinate petroleum policies.
- Founded in 1960 in Baghdad, with Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela as original members.
- Headquarters: Vienna, Austria (Austria is not an OPEC member).
- Objective: Ensure fair and stable oil prices and balance supply-demand.
- India is not an OPEC member.

About OPEC+:

- Formed in 2016 to counter falling oil prices due to rising U.S. shale oil production.
- OPEC partnered with 10 non-OPEC oil producers to stabilize the market.
- As of 2025, OPEC+ has 23 members, including Russia, Kazakhstan, Mexico, and now Brazil.

Conclusion: Brazil's entry into OPEC+ enhances its role in global oil diplomacy while aligning with major energy exporters.

Agriculture Sector in Budget 2025-26

Agriculture: The 1st Engine of India's Development

The Union Budget 2025-26 highlights agriculture as a key driver of India's growth.



Sector Contribution & Budget Allocation:

- GDP Contribution: 18.2% with a 5% annual growth (2017-2023).
 - Total Allocation: ₹1.37 lakh crore for the Ministry of Agriculture & Farmers' Welfare. ₹1.27 lakh crore for the Department of Agriculture & Farmers' Welfare.
 - ₹10,466 crore for the Department of Agricultural Research & Education.

Budget Changes:

- Overall reduction of 2.75%, from ₹1.41 lakh crore to ₹1.37 lakh crore in revised estimates (RE) for 2024-25.
 - Allied Sectors Growth: Fisheries, animal husbandry, and dairying: ₹7,544 crore (37% increase).
 - Food processing: ₹4,364 crore (56% increase).

Key Agricultural Schemes:

- PM-KISAN Scheme: ₹63,500 crore (higher than ₹60,000 crore last year).
- Pradhan Mantri Fasal Bima Yojana (Crop Insurance): ₹12,242 crore (down from ₹15,864 crore in 2024-25 RE).

Conclusion: While overall agricultural funding saw a slight cut, allied sectors and PM-KISAN received a significant boost, reflecting the government's focus on diversified rural growth.

Gross Domestic Knowledge Product (GDKP)

Context: The Ministry of Statistics and Programme Implementation (MoSPI) recently conducted a session on measuring Gross Domestic Knowledge Product (GDKP) to assess India's knowledge economy.



What is GDKP?

- GDKP is a proposed metric to quantify the contribution of knowledge-based sectors—such as innovation, intellectual assets, and intangible resources—to GDP.
- First proposed in 2021, but was shelved due to the lack of a clear methodology.
- MoSPI will set up a technical committee to develop an effective measurement approach.

Current Status & Approach:

- At present, spending on Intellectual Property Products (IPP) is recorded under Gross Fixed Capital Formation (GFCF) in GDP data.
- The government may adopt a "satellite account" approach, similar to measuring tourism or the blue economy, to track knowledge contributions separately.

Framework:

GDKP will be based on four key pillars:

1. Knowledge Items (e.g., patents, research output).
2. Knowledge Producers (e.g., universities, R&D institutions).
3. Knowledge Distributors (e.g., digital platforms, media).
4. Knowledge Users (e.g., businesses, consumers).

Significance:

- Helps in better policymaking for education, research, and technology.
- Guides investment in knowledge infrastructure like R&D, digital networks, and skill development.
- Captures the impact of knowledge on economic and social progress.

Challenges in Implementation:

- Methodology Issues: Defining measurable knowledge parameters.
- Data Gaps: Intellectual property, digital innovation, and human capital data are fragmented.
- Integration with GDP: Avoiding double counting of knowledge already included in GDP.
- Subjectivity: Knowledge measurement varies across sectors and needs refinement.
- Welfare Measurement: Unclear how GDKP will supplement GDP in assessing economic well-being.

Conclusion: GDKP aims to shift from purely economic indicators to a knowledge-driven approach, but requires a robust methodology and clear data collection mechanisms for effective implementation.

Shift from Fiscal Deficit to Debt-to-GDP Ratio

Context: The Indian government has announced a transition from Fiscal Deficit to Debt-to-GDP ratio as the key fiscal metric from FY 2026-27. The target is to reduce the Debt-to-GDP ratio to 50±1% by 2031.

$$\text{Debt-to-GDP Ratio} = \left(\frac{\text{Total Government Debt}}{\text{GDP}} \right) \times 100$$

What is Debt-to-GDP Ratio?

- **Definition:** It measures a country's total debt (past and present borrowings) relative to GDP.
 - **Indicates:** The level of debt compared to the size of the economy.
 - A country's ability to repay its debt based on economic performance.

What is Fiscal Deficit?

- **Definition:** The difference between government expenditure and total revenue (excluding borrowings) in a financial year.
- **Formula:**
- **Fiscal Deficit = Total Expenditure – Total Revenue (Excluding Borrowings)**
 - **Interpretation:** High Fiscal Deficit: Indicates more government borrowing, which can lead to inflation.
 - **Low Fiscal Deficit:** Reflects better financial management and reduced reliance on debt.

Why Shift to Debt-to-GDP Ratio?

- **Better Debt Management:** Focuses on long-term debt sustainability rather than short-term fiscal gaps.
- **Improved Credit Ratings:** A lower Debt-to-GDP ratio signals fiscal discipline, attracting investors.
- **Inflation Control:** Reduces excessive borrowing, preventing inflationary pressures.
- **Global Benchmarking:** Aligns with international fiscal standards for a stronger economy.

Conclusion: The transition to Debt-to-GDP as the primary fiscal anchor reflects India's commitment to sustainable debt management, reduced fiscal deficits, and long-term economic stability.

National Mission on High-Yielding Seeds

Context: The Indian government has launched the National Mission on High-Yielding Seeds in the Union Budget 2025-26 to boost agricultural productivity and ensure food security.

Key Features:

- Budget Allocation: ₹100 crore for seed research and development.
- Objective: Develop high-yielding, pest-resistant, and climate-resilient seeds to enhance crop productivity.
 - Focus Areas: Strengthening research for improved seed varieties.
 - Developing pest- and climate-resistant crops for sustainable farming.
 - Making over 100 new seed varieties available to farmers.
 - Encouraging hybrid crop adoption through advanced research.



Expected Benefits:

- Increased Crop Yield: Better seed quality enhances farm productivity.
- Resilient Agriculture: Climate-resistant seeds ensure stability despite changing weather patterns.
- Boost to Seed Industry: Strengthens both public and private sector seed development.

Implementation: The Indian Council of Agricultural Research (ICAR) will oversee the mission, ensuring research, development, and widespread adoption of high-yielding seeds.

Makhana: The 'Black Diamond'

Context: Union Finance Minister Nirmala Sitharaman announced the establishment of a Makhana Board in Bihar to boost production and marketing.

Makhana Board

- Budget Allocation: ₹100 crore
 - Objective: Provide training, financial aid, and access to government schemes for farmers.
 - Enhance production, processing, value addition, and marketing of Makhana.

Makhana under ODOP Scheme:

- Recognized as a One District One Product (ODOP) item.
- Government subsidies for processors to improve:
 - Branding & marketing
 - Infrastructure development in Bihar

About Makhana (Fox Nuts):

- Scientific Name: *Euryale ferox*
 - Appearance: Found in freshwater bodies across South & East Asia
 - Known for violet & white flowers with large, prickly leaves
 - Why 'Black Diamond'? The dark outer layer of Makhana resembles black diamonds.

Nutritional Value & Uses:

- Low in fat, high in carbohydrates, and a rich source of protein.
- Used in snacks, sweets, and religious offerings.

Major Producing Regions:

- Bihar produces 90% of India's total Makhana.
- Mithila Makhana received a Geographical Indication (GI) Tag in 2022.

Climatic Conditions for Cultivation:

- Thrives in stagnant water bodies (ponds, lakes, ditches, wetlands).
 - Ideal Climate: Temperature: 20°C - 35°C
 - Humidity: 50% - 90%
 - Annual Rainfall: 100 - 250 cm



Lezim – Maharashtra’s Traditional Folk Dance

The Bollywood film Chhava, based on Chhatrapati Sambhaji Maharaj, has sparked controversy over a scene depicting the Maratha king performing the Lezim dance.

About Lezim Dance:

- A vibrant folk dance of Maharashtra, commonly performed during weddings and festivals like Ganesh Chaturthi.
- Believed to have originated as a physical training sport during Chhatrapati Shivaji’s reign.
- Involves rhythmic formations in pairs, groups of four, or circles, with energetic movements like stepping, squatting, and jumping.
- Accompanied by dhol (drums), starting with slow beats that gradually intensify to match the dancers’ pace.



Jhumer Dance – A Folk Tradition of Eastern India

The Prime Minister recently attended Jhumer Binandini 2025, a grand celebration of Jhumer dance in Guwahati, Assam.

About Jhumer (Jhumur) Dance:

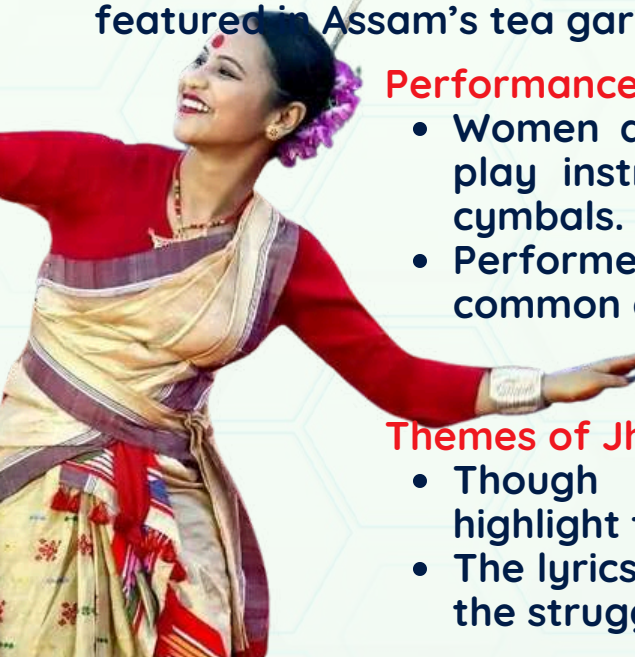
- A folk dance of the Sadan ethnolinguistic group, originating from the Chotanagpur region (Jharkhand).
- Traditionally performed during the harvest season and prominently featured in Assam’s tea garden festivals.

Performance Style:

- Women are the main dancers and singers, while men play instruments like madal, dhol, dhak, flutes, and cymbals.
- Performers wear traditional red and white sarees, a common cultural attire.

Themes of Jhumur Songs:

- Though lively and rhythmic, Jhumur songs often highlight the hardships of tea plantation workers.
- The lyrics narrate stories of migration, exploitation, and the struggles faced by the tea garden community.



Fort William Renamed as Vijay Durg

As part of efforts to remove colonial influences from the armed forces, Fort William in Kolkata has been renamed Vijay Durg.

Key Changes:

- Kitchener House → Manekshaw House
- St. George's Gate → Shivaji Gate

About Fort William:

- Built by the British in 1781, named after King William III of England.



- Now called Vijay Durg, inspired by the Maratha fort that served as a naval base under Chhatrapati Shivaji.
- Serves as the headquarters of the Eastern Army Command.

Significance of Renaming:

- Strengthens India's military heritage and national identity.
- Aligns with the government's vision of indigenizing defence doctrines and traditions.

Swavalambini: Women Entrepreneurship Programme

The Ministry of Skill Development & Entrepreneurship (MSDE), in partnership with NITI Aayog, launched Swavalambini, a women entrepreneurship program in Assam, Meghalaya, and Mizoram.



Objectives:

- Encourage women to become entrepreneurs by providing skills, mentorship, and funding.
- Foster women-led businesses and job creation.
- Implement a structured process: Awareness → Development → Mentorship → Funding.

Key Features:

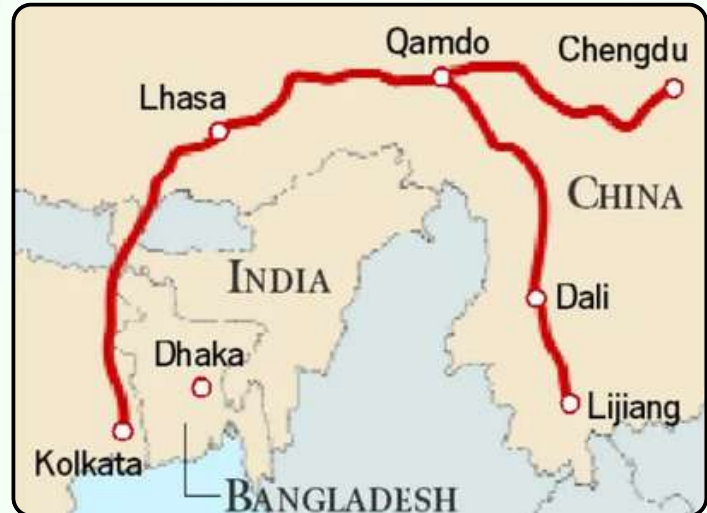
- Entrepreneurship Awareness Programme (EAP): A 2-day session introducing 600 female students to business basics.
- Women Entrepreneurship Development Programme (EDP): A 40-hour intensive training for 300 selected participants, offering hands-on business skills.

Tea Horse Road: An Ancient Trade Route

China's Ambassador to India, Xu Feihong, recently emphasized the historical importance of the Tea Horse Road, an ancient trade network.

What Was the Tea Horse Road?

- A 2,000+ km trade network connecting southwest China to India, Nepal, and Bangladesh via Tibet.
- Passed through Yunnan province cities like Dali and Lijiang, reaching Lhasa before branching into the Indian subcontinent.
- Though lesser-known than the Silk Road, it played a crucial role in trade and cultural exchange.



Historical Background

- Tang Dynasty (618-907 CE): Buddhist monk Yijing documented the trade of sugar, textiles, and rice noodles from China to Tibet and India.
- Song Dynasty (960-1279 CE): Trade focused mainly on tea and horses, alongside other goods.

Point Nemo: Earth's Most Remote Location

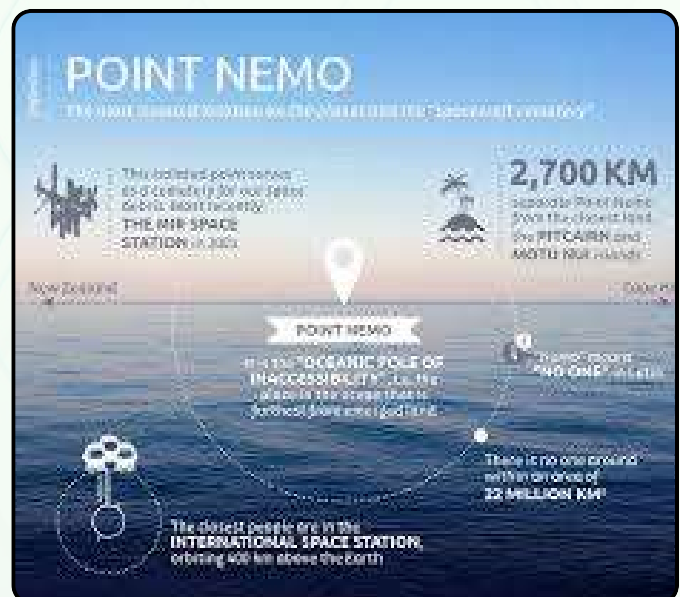
INSV Tarini recently crossed Point Nemo, the most isolated spot on Earth, also called the Oceanic Pole of Inaccessibility.

About Point Nemo

- Located in the South Pacific Ocean, farthest from any land.
- Due to weak ocean currents and low nutrients, marine life is scarce in this region.
- The nearest humans to Point Nemo are often astronauts aboard the International Space Station (ISS), orbiting about 400 km above.

INSV Tarini

- A 56-foot sailing vessel of the Indian Navy, built by Aquarius Shipyard Ltd.
- Named after the Tara Tarini temple, symbolizing resilience and courage.



Earthquake Swarm

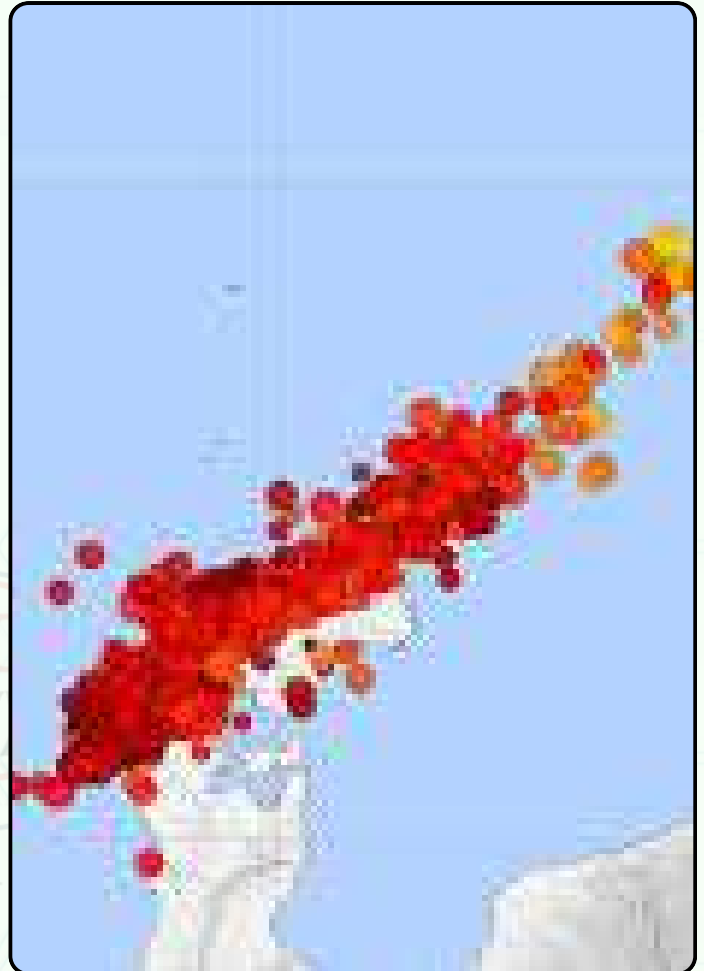
Greece has declared a state of emergency following a series of undersea earthquakes.

What is an Earthquake Swarm?

An earthquake swarm is a series of multiple earthquakes occurring in a small area over a short period, with no single event being significantly stronger than the others.

Causes of Earthquake Swarms

- Tectonic Activity - Movement along fault lines redistributes stress within the Earth's crust, triggering swarms.
- Magmatic & Volcanic Processes - Magma movement beneath the surface, especially in volcanic regions like Santorini, Greece, can cause swarms.
- Human-Induced & Geothermal Activities - Activities like geothermal energy extraction, mining, and wastewater injection can alter underground stress, leading to earthquake swarms.



Articles 21 and 22(1): Right to Be Informed of Arrest Grounds

The Supreme Court has ruled that failing to provide reasons for an arrest violates Articles 21 and 22(1) of the Constitution.

Key Constitutional Provisions:

- Article 21 - Protects personal liberty, stating that no person can be deprived of it unless through a lawful procedure.
- Article 22(1) - Ensures that:
 - Every arrested individual must be informed of the reasons for their arrest as soon as possible.
 - They have the right to consult and be defended by a lawyer of their choice.

State Emblem of India: Proper Usage Guidelines

The Union Home Ministry has directed states to ensure the correct depiction of the State Emblem of India, mandating the inclusion of "Satyameva Jayate" in Devanagari script.

About the State Emblem of India:

- Adopted: January 26, 1950, inspired by the Sarnath Lion Capital of Ashoka.
- Design Features:
 - Three visible lions, with the fourth hidden.
 - Dharma Chakra at the center of the abacus.
 - Animal Representations on the Abacus: Bull (Right): Symbolizes Buddha's birth.
 - Horse (Left): Represents Buddha's renunciation journey.
 - Elephant (East): Reflects Queen Maya's dream of a white elephant.
 - Lion (North): Signifies Buddha's enlightenment.
- Dharma Chakra symbolizes Buddha's first sermon.
- The bell-shaped lotus from the original capital is not included in the official emblem.



Motto: Satyameva Jayate ("Truth Alone Triumphs"), taken from the Mundaka Upanishad, is inscribed below the emblem.

This directive ensures the emblem's accurate representation in all official and public spaces.

Advocate-on-Record (AoR): Supreme Court's Ruling

The Supreme Court has ruled that Advocates-on-Record (AoRs) are fully responsible for the accuracy of petitions filed, even if drafted by other lawyers.



Who is an Advocate-on-Record (AoR)?

- Introduced under Article 145 of the Constitution, allowing the Supreme Court to regulate its own procedures.
- British Influence: Based on the barrister-solicitor system in the UK.
- Role & Responsibilities:
 - Only AoRs can file and conduct cases in the Supreme Court.
 - No other advocate can appear in the SC without an AoR's instruction.
 - Uniqueness: This system is exclusive to the Supreme Court and does not exist in High Courts.

This ruling reinforces the accountability of AoRs in maintaining legal accuracy and procedural integrity.

National Geospatial Land Survey (NAKSHA) Launched

The Union Minister of Rural Development is set to inaugurate NAKSHA in Raisen, Madhya Pradesh.

About NAKSHA:

- Coverage: 152 Urban Local Bodies (ULBs) across 26 States and 3 Union Territories (UTs).
- Nodal Ministry: Department of Land Resources, under the Ministry of Rural Development.
- Objective: To digitize and update urban land records, ensuring accurate land ownership documentation.

This initiative aims to improve urban land governance through geospatial technology.

Digital Brand Identity Manual (DBIM)

The Ministry of Electronics and IT (MeitY) has launched the Digital Brand Identity Manual (DBIM) to streamline and standardize the government's digital presence.



Key Highlights:

Objective:

- Unifies the digital identity of government websites under the Gov.In initiative.
- Supports the "Reform, Perform, and Transform" vision for efficient and inclusive e-governance.

Features:

- DBIM Toolkit - Ensures consistency in government websites.
- Gov.In CMS Platform - Simplifies website management.
- Central Content Publishing System (CCPS) - Enables centralized content regulation.
- Social Media Guidelines - Standardizes government digital communication.

This initiative enhances transparency, accessibility, and citizen engagement in digital governance.

Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)

India has taken over the Chairmanship of BOBP-IGO from Bangladesh during the 13th Governing Council Meeting in Malé, Maldives.

About BOBP-IGO:

- Established: 2003
- Purpose: Supports member nations in enhancing livelihoods and quality of life for small-scale and artisanal fishers in the Bay of Bengal region.
- Members:
 - Full Members: Bangladesh, India, Maldives, Sri Lanka.
 - Cooperating Nations: Indonesia, Malaysia, Myanmar, Thailand.
- Observers: FAO and regional fisheries/environmental organizations.

This regional fisheries body plays a crucial role in sustainable marine resource management and economic upliftment in coastal communities.

Beggar-Thy-Neighbour Policies

The US has recently imposed tariffs on imports from China, Canada, and Mexico, following a Beggar-Thy-Neighbour approach.



What Are Beggar-Thy-Neighbour Policies?

These are protectionist economic measures that benefit one country at the expense of others.

Examples:

- Trade Wars: Imposing high tariffs or import restrictions.
- Currency Wars: Weakening the national currency to boost exports and make imports expensive.

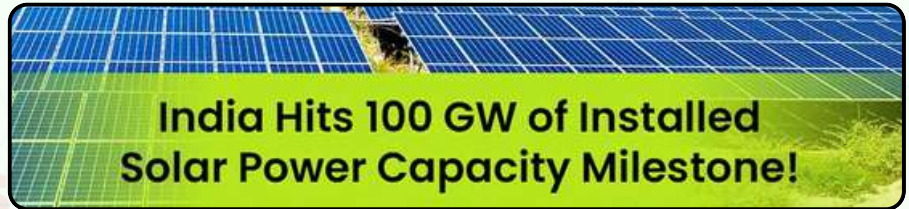
Origins:

The term was first used by Adam Smith in *The Wealth of Nations* (1776).

These policies often lead to retaliatory measures, disrupting global trade and economic stability.

India Crosses 100 GW Solar Power Capacity

India has achieved a significant milestone by surpassing 100 GW of installed solar power capacity.



Key Highlights:

- Rapid Solar Expansion: As of January 2025, India has 100.33 GW installed, with 84.10 GW under implementation and 47.49 GW in the tendering stage.
- Leading Renewable Source: Solar power now accounts for 47% of India's total renewable energy capacity.
- Record Growth in 2024:
 - 24.5 GW of new solar capacity added—twice the 2023 figure.
 - Utility-scale projects contributed 18.5 GW (2.8x higher than 2023).
 - Top-performing states: Rajasthan, Gujarat, Tamil Nadu, Maharashtra, and Madhya Pradesh.
 - Boost in Solar Manufacturing:
 - In 2014, India had only 2 GW of solar module production capacity.
 - By 2024, this increased to 60 GW, positioning India as a global solar manufacturing hub.

This milestone strengthens India's commitment to clean energy and its goal of achieving net-zero emissions by 2070.

ELS Cotton Mission Announced in Union Budget

The government has launched a five-year mission to boost productivity and sustainability in cotton farming, with a special focus on Extra-Long Staple (ELS) cotton.

What is ELS Cotton?

- Superior Quality: Fibre length of 30 mm or more, making it ideal for premium textiles.
- Derived from: *Gossypium barbadense* (also known as Egyptian or Pima cotton).
- Comparison: Most of India's cotton is *Gossypium hirsutum* (96% share), with shorter fibres (25-28.6 mm).

Key Features of ELS Cotton:

- Fine & Strong Yarns: Used in luxury fabrics.
- Highly Durable: Resistant to wear and tear.



Major ELS Cotton Growing Regions:

- Global Producers: Egypt, China, Australia, Peru.
 - In India: Atpadi (Maharashtra), Coimbatore (Tamil Nadu), parts of Karnataka & Madhya Pradesh.

This initiative aims to reduce import dependence and enhance India's position in high-value cotton production.

Tobin Tax

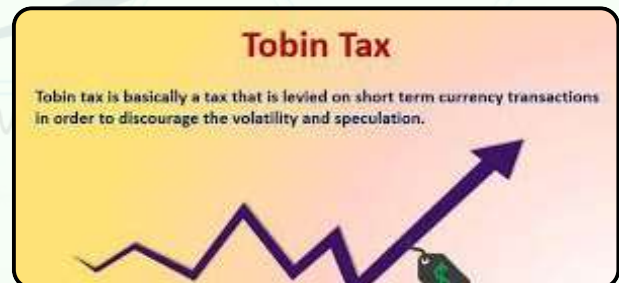
Trump's administration is reassessing U.S. capital investment policy to address the U.S. trade deficit and alleged currency manipulation, with some economists proposing a Tobin-style tax as a potential solution.

About Tobin Tax:

- It is a small tax on international currency transactions to enhance currency stability.
- Proposed by: James Tobin (1972), a Nobel Laureate economist.

Also known as:

- Financial Transactions Tax (FTT)
- Robin Hood tax (informal name)
- Purpose: To reduce excessive speculation and stabilize global financial markets.
- Application: Imposed on spot currency trades to:
 - Penalize short-term currency trading.
 - Stabilize markets by discouraging rapid, speculative trades.
 - Reduce volatility in cross-border financial flows.
- Often described as: A mechanism to "throw sand in the wheels" of currency flows, slowing volatility.



Indian-Origin Ongole Cow Sets Guinness World Record

Viatina-19, a Brazilian Ongole breed cow, has become the world's most expensive cow, selling for \$4.82 million (~₹41 crore), surpassing Japan's Wagyu and India's Brahman breeds.

About Ongole Cattle

- **Native to India:** Bos Indicus breed from Andhra Pradesh, known for strength, disease resistance, and heat tolerance.
- **Agricultural Significance:** Used in farming, dairy, and breeding.
- **Also Known As:** Nellore breed due to its historical link to the Nellore district.
- **Distinct Feature:** Males have a well-developed hump.
- **Global Demand:** Extensively used for crossbreeding in Brazil, USA, and Australia to improve local cattle breeds.

Geographical Distribution in India

- **Origin:** Prakasam district (formerly Nellore), Andhra Pradesh.
- **Key Regions:** Guntur, Vinukonda, Narasaraopet, Ongole, Kandukur.
- **River Areas:** Gundlakamma and Alluru rivers.

Ongole cattle continue to gain global recognition, boosting India's livestock legacy!



Mutual Fund Investment Tracing and Retrieval Assistant (MITRA)

The Mutual Fund Investment Tracing and Retrieval Assistant (MITRA) is a new digital platform launched by SEBI to help investors track and reclaim inactive or unclaimed mutual fund folios.

Key Features of MITRA:

- **Industry-Level Database** - Developed by Registrar and Transfer Agents (RTAs), MITRA provides a centralized search tool for unclaimed mutual fund investments.
- **Objective** - Encourages investors to retrieve forgotten investments and update their KYC details as per current norms.
- **Hosting** - Managed by CAMS and KFIN Technologies, two Qualified RTAs (QRTAs) authorized by SEBI.



Functions of MITRA:

- Helps investors identify unclaimed or overlooked mutual fund investments.
- Assists rightful legal claimants in recovering investments.
- Encourages compliance with KYC norms, reducing non-KYC compliant folios.
- Strengthens financial transparency and prevents fraud.

What is an Inactive Folio?

A folio is classified as inactive if no financial or non-financial transactions have been made for 10 years, despite having a unit balance.

MITRA aims to make the investment ecosystem more transparent, accessible, and secure for all investors.

Mutual Credit Guarantee Scheme for MSMEs (MCGS-MSME)

Government Launches Mutual Credit Guarantee Scheme for MSMEs

The Mutual Credit Guarantee Scheme for MSMEs (MCGS-MSME), announced in the Union Budget 2025-26, aims to provide collateral-free loans to support Micro, Small, and Medium Enterprises (MSMEs) in expanding and upgrading technology.



Key Features of MCGS-MSME:

- **Loan Facility** - Offers collateral-free loans up to ₹100 crore for MSMEs to modernize and expand operations.
- **Eligibility** - Available only to MSMEs with valid Udyam registration and not classified as NPAs.
- **Fund Allocation** - At least 75% of the loan must be used for machinery or equipment.
- **Guarantee Fund** - The Mutual Credit Guarantee Fund-MSME (MCGF-MSME), managed by NCGTC, provides 60% guarantee coverage to lenders, reducing risks.
- **Lending Institutions** - Includes Commercial Banks, NBFCs, and other registered lenders.
- **Scheme Duration** - Valid for four years or until ₹7 lakh crore in guarantees are issued.



This initiative boosts credit access, reduces lending risks, and helps MSMEs compete globally.

Liquidity Coverage Ratio (LCR)

What is Liquidity Coverage Ratio (LCR)?

LCR measures the proportion of High-Quality Liquid Assets (HQLA) that banks must hold to meet short-term liquidity needs during financial stress.

Key Features of LCR:

- **Objective:** Ensures banks have enough liquid assets to survive 30 days of severe liquidity stress.
- **HQLA Includes:** Cash, short-term bonds, excess SLR, MSF assets, and other cash equivalents.
- **FALLCR (Facility to Avail Liquidity for LCR):** Set at 15% of a bank's deposits since April 1, 2020.
- **Formula:** $LCR = \frac{HQLA}{\text{Total Net Cash Outflows}}$
- **Limitations of LCR:**
 - Higher LCR requirements can lead to banks holding more cash, reducing their ability to issue loans.
 - This may slow economic growth by restricting credit availability.



Basel III and LCR Implementation:

- Introduced by the Basel Committee on Banking Supervision (BCBS) in 2010 after the 2008 financial crisis.
- Initially set at 60% in 2015, gradually increased to 100% by 2019 for full compliance.

Four New Wetlands Designated as Ramsar Sites in India

Four New Ramsar Sites Recognized in India

India's Ramsar sites count has risen to 89 with the recent inclusion of four new wetlands under the Ramsar Convention.

Newly Designated Ramsar Sites:

- Sakkarakottai Bird Sanctuary (Tamil Nadu)
- Therthangal Bird Sanctuary (Tamil Nadu)
- Khecheopalri Wetland (Sikkim)
- Udhw Lake (Jharkhand)

Key Highlights:

- Tamil Nadu now leads India with 20 Ramsar sites, followed by Uttar Pradesh with 10 sites.
- India ranks third globally with 89 Ramsar sites, after the United Kingdom (176) and Mexico (144).
- India has the highest number of Ramsar sites in Asia.

Montreux Record - Wetlands Under Threat

- The Montreux Record lists wetlands facing ecological degradation due to human activities.
- Keoladeo National Park, Rajasthan (Listed in 1990) - A UNESCO World Heritage Site.
- Loktak Lake, Manipur (Listed in 1993) - Largest freshwater lake in Northeast India, known for its floating vegetation (Phumdis).

Understanding Wetlands

- Defined by the Ramsar Convention, wetlands include marshes, peatlands, and water bodies, whether natural or artificial, freshwater or saltwater.
- They act as transition zones between land and water ecosystems.

About the Ramsar Convention

- International treaty for wetland conservation, signed in Ramsar, Iran, on 2nd February 1971.
- World Wetlands Day is celebrated every year on February 2.
- Came into force in 1975, promoting the sustainable use of wetlands globally.

With this recognition, India strengthens its commitment to wetland conservation, ensuring ecological balance and biodiversity protection.



Algal Bloom Hotspots

Study Identifies Nine Algal Bloom Hotspots Along Indian Coast

A study by the Indian National Centre for Ocean Information Services (INCOIS) has pinpointed nine algal bloom hotspots along India's east and west coasts.

Key Algal Bloom Hotspots

- West Coast: Goa, Mangaluru, Kozhikode, Kochi, Vizhinjam Bay
- East Coast: Gopalpur, Kalpakkam, Palk Bay, Gulf of Mannar



What are Algal Blooms?

- Algal blooms are the rapid growth of phytoplankton in water bodies due to excess nutrients and sunlight.
- These blooms can discolor water and impact marine ecosystems.

Harmful Algal Blooms - The Red Tide

- Red Tide: Caused by toxin-producing dinoflagellates, leading to oxygen depletion and marine life fatalities.

Causes of Algal Blooms

- **Nutrient Flux:** Coastal upwelling and monsoonal nutrient runoff.
- **Eutrophication:** Excess nutrients accelerate algae and cyanobacteria growth.
- **Temperature:** Warmer conditions favor blooms, especially in summer and fall.
- **Turbidity:** Clearer water allows more sunlight, boosting photosynthesis.

Role of Phytoplankton in Ocean Health

- Produce over 50% of Earth's oxygen.
- Absorb CO₂, helping mitigate global warming.
- Foundation of the marine food chain and a bioindicator of ocean health.

This study emphasizes the need for coastal monitoring and sustainable nutrient management to prevent harmful algal blooms.

Tiger Population in India: NCBS Study

India's Tiger Population Grows by 30% in Two Decades

A recent study highlights a 30% increase in India's tiger population, showcasing the success of conservation efforts.

Tiger Facts

- Scientific Name: *Panthera tigris*
- Largest wild cat species in the world
- Conservation Status (IUCN): Endangered
- Key Role: Apex predator, crucial for ecosystem balance



Tiger Population in India (2022 Estimation)

- Minimum Count: 3,167 tigers
- Estimated Average: 3,682 tigers
- Upper Limit: 3,925 tigers
- Annual Growth Rate: 6.1%

What's Behind the Tiger Comeback?

1. Balanced Conservation Strategy:

- 85% of breeding tigers are in protected areas (land sparing)
- Tigers also thrive in multi-use forests where humans and wildlife coexist (land sharing)

2. Strong Legislative Support:

- Wildlife Protection Act, 1972
- Forest Conservation Act, 1980
- National Tiger Conservation Authority (NTCA)

3. Socio-Economic Factors:

- Economic growth and reduced forest dependence boost tiger recolonization

Why Tigers Matter?

- Biodiversity Guardians: Protecting tigers means conserving entire ecosystems
- Community Benefits: Healthy tiger landscapes support local livelihoods & ecotourism

Morand-Ganjali Irrigation Project

NTCA Warns Against Morand-Ganjali Irrigation Project's Impact on Tiger Habitats

The National Tiger Conservation Authority (NTCA) has raised concerns that the Morand-Ganjali Irrigation Project in Madhya Pradesh will submerge critical tiger habitats in Satpura Wildlife Sanctuary and Melghat Tiger Reserve.

About Satpura Wildlife Sanctuary

- Location: South of Narmada River, Hoshangabad district, Madhya Pradesh
- Established in: 2000
- Part of Satpura Ranges - meaning "Seven Folds", forming a watershed between Narmada & Tapti Rivers

About Melghat Tiger Reserve 🌿

- Location: Gavilgarh Hills, Maharashtra, part of Satpura Hill Range
- Declared Wildlife Sanctuary in: 1967
- Became a Tiger Reserve in: 1974
- Vegetation: Tropical dry deciduous forests, dominated by Teak
- Boundaries: Tapti River & Gawilgarh Ridge

Tribal Communities:

- Korkus (largest tribal group)
- Gawli Community
- Gond Tribe



Key Concern: Impact of the Morand-Ganjaj Project

- Submergence of vital tiger corridors
- Threat to biodiversity and wildlife movement
- Displacement of local tribal communities
- Conservation vs. Development: Striking a Balance is Crucial!

Pong Dam Lake Wildlife Sanctuary

2025 Pong Dam Lake Bird Count Records a Surge in Waterfowl Population

The annual bird count at Pong Dam Lake Wildlife Sanctuary has reported a significant increase in the waterfowl population, particularly among migratory birds.

Key Findings of the 2025 Bird Count 📊

- Total Birds Counted: 1,53,719 🐦
- Total Species Documented: 97
- Migratory Birds: Sharp rise in numbers
- Bar-headed Goose (Flagship species) shows unprecedented growth

About Pong Dam Lake Wildlife Sanctuary

- Location: Wetland zone of Shivalik Hills, Himachal Pradesh
- Formation: A man-made reservoir created by Pong Dam on the Beas River
- Other Name: Maharana Pratap Sagar



Ecological Significance 🌍

- Wetland of National Importance (Declared in 1994)
- Ramsar Site (Recognized internationally in 2002)

Flora & Fauna at Pong Dam Lake

- Vegetation: Submerged plants, grasslands, and forests
- Dominant Trees: Eucalyptus, Acacia, Shisham
- Key Species: Bar-headed Goose (Flagship species)

Why Is This Important?

- The rise in migratory bird population signals a healthy wetland ecosystem
 - Reinforces Pong Dam's importance as a key wintering ground for migratory species
 - Strengthens India's conservation efforts under the Ramsar Convention
- Protecting wetlands is crucial for biodiversity!

Tree Aadhaar for Chinar

Kashmir Introduces 'Tree Aadhaar' to Protect Iconic Chinar Trees

A new geo-tagged digital identity system, similar to Aadhaar, has been introduced in Jammu, Kashmir, and the Chenab region to monitor and conserve Chinar trees, which are under threat due to urbanization and infrastructure projects.

What is the Tree Aadhaar Initiative?

- Unique Digital ID: Each Chinar tree is assigned a unique identity.
- Example: The Chinar in Lal Chowk is labeled as CG-JK010088.
- Geo-Tagging: QR codes are attached to trees, storing 25 characteristics such as:

Geographical location

Health & Age

Growth patterns

- Conservation Impact: Helps track changes and mitigate risks.

About the Chinar Tree (*Platanus orientalis*)

- Other Names: Oriental Plane Tree, Maple Tree, locally called Boueen.
- Size: Grows up to 30 meters tall, with a girth of 10-15 meters.
- Growth:
 - Takes 30-50 years to mature.
 - Lives up to 150+ years; some over 700 years old!



Where Does It Grow?

- Eastern Himalayas, Pir Panjal Valley, Chenab Valley
- Requires cool climates & ample water

Uses of Chinar

- Medicinal: Leaves & bark used in traditional medicine.
- Woodwork: Lacewood is used for fine interior furniture.
- Dyes: Twigs & roots are used in dye-making.

Why Are Chinar Trees Declining?

- Urbanization: Habitat loss due to construction.
- Climate Change: Irregular rainfall & temperature extremes.
- Illegal Logging: Despite protection, trees are cut for timber.
- Pests & Diseases: Environmental stress weakens them.

Historical Significance

- The oldest Chinar in Kashmir (700 years old) was planted by Sufi Saint Syed Qasim Shah in Chattergam, Budgam district.
- This initiative is a crucial step toward preserving Kashmir's heritage and ecological balance!

Polarised Moonlight for Navigation

Bull Ants Use Polarised Moonlight for Night Navigation

Scientists at Macquarie University, Sydney have discovered that two nocturnal bull ant species—*Myrmecia pyriformis* and *Myrmecia midas*—navigate at night using polarised moonlight.

Why is this discovery significant?

- Only the second known case of an animal using polarised moonlight instead of sunlight for navigation (after the Dung Beetle).
- Even under a crescent moon, when moonlight is 80% dimmer, these ants can still find their way



How Does Polarised Light Help in Navigation?

- Sun & Moon emit unpolarised light
- As light travels through the atmosphere, it scatters and becomes polarised
- Polarization patterns act as a 'natural compass' for certain animals



Feature	Sunlight ☀️	Moonlight 🌙
Brightness	High	Much dimmer
Polarisation Strength	Strong	Weaker, but still detectable
Used By	Many insects (e.g., bees, ants)	Very few animals (e.g., Dung beetles, Bull ants)

Moonlight & Polarisation

- Full Moon: Low polarisation due to high brightness
- Crescent Moon: Higher polarisation as dimmer light scatters more

Why is This Important for Nocturnal Animals?

- Moon visibility is inconsistent due to:
 - Waxing & Waning cycles
 - Cloud cover
 - Tree canopies

These ants' ability to use polarised moonlight gives them an evolutionary advantage!

Black Plastic

Black Plastics & Health Risks: A Toxic Concern

A recent study has raised serious health concerns regarding the presence of harmful flame retardant chemicals in household items made from black plastic.

Key Findings:

- Toxic Chemical Found: High levels of BDE-209 (decabromodiphenyl ether) were detected in black plastic products.
- Phased Out: BDE-209 was banned in the U.S. over a decade ago, but still appears in products.
- Food Contamination: These toxic chemicals leach into food at hazardous levels, posing significant health risks.



What is Black Plastic?

- Made from recycled e-waste (computers, TVs, appliances)
- Used in kitchen utensils, food containers, toys, jewelry, coffee lids, and more
- Colored using carbon black, which contains carcinogenic PAHs (polycyclic aromatic hydrocarbons)

Harmful Component	Health Impact
Carbon Black (PAHs)	Possible carcinogen (IARC classified)
Heavy Metals (Lead, Cadmium, Mercury, etc.)	Neurological damage, kidney issues
Phthalates & Flame Retardants	Hormone disruption, developmental problems

A Call for Action!

- Stricter regulations on recycled plastics
- Safer alternatives for food-grade materials
- Awareness among consumers to avoid black plastic utensils & packaging

Paris AI Summit 2025

AI Action Summit 2025: India & France Lead the Global AI Dialogue

India and France co-chaired the Artificial Intelligence Action Summit (Feb 10-11, 2025), focusing on AI for public good and sustainable development.

Key Highlights:

- Global Collaboration: India to host the next AI Summit in 2026.
- AI for Public Interest: A new AI incubator launched to bridge the gap between public and private AI initiatives.
- Green AI: A Coalition for Environmentally Sustainable AI introduced by France, UNEP, and ITU.



Major Outcomes:

- **Global AI Agreement:**
 - 58 countries signed the "Inclusive and Sustainable AI" statement
 - The US and the UK abstained
- **Public Interest AI Platform:**
 - Aims to bridge the gap between public and private AI initiatives
 - Founding members include India, Kenya, Germany, France, and others
- **Energy & AI Observatory:**
 - To track AI's electricity usage and environmental impact
 - Led by the International Energy Agency (IEA)
- **Sustainable AI Initiatives:**
 - Coalition for Green AI: Launched by France, UNEP, and ITU to promote eco-friendly AI
 - Green Digital Action Initiative: Focuses on sustainable AI development
 - Current AI Initiative: A \$400 million fund to promote ethical and transparent AI, aiming to raise \$2.5 billion
- **AI in Labour & Governance:**
 - Observatories to assess AI's impact on jobs and skill development
 - A global dialogue on AI governance to align policies

Challenges & Concerns:

- **High Energy Consumption:** AI data centers could increase power demand by 160% by 2030
- **Job Displacement:** AI threatens 75 million jobs globally
- **Automation Inequality:** Benefits concentrated in developed nations, widening inequality
- **Bias in AI Models:** Risk of discrimination due to flawed training datasets
 - **Diverse AI Governance Approaches:** Europe: Focuses on regulations
 - **China:** Expanding state-backed AI
 - **US:** Prefers a hands-off approach

Way Forward:

- **Energy-Efficient AI:** Develop low-power AI infrastructure
- **Workforce Transition:** Strengthen institutions to help workers adapt to AI-driven jobs
- **AI in Education:** Introduce AI as a core subject in schools and colleges
- **Bias-Free AI Models:** Promote open-source, inclusive AI systems
- **Breaking AI Monopolies:** Ensure equitable access to AI technology worldwide

India's Contributions & PM's Vision:

- **AI Video Localization Partnership:** Collaboration between India's Reverie and France's Mediawen to enhance video accessibility in 11 Indian languages
- **Open Source AI:** Push for inclusive AI models, inspired by China's DeepSeek AI
- **AI & Job Market:** Emphasis on skilling and reskilling to adapt to AI-driven changes
- **Sustainable AI Development:** Advocating for AI powered by clean energy

Nuclear Energy Mission for Viksit Bharat

Overview:

- Announced in Budget 2025-26 to boost nuclear energy R&D and deploy Small Modular Reactors (SMRs).
- Budget Allocation: ₹20,000 crore for SMR research, targeting 5 operational reactors by 2033.
- Long-term Goal: Achieve 100 GW nuclear power capacity by 2047.



Key Initiatives:

1. Private Sector Entry:

- Amendment of Atomic Energy Act (1962) and Civil Liability for Nuclear Damages Act to allow private participation.
- Focus on:
 - Bharat Small Reactors (BSRs)
 - Bharat Small Modular Reactors (BSMRs)
 - Development of advanced nuclear technologies

2. What are Small Modular Reactors (SMRs)?

- Capacity: Up to 300 MW, about one-third of traditional reactors.
- Modular Design: Factory-built, transported, and installed on-site.
- Applications: Power generation, heating, desalination, industrial steam supply.
- Global Status: Under development in countries like the US, China, Russia, and South Korea.
- Example: Russia's Akademik Lomonosov - first floating nuclear plant (35 MW SMRs).

Advantages of SMRs:

- Cost-Effective & Scalable: Built in modules, allowing gradual deployment.
- Safety Features: Passive cooling systems reduce accident risks.
- Longer Fuel Cycle: Some designs run up to 30 years without refueling.
- Energy Accessibility: Suitable for remote/off-grid areas.

India's Nuclear Power Growth:

- Current Capacity: 8,180 MW (up from 4,780 MW in 2014).
- Projected Capacity: 22,800 MW by 2031-32, with nuclear energy contributing 9% of India's electricity by 2047.
- Existing Infrastructure: 23 reactors across 7 nuclear plants, mainly Pressurized Heavy Water Reactors (PHWRs).
- Ownership: NPCIL & BHAVINI operate nuclear plants; NTPC & NHPC can now enter joint ventures.

Key Government Initiatives:

- Expansion: 10 new reactors (8,000 MW) planned in Gujarat, Rajasthan, Tamil Nadu, Haryana, Karnataka, and MP.
- Kovvada Nuclear Project: India-US partnership for 6×1208 MW nuclear plant in Andhra Pradesh.
- Prototype Fast Breeder Reactor (PFBR): Advancing next-gen reactors for energy security.
- Thorium-Based Reactors: Research into Molten Salt Reactors for utilizing India's thorium reserves.

Bharat Small Reactors (BSRs):

- Capacity: 220 MW PHWRs with proven safety.
- Purpose: Compact design to support industries like steel, aluminum, and metals.
- Public-Private Partnership: Private sector provides land & capital, NPCIL handles operations.

Bharat Small Modular Reactors (BSMRs):

- Developed by: Bhabha Atomic Research Centre (BARC) for repurposing coal-based plants & remote areas.
- Goal: Deploy 40-50 BSMRs in 7-8 years with Tata Consulting Engineers & Dept. of Atomic Energy.
- Capacity Range: 30 MWe to 300+ MWe for a sustainable energy transition.

Conclusion:

India's Nuclear Energy Mission aims to modernize its nuclear sector, ensure energy security, and promote low-carbon growth through SMRs, public-private collaboration, and next-gen reactor technologies.

Biolumpivaxin: Lumpy Skin Disease Vaccine

Developed By:

- Bharat Biotech Group's Biovet in collaboration with Indian Council for Agricultural Research (ICAR).
- Approval: Certified by the Central Drug Standards Control Organization (CDSCO).

Key Features:

- World's First DIVA Marker Vaccine - Differentiates infected and vaccinated animals.
- High Safety & Efficacy - Rigorously tested for quality and effectiveness.
- Single-Dose Vaccine - Administered once a year to cattle and buffaloes (above 3 months).



About Lumpy Skin Disease (LSD):

- Cause: Lumpy Skin Disease Virus (LSDV), from the Poxviridae family.
 - Transmission: Blood-sucking vectors (ticks, mites, mosquitoes, houseflies).
 - Contaminated water, fodder, and feed.
 - Impact: Reduced milk production and fertility issues.
 - Severe economic losses in the dairy and livestock industry.

Significance of Biolumpivaxin:

- Strengthens India's veterinary healthcare sector.
- Helps in effective disease surveillance & control.
- Reduces livestock mortality & economic losses.

Biolumpivaxin marks a major breakthrough in animal health, ensuring better protection and productivity for India's dairy and livestock industry.

Bio Bank

About the Biobank (Frozen Zoo):

- Preserves DNA, cells, and reproductive tissues of endangered species.
- Storage: Cryogenic preservation at -196°C in liquid nitrogen to maintain genetic diversity.
- Collection So Far: Samples from 60 animals of 23 species.



SHAPING TALENT SINCE 2009

Biobanks in India:

- 19 registered biobanks preserving biological specimens, including cancer cell lines and tissues.
- Genome India Project:
 - Sequenced 10,000 genomes from 99 ethnic groups for disease research.
- Phenome India Project:
 - Collected 10,000 samples to improve prediction models for cardio-metabolic diseases.
- PRaGeD Mission:
 - Aims to identify genetic disorders in children for targeted treatments.
- Challenges:
 - India's biobank regulations limit advancements in precision medicine.



Padmaja Naidu Himalayan Zoological Park:

- India's largest high-altitude zoo, located in Darjeeling, West Bengal.
- Specialization: Breeding alpine-adapted species.
 - Notable Conservation Breeding Programs: Red Panda (Endangered).
 - Snow Leopard (Vulnerable).
 - Himalayan Wolf (Vulnerable).

Significance:

- Strengthens wildlife conservation and genetic research.
- Helps in species restoration and disease studies.
- A major step in India's biodiversity preservation efforts.

Second National Gene Bank

What is a Gene Bank?

- A storage facility that preserves seeds, pollen, and plant tissues to prevent species extinction.

India's First National Gene Bank:

- Established: 1996
- Managed by: Indian Council of Agricultural Research - National Bureau of Plant Genetic Resources (ICAR-NBPGR)
- Location: New Delhi



Purpose of the New Gene Bank:

- Ensures food and nutritional security for the future.
- Conserves genetic resources for both public and private sectors.

National Bureau of Plant Genetic Resources (NBPGR):

- A premier institute under ICAR.
- Objective: Conservation, evaluation, and sustainable use of plant genetic resources.
- Headquarters: New Delhi.

Global Example - ICRISAT Genebank:

- Established: 1972
- Purpose: Conserving crop genetic resources for semi-arid tropics.

Significance:

- Strengthens India's agricultural resilience.
- A crucial step for biodiversity conservation and food security.

GARBH-INi-DRISHTI Data Repository

GARBH-INi-DRISHTI Data Repository

- Developed at: Translational Health Science and Technology Institute (THSTI), Faridabad, Haryana.
- Purpose: Provides access to one of South Asia's largest pregnancy cohort datasets.
- Significance:
 - Includes clinical data, images, and biospecimens from over 12,000 pregnant women, newborns, and postpartum mothers.
 - Empowers global researchers in maternal and neonatal health studies.



- Part of: GARBH-INi Program, a national initiative for maternal and child health research.

GARBH-INi Program

- Objective: Develops prediction tools for preterm birth and enhances maternal & child health research.
- Initiative by: Department of Biotechnology, Ministry of Science & Technology.
- Part of: Atal Jai Anusandhan Biotech Mission under UNaTI (Undertaking Nationally Relevant Technology Innovation).

India's First Ferret Research Facility

- Location: THSTI, Faridabad, Haryana.
- Purpose: Supports vaccine development, infectious disease research, and pandemic preparedness.
- Features: State-of-the-art biosafety laboratory for advanced biomedical research.

Why Ferrets?

- Scientific Importance:
 - Ferrets' respiratory system closely resembles humans, making them ideal for studying airborne diseases.
 - Used for research on influenza, COVID-19, tuberculosis, vaccines, drug testing, neurological, and reproductive health studies.
- Biological Characteristics:
 - Small carnivorous mammals from the weasel family (Mustelidae).
 - Domesticated for over 2,500 years.

Lactobacillus crispatus & THSTI's Research

- **What is Lactobacillus crispatus?**
 - A probiotic bacterium found in the female reproductive & urinary tracts.
 - Produces lactic acid, hydrogen peroxide (H₂O₂), and antimicrobial compounds, maintaining a healthy vaginal microbiome.
- **Significance for Pregnant Women:**
 - Reduces the risk of preterm birth.
 - Prevents infections linked to infertility & pregnancy complications.
- **THSTI's Breakthrough:**
 - Isolated a genetically defined strain of Lactobacillus crispatus from Indian women enrolled in the GARBH-INi cohort.

J. C. Bose Grant (JBG)

About J. C. Bose Grant (JBG)

- Launched by: Anusandhan National Research Foundation (ANRF).
- Objective: Recognizes and supports outstanding senior Indian scientists & engineers.
- Grant Amount: ₹25 lakh annually for five years.



About Anusandhan National Research Foundation (ANRF)

- Statutory body under the Ministry of Science & Technology, established through the ANRF Act, 2023.
- Role: Apex body providing strategic direction for scientific research in India.
- Vision: Promote Research & Development (R&D), foster innovation, and build research capacity.
- Mandate: Strengthen India's national research ecosystem as per the National Education Policy (NEP).
- Focus Areas: Cutting-edge research in science, technology, agriculture, medicine, humanities, and social sciences.

Eligibility Criteria for JBG

- Who can apply?
 - Senior Indian scientists/researchers with proven excellence in research.
 - Excellence demonstrated through publications, patents, technology transfers, awards, and grants.
 - Must hold Professor-level or equivalent position in an Indian institution.
- Age Limit: Can be availed until 68 years.

Significance of J. C. Bose Grant

- Encourages high-impact research & innovation among senior Indian scientists.
- Strengthens India's global leadership in science & technology.
- Supports pathbreaking advancements across multiple disciplines.

mRNA Cancer Vaccine

Russia's mRNA-Based Personalized Cancer Vaccine

• Key Highlights

- Russia has developed an mRNA-based personalized cancer vaccine.
- Expected to be available for free to patients by early 2025.



What is an mRNA Cancer Vaccine?

- A type of immunotherapy, not a preventive vaccine.
- Uses messenger RNA (mRNA) to provide genetic instructions to the body's cells.
- Trains cells to produce specific antigens that trigger an immune response against cancer cells.

How It Works?

- mRNA Instructions - Directs the body to produce tumor-specific antigens.
- Immune Activation - The immune system recognizes and attacks cancer cells.
- Personalization - The vaccine is customized for each patient, targeting their specific tumor antigens.

Advantages Over Traditional Cancer Treatments

- Selective Targeting - Unlike chemotherapy, which kills both healthy and cancer cells, immunotherapy specifically attacks cancer cells, reducing side effects.
- Personalized Treatment - Tailored to an individual's unique cancer profile, increasing effectiveness.
- Potentially More Effective - Trains the body to continuously fight cancer rather than just eliminating it once.

Understanding mRNA (Messenger RNA)

- Role: Acts as a genetic messenger, carrying instructions from DNA to ribosomes for protein synthesis.
 - Process: DNA remains in the cell nucleus.
 - mRNA is transcribed from DNA and moves to ribosomes.
 - Ribosomes read mRNA and produce proteins needed by the body.

- Structure: Made of four nucleotides (A, U, C, G), which determine the protein-building instructions.

Significance of Russia's mRNA Cancer Vaccine

- Revolutionary Step in Cancer Treatment - Moves towards targeted and less harmful therapy.
- Potential to Improve Survival Rates - As a customized approach, it could improve treatment success rates.
- Global Impact - Could pave the way for more affordable cancer immunotherapies worldwide.

Paraquat Poisoning

Kerala Woman Sentenced to Death for Poisoning with Paraquat

A woman in Kerala received the death penalty for poisoning her boyfriend in 2022 using Paraquat, a highly toxic herbicide.

What is Paraquat?

- Definition: A widely used herbicide, also known as paraquat dichloride or methyl viologen.
- Uses: Controls weeds and dries crops like cotton before harvest.
- Toxicity: Classified as moderately hazardous (Category 2) by WHO.
- Ban Status: Prohibited in over 70 countries, including China and the EU, but still used in India and the US.

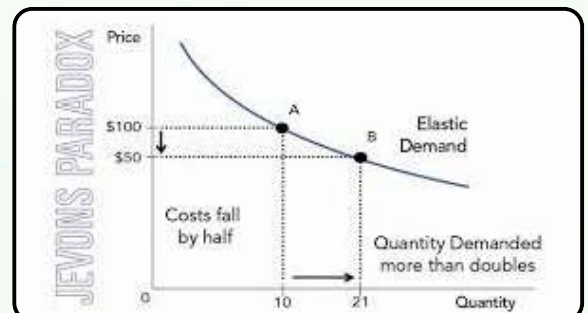
Its extreme toxicity has raised concerns about misuse, prompting global restrictions.



Jevons Paradox

Satya Nadella Links AI Growth to Jevons Paradox

Microsoft CEO Satya Nadella highlighted the Jevons Paradox while discussing AI, suggesting that making AI more efficient and accessible could increase overall demand rather than reduce it.



What is the Jevons Paradox?

- Proposed by economist William Stanley Jevons in 1865.
- States that greater efficiency in resource use often leads to higher overall consumption instead of a decrease.
- Reason: When a resource becomes cheaper and more accessible due to technological advancements, its demand rises.

Example

- Coal & Steam Engines: Jevons observed that improving steam engine efficiency led to more coal consumption instead of less, as industries expanded their usage.

This paradox is relevant today, as AI's growing efficiency might fuel wider adoption and higher energy consumption, reshaping industries globally.

Einstein Ring

ESA's Euclid Telescope Discovers Einstein Ring

The Euclid Space Telescope, launched by the European Space Agency (ESA), has spotted an Einstein Ring around the galaxy NGC 6505, located 590 million light-years away.

What is an Einstein Ring?

- It is a circular light formation created by gravitational lensing—where light from a distant object bends due to a massive galaxy in between.
- This effect magnifies and distorts the distant object's appearance.
- Named after Albert Einstein, who predicted this in his General Theory of Relativity.

Discovery Details

- NGC 6505 acts as the lens, bending light from a galaxy 4.42 billion light-years away.
- The first Einstein Ring was observed in 1987, and many more have been found since.

This discovery highlights how gravitational lensing helps astronomers study distant galaxies and the mysterious nature of the universe.



MATSYA 6000

India's First Manned Submersible - Matsya 6000

Matsya 6000, India's first manned deep-sea submersible, is set to dive 6,000 meters into the ocean by 2026.

Key Highlights

- Developed by: National Institute of Ocean Technology (NIOT), Chennai.
- Mission: Part of the Samudrayaan Mission, under the Deep Ocean Mission of the Ministry of Earth Sciences (MoES).
- Capacity: Can carry three people for 12-16 hours (with 96-hour emergency oxygen supply).



Features & Applications

- Structure: Built with 80mm-thick titanium alloy, capable of withstanding 600 times atmospheric pressure.
- Technology: Equipped with buoyancy control, power systems, propellers, navigation, communication, and robotic arms for deep-sea operations.
- Collaboration: The personnel sphere (2.1m diameter) was developed with ISRO.
- Purpose: Used for marine biodiversity research, mineral exploration, and scientific surveys.

This groundbreaking submersible will enhance India's deep-sea exploration capabilities and support marine resource studies.

Sudan Virus Disease

Sudan Virus Disease (SVD) Outbreak Confirmed in Uganda

The Ugandan government and WHO have confirmed an outbreak of Sudan Virus Disease (SVD), a severe viral hemorrhagic fever similar to Ebola.



About Sudan Virus Disease (SVD)

- Origin: First identified in Sudan in 1976.
- Cause: Sudan virus (SUDV) from the Filoviridae family, commonly found in bats and non-human primates.
- Symptoms: High fever, vomiting, diarrhea, and internal bleeding.
- Difference from Ebola: Though similar, SVD requires a different vaccine due to genetic variations.
- Transmission: Spreads through direct contact with infected blood, bodily fluids, contaminated surfaces, and animals.
- Risk Factor: Increases with disease severity.

DeepSeek

DeepSeek: China's AI Model Making Waves

DeepSeek, a Chinese AI chatbot, has gained massive attention, topping free downloads on the Apple Store.

About DeepSeek

- What is it? A free AI chatbot similar to ChatGPT.
- Founder: Liang Wenfeng (also runs hedge fund High-Flyer).
- Based in: Hangzhou, Zhejiang province.
- Reasoning Model - R1: Simulates human-like problem-solving by generating responses step-by-step.
- Censorship: Avoids politically sensitive topics (e.g., no response on Tiananmen Square).
- AI Chips: Trained using 2,000 Nvidia H800 chips before the U.S. restricted exports; later adapted with alternative hardware.
- Open-Source: Recent releases like DeepSeek-V3 and DeepSeek-R1 are open-source.
- Capabilities: Excels in complex reasoning, mathematics, programming, and natural language tasks.



DeepSeek's rise highlights China's growing AI ambitions despite global restrictions.

Srjanam Rig

Srjanam: India's First Indigenous Automated Biomedical Waste Treatment Plant

Union Minister for Science & Technology inaugurated Srjanam, an advanced, eco-friendly biomedical waste treatment plant at AIIMS, New Delhi.

About Srjanam

- What is it? An automated system to disinfect biomedical waste without incineration.
- Developed by: CSIR-NIIST, Thiruvananthapuram.
- Ministry: Science & Technology.
- Implementation: AIIMS & CSIR collaboration.



How It Works?

- Uses non-incineration technology to treat waste like blood, urine, and lab disposables.
- Neutralizes pathogens with a specialized antimicrobial process.
- Converts treated waste into safe organic material, minimizing hazardous emissions.

Srjanam is a significant step towards sustainable biomedical waste management in India.

DDoS Cyberattack

Karnataka's Kaveri 2.0 Portal Hit by DDoS Attack

In January 2025, Karnataka's Kaveri 2.0 property registration portal suffered a Distributed Denial of Service (DDoS) attack, disrupting online services.

What is a DDoS Attack?

- Overloads a server/network with excessive traffic from multiple compromised systems (botnets).
- Unlike a DoS attack (from a single source), a DDoS attack uses multiple sources, making it harder to stop.



Notable DDoS Attacks:

- Elon Musk's X (2024): Disrupted before a scheduled conversation with Donald Trump.
- GitHub (2015): China-based botnet targeted projects bypassing Chinese censorship.

DDoS attacks pose a serious threat to online platforms, affecting security and accessibility.

Aero India 2025

Aero India 2025 Inaugurated in Bengaluru

The 15th edition of Aero India, Asia's largest air show, was inaugurated at Yelahanka Air Force Station, Bengaluru.



About Aero India:

- Theme: "The Runway to a Billion Opportunities."
- Organized by: Defence Exhibition Organisation, Ministry of Defence.
- Purpose: Showcases advancements in aerospace, defence, and aviation technology.
- Participants: Industry leaders, government officials, and defence strategists from across the globe.

Aero India serves as a platform for collaboration and innovation in the aerospace sector.

Maharishi Dayanand Saraswati

PM Pays Tribute to Maharishi Dayanand Saraswati on His Birth Anniversary

Prime Minister paid homage to Maharishi Dayanand Saraswati (1824-1883), a great social reformer and Vedic scholar, on his birth anniversary.

About Maharishi Dayanand Saraswati:

- Born: February 12, 1824, in Tankara, Gujarat.



Founder of Arya Samaj (1875):

- Aimed at reviving Vedic principles and eradicating social evils.
- Established Paropkarini Sabha in 1882 for Vedic literature publication.

Key Contributions:

- Books: Satyarth Prakash, Rigvedadi Bhashya Bhumika, Sanskar Vidhi.
- Education: Founded Dayanand Anglo Vedic (DAV) schools and promoted girls' education.
- Social Reforms: Opposed caste discrimination, child marriage, and sati.
- Suddhi Movement: Encouraged reconversion to Hinduism.
- Nationalism: Coined Swaraj (self-rule), influencing India's freedom movement.

Philosophy:

- Advocated "Back to the Vedas" and rational thinking in religious interpretations.
- Stressed scientific temper and national awakening.

Maharishi Dayanand's legacy continues to shape Indian society and reforms.

Veer Savarkar in Marseille

PM Highlights Marseille's Connection to India's Freedom Struggle

During his visit to Marseille, France, the Indian Prime Minister recalled the city's historic link to India's independence movement, particularly through Veer Savarkar's escape attempt.

About Veer Savarkar

- Full name: Vinayak Damodar Savarkar, also known as Swatantryaveer Savarkar.
- Born in Bhagur, Maharashtra, he was a freedom fighter, politician, and proponent of Hindutva.
- Key figure in the Hindu Mahasabha, advocating for a unified Hindu identity.
- Though an atheist, he followed Hindu philosophy pragmatically.

The Marseille Escape Attempt (1910)

- Arrested in London in March 1910 for anti-British activities and involvement in the murder of Nashik magistrate A.M.T. Jackson.
- While being transported to India on SS Morea, he jumped into the sea at Marseille on July 8, 1910, attempting to escape.
- French authorities mistakenly handed him back to British guards, leading to a diplomatic dispute between France and Britain.

Savarkar's bold escape attempt remains a significant chapter in India's freedom struggle and highlights Marseille's historical significance.



Pradhan Mantri Dhan Dhanya Krishi Yojana (PM DDKY)

PM Dhan Dhanya Krishi Yojana (PM DDKY) Announced in Union Budget 2025

Inspired by the Aspirational Districts Programme (ADP), the PM Dhan Dhanya Krishi Yojana (PM DDKY) aims to uplift farmers in low-productivity regions through better farming practices and financial support.



Key Highlights of PM DDKY

- **Objective:** Boost agricultural productivity, promote crop diversification, and improve irrigation & post-harvest storage.
- **Budget Allocation:** No separate funds; resources will come from existing schemes under:
 - Ministry of Agriculture & Farmers' Welfare
 - Ministry of Fisheries, Animal Husbandry & Dairying
- **Implementation:** Led by the Ministry of Agriculture & Farmers' Welfare, with NABARD & financial agencies assisting in farm credit management.
- **Target Beneficiaries:** 100 districts with low productivity & limited credit access, benefiting 1.7 crore farmers.

Aspirational Districts Programme (ADP) - The Model for PM DDKY

- Launched in 2018 to uplift underdeveloped districts.
 - Focuses on health, education, agriculture, financial inclusion, and infrastructure.
 - Uses a ranking-based system to drive competition and progress.
- The scheme is expected to enhance farm incomes, improve rural livelihoods, and strengthen India's agricultural ecosystem.

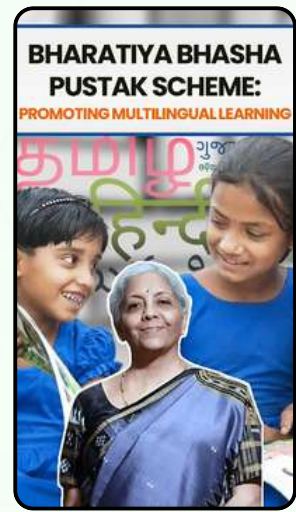
Bharatiya Bhasha Pustak Scheme

Bharatiya Bhasha Pustak Scheme Introduced in Union Budget 2025-26

The Bharatiya Bhasha Pustak Scheme aims to promote linguistic diversity and enhance digital learning accessibility across India.

Key Highlights

- Nodal Ministry: Ministry of Education
- Objective: Provide digital textbooks & study materials in multiple Indian languages.
 - Integration with ASMITA Initiative: ASMITA will develop 22,000 books in 22 Indian languages over five years.
- Technology-Driven Learning: Supports multilingual education using digital platforms.



This initiative aligns with the National Education Policy (NEP) 2020, ensuring inclusive education and greater language accessibility.

Corruption Perceptions Index (CPI) 2024

India Ranks 96th in Corruption Perceptions Index (CPI) 2024

About CPI

- Published by: Transparency International
- Measures: Public sector corruption across 180 countries on a scale of 0 (highly corrupt) to 100 (very clean).
- Global Corruption Ranking: Most widely used index for assessing corruption levels.



India's Performance

- 2024: Rank 96, Score 38
- 2023: Rank 93, Score 39
- Declining Trend: Indicates persistent corruption challenges despite laws like the Right to Information Act and anti-corruption measures.

Global Rankings

- Least Corrupt Nations: Denmark (Rank 1), followed by Finland & Singapore.

