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Chief Editor

B. Singh

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Compilation of UPSC relevant news from 1st August to 31st August 2026

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PARLIAMENTARY PRODUCTIVITY AMID DISRUPTIONS

According to the Parliamentary Affairs Minister, productivity stood at only 19% in the Lok Sabha and 39% in the Rajya Sabha.

About Parliament

- It is the supreme legislative institution under the Constitution.
- Article 79** provides that Parliament consists of the **President, Lok Sabha and Rajya Sabha**.

Role of Parliament

The constitution assigns Parliament the following responsibilities:

- Law-making:** Parliament legislates on subjects in the **Union List** and **Concurrent List**. It may also legislate on the **State List** in exceptional situations, such as under **Arts. 249, 250 and 252**.
- Financial control:** Parliament authorises taxation and public expenditure through the **Budget, Finance Bill, Appropriation Bill** and **Demands for Grants**.
- Executive accountability:** Parliament holds the Council of Ministers accountable through **Question Hour, Zero Hour, debates, motions, parliamentary committees** and the **no-confidence motion**.
- Constitutional amendment:** Under **Article 368**, Parliament may amend the Constitution, subject to the **Basic Structure Doctrine** evolved by the Supreme Court.
- Representative role:** The **Lok Sabha** directly represents the people, while the **Rajya Sabha** represents the States and Union Territories in the federal framework.

Parliamentary Sovereignty

Unlike the sovereign British system, the written Constitution of India explicitly limits Parliament's legislative powers through a federal framework, fundamental rights, and judicial review under the Basic Structure doctrine.

Important Constitutional Provisions

Article 75(3) 	Articles 79–81 
Makes the Council of Ministers collectively responsible to the Lok Sabha.	Establish Parliament and provide for the composition of the Lok Sabha and Rajya Sabha.
Articles 112–117 	Articles 107–111 
Govern the Annual Financial Statement (Budget) and financial legislation.	Lay down the procedure for introduction, passage and assent to Bills.
Article 118 	Article 105 
Empowers each House to frame rules regulating its own procedure and conduct of business.	Grants parliamentary privileges and freedom of speech within Parliament.
Article 93 	Articles 121–122 
Requires the Lok Sabha to elect a Speaker and Deputy Speaker "as soon as may be."	Protect parliamentary autonomy by limiting judicial interference in parliamentary proceedings and restricting discussion on judges except during removal proceedings.

What are Parliamentary Disruptions?

- Parliamentary disruptions include **repeated adjournments, sloganeering, protests**, entering the **Well** of the House and other actions that prevent scheduled business.
- Limited disruption may sometimes serve as a democratic instrument to draw attention to urgent public issues when normal parliamentary mechanisms fail.
- However, persistent disruption weakens Parliament's constitutional role. It reduces deliberation, weakens legislative scrutiny and limits executive accountability.

Instances of Parliamentary Disruptions

Several sessions have witnessed severe disruptions.

- Winter Session 2010:** The **2G spectrum controversy** reduced productivity to about **5% in Lok Sabha** and **2% in Rajya Sabha**.
- Winter Session 2013:** Protests over **Telangana** and the **2G JPC report** reduced productivity to **6% and 19%**, respectively.
- Interim Budget Session 2014:** Productivity stood at **21% in Lok Sabha** and **27% in Rajya Sabha**.
- Monsoon Session 2015:** The **Lalit Modi** and **Vyapam** controversies reduced productivity to **48% in Lok Sabha** and **9% in Rajya Sabha**.
- Winter Session 2016:** Protests over **demonetisation** reduced productivity to **15% and 18%**.
- Budget Session 2018:** The **Cauvery dispute**, demand for **Special Category Status** for Andhra Pradesh and banking fraud allegations reduced productivity to **21% and 27%**.
- Monsoon Session 2021:** Protests over **Pegasus** and the **farm laws** reduced productivity to **21% in Lok Sabha** and **29% in Rajya Sabha**.
- Budget Session 2023:** Political confrontation reduced productivity to **33% and 24%**, respectively.
- Monsoon Session 2025:** Productivity stood at **29% in Lok Sabha** and **34% in Rajya Sabha**.
- Monsoon Session 2026:** Both Houses met for **19 days**, but productivity fell to **19% in Lok Sabha** and **39% in Rajya Sabha**.

Responsible Factors

Several structural and political factors contribute to repeated disruptions.

- Political polarisation** limits the scope for consensus and constructive dialogue.
- The Opposition often resorts to protests when demands for discussions are not accepted.
 - Example:** During the Monsoon Session 2026, repeated protests over the NEET paper leak, Jantar Mantar police action, and the Ayodhya Ram Mandir donation controversy led to prolonged disruptions.

- The government's legislative agenda is sometimes perceived as being rushed, with limited opportunity for debate.
 - ♦ **Example:** During the Monsoon Session 2026, the Tribunals Reforms Bill, 2026, MSME Development (Amendment) Bill, 2026, and Registration of Births and Deaths (Amendment) Bill, 2026, among several others, were passed in the Lok Sabha without any MP (other than the Minister) participating in the debate.
- **Fewer bills are referred to parliamentary committees**, reducing opportunities for detailed scrutiny.
- **Limited sitting days** create pressure to pass a large volume of business within a short period.
- **Weak parliamentary conventions** have gradually normalised disruption as a political strategy.
- The continued absence of a **Deputy Speaker**, despite the requirement under **Article 93**, has raised concerns regarding institutional balance.

Parliamentary Disruption	
Justifiable When	Not Justifiable When
➤ Normal parliamentary remedies have been exhausted. ➤ The issue involves an urgent constitutional or national concern. ➤ The government refuses meaningful discussion or accountability. ➤ The protest remains peaceful, proportionate and temporary.	➤ Prevents legislative debate or Budget scrutiny. ➤ Disrupts Question Hour or committee functioning. ➤ Relies on physical obstruction, intimidation or damage to parliamentary property. ➤ Continues even after adequate discussion has been permitted.

Evidence of Declining Legislative Scrutiny

Recent trends indicate a steady weakening of Parliament's deliberative role.

- The **17th Lok Sabha** held only **274 sittings across 15 sessions**, the **lowest for any full-term Lok Sabha**.
- Only **16% of Bills** introduced during the 17th Lok Sabha were referred to **Department-related Standing Committees**, compared with **71%** in the 15th Lok Sabha and **28%** in the 16th Lok Sabha.
- By the end of the **Monsoon Session 2026**, only **21% of Bills** introduced in the **18th Lok Sabha** had been referred to parliamentary committees.
- During the **Monsoon Session 2026**, the **Lok Sabha passed 11 Bills**, of which **nine were passed without any Member, other than the Minister, participating in the debate**. This reduced meaningful legislative scrutiny.
- **Question Hour** functioned for only **1%** of scheduled time in the Lok Sabha and **12%** in the Rajya Sabha, substantially limiting executive accountability.

- Although the **Budget Session 2026** recorded **86% productivity in the Lok Sabha** and **92% in the Rajya Sabha**, yet nearly **77% of voted expenditure** was **guillotined without discussion**, weakening Parliament's financial oversight.

Major Concerns

- **Legislative scrutiny declines** because Bills may be enacted without adequate debate, stakeholder consultation or committee examination.
 - ♦ This affects the quality and effectiveness of legislation.
- **Executive accountability weakens** because disruptions reduce opportunities to question Ministers through **Question Hour**, debates and other parliamentary devices.
- **Financial control is diluted** because guillotining of **Demands for Grants** limits detailed scrutiny of government expenditure.
 - ♦ Guillotining of Demands for Grants is the procedure whereby the Lok Sabha, on the last allotted day for Budget discussion, puts all remaining undiscussed Demands for Grants to vote together without further debate to ensure timely approval of the Budget.
- **Executive dominance increases** when hurried legislation, delegated legislation or ordinances receive limited parliamentary examination.
- **Federal deliberation suffers** because repeated disruption of the **Rajya Sabha** weakens its constitutional role as the **Council of States**.
- **Regional parties and Independent Members lose opportunities** to raise constituency-specific concerns when proceedings remain disrupted.
- The **disruption-suspension cycle** can further reduce meaningful participation and deepen political confrontation instead of encouraging dialogue.
- **Public confidence declines** because repeated disorder undermines Parliament's credibility as the nation's highest deliberative institution and weakens trust in democratic governance.

Shared Responsibility

Effective parliamentary functioning requires cooperation among all constitutional stakeholders.

- The **Government** must provide adequate opportunities for discussion, consultation and legislative scrutiny instead of relying only on its numerical majority.
- The **Opposition** must ensure that democratic protest does not become prolonged obstruction that prevents Parliament from discharging its constitutional functions.
- **Presiding Officers** must maintain order impartially while safeguarding the rights of both the Government and the Opposition.
- **Political parties** should strengthen parliamentary conventions and encourage constructive debate over disruptive tactics.

Way Forward

- **Build political consensus** through regular all-party meetings and effective use of the **Business Advisory Committee** for agenda management.
- **Protect Question Hour** by preventing routine disruptions, as it remains Parliament's most important instrument of executive accountability.
- **Institutionalise committee scrutiny** by referring all significant Bills to **Department-related Standing Committees**, except in clearly defined emergencies.
- **Guarantee adequate debate** on constitutional, financial and socially significant legislation before voting.
- **Strengthen financial oversight** by providing sufficient time to examine **Demands for Grants** and improving outcome-based Budget scrutiny.
- **Increase annual sitting days**, consistent with recommendations of expert bodies such as the **National Commission to Review the Working of the Constitution (NCRWC)**, to reduce legislative congestion and improve deliberation.
- **Provide structured Opposition time** for debates on issues of national importance to reduce the incentive for disruptive protests.
- **Strengthen pre-legislative consultation** by encouraging wider stakeholder participation before introducing major Bills.

- **Enforce parliamentary rules impartially** through a transparent and proportionate code of conduct that protects legitimate dissent while discouraging disorder.
- **Fill constitutional vacancies**, including the office of the **Deputy Speaker** under **Article 93**, to strengthen institutional balance.
- **Improve transparency** by publishing legislative impact assessments, committee reports, attendance, debate participation and voting records to enhance public accountability.

Conclusion

- Parliament is the principal forum for legislation, accountability and democratic deliberation.
- While limited disruption may occasionally draw attention to issues of exceptional public importance, it cannot become a substitute for debate and constitutional scrutiny.
- A healthy parliamentary democracy requires a Government that remains accountable, an Opposition that scrutinises responsibly, and Presiding Officers who uphold institutional neutrality.
- Strengthening deliberation, committee scrutiny, financial oversight and parliamentary conventions is essential to restore Parliament's effectiveness and reinforce India's constitutional democracy.

GLOBAL BEST PRACTICES

➤ United Kingdom – Prime Minister's Questions (PMQs):

- ◆ The **Prime Minister answers MPs' questions every Wednesday** during a fixed session in the House of Commons.
- ◆ It strengthens **executive accountability**, provides a regular forum for raising public issues, and reduces the need for frequent disruptions.

➤ United Kingdom – Departmental Select Committees:

- ◆ **Cross-party Select Committees** examine Bills, government policies, expenditure and departmental performance.
- ◆ Their detailed scrutiny improves the **quality of legislation** and promotes informed parliamentary debate.

➤ United Kingdom – E-petition System:

- ◆ Citizens can submit **online petitions** to Parliament.
- ◆ Petitions receiving **10,000 signatures** require a Government

response, while those with **100,000 signatures** are considered for parliamentary debate. This institutionalises **public participation** in the legislative process.

➤ Germany – Major and Minor Interpellations:

- ◆ Members of the **Bundestag** can submit **formal written and oral questions (interpellations)** requiring government responses.
- ◆ This provides a structured mechanism for **executive oversight** without disrupting parliamentary proceedings.

➤ New Zealand – Business Committee:

- ◆ The **Business Committee**, comprising representatives from all major parties, schedules parliamentary business through **consensus**.
- ◆ This facilitates smoother conduct of proceedings and minimises procedural conflicts.

CREAMY LAYER IN SC/ST RESERVATIONS

The Union Government has opposed extending the creamy layer principle to Scheduled Castes (SCs) and Scheduled Tribes (STs) before the Supreme Court.

About Creamy Layer

- The **creamy layer** consists of individuals within a reserved category who are relatively socially, educationally, and economically advanced and are excluded from reservation benefits.
- The concept originated in **Indra Sawhney v. Union of India (1992)**, where the Supreme Court upheld **27% reservation for OBCs** while directing exclusion of the OBC creamy layer.
- It is based on the principle of **relative equality**, which seeks to ensure that reservation benefits reach the genuinely disadvantaged.
- At present, the principle applies only to **Other Backward Classes (OBCs)**.
- It has **not traditionally been applied** to **SCs and STs**, whose constitutional backwardness arises from **historical discrimination, untouchability, social stigma and tribal marginalisation**, rather than economic deprivation alone.
- The **Economically Weaker Sections (EWS)** reservation also follows **income and asset criteria**, but it is available only to individuals who do **not** belong to the **SC, ST or OBC** categories.

Scheduled Castes (SCs) and Scheduled Tribes (STs)

- **Scheduled Castes (SCs):** Under **Article 366(24)**, SCs mean such castes, races or tribes, or parts/groups thereof, as are deemed to be Scheduled Castes under **Article 341** of the Constitution.
- **Scheduled Tribes (STs):** Under **Article 366(25)**, STs mean such tribes or tribal communities, or parts/groups thereof, as are deemed to be Scheduled Tribes under **Article 342** of the Constitution.

Sub-Categorisation and Creamy Layer

- **Sub-categorisation** divides an existing reservation quota among different sub-groups within the same category, thereby ensuring a **fair distribution** of benefits.
- **Creamy layer exclusion** removes relatively advanced individuals from the reservation pool altogether.
- Thus, **sub-categorisation redistributes benefits within the quota**, while the creamy layer reduces the number of eligible beneficiaries.
- Several States have adopted **sub-categorisation** for SCs or STs. The Union Government also follows a limited form of sub-categorisation for **Particularly Vulnerable Tribal Groups (PVTGs)** in **Eklavya Model Residential Schools**.

Centre's Stand against Creamy Layer for SC/STs

- The Centre argues that **SC/ST reservation** addresses **historical and structural discrimination**, not merely economic disadvantage.
- It maintains that **economic advancement does not remove caste stigma**, social exclusion or barriers to representation in public institutions.
- Applying the **OBC creamy layer principle** to SCs and STs would ignore the distinct constitutional foundation of their reservation.
- Under **Articles 341 and 342**, only **Parliament** can modify the **Presidential Lists** of SCs and STs. The Centre argues that judicially introducing a creamy layer would disturb this constitutional framework.
- The Government also relies on **Article 16(4A)**, which specifically enables reservation in promotion for SCs and STs, recognising their continuing structural disadvantages.
- It further argues that the absence of **updated nationwide socio-economic and caste data** makes any creamy-layer framework premature and potentially arbitrary.

WHAT HAS THE CENTRE OPPOSED

Creamy Layer for SC/STs?

Key reasons behind the Centre's stand

 01 Addresses historical discrimination SC/ST reservation is based on historical and structural discrimination, not merely economic disadvantage.	 02 Economic advancement does not end caste stigma Economic progress does not remove caste-based discrimination, social exclusion or barriers to representation.	 03 Distinct constitutional framework Judicially introducing a creamy layer may disturb the scheme under Articles 341 and 342, where only Parliament can modify SC/ST lists.	 04 Recognition of continuing disadvantage Article 16(4A) enables reservation in promotion for SCs/STs, recognising their continuing structural disadvantages.	 05 Lack of updated data Absence of nationwide socio-economic and caste data makes any creamy-layer framework premature and potentially arbitrary.
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Judicial Position

- **Indra Sawhney Case (1992)** confined the **creamy layer principle** to OBCs.
- **E.V. Chinnaiah Case (2004)** treated Scheduled Castes as a homogeneous class and disallowed sub-classification.
- **Ashoka Kumar Thakur Case (2008)** reaffirmed that the creamy layer principle does not apply to **SC/ST reservations**.
- **Jarnail Singh Case (2018)** observed that excluding a creamy layer in the context of promotion reservation does not, by itself, alter the **Presidential Lists**.
- In **State of Punjab v. Davinder Singh Case (2024)**, the Supreme Court **overruled E.V. Chinnaiah** judgement and upheld **sub-**

classification within Scheduled Castes based on quantifiable data, greater backwardness, and inadequate representation.

- ♦ The operative ruling recognised the sub-classification. Some judges also favoured evolving a separate creamy-layer principle for SCs/STs, but the Court **did not direct its immediate implementation**.

Davinder Singh (2024) Judgement

- ➔ In **State of Punjab v. Davinder Singh (2024)**, a seven-judge Constitution Bench, by a 6:1 majority, upheld the constitutional validity of **sub-classification within Scheduled Castes (SCs)** and overruled **E.V. Chinnaiah v. State of Andhra Pradesh (2004)**.
- ➔ The Court held that **Scheduled Castes are not a homogeneous class**. Different communities have experienced varying levels of historical deprivation and representation.
 - ♦ Therefore, treating them as a single uniform group may defeat substantive equality.
- ➔ It ruled that **states may create sub-categories** under **Articles 15(4) and 16(4)** to ensure that reservation benefits reach the **most disadvantaged sections** within the Scheduled Castes.
- ➔ The Court clarified that **Articles 341 and 342** empower the President to identify SCs and STs but **do not prohibit internal classification** for equitable distribution of reservation benefits. Such classification does not amount to altering the Presidential Lists.
- ➔ **Any sub-classification must satisfy the following conditions:**
 - ♦ It must be based on **quantifiable and objective data**.
 - ♦ It must establish **greater backwardness** or **inadequate representation**.
 - ♦ It must satisfy the **Article 14** test of reasonable classification.
- ➔ It must not disturb the **Presidential Lists** or grant exclusive reservation to one subgroup.
- ➔ Some **concurring opinions** suggested evolving a **distinct creamy-layer principle** for SCs and STs to prevent concentration of reservation benefits.
 - ♦ However, **this recommendation was not a binding direction**, and the Court did **not mandate** creamy-layer exclusion for SCs or STs.

Key Constitutional Issues

- ➔ The debate reflects the balance between **formal equality** and **substantive equality** under **Article 14**.
- ➔ It also concerns the constitutional objective of **historical justice, adequate representation, and social dignity** for SCs and STs.
- ➔ A central issue is whether **economic advancement** alone can justify exclusion when **caste-based discrimination** and **social stigma** may continue across generations.
- ➔ The debate also tests the balance between the **judiciary's interpretative role** and **Parliament's exclusive power** under **Articles 341 and 342** to determine SC and ST lists.

- ➔ **Article 335** requires balancing the claims of SCs and STs in public employment with the maintenance of **administrative efficiency**.
- ➔ The absence of updated nationwide **socio-economic and caste data** limits evidence-based policy decisions on intra-group disparities.

Key Concerns

- ➔ Better-off sections within reserved communities may receive a disproportionate share of reservation benefits.
- ➔ Treating all SCs or STs as a single homogeneous group may leave the **most deprived communities** inadequately represented.
- ➔ Economic criteria alone may fail to capture **continuing caste-based discrimination** and social exclusion.
- ➔ Lack of comprehensive empirical data may result in arbitrary or inconsistent policy decisions.
- ➔ Continued legal and policy uncertainty may persist until Parliament, States, and courts develop a coherent framework for sub-classification and any future creamy-layer mechanism.

Way Forward

- ➔ Implement **evidence-based sub-classification** in line with the Davinder Singh (2024) judgement.
- ➔ Build future policy on a **comprehensive socio-economic and caste database** supported by periodic empirical reviews.
- ➔ Continue to treat reservation as an instrument of **representation, social justice, and substantive equality**, rather than merely poverty alleviation.
- ➔ Use means-tested scholarships, housing assistance, education support, and financial grants to address economic deprivation outside the reservation framework.
- ➔ Strengthen **quality education, skill development, entrepreneurship, and anti-discrimination enforcement** to improve long-term social mobility.
- ➔ Ensure that any future reform remains consistent with **Articles 14, 15(4), 16(4), 16(4A), 17, 335, 341, and 342** of the Constitution.

Conclusion

- ➔ The creamy-layer debate reflects the constitutional challenge of balancing **historical justice, substantive equality, and equitable distribution** of reservation benefits.
- ➔ While the Union Government maintains that SC/ST reservations address enduring structural discrimination, the **Davinder Singh (2024)** judgement has reinforced the constitutional basis for **data-driven sub-classification**.
- ➔ The objective should be to ensure that reservation continues to promote **representation, dignity, and social justice**, while **evidence-based sub-classification** helps reservation benefits reach the **most disadvantaged sections** without diluting the constitutional safeguards protecting SCs and STs.

NEPAL-TIBET FLASH FLOODS

On August 26, 2026, a mass of ice and rock (roughly 600 metres wide) broke away from a glacier near Langtang Lirung on the Nepal-China border. This triggered catastrophic flash floods across the Bhote Koshi and Trishuli river systems.



Bhote Koshi-Trishuli River System

- **Bhote Koshi:** Originates in **Tibet (Poiqu)** and forms the upper course of the **Sun Kosi** in the **Koshi basin**. It is highly prone to **flash floods** and **GLOFs**.
- **Trishuli River:** A major **transboundary river** of the **Narayani (Gandaki)** basin, originating in Tibet and flowing through central Nepal.
- The **Rasuwagadhi-Gyirong corridor** along these rivers is an important **trade, transit, and hydropower** route between **Nepal and China**.

Sequence of Events

- Ice and rock fell from an **elevation of 5,600 metres** into the **Lende Khola**, a tributary of the Bhote Koshi at the **Rasuwagadhi border crossing**.
- Frictional heat generated by the grinding avalanche is thought to have converted much of the ice into liquid water, releasing a devastating wall of water and debris downstream.
- The flood surged through **Timure and Syabrubesi**, travelling over **150 km** down the Trishuli corridor to **Chitwan and Nawalparasi**.
- Bodies were carried **240 km** into **neighbouring India**, directly demonstrating the **transboundary scale** of Himalayan flood disasters.

- **7,570 houses** were destroyed, affecting **32,933 people**. Eighteen schools and seven health facilities were damaged.
- Total economic losses are estimated at **USD 4.8 billion**.

Factors Driving Himalayan Vulnerability

Geological and Climatic Drivers

- The Himalayas are **young, continuously uplifting fold mountains** traversed by highly active thrust faults – the **Main Central Thrust (MCT)**, **Main Boundary Thrust (MBT)**, and **Himalayan Frontal Thrust (HFT)**. Most of the Indian Himalayan Region falls in high risk seismic region.
- **Elevation-Dependent Warming (EDW)** is accelerating **permafrost thaw**, which removes the ice-cement holding rocks together, and expanding **moraine-dammed glacial lakes**, increasing the risk of **Glacial Lake Outburst Floods (GLOFs)** and ice-rock avalanches.
- The **2021 Chamoli disaster** was triggered by permafrost thaw. The **2023 South Lhonak Lake disaster in Sikkim** resulted from a breached moraine dam. The 2013 A localised cloudburst and the breaching of Chorabari Lake amplified the Kedarnath disaster.
- Shifting monsoons cause localised cloudbursts that, combined with steep river gradients, generate violent flash floods and debris flows.

Anthropogenic Drivers

- Vertical toe-cutting of slopes without retaining walls during road construction destabilises the mountainsides. The **Char Dham Pariyojana** highway widening has triggered recurring landslides. A **Supreme Court-appointed High Powered Committee (HPC)** warned that it could destabilise the fragile Himalayan ecosystem.
- Subterranean tunnelling and blasting for **run-of-the-river hydropower projects** puncture deep aquifers, alter pore-water pressure, and cause severe ground subsidence, as seen in the **Joshimath crisis**.
- Excavated muck from tunnelling is routinely dumped into riverbeds, transforming high-discharge floods into lethal debris torrents and destroying downstream dams, as in the **Teesta-III collapse**.

Governance and Regulatory Failures

- **Piecemeal Environmental Impact Assessments (EIAs)** assess individual projects separately. Basin-wide **Strategic Environmental Assessments (SEAs)** remain limited, missing cumulative impacts.
- Despite the **2016 Ganga Authorities Order**, illegal multi-storey construction continues on active river terraces and No-Development Zones.

- Relaxations to the **Bhagirathi Eco-Sensitive Zone** and exemptions under the **Forest Conservation (Amendment) Act 2023** allow large projects to bypass critical ecological scrutiny.
- In Nepal, a centralised, single-window distribution system compounded relief failures by leaving local governments with no authority to respond quickly on the ground.

India's Downstream Vulnerability

- Nepal's rivers such as the **Bhote Koshi, Gandak, Karnali, and Kosi**, originate in or pass through the Himalayan region before entering India's densely populated plains.
- Transboundary rivers carry upstream disaster risks into **Bihar and Uttar Pradesh**, making cooperation with Nepal critical.
- India faces a compound risk from **cloudbursts, landslides, and glacial hazards** across Himalayan states.

Key Committee Recommendations

- **Mishra Committee (1976)**: Set up to investigate the sinking of Joshimath. Recommended restricting construction in unstable zones and prohibiting indiscriminate tree cutting and boulder removal for construction and road works.
- **J.C. Pant Committee (1999)**: Classified 31 disasters into five categories. Recommended integrating disaster management into the **Seventh Schedule**, enacting national and state disaster laws, strengthening building codes, and establishing dedicated institutional mechanisms for disaster management and financing.

Way Forward

- **Enforce Ecological Carrying Capacity**: Legally mandate **Strategic Environmental Assessments (SEAs)** and landscape-level cumulative impact assessments before approving major linear or hydropower infrastructure.
- **Springshed Management**: Scale up the **Eight-Step Springshed Management Methodology** endorsed by **NITI Aayog** to protect spring recharge areas and prevent tunnelling in recharge zones.
- **Bio-Engineering for Slope Stabilisation**: Transition from rigid concrete retaining walls to **nature-based slope stabilisation** using deep-rooting grasses like **Vetiver**, hydroseeding, geotextiles, and contoured vegetative terraces.
- **Modernise Multi-Hazard Early Warning Systems (MHEWS)**: Integrate **InSAR, satellite telemetry, Automated Weather Stations (AWS), and Doppler radars** to extend real-time warning windows for downstream communities.
- **Transboundary Cooperation**: Institutionalise data-sharing and glacial monitoring with Nepal, China, and Bhutan under the **Hindu Kush Himalaya cooperation framework**.
- **Sendai Framework Integration**: Mainstream **disaster risk reduction and climate adaptation** into all infrastructure and urban planning in the Indian Himalayan Region (IHR).
- **Decentralise Disaster Response**: Empower local governments with independent authority and resources to respond quickly without relying on centralised distribution systems.

Key Concepts

Cryosphere

- Includes all forms of frozen water such as glaciers, snow, permafrost and ice.
- Acts as a natural water reservoir, feeding rivers across Asia.
- Himalayan cryosphere is highly sensitive to temperature rise due to its high altitude and thin atmosphere.
- Rapid warming is changing the amount, extent and stability of frozen water in the region.

Permafrost Degradation

- Permafrost is ground (soil, rock and debris) that remains frozen for at least two years.
- Rising temperatures are causing permafrost to thaw in the Himalaya.
- Thawing reduces the "natural cement" that binds rocks and slopes, making them unstable.
- This increases the likelihood of landslides, rockfalls and rock-ice avalanches, especially on steep high-altitude slopes.

Mass Wasting (Mass Movement)

- Downslope movement of rock, soil and debris under the influence of gravity.
- Includes rockfall, landslide, debris flow, slump and avalanche.
- Common in the Himalaya due to steep slopes, young and fragile geology, high relief and intense rainfall or snowmelt.
- Often acts as a trigger or accompanying process in mountain disasters such as glacial lake outburst floods and flash floods.

Glacier Retreat

- Himalayan glaciers are retreating and thinning due to rising temperatures.
- Retreat exposes loose rocks, unstable slopes and glacial lakes, increasing the risk of landslides and avalanches.
- Enhanced melting can also lead to the formation and expansion of glacial lakes, which may burst suddenly.
- Glacier retreat alters river flows, affecting downstream ecosystems and communities.

Rock-Ice Avalanche

- A rapid downslope movement of rocks, ice and debris from steep mountain slopes.
- Often triggered by factors such as permafrost thaw, heavy rainfall, earthquakes or glacier retreat.
- Can fall into a river or glacial lake, displacing large volumes of water and triggering downstream floods.
- In the recent Nepal-Tibet event, a large rock-ice avalanche initiated the destructive flood.

Flash Floods

- A rapid and high-energy flow of water, usually with large amounts of debris.
- Occurs within a short time, often with little warning.
- In the Himalaya, they can be triggered by rock-ice avalanches, glacial lake outbursts, intense rainfall or landslide dam failures.
- Cause severe destruction to downstream areas, affecting lives, infrastructure and ecosystems.

TRIBUNAL REFORMS ACT, 2026

The Parliament has passed the Tribunals Reforms Act, 2026, which proposes the establishment of a National Tribunals Commission (NTC) to oversee the recruitment, administration, and functioning of tribunals.

About Tribunals

- **Tribunals** are **quasi-judicial bodies** that adjudicate specialised disputes and help in reducing the burden on regular courts.
- They deal with specialised matters, including service disputes, taxation, corporate law, finance, telecommunications, the **environment, consumer protection, labour, defence, and insolvency**.
- Their growing importance has increased the need for reforms that ensure **speedy justice** while preserving **judicial independence, separation of powers, and access to justice**.

Constitutional and Judicial Framework

- **Part XIV-A**, inserted by the **42nd Constitutional Amendment Act, 1976**, provides the constitutional basis for tribunals through **Articles 323A and 323B**.
- **Article 323A** empowers **Parliament** to establish administrative tribunals, including the Central Administrative Tribunal (**CAT**), State Administrative Tribunals (**SATs**), and Joint Administrative Tribunals (**JATs**).
- **Article 323B** empowers **Parliament and State Legislatures** to establish tribunals for specified matters, including taxation, industrial disputes, land reforms, elections, foreign exchange, imports, exports, rent, tenancy, and essential commodities.
- **Article 50** directs the State to separate the judiciary from the executive.
- **Articles 226 and 227** empower the **High Courts** to exercise judicial review and superintendence over tribunal decisions.
- **Article 136** empowers the **Supreme Court** to hear appeals against tribunal decisions through **Special Leave Petitions (SLPs)**.
- In **L. Chandra Kumar v. Union of India (1997)**, the Supreme Court held that tribunals can **supplement**, but not **replace**, the jurisdiction of constitutional courts.
- In the **Madras Bar Association** judgments, the Supreme Court emphasised that tribunal administration must remain free from excessive executive control.

Key Features of the Tribunals Reforms Act, 2026

- **National Tribunals Commission (NTC):**
 - ♦ The Act establishes the **National Tribunals Commission (NTC)** as the apex institution for tribunal administration while preserving the jurisdiction of tribunals under their respective parent laws.
- **Composition:**
 - ♦ The **Chairperson** must be a former **Supreme Court Judge** or **Chief Justice of a High Court**.

- ♦ The Commission will include **two Judicial Members** and **two Technical Members**.
- ♦ Technical Members must possess at least **25 years of professional experience** in fields such as **law, finance, accountancy, banking, management, technology, or public administration**.
- ♦ The **Central Government** will appoint the Chairperson and Judicial Members after consultation with the **Chief Justice of India**.

Functions:

- ♦ The **NTC** will conduct appointments of tribunal Chairpersons and Members through **Search-cum-Selection Committees**.
- ♦ It will review members' performance and supervise inquiries into complaints.
- ♦ It will maintain the **National Tribunals Data Grid** containing case-related information.
- ♦ It will oversee tribunal administration and promote uniform standards across the tribunal system.
- ♦ The Act repeals the **Tribunals Reforms Act, 2021**, while protecting existing appointments and ongoing selection processes until the **NTC** becomes operational.

Appointments and Administration

- Separate **Search-cum-Selection Committees** will recommend appointments for tribunal Chairpersons and Members.
- These committees will be **judicially chaired**, and the judicial Chairperson will have a **casting vote**, thereby limiting executive discretion.
- Each committee will recommend **one selected candidate** and **one waiting-list candidate** for every vacancy.
- Recommendations must reach the Central Government within **three days**, and appointments must ordinarily be completed within **three months**.
- The **Secretariat**, headed by a **Secretary to the Government of India**, will provide administrative support, empanel experts, communicate recommendations, and prepare annual reports.

Service Conditions and Institutional Framework

- The **Chairperson** and Members of the **NTC** will hold office for **five years** or until attaining the age of **70 years**, whichever is earlier.
- Tribunal Members will hold office for **five years** or until attaining the age of **67 years**, whichever is earlier.
- The Act permits **reappointment** after considering previous performance.

- The framework applies to 16 tribunals and appellate authorities, covering sectors such as administrative services, taxation, customs, corporate affairs, finance, environment, electricity, telecommunications, consumer protection, railways, industrial relations, armed forces, debt recovery, and insolvency.
- Individual tribunals will assess their financial and infrastructural needs, while the **NTC** will consolidate these requirements.
- The **Central Government** will provide grants after parliamentary appropriation, and the **Comptroller and Auditor General (CAG)** will audit the Commission's accounts to ensure financial accountability.

Significance of the Act

Constitutional Significance

- The Act reinforces **judicial independence** by shifting tribunal administration from executive dominance to a **judiciary-led institutional framework**.
- It upholds the constitutional principles of **separation of powers**, **rule of law**, and **judicial review** while preserving the jurisdiction of the High Courts and the Supreme Court.
- It strengthens **access to justice** by making specialised dispute resolution more efficient, transparent, and accountable.
- It aligns tribunal governance with the constitutional principles laid down in **L. Chandra Kumar** and the **Madras Bar Association** judgements.

Governance and Economic Significance

- A unified administrative framework will reduce fragmentation and improve coordination among tribunals.
- The **National Tribunals Data Grid** will facilitate data-driven monitoring of vacancies, pendency, disposal rates, and institutional performance.
- Transparent appointments and performance review will improve public confidence in tribunals.
- Faster disposal of disputes will strengthen **Ease of Doing Business**, improve regulatory certainty, and enhance investor confidence.
- Specialised adjudication by judicial and technical experts will improve the quality of decisions in complex sectors.
- Although the proposed **NTC** is expected to cost about **₹27.14 crore**, with recurring expenditure increasing by **10%** during the second and third years, improved efficiency is expected to generate long-term institutional benefits.

Key Issues and Concerns

Constitutional and Institutional Issues

- Executive influence over appointments, tenure, finances, and service conditions may continue to affect tribunal independence unless the **NTC** functions autonomously.
- Tribunals should complement constitutional courts rather than gradually replace them through excessive **tribunalisation**.

Administrative Challenges

- Persistent vacancies of Chairpersons and Members continue to increase **pendency** and delay justice.
 - ♦ **For example in Income Tax Appellate Tribunal (ITAT)** 27 of 126 sanctioned Member posts were vacant (May 2026), prompting the Parliamentary Standing Committee to warn that vacancies were affecting timely disposal of cases.
- Overlapping jurisdictions and multiple appellate mechanisms create procedural complexity and uncertainty.
- Recruiting competent **technical members** while preserving adjudicatory independence remains a challenge.
- Dependence on ministries for infrastructure, finances, and personnel limits institutional autonomy.

Accessibility and Accountability

- The concentration of tribunals in a few cities increases litigation costs for individuals and small organisations.
- Transparent performance evaluation and grievance redressal mechanisms are essential to balance accountability with judicial independence.
- Major institutional reforms require meaningful parliamentary scrutiny to strengthen democratic legitimacy.

Way Forward

- The **National Tribunals Commission** should function with adequate financial, administrative, and operational autonomy.
- Appointments should remain **transparent, merit-based, and time-bound**, with strong judicial participation at every stage.
- Vacancies should be filled promptly to reduce pendency and improve the efficiency of specialised adjudication.
- The **National Tribunals Data Grid** should be fully operationalised to promote transparency, evidence-based policymaking, and effective case management.
- Technology-enabled hearings, wider regional benches, and continuous capacity building should improve accessibility and institutional performance.
- Tribunal reforms should remain fully consistent with the constitutional principles of **judicial independence, separation of powers, and judicial review**.

Conclusion

- The **Tribunals Reforms Act, 2026** marks an important step towards building a **more independent, transparent, and professionally managed tribunal system**. The proposed **National Tribunals Commission** can improve institutional capacity, strengthen public confidence, and enhance the quality of specialised justice.
- Its long-term success, however, will depend on effective implementation, institutional autonomy, timely appointments, and continued adherence to the constitutional values upheld by the **Supreme Court**.
- A robust tribunal system should therefore function as a **specialised complement to the regular judiciary**, ensuring efficient justice while upholding constitutional supremacy.

INDIA'S CAREGIVING WORKFORCE

Recently, NITI Aayog has released the report "Reimagining Care: Strategies for Empowering Caregivers in Viksit Bharat@2047", proposing a roadmap to build a professional, inclusive and future-ready caregiving ecosystem.

About Care Economy

- The **care economy** comprises all **paid and unpaid** care work and services that support health, well-being and daily living. It includes care provided by households, governments, private institutions, MSMEs, non-profit organisations and community organisations.
- According to the **World Health Organization (WHO)**, **caregiving** refers to the physical, emotional and social support provided to individuals who cannot perform daily activities independently because of **age, illness or disability**.
- **Formal caregivers** are trained professionals providing non-medical support to elderly persons, **Persons with Disabilities (PwDs)** and individuals with chronic or terminal illnesses.
- **Informal caregivers** include family members, relatives, friends and volunteers.
- Professional caregiving supports the constitutional vision of **Article 41**, which directs the State to provide public assistance in cases of **old age, sickness and disability**, while also promoting the **right to work**.
- The **Indian care services market** was valued at **USD 29.62 billion (2023)** and is projected to reach **USD 72.31 billion by 2030** at a **13.76% CAGR**, reflecting significant economic and employment potential.

Need of an Organised Caregiving Ecosystem

Managing Demographic Transition

- India's **60+ population** is projected to increase from **149 million (2022)** to **347 million (2050)**, accounting for over **20%** of the population.
- Rising life expectancy, chronic diseases, dementia and disabilities are increasing the demand for **long-term, geriatric, palliative and home-based care**.

Meeting Rising Domestic Care Needs

- Nearly **10%** of Indians serve as family caregivers, most of whom are **untrained and unpaid**.
- A professional caregiving workforce is essential to improve the quality and accessibility of long-term care services.

Promoting Women's Economic Empowerment

- Women bear a disproportionate share of unpaid caregiving responsibilities.
- According to the **NSO Time Use Survey (2024)**:
 - ♦ **41%** of women participated in caregiving compared with **21.4%** of men.
 - ♦ Women spent **140 minutes per day** on caregiving against **74 minutes** for men.

- Formalising the care economy can reduce unpaid work and improve **female labour-force participation**.

Demographic Dividend

- Professional caregiving can transform India's large working-age population into a source of **skilled employment**, human capital and sustainable livelihoods.

Unlocking the Care Economy

- The **World Economic Forum (2024)** estimates that the care economy accounts for **16% of global employment**.
- Unpaid care work contributes nearly **USD 11 trillion annually**, despite receiving limited formal economic recognition.
- Professionalising caregiving can boost **GDP**, employment and productivity.

Responding to the Global Care Deficit

- The **WHO** estimates a shortage of nearly **11 million health workers by 2030**.
- **OECD countries** are expected to require **13.5 million additional care workers by 2040**.
- India can leverage this opportunity through **Government-to-Government (G2G)** mobility partnerships.

Promoting Inclusive Growth and Soft Power

- A strong caregiving ecosystem improves services for **elderly persons, PwDs and other vulnerable groups**.
- It also supports the **Purple Economy** by enabling PwDs to participate as trained caregivers while enhancing India's global reputation through skilled workforce exports.

Existing Caregiving Ecosystem in India

Institutional Framework

- **Department of Social Justice & Empowerment (DoSJE)** implements geriatric caregiver training and has launched the SHATAYU Dashboard and JEEVAN App for elderly care.
- **Department of Empowerment of Persons with Disabilities (DEPwD)** offers the Certificate Course in Caregiving (CCCG) through the Rehabilitation Council of India (RCI).
- **Ministry of Health & Family Welfare (MoHFW)** implements the National Programme for Health Care of the Elderly (NPHCE). NCAHP, NIMHANS and the National Centre for Ageing support professional training and quality care.
- **Ministry of Skill Development & Entrepreneurship (MSDE)** and Ministry of External Affairs (MEA) promote NSQF-based certification, international mobility programmes and Pre-Departure Orientation Training (PDOT).

State-Level Innovations

- Karnataka provides the Carer's Monthly Allowance Scheme and supports caregivers through Self-Help Groups (SHGs).
- Kerala has pioneered K4Care, Aswasakiranam, Neighbourhood Network in Palliative Care and the Triple Win Programme with Germany.
- Odisha runs a Geriatric Caregiver Training Programme to develop skilled caregivers for elderly care.

Challenges

- **Regulatory gaps:**
 - ♦ Caregiving is yet to be recognised as a fully regulated profession.
 - ♦ The absence of uniform standards, accreditation, licensing and quality assurance limits professionalisation.
- **Unpaid care burden:**
 - ♦ Family caregiving remains largely unpaid and is disproportionately performed by women.
 - ♦ Although the **Rights of Persons with Disabilities Act, 2016** recognises caregivers of persons requiring high support, comprehensive financial support and social security remain limited.
- **Skill shortages:**
 - ♦ India lacks adequately trained caregivers, particularly in **geriatric, dementia, stroke, palliative and disability care**.
 - ♦ Existing training is not fully aligned with international standards, limiting overseas employment opportunities.
- **Weak care infrastructure:**
 - ♦ Formal caregiving services remain inadequate, especially in rural areas.
 - ♦ Limited respite-care facilities increase caregiver burnout and reduce service quality.
- **Technology and trust deficits:** The sector lacks robust caregiver verification, grievance-redress mechanisms, digital registries and technology-enabled service delivery, reducing public confidence.
- **Limited social protection:** Caregivers often lack **health insurance, accident cover, pension benefits** and long-term care financing, making caregiving financially insecure.
- **Low social recognition:** Care work continues to be viewed primarily as a private family responsibility rather than productive economic activity, reducing its professional appeal.

Major Recommendations of the NITI Aayog Report

Strengthen Policy and Regulation

- Formulate a National Policy on Caregiving to formalise the sector and improve Centre-State coordination.
- Establish a **National Caregiver Council (NCC)** as the apex body for regulation, accreditation, certification, caregiver registry, standard-setting and grievance redressal.

Professionalise the Workforce

- Introduce **NSQF-aligned certification**, standardised curricula and specialised cadres for **geriatric, palliative and dementia care**.
- Integrate caregiving into educational institutions and digital learning platforms.
- Strengthen institutions such as RCI, NISD, Sector Skill Councils, National Centre for Ageing and Regional Geriatric Centres.

Expand Global Mobility

- Develop G2G partnerships with countries such as Japan, Germany, the UK and Australia through ethical recruitment, language training and reintegration support.

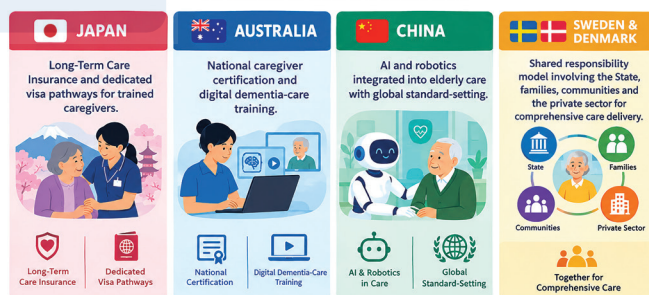
Strengthen Social Security and Community Care

- Extend health insurance, accident insurance and social security to caregivers while promoting care entrepreneurship.
- Strengthen family caregivers, SHGs, Ayushman Arogya Mandirs and CSR-supported community care initiatives to reduce the unpaid care burden.

Improve Caregiver Welfare and Technology

- Introduce care leave, respite-care services, counselling support and workplace sensitisation to prevent caregiver burnout.
- Develop a **National Digital Caregiver Portal** with a certified caregiver directory, registry, background verification, multilingual training and technology-enabled service delivery.

Global Best Practices



Conclusion

- A strong **care economy** is not merely a welfare initiative but a strategic investment in **human capital, employment generation, gender equality and inclusive growth**.
- Professionalising caregiving through robust regulation, skilled workforce development, social security and technology-enabled service delivery can improve long-term care while creating quality employment opportunities.
- By implementing the recommendations of the **NITI Aayog's "Reimagining Care"** report, India can meet rising domestic care needs and emerge as a **global hub for skilled caregivers**, advancing the vision of **Viksit Bharat @2047**.

IRDAI REFORMS 2026

Recently, IRDAI approved major reforms to modernise the insurance sector and implement the Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Act, 2025.

Background

- The insurance sector provides **financial security**, mobilises **long-term savings**, and supports **economic growth**.
- India aims to achieve '**Insurance for All by 2047**' by expanding insurance coverage across the country.
- The **SBSR Act, 2025** provides the legislative framework to modernise the sector.
- The latest reforms seek to improve **governance**, strengthen **policyholder protection**, facilitate **capital formation**, and enhance the **ease of doing business**.

Objectives of the Reforms

The reforms seek to:

- Provide greater **operational flexibility** to insurers.
- Facilitate **capital formation** in the insurance sector.
- Strengthen **corporate governance** and financial discipline.
- Enhance **policyholder protection**.
- Improve the **ease of doing business** across the insurance ecosystem.
- Accelerate **insurance penetration** to achieve the goal of **Insurance for All by 2047**.

Key Reforms Approved by IRDAI

➤ Operational and Financial Reforms:

- ◆ **IRDAI approved amendments to:**
 - ◆ IRDAI (Actuarial, Finance and Investment Functions of Insurers) (Second Amendment) Regulations, 2026
 - ◆ IRDAI (Registration, Capital Structure, Transfer of Shares and Amalgamation of Insurers) (Amendment) Regulations, 2026
- ◆ **Key Features:**
 - ◆ The amendments liberalise investment norms for insurers and provide a clearer framework for capital infusion.
 - ◆ They simplify the transfer of shares and streamline the amalgamation of insurers.
 - ◆ They facilitate corporate restructuring and improve operational flexibility.
 - ◆ They strengthen actuarial oversight, improve financial governance, and protect policyholder interests.
 - ◆ These reforms improve the ease of doing business, strengthen the financial resilience of insurers and create a more stable environment for long-term growth.

➤ Policyholders' Education and Protection Fund (PEPF):

- ◆ IRDAI approved the IRDAI (Policyholders' Education and Protection Fund) Regulations, 2026 to operationalise the

Policyholders' Education and Protection Fund (PEPF) under Section 16A of the IRDA Act, 1999, inserted through the SBSR Act, 2025.

◆ PEPF aims to:

- ◆ Promote insurance awareness and financial literacy.
- ◆ Strengthen grievance redressal mechanisms.
- ◆ Improve policyholder services through technology-enabled platforms.
- ◆ Facilitate the tracing and recovery of unclaimed insurance amounts.
- ◆ Support policyholder education and consumer empowerment.
- ◆ The fund strengthens consumer confidence and policyholder protection.
- ◆ It improves transparency and trust in the insurance ecosystem and supports a more informed and empowered insurance consumer.

➤ Reforms for Insurance Intermediaries:

◆ Major changes:

- ◆ The reforms mandate the tagging of the authorised salesperson with every insurance proposal, policy and certificate.
- ◆ They introduce perpetual registration through an annual fee mechanism instead of periodic renewal.
- ◆ They align the regulatory framework with the SBSR Act and the Foreign Investment Rules.
- ◆ They strengthen governance, disclosure standards, and accountability.

◆ Benefits:

- ◆ The reforms improve accountability and traceability across insurance distribution.
- ◆ They enhance transparency for policyholders.
- ◆ They reduce compliance costs for intermediaries, TPAs and surveyors.
- ◆ They enable faster and more efficient policyholder service delivery.

➤ Transparent Regulatory Enforcement:

- ◆ IRDAI approved the IRDAI (Manner and Procedure for Imposition of Penalties) Regulations, 2026.
- ◆ **Key provisions:**
 - ◆ The regulations establish a uniform and transparent enforcement framework.
 - ◆ They prescribe a structured procedure for regulatory proceedings.
 - ◆ They provide a clear process for issuing show-cause notices and reasoned orders.

- ♦ They promote fair, proportionate, and consistent regulatory action.
 - ♦ The framework improves regulatory certainty and strengthens compliance and accountability. It also enhances public confidence in insurance regulation.
- ➔ **Expansion of the Insurance Market:**
- ♦ ProTec General Insurance Ltd. received a Certificate of Registration to commence general insurance business.
 - ♦ This is the fourth insurer registered during 2026, including two general insurers, one health insurer and one reinsurer.
 - ♦ The approval expands market competition and increases the capacity of the insurance sector.
 - ♦ It also supports wider insurance penetration across the country.

Foreign Direct Investment (FDI) Reforms

- ➔ The Government has permitted **100% Foreign Direct Investment (FDI)** in insurers under the **SBSR Act, 2025**.
- ➔ **One life insurer** and **one general insurer** have already increased foreign shareholding beyond the earlier **74% limit**.
- ➔ The reform attracts greater **long-term capital** into the insurance sector and strengthens **investor confidence** and improves the sector's financial capacity.
- ➔ It promotes **competition**, **innovation**, and **product diversification** and enables insurers to expand operations and support wider **insurance penetration**.

Significance of the Reforms

- ➔ The reforms create a balanced framework that combines **market liberalisation** with **strong policyholder protection**.
- ➔ They strengthen **corporate governance**, **actuarial oversight**, and **financial discipline** across insurers.
- ➔ They improve **regulatory transparency**, **accountability**, and **predictability**.
- ➔ They facilitate **capital formation** and support sustainable growth of the insurance sector.
- ➔ They reduce regulatory and compliance burdens, thereby improving the **ease of doing business**.
- ➔ They encourage greater **private** and **foreign investment**, leading to increased competition and innovation.
- ➔ They promote higher **insurance penetration** and support the national vision of **Insurance for All by 2047**.

Challenges

Regulatory Challenges

- ➔ Regulators must balance **operational flexibility** with **policyholder protection**.
- ➔ Strong supervision is essential as private participation and foreign investment increase.
- ➔ Regulatory capacity must develop in line with the growing complexity of the insurance market.

Implementation Challenges

- ➔ Insurers must implement the new regulatory framework uniformly across the sector.
- ➔ Intermediaries must adopt higher standards of **governance**, **disclosure**, and **accountability**.
- ➔ Digital infrastructure must efficiently support policy servicing, grievance redressal, and unclaimed amount recovery.

Market Challenges

- ➔ **Insurance penetration** remains low in many rural and underserved regions.
- ➔ Affordable insurance products remain inadequate for several vulnerable households.
- ➔ Additional capital must translate into wider insurance coverage rather than merely expanding business volumes.

Consumer-Centric Challenges

- ➔ Insurance awareness and **financial literacy** remain limited among many citizens.
- ➔ Many policyholders are unaware of their rights and grievance-redressal mechanisms.
- ➔ A large amount of insurance money continues to remain **unclaimed**.

Way Forward

- ➔ **Implement the SBSR Act** and the accompanying regulations in a timely and coordinated manner.
- ➔ **Strengthen insurance literacy** through sustained awareness campaigns across urban and rural areas.
- ➔ **Expand technology-driven platforms** for policy servicing, grievance redressal, and recovery of unclaimed insurance amounts.
- ➔ **Promote risk-based regulation** that encourages innovation without compromising policyholder protection.
- ➔ **Develop affordable and inclusive insurance products** for low-income households, informal workers, and underserved regions.
- ➔ **Strengthen supervisory capacity** through data-driven regulation and continuous monitoring of insurers.
- ➔ **Leverage digital technologies**, including AI and advanced analytics, to improve underwriting, claims management, fraud detection, and customer service.
- ➔ **Ensure that higher capital inflows translate into greater insurance penetration**, improved product accessibility, and better consumer outcomes.

Conclusion

- ➔ The **IRDAI Reforms 2026** represent a significant step towards building a **transparent**, **competitive**, and **policyholder-centric** insurance ecosystem.
- ➔ By balancing **market liberalisation** with **strong consumer safeguards**, the reforms can accelerate insurance penetration, strengthen public trust, and advance the vision of **Insurance for All by 2047**.

ILO CONVENTION NO. 193

The International Labour Organization (ILO) adopted Convention No. 193 on Decent Work in the Platform Economy, the world's first legally binding treaty on gig and platform workers.

Background

- The rapid expansion of **digital labour platforms** has generated millions of flexible jobs across the world.
- However, many platform workers continue to face **low social security, income uncertainty, unsafe working conditions and weak legal protection** because they are often treated as independent contractors.
- To address these gaps, the ILO adopted **Convention No. 193**, establishing minimum global labour standards for the platform economy.

About ILO Convention No. 193

- The Convention was adopted in **June 2026** by the **International Labour Conference** with **406 votes in favour, 8 against, and 36 abstentions**, including India.
- It is the **first legally binding international labour standard** dedicated exclusively to the platform economy.
- It applies to **digital platform workers**, irrespective of whether they are employees, self-employed persons or independent contractors.
- It covers both **location-based** and **online platform work**.

Key Provisions

- Guarantees **fair remuneration**, timely payment, **occupational safety** and **social security**.
- Requires **algorithmic transparency** in work allocation, wage determination, ratings and account deactivation.
- Mandates **human oversight** over significant automated decisions. Prevents **worker misclassification** by recognising the actual nature of work rather than contractual labels.
- Protects **fundamental labour rights, data privacy**, and safeguards **migrant and refugee workers**.
- Promotes protection against **violence, harassment**, unfair suspension and arbitrary termination. Strengthens workers' access to **justice** and effective grievance redressal.

Reasons for India to Abstain

- The Govt. argued that the **Code on Social Security, 2020** already provides a legal framework for gig and platform workers.
- India generally ratifies **ILO Conventions** only after ensuring complete compatibility with domestic laws.
- Since **labour** falls under the **Concurrent List**, the Centre prefers retaining flexibility for States to frame labour regulations.
- The Government also expressed concerns that provisions relating to worker reclassification and algorithmic transparency could increase compliance costs and affect digital innovation.

India's Gig Economy

- India had nearly **7.7 million** gig workers in **2020–21**, which may increase to **23.5 million** by **2029–30**.
- Expansion of **Digital India**, smartphones, internet connectivity and app-based services has accelerated platform work.

India's Existing Framework

- The **Code on Social Security, 2020** legally recognises **gig workers** and **platform workers**.
- It requires aggregators to contribute **1–2% of annual turnover**, subject to a prescribed ceiling, towards a **Social Security Fund**.
- Eligible workers can receive accident insurance, health benefits, maternity benefits, pension and other notified welfare measures. However, the social security framework remains largely **unimplemented** because operational schemes and detailed rules are yet to be fully notified.
- States such as **Rajasthan, Karnataka and Telangana** have initiated separate welfare measures for gig workers.

Challenges

- **Worker misclassification** continues to deny many platform workers basic labour rights.
- **Opaque algorithms** determine work allocation, earnings and account deactivation without adequate transparency.
- **Social security** remains weak despite statutory provisions.
- Workers continue to face **income volatility**, occupational risks and inadequate health protection.
- Women platform workers remain vulnerable to safety and harassment issues.
- Many gig workers are still outside formal welfare and social security systems.

Way Forward

- Fully operationalise the **Code on Social Security, 2020** and notify welfare schemes without delay.
- Ensure effective implementation of the **Social Security Fund** through aggregator contributions.
- Mandate **algorithmic transparency**, human review and independent grievance redressal.
- Expand **e-Shram** registration and provide portable social security benefits across States.
- Introduce minimum earnings protection, stronger occupational safety standards and better safeguards for women workers.
- Progressively align India's regulatory framework with the principles of **ILO Convention No. 193** while balancing worker welfare with innovation.

RISING SUGAR PRICES

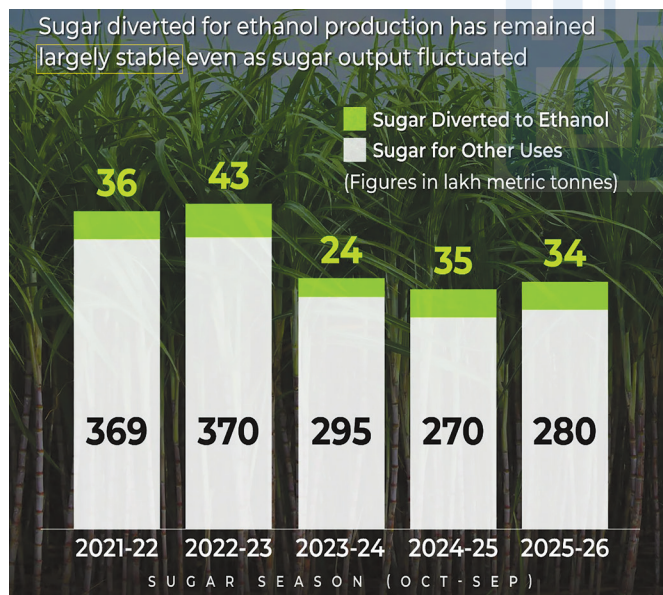
Rising sugar prices have reignited the debate over balancing ethanol blending, energy security and food security in India.

Background

- **Ethanol** is a renewable alcohol produced from **sugarcane, maize, wheat** and other starch-rich feedstocks. It is blended with petrol to reduce fossil fuel consumption.
- Under the **National Policy on Biofuels, 2018**, India achieved **20% ethanol blending (E20)** in 2025 and introduced **E85** fuel for flex-fuel vehicles.

Reasons for Sugar Prices Hike

- Domestic sugar production declined to about **30.6 million tonnes** against the initial estimate of **34.3 million tonnes** because of **red rot disease, top borer infestation**, excess rainfall and waterlogging.
- Higher demand during the **festive season** further increased market pressure. Rising **global sugar prices** and an expected global supply deficit also pushed domestic prices upward.
- **Speculative buying** and hoarding aggravated the shortage.
- Consequently, India's closing sugar stocks are projected to fall to a **multi-year low**, tightening domestic supply.



Ethanol Factor

- The Government has rejected the claim that **ethanol diversion** caused the sugar price surge.
- The share of sugar diverted for ethanol declined from **about 12% in 2022-23** to **around 9% in 2025-26**.
- Nearly **three-fourths** of India's ethanol production now comes from **grains**, mainly maize.
- The programme has reduced surplus sugar stocks, improved

mill finances and enabled payment of **97% of sugarcane dues** for 2025-26.

- The available evidence indicates that **lower production**, rather than ethanol diversion, was the primary reason.

Promotion of Ethanol Blending

- It strengthens **energy security** by reducing dependence on imported crude oil while lowering **foreign exchange outflow**.
- It creates an additional market for **sugarcane, maize and surplus foodgrains**, thereby increasing farmers' incomes.
- It reduces **carbon emissions** and supports India's climate commitments.
- It promotes **rural industrialisation** by encouraging investments in distilleries and creating non-farm employment.
- It also reinforces India's global leadership through the **Global Biofuel Alliance**.

Key Concerns

- Heavy dependence on **food-based feedstocks** makes ethanol production vulnerable to poor harvests.
- Diversion of agricultural produce may increase **food and sugar prices** during supply shortages. Higher ethanol blends may reduce **fuel efficiency** in conventional vehicles.
- Older vehicles may face **engine compatibility** and corrosion issues because ethanol readily absorbs moisture.
- **Water-intensive sugarcane cultivation** raises concerns about long-term environmental sustainability.

Government Measures

- The Government imposed **stock limits** on dealers and bulk consumers to discourage hoarding.
- It permitted **duty-free imports** of up to **10 lakh tonnes** of raw sugar to improve domestic availability.
- It continued the temporary **export ban**, ordered physical verification of sugar stocks and monitored bulk purchases.
- It also encouraged **early sugarcane crushing** to increase market supply before the festive season.

Way Forward

- Promote **second-generation ethanol** produced from agricultural residues and other non-food feedstocks.
- Adopt a **flexible ethanol policy** based on sugar availability, food prices and feedstock supply.
- Improve **water-use efficiency** in sugarcane cultivation through micro-irrigation and better agronomic practices.
- Ensure better coordination among **ethanol procurement, sugar production, imports and price stabilisation** measures to balance energy security with food security.

AIRPORT PRIVATISATION IN INDIA

The Ministry of Civil Aviation (MoCA) has received in-principle approval to privatise 11 Airports Authority of India (AAI) airports under the Public-Private Partnership (PPP) model.

Background

- India has adopted the **PPP model** to modernise airports, improve passenger services and attract private investment while retaining public control over sovereign functions.
- Under the latest proposal, **11 AAI airports** will be leased for **50 years** in **five bundles** to promote **cross-subsidisation** between commercially strong and weaker airports.

About Airport Privatisation

- A **Public-Private Partnership (PPP)** is a long-term arrangement in which the Government and a private entity jointly develop and manage public infrastructure.
- Under this model, private concessionaires undertake **airport operation, management, maintenance and development** for a specified concession period.
- The **Airports Authority of India (AAI)** continues to perform sovereign functions such as **Air Traffic Control (ATC)** and **Communication, Navigation and Surveillance (CNS)** services.
- The **Public Private Partnership Appraisal Committee (PPPAC)**, under the **Department of Economic Affairs**, appraises major PPP projects to ensure they are **financially viable, transparent, well-structured and consistent with public interest**. It has granted **in-principle approval** for the present proposal.

Key Features of the Latest Proposal

- The Government proposes to lease **11 AAI airports** through **five bundles** for a **50-year concession period**.
- The bundled airports are **Amritsar–Kangra, Varanasi–Gaya–Kushinagar, Bhubaneswar–Hubballi, Raipur–Aurangabad, and Tiruchirappalli–Tirupati**.
- The bundling model combines profitable and smaller airports to facilitate **cross-subsidisation** and improve the viability of regional airports.
- The proposal is expected to attract **about ₹8,622 crore** in private investment. Private concessionaires will undertake **capital expenditure, capacity expansion**, airport development and passenger services.
- The bidding parameter will be a **per-passenger fee** for domestic passengers, while the fee for international passengers will be **twice** the domestic rate.
- A **one-year joint management period** has been proposed after the transfer of operations.
- Private operators must retain at least **60% of the existing AAI workforce** during the transition.
- The revised eligibility criteria permit bidders with **cross-sector infrastructure experience**, thereby broadening the investor base.

Significance of Airport Privatisation

- Private participation can improve **operational efficiency**, service quality and passenger experience through better technology and professional management.
- It can accelerate **airport expansion**, terminal modernisation and city-side infrastructure by mobilising private capital.
- The PPP model reduces the Government's immediate **fiscal burden** and enables greater public investment in other development priorities.
- Airport bundling strengthens **regional connectivity** by supporting the operation of commercially weaker airports.
- Higher private investment can help meet India's rapidly growing **air passenger traffic** and future aviation infrastructure needs.

Key Concerns

- Excessive **market concentration** may reduce competition if a few corporate groups operate multiple airports.
- Financial stress in one project may adversely affect other airports managed by the same concessionaire.
- Long concession periods require strong **regulatory oversight**, financial scrutiny and continuous performance monitoring.
- Commercial interests should not compromise **affordable airport services, public interest** or **regional connectivity**.

Way Forward

- Adopt a **transparent and competition-oriented PPP framework** for airport privatisation.
- Strengthen **financial due diligence**, independent regulation and periodic performance audits.
- Prevent excessive concentration through appropriate **competition safeguards**.
- Ensure that private investment expands airport capacity while protecting **consumer interests** and **regional connectivity**.
- Promote close coordination between the **Government, AAI** and private concessionaires for sustainable aviation growth.

Conclusion

- Airport privatisation can strengthen India's aviation ecosystem by combining **private investment, efficient management** and **public oversight**.
- A well-regulated PPP framework will be essential to improve connectivity, enhance passenger services and support long-term infrastructure development.

FIRST REGULAR CASTE CENSUS

Ladakh is to be the first region to conduct caste enumeration under Census 2027.

Its early schedule is due to severe winter conditions.

Starting with Ladakh

- Population Enumeration will take place from **1 to 30 September 2026**. A revisional round will follow from 1 to 5 October 2026.
- The reference date for these areas is 00:00 hours of 1 October 2026. For the rest of India, it is 1 March 2027.
- Ladakh, along with notified snow-bound areas of Jammu and Kashmir, Himachal Pradesh and Uttarakhand, is classified as a **snow-bound non-synchronous area**.
- Door-to-door enumeration is difficult during the usual February period because of heavy snowfall and restricted connectivity.

About Census

- The Census is a periodic and systematic count of population and its demographic, social and economic characteristics.
- It supports public-service planning, resource allocation, welfare delivery and evidence-based policymaking.
- It is conducted by the **Registrar General and Census Commissioner of India** under the Census Act, 1948 and Census Rules, 1990.
- India has conducted a Census since 1871 (*Published in 1872*). The first complete Census was held in 1881. The last completed Census was in 2011.
- **Census 2027 has two phases:**
 - ◆ **Houselisting and Housing Census**, conducted from April to September 2026 according to State and Union Territory schedules.
 - ◆ **Population Enumeration**, is to be conducted in September 2026 in snow-bound areas and in February 2027 elsewhere.
- It is India's first **fully digital Census**. Enumerators will use mobile applications, while Digital Layout Maps and geo-tagged buildings will be created for each Houselisting Block.
- Sensitive defence establishments near the LAC in Ladakh will be enumerated through paper schedules as special charges. This protects strategic locations from geo-tagging and public disclosure.

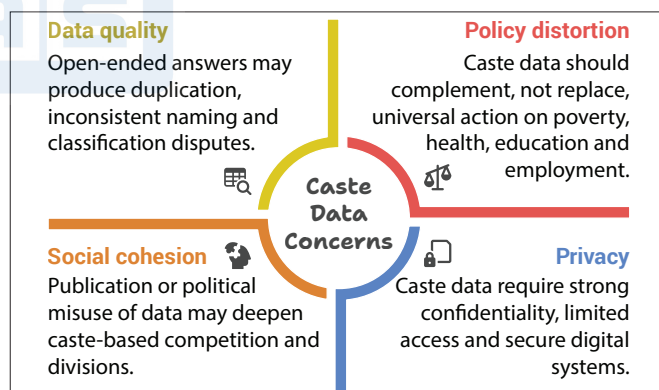
Caste Enumeration in Census 2027

- Caste will be recorded during the Population Enumeration phase. The notified schedule has **40 questions** on caste, demographic characteristics, education, migration, work and other socio-economic indicators.
- The caste column is open-ended. Respondents may state their caste or sub-caste in their words.
- The approach was pre-tested from 1 to 20 July 2026 across 16 States and Union Territories.

- SC and ST data have continued to be recorded after Independence. Census 2027 will additionally enumerate other caste groups within the regular statutory Census.
- The 1931 Census remains the last published all-India caste count covering non-SC/ST groups. Its data have therefore continued to influence estimates of the OBC population.
- The 2011 **Socio-Economic Caste Census** collected caste responses outside the regular Census. Its raw data generated more than 46 lakh caste names because of spelling variations, aliases and inconsistent self-identification.
- The caste dataset was not released as a validated, standardised national database.

Significance of Census

- **Targeted welfare:** Current data can reveal gaps in education, employment, assets and access to public services.
- **Affirmative action:** It can support evidence-based assessment of representation and backwardness under Art. 16(4) and 340.
- **Policy evaluation:** Governments can assess whether welfare and reservation policies reach intended groups.
- **Social justice:** Reliable data can make exclusion and intra-group disparities more visible.



Way Forward

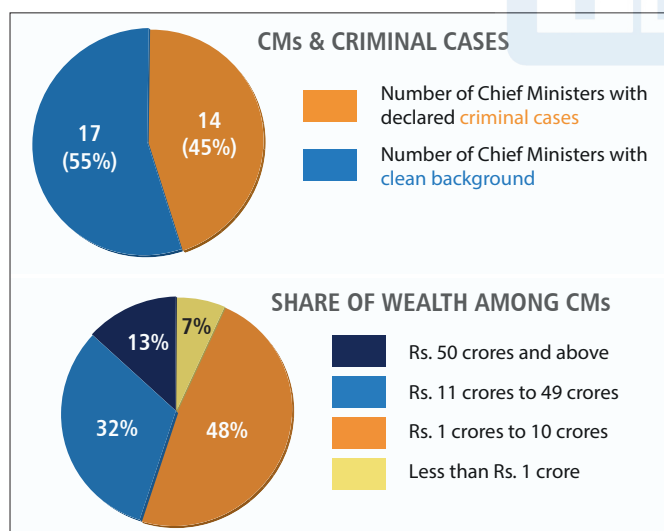
- Create a transparent and expert-led protocol for standardising caste responses.
- Publish only anonymised, aggregate datasets after independent quality checks.
- Establish strong safeguards against data misuse and ensure compliance with confidentiality obligations under the Census Act.
- Use caste data with income, education, occupation, geography and gender indicators for multidimensional policy design.

CRIMINALISATION OF POLITICS

A report by the Association for Democratic Reforms (ADR) and National Election Watch (NEW) revealed that 31% of sitting Rajya Sabha MPs have declared criminal cases against themselves, while 16% face serious criminal charges.

Key Findings of the ADR Report

- Analysis covered **226 out of 233 sitting Rajya Sabha MPs**, based on self-sworn election affidavits.
- **31%**, of the 226 cases that were covered, have declared pending criminal cases.
- **16% face serious charges** including murder, attempt to murder, kidnapping, and crimes against women.
- One MP declared as many as **36 serious cases**.
- The data confirms the issue spans **all major national and regional parties** not confined to any single political formation.
- States with the highest proportion of MPs with criminal cases: **Telangana (71%), Delhi (67%), and Maharashtra (53%)**.
- **14% of Rajya Sabha MPs are billionaires**. The average declared assets of a Rajya Sabha MP stand at **₹120.69 crore**.
- Nationally, **1,861 MLAs i.e. approximately 45%** have declared criminal cases. **14 out of 28 Chief Ministers** have also declared criminal cases, including serious ones.
- There has been a **55% increase** in MPs with declared criminal cases since 2009 and a **124% increase** in serious criminal cases over the same period.
- Over **4,000 criminal cases** are pending against MPs and MLAs across India.



What is Criminalisation of Politics?

- It refers to the trend where individuals with **criminal backgrounds, pending charges, or convictions** contest elections and hold public office.
- It replaces the **rule of law** with the **rule of money and muscle power**, undermining democratic integrity.

Causes

- **Money and Muscle Power:** The **First-Past-The-Post (FPTP)** system and high election costs compel parties to field candidates with black money reserves and local influence.
- **Judicial Delays:** With over **5.6 crore pending cases** in Indian courts, politicians can contest multiple terms while trials drag on for decades.
- **Legal Loopholes:** Under **Section 8 of the Representation of the People Act, 1951**, disqualification occurs only after **conviction** with a sentence of two or more years. Pending cases, however serious, do not bar candidature.
- **Identity Politics:** Voters frequently prioritise caste, religion, or language over a candidate's criminal antecedents. Local strongmen are perceived as **'Robin Hood' figures** who provide quick, extra-legal solutions.
- **Lack of Inner-Party Democracy:** Opaque ticket distribution allows party bosses to favour wealthy candidates over grassroots workers.
- **Governance Deficit:** Weak state institutions lead voters to rely on criminal strongmen who act as parallel power centres.
- **The 'Winnability' Factor:** Candidates with criminal records win at approximately **15%**, compared to **4%** for clean candidates. Parties prioritise electoral success over ethical conduct.

Implications

- Lawmakers facing serious charges may **influence legislation** to serve vested interests or **dilute institutional accountability**.
- The Rajya Sabha is constitutionally designed to represent state interests and provide expert legislative review. The dominance of money and muscle undermines this mandate.
- The **criminal-politician-business nexus**, recognised by the **Vohra Committee in 1993**, has deepened over three decades.
- Criminalisation **erodes public trust**, distorts policy-making, marginalises genuine representation, and weakens India's democratic and developmental aspirations.
- It compromises **constitutional morality** highlighting Ambedkar's warning that even a good Constitution fails if administered by a **"bad lot."**

Judicial Pronouncements

- **Union of India vs ADR (2002):** SC ruled that voters have a **fundamental right under Article 19(1)(a)** to know the criminal, financial, and educational background of candidates. Disclosure through affidavits was made mandatory.
- **PUCL vs Union of India (2004):** SC struck down Section 33B of the RPA, 1951, reaffirming voters' **right to know** candidates' antecedents as a fundamental right.

- **K. Prabhakaran vs P. Jayarajan (2005):** SC clarified that Section 8(3) of the RPA aims to prevent criminalisation, observing **"those who break the law should not make the law."**
- **Lily Thomas vs Union of India (2013):** SC mandated **immediate disqualification** of MPs and MLAs convicted and sentenced to two years or more.
- **Manoj Narula vs Union of India (2014):** SC held that persons facing serious criminal charges should **ideally not be included** in the Council of Ministers.
- **Public Interest Foundation vs Union of India (2018):** SC directed political parties to **publicise criminal antecedents** of candidates. Only Parliament can enact a law to disqualify candidates upon framing of charges.
- **Rambabu Singh Thakur vs Sunil Arora (2020):** SC directed the **ECI to strictly monitor** compliance with criminal record disclosures and report violations to the Court.

Recommendations of Committees

- **Vohra Committee (1993):** Acknowledged a **parallel government** run by mafias enjoying political patronage. Recommended a **specialised Nodal Agency** under the MHA to track criminal-politician-business links.
- **Dinesh Goswami Committee (1990) and Indrajit Gupta Committee (1998):** Both advocated **partial, in-kind state funding of elections** i.e. providing voter slips, fuel, and media time to reduce dependence on criminal money.
- **Second Administrative Reforms Commission (2007):** Recommended amending **Section 8 of the RPA** to immediately disqualify individuals facing trial for serious offences.
 - ♦ Also stressed a **stringent code of ethics** for ministers and legislators.
- **244th Law Commission Report (2014):** Recommended disqualifying candidates upon **framing of charges** for offences punishable with five or more years, provided charges are framed at least one year before nomination scrutiny.
 - ♦ Also proposed **fast-track courts** for day-to-day trials of politician cases and enhanced penalties for **false electoral affidavits**.
- **255th Law Commission Report (2015):** Recommended mandatory **disclosure of all political donations** regardless of size and **independent audits** of party accounts.
- **Election Commission of India:** Has urged the SC to impose a **lifetime ban** on convicted politicians from contesting, instead of the current six-year disqualification.

The Nolan Principles

- The **Nolan Principles**, also known as the **Seven Principles of Public Life**, were recommended by the **Committee on Standards in Public Life** established in the **UK in 1994** under **Lord Michael Nolan**.
- They provide an ethical framework for public office holders and are directly relevant to India's criminalisation crisis.

- The seven principles are: **Selflessness, Integrity, Objectivity, Accountability, Openness, Honesty, and Leadership**.
- Their application in India would require elected representatives to act solely in the **public interest**, avoid conflicts of interest, take decisions on **merit**, be answerable for actions, maintain **transparency**, be truthful, and lead by ethical example.

Recent Measure to Deal with Criminalisation

Constitution (130th Amendment) Bill, 2025

- The Bill seeks to amend **Articles 75 (Union), 164 (States), and 239AA (Delhi)** to mandate removal of the **Prime Minister, Chief Ministers, or any Minister** arrested and detained for **30 consecutive days** for an offence punishable by five years or more.
- If the PM or CM remains in custody for 30 days, they must resign. Failing this, they **automatically cease to hold office on the 31st day**.
- Removal can be directed by the **President or Governor** on the advice of the PM or CM, or triggered automatically.
- The Bill was introduced in **2025** and referred to a **Joint Parliamentary Committee (JPC)** following intense opposition protests.

Arguments Against

- **Erosion of Presumption of Innocence:** Disqualification is triggered by **arrest** i.e. by an executive action rather than framing of charges or conviction, which are judicial actions.
- **Weaponisation Risk:** Laws with high bail thresholds such as **PMLA and UAPA** could be used by ruling dispensations to arbitrarily detain opposition leaders for 30 days and force their removal.
 - ♦ This has potential of **destabilising elected state governments**.

Way Forward

- Amend **Section 8 of the RPA** to disqualify candidates upon framing of serious charges. This was recommended by the 244th Law Commission Report.
- Establish **dedicated fast-track courts** for speedy trial of criminal cases involving elected representatives.
- Introduce in kind **state funding of elections** to reduce dependence on money that could be coming from questionable acts.
- Strengthen **inner-party democracy** through legislation mandating transparent candidate selection.
- Enforce **financial transparency** in political funding using mandatory disclosure of all donations and independent audit of party accounts.
- Enhance **voter awareness** through ECI and civil society. The **NOTA option** can incentivise parties to field cleaner candidates.
- Apply the spirit of the **Nolan Principles** through a statutory **code of ethics** for legislators and ministers.

INDIA'S ROLE AND PRESENCE IN THE ARCTIC REGION

The Parliamentary Standing Committee on External Affairs, chaired by MP Shashi Tharoor, presented its report titled "India's Role and Presence in the Arctic and Antarctic Regions" in Lok Sabha in July 2026.

About the Arctic Council

- ➔ Established on **September 19, 1996** through the **Ottawa Declaration**.
- ➔ It has eight member states, namely, Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States all have territories above the Arctic Circle.
 - ♦ The council also includes **six Permanent Participant organisations** representing Arctic Indigenous peoples.
- ➔ The Arctic Council has 13 observer states, including India.
- ➔ While these countries lack decision-making powers, they can financially support specific council projects and actively conduct independent national research in the Arctic.
- ➔ The Council Operates as a **consensus-based forum** focused on scientific research and policy recommendations.

Arctic Region

- ➔ The Arctic is the northern polar region centred on the Arctic Ocean.
- ➔ The Arctic generally lies north of the Arctic Circle (66°33' N).
- ➔ It comprises the Arctic Ocean, surrounding seas, islands and parts of Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden and the US (Alaska).
- ➔ The region is characterised by permafrost, sea ice, tundra and extreme seasonal variations in daylight.

India's Arctic Engagement

- ➔ India has been an **observer in the Arctic Council** since 2013.
- ➔ Research is conducted through the **National Centre for Polar and Ocean Research (NCPOR)**, studying climate patterns, marine biodiversity, and glacial dynamics.
- ➔ In 2008, India established its research station **Himadri** at **Svalbard, Norway**.
- ➔ India's **Arctic Policy (2022)**, titled "**India and the Arctic: Building a Partnership for Sustainable Development**", marked a shift beyond purely scientific engagement.
- ➔ Arctic-related matters are currently handled by the **Polar Cell in the MEA**. It does not have a dedicated ambassador.

Why India Needs Greater Arctic Engagement

- ➔ The Arctic warms at **three to four times the global average**, directly influencing **India's monsoon patterns and sea levels**.
- ➔ The **Himalayas** – recognised as the "**Third Pole**" – give India a strong stake in polar governance.
- ➔ The Arctic holds significant **critical mineral reserves** – including minerals used in **Active Pharmaceutical Ingredients (APIs) and air-conditioning components**.
- ➔ The **Northern Sea Route (NSR)** can dramatically reduce shipping distances between Asia and Europe.
- ➔ The **Chennai-Vladivostok Eastern Maritime Corridor** (operational since November 2024) has already benefited India's trade with Russia.

Importance of the Arctic Region

- ➔ The Arctic is strategically, economically and environmentally significant.
- ➔ It regulates the global climate through its ice cover and ocean circulation, stores vast reserves of oil, natural gas and critical minerals, supports unique biodiversity, and offers emerging Northern Sea Route shipping opportunities as sea ice recedes.
- ➔ It is vital for scientific research and geopolitical security.

Parliamentary Committee's Key Recommendations

- ➔ **Appoint a Polar Ambassador** to pursue "**polar diplomacy**" more effectively.
- ➔ All Arctic Council member states and most observer countries, including **Japan, China, Singapore, and South Korea**, already have dedicated Polar Ambassadors.
- ➔ **Seek full membership** of the Arctic Council whenever membership criteria are reviewed.

Six Working Groups



Arctic Contaminants Action Program (ACAP)
Reduces pollutant emissions and hazardous chemical releases.



Arctic Monitoring and Assessment Programme (AMAP)
Monitors climate change, ecosystems, and human health.



Conservation of Arctic Flora and Fauna (CAFF)
Protects Arctic biodiversity and living resources.



Emergency Prevention, Preparedness and Response (EPPR)
Handles environmental accidents, spills, and search-and-rescue coordination.



Protection of the Arctic Marine Environment (PAME)
Focuses on protection and sustainable use of Arctic oceans and seas.



Sustainable Development Working Group (SDWG)
Improves living conditions and social well-being of Arctic communities.

Challenges Facing the Arctic Council



○ Ruptured Cooperation:

Russia's invasion of Ukraine in 2022 led members to pause participation, fracturing consensus-based diplomacy.



○ Militarisation:

Growing strategic competition undermines the Arctic's status as a zone of peace.



○ Governance Gap:

The Council's mandate explicitly excludes military security – creating a significant gap as regional tensions rise.



○ Rapid Warming:

Accelerating sea-ice loss opens vulnerable marine areas to shipping, resource exploitation, and oil spill risks.

- ◆ Since the **Ottawa Declaration** currently restricts full membership to nations with **territory above the Arctic Circle**, India must work diplomatically toward a future revision of these criteria.

- ➔ Formulate an '**Indian Narrative of the Arctic**' to enhance India's leadership position in polar affairs.
- ➔ Form a **quadrilateral arrangement with Japan, South Korea, and Singapore** to enhance Asia's **collective voice** in the Arctic Council.
- ➔ Encourage Russia's continued involvement in Arctic scientific research through diplomatic channels.
- ➔ Purchase **polar research vehicles**, increase budgetary allocations for **polar research scholarships**, and explore **fishing by Indians in polar regions**.
- ➔ Expand Arctic policy beyond science to incorporate **geopolitical and strategic considerations**.
- ➔ Strengthen India's role as a **representative of the Global South** in Arctic and Antarctic governance.

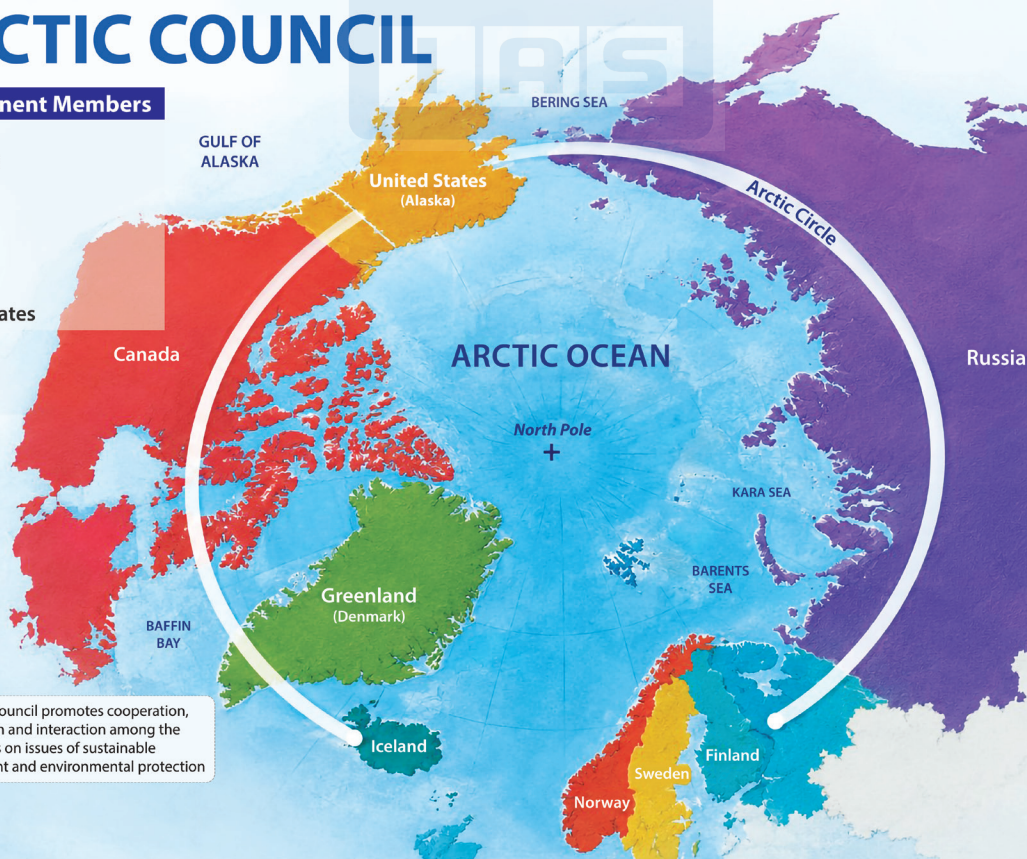
Way Forward

- ➔ Appoint a **Polar Ambassador** and establish a dedicated **Arctic and Antarctic Affairs Division** in the MEA.
- ➔ Deepen cooperation with **Asian observers** through the proposed quadrilateral arrangement.
- ➔ Integrate Arctic policy with India's **SAGAR vision and Act East Policy**.
- ➔ Strengthen **NCPOR and Himadri station** with enhanced funding and infrastructure.

ARCTIC COUNCIL

8 Permanent Members

Canada
Denmark
Finland
Iceland
Norway
Russia
Sweden
United States



The Arctic Council promotes cooperation, coordination and interaction among the Arctic States on issues of sustainable development and environmental protection

MECCA JOINT DEFENCE AGREEMENT

Pakistan, Saudi Arabia, and Türkiye signed the Mecca Joint Defence Agreement on August 7, 2026 in Mecca.

Background

- These nations pledged **collective defence and collective deterrence** against a backdrop of the ongoing **US-Israel-Iran conflict**, repeated Houthi attacks, and an **Israeli airstrike on Doha**.
- The agreement builds on the **Saudi-Pakistan Strategic Mutual Defence Agreement (SMDA)** signed on **September 17, 2025** at **Al-Yamamah Palace, Riyadh**.
- Negotiations began after the **October 7, 2023 Hamas attack** on Israel and gained pace amid the ongoing **US-Israel war on Iran**.
- Since the 2025 SMDA, Pakistan had already deployed **8,000 troops and a JF-17 fighter squadron** to Saudi Arabia.
- Türkiye's inclusion draws on a separate track of **bilateral defence cooperation with Pakistan**. This includes warship exchanges and pilot training built over several years.
- The **full text of the Mecca Agreement has not been made public**. Only a joint press release describing its collective-deterrence intent has been issued.

Key Features of the Agreement

- An **armed attack on any one member** shall be regarded as an **attack on all three**.
- Modelled on **Article 51 of the UN Charter** on the right to collective self-defence.
- The agreement is built on **four pillars** i.e. collective deterrence, **joint training and military exercises**, **intelligence-sharing mechanisms**, and **defence-industrial integration**.
- The agreement **names no specific adversary** and is described as purely defensive and open to any "**brotherly nation**" wishing to join.
- Türkiye's FM **Hakan Fidan** explicitly stated the agreement is **not directed at Iran**.
- There is **no joint command headquarters**, no standing joint force, no common budget, and no explicit nuclear-sharing clause.
- An **exclusionary clause** denies protection to any member that initiates aggression or allows its territory to be used against another state.

Complementary Strengths of the Three Nations

- Saudi Arabia:**
 - Top oil exporter with financial depth and geography astride the **Strait of Hormuz and Bab el-Mandeb** chokepoints.
 - Defence budget: USD 63.9 billion**. A **Greek Patriot battery** stationed near Yanbu since 2021 has repeatedly

intercepted missiles and drones. This reflects Saudi Arabia's existing dependence on external defence assets.

- Türkiye: NATO's second-largest army** with advanced defence industry including **Baykar's Akinci drones** and the **KAAN fighter programme**.
- Defence budget: USD 51.4 billion**.
- Pakistan: Large manpower base and the only nuclear-armed Muslim-majority state**. Defence budget: **USD 9.1 billion**.
- Combined defence budgets: Approximately USD 124.4 billion annually**.



Reason and Timing of Signing the Pact

- The **US-Israel-Iran confrontation** since early 2026 exposed the limits of relying solely on US security guarantees.
- Saudi Arabia reportedly depleted a significant share of its **Patriot missile interceptor stockpile** defending against Iranian and Houthi strikes.
- Post-October 7 regional recalibration pushed Riyadh to **diversify its security partnerships**.
- The **Trump administration** is likely to view the pact favourably as it advances **regional burden-sharing**, reducing US security commitments in the Gulf.

Critical Assessment

- Comparisons with NATO's **Article 5** are analytically weak.
- Article 5 of the North Atlantic Treaty** provides that an armed attack against one NATO member is considered an attack against all members, creating a legally recognised collective defence commitment. In contrast, the Mecca Pact lacks such institutional and legal certainty.
- The Mecca Pact leaves geographic scope and response triggers undefined.
- It does not clearly specify the territorial scope, the circumstances that would trigger collective action, or the nature of the response. Each signatory retains **full discretion** over whether and how to respond.
- Historically, mutual defence pacts are not always translated into military action.
- For **example**, despite being a close security partner of Saudi Arabia, Pakistan did not provide military assistance during the Houthi missile and drone attacks on Saudi Arabia. Instead, it emphasised diplomatic engagement and mediation,

illustrating that political and strategic considerations often outweigh treaty commitments.

Aim of the Agreement

- While being viewed as **deterrence against aggression**, the deeper strategic subtext is contested.
- Türkiye views Israel as a greater long-term security threat than Iran particularly given clashing interests in **post-Assad Syria**.
- Israeli figures, including former PM **Naftali Bennett**, have labelled Türkiye **'the new Iran'** and accused it of building a **'hostile Sunni axis'** with nuclear-armed Pakistan.
- Iran, despite being the implicit concern for Saudi Arabia, is not a threat Türkiye or Pakistan wishes to openly confront. Each has structural reasons to maintain working relations with Tehran.

Broader Geopolitical Significance

- The agreement reflects a **shift from dependence on external security providers** toward regional partnerships and strategic diversification.
- It signals the emergence of a more **multipolar West Asian security environment** where Saudi Arabia, Türkiye, Iran, Israel, and the UAE pursue overlapping and competing partnerships.
- **China** has responded with calculated silence, seeing benefit in a stabilised Pakistan-Gulf security architecture that protects its **Belt and Road investments**.
- **Russia** is watching with pragmatic neutrality, balancing its Iran partnership against interest in reduced US centrality in the Gulf.

Implications for India

Three Strategic Imperatives for India

- 01** **Insulate** its bilateral relationship with Saudi Arabia which is built on energy, diaspora welfare, and counterterrorism cooperation, from spillover effects.
- 02** **Intensify** bilateral defence engagement with Gulf states to prevent diplomatic isolation on Kashmir-related narratives of UAE.
- 03** **Calibrate** its extended-neighbourhood posture through Quad engagement, Indian Ocean naval presence, and defence diplomacy with Israel and moderate Arab states.

- India has major stakes in the Gulf, like, **crude oil and gas supplies, shipping routes, remittances, and Indian diaspora welfare**. This makes West Asian instability a direct strategic concern.
- Türkiye has historically been **diplomatically hostile to India** and demonstrated military cooperation with Pakistan including during the **India-Pakistan conflict of April-May 2025**.

- **Saudi Arabia** has invested significantly in ties with India over the past decade.

- ✦ However, growing Saudi security dependence on Pakistan may give **Islamabad greater leverage** in the Saudi-India relationship, potentially straining India's long-term strategic partnership with Riyadh.

- **Pakistan's growing West Asian role** could boost Islamabad's diplomatic standing and strengthen its narrative on **Kashmir** in Gulf capitals.

Challenges

- **Divergent Strategic Interests:** Pakistan, Saudi Arabia, and Türkiye do not share identical foreign policy priorities.
- **Iran Factor:**
 - ✦ Despite official denials, the pact will inevitably be assessed in the context of **Saudi-Iranian strategic competition**.
 - ✦ Pakistan shares a **900 km border with Iran** and has a substantial Shia population limiting its willingness to confront Tehran.
- **NATO Dimension:** Türkiye's NATO membership adds complexity to its external security commitments alongside the Mecca Agreement.
- **Ambiguity of Action:** The "attack on one is attack on all" clause lacks **precise guidelines** on the kind and scale of collective response.
- **Risk of Bloc Politics:** Multiplying competing military groupings could deepen **fragmentation of West Asian security**.

Way Forward

- The agreement's value lies in defence cooperation rather than bloc confrontation.
- Productive areas include intelligence sharing, counter-terrorism, air and maritime security, and humanitarian and disaster response coordination.
- Regional security arrangements must complement broader diplomatic efforts to reduce tensions rather than deepen them.
- All parties should respect international law and sovereignty and prioritise diplomatic tools for conflict avoidance.

Conclusion

- The **Mecca Joint Defence Agreement** reflects eroding confidence in single-power security guarantees, rather than the emergence of a fully realised military alliance.
- Its immediate significance lies less in creating a new military bloc and more in **institutionalising defence cooperation** among three strategically complementary Muslim-majority states.
- For India, the sensible course lies not in alarm but in **sustained, calibrated diplomatic engagement**, ensuring the pact reshapes West Asia's security map without reshaping India's strategic space.

INDIA'S CULTURAL DIPLOMACY

India is expanding its global cultural outreach through Cultural Exchange Programmes (CEPs) with 98 countries as part of the Global Engagement Scheme (GES).

What is Cultural Diplomacy?

- Cultural diplomacy is the exchange of ideas, values, traditions, languages, arts, and cultural practices among nations to promote mutual understanding, trust, and goodwill.
- It is an important instrument of soft power, enabling countries to shape international opinion through attraction rather than coercion.
- The post-World War II France–Germany student exchange programmes have shown how cultural engagement can foster reconciliation and lasting peace.

Significance of Cultural Diplomacy

- Strengthens a country's soft power and global credibility.
- Builds enduring people-to-people connections beyond formal diplomacy.
- Facilitates dialogue even during periods of geopolitical tension.
- Promotes tourism, the creative economy, and cultural industries.
- Reinforces national identity while expanding international partnerships.
- Complements economic, political, and strategic diplomacy through non-coercive influence.

Bharat, and the Scheme for Safeguarding Intangible Cultural Heritage and Diverse Cultural Traditions.

- Cultural Exchange Programmes (CEPs) with 98 countries institutionalise bilateral cooperation in culture, heritage, museums, and the performing arts.
- Festivals of India, ICCR scholarships, Chairs of Indian Studies, and Indian Cultural Centres promote sustained academic, artistic, and intellectual exchanges worldwide.
- India also advances its cultural diplomacy through BRICS, the G20, the Shanghai Cooperation Organisation (SCO), and BIMSTEC.

Challenges

- Increasing competition from countries such as China, South Korea, and Japan in the soft power domain.
- Limited financial, institutional, and human resources for organisations like Indian Council for Cultural Relations (ICCR).
- Weak coordination among the Ministry of Culture, the Ministry of External Affairs, tourism agencies, and state governments.
- Underutilisation of India's heritage, museums, literature, maritime legacy, and diaspora potential remains a challenge.
- Limited multilingual digital content and global accessibility.
- Excessive commercialisation can dilute the authenticity of traditional cultures.
- Greater emphasis on classical heritage than on contemporary creative industries.

Way Forward

- Formulate a **National Cultural Diplomacy Framework** with coordinated action by the Ministry of Culture, Ministry of External Affairs, ICCR, and Indian Missions abroad.
- Strengthen the institutional capacity, funding, and global presence of ICCR and Indian Cultural Centres.
- Expand digital diplomacy through multilingual platforms, virtual museums, digital archives, OTT platforms, and immersive technologies.
- Deepen engagement with the Indian diaspora as cultural ambassadors.
- Encourage Public-Private Partnerships (PPPs) and Corporate Social Responsibility (CSR) support for cultural initiatives.
- Promote contemporary creative sectors such as **cinema, literature, fashion, gaming, and culinary diplomacy** alongside India's classical traditions.
- Strengthen regional cultural cooperation through joint heritage conservation and maritime initiatives across the Indian Ocean, South Asia, and Southeast Asia.

Key Dimensions of India's Cultural Diplomacy



Institutional Framework and Major Initiatives

- The Global Engagement Scheme (GES) serves as the umbrella programme for India's international cultural outreach.
- Its major components include the International Cultural Exchange Programme (ICEP), Project Mausam, Brihattar

e-PRATYAROPAN PORTAL

The National Organ and Tissue Transplant Organisation (NOTTO) has launched the e-Pratyaropan Portal and the NOTTO Mobile Application to create a unified digital ecosystem for organ donation and transplantation in India.

Organ Transplantation in India

- **Organ transplantation** is a surgical procedure in which an organ, tissue, or group of cells is transferred from one person to another for therapeutic purposes.
- Both **living donors** and **deceased donors** can donate organs, subject to prescribed medical and legal conditions.
- A single deceased donor can save **up to eight lives** by donating the **heart, lungs, liver, kidneys, pancreas, and intestines**.
- India ranks **third globally** in the number of organ transplants, after the **United States** and **China**.
- **Delhi** has recorded the highest number of overall transplants, while **Tamil Nadu** has performed the highest number of deceased donor transplants.

National Organ and Tissue Transplant Organisation

- **NOTTO** is the national apex organisation functioning under the **Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare**.
- It formulates policy guidelines for organ transplantation across the country.
- It maintains the national transplant database and coordinates inter-regional organ allocation.
- It also monitors transplant activities and conducts training and capacity-building programmes.

NOTTO

The National Organ and Tissue Transplant Organization (NOTTO) was established on November 25, 2014.

- **Ministry:** Ministry of Health and Family Welfare, Government of India (under the Directorate General of Health Services).
- **Location:** New Delhi, India.
- **Mandate:** Operates under the Transplantation of Human Organs and Tissues Act (THOTA), 1994.

About the e-Pratyaropan Portal

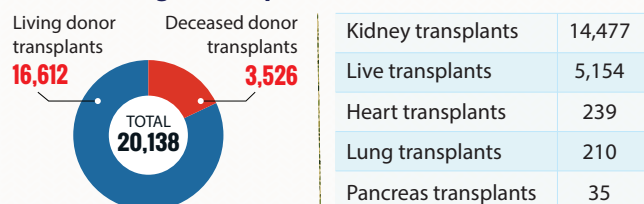
- The **e-Pratyaropan Portal** is a real-time national digital platform that connects hospitals, **State Organ and Tissue Transplant Organisations (SOTTOs)**, **Regional Organ and Tissue Transplant Organisations (ROTOOs)**, and **NOTTO**.
- Patients continue to register for transplantation through a hospital of their choice.
- Transplant centres upload recipient details directly onto the portal through secure access.
- The system automatically generates waiting lists at the **hospital, State, regional, and national levels**.

- It digitally records every stage of organ allocation and movement, replacing manual coordination through phone calls and messages.
- The portal also allows hospitals and State authorities to raise **super urgent requests** for critically ill patients requiring immediate transplantation.

Key Features and Significance

- The portal creates a **unified national waiting list**, replacing fragmented hospital-based databases and ensuring greater transparency.
- It enables **real-time organ allocation** across hospitals, States, and regions, thereby reducing delays in transplantation.
- It facilitates **paired kidney exchange (swap transplantation)** across the country, which significantly expands the pool of compatible donors.
- It establishes India's first **National Transplant Outcome Registry**, where hospitals upload follow-up data to support policy formulation, clinical research, quality assessment, and performance monitoring.
- It improves coordination among hospitals, **SOTTOs**, **ROTOOs**, and **NOTTO**, thereby strengthening cooperative federalism.
- The portal supports **Aadhaar-linked organ donation pledges**, making donor registration more efficient and transparent.
- It also enables online registration, renewal, and monitoring of transplant centres and statutory committees.
- Overall, the initiative strengthens **Digital Health**, promotes **Good Governance**, and contributes to the goal of **Universal Health Coverage**.

Organ Transplants in India in 2025



Source: NOTTO ANNUAL REPORT

How Organ Allocation Works

- The portal follows the existing statutory organ allocation principles.
- The **donor hospital** receives the first opportunity to allocate the organ to its registered patients.
- If no suitable recipient is available, the organ is transferred sequentially to the **State Pool**, **Regional Pool**, and **National Pool**.

- In the case of **kidney transplantation**, one kidney generally remains with the donor hospital.
- The second kidney is first allocated to the nearest eligible government hospital before moving through the higher allocation pools if no compatible recipient is available.

Legal and Policy Framework

- The **Transplantation of Human Organs Act, 1994** regulates the removal, storage, and transplantation of human organs for therapeutic purposes. It also prohibits commercial dealings in human organs and recognises **Brainstem Death (BSD)** as a legal form of death.
- The **Transplantation of Human Organs (Amendment) Act, 2011** permits **swap transplantation** and expands the donor pool by including **grandparents and grandchildren**.
- The **Transplantation of Human Organs and Tissues Rules (THOT), 2014** simplify organ donation procedures while preventing misuse and ensuring greater transparency.

Green Corridor

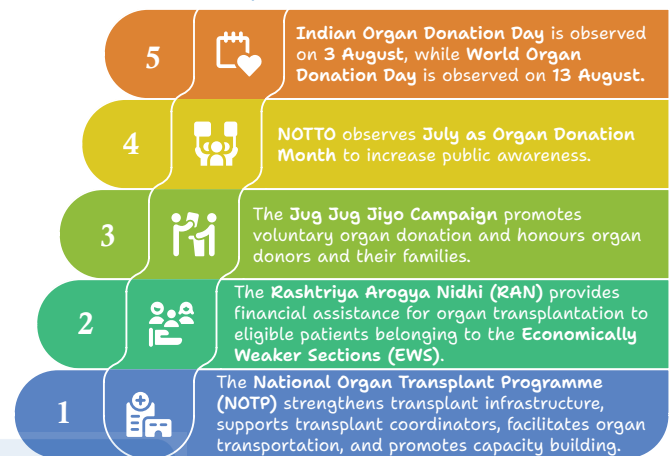
- A Green Corridor is a specially coordinated, traffic-free route created to ensure the time-bound transportation of donated organs between hospitals, thereby preserving organ viability and improving transplant outcomes.
- **Importance:**
 - ♦ Reduces cold ischemia time, preserving organ quality.
 - ♦ Enables timely transplantation of organs such as the heart, lungs, liver, and kidneys.
 - ♦ Requires coordination among hospitals, traffic police, airports, airlines, and emergency services.
 - ♦ Has become a key component of India's deceased organ donation programme under the coordination of National Organ and Tissue Transplant Organization.

Challenges

- India continues to face a **large demand-supply gap**, particularly for kidney transplantation.
- The rate of **deceased organ donation** remains low because of limited awareness, social beliefs, and hesitation among families.
- A significant **gender disparity** exists, as women contribute more living organ donations than they receive.
- Many hospitals still lack adequate transplant infrastructure, **Human Leukocyte Antigen (HLA)** laboratories, and intensive care facilities.
- The country faces a shortage of trained transplant surgeons, nephrologists, and transplant coordinators.
- High treatment costs and lifelong immunosuppressive therapy continue to impose a financial burden on patients.
- Inconsistent reporting and limited outcome monitoring weaken evidence-based policy making.

- Instances of **organ trafficking** and uneven enforcement of legal provisions continue to raise ethical concerns.
- Differences in State-level allocation policies make it difficult to establish a fully uniform national allocation framework.

Enhancing Organ Donation and Transplantation Government Initiatives



Way Forward

- India should develop a **uniform national organ allocation policy** through consensus between the Centre and the States.
- Sustained awareness campaigns should encourage voluntary deceased organ donation and address social misconceptions.
- The government should expand transplant infrastructure and strengthen skilled human resources, especially in underserved regions.
- The **e-Pratyaropan Portal** should be fully operationalised to ensure real-time allocation, transparent monitoring, and efficient coordination.
- Authorities should strictly enforce the **Transplantation of Human Organs and Tissues Act** to eliminate illegal organ trade.
- Greater emphasis should be placed on research, outcome monitoring, robust data governance, and continuous capacity building to strengthen India's organ transplantation ecosystem.

Conclusion

- The **e-Pratyaropan Portal** represents a transformative reform in India's organ transplantation ecosystem by integrating **digital technology** with healthcare governance.
- Its long-term success will depend on harmonised allocation policies, strong Centre-State coordination, robust institutional capacity, improved public awareness, and active citizen participation.
- Together, these measures can create a **transparent, equitable, efficient, and patient-centric** organ transplantation system while advancing the objectives of **Universal Health Coverage**.

INDIAN STATISTICAL INSTITUTE BILL, 2026

The Indian Statistical Institute Bill, 2026 was introduced in the Lok Sabha on 3 August 2026. It seeks to repeal the Indian Statistical Institute Act, 1959 and replace ISI's society-based structure with a statutory framework.

Background of ISI

- The Indian Statistical Institute was established in **1931** by eminent statistician **P. C. Mahalanobis** in the Statistical Laboratory of Presidency College, Kolkata.
- It was registered under the Societies Registration Act, 1860. It is presently registered under the West Bengal Societies Registration Act, 1961.
- The Indian Statistical Institute Act, 1959 declared ISI an **Institution of National Importance**. It enabled ISI to grant degrees, receive Central grants and undergo public audit. However, ISI continued as a registered society.
- ISI is headquartered in **Kolkata**. It has centres in Delhi, Bengaluru, Chennai and Tezpur.
- It conducts education, training and research in statistics, mathematics, economics, computer science and allied disciplines.
- Its present apex body is a 33-member representative **Council**. It includes an elected Chairperson, Central Government representatives and independent scientists. The Director, who is the academic and administrative head, is appointed by the Council.

Key Provisions of the Bill

- **Statutory incorporation:** The Bill converts ISI into a not-for-profit **body corporate**. Its status as an Institution of National Importance will continue.
- **Continuity of rights:** All assets, liabilities, employees, students and academic programmes of the existing ISI will transfer to the new institution. The new institution will protect service conditions and academic continuity.
- **Institutional mandate:** ISI will promote statistical sciences and allied fields, interdisciplinary research, and collaboration among academia, industry and government. It aims to become a global centre of excellence.
- **Board of Governors:**
 - ◆ An 11-member **Board of Governors** will replace the Council as the principal executive and policy-making body.
 - ◆ It will include a Chairperson nominated by the Visitor on the Central Government's recommendation.
 - ◆ It will include a Ministry nominee, the Ministry's Financial Adviser, four eminent external individuals, and four ISI representatives.
 - ◆ It will approve budgets and development plans, establish departments and centres, frame regulations, create posts with approval, grant degrees and review institutional performance.

- **Academic and financial bodies:** An **Academic Council** will oversee curriculum, examinations, academic standards and research. The Bill also provides for a Finance Committee and Management Councils for the ISI centres.
- **Visitor and Director:** The President of India will be the **Visitor**. The Visitor may order reviews and inquiries, and issue binding directions. The Director will serve as the Chief Executive Officer and will be appointed through the prescribed process with the Visitor's approval.
- **Transparency:** The Bill provides for CAG audit, annual financial and performance reports, periodic evaluation, parliamentary scrutiny of rules and the first regulations, and application of the **RTI Act, 2005**.

Concerns

- **Reduced autonomy:** Smaller Board may weaken faculty representation and participatory governance.
- **Greater executive influence:** Government and Visitor's powers in appointments and directions may affect institutional independence.
- **Academic freedom:** Board's broad powers may constrain academic decision-making.
- **Research priorities:** Industry focus could undermine fundamental research.
- **Consultation:** Concerns over stakeholder consultation and omission of Kolkata as headquarters.

Government's Position

- The government argues that the existing large General Body has slowed reforms and modernisation.
- It states that four Review Committees recommended a smaller governing body and merit-based appointments.
- It also maintains that stakeholder consultations, including a 2025 brainstorming session and public comments, were undertaken.

Way Forward

- Ensure a **balanced Board** with independent experts, faculty representation and limited government presence.
- Clearly define the Visitor's powers. Research, curriculum and publication must be protected from executive interference.
- Establish an independent, merit-based **Search-cum-Selection Committee** for the Director.
- Provide adequate public funding for fundamental research. Industry collaboration should complement ISI's public mission.

REPATRIATING FUGITIVES

According to the Ministry of Home Affairs, India brought back 274 fugitive criminals from 36 countries between 2019 and July 2026.

Fugitive Economic Offender

- Under the **Fugitive Economic Offenders Act, 2018**, an FEO is a person against whom an arrest warrant exists for a scheduled economic offence involving at least **₹100 crore**.
- The person must have left India to avoid prosecution or refused to return to face legal proceedings.
- A Director or Deputy Director under the **Prevention of Money Laundering Act, 2002** may apply to a designated Special Court for an FEO declaration.
- The Act permits attachment and confiscation of the offender's Indian and overseas assets. It covers benami property and property indirectly controlled by the offender.
- A declared FEO may be barred from pursuing or defending civil claims before Indian courts.

Extradition and Related Mechanisms

- Extradition** is the formal surrender of an accused or convicted person by one State to another for prosecution or punishment.
- In India, it is governed by the **Extradition Act, 1962**. The Ministry of External Affairs is the nodal authority for outgoing and incoming requests.
- India has extradition treaties with **48 countries** and extradition arrangements with **12 countries**. Requests may also be made on the basis of reciprocity where no treaty exists.
- The CBI functions as India's **INTERPOL National Central Bureau**. It issues notices and coordinates with foreign police agencies to trace fugitives.
- A **Mutual Legal Assistance Treaty (MLAT)** enables countries to obtain evidence and other formal assistance for investigation and prosecution.
- Letters Rogatory** are judicial requests from an Indian court to a foreign court for assistance, such as collecting evidence or serving summons. They usually move through diplomatic channels and can be slow.
- India is also party to the **UN Convention against Corruption** and the **UN Convention against Transnational Organized Crime**.

Recent Institutional Measures

- The government's strategy rests on **global outreach**, stronger coordination and smart diplomacy.
- BHARATPOL**, launched in January 2025, connects over 1,400 State and Central units with INTERPOL through a common platform. It has shortened some information-sharing requests to 3 to 10 days.
- Operation Trishul** uses satellite inputs, surveillance and digital-footprint analysis to locate fugitives who change their identity abroad.

- Sections **355 and 356** of the Bharatiya Nagarik Suraksha Sanhita, 2023 permit proceedings in the absence of an accused in specified cases.
- Section 356** specifically provides for inquiry, trial or judgment in absentia of a proclaimed offender, subject to safeguards.
- A Standing Focus Group under the Intelligence Bureau's **Multi Agency Centre**, constituted in January 2026, prioritises cases, standardises dossiers and supports follow-up with foreign partners.
- The government reports that it attached **₹17,874 crore** of fugitive-linked assets under PMLA between 2019 and 2026. It also reports restitution of **₹18,762 crore**.
- Red Corner Notices rose from 40 in 2022 to 182 in 2026, as of August. A total of 401 notices were issued during the preceding three years.
- Among the 274 returnees, the largest category was murder, robbery and violent crime at 62. Sexual offences accounted for 53 cases. The extradition of **Tahawwur Hussain Rana** from the United States illustrates the importance of sustained legal and diplomatic action.

Persistent Challenges

- Foreign courts independently assess **dual criminality**, prima facie evidence, prison conditions, fair-trial guarantees and human-rights safeguards.
 - Dual criminality** means that the alleged act for which extradition is sought must be a criminal offence in both the requesting country and the requested country.
- Asylum claims and assertions of political persecution can prolong proceedings. Absence of treaties with some jurisdictions restricts legal compulsion.
- Older list-based treaties may not adequately cover cybercrime, money laundering and complex financial fraud.
- Weak documentation, delayed trials and poor prison conditions can undermine India's credibility before foreign courts.

Way Forward

- Expand treaty and MLAT networks, especially with major financial centres and jurisdictions that host Indian fugitives.
- Modernise older treaties by including broad offence-based clauses and stronger provisions for cybercrime and economic offences.
- Prepare standardised, evidence-rich requests and provide credible assurances on detention conditions and due process.
- Upgrade prisons, ensure speedy trials and strengthen coordination among the CBI, ED, NIA, MEA, State police and intelligence agencies.

INDIA-UZBEKISTAN

COMPREHENSIVE STRATEGIC PARTNERSHIP

During PM Modi's State Visit to Uzbekistan, both countries elevated their relationship from a Strategic Partnership (2011) to a Comprehensive Strategic Partnership (2026).

Key Outcomes of the Visit

- ➔ India and Uzbekistan upgraded ties to a **Comprehensive Strategic Partnership**.
- ➔ Both set a **USD 5 billion trade target by 2030** and established a **Foreign Ministers-led Coordination Council**.
- ➔ **Preferential Trade Agreement (PTA)** negotiations began with a Joint Working Group on non-tariff barriers.
- ➔ Cooperation expanded in uranium, rare earths, critical minerals, AI, startups, digital innovation and IT.
- ➔ **UPI payments** will be enabled through the NPCI International (NIPL)-National Interbank Processing Centre (NIPC) **UZQR** partnership.
- ➔ Both reaffirmed **zero tolerance for terrorism** and welcomed **Exercise DUSTLIK 2026**.
- ➔ Cooperation expanded in Pharma Park, healthcare, Aral Sea restoration (USD 1 million grant), culture, Buddhist heritage, AYUSH and Hindi studies.
- ➔ Uzbekistan backed India's UNSC permanent membership, 2026 BRICS Chairship, and supported joining the International Solar Alliance (ISA) and International Big Cat Alliance (IBCA). PM Modi received the Oliy Darajali Do'stlik Order.

Significance

Historical Background

- ➔ Civilisational links through the ancient **Silk Route** facilitated trade, culture, and the spread of Buddhism.
- ➔ **Babur**, founder of the Mughal Empire, hailed from the **Fergana Valley** in present-day Uzbekistan.
- ➔ Diplomatic relations established in **1992** after Uzbekistan's independence following the **Soviet dissolution**.

Geopolitical and Strategic Cooperation

- ➔ Uzbekistan is a **gateway to Central Asia**, sharing borders with all other Central Asian republics and Afghanistan.
- ➔ Central pillar of India's **Connect Central Asia Policy**.
- ➔ Both cooperate through **UN, SCO, BRICS, India-Central Asia Dialogue**, and G20.
- ➔ Uzbekistan is central to operationalising **Chabahar Port** and the **International North-South Transport Corridor (INSTC)** as alternatives to routes blocked by Pakistan.
- ➔ Defence cooperation includes **DUSTLIK exercises**, military training, cybersecurity, intelligence sharing, and counter-terror financing. The **India-Uzbekistan Joint Working Group on Defence** was established in **2019**.

Geo-economic Cooperation

- ➔ India is among Uzbekistan's **top ten trading partners**, though bilateral trade remains well below potential.
- ➔ Indian investments focus on **pharmaceuticals, healthcare, IT, construction, and manufacturing**.
- ➔ India supports Uzbekistan's **WTO accession**, strengthening long-term economic integration.

Energy and Critical Minerals

- ➔ Uzbekistan is among the world's **important uranium producers** a **long-term** uranium supply framework agreed.
- ➔ Cooperation in **geological exploration, mining, processing, and recycling** of critical minerals and rare earth elements.
- ➔ Uzbekistan to join **ISA**, deepening renewable energy cooperation.

People-to-People and Cultural Relations

- ➔ Indian cinema, music, and **Yoga** enjoy widespread popularity in Uzbekistan. First **India-Uzbekistan Consular Dialogue (2025)** improved visa and mobility cooperation.
- ➔ Education, Hindi promotion, AYUSH, and Buddhist heritage conservation deepen long-term engagement.

Challenges

- ➔ **Connectivity Constraints:** No direct land access due to Pakistan's transit restrictions. Uzbekistan is **doubly landlocked**. Chabahar and INSTC dependence increases geopolitical risk.
- ➔ **China's Expanding Footprint:** China's **BRI** and the **China-Kyrgyzstan-Uzbekistan (CKU) Railway** intensify strategic competition.
- ➔ **Low Trade Realisation:** Transport bottlenecks, limited market access, and banking constraints keep trade below its potential.
- ➔ **Implementation Gap:** Timely execution of commitments remains the key test of the upgraded partnership.

Way Forward

- ➔ Fast-track **Chabahar Port** and **INSTC** to overcome connectivity constraints.
- ➔ Expedite **India-Uzbekistan PTA** negotiations.
- ➔ Expand **UPI-UZQR** interoperability and digital cooperation.
- ➔ Develop long-term partnerships in **uranium, rare earths, and renewable energy**.
- ➔ Expand **Exercise DUSTLIK** and deepen counter-terrorism coordination.
- ➔ Empower the **Coordination Council** for time-bound implementation of commitments.



POLITY & GOVERNANCE

AI TRANSPARENCY CODE

From 2 August 2026, the EU mandates labels for AI-generated content. This aims to boost transparency online.

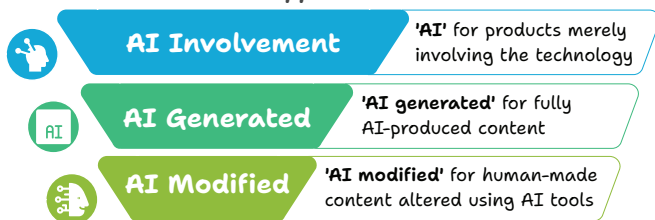
About the Code

- The Code lets human users distinguish manipulated content online.
- It falls under **Article 50** of the **EU Artificial Intelligence Act (AIA)**.
- The Act sets a **risk-based framework** for AI systems within the bloc.
- The '**Code of Practice on Transparency of AI-Generated Content**' sets obligations for AI developers and providers. This maintains the information ecosystem's integrity.
- Non-compliance can draw fines of up to **€15 million**, or **3% of global annual turnover**, whichever is higher.

Major Highlights

- The code covers two categories: deepfakes and manipulated text.
 - ♦ Deepfakes are AI-generated or manipulated images, audio or video resembling real persons, places or events. They would appear authentic to a human user.
 - ♦ Manipulated text is content published to inform the public without human review.
- Developers and providers must display **prominent, distinguishable signs** marking such content as artificial.
- Exceptions apply to deepfakes that are evidently **artistic, satirical or fictional**. They also apply to content authorised by law for detecting or prosecuting crimes.
- Text under **editorial control**, with a legally liable person responsible for it, is also exempt.

AI Icon Application Process



How the Code Differs from India

- In 2026, India's **IT Ministry** notified an amendment to the **IT Rules, 2021**. It required users and platforms to prominently label **synthetically generated information (SGI)**.
- The EU code places the labelling duty on **AI developers**. India instead focuses on **social media**, placing disclosure onus on users while platforms enforce it.

- The EU code seeks accountability from **AI systems themselves**. India instead regulates the **final product**, empowering platforms to take down non-compliant content.
- The EU carves out specific exemptions for **creative content** and trusts **human review**. India's rules are more generic and offer less such leeway.

PM VIDYALAXMI SCHEME

PM-Vidyalaxmi is a Central Government scheme approved in November 2024 to support equitable higher education by providing collateral-free, guarantor-free education loans and interest assistance to meritorious students.

Key Features

Eligibility and Coverage

- Available to students admitted on **merit** to designated **Quality Higher Education Institutions (QHEIs)**.
- Currently **1,425 QHEIs** are covered both public and private institutions.
- Students admitted under **Management quota, NRI quota**, or similar routes are **not eligible**.

Loan Structure

- Loans are **collateral-free and guarantor-free**.
- There is **no upper limit** on the loan amount.
- Loan coverage includes **tuition fees, hostel and mess charges, refundable and non-refundable institutional fees, laptops**, and other reasonable educational and living expenses.
- Interest rate is capped at **EBLR + 0.5%** i.e. lower than regular education loan rates.
- Repayment period: up to **15 years**, excluding the course duration plus a **one-year moratorium**.

Government Credit Guarantee

- The government provides a **75% credit guarantee** for loans up to **₹7.5 lakh**.
- This reduces lending risk for banks and improves access to education finance.

Interest Subsidy

- **100% interest subvention** under **PM-USP CSIS (Pradhan Mantri Uchchatar Shiksha Protsahan Central Sector Interest Subsidy Scheme)** for students with annual family income up to **₹4.5 lakh**.
- **3% interest subsidy** under PM-Vidyalaxmi on loans up to **₹10 lakh** for students with annual family income up to **₹8 lakh** during the moratorium period.

PM Vidyalaxmi Digital Rupee App (CBDC Wallet)

- ➔ After loan disbursement, eligible students can apply for interest subvention based on family income.
- ➔ The subsidy amount is credited to the **PM Vidyalaxmi Digital Rupee App (CBDC Wallet)** and then transferred to the education loan account.

PM Vidyalaxmi Digital Rupee Wallet

- ➔ **PM VIDYALAXMI DIGITAL Rupee App** is a Central Bank Digital Currency (CBDC) based dedicated mobile application for receiving education loan interest subvention benefits from Dept. Of Higher Education Ministry of Education Govt.
- ➔ The application is available for download at **Play store** for android based mobiles and **App store** for i-phones.
- ➔ **Mobile number of beneficiaries** updated in PM-Vidyalaxmi portal by the financing Bank, against beneficiary claim should be used for downloading the application.
- ➔ Beneficiaries can activate their **PM VIDYALAXMI DIGITAL Rupee App** through **AADHAAR based authentication** process via **OTP** received in their AADHAAR registered Mobile number.
- ➔ **PM VIDYALAXMI DIGITAL Rupee App** is applicable for both **PM-VIDYALAXMI** and **CSIS** interest subvention schemes of Dept. Of Higher Education, Ministry of Education, Govt.

Significance

- ➔ Improves access to quality higher education and supports the goals of **NEP 2020** and **SDG 4 (Quality Education)**.
- ➔ Provides a **one-stop online portal** for loan application, tracking, and management across various schemes.
- ➔ A **real-time dashboard** enhances transparency and enables efficient processing.
- ➔ Ensures **equal access** for **women and transgender students**, encouraging higher education and workforce participation.
- ➔ Benefits students from **EWS, OBC, SC, ST, PwD**, and other marginalised groups — reducing financial barriers and ensuring **equitable access to higher education**.
- ➔ Helps build a **skilled, inclusive, and future-ready workforce** aligned with India's demographic dividend goals.

DAANVEER INITIATIVE

The Ministry of Panchayati Raj (MoPR) launched the **DAANVEER** initiative in collaboration with the National Informatics Centre (NIC) and DigiHaat. It aims to strengthen digital infrastructure in Gram Panchayats through voluntary citizen participation.

About DAANVEER

- ➔ **Full tagline:** "Give Back to Your Village"
- ➔ **Objective:** Bridge the digital infrastructure gap in Gram Panchayats and support efficient, transparent, and citizen-centric local governance.

- ➔ It is a transparent, verifiable, end-to-end digital platform enabling citizens, organisations, philanthropists, and the Indian diaspora to donate standardised, quality-verified computer bundles to eligible Gram Panchayats.
- ➔ Available through the **Meri Panchayat App**.
- ➔ Integrated with **DigiHaat** marketplace, allowing donors to select state-specific pre-approved computer bundles.
- ➔ Provides end-to-end digital tracking from dispatch to installation.
- ➔ Donors receive a digital certificate of appreciation.
- ➔ Builds upon existing MoPR digital platforms such as **e-GramSwaraj, Meri Panchayat, Sabha Saar, AuditOnline**, and **Gram Manchitra**.

Coverage and Significance

- ➔ India has nearly 2.5 lakh Gram Panchayats forming the foundation of grassroots democracy and rural service delivery.
- ➔ The initiative institutionalises voluntary public participation through a transparent and accountable digital platform.
- ➔ It strengthens Digital India, Viksit Bharat, and digitally empowered Panchayati Raj institutions.
- ➔ It improves efficiency, transparency, and accessibility of Gram Panchayat services at the grassroots level.

OBSCENITY AND PROFANITY RELATED LAW IN INDIA

Noida Police registered a Zero FIR against a woman for remarks made about the Prime Minister during a Jantar Mantar protest.

Sections Invoked in the Case

- ➔ The FIR invokes **BNS Sections 352, 353(1) and 356(1)**, covering **insult, public mischief and defamation**.
- ➔ **Section 352** needs proof the accused intended, or knew, that the insult would likely provoke an actual breach of peace, not merely cause offence.
- ➔ **Section 353(1)** targets incitement to mutiny, communal enmity or offences against the state, a far higher bar than criticism of a leader.
- ➔ **Section 356(1)**, on defamation, exempts **good-faith comment** on a public figure's conduct in their public role.

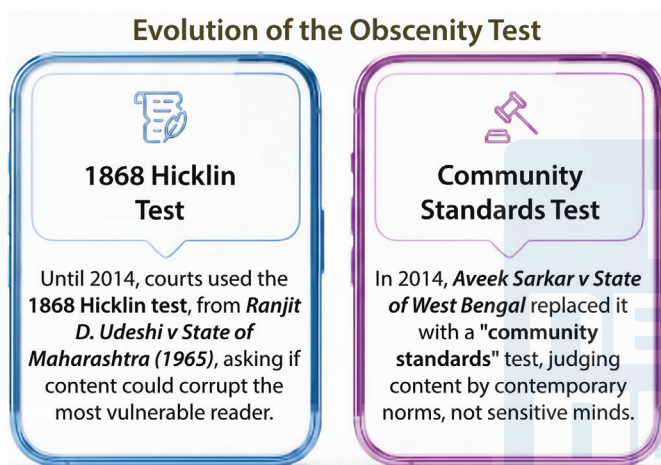
Obscenity Laws in India

- ➔ Obscenity is governed by the **BNS, 2023**, and the **IT Act, 2000**.
- ➔ Content is obscene if **lascivious**, appeals to **prurient interest**, or tends to deprave viewers.
- ➔ **Section 296** of the BNS bans obscene acts or words in public, carrying up to **three months' jail** and a fine. This section was **not invoked** in the Noida case.

- **Section 294** of the BNS criminalises selling, importing, exporting or displaying obscene material, including online content, with up to **two years' jail** and a **₹5,000 fine** for a first offence.
- **Section 67** of the IT Act punishes publishing obscene material electronically, more strictly, with up to **three years' jail** and a **₹5 lakh fine**.

Evolution of the Obscenity Test

- Until 2014, courts used the **1868 Hicklin test**, from *Ranjit D. Udeshi v State of Maharashtra (1965)*, asking if content could corrupt the most vulnerable reader.
- In 2014, *Aveek Sarkar v State of West Bengal* replaced it with a "**community standards**" test, judging content by contemporary norms, not sensitive minds.



Profanity is Not Obscenity

- Courts have repeatedly held that vulgar or abusive language does not automatically amount to obscenity, since such words usually express anger, not sexual intent.
- In 2025, the **Telangana High Court** ruled that harsh social media language alone cannot attract Sections 352 or 353 without a real threat to public order.
- The legal test requires proof of **lasciviousness**. Anything short of that generally escapes obscenity's definition.

PREVENTION OF INSULTS TO NATIONAL HONOUR (AMENDMENT) ACT, 2026

Parliament has passed the Prevention of Insults to National Honour (Amendment) Act, 2026. It extends the legal protection given to the National Anthem, Jana Gana Mana, to the National Song, Vande Mataram.

Key Highlights of the Amendment

- The Bill amends **Section 3** of the **1971 Act**.
- It makes it an offence to intentionally prevent the singing of Vande Mataram. It is also an offence to disturb an assembly singing it.

- The punishment stays the same: imprisonment up to **three years**, a fine, or both.
- The enhanced punishment under **Section 3A** also applies to repeat offenders.

Need of the Amendment

- **Dr. Rajendra Prasad**, addressing the Constituent Assembly on **24 January 1950**, said Vande Mataram deserved equal honour with Jana Gana Mana.
- Despite this, the 1971 Act protected only the National Anthem, a gap the Amendment now fills.

The Prevention of Insults to National Honour Act, 1971

- Enacted on **23 December 1971**, the Act applies across India. It protects the **National Flag**, the **Constitution** and the **National Anthem**.
- **Section 2** penalises insults to the Flag or Constitution, such as burning, defacing or trampling. The punishment is up to **three years' imprisonment**, a fine, or both.
- Lawful criticism made to seek constitutional amendment is protected and not an offence.
- **Section 3** protects the National Anthem in the same manner.
- **Section 3A**, added in **2003**, sets a **minimum one-year sentence** for repeat offenders under Sections 2 or 3.

Vande Mataram

- **Bankim Chandra Chatterjee** wrote Vande Mataram, meaning "**Mother, I Bow to Thee**." It was first published in **Bangadarshan** on **7 November 1875**, and later included in his novel **Anandamath** in **1882**.
- **Rabindranath Tagore** set it to music.
- The **Congress Working Committee** adopted its first two stanzas as the **National Song** in **1937**.
- It became a unifying symbol of nationalism, inspiring the **1905 Swadeshi Movement** and serving as a rallying cry against British rule.
- **Madam Bhikaji Cama** displayed the words on the first Indian tricolour unfurled abroad in **1907**. Revolutionaries like **Madan Lal Dhingra** also invoked it as a patriotic slogan.

GOVERNMENT SCHOOLS CLOSURE

A recent NITI Aayog report highlighted that around **94,000 government schools** were closed or merged during the last decade. A decline of **2.26 crore** in overall school enrolment was also reported.

Overview

- Government schools are the primary source of education for Economically Weaker Sections (EWS), Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs) and many minority communities.

- Education is a Concurrent List subject. The **Right of Children to Free and Compulsory Education (RTE) Act, 2009** requires the availability of neighbourhood schools.
- The share of students enrolled in government schools has declined from 71% (2005) to 49.24% (2024–25).

Extent

- Several States have closed or merged low-enrolment schools through school rationalisation, consolidation and cluster development, in line with NEP 2020 for better resource utilisation.
- According to **UDISE+** and the **NITI Aayog report**, government schools declined from 11.07 lakh (2014–15) to about 10.13 lakh (2024–25), while private schools increased during the same period.
- Uttar Pradesh, Madhya Pradesh and Jammu & Kashmir have witnessed significant school mergers. In several areas, children now travel longer distances due to closure of neighbourhood schools.

Reasons

- NEP 2020 encourages school complexes to pool infrastructure, teachers and other resources.
- Parents in many cases prefer private schools for better infrastructure, teacher availability, sanitation and English-medium education.
- Teacher vacancies in low-enrolment and single-teacher schools have accelerated mergers of such schools.
- Administrative and quality-related challenges have contributed to declining enrolment in many government schools.

Impact

- Reduced access to neighbourhood schools may weaken the objectives of the RTE Act, 2009.
- Longer travel distances increases dropout risks, especially for girls and children from economically weaker families.
- School consolidation may also increase the number of at-risk and untraceable students in some regions.

Practicable Suggestions

- Ensuring school consolidation remains consistent with the RTE Act, 2009 with availability of safe transport wherever required.
- Assessment of the impact of closure of these schools on girls, SC/ST communities, and children with disabilities must be done.
- Fill teacher vacancies, strengthen infrastructure and early childhood education, and involve School Management Committees (SMCs), Gram Panchayats and parents in decision-making.
- Strengthen Centre–State coordination so that school rationalisation under NEP 2020 improves efficiency without compromising equitable access to education.

CUSTODIAL DEATHS

Recent incidents of custodial deaths have once again raised concerns. They have also renewed focus on compliance with constitutional safeguards, Supreme Court directions and NHRC guidelines.

About

- Custodial death refers to the death of a person while under the custody of the police or in judicial custody (prison).
- It may result from natural causes, illness, suicide, accident or alleged torture or excessive use of force. Every custodial death requires independent legal scrutiny.

Constitutional and Legal Framework

- **Article 21** guarantees the Right to Life and Personal Liberty, which extends to every person, including those in custody.
- **Article 22** provides safeguards against arbitrary arrest and detention.
- **Police and Public Order** are State subjects, while the Union Government issues advisories and human rights guidelines.

Key Safeguards

- The Supreme Court in **D.K. Basu v. State of West Bengal (1997)** prescribed mandatory safeguards during arrest and detention to prevent custodial abuse.
- The **National Human Rights Commission (NHRC)** requires:
 - ♦ Intimation of every custodial death within 24 hours.
 - ♦ Magisterial/Judicial inquiry, post-mortem, videography and submission of prescribed reports within the stipulated timeline.

Concerns

- Human rights violations and erosion of public trust.
- Weak accountability due to delays in investigation and reporting.
- Inadequate adherence to arrest and custody procedures.

Way Forward

- Ensure strict compliance with D.K. Basu guidelines and NHRC protocols.
- Conduct prompt, independent and transparent inquiries into every custodial death.
- Strengthen police training, scientific investigation methods and institutional accountability to uphold the rule of law and human dignity.

SUPREME COURT (NUMBER OF JUDGES) AMENDMENT BILL, 2026

Recently, the Parliament passed the Supreme Court (Number of Judges) Amendment Bill, 2026, replacing the Supreme Court (Number of Judges) Amendment Ordinance, 2026.

About the Bill

- The Bill amends the Supreme Court (Number of Judges) Act, 1956.
- It increases the number of Supreme Court Judges, excluding the Chief Justice of India (CJI), from 33 to 37. Thus, the total sanctioned strength rises from 34 to 38, including the CJI.
- The creation of four additional judicial posts also requires supporting staff, official residences, vehicles and security arrangements. The expenditure will be met from the Consolidated Fund of India.

Money Bill Provision

- The legislation was introduced and passed as a Money Bill.
- The government justified this classification on the ground that it involves expenditure from the Consolidated Fund of India and matters incidental to it.
- Under Article 110, a Money Bill deals with taxation, government borrowing, custody or appropriation of the Consolidated Fund of India, and matters incidental to these subjects.
- Once certified as a Money Bill by the Lok Sabha Speaker, the Rajya Sabha cannot reject or amend it. It can only make recommendations.

Concerns

- Critics argue that reliance on **Article 110(1)(g)** relating to incidental matters may limit effective scrutiny by the Rajya Sabha.
- In his dissenting opinion in the 2018 Aadhaar judgment, **Justice D.Y. Chandrachud** described the use of the Money Bill route for the Aadhaar Act as a "fraud on the Constitution" and a "subterfuge."
- The scope of the Lok Sabha Speaker's power to certify a Bill as a Money Bill is currently pending before a seven-judge Constitution Bench.

DELHI LAKSHMI YOJANA

The Delhi Government has opened the online registration portal for the Delhi Lakshmi Yojana, a women-centric welfare scheme that provides monthly financial assistance.

About

- It is a **Delhi Government** scheme that provides **₹2,500 per month** to eligible women through **Direct Benefit Transfer (DBT)**.
- **Objective:** To strengthen **economic security**, encourage **financial independence**, and promote **long-term savings** among women.
- The scheme has a **Budget allocation of ₹5,110 crore** for 2026-27 and is expected to benefit **more than 17 lakh women**.

Financial Assistance

- Every eligible beneficiary receives **₹2,500 per month**.
- **Beneficiaries may choose either of the following:**

- **Option 1:** **₹1,000** is credited to a **Central Bank Digital Currency (CBDC) wallet** for daily expenses, while **₹1,500** is deposited in a **Recurring Deposit (RD)** or **Fixed Deposit (FD)** account.
- **Option 2:** The entire **₹2,500** is deposited in an **RD** or **FD** account to encourage long-term savings.
- Amount deposited in an **RD** remains locked for **three years**, after which the accumulated amount, along with interest, is credited to the beneficiary.

Eligibility

- **Women aged 21-60 years** with an annual family income up to **₹2.5 lakh** are eligible.
- The applicant, or her **parents or husband**, must have been **Delhi residents for at least 10 years**.
- The applicant must be a **registered voter in Delhi**.
- **Only one eligible woman per family** can avail the benefit.

Exclusions

- Government employees, government pensioners, and women receiving regular financial assistance under another government scheme are not eligible.
- Families paying income tax, filing GST returns, owning a four-wheeler, or consuming more than 2,400 electricity units annually are excluded.
- Women with more than three living children, and families having members employed in the Central Government, State Government, Public Sector Undertakings (PSUs), or other government organisations are also not eligible.

PROTECTION AGAINST DOMESTIC CRUELTY TO WOMEN IN LIVE-IN RELATIONSHIPS

The Supreme Court, in **Dr. Lokesh B.H. & Ors. v. State of Karnataka & Anr. (2026)**, held that **Section 498A of the Indian Penal Code (IPC)**, now **Section 85 of the Bharatiya Nyaya Sanhita (BNS), 2023**, applies to women in live-in relationships that are "in the nature of marriage", provided the intention to marry is established.

Background

- **Section 498A IPC** criminalises **cruelty** against a woman by her husband or his relatives.
- Since the provision refers to "**husband**", it was traditionally limited to **legally valid marriages**.
- The Supreme Court later extended its protection to women deceived into **void or voidable marriages**, such as where a man concealed an existing marriage.

Key Ruling

- The Court adopted a **purposive interpretation** of **Section 498A IPC**, holding that its objective is to prevent **domestic cruelty**, irrespective of the formal validity of marriage.

- It ruled that excluding women in eligible **live-in relationships** from this protection has **no rational nexus** with the object of the law and is **offensive to Article 14** of the Constitution.
- The Court relied on the concept of a "**relationship in the nature of marriage**" under the **Protection of Women from Domestic Violence Act, 2005**.
- Such relationships are identified through factors such as a **shared household, financial interdependence, stable domestic life, and public recognition as spouses**.
- The **initial burden of proving the intention to marry** rests on the woman seeking protection. The Court did not prescribe rigid criteria because criminal liability requires a higher standard of proof.
- The Court also clarified that the **Protection of Women from Domestic Violence Act, 2005** provides **civil remedies**, whereas **Section 498A IPC/Section 85 BNS** imposes **criminal liability**.

Significance

- Shifts the focus from the **legal status of marriage** to the **existence of domestic cruelty**.
- Extends equal legal protection to women in marriage-like relationships.
- Reinforces the constitutional values of **equality, dignity and personal liberty** under **Articles 14, 15(3) and 21**.

Important Judgments

- D. Velusamy v. D. Patchaiammal (2010)**: Laid down criteria for a relationship in the nature of marriage.
- Indra Sarma v. V.K.V. Sarma (2013)**: Distinguished marriage-like relationships from casual live-in arrangements.
- Lalita Toppo v. State of Jharkhand (2018)**: Recognised civil remedies under the **Protection of Women from Domestic Violence Act, 2005**.
- Navtej Singh Johar v. Union of India (2018)**: Affirmed the constitutional values of **dignity, autonomy, privacy and individual choice**.

Safeguard

- The Court directed strict compliance with **Armesh Kumar v. State of Bihar (2014)**. Arrests in such cases must follow the prescribed safeguards and **cannot be made without the mandatory preliminary inquiry** directed by the Court.

Way Forward

- Parliament should provide a **clear statutory definition** of relationships in the nature of marriage.
- Uniform judicial standards, greater legal awareness, and proper training of law enforcement agencies can ensure effective implementation while preventing misuse of the law.

ATL MISSION FOR REJUVENATION AND URBAN TRANSFORMATION (AMRUT)

The Parliamentary Standing Committee has urged the government to expedite sewerage and septage management projects under AMRUT 2.0. It noted that only 104 of 594 projects (17.5%) have been completed, while about 67% are under implementation.

AMRUT

AMRUT



First Water-focused Mission launched on 25th June, 2015
Universal water supply, improvement in sewerage & septage management in 500 Mission cities.

Project Components



Water Supply



Sewerage & Septage Management



Storm Water Drainage



Non Motorized Urban Transport



Green Spaces & Perks

Allocation: ₹77,640 crore



- Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched on 25 June 2015 to improve the quality of life in urban areas.
- It is a **Centrally Sponsored Scheme**, with financial assistance shared between the **Centre, States and Union Territories**.
- The mission initially covered **500 cities**, accounting for nearly **60% of India's urban population**.
- It focuses on strengthening **water supply, sewerage, storm water drainage, urban transport, green spaces, and capacity building**.
- The mission aims to create quality urban infrastructure and improve access to basic services, especially for the urban poor.

AMRUT 2.0

- AMRUT 2.0 was launched on 1 October 2021 for the period 2021–22 to 2025–26, covering all Urban Local Bodies (ULBs).
- It aims to achieve universal water supply in about 4,900 statutory towns and universal sewerage and septage management in the original 500 AMRUT cities.
- The mission promotes water security through City Water Balance Plans, reuse and recycling of treated wastewater, rejuvenation of water bodies, and water conservation.
- It also promotes reforms to reduce non-revenue water, strengthen urban planning and urban finance, and improve the ease of living.

- Other components include Pey Jal Survekshan, Technology Sub-Mission for Water, and Information, Education and Communication (IEC) campaigns to encourage efficient water management and public awareness.

APPROPRIATION BILL, 2026: EXCESS GRANTS

Parliament has passed the Appropriation Bill, 2026, authorising the withdrawal of ₹54,067.44 crore from the Consolidated Fund of India (CFI) towards Excess Grants for expenditure incurred during FY 2022–23.

Appropriation Bill

- It is a **Money Bill** introduced under **Article 114** of the **Constitution of India**.
- It authorises the **withdrawal of money from the Consolidated Fund of India** to meet government expenditure.
- It is introduced **after the Lok Sabha votes on the Demands for Grants** under **Article 113**.
- It covers:
 - ♦ **Voted expenditure** approved by the Lok Sabha.
 - ♦ **Charged expenditure** on the Consolidated Fund of India.
- **No amendment** can be moved to vary the amount or destination of any grant or charged expenditure.
- As a **Money Bill**, the **Rajya Sabha** can only discuss it and make recommendations. It cannot amend or reject the Bill.

Excess Grants

- **Excess Grants** arise when **actual expenditure exceeds** the amount originally authorised by Parliament for a financial year.
- **Article 115** provides for **supplementary, additional and excess grants** whenever additional parliamentary approval becomes necessary.
- A **separate Appropriation Bill** is required to authorise withdrawal of the additional amount from the **CFI**.
- Such expenditure is presented **after the financial year ends**.
- It is first examined by the **Public Accounts Committee (PAC)** before being regularised by Parliament.

Key Facts

- The approved **₹54,067.44 crore** includes:
- **₹53,871 crore** towards **debt repayment**.
- **₹196.44 crore** towards compliance with a **Railways-related court order**.

Significance

- Ensures parliamentary control over public expenditure.
- Strengthens constitutional and fiscal accountability.
- Reinforces the PAC's oversight of excess expenditure.
- Promotes transparency and financial discipline in public finance.

GOOD SAMARITAN (RAH-VEER) SCHEME

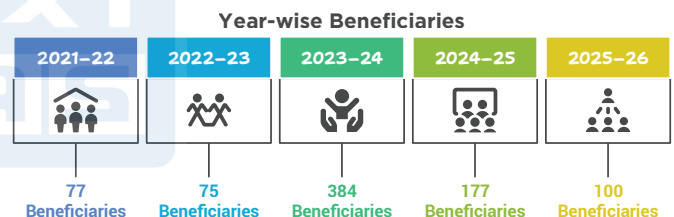
Only 813 Good Samaritans were honoured under the Good Samaritan (Rah-Veer) Scheme from 2021–22 to 2025–26, despite the scheme being designed to encourage timely assistance to road accident victims.

About the Scheme

- It was launched by the **Ministry of Road Transport and Highways (MoRTH)** in 2021.
- It recognises **Good Samaritans (Rah-Veers)** who voluntarily help road accident victims without expecting any reward.
- A Good Samaritan who helps an accident victim receive medical attention during the **Golden Hour** is eligible for:
 - ♦ Cash reward of ₹25,000.
 - ♦ Certificate of Appreciation.
- The **Golden Hour** is the **first 60 minutes** after a serious road accident, during which timely medical care significantly improves the chances of survival.
- The reward amount was **enhanced from ₹5,000 to ₹25,000** to encourage greater public participation.
- The scheme has been **extended for another five years (2026–27 to 2030–31)**.

Performance

- A total of **813 Good Samaritans** were rewarded between **2021–22 and 2025–26**.



- **Rajasthan** recorded the **highest number** of awardees, followed by **Bihar, Madhya Pradesh, Uttar Pradesh, Andhra Pradesh** and **Tamil Nadu**.
- **Two States** reported **no beneficiaries** during the five-year period.
- **Uttar Pradesh, Tamil Nadu, Maharashtra, Madhya Pradesh, Karnataka, Rajasthan, Bihar** and **Andhra Pradesh** together account for **about two-thirds of India's road accident deaths**.

Legal Protection

- **Section 134A of the Motor Vehicles Act, 1988** and the **Good Samaritan Rules, 2020** protect Good Samaritans acting in **good faith**.
- They cannot be compelled to disclose their identity, face unnecessary legal harassment, or be detained solely for helping an accident victim.

Significance

- Encourages **citizen participation** in emergency response.
- Promotes **timely medical assistance** during the Golden Hour.

- ➔ Strengthens **road safety** and improves the survival chances of accident victims.
- ➔ Reinforces a culture of **voluntary public service** and humanitarian action.

SUPREME COURT EXAMINES RTI AMENDMENTS UNDER THE DPDP ACT

The Supreme Court has granted the Union Government two weeks to respond to petitions challenging the amendments to the Right to Information (RTI) Act, 2005 made through the Digital Personal Data Protection (DPDP) Act, 2023.

Key Issue before the Supreme Court

- ➔ **Section 44(3)** of the DPDP Act, 2023 amended **Section 8(1)(j)** of the RTI Act.
- ➔ Earlier, personal information could be withheld only if disclosure had no relationship to any public activity or interest, or would cause an unwarranted invasion of privacy, unless a **larger public interest** justified disclosure.
- ➔ The amended provision exempts **personal information** from disclosure, raising concerns that access to information may become more restricted.
- ➔ The Court observed that both laws are **Central legislations** and must be interpreted **harmoniously**.
- ➔ It will examine whether the amendment indirectly limits the transparency framework established under the RTI Act.

Digital Personal Data Protection (DPDP) Act, 2023

- ➔ **Purpose:** Regulates the processing of **digital personal data**.
- ➔ **Origin:** Based on the recommendations of the **Justice B.N. Srikrishna Committee** constituted by the **Ministry of Electronics and Information Technology (MeitY)**.
- ➔ **Applicability:** Covers digital personal data processed in India. It also applies to processing outside India if related to offering goods or services in India.
- ➔ **Consent:** Data processing generally requires **consent**. Certain **legitimate uses** are exempt.
- ➔ **Data Fiduciary Obligations:** Ensure data accuracy, security and deletion after the purpose is fulfilled.
- ➔ **Rights of Individuals:** Right to information, correction, erasure and grievance redressal.
- ➔ **Exemptions:** The Central Government may exempt specified entities on grounds such as **national security, public order** and prevention of offences.
- ➔ **Data Protection Board:** Adjudicates cases of non-compliance under the Act.

Right to Information (RTI) Act, 2005

Objective	Coverage	Time Limit	Exemptions	Penalty
Promotes transparency and accountability by giving citizens access to information held by public authorities.	Applies to government departments and substantially government-funded bodies.	Information is generally provided within 30 days but for life or liberty cases of a person, information must be provided within 48 hours .	Includes matters relating to national security, specified confidential information and other exemptions under Section 8 .	Public Information Officers may be penalised for unjustified refusal, delay or providing incorrect information.

Significance

- ➔ Promotes **transparency** and strengthens **government accountability**.
- ➔ Empowers **citizens** to participate in democratic governance.
- ➔ Supports **social audits** and informed public oversight.
- ➔ The present case will determine how the **right to privacy** and the **right to information** should be balanced under the constitutional framework.

OFFICIAL SECRETS ACT, 1923

An Indian Air Force (IAF) Wing Commander was arrested under the Official Secrets Act, 1923 (OSA) for allegedly sharing sensitive defence-related information with a suspected Pakistani intelligence operative.

Official Secrets Act (OSA), 1923

- ➔ The Official Secrets Act, 1923 is a colonial-era law that consolidates and amends the law relating to official secrets to safeguard the security and interests of the State.
- ➔ It applies to government servants as well as private individuals.
- ➔ **The Act makes the following acts punishable:**
 - ♦ **Espionage** and activities prejudicial to the safety or interests of the State.
 - ♦ **Obtaining, collecting, recording, communicating or publishing** secret official codes, passwords, documents or information without lawful authority.
- ➔ **Entering or inspecting prohibited places**, unauthorised use of official uniforms, and interference with defence establishments or armed forces in prohibited or restricted areas.
- ➔ **Protected information** includes official **documents, maps, sketches, photographs, plans, models, secret codes, passwords**, and information whose disclosure could affect the **sovereignty and integrity of India, security of the State, or friendly relations with foreign States**.
- ➔ **Punishment:** Depending on the nature of the offence, imprisonment may extend to **14 years** in serious espionage cases involving defence or secret official codes, while other offences may attract imprisonment of up to **3 years**, or **fine**, or **both**.

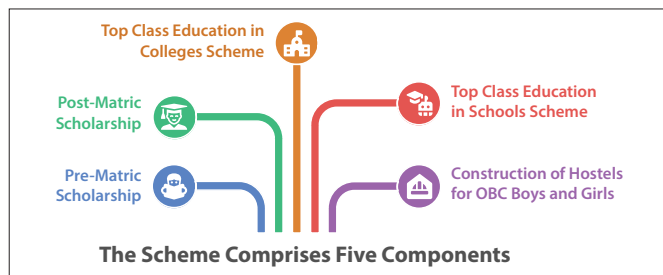
PM-YASASVI

The Government has reaffirmed its commitment to expanding educational opportunities for students belonging to **Other Backward Classes (OBCs), Economically Backward Classes (EBCs) and Denotified, Nomadic and Semi-Nomadic Tribes (DNTs)** through the **PM-YASASVI Scheme**.

About

- ➔ It stands for **Prime Minister Young Achievers Scholarship Award Scheme for Vibrant India**.
- ➔ It is an **umbrella scheme** implemented by the **Department of Social Justice and Empowerment** under the **Ministry of Social Justice and Empowerment**.

- The scheme has been operational **from 2021–22** by integrating earlier scholarship schemes for eligible students.
- **Objective:** To promote **quality school and higher education** by reducing financial barriers and improving educational opportunities for **OBC, EBC and DNT** students.



Eligibility

- Applicable to students belonging to **OBC, EBC and DNT** communities.
- **Annual family income** should not exceed **₹2.5 lakh**.
- Students must be admitted to **eligible full-time courses** in **notified institutions**, subject to the availability of allocated slots.
- The maximum benefit is limited to **two siblings per household**.

Benefits

- **Full tuition fee** and other **non-refundable charges**, subject to prescribed ceilings.
- **₹3,000 per month** for living expenses.
- **₹5,000 per year** for books and stationery.
- **One-time assistance up to ₹45,000** for a **computer/laptop with accessories**.
- Tuition fees are paid **directly to institutions**.
- Other benefits are transferred through **Direct Benefit Transfer (DBT)**.
- **Scholarships are renewable annually** until completion of the course, subject to **satisfactory academic performance**.

KERALA (ALTERATION OF NAME) BILL, 2026

Parliament has passed the Kerala (Alteration of Name) Bill, 2026, paving the way for the official renaming of the State of Kerala as Keralam.

About

- The Bill gives effect to the **unanimous resolution** passed by the **Kerala Legislative Assembly** and seeks to reflect the State's traditional Malayalam name in the Constitution and official records.
- The Bill changes the official name of the State from **Kerala** to **Keralam**.
- It provides for consequential amendments to the **First Schedule, Fourth Schedule**, and other relevant constitutional provisions, including **Articles 31A and 290A**, to reflect the new name.

- The proposal was based on a **2024 unanimous resolution** of the Kerala Legislative Assembly requesting the Union Government to enact the required legislation.

Historical Background

- The earliest **epigraphic reference** to Kerala appears in **Ashoka's Rock Edict II (257 BCE)**, which mentions **Keralaputra**, a term generally associated with the **Chera rulers**.
- The **Aikya Kerala Movement** of the **1920s** demanded a unified State for **Malayalam-speaking people** by integrating **Malabar, Kochi and Travancore**.
- After Independence, **Travancore** and **Cochin** were merged on **1 July 1949**.
- Based on the recommendation of the **States Reorganisation Commission (Fazl Ali Commission)**, the modern State of **Kerala** was formed on **1 November 1956** under the **States Reorganisation Act, 1956**, by integrating the Malayalam-speaking regions.
- While the State has traditionally been known as **Keralam** in Malayalam, the Constitution adopted the English name **Kerala**.

Constitutional Procedure for Renaming a State

- **Article 3** empowers **Parliament** to:
 - ♦ Form new States.
 - ♦ Alter the area or boundaries of existing States.
 - ♦ Change the name of any State.
- **A Bill under Article 3:**
 - ♦ Can be introduced **only with the prior recommendation of the President**.
 - ♦ Must be referred by the **President** to the concerned **State Legislature** for expressing its views within the prescribed period.
 - ♦ The **views of the State Legislature are not binding** on Parliament.
- **Article 4** provides that laws made under **Article 3** are **not treated as Constitutional Amendments under Article 368**. They are passed through the **ordinary legislative process** by a **simple majority** in Parliament.
- The name change takes effect after **Presidential assent**.

Other Examples of State Renaming

- **Madras** was renamed Tamil Nadu in 1969.
- **Uttaranchal** was renamed Uttarakhand in 2007.
- **Orissa** was renamed Odisha in 2011.

DEEN DAYAL UPADHYAYA GRAMEEN KAUSHALYA YOJANA (DDU-GKY)

The Parliamentary Standing Committee on Rural Development and Panchayati Raj highlighted the gap between skill training and sustainable employment under the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY).

About DDU-GKY

- ➔ **DDU-GKY** is a **placement-linked skill development programme** launched by the **Ministry of Rural Development (MoRD)** in **2014** under the **Deendayal Antyodaya Yojana–National Rural Livelihoods Mission (DAY-NRLM)**.
- ➔ **Objective:** To provide **industry-relevant skill training** to rural youth and enable **sustainable wage employment** and improved livelihoods.
- ➔ **Eligibility:** Rural youth aged **15–35 years**. The upper age limit is **45 years** for **women, Scheduled Castes (SCs), Scheduled Tribes (STs), Persons with Disabilities (PwDs) and minorities**.
- ➔ **Implementation:** Implemented through **State Rural Livelihood Missions (SRLMs)** and **Project Implementing Agencies (PIAs)** in partnership with industry.

Key Features

Demand-driven and Placement-linked	Industry Partnership	Emerging Sectors
Training is aligned with industry demand and focuses on employment outcomes.	Employers and Sector Skill Councils (SSCs) participate in curriculum design, assessment and placement.	Recent operational guidelines promote training in sectors such as electric vehicle maintenance, renewable energy, logistics and other emerging industries.
Post-placement Support	Inclusive Approach	
The scheme provides post-placement tracking and support to improve employment retention and career progression.	The scheme places special emphasis on women, SCs, STs, PwDs, and minority communities.	

Significance

- ➔ Creates a **skilled rural workforce** aligned with industry needs.
- ➔ Promotes **sustainable livelihoods** and reduces rural unemployment.
- ➔ Supports **Skill India Mission, SDG 1 (No Poverty)** and **SDG 8 (Decent Work and Economic Growth)**.

Challenges

- ➔ **Training and employment mismatch** in some sectors.
- ➔ **Uneven quality** of training across regions.
- ➔ **Low job retention** after placement.
- ➔ **Need for stronger monitoring** of long-term employment outcomes.

RAJASTHAN TREES (PROTECTION) BILL, 2026

The Rajasthan Cabinet has approved the draft **Rajasthan Trees (Protection) Bill, 2026**, to regulate tree felling on non-forest land and strengthen conservation of ecologically important tree species.

Key Provisions

- ➔ **Protected Trees:** The Bill provides protection to **29 specified tree species**, including **Khejri (State Tree), Rohida, Banyan, Peepal, Lasoda, Tendu, Mahua, Kair, and Chironji**.
- ➔ **Prior Approval:** Prior permission from the authorised authority will be mandatory before felling any protected tree on privately owned or occupied non-forest land.

- ➔ **Penalties:** Illegal felling will be a **cognisable and bailable offence**. The punishment may extend to **one year of imprisonment**, a **fine up to ₹1 lakh**, or **both**.
- ➔ **Compensatory Plantation:** A person permitted to remove a protected tree must **plant the prescribed number of trees in the same area** for every tree felled.

Significance

- ➔ The Bill seeks to **prevent unauthorised tree felling** on non-forest land.
- ➔ It aims to **conserve biodiversity** and maintain **ecological balance**.
- ➔ It supports efforts to **combat desertification** and **mitigate climate change**.
- ➔ It strengthens legal protection for **native and ecologically significant tree species** in Rajasthan.

NATIONAL COOPERATIVE DEVELOPMENT CORPORATION (AMENDMENT) BILL, 2026

Parliament has passed the **National Cooperative Development Corporation (Amendment) Bill, 2026** to expand the statutory powers and financing mandate of the **National Cooperative Development Corporation (NCDC)**.

Key Highlights of the Amendment Bill

- ➔ **Broader Cooperative Development Mandate:** NCDC can now **plan, promote, finance and support cooperative development** directly or through eligible intermediary organisations, and not only cooperative societies.
- ➔ **Direct Financial Assistance:** NCDC may provide **direct loans and grants** to cooperative societies and other eligible entities engaged in cooperative development, subject to prescribed conditions. It will also continue financing cooperative societies through **state governments**.
- ➔ **Investment Powers:** With prior approval of the **Central Government**, NCDC may invest in the **share capital** of cooperative societies and cooperative development organisations.
- ➔ **Expanded Sectoral Coverage:** The definition of **foodstuffs** has been expanded to include **processed food** and other notified food items. Support for industrial, cottage and village cooperatives is no longer limited to **rural areas**.
- ➔ **Credit Information Powers:** NCDC may collect and share **credit and financial information** with the **Central Government, Reserve Bank of India (RBI), banks and notified financial institutions** for efficient discharge of its functions.
- ➔ **Incidental Powers:** A new provision authorises NCDC to undertake activities that are necessary or incidental to fulfilling its statutory responsibilities.
- ➔ **Legal Update:** References to the **Multi-State Cooperative Societies Act, 1984** have been replaced with the **Multi-State Cooperative Societies Act, 2002**.

Concerns

- **Federal Concerns:** As **cooperative societies** fall under **Entry 32 of the State List**, direct financing by NCDC may reduce the role of state governments and raise concerns regarding the **federal balance**.
- **Implementation Challenges:** Direct funding could create **overlapping jurisdiction**, weaken state-level oversight, and complicate **monitoring, auditing and regulatory coordination**.

National Cooperative Development Corporation (NCDC)

- NCDC is a **statutory body** established in **1963** under the **National Cooperative Development Corporation Act, 1962**. It functions under the **Ministry of Cooperation**.
- **Evolution:** The Act was previously amended in **1973, 1974 and 2002** to progressively expand NCDC's functions and financing powers.
- **Mandate:** It plans, promotes and finances programmes relating to the **production, processing, marketing, storage, export and import** of agricultural produce, foodstuffs and other notified commodities through the cooperative sector. It also supports sectors such as **dairy, fisheries, livestock, poultry, handloom and other allied activities**, including cooperatives led by **women and SC/ST communities**.
- **Performance:** NCDC's annual disbursements increased from **₹5,735 crore (2014–15)** to **₹95,182 crore (2024–25)**, reflecting its expanding role in cooperative financing.
- **National Cooperation Policy 2025:** The policy seeks to create a **supportive legal, institutional and economic ecosystem** for cooperatives in line with the vision of **Viksit Bharat 2047**. It promotes **transparent, technology-driven and professionally managed** cooperative institutions.

- **Right to Legal Counsel:** Under **Section 38 of the BNSS**, an accused has the **right to meet an advocate of choice** during interrogation. However, this **does not entitle the advocate to remain continuously present** throughout the interrogation.
- **Role of the Magistrate:** Every request for police custody requires **judicial approval**. Courts should not impose conditions that make lawful custodial interrogation ineffective. In the present case, the Supreme Court permitted **7 additional days of police custody**, ensuring that the **total police remand did not exceed 15 days**.

Legal Framework under BNSS

- **Section 58:** A person arrested **without a warrant** cannot be detained for **more than 24 hours** unless a magistrate authorises it under **Section 187**.
- **Section 187(2):** Permits **police custody up to 15 days**, either **in one stretch or in parts**, within the prescribed **40-day or 60-day window**.
- **Section 187(3):** Permits **judicial custody** beyond the initial 15 days up to **90 days** for offences punishable with **death, life imprisonment, or imprisonment of 10 years or more**, and up to **60 days** for all other offences.
- **Default Bail:** If the investigation is not completed within the prescribed **60-day or 90-day period**, the accused becomes entitled to **default bail**, subject to the conditions prescribed by law.

Significance

- The judgement balances **effective investigation** with **judicial safeguards**.
- It provides greater flexibility to investigators while preserving the **15-day ceiling on police custody** and protecting the accused's procedural rights.

SCOPE OF POLICE CUSTODY UNDER BNSS

The Supreme Court, while interpreting **Section 187(2) of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023**, clarified that police custody is no longer restricted to the first 15 days of remand.

Supreme Court's Key Observations

- **Expanded Custody Window:** Under **Section 187(2)**, police custody may be granted **in parts** during the **first 40 days** of detention in cases punishable with **less than 10 years' imprisonment**, or during the **first 60 days** in cases punishable with **10 years or more, life imprisonment, or death**.
- **15-Day Cap Unchanged:** The **aggregate period of police custody remains capped at 15 days**. Only the **time window** for seeking such custody has been expanded.
- **Purpose of the Amendment:** The provision enables investigating agencies to seek additional police custody if **fresh facts, evidence, recoveries or investigative leads** emerge during the investigation.

CONSTITUTIONAL LIMITS ON THE POWER OF ARREST

In **Vihaan Kumar v. State of Haryana (2025)**, the Supreme Court ruled that the authorities must **meaningfully inform every arrested person of the grounds of arrest**.

Supreme Court's Observations

- **Grounds of Arrest:** Failure to inform the arrested person of the grounds of arrest violates **Article 22(1)** and **Section 47 of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023**.
- **Meaningful Communication:** Informing relatives or making vague official records is **not sufficient**. The grounds must be communicated **directly** in a language the arrested person understands.
- **Illegal Arrest:** An arrest made in violation of **Article 22(1)** is illegal. Any **subsequent remand** based on such arrest is also invalid.

- **Time of Arrest:** The **arrest memo** must record the **exact time of arrest** to ensure compliance with **Article 22(2)** and **Section 58 of the BNSS**.
- **Human Dignity:** Degrading treatment during custody violates the **right to life and personal liberty** under **Article 21**.

Constitutional Framework

- **Article 22 guarantees:**
 - ♦ **Right to be informed** of the grounds of arrest.
 - ♦ **Right to consult and be defended** by a lawyer of choice.
 - ♦ **Production before the nearest magistrate within 24 hours**, excluding travel time.
- **Arrest** is a formal restraint on liberty for an alleged offence. **Detention** is a broader form of lawful custody.
- **Cognisable offences** allow for arrest without a warrant. **Non-cognisable offences** generally require a warrant.

Judicial Safeguards

- **Arnesh Kumar v. State of Bihar (2014):** Arrest should not be routine for offences punishable by **up to seven years' imprisonment**. Police must justify its necessity under **Section 35 of the BNSS**.
- **Maneka Gandhi v. Union of India (1978):** Any procedure affecting personal liberty must be **fair, just and reasonable**.

Significance

- The judgement reinforces that **arrest is a constitutionally regulated power**, balancing **effective investigation** with **personal liberty, due process and judicial oversight**.

SURROGATE ADVERTISING

The Maharashtra Food and Drug Administration (FDA) issued show-cause notices to actors endorsing Vimal Elaichi, alleging that the advertisement indirectly promotes Vimal Pan Masala through surrogate advertising.

About Surrogate Advertising

- **Surrogate advertising** is the promotion of a **prohibited or restricted product** by advertising another legally permitted product using the **same brand name, logo, packaging or promotional style**.
- It is commonly used for products such as **tobacco, alcohol and pan masala**, whose advertisements are restricted by law.
- Its objective is to **keep the prohibited brand visible** in consumers' minds despite advertising restrictions.

Legal Framework

- **Food Safety and Standards Act, 2006:**
 - ♦ **Section 24** prohibits **misleading and deceptive advertisements** relating to food products.
 - ♦ **Section 53** provides a **penalty of up to ₹10 lakh** for publishing misleading advertisements.
 - ♦ **Section 30(2)(a)** empowers States to prohibit unsafe food

products. Using this provision, **Maharashtra has banned gutkha and pan masala containing tobacco or nicotine since 2012**.

Consumer Protection Act, 2019:

- ♦ **Section 2(28)** defines a **misleading advertisement** as one that falsely describes a product, gives false guarantees, misleads consumers, amounts to an unfair trade practice, or conceals important information.
- ♦ The **Central Consumer Protection Authority (CCPA)** issued the **Guidelines for Prevention of Misleading Advertisements and Endorsements, 2022**, which define **surrogate advertisement** as an advertisement that circumvents a legal prohibition by indirectly promoting a restricted product through a permitted one.
- ♦ Under **Section 21**, the **CCPA** may impose a penalty of **up to ₹10 lakh** for the first violation and **up to ₹50 lakh** for subsequent violations.
- ♦ The **CCPA** may also prohibit an endorser from making endorsements for **up to one year**, extendable to **three years** for repeated violations.

Significance

- The case highlights the challenge of **distinguishing genuine brand extensions from indirect promotion of prohibited products**.
- It reinforces the importance of **truthful advertising, celebrity due diligence and consumer protection** under India's regulatory framework.

SUPREME COURT ON BLACK MONEY IN ELECTIONS

In **State of Karnataka vs Prathik Parasrampur** (17 August, 2026), the Supreme Court held that the **use of black money in elections undermines free and fair elections and strikes at the very essence of democracy**.

Black Money in Elections

- **Black money** refers to **unaccounted or undeclared money** used for **voter bribery, campaign financing, gifts and other illegal election expenses**.
- It creates an **unequal electoral playing field** and strengthens the nexus between **money, crime and politics**.
- The case arose from a **2015 Karnataka High Court** judgment quashing an FIR related to alleged cash hoarding for voter bribery. The Supreme Court expanded the proceedings to address the larger systemic issue.

Why is it a Threat to Democracy?

- Distorts voter choice through financial inducements.
- Favors wealthy candidates over genuine public support.
- Promotes criminalisation of politics.
- Weakens public confidence in democratic institutions.

- Encourages policy capture by vested interests.
- Undermines political equality and electoral fairness.

Constitutional and Legal Framework

- **Article 324:** Vests the superintendence, direction and control of elections in the Election Commission of India (ECI).
- **Representation of the People Act, 1951:** Governs electoral offences, corrupt practices and election expenditure.
- **Income Tax Department:** Investigates unexplained cash and assets.
- The Court relied on *Kanwar Lal Gupta v. Amar Nath Chawla* (1975), the Goswami Committee Report (1990), the Vohra Committee Report (1993) and the 255th Law Commission Report (2015).

Supreme Court Directions

- Report **seized cash or assets** to the **District Magistrate, Additional District Magistrate or Court within 24 hours** with reasons showing a **prima facie electoral nexus**.
- Complete investigations **within one year**. Report delays and submit **quarterly progress reports** to the ECI.
- Report cash exceeding **₹10 lakh** seized by **Static Surveillance Teams** to the **Income Tax Department**.
- **High Courts** should designate **special courts** for speedy trial of cases involving candidates and sitting **MPs/MLAs**.
- Withdrawal of prosecution during an election cycle requires **prior approval of the jurisdictional High Court**.
- The **ECI** and governments must submit **compliance reports by 18 November 2026**.

Current Status and Way Forward

- During the **2024 Lok Sabha elections**, **3,87,430 FIRs** were registered. Only **1,66,044 cases (42.9%)** resulted in convictions. The Court also observed that withdrawal of prosecutions after a change in government may create an **impression of impunity**.
- Strengthen **time-bound investigation**, improve coordination among the **ECI, police, Income Tax Department and enforcement agencies**, ensure **transparent political funding**, and enhance **voter awareness** against inducements.

RELIGIOUS SENTIMENTS AND CONSTITUTIONAL FREEDOMS

The Punjab Governor has assented to the Jaagat Jot Sri Guru Granth Sahib Satkar (Amendment) Act, which prescribes stricter punishment for sacrilege of the Sri Guru Granth Sahib Ji.

Key Provisions of the Punjab Law

- The Act prescribes **imprisonment from 10 years to life** and a **fine of ₹5 lakh to ₹25 lakh** for acts of sacrilege.
- **Sacrilege** includes **wilful and deliberate** acts such as **physical damage, defacement, burning, tearing or theft** of the scripture.

- The offence also extends to sacrilegious acts committed through **speech, writing, visual representation or electronic means**.

Sacrilege and Blasphemy

- **Sacrilege** means treating a **sacred object or place without due respect**. It primarily relates to **physical desecration**.
- **Blasphemy** refers to **speech, writing, signs or images** that insult or show contempt towards a religion, deity, scripture or religious beliefs.
- **Section 298 of the Bharatiya Nyaya Sanhita (BNS)** punishes **injuring or defiling a place of worship** with intent to insult a religion.
- **Section 299 of the BNS** punishes **deliberate and malicious acts** intended to outrage religious feelings through words, signs or visible representations.

Legal and Constitutional Perspective

- **Section 295A of the Indian Penal Code**, inserted in **1927**, criminalised **deliberate and malicious acts** that were intended to outrage religious feelings.
- In *Ramji Lal Modi v. State of Uttar Pradesh* (1957), the **Supreme Court** upheld its constitutional validity.
- **Article 19(1)(a)** guarantees **freedom of speech and expression**. Criminalising expression may discourage legitimate criticism, academic debate, satire and social reform.
- Under **Article 19(2)**, restrictions on speech are valid only on specified grounds, including **public order**. Mere religious hurt may not always amount to a threat to public order.
- **Article 14** requires laws to be **clear, non-arbitrary and equally applicable**. Vague terms may lead to inconsistent enforcement.
- The **principle of proportionality** requires that punishment should be proportionate to the nature and gravity of the offence.

PM CARES FUND

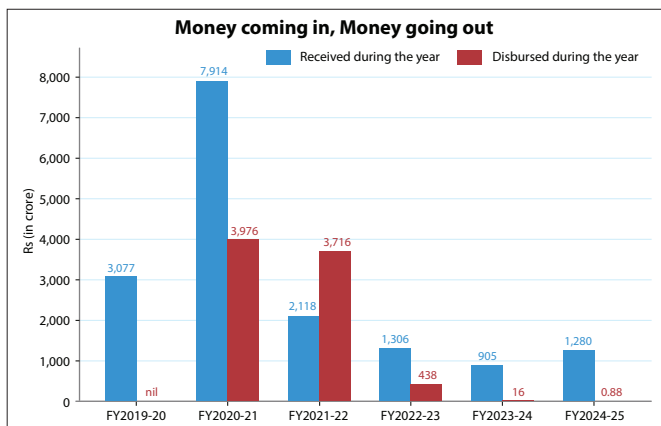
Concerns have persisted over the transparency and accountability of the PM CARES Fund. While audited financial statements for FY 2023-24 and FY 2024-25 were finally made public in August 2026 after a two-year delay, critics have flagged the fund's minimal expenditure and its continued exemption from the RTI Act.

PM CARES Fund

- It is a **Public Charitable Trust** established in **March 2020** to provide assistance during **public health emergencies, natural disasters and other distress situations**.
- **Registration:** It is registered under the **Registration Act, 1908**.
- **Trustees:** The **Prime Minister** is the **ex-officio Chairperson**. The Union Ministers of **Defence, Home Affairs and Finance** are **ex-officio Trustees**.
- **Funding:** It is financed entirely through **voluntary contributions**. It receives **no budgetary support** from the government.

- ➔ **Tax and CSR Benefits:** Donations qualify for **100% income-tax deduction** under the **Income-tax Act** and are eligible as **Corporate Social Responsibility (CSR)** expenditure under the **Companies Act, 2013**.

- ➔ **Foreign Donations:** It is exempt under the **Foreign Contribution (Regulation) Act, 2010 (FCRA)** and can receive foreign contributions.



Financial Position

- ➔ The **corpus** increased from about **₹6,722 crore (2022-23)** to **₹8,453 crore (2024-25)**.
- ➔ However, **utilisation** reportedly declined from **₹437.9 crore** to about **₹87.5 lakh** during the same period.

KEY CONCERNS ABOUT PM CARES FUND



TRANSPARENCY

Audited statements after FY 2022-23 are not publicly available.



RTI STATUS

Whether PM CARES is a **public authority** under the **RTI Act, 2005** remains under judicial consideration.



AUDIT

The Fund is audited by an **independent Chartered Accountant** and **not by the CAG**.



PARLIAMENTARY OVERSIGHT

Questions on the Fund have faced limited parliamentary scrutiny.



INSTITUTIONAL OVERLAP

Debate continues over the need for PM CARES alongside the **Prime Minister's National Relief Fund (PMNRF)** and the **National Disaster Response Fund (NDRF)**, although the Supreme Court (2020) held that these funds have **distinct purposes**.

EXECUTION BY HANGING IN INDIA

The Supreme Court has upheld the constitutional validity of execution by hanging, holding that it does not violate the right to dignity under Article 21.

Execution by Hanging in India

- ➔ **Legal Basis:** Section 393(5) of the **Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023**, provides that a person sentenced to death shall **be hanged by the neck till dead**.
- ➔ **Method:** India follows the **long-drop method**, which is intended to cause **cervical spine fracture** and rapid unconsciousness.
- ➔ **Judicial Precedent:** The constitutional validity of hanging was first upheld in **Deena v. Union of India (1983)**.

Constitutional and Legal Position



Article 21:

Guarantees the **right to life and personal liberty**. Any procedure depriving life must be **fair, just and non-arbitrary**.



Gian Kaur v. State of Punjab (1996):

The Supreme Court recognised that **dignity** remains an essential constitutional value even at the stage of execution.



Law Commission:

The **187th Report (2003)** recommended lethal injection as an alternative mode of execution. However, Parliament retained hanging under the **BNSS, 2023**.

Key Observations of Supreme Court

- ➔ The Court held that the evidence presented **did not justify overruling Deena v. Union of India (1983)**.
- ➔ The evidence has not conclusively shown that alternatives such as lethal injection, electrocution, lethal gas, and shooting are more humane or constitutionally superior.
- ➔ The judgment clarified that the issue **remains open** if future **medical or scientific evidence** establishes a better method.
- ➔ The Court reiterated that execution must be carried out with **decency, dignity and without unnecessary brutality**.

Key Concerns

- ➔ **Scientific Reliability:** Incorrect drop calculation may cause prolonged suffering or severe physical injury.
- ➔ **Human Dignity:** The State's duty to protect dignity continues until the execution is completed.
- ➔ **Psychological Impact:** Long periods on **death row** raise separate human-rights concerns.
- ➔ **Colonial Legacy:** Hanging continues to be part of the colonial criminal justice framework.
- ➔ **Capital Punishment Debate:** Concerns persist regarding **arbitrariness, wrongful convictions, proportionality and irreversibility**.

Global Position

- **Hanging** remains legally available in countries such as **Japan** and **Singapore**.
- Many countries have **abolished capital punishment**, reflecting a broader global trend.

POLYGAMY IN INDIA

The Supreme Court is hearing a petition challenging the constitutional validity of polygamy under Muslim Personal Law.

About

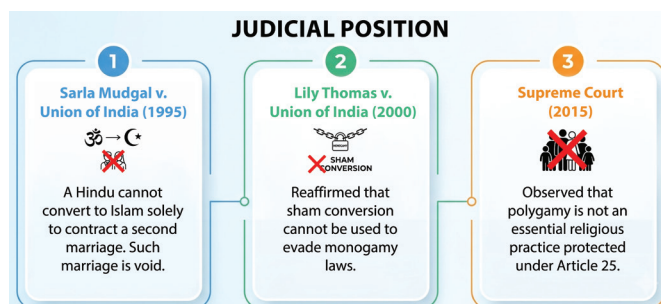
- **Polygamy** is the practice of having **more than one spouse** at the same time.
- **Types:**
 - ♦ **Polygyny:** One man has multiple wives.
 - ♦ **Polyandry:** One woman has multiple husbands.
 - ♦ **Bigamy:** Marrying again while the first valid marriage is still subsisting.

Legal Position in India

- **Hindu Marriage Act, 1955:** Prohibits bigamy for **Hindus, Buddhists, Jains and Sikhs**.
- **Special Marriage Act, 1954:** Recognises only **monogamous marriages**.
- **Parsi Marriage and Divorce Act, 1936:** Prohibits bigamy.
- **Indian Christian Marriage Act, 1872:** Does not permit marriage if either party already has a living spouse.
- **Bharatiya Nyaya Sanhita (BNS): Section 82** makes bigamy punishable with **up to seven years' imprisonment and fine** where the second marriage is legally void.
- **Muslim Personal Law (Shariat) Application Act, 1937:** Permits a **Muslim man to marry up to four wives**. Therefore, the offence of bigamy under the BNS does not apply in such cases.

Arguments Against Polygamy

- **Gender Inequality:** It permits multiple wives for men but not multiple husbands for women.
- **Mental and Social Impact:** It may cause emotional distress, family conflict and economic insecurity.
- **Financial Burden:** Multiple households can reduce resources available for children and families.
- **Constitutional Concerns:** Critics argue that the practice may conflict with **Articles 14 and 21** guaranteeing **equality, dignity and personal liberty**.



State-Level Developments

- **Uttarakhand:** The **Uniform Civil Code, 2024** prohibits bigamy for all residents.
- **Assam:** The **Assam Prohibition of Polygamy Act, 2025** prohibits polygamy, while providing constitutional exemptions for certain **Scheduled Tribes**.
- **Goa:** The **Goa Civil Code** generally follows monogamy, though it retains limited historical exceptions for Hindus that are considered **virtually obsolete**.

Current Position

- **NFHS-5 (2019–21)** reported polygamy across several religious communities, with relatively higher prevalence in some **North-Eastern and tribal regions**. Overall, the practice remains **uncommon** in India.

IDEA OF THE 'IDEAL VICTIM' IN CRIMINAL JUSTICE

The Bombay High Court, while setting aside the 2021 acquittal of Tarun Tejpal, observed that the trial court wrongly expected the complainant to behave like a "perfect victim" to be considered credible.

What is the 'Ideal Victim' Concept?

- The concept was proposed by **Norwegian criminologist Nils Christie (1986)**.
- According to him, an **"ideal victim"** usually has these characteristics:
 - ♦ **Weak or vulnerable**, such as a woman, child, elderly person or person with disability.
 - ♦ Engaged in **respectable activities**.
 - ♦ **Not responsible** for being at the place of the crime.
 - ♦ **Unknown to the offender**.
 - ♦ Harmed by a **powerful and clearly blameworthy offender**.

Concerns

- The concept creates a **hierarchy of victimhood** by treating only certain victims as deserving of sympathy.
- **Media, films and social attitudes** often reinforce these stereotypes.
- Survivors who do not fit this image may face **prejudice, victim-blaming and reduced credibility**.
- Factors such as **gender, caste, class, social status and sexual history** may unfairly influence public and institutional responses.

Judicial Perspective

- The **Bombay High Court** held that courts must rely on **evidence**, not on assumptions about a survivor's conduct, background or post-incident behaviour.
- It criticised the trial court for focusing on the complainant's reactions rather than on the material evidence.

- The **Mathura Custodial Rape Case (1979)** and **Bhanwari Devi Case (1992)** exposed the dangers of stereotypical reasoning and significantly influenced reforms in laws relating to sexual offences and workplace sexual harassment.
- The **Supreme Court** has also recommended **gender-sensitive judicial writing**. It cautioned that **delay in reporting, absence of physical injuries, inconsistencies in testimony or a survivor's demeanour** should not automatically weaken credibility because **trauma affects individuals differently**.

SUPREME COURT RULING ON THE DEFINITION OF 'INDUSTRY'

The Supreme Court has held that the definition of "industry" under the Industrial Relations Code (IRC), 2020, must be interpreted independently and will not automatically follow the Bangalore Water Supply v. A. Rajappa (1978) judgement.

Bangalore Water Supply Judgement(1978)

- A **seven-judge bench** adopted a broad interpretation of "industry" under **Section 2(j)** of the Industrial Disputes Act, 1947.
- It evolved the **Triple Test**, under which an activity is an industry if it involves:
 - ♦ Systematic and organised activity.
 - ♦ Cooperation between employer and employee.
 - ♦ **Production or distribution of goods or services** to satisfy human wants.
- The ruling covered **hospitals, educational institutions, charities and municipalities**.
- **Core sovereign functions**, such as **defence, judiciary and law enforcement**, remained outside its scope.

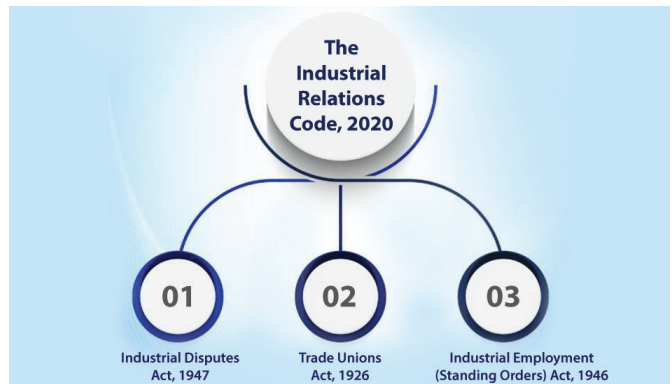
Recent Supreme Court Ruling

- The Court held that **Section 2(p)** of the IRC, 2020, must be interpreted from the **language, scheme and purpose** of the new Code.
- Interpretation under the IRC will begin on a "**clean slate**".
- The **1978 judgement** will continue to govern **pending disputes** under the Industrial Disputes Act, 1947, but will **not automatically govern** the IRC.
- The majority favoured a fresh interpretation, while the dissent cautioned that narrowing the definition could affect **industrial peace and workers' rights**.

Industrial Relations Code, 2020

- The Code consolidates the **Industrial Disputes Act, 1947, Trade Unions Act, 1926** and **Industrial Employment (Standing Orders) Act, 1946**.
- **Section 2(p)** defines **industry** as any **systematic activity** carried out through **employer-worker cooperation**, irrespective of **profit motive or capital investment**.

- It extends labour-law protection to workers in **non-profit and low-capital organisations**.
- It strengthens **collective bargaining, conciliation, Industrial Tribunals, grievance redressal**, and statutory benefits such as **notice of service changes** and **retrenchment compensation**.



Concerns and Way Forward

- Trade unions fear that exclusions for certain organisations may reduce labour law protections and collective bargaining rights.
- Courts should interpret statutory exclusions **strictly** and focus on the **actual nature of employer-worker activity**.
- Labour reforms should balance **industrial growth, Ease of Doing Business, and workers' rights** while ensuring legal certainty and industrial harmony.

ZONAL COUNCILS

The 31st Southern Zonal Council Meeting was held in Mahabalipuram, Tamil Nadu.

About

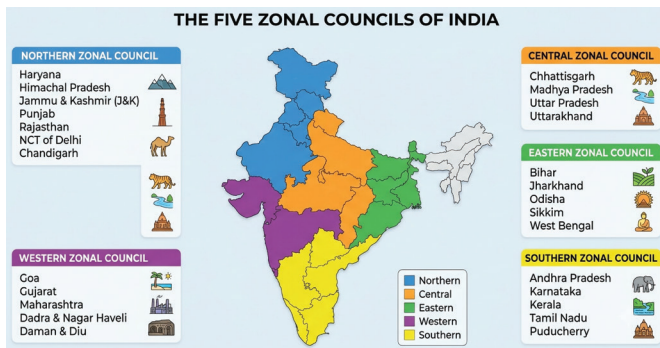
- **Zonal Councils** are **statutory bodies** established under **Part III of the States Reorganisation Act, 1956**.
- They promote **cooperation and coordination** on matters involving **two or more states** or between the **Centre and states**.
- They are **advisory bodies** and facilitate dialogue on **inter-state and regional** issues.

Composition and Organisation

- The **Union Home Minister** is the **Chairman** of all Zonal Councils.
- The **Chief Minister** of one of the member states serves as the **Vice-Chairman** on a **rotational basis**.
- A **Standing Committee**, comprising the **Chief Secretaries** of member states, examines issues before they are placed before the Council. Unresolved matters are referred to the full Council.

Historical Background

- In 1956, Prime Minister Jawaharlal Nehru proposed the idea of zonal councils.



Functions and Significance

- ➔ Promote **cooperative federalism** and **emotional integration**.
- ➔ Resolve **interstate boundary**, **linguistic** and **water-sharing** issues through dialogue.
- ➔ Coordinate **regional planning**, **transport**, **infrastructure**, **disaster management** and **internal security**.
- ➔ Encourage consensus on **economic and social development** and reduce regional disputes.

North Eastern Council

- ➔ The **North Eastern Council (NEC)** was established separately as a statutory regional body under the North Eastern Council Act, 1971, and became operational in 1972
- ➔ It covers **Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura** and **Sikkim** (included through the **North Eastern Council (Amendment) Act, 2002**).

NAMASTE SCHEME

The Government of India is considering expanding the National Action for Mechanised Sanitation Ecosystem (NAMASTE) from urban to rural areas to improve the safety, dignity and rehabilitation of sanitation workers through mechanised sanitation.

About NAMASTE Scheme

- ➔ NAMASTE was launched in **2023** by the **Ministry of Social Justice and Empowerment** in collaboration with the **Ministry of Housing and Urban Affairs**.
- ➔ It is a **Central Sector Scheme** aimed at eliminating **hazardous manual cleaning** and promoting **safe, mechanised sanitation practices**.
- ➔ The scheme initially covered **Sewer and Septic Tank Workers (SSWs)** and was later expanded to include **waste pickers**.

Objectives

- ➔ **Eliminate** hazardous manual cleaning practices.
- ➔ Improve the occupational **safety and dignity** of sanitation workers.
- ➔ Provide skill development, livelihood support and social security.

Key Features

- ➔ **Mechanisation:** Financial assistance is provided for the procurement of **mechanised sanitation equipment**. Capital subsidy of up to **50% of the project cost** is available for eligible sanitation-related enterprises.
- ➔ **Personal Protective Equipment (PPE):** PPE kits are provided to reduce occupational risks.
- ➔ **Training:** Workers receive training in **the safe operation of mechanised equipment** and in occupational safety.
- ➔ **Social Security:** Benefits include **health insurance**, **Ayushman Bharat coverage** and other welfare measures.
- ➔ **Rehabilitation:** Identified **manual scavengers** receive **one-time cash assistance**, **skill training** and **support for self-employment**.

Progress under NAMASTE

- ➔ Surveys conducted in **2013 and 2018** identified **58,098 manual scavengers**.
- ➔ According to the Government:
 - ♦ All identified beneficiaries received one-time cash assistance.
 - ♦ **27,926** completed skill development training.
 - ♦ **2,803** received capital subsidy for self-employment projects.

Proposed Rural Expansion

- ➔ The proposed expansion will cover Drain cleaners, Sewage Treatment Plant (STP) workers and Faecal Sludge Treatment Plant (FSTP) workers.
- ➔ The proposal has an estimated outlay of **₹498.73 crore** for **2026-27 to 2030-31**.

Significance

- ➔ It extends **mechanised sanitation** beyond urban areas.
- ➔ Improves **worker safety, dignity and health**.
- ➔ Expands access to **protective equipment, training, insurance and alternative livelihoods**.
- ➔ Reduces dependence on **manual scavenging** and hazardous sanitation work.
- ➔ Effective implementation and timely financial assistance remain essential for achieving the scheme's objectives.

PRADHAN MANTRI JANJATIYA VIKAS MISSION (PMJVM)

The Pradhan Mantri Janjatiya Vikas Mission (PMJVM) is strengthening India's tribal forest economy by organising tribal communities into Van Dhan Vikas Kendras (VDVKs) and enabling them to move from selling raw forest produce to becoming value-adding entrepreneurs.

About PMJVM

- ➔ PMJVM is a **Central Sector Scheme** of the **Ministry of Tribal Affairs**, launched in **2021-22**.

- It was created by merging the **MSP for Minor Forest Produce (MFP) Scheme** with the **Institutional Support for Development and Marketing of Tribal Products/Produce Scheme**.
- It is implemented by **TRIFED** through **State Implementing Agencies**.
- **Objective:** To improve **tribal livelihoods** through **procurement, processing, value addition, entrepreneurship and marketing** of tribal products.
- It also provides **Minimum Support Price (MSP)** for notified **Minor Forest Produce (MFP)** to protect tribal gatherers from distress sales.

Key Features

- **Implementing Agency:** Tribal Cooperative Marketing Development Federation of India (**TRIFED**).
- **Major Components:**
 - ♦ **MSP-based procurement** of MFP.
 - ♦ **Van Dhan Vikas Kendras (VDVKs)** and **Van Dhan Producer Enterprises (VDPEs)**.
 - ♦ **Skill development**, value addition, branding, e-commerce and market linkages.
- **Financial Support:**
 - ♦ Up to **₹15 lakh** for establishing one **VDVK**.
 - ♦ Up to **₹64 lakh over three years** for each **VDPE**.
- **Special Focus:** Aspirational Districts, Particularly Vulnerable Tribal Groups (PVTGs) and Forest Rights Act (FRA) land-title holders.

Minor Forest Produce (MFP)

- Under the Forest Rights Act, 2006, MFP includes non-timber forest produce such as bamboo, cane, honey, wax, lac, tendu leaves, mahua flowers, tamarind, medicinal plants, roots, tubers, tussar cocoons and wild herbs.
- **FRA, 2006** recognises the rights of forest-dwelling communities to **collect, use and sell** MFP.
- **PESA Act, 1996** grants **ownership of MFP** to **Gram Sabhas** in Scheduled Areas.
- The Government has notified **MSP for 87 MFP items** under PMJVM.
- Since 2013–14, the Government has procured about 2.68 lakh metric tonnes of MFP worth ₹693.98 crore.
- Around **10.4 crore Scheduled Tribes** depend on forests, with **20–40% of annual income** for many families coming from MFP.

Support through Van Dhan Vikas Kendras

- Tribal gatherers are organised into **Self-Help Groups (SHGs)** and clustered into **VDVKs**, each with about 300 members and at least **60% Scheduled Tribe representation**.
- The **Van Dhan Yojana**, launched on **14 April 2018**, forms the operational foundation of the VDVK model.
- VDVKs provide **training**, scientific harvesting methods, primary processing, packaging, storage, working capital and market support.

- TRIFED also facilitates **branding, exhibitions, e-commerce and market intelligence**.
- As of **31 July 2026**, **4,172 VDVKs** had been sanctioned, **2,911** were functional, benefiting **12.48 lakh tribal members** and generating about **₹168 crore** in sales.

DISTRICT COLLECTORS EMPOWERED TO GRANT CITIZENSHIP

The Ministry of Home Affairs (MHA) has authorised District Collectors in eight States and Union Territories (UTs) to process and grant citizenship under the Citizenship Amendment Act (CAA), 2019, by transferring all pending applications from the earlier committees.

About the CAA

- The **Citizenship Amendment Act, 2019** amended the **Citizenship Act, 1955**.
- It provides a **special pathway to Indian citizenship** for undocumented migrants from Afghanistan, Bangladesh and Pakistan who belong to Hindu, Sikh, Buddhist, Jain, Parsi and Christian communities and entered India **on or before 31 December 2014**.
- It **reduced the minimum residence requirement** for eligible applicants from **11 years to 5 years** for citizenship by naturalisation.
- **Pakistani Hindus** were already eligible for citizenship under **Sections 5 and 6(1)** of the Citizenship Act, 1955. The CAA primarily **expedited their citizenship process**.

Recent MHA Decision

- Under the **Citizenship (Third Amendment) Rules, 2026**, **District Collectors** have been empowered to:
 - ♦ **Receive and scrutinise** citizenship applications.
 - ♦ **Verify documents** and conduct enquiries.
 - ♦ **Administer the Oath of Allegiance**.
 - ♦ **Determine eligibility under Section 6B** of the Citizenship Act, 1955.
 - ♦ **Grant citizenship** to eligible applicants.
- Applications may be **rejected** if an applicant repeatedly fails to appear for mandatory procedures despite reasonable opportunities.
- The order applies to Gujarat, Rajasthan, Punjab, West Bengal, Assam, Tripura, Jammu and Kashmir, and Ladakh.
- In Assam and Tripura, the order does not apply to Sixth Schedule tribal areas.

Constitutional and Legal Framework

- **Articles 5 to 11** of the Constitution deal with **citizenship**.
- **Article 11** empowers **Parliament** to regulate citizenship through law.
- The **CAA Rules, 2024** prescribed the procedure for filing and processing applications through an online portal.

- The **2026 Rules** shift the final decision-making authority from **Empowered Committees** to **District Collectors**.

Key Significance

- **Decentralises** the citizenship process, enabling faster disposal of pending applications.
- Strengthens **district-level implementation** and administrative efficiency.
- Has particular significance in **West Bengal**, especially for the **Matua community**.
- The CAA continues to face **constitutional challenges**, particularly regarding **Article 14 (Right to Equality)**.

Special Exemptions

The CAA **does not apply** to:

- Inner Line Permit (ILP) areas (Arunachal Pradesh, Nagaland, Mizoram, Manipur).
- Sixth Schedule tribal areas under the Constitution (Assam, Meghalaya, Mizoram and Tripura).

ELIGIBILITY FOR ENTRY-LEVEL JUDICIAL SERVICE

The Supreme Court has retained its 2025 decision requiring prior professional exposure before entry into the subordinate judiciary but has substantially modified its implementation by introducing a phased transition and structured training framework.

Background

- The **Justice Shetty Commission (2002)** recommended removing the **three-year Bar practice requirement**, stating that internships and clinical legal education adequately expose law students to court functioning.
- Accepting this view, the Supreme Court allowed **fresh law graduates** to appear directly for judicial service examinations.
- In **May 2025**, the Court restored the requirement of **three years of professional experience** before appearing for the **Civil Judge (Junior Division)** examination.

The New Framework

- The Court reaffirmed that fresh law graduates should not enter the subordinate judiciary without practical courtroom exposure.
- It observed that Civil Judges adjudicate matters involving life, liberty, property and personal rights from the beginning of their careers.

- Three years of relevant experience will continue to be required, calculated from the date of enrolment with the State Bar Council.
- Postgraduate legal education will not count towards this requirement, as academic study cannot substitute for practical court experience.

Transitional Arrangement

- **From 20 May 2025 to 31 March 2027**, fresh law graduates may continue to appear for judicial service examinations without prior Bar practice.
- Candidates selected during this period will be appointed as **Trainee Judicial Officers** and receive **half the remuneration of a Judicial Magistrate First Class (JMFC)** during training.
- **They must complete:**
 - One year of training at the State Judicial Academy.
 - One year of supervised judicial clerkship, including six months under a District or Sessions Judge and six months under a High Court Judge.
- Regular appointment, full salary and service benefits will be granted only after successful completion of the training programme.

Framework from 1 April 2027

- Candidates must possess **at least one year of certified actual practice** before appearing for the examination, under a certification mechanism prescribed by the **High Courts**.
- After selection, they must complete the **same one-year judicial academy training** and **one-year clerkship** before assuming regular judicial duties.
- The new framework will remain in force for **five years** and will thereafter be reviewed based on **empirical evidence**.
- **High Courts and State Governments** have been directed to amend the relevant **subordinate judicial service rules within three months**.

Constitutional Provisions

- **Article 233:** Appointment of **District Judges** by the **Governor** in consultation with the **High Court**. Direct recruits must have **at least seven years' practice** as an advocate or pleader.
- **Article 234:** Recruitment of persons other than District Judges is made by the **Governor** in consultation with the **State Public Service Commission** and the **High Court**.
- **Article 235:** Vests **administrative and disciplinary control** over subordinate courts in the **High Court**.



INTERNATIONAL RELATIONS

U.S. BILL FOR 100% TARIFFS ON MAJOR BUYERS OF RUSSIAN ENERGY

The U.S. Senate has fast-tracked the bipartisan Lindsey O. Graham Sanctioning Russia Act of 2026, proposing steep tariffs on major purchasers of Russian oil and natural gas.

Key Provisions

- The Bill authorises the **U.S. President** to impose tariffs of up to **100%** on imports from the **five largest buyers of Russian oil and natural gas**, including **India** and **China**.
- Other identified purchasers include **Slovakia, Hungary and Azerbaijan**. The list will be reviewed every **180 days** by the **U.S. Trade Representative**.
- It provides **exceptions** for countries importing **less than 15%** of their natural gas from Russia and taking steps to reduce such dependence.
- The Bill also extends the **Iran Sanctions Act** for **five years (till 2031)** and continues sanctions targeting **Iran's energy and weapons sectors**.

Significance

- It aims to **reduce Russia's energy revenues** and weaken its capacity to finance the **Ukraine conflict**.
- **India's energy security** could be affected because discounted Russian crude forms a significant share of its oil imports.
- If implemented, the proposal could tighten **global oil supplies**, increase **crude price volatility**, and disrupt international energy trade.

Legislative Status

- The Bill is **not yet law**. It must still be passed by the **U.S. House of Representatives** and complete the remaining legislative process before it can take effect.

PAX SILICA INITIATIVE

US Special Envoy for South and Central Asia and Ambassador to India met Bangladesh Prime Minister Tarique Rahman in Dhaka and invited Bangladesh to join the US-led Pax Silica initiative.

About Pax Silica

- Pax Silica is a **US-led international economic security initiative** to secure supply chains for **semiconductors, AI infrastructure, and critical minerals** among trusted partner nations.
- Its core objective is to reduce coercive dependencies on China and ensure aligned nations can develop and deploy transformative technologies at scale.

- The inaugural **Pax Silica Summit** was held in **December 2025**.
- **Founding signatories:** Australia, Israel, Japan, South Korea, Singapore, the UK, the Netherlands, and the UAE.
- **India joined in February 2026** during the **AI Impact Summit in New Delhi**.
- Countries partner on securing **strategic technology supply chains** including software applications and platforms.

FARAKKA TREATY (GANGA WATER TREATY), 1996

The 1996 Farakka Treaty, set to expire on December 12, 2026, has come under scrutiny with demands to review its provisions in light of Bihar's future water requirements and India's evolving domestic water needs.

Key Facts

- Formally known as the **Ganga Water Sharing Treaty**, it was signed on **December 12, 1996** between Indian PM **H.D. Deve Gowda** and Bangladesh PM **Sheikh Hasina**.
- It governs the sharing of **Ganga waters at the Farakka Barrage** during the **lean season (January 1 to May 31)**.
- During the **critical period (March 11 to May 11)**, **35,000 cusecs** are allocated alternately to each country for **10-day periods**, subject to water availability.
- The **Farakka Barrage** is built on the **Ganga River in West Bengal**, approximately **10 km from the Bangladesh border**.
 - ♦ It was commissioned in **1975** to divert Ganga water into the **Hooghly River** to improve **Kolkata Port navigability**.
- A **Joint Committee** monitors flows at **Farakka (India)** and **Hardinge Bridge (Bangladesh)**.
- **Article XII** provides that the treaty is **renewable by mutual consent** after the 30-year term.
- The 1996 Treaty was preceded by the **1977 Ganges Water Agreement** and temporary **MoUs in 1982 and 1985**.
- As of **February 2026**, formal renewal discussions between the two countries had **not yet commenced**.

16TH BRICS TRADE MINISTERS' MEETING

India successfully concluded the 16th BRICS Trade Ministers' Meeting in Jaipur, Rajasthan, under its BRICS Chairship 2026. The theme, this year, was "Building for Resilience, Innovation, Cooperation and Sustainability."

Key Outcomes

- The meeting was chaired by **Piyush Goyal**, Union Minister of Commerce and Industry.

- It was preceded by the Third Meeting of the BRICS Contact Group on Economic and Trade Issues (CGETI) held on **August 3–4, 2026 in New Delhi**.
- Members adopted a **Joint Declaration and four key annexes**.
- The **Strategy for BRICS Economic Partnership 2030** was finalised.
- It covers trade, investment, digital economy, industry, innovation, financial cooperation, and sustainable development.
- It is to be submitted for endorsement at the **BRICS Leaders Summit in New Delhi in September 2026**.

WTO and Multilateral Trade

- Members reaffirmed support for a rules-based multilateral trading system with the WTO at its core.
- They called for restoration of a fully functioning, two-tier and binding WTO dispute settlement system.
- They affirmed Special and Differential Treatment (S&DT) for developing countries and policy space for food and livelihood security.
- India specifically pushed for safeguarding farmers' interests and securing food and livelihood security for developing nations within the multilateral trading system.

MSME and Trade Finance

- The **Jaipur Consensus** was issued to study the feasibility of a **BRICS Invoice Discounting Mechanism** aimed at improving **working capital access** for small businesses.
- Guiding Principles for Credit Assessment Frameworks for Export-Oriented MSMEs were adopted. Financial institutions will now assess enterprises on the basis of cash flows rather than assets and collateral.
- A **Work Plan on Internationalisation of MSMEs** was adopted to improve global market access for small enterprises across BRICS countries.
- These initiatives address the estimated **USD 2.5 trillion global trade finance gap** that disproportionately affects smaller enterprises.

Global Value Chains

- The BRICS Shared Understanding on Global Value Chains was adopted, including the GVC Action Plan 2026–2030.
- The plan proposes a **BRICS Technical Council**, **BRICS Connect initiative**, joint GVC studies, and strategic supply chain platforms in sectors like **pharmaceuticals and food security**.

Digital Trade

- BRICS Principles to Facilitate Digitally Delivered Services Across Borders were adopted to promote secure and safe cross-border digital trade.

BRICS

- **BRICS** is a grouping of major emerging economies. The term was coined by economist **Jim O'Neill in 2001**.
- **Original five members:** Brazil, Russia, India, China, and South Africa.
- **New full members:** Egypt, Ethiopia, Iran, Indonesia, and the UAE taking total membership to **10 nations**.
- Formally began as **BRIC** at the Leaders' meeting in **St. Petersburg, 2006**, on the margins of the G8 Outreach Summit.
- Formalised at the **1st BRIC Foreign Ministers' Meeting** on the margins of **UNGA in New York, 2006**.
- South Africa joined in **2010**, after which the grouping became **BRICS**.
- Annual formal summits have been held since **2009**.
- The **New Development Bank (NDB)**, formerly the BRICS Development Bank, is the grouping's multilateral development bank. It supports projects through **loans, guarantees, equity participation**, and other financial instruments.

INDIA'S CAMPAIGN FOR THE 2028-29 UNSC SECURITY COUNCIL SEAT

India has formally launched its campaign for election as a non-permanent member of the United Nations Security Council (UNSC) for the 2028-29 term. The election will be held in June 2027, with Tajikistan as its Asia-Pacific Group competitor.

About

- The **UNSC** is the principal UN organ responsible for maintaining **international peace and security**. It has **15 members**, comprising **5 Permanent Members (P5)** with **veto power** and **10 Non-Permanent Members** elected for **two-year terms**.
- Non-permanent members are elected by the **UN General Assembly** through a **secret ballot** and require a **two-thirds majority** of members present and voting.
- The **Asia-Pacific Group** is allocated **two non-permanent seats**.

India's Campaign

- If elected, India will serve on the UNSC for the **ninth time**. Its last tenure was **2021–22**.
- India's campaign is based on **SHANTI (Securing Holistic Advancement through Norms, Trust and Integrity)**.
- It emphasises **peace and security**, **UN reforms**, **Global South representation**, **maritime security**, **responsible technology governance**, and **effective peacekeeping**.

Significance of the Seat

- It strengthens India's role in **global governance** and international security.

- It provides a platform to advance **counter-terrorism**, **peacekeeping**, and **multilateral reforms**.
- It reinforces India's long-standing claim for **permanent UNSC membership**.
- It enables India to represent the interests of the **Global South** more effectively.

Challenges

- India faces electoral competition from **Tajikistan**.
- Success depends on sustained **coalition-building**, regional diplomacy, and securing broad support across UN member states.
- Geopolitical rivalries and differing priorities among countries may influence voting.

Way Forward

- India should pursue **inclusive diplomatic outreach** and strengthen partnerships with developing countries.
- It should continue advocating a **more representative, transparent and effective UNSC** that reflects contemporary global realities.

EU'S CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

At the 12th BRICS Environment Ministers' Meeting in New Delhi, BRICS countries jointly opposed the European Union's Carbon Border Adjustment Mechanism (CBAM), describing it as unilateral, punitive, discriminatory and protectionist.

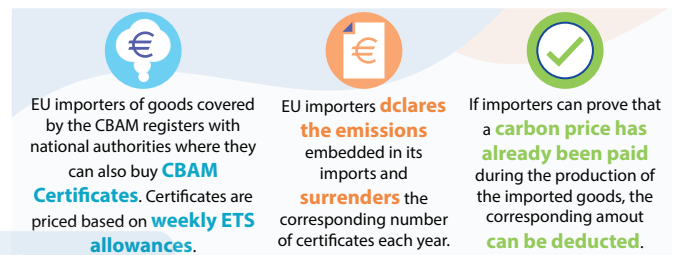
What is the CBAM?

- CBAM is a carbon-pricing mechanism of the **European Union (EU)** that imposes a carbon cost on specified imported goods based on their **embedded greenhouse gas emissions**.
- EU importers are required to purchase **CBAM certificates** corresponding to the embedded emissions of imported products.
- It aims to prevent **carbon leakage**, where industries shift production to countries with less stringent climate policies.
- It complements the EU's **Emission Trading System (ETS)** by ensuring imported goods face a carbon cost comparable to that paid by EU producers.
- It is part of the EU's **Fit for 55** package, which seeks to reduce greenhouse gas emissions by **at least 55% by 2030** compared to 1990 levels.
- The **definitive phase** of CBAM began on **1 January 2026**.
- It currently covers **iron and steel, aluminium, cement, fertilisers, hydrogen and electricity**.

Concerns of BRICS and Developing Countries

- **Trade Barrier:** BRICS argues that CBAM functions as a **disguised restriction on international trade** rather than a purely environmental measure.

- **Impact on India:** About **90%** of India's exports covered under CBAM are **iron and steel**, making the sector particularly vulnerable.
- **Climate Equity:** Developing countries stress the principle of **Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC)** under the **UNFCCC**.
- **Economic Burden:** The mechanism may reduce the competitiveness of exports from developing countries while favouring industries in developed economies.
- **Trade and Climate Linkage:** Many developing countries maintain that environmental obligations should not become barriers to legitimate international trade.



Adaptation Finance

- BRICS called for **new, additional, predictable, adequate and accessible** climate finance from developed countries.
- It emphasised **grants and concessional finance** instead of debt-creating loans.
- It urged developed countries to fulfil the commitment to **triple adaptation finance for developing countries by 2035**.
- **Adaptation finance** supports **water security, climate-resilient agriculture, resilient infrastructure, disaster preparedness and sustainable livelihoods**, whereas **mitigation finance** focuses on reducing greenhouse gas emissions.

NEW DEVELOPMENT BANK (NDB)

Iran has announced its intention to join the NDB to deepen financial, monetary and banking cooperation with BRICS countries.

About the NDB

- The **New Development Bank (NDB)** is a **multilateral development bank** established by the **BRICS countries**. It was established in **2015** with its **headquarters in Shanghai, China**.
- **Membership** is open to **all United Nations member states**, including both borrowing and non-borrowing countries.
- **Objective:** To mobilise resources for **infrastructure and sustainable development projects in emerging markets and developing countries (EMDCs)**.
- It seeks to **complement**, rather than replace, existing multilateral development institutions.

Membership

- **Founding Members:** Brazil, Russia, India, China and South Africa.

- The Bank has expanded its membership beyond BRICS. **Bangladesh, the United Arab Emirates, Egypt, Algeria, Colombia and Uzbekistan** have joined through the prescribed accession process.
- **Uzbekistan** became the **10th member** and the **first Central Asian country** to join the NDB.
- **Iran** is currently a **prospective member** and must complete the formal accession process before becoming an official member.

Key Areas of Financing



Significance of Iran's Proposed Membership

- It would strengthen **economic and financial cooperation** between Iran and BRICS countries.
- It could provide Iran with an additional source of **development finance** for infrastructure and sustainable development.
- It supports BRICS' efforts to promote the **use of national currencies** in international trade and financial transactions.
- It could further strengthen the role of the NDB in the **global development finance architecture** by expanding cooperation among emerging economies.

Key Facts

- Since its establishment, the NDB has **approved more than 120 projects** worth **around US\$40 billion** across member countries.
- The Bank focuses on promoting **inclusive, sustainable and resilient development** in emerging and developing economies.

INDIA-JAPAN MARITIME SECURITY COOPERATION

India and Japan have signed a **Memorandum of Arrangement (MoA) on Maritime Security Cooperation** during bilateral defence talks in New Delhi.

Key Features of the MoA

- The agreement aims to strengthen **maritime security, defence collaboration and strategic cooperation** in the Indo-Pacific.
- The MoA provides a framework for cooperation between the **Indian Navy** and the **Japan Maritime Self-Defense Force (JMSDF)**.
- It covers **Maritime Domain Awareness (MDA)**, **Search and Rescue (SAR)** and **Humanitarian Assistance and Disaster Relief (HADR)**.
- Both countries will strengthen the security of **Sea Lines of Communication (SLOCs)** through joint exercises, reciprocal naval visits, logistics support, personnel exchanges, port access and ship maintenance.

Major Areas of Cooperation

- **Military Exercises**: Both sides will expand exercises such as **Dharma Guardian**, **JAIMEX** and **Veer Guardian**. Future drills will include **unmanned systems, multi-domain operations** and more complex operational scenarios.
- **Naval Shipbuilding**: The two countries will explore cooperation in **naval design, shipbuilding and ship repair**, combining Japan's technological expertise with India's manufacturing capabilities under **Make in India**.
- **Defence Technology**: Cooperation will deepen between **DRDO** and Japan's **Acquisition, Technology & Logistics Agency (ATLA)**. A **Defence Industry Forum** will promote industrial collaboration.
- **Defence Equipment**: The **UNICORN integrated communications antenna system** is being pursued as the **first India-Japan defence equipment transfer project**.
- **Institutional Cooperation**: Both sides will enhance exchanges between **Special Operations Forces**, establish a **Director-General/Joint Secretary-level Working Group**, and prepare for the **4th India-Japan 2+2 Foreign and Defence Ministerial Dialogue**.

Strategic Significance

- The partnership strengthens a **free, open and rules-based Indo-Pacific**.
- It enhances **interoperability, maritime security and regional stability**.
- It supports India's goals of **defence indigenisation, military manufacturing and shipbuilding**.
- It also advances Japan's interest in **secure maritime trade routes and a stable Indo-Pacific**.

Key Challenges

- **Low bilateral trade**, despite the large size of both economies.
- **Regulatory barriers**, including **BIS compliance** for Japanese firms and **phytosanitary requirements** for Indian exports.
- **Slow progress** in defence co-production due to pricing, technology transfer and procurement issues.
- **Differences in strategic outlook**, particularly on issues such as **Russia-related sanctions**, where India follows **strategic autonomy** while Japan remains closely aligned with the **G7**.

INDIA-U.K. DEFENCE AND MARITIME PARTNERSHIP

India and the United Kingdom reviewed their bilateral defence partnership during the **25th India-U.K. Defence Consultative Group (DCG) meeting** held in New Delhi.

Key Areas of Cooperation

- **Defence Industrial Cooperation**: Both sides reviewed progress in research and development (R&D) under the India-U.K.

Vision 2035 and the 10-year Defence Industrial Roadmap, with emphasis on long-term technology and industrial collaboration.

- **Maritime Security:** The two countries are cooperating to establish the **Regional Maritime Security Centre of Excellence (RMSCE)** under **India's Indo-Pacific Oceans Initiative (IPOI)** to strengthen **capacity-building, information sharing and regional maritime security** in the Indo-Pacific.
- **Military Cooperation:** Both sides agreed to expand **joint military exercises**, training programmes and capacity-building initiatives to improve interoperability between their armed forces.

Institutional Framework

- The **Defence Consultative Group (DCG)** is the principal **bilateral institutional mechanism** for dialogue on defence and security cooperation between India and the United Kingdom.
- **India-U.K. Vision 2035** serves as the long-term roadmap for cooperation in **defence, security, trade, technology and innovation**.
- The **10-year Defence Industrial Roadmap** seeks to strengthen **joint research, defence manufacturing, technology collaboration and industrial partnerships**.
- **IPOI**, launched by **India in 2019**, is a collaborative initiative that promotes a **safe, secure and stable Indo-Pacific** through thematic pillars and partner-led cooperation.

Strategic Significance

- It strengthens **defence industrial collaboration, R&D and technology partnerships**.
- It enhances **maritime security, interoperability and capacity-building** in the Indo-Pacific.
- It reinforces the India-U.K. commitment to **regional stability, shared security and strategic autonomy**.
- The long-term success of the partnership will depend on the effective implementation of the agreed institutional and industrial initiatives.

25TH INDIA-CHINA SPECIAL REPRESENTATIVES' DIALOGUE

India and China held the 25th round of the Special Representatives (SR) Dialogue in Beijing to advance the boundary settlement process and strengthen mechanisms for maintaining peace and tranquillity along the Line of Actual Control (LAC).

Key Outcomes

- Both sides agreed to pursue an **"Early and Substantial Harvest"** in **boundary delimitation** while continuing efforts towards a **fair, reasonable and mutually acceptable** boundary settlement.
- They reaffirmed commitment to the **2005 Agreement on Political Parameters and Guiding Principles** for resolving the boundary question.

- Two mechanisms under the **Working Mechanism for Consultation and Coordination (WMCC)** will be strengthened:
 - ♦ Expert Group on Boundary Delimitation
 - ♦ Working Group on Border Management
- **Both countries agreed to:**
 - ♦ Establish **two additional military meeting points**.
 - ♦ Create **two new military hotlines** in the **Eastern and Middle Sectors**.
- Address border incidents promptly through diplomatic and military channels.
- They welcomed the reopening of **three designated border trading points**, agreed to expand **border trade, pilgrimage and people-to-people exchanges**, and decided to hold the next **Expert-Level Mechanism on Trans-border Rivers** to strengthen hydrological cooperation, particularly concerning the **Brahmaputra (Yarlung Tsangpo)**.
- The **26th SR Dialogue** will be hosted by **India in 2027**.

India-China Boundary Dispute

- The dispute covers an approximately **3,488 km** undemarcated boundary with differing perceptions of the **LAC**.
- **Western Sector: Aksai Chin**, controlled by China but claimed by India.
- **Eastern Sector: Arunachal Pradesh**, claimed by China as **Zangnan (Southern Tibet)**.
- **Central Sector:** Disputed pockets in **Himachal Pradesh and Uttarakhand**.

Significance

- Strengthens **confidence-building measures (CBMs)** and institutional dialogue.
- Reduces the risk of accidental military escalation.
- Supports cooperation on **border management, trans-border rivers, trade and pilgrimage**.
- Creates conditions for broader normalisation of bilateral relations while keeping the long-term boundary settlement process on track.

CHINA EXPANDS MILITARY INFRASTRUCTURE IN THE SOUTH CHINA SEA

Recently, satellite imagery indicated that China has accelerated military-orientated infrastructure development in the disputed **Paracel Islands**, including a large artificial island at **Antelope Reef** and new installations on **Yagong Islet**.

Latest Developments

- China has completed the **first phase of land reclamation** at **Antelope Reef**, creating an **artificial island of about 6 km** in length.
- The island includes a **deep-water harbour, wharf, helicopter pad** and a prepared strip that analysts believe could become a **3 km runway**.

- New structures have also appeared on **Yagong Islet**, about **14 km** from Antelope Reef, and are expected to support **early-warning radar and surveillance systems**.
- The project marks China's first major **artificial-island construction** in the **South China Sea** since **2017**, following large-scale island building that accelerated from **2013 onwards**.

Paracel Islands

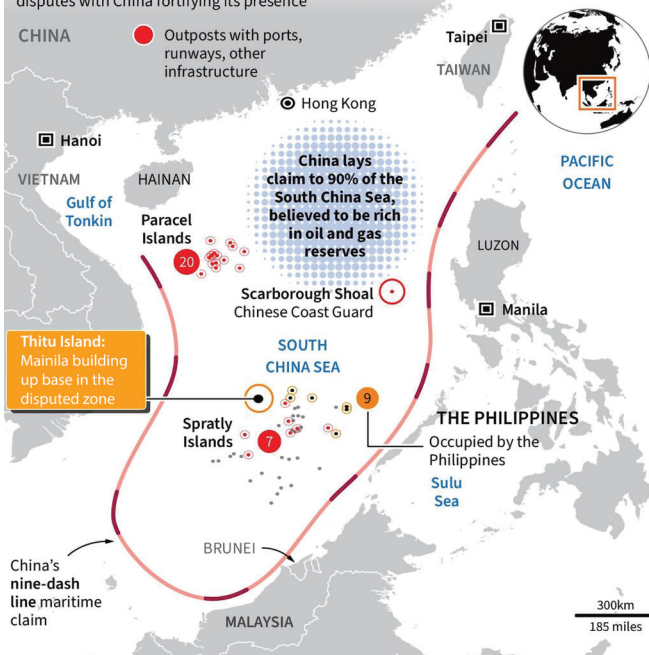
- The **Paracel Islands** comprise about **130 coral islands and reefs** in the **northern South China Sea**.
- They are located about **400 km east of central Vietnam** and **350 km southeast of China's Hainan Island**.
- **China has controlled the islands since 1974**, but **Vietnam also claims sovereignty** over them.
- The broader South China Sea dispute involves **China, Vietnam, the Philippines, Malaysia, Brunei, Taiwan and Indonesia (Natuna EEZ)**.

Strategic Significance

- Enhances China's **intelligence, surveillance and reconnaissance (ISR)** capabilities.
- Strengthens **Anti-Access/Area-Denial (A2/AD)** capabilities by integrating **radar, airfields, ports and missile-support infrastructure**.
- Improves connectivity with **Hainan**, China's major naval base, and expands operational reach in the northern SCS, including a possible **Taiwan contingency**.
- Increases pressure on rival claimants and intensifies **US-China strategic competition**.

CONFLICT IN THE WAVES

The South China Sea has become a focal point of geopolitical tensions amid territorial disputes with China fortifying its presence



South China Sea Importance

- The SCS is a **semi-enclosed sea** linking the **Pacific and Indian Oceans** and carries a major share of global maritime trade. It is rich in **oil and natural gas resources** and has high strategic value.
- Under **UNCLOS, 1982**, coastal states are entitled to a **12-nautical-mile territorial sea** and a **200-nautical-mile Exclusive Economic Zone (EEZ)**. China's expansive maritime claims remain disputed by several coastal states.
- **India is not a claimant**, but supports **freedom of navigation, peaceful dispute resolution and adherence to international law, including UNCLOS**.
- Large-scale reclamation also threatens **coral reefs, marine biodiversity and fisheries**.

UNITED NATIONS MISSION IN SOUTH SUDAN

India has strongly condemned the recent attack on United Nations Mission in South Sudan (UNMISS) peacekeepers and reiterated its commitment to the safety of UN personnel and the UN peacekeeping mandate.

About UNMISS

- UNMISS is a **United Nations peacekeeping mission** established under **UN Security Council Resolution 1996 (2011)** following **South Sudan's independence on 9 July 2011**.
- It operates under **Chapter VII of the UN Charter** which empowers it to take necessary measures, including the use of force where authorised, to **protect civilians** and implement its mandate.
- **Headquarters:** Juba, South Sudan.
- Following the outbreak of civil conflict in **December 2013**, **UNSC Resolution 2155 (2014)** reprioritised the mission towards **civilian protection and humanitarian assistance**.

Mandate

- **Protect civilians** from violence.
- Ensure the **safe and unhindered delivery of humanitarian assistance**.
- Promote and monitor **human rights** and violations of **international humanitarian law**.
- Support **peacebuilding, political dialogue, elections, transitional justice, and security-sector and legal reforms**.
- Prevent the escalation of conflict through **mediation and good offices**.

India's Contribution

- As of **April 2026**, **India is the largest troop contributor to UNMISS**, with about **1,775 military personnel** deployed.
- **Lieutenant General Mohan Subramanian (India)** serves as the **Force Commander of UNMISS**.
- India remains one of the **largest contributors to UN peacekeeping operations**, reflecting its long-standing commitment to international peace and security.

UN Peacekeeping

- ➔ The UN Security Council establishes UN peacekeeping missions to maintain **international peace and security**.
- ➔ The **first UN peacekeeping mission** was launched in **1948** to monitor the Arab-Israeli armistice.
- ➔ **Blue Helmets** are military personnel contributed by **UN Member States** who wear **light-blue helmets or berets** as a symbol of neutrality.
- ➔ **Core principles** are **consent of the parties, impartiality**, and **non-use of force except in self-defence and defence of the mandate**.
- ➔ **UNMOGIP** monitors the ceasefire situation between **India and Pakistan**.
- ➔ **UN Peacekeeping Forces** received the **1988 Nobel Peace Prize**.

INDIA-KUWAIT JOINT DEFENCE COMMITTEE

India and Kuwait held the inaugural meeting of the India-Kuwait Joint Defence Committee (JDC) in New Delhi. The meeting marked the operationalisation of the 2024 Memorandum of Understanding (MoU) on Defence Cooperation and reaffirmed both countries' commitment to expanding bilateral defence ties.

Key Outcomes

- ➔ Both sides agreed to strengthen cooperation in military training, joint exercises, military medicine, staff talks, the defence industry, and Research & Development (R&D).
- ➔ The JDC will serve as an **institutional mechanism** for deepening long-term defence collaboration and strategic engagement.

India- Kuwait Relations

- ➔ **Diplomatic relations** were established in **1962 (PIB)**.
- ➔ Bilateral ties were elevated to a **Strategic Partnership** during the Prime Minister's visit to Kuwait in **2024**.
- ➔ **2026–27** marks the **65th anniversary** of diplomatic relations.
- ➔ During **FY 2025–26**, Kuwait met about **3.5% of India's energy requirement**. It was India's **6th largest crude oil supplier** and **4th largest LPG source**.
- ➔ **Bilateral trade** stood at **USD 9.57 billion**, including **USD 1.65 billion** of Indian exports.
- ➔ Around **1 million Indians** reside in Kuwait, making them the **largest expatriate community**. Labour issues are addressed through the **Joint Working Group (JWG) on Labour, Employment and Manpower Development**.

Significance for India

- ➔ **Energy Security:** Kuwait is a reliable supplier of **crude oil** and **LPG**.

- ➔ **Diaspora:** The large Indian community strengthens **people-to-people relations** and contributes through **remittances**.
- ➔ **Strategic and Defence Cooperation:** Kuwait's location in the **Persian Gulf** enhances cooperation in **maritime security, defence industry, military training, and R&D**, while supporting India's engagement in **West Asia**.

Kuwait

- ➔ **Location:** A country in **Western Asia** at the **northern edge of Eastern Arabia**, on the **Persian Gulf**.
- ➔ **Borders:** **Iraq** to the north and west, **Saudi Arabia** to the south, and the **Persian Gulf** to the east.
- ➔ **Capital:** Kuwait City.
- ➔ **Climate and Terrain:** Predominantly **Arabian Desert** with a **hyper-arid desert climate**. It has **no perennial rivers or lakes**, only seasonal **wadis** ending in inland basins.
- ➔ **Natural Resources:** Rich in **petroleum** and **natural gas**.
- ➔ **Memberships:** **Gulf Cooperation Council (GCC)**, **Arab League**, **Organisation of Islamic Cooperation (OIC)**, and **OPEC**.



UN COMMITTEE ON THE ELIMINATION OF RACIAL DISCRIMINATION

India rejected the "politically motivated and malicious" observations made by the UN Committee on the Elimination of Racial Discrimination (UNCERD) following its 11th periodic review in Geneva.

About UNCERD

- ➔ **UNCERD (CERD)** is an **independent UN human rights treaty body** comprising **18 independent experts** serving in their personal capacity. It monitors the implementation of **ICERD** by its State Parties.
- ➔ **ICERD** was **adopted in 1965** and **entered into force in 1969**.
- ➔ The Committee is **administratively serviced by the Office of the United Nations High Commissioner for Human Rights (OHCHR)**.

Functions

- Reviews **initial and periodic reports** submitted by State Parties through **constructive dialogue** with their delegations.
- Issues **Concluding Observations** highlighting achievements, concerns and recommendations.
- Operates **Early Warning and Urgent Action Procedures** to prevent racial and ethnic conflicts.
- Can examine **inter-State complaints** and **individual communications** where a State Party has recognised the Committee's competence under **Article 14 of ICERD**.

UNCERD and India

- India actively supported the Convention during the global struggle against **apartheid** and **colonialism**.
- India **signed ICERD in 1967** and **ratified it in 1968**.
- India's constitutional framework reflects ICERD principles through **Articles 14, 15, 16 and 17**, along with the **Protection of Civil Rights Act, 1955** and the **Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989**.
 - ◆ While India is automatically subject to the compulsory interstate complaint mechanism under ICERD **Articles 11-13**, it has not made the optional declaration under **Article 14**, meaning it does not recognize the Committee's competence to receive individual or group communications.
- India maintains that **caste-based discrimination** is a matter of **social stratification** addressed under its constitutional and legal framework, and **not racial discrimination** under ICERD.
- State Parties submit an **initial report within one year** of the Convention entering into force for them, followed by **periodic reports every two years**.

QUALIFIED MOST-FAVOURLED NATION (MFN) CLAUSE

India is considering introducing a Qualified Most-Favoured Nation (MFN) clause while revising its Bilateral Investment Treaty (BIT) framework.

About BIT

- A **BIT** is an agreement between two countries to **promote, facilitate and protect cross-border investments** made by investors of one country in the territory of the other.

- It generally provides for protection against discriminatory treatment and safeguards against expropriation, transfer of funds and **Investor-State Dispute Settlement (ISDS)**.
- India adopted a new **Model BIT in 2015** (implemented from **2016**), which excluded an **open-ended MFN clause** and adopted a narrower **Fair and Equitable Treatment (FET)** standard.
- The change followed India's experience with **investment arbitration**, where investors relied on MFN clauses to invoke more favourable provisions in India's treaties with **third countries**.

Qualified MFN Clause

- The **MFN principle** requires a country to provide investors from one treaty partner with treatment that is no **less favourable** than that accorded to investors from another treaty partner.
- A **Qualified MFN** permits such treatment **only under clearly specified conditions**, instead of allowing unrestricted import of benefits from other investment treaties.
- It may specify:
 - ◆ **Which treaty provisions** can be invoked.
 - ◆ Whether benefits apply **retrospectively**.
 - ◆ Whether **settled disputes** can be reopened.
 - ◆ The **categories of treatment** covered.
- It differs from the **WTO MFN principle**, which applies to **trade among WTO members**, whereas BIT MFN applies to **foreign investors**.

Proposed BIT Reforms

- Reduce the period for exhausting **domestic remedies before ISDS** from **five years to one year**.
- Extend **post-treaty investment protection** from **five years to ten years**.
- Expand the definition of **investment** to include certain **portfolio investments and financial assets**.
- Prohibit **third-party funding** in investment-related disputes.

Significance

- Enhances **investor confidence** and improves policy predictability.
- Strengthens India's leverage in **BIT negotiations** and supports **Indian investors** seeking similar treatment in markets such as the **US** and **EU**.
- Balances **investment protection** with **State regulatory autonomy** by preventing unrestricted reliance on third-country treaty provisions.



PRADHAN MANTRI VIKSIT BHARAT ROJGAR YOJANA (PM-VBRY)

The Pradhan Mantri Viksit Bharat Rojgar Yojana (PM-VBRY) completed one year of implementation on 1 August 2026.

About

- PM-VBRY is a Central Sector Scheme approved by the Union Cabinet and implemented by the Ministry of Labour & Employment through EPFO.
- The implementation period of the scheme is from 1 August 2025 to 31 July 2027.
- Aim:** The scheme is aimed at Promoting first-time employment, creating additional formal jobs, expanding EPFO-based social security, and strengthening employment across sectors with special emphasis on labour-intensive manufacturing.
- The scheme targets more than 3.5 crore jobs, including 1.92 crore first-time employees.

Incentive Structure

For First-time Employees

- Employees with income up to ₹1 lakh per month receive a one-time incentive equal to one month's EPF wage. This is subject to a maximum of ₹15,000.
- The first instalment is paid after six months of continuous service.
- The second instalment is paid after twelve months of continuous service and completion of a financial literacy programme.
- A portion of the incentive is deposited in a designated savings instrument to promote long-term financial security.

For Employers

- Employers receive up to ₹3,000 per month for two years for every eligible additional employee earning up to ₹1 lakh per month and retained for at least six months.
- For the manufacturing sector, the incentive continues during the third and fourth years.

Implementation

- The scheme operates through a fully digital EPFO platform using Aadhaar authentication, **Universal Account Number (UAN)**, **Electronic Challan-cum-Return (ECR)** filings and Face Authentication Technology through the UMANG App.
- Benefits are transferred directly to Aadhaar-linked bank accounts through **Direct Benefit Transfer (DBT)**.
- The PM-VBRY portal enables real-time monitoring of beneficiaries and sector-wise progress.

- EPFO, Employees' State Insurance Corporation (ESIC) and the Chief Labour Commissioner (CLC) support implementation through nationwide awareness and outreach programmes.

Progress

- During its first year, the scheme encouraged the formalisation of employment by bringing more workers into the organised workforce through EPFO registration.
- More than 72 lakh first-time employees joined the formal workforce.
- Over 15 lakh beneficiaries received employment-linked incentives.
- Nearly 30% of beneficiaries are women, reflecting greater participation of women in formal employment.

Pradhan Mantri Viksit Bharat Rozgar Yojana

PART A

Incentive to First Time Employees

Incentive of up to ₹15,000 for first-time employees registered with EPFO

Employees with Gross wages upto 1 Lakh are eligible

Online Financial literacy course for employees

PART B

Support to Employers

Incentives for generating additional employment

Incentives to employers of all sectors for 2 years; 4 years for manufacturing

Employers will receive up to ₹3,000 per month for each additional employee

ONE YEAR OF PM-VBRY



72 lakh+ first-time employees brought into formal workforce since August 2025

~30% women beneficiaries



₹2,400 crore+ disbursed in June 2026

15 lakh+ beneficiaries received incentives



March 2026 disbursement: ₹462 crore released

Supported ~6.46 lakh additional workers



THE TAXATION AND OTHER LAWS (AMENDMENT) ACT, 2026

Parliament has passed the Taxation and Other Laws (Amendment) Act, 2026, replacing the Taxation and Other Laws (Amendment) Ordinance, 2026.

About

- The Act amends the **Income-tax Act, 2025**, **Finance Act, 2026**, and the **Payment and Settlement Systems Act, 2007**.

Key Provisions

- **Government Securities:** Exempts **Foreign Institutional Investors (FIIs)** and the **Bank for International Settlements (BIS)** from income tax on **interest income** and **capital gains** from government securities.
- **Diamond Sector:** Exempts eligible foreign **diamond mining companies**, **sightholders**, brokers, aggregators and auction entities from tax on income earned through the sale of **rough diamonds** in notified special zones.
- **Electronics Manufacturing:** Exempts specified income from storing electronic components in **customs bonded warehouses** and supplying capital goods to Indian contract manufacturers of **mobile phones, laptops, servers, and their sub-assemblies/components**.
- **Foreign Investment Funds:** Relaxes several eligibility conditions for foreign investment funds managed from India while retaining the favourable tax treatment.
- **Business Trusts:** Raises the surcharge on **Special Purpose Vehicles (SPVs)** of **Real Estate Investment Trusts (REITs)** and **Infrastructure Investment Trusts (InvITs)** from **10% to 25%**. It also exempts eligible dividend income received by unit holders.
- **Data Centres:** Extends tax exemptions to services procured from **leased and operated Indian data centres** and removes certain approval requirements for eligible foreign companies.
- **Digital Payments:** Removes the statutory **zero-Merchant Discount Rate (MDR)** provision, empowering the **Central Government** to permit charges on notified digital payment modes, including **UPI**. **MDR** is the fee charged to merchants for processing digital payment transactions.

Significance

- Strengthens **FDI**, **electronics manufacturing**, **data centres**, **investment fund management**, and **Ease of Doing Business**.

Concerns

- Tax incentives may reduce **government revenue** in the short term and require safeguards against **tax avoidance** and **round-tripping**.

POLYMER BANKNOTES

The government has approved the Reserve Bank of India's (RBI) proposal to introduce polymer banknotes in the denominations of ₹10 and ₹20.

About

- Also known as **plastic banknotes**.
- Unlike conventional cotton-based banknotes, they are more resistant to **dirt, moisture and tearing**, resulting in a longer lifespan.
- Incorporate **advanced security features**, making counterfeiting more difficult.
- **Australia** was the **first country** to introduce polymer currency in **1988**.
- Over **60 countries**, including the **UK, Canada, Australia, New Zealand, Singapore, Malaysia and Vietnam**, use polymer notes fully or partially.

India's Previous Trial

- In **2012**, the RBI conducted pilot trials of **₹10 polymer banknotes** in **Kochi, Mysuru, Jaipur, Bhubaneswar and Shimla**, representing diverse climatic conditions.
- The initiative was discontinued due to **operational and ATM-related challenges**.

'SAMUDRA MANTHAN' – NATIONAL OFFSHORE EXPLORATION SCHEME

The Union Cabinet has approved 'Samudra Manthan' – the National Offshore Exploration Scheme with an approved outlay of ₹84,084 crore for implementation up to FY 2030-31.

About

- **Nature:** Central Sector Scheme.
- **Ministry:** Ministry of Petroleum & Natural Gas.
- **Aim:** To unlock India's **offshore energy potential**, strengthen **energy security** and support the goal of **Viksit Bharat**.
- **Objective:** Enhance energy security by unlocking over **600 Million Metric Tons of Oil Equivalent (MMTOE)** of offshore reserves and boosting domestic oil and gas output.

Components

- Acquisition and processing of modern **offshore seismic data**.
- Drilling of **60 deepwater exploration wells**. Government support of up to **50% of eligible drilling cost** or **₹675 crore per well, whichever is lower**.
- Development of **common offshore infrastructure hubs** to facilitate commercialisation of discoveries.
- Establishment of **Oil and Gas Manufacturing and Services Zones**.

Offshore Exploration

- Search for natural resources, primarily **crude oil, natural gas and seabed minerals**, beneath the ocean floor.
- Involves geological, geophysical and engineering methods to locate and evaluate potential reserves before commercial drilling or extraction.

BHARAT MARITIME INSURANCE POOL (BMIP)

The Department of Financial Services (DFS) has launched India's first sovereign-backed Protection and Indemnity (P&I) insurance product under the Bharat Maritime Insurance Pool (BMIP).

Objectives

- Ensure continuity of **maritime war risk insurance coverage**.
- Develop **domestic underwriting capacity**.
- Enhance confidence among India's **shipping and trade stakeholders**.

Protection and Indemnity (P&I) Cover

- Designed by the **New India Assurance Company**.
- Provides financial protection against **third-party liabilities**, including:
 - ♦ Crew and Cargo liability
 - ♦ Pollution liability
 - ♦ Wreck removal
- Provides a **24x7 port correspondent network**.
- **Indemnity limit**: up to **\$1.5 billion** through the combined capacity of the pool.

Bharat Maritime Insurance Pool (BMIP)

- **Approved**: By the Union Cabinet in **April 2026**.
 - ♦ Backed by a **sovereign guarantee of ₹12,980 crore**.
- **Aim**: To provide uninterrupted and cost-effective maritime insurance cover to **Indian-flagged/controlled vessels and ships carrying cargo to and from India**, including in high-risk geopolitical areas.
 - ♦ Addresses India's dependence on foreign **International Group of Protection & Indemnity (IGP&I) Clubs** for third-party liability insurance.
- **Coverage**: Hull & Machinery, Cargo, Protection and Indemnity (P&I), and War Risk.
 - ♦ Member insurers shall underwrite policies with a total underwriting capacity of **₹950 crore**.

BLOOMBERG GLOBAL AGGREGATE BOND INDEX

Bloomberg Index Services Ltd. (BISL) has once again deferred the inclusion of Indian government bonds in the Bloomberg Global Aggregate Bond Index.

About

- Bloomberg's flagship **global investment-grade bond index**.
- Tracks **government, corporate and securitised bonds** across developed and emerging markets.
- Serves as a **benchmark for global fixed-income investors and passive investment funds**.
- Countries included in the index generally attract **larger foreign investments** into their bond markets.

AGRIVOLTAICS: POWERING AI INFRASTRUCTURE SUSTAINABLY

The proposed Google AI Data Centre in Visakhapatnam has brought the concept of agrivoltaics into focus as a sustainable solution to meet the rising energy demand of AI infrastructure.

About Agrivoltaics

- Also known as **Agri-Photovoltaics (APV)**.
- A land-use system where **agriculture and solar power generation** are carried out simultaneously on the same land.
- Solar panels are installed about **10–12 feet high**, allowing farming activities to continue underneath.
- Enables the same land to produce **food and renewable energy**, improving **land-use efficiency and farm income**.
- **Government Support**: PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) promotes decentralised solar power generation and solarisation of agriculture.

GEOGRAPHICAL INDICATION (GI)

GI tags have emerged as a tool for protecting India's cultural heritage while creating economic opportunities for local communities.

About GI

- A **sign used on products** that have a **specific geographical origin** and possess qualities or a reputation due to that origin.
- The sign must identify a **product as originating in a given place**.
- Typically used for **agricultural products, foodstuffs, wine and spirit drinks, handicrafts and industrial products**.
- **Darjeeling Tea from West Bengal** was the first product in India to receive a GI tag.
- **Significance**: Acts as a **seal of authenticity**, safeguarding products against imitation, misuse and unauthorised commercialisation.

TOP 10 STATES BY GI REGISTRATIONS

Uttar Pradesh	81
Tamil Nadu	76
Maharashtra	55
Karnataka	49
Assam	42
Kerala	41
West Bengal	36
Gujarat	30
Madhya Pradesh	30
Uttarakhand	29

- **Regulation of GI**:
 - ♦ Recognised internationally under the **Paris Convention for the Protection of Industrial Property** and the **WTO**

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

- ♦ In India, registration and protection are governed by the **Geographical Indications of Goods (Registration and Protection) Act, 1999** and Rules notified in 2002.
- ♦ GI registration is valid for **10 years**.
- ♦ The **Geographical Indications of Goods (Registration and Protection) Rules, 2002**, were amended in 2025.

GI Exclusions: What Cannot Be Registered

- ➔ **Generic product names** are no longer protected in their country of origin.
- ➔ Indications that **mislead consumers** or falsely suggest a different geographical origin.
- ➔ Indications that **offend religious sentiments** or contain scandalous, offensive or obscene matter.
- ➔ Indications not eligible for legal protection or that **violate any law in force**.

GOVERNMENT E-MARKETPLACE (GEM)

Government e-Marketplace (GeM) completed 10 years of operations on 9 August 2026, marking a decade of transforming public procurement through digital technology.

About GeM

- ➔ **About:** GeM is a one-stop online portal for procurement of goods and services by Central and State Governments, Ministries, Departments, Public Sector Undertakings (PSUs), Autonomous Bodies, local bodies, Panchayats and Cooperatives.
- ➔ **Launch & Administration:** It was launched in 2016 and is operated by GeM SPV, a 100% government-owned Special Purpose Vehicle under the Ministry of Commerce and Industry.
- ➔ **Mandatory Procurement:** In 2017, the Ministry of Finance made procurement through GeM mandatory for government buyers.
- ➔ **Core Principles:** Transparency, efficiency, inclusiveness, competition and value for money.
- ➔ **Key Features:**
 - ♦ Enables **paperless, cashless and contactless** procurement.
 - ♦ Digitises the **entire procurement lifecycle**, from seller registration to payment.
 - ♦ Supports **direct purchase, comparison, e-bidding and reverse auctions**.
 - ♦ Uses **Artificial Intelligence (AI)** and **Machine Learning (ML)** to detect **cartelisation, collusion and order splitting**.
 - ♦ Provides tools such as **GeM Availability Reports, Past Transaction Summary, Last Purchase Price and Price Trend Analysis** for informed procurement.
 - ♦ Integrates with **CPPP, IREPS and DPPP** to build a unified public procurement ecosystem.

Core Principles of GeM

TRANSPARENCY	Relevant information on sellers, goods, and services shall be easy to find and readily available for users.
FAIRNESS	GeM allow sellers, big and small, to gain direct access to Government buyers.
INCLUSIVENESS	All sellers interested in conducting business with the Government shall be welcomed on the platform.

Major Achievements

- ➔ Facilitated cumulative Gross Merchandise Value (GMV) of over ₹20 lakh crore through more than 3.78 crore orders.
- ➔ Achieved the first ₹10 lakh crore GMV in over eight years, while the next ₹10 lakh crore was added in less than two years.
- ➔ Expanded to 1.37 lakh buyer organisations and over 25.45 lakh registered sellers and service providers.
- ➔ Offers 10,660+ product categories and 350+ service categories.
- ➔ The Department of Military Affairs crossed ₹1.35 lakh crore GMV through GeM by August 2026.

Major Initiatives and Inclusive Procurement

- ➔ **GeMSahay** provides **instant collateral-free working capital loans** to eligible sellers.
- ➔ **SWAYATT** promotes participation of **startups, women entrepreneurs, Micro and Small Enterprises (MSEs) and Self-Help Groups (SHGs)**.
- ➔ Dedicated platforms such as **Womaniya, SARAS Collection** and **Startup Runway 2.0** improve market access.
- ➔ **GeM Suvidha Kendras**, established with **CSC-SPV**, support registration, training and grievance redressal.
- ➔ Partnerships with **AJNIFM, NCGG, IIPA and CareEdge Ratings**, along with **EPFO integration**, strengthen capacity building, policy support and compliance.
- ➔ GeM advances the objectives of **Digital India, Make in India, Aatmanirbhar Bharat, Vocal for Local** and **Ease of Doing Business**.
- ➔ In 2025–26, GeM enabled procurement worth **over ₹2.36 lakh crore** from **11 lakh+ MSEs**, **₹28,000 crore+** from **women-led enterprises**, **₹6,000 crore+** from **SC/ST enterprises**, and **₹19,000 crore+** from **startups**.

CONTAINER MANUFACTURING ASSISTANCE SCHEME (CMAS)

The Union Government has proposed the Container Manufacturing Assistance Scheme (CMAS) with an outlay of ₹10,000 crore to build a globally competitive container manufacturing ecosystem in India.

About CMAS

- **About:** CMAS is a **Central Sector Scheme** of the **Ministry of Ports, Shipping and Waterways**, as announced in the **Union Budget 2026–27**.
 - ♦ **Outlay:** The scheme has a proposed allocation of **₹10,000 crore** over **five years**.
 - ♦ **Objective:** To develop a **globally competitive domestic container manufacturing ecosystem** through financial support, technology adoption and investment across the value chain.
 - ♦ **Capacity Expansion:** It supports the establishment of **new Greenfield manufacturing facilities** and the expansion of **existing Brownfield units**.
- **Production Target:** It aims to raise India's annual container manufacturing capacity to **7.5 lakh Twenty-foot Equivalent Units (TEUs)**, nearly **10 times** the present capacity.
- **Financial Assistance:**
 - ♦ **Capital support** for Greenfield projects.
 - ♦ Assistance for **Brownfield expansion**.
 - ♦ **Operational support** to improve the global competitiveness of domestic manufacturers.
- **Ecosystem Development:** The scheme promotes **testing and certification infrastructure, skilling, technology upgradation and capacity building** to strengthen the container manufacturing value chain.
- **Economic Significance:** It is expected to create a market opportunity of about **₹80,000 crore** while positioning India as a reliable producer of **internationally competitive shipping containers**.
- **Strategic Importance:** CMAS aims to reduce dependence on imported containers, improve **trade and logistics resilience**, strengthen **maritime self-reliance**, and support India's export competitiveness.
- **Policy Alignment:** The scheme complements **Make in India, Maritime Amrit Kaal Vision 2047** and **multimodal logistics development**, thereby enhancing India's long-term maritime and logistics capabilities.

BETTER PIGEONPEA VARIETIES

The Indian Council of Agricultural Research (ICAR) has developed India's first fully annotated telomere-to-telomere (T2T) reference genome of pigeonpea (*Cajanus cajan* L. Millsp.) variety 'Asha'.

About Pigeonpea

- Scientific name: *Cajanus cajan*.
- A major pulse crop cultivated extensively across the **tropics and subtropics**, predominantly under **rainfed conditions**.
- Highly sensitive to **erratic rainfall, poor seedling establishment and moisture stress during germination**.
- **Global producers:** Myanmar, Malawi, Kenya, Uganda, Haiti, Democratic Republic of Congo and Nepal.

- **Major producing States in India:** Uttar Pradesh, Madhya Pradesh, West Bengal, Bihar, Karnataka and Jharkhand.
- Popularly known as '**Arhar**' or '**Tur**'.

Important Note

- **Telomeres:** Repetitive DNA sequences at the ends of chromosomes that maintain their stability and integrity.
 - ♦ They shorten with each cell division, and when they reach a critical length, cells stop dividing.
 - ♦ Their highly repetitive DNA makes them difficult to sequence using conventional methods.
- **Telomere-to-Telomere (T2T) Genome:** A complete and highly accurate genome sequence without gaps from one telomere to another.
 - ♦ The **T2T-CHM13 human genome** resolved previously missing regions such as repetitive DNA and centromeric regions.

Mission for 'Aatmanirbharta in Pulses

- **Duration:** 2025-26 to 2030-31.
- **Aim:** Achieve self-sufficiency in pulse production, reduce import dependence and enhance farmers' income.
- Focuses on improved seeds, area expansion, technology adoption, assured procurement and strengthened post-harvest infrastructure.
- Targets increasing pulse production to about **35 million tonnes by 2030–31** through research, seed systems and extension services.

MSME SUSTAINABLE ZED CERTIFICATION SCHEME

The Ministry of Micro, Small and Medium Enterprises (MSME) is promoting **quality-driven and environmentally sustainable manufacturing through the MSME Sustainable (Zero Defect, Zero Effect – ZED) Certification Scheme**.

About

- It encourages MSMEs to manufacture **high-quality products while minimising their environmental impact**.
- It supports enterprises in continuously improving their **technology, systems and manufacturing practices** to enhance quality, productivity and sustainability.
- **Eligibility:** All MSMEs registered with the **Udyam Registration Portal of the Ministry of MSME** are eligible to participate and avail related benefits and incentives.
- It offers **Bronze, Silver and Gold certifications**, allowing MSMEs to progressively improve their quality and sustainability standards.
- **Eligible enterprises can avail financial assistance of:**
 - ♦ Up to **75% of the cost of testing, system or product certification**, subject to a maximum of **₹50,000**.

- ♦ Up to ₹2 lakh for consultancy and handholding support.
 - ♦ Up to ₹3 lakh for adopting cleaner technologies, pollution-control measures and Zero Effect solutions.
- ➔ **Women-owned MSMEs:** The government provides a **100% subsidy on the cost of ZED certification** since November 2023.

MITHILA MAKHANA

The Agricultural and Processed Food Products Export Development Authority (APEDA) has facilitated the first-ever commercial sea shipment of GI-tagged Mithila Makhana from Bihar to Australia.

About Mithila Makhana

- ➔ Makhana, also known as **fox nut or gorgon nut**, is the seed of the prickly water lily (*Euryale ferox*), grown in stagnant freshwater bodies such as ponds and wetlands.
- ➔ It is popularly called the **"Black Diamond"** because of its dark outer shell, which turns white after processing.
- ➔ **Mithila Makhana received its GI tag in 2022**, linking the product to the Mithila region of Bihar, particularly **Darbhanga, Madhubani and Purnia**.

Makhana Board

- ➔ The Union Budget 2025–26 announced the establishment of a **Makhana Board in Bihar**, along with a **National Makhana Research Centre**, to strengthen production, processing, value addition and marketing.
- ➔ Bihar accounts for nearly 85% of India's total Makhana production. Makhana is also covered under the government's **One District One Product (ODOP)** scheme.
- ➔ The Board follows a sector-specific model similar to institutions such as the **Tea Board, Coffee Board and Turmeric Board**.

CREATORS ECONOMY OF INDIA

PM Modi said that India has an extraordinary pool of creative talent, which can be leveraged to strengthen the country's position as a global hub for content creation.

About Creator Economy

- ➔ It refers to an ecosystem where individuals use digital platforms to create, distribute and monetise content, skills or influence directly to audiences, often without traditional intermediaries.
- ➔ **Key Components:**
 - ♦ **Creators:** YouTubers, podcasters, bloggers, influencers, educators, gamers and artists.
 - ♦ **Platforms:** YouTube, Instagram, X, etc.
 - ♦ **Monetisation Tools:** Advertisements, brand sponsorships, subscriptions, tips, NFTs and merchandise.
 - ♦ **Audiences/Communities:** Followers, subscribers and niche communities.

- ♦ **Enablers:** Payment gateways, analytics tools, AI tools and creator management agencies.

PRADHAN MANTRI AWAS YOJANA-URBAN

Pradhan Mantri Awas Yojana-Urban (PMAY-U) has sanctioned over 1.25 crore houses, with more than 1 crore completed and delivered to beneficiaries.

About PMAY-U

- ➔ It was **launched in 2015** to transform the urban housing landscape in India.
- ➔ It aims to provide **dignified housing for urban migrants and economically disadvantaged sections**.
- ➔ It addresses the housing shortage faced by:
 - ♦ Economically Weaker Section (EWS).
 - ♦ Low Income Group (LIG).
 - ♦ Middle-Income Group (MIG).
 - ♦ Slum dwellers.
- ➔ **Aim:** To ensure that all eligible urban households have access to **permanent and durable housing**.



RBI'S NEW LOAN RECOVERY RULES

RBI issued comprehensive rules governing loan recovery practices by commercial banks and outsourced recovery agents.

About New Rules

- ➔ Regulates loan recovery practices while protecting borrowers from harassment
- ➔ Effective from **January 1, 2027**
- ➔ First detailed regulatory framework for technology-based restrictions on devices financed through bank loans.

Key Provisions

- ➔ **No device locking:** Remote locking or restriction of devices prohibited unless loan specifically financed the device
- ➔ **No harassment:** No abuse, threats, intimidation or public shaming by recovery agents
- ➔ **Privacy protection:** No access to contacts, photos, messages, call records or location data for recovery
- ➔ **Limited data sharing:** Only to the extent necessary for debt recovery
- ➔ **Borrower liability:** EMLs, outstanding debt and interest remain payable
- ➔ **Defaults:** Continued legal and credit score implications

RBI Rule	Interpretation for Borrowers
Personal devices	Cannot be disabled for recovery of unrelated loans
Financed devices	Restrictions may apply, subject to RBI safeguards
Notice period	The borrower must receive due notice before restrictions
30 days past due	Device restrictions cannot begin before this stage
60 days past due	Full restrictions may be imposed as per the loan agreement
Essential functions	Incoming calls, SMS and emergency SOS must remain available
Personal data	Contacts, photos, SMS, call logs and location history cannot be accessed for recovery

PRADHAN MANTRI ANNADATA AAY SANRAKSHAN ABHIYAN (PM-AASHA)

PM-AASHA has emerged as a strong and structured mechanism to support farmers through assured procurement, price stabilisation, and effective market interventions.

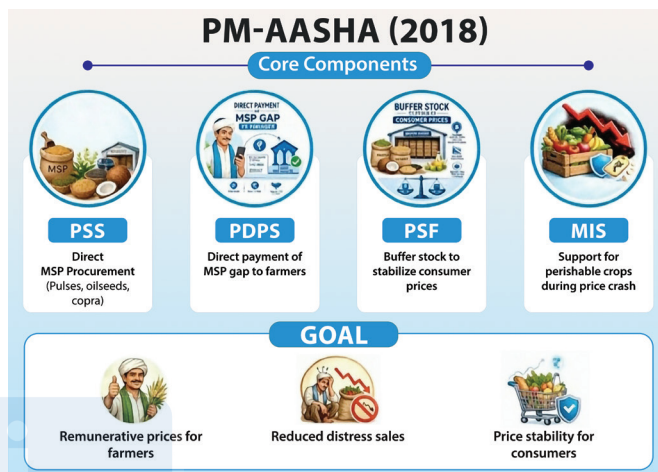
About PM-AASHA

- ➔ Mechanism for farmer support through **assured procurement, price stabilisation and market intervention**
- ➔ Launched in **September 2018**
- ➔ Protection from **distress sales**
- ➔ Balance between farmer incomes and **consumer price stability**

Components

- ➔ **Price Support Scheme (PSS):** Procurement of **pulses, oilseeds and copra** at MSP
 - ♦ From **2024-25:** Tur, Urad and Masur procurement up to **100% of State production**
- ➔ **Price Stabilization Fund (PSF):** Buffer stocks of **pulses, onions and potatoes** for price stability

- ➔ **Price Deficiency Payment Scheme (PDPS):** Difference between **MSP and market price** paid to farmers
 - ♦ Mostly for **oilseeds**
 - ♦ No physical procurement
- ➔ **Market Intervention Scheme (MIS):** Support for **perishables** such as tomatoes, onions and potatoes during price crash or oversupply.



CORE SECTOR GROWTH SLOWS

Growth in India's core industrial sectors slowed to **5.4% in July 2026** from **6% in June**.

About

- ➔ **Nine core industries** are Coal, Crude Oil, Natural Gas, Petroleum Refinery Products, Fertilizers, Steel, Cement, Iron ore and Electricity.
- ➔ Slowdown is driven by fertilisers, iron ore and steel.
- ➔ Continued contraction in natural gas and crude oil is noted.

Index of Core Industries ICI

- ➔ Production volume index providing advance indication of production performance of core industries before release of IIP
- ➔ **Compilation:** Office of the Economic Adviser (OEA), Department for Promotion of Industry and Internal Trade of India (DPIIT), Ministry of Commerce & Industry

GST APPELLATE TRIBUNAL (GSTAT)

Less-than-anticipated cases were filed with the GST Appellate Tribunal.

About GSTAT

- ➔ Statutory **quasi-judicial body** under **CGST Act, 2017**
- ➔ **Second appellate authority** for GST disputes
- ➔ Unified platform for disputes between **taxpayers and tax authorities**

- **First appellate authority:** Commissioner (Appeals) level officer
- **GSTAT e-filing portal:** Operational from 2025
- Deadline for time-barred appeals: **July 31, 2026**

Token System

- Introduced after consultations with **Department of Revenue** and **Ministry of Finance**
- Businesses facing July 31 limitation could generate **tokens** on e-filing portal
- **Token generation:** 60 days allowed for filing case before appellate tribunal

5 YEARS OF E-SHRAM PORTAL

The e-Shram Portal completed five years, marking a significant milestone in strengthening social security for India's unorganised workforce.

About e-Shram Portal

- Launched in 2021 by **Ministry of Labour and Employment**
- Developed by **National Informatics Centre (NIC)**
- India's first **Aadhaar-seeded National Database of Unorganised Workers**
- Unique **12-digit Universal Account Number UAN** for registered workers.
- One-stop digital platform for **welfare, jobs, skilling, apprenticeship and pension services**

Eligibility

- Unorganised sector workers aged **16 years and above**
- Not an **income tax-payer**
- Not a member of **EPFO or ESIC**

Coverage

- construction workers, migrant workers, gig and platform workers, street vendors, domestic workers, agricultural workers, and other unorganised workers.

Objectives

- **Welfare convergence:** Integration of welfare schemes across Ministries and Departments
- **Data sharing:** Secure worker data sharing through **APIs**
- **Portability:** National availability of social security and welfare benefits
- **National database:** Prompt preparation and response during emergencies and disasters.

SEBI'S IT RESILIENCE INDEX (ITRI)

SEBI introduced IT Resilience Index ITRI framework for Market Infrastructure Institutions MIIs Focus on strengthening technology systems.

About ITRI

- Quantitative scorecard to measure **IT resilience, cybersecurity, reliability and disaster recovery**

- Critical market systems capable of withstanding **cyberattacks, technical failures and sudden transaction surges**
- Quick restoration of operations

Key Features

- Shift from periodic compliance checks to **measurable, real-time resilience assessment**
- **9 risk-based parameters**
- **Availability and Cybersecurity:** Highest weight **20% each**
- **Business Continuity, Reliability and Scalability:** Recovery and market-stress handling
- **Early Warning System EWS:** Detection of performance issues before major outages
- **Resilience-first approach:** Absorbing shocks and quick recovery alongside failure prevention
- Supports SEBI's technology agenda including **AI/ML, SupTech/RegTech and quantum-safe cybersecurity**.

EMERGENCY CREDIT LINKED GUARANTEE SCHEME (ECLGS) 5.0

The Emergency Credit Linked Guarantee Scheme (ECLGS) 5.0 will operate only until its ₹2.5 lakh crore guarantee cover is exhausted, with guarantees being sanctioned on a first-come, first-served basis.

Background

- **ECLGS:** Announced in **May 2020** under **Aatmanirbhar Bharat Abhiyaan**
- Support for eligible **MSMEs and other business enterprises**
- Focus on operational liabilities and business restart amid **COVID-19 disruption**
- Coverage across almost all sectors
- **100% guarantee** to Member Lending Institutions **MLIs** for eligible credit facilities.

About ECLGS 5.0

- Approved by **Union Cabinet in 2026**
- Risk mitigation for lending institutions to expand lending
- Support for managing **cash-flow shocks** and continuing operations
- Rapid, large-scale liquidity support to firms affected by **West Asia geopolitical scenario**

Salient Features

- **Eligible Borrowers:** MSMEs, non-MSMEs with working capital restrictions and scheduled passenger airlines
 - ♦ Outstanding credit facilities as on **March 31, 2026**
 - ♦ Accounts required to be **standard**
- **Guarantee Coverage:** 100% for MSMEs; 90% for non-MSMEs and airlines
- **Guarantee Fee:** Nil
- **Quantum of Support:** Additional credit up to 20% of peak working capital used in Q4 FY26

- ♦ Maximum ₹100 crore
- ♦ **Airlines:** Up to 100%, maximum ₹1,500 crore per borrower subject to conditions
- ➔ **Loan Tenure — MSMEs/Non-MSMEs:** 5 years
 - ♦ **Moratorium:** 1 year
 - ♦ From date of first disbursement
- ➔ **Airlines: 7 years**
 - ♦ **Moratorium:** 2 years
- ➔ **Guarantee Cover:** Maximum duration runs concurrently with loan tenor.

PRADHAN MANTRI FASAL BIMA YOJANA

Pradhan Mantri Fasal Bima Yojana (PMFBY) has evolved as one of the key pillars of India's agricultural risk management system in the last 10 years.

About PMFBY

- ➔ Coverage from **pre-sowing to post-harvest**
- ➔ **Pre-sowing:** Prevented/failed sowing
- ➔ **Standing crops:** Mid-season adversity and yield losses
- ➔ **Localised calamities:** Hailstorms, floods, landslides etc.
- ➔ **Post-harvest:** Cyclones, unseasonal rainfall and specified hazards

Premium

- ➔ **Kharif foodgrain & oilseed:** Maximum 2%
- ➔ **Rabi foodgrain & oilseed:** Maximum 1.5%
- ➔ **Commercial & horticultural crops:** Maximum 5%
- ➔ **Balance premium subsidy:**
 - ♦ **Centre:** State = 50:50
 - ♦ North-Eastern & Himalayan States/UTs = 90:10

Eligibility

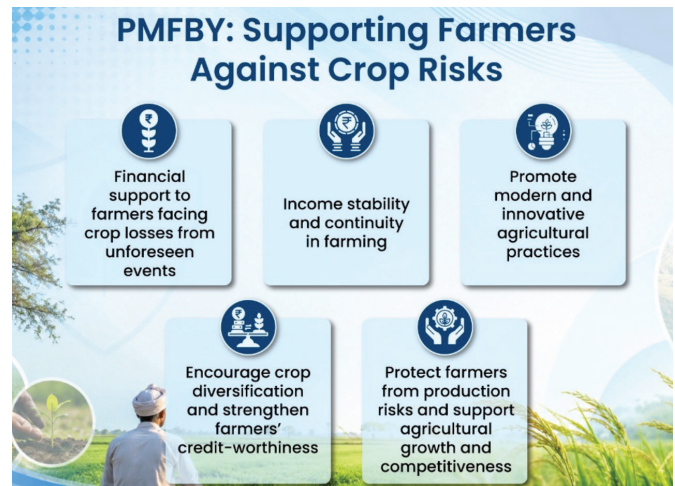
- ➔ Loanee and non-loanee farmers
- ➔ Tenant farmers and sharecroppers
- ➔ Non-loanee farmers: **Voluntary enrolment**
- ➔ Documentation and eligibility: **State-specific**

Risks Covered

- ➔ **Yield losses:** Drought, dry spells, floods, inundation, cyclones, hailstorms, lightning, pests and diseases
- ➔ **Prevented sowing:** Claims up to **25% of sum insured**
- ➔ **Post-harvest losses:** Cut-and-spread crops for drying coverage up to **14 days after harvesting**
- ➔ **Localised calamities:** Hailstorms, landslides, inundation, cloudbursts and natural fire under specified conditions.

Exclusions

- ➔ War, nuclear risks, riots, theft
- ➔ Specified post-harvest conditions
- ➔ Preventable, negligent or man-made causes
- ➔ Losses outside **reported locations** or **covered crop lifetime**



NATIONAL CIRCULAR BIOENERGY SCHEME (GOBARDHAN SCHEME)

Recently, the Union Cabinet approved the National Circular Bioenergy Scheme (GOBARDhan – Galvanising Organic Bio-Agro Resources Dhan) with a total outlay of ₹23,731 crore.

About

- ➔ It aims to create an enabling ecosystem for **Compressed Biogas (CBG) production** through managed pricing, capital subsidies, pipeline infrastructure support and easier access to finance.
- ➔ It aims to increase domestic **CBG production by over 10 times** and create a stable and predictable investment environment.
- ➔ It encourages CBG production from diverse organic wastes, including **agricultural residues, animal manure, sugar industry waste such as press mud, municipal organic waste and other biodegradable biomass.**
- ➔ The CBG produced can be blended with **Compressed Natural Gas (CNG)** for transportation and distributed through **Piped Natural Gas (PNG)** networks.

Major Features

- ➔ **Assured Market and Administered Pricing:** CBG will be fixed at an administered price of **₹2,110 per Metric Million British Thermal Unit (MMBTU).**
- ➔ **Capital Assistance:** Eligible greenfield and brownfield CBG projects for capacity expansion will receive capital assistance of up to **₹2 crore per tonne per day (TPD)** of installed CBG capacity. Covers core plant machinery, feedstock aggregation infrastructure and manure processing.
- ➔ **Development of Pipeline Infrastructure:**
 - ♦ Supports cluster-based pipeline networks and standalone pipelines connecting CBG plants to trunk pipelines.
 - ♦ Facilitates integration with **City Gas Distribution (CGD)** networks.

Cabinet Approves ₹23,731-Crore GOBARdhan Scheme

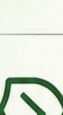
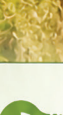
to Scale Up Compressed Biogas Production

Ministry of Petroleum
and Natural Gas
Government of India

Landmark national scheme to convert India's organic wealth into clean energy, rural prosperity and economic growth

-  Outlay of ₹23,731 crore (FY 2026-27 to FY 2035-36)
-  Assured offtake, stable pricing, capital assistance, pipeline connectivity and credit support
-  Aims for nearly ten-fold growth in domestic CBG production
-  Transforms agricultural residue, cattle dung, municipal waste into clean fuel and organic manure
-  Boost to farmers, rural entrepreneurs and private investment
-  Supports waste-to-wealth, Atmanirbhar Bharat and Viksit Bharat

SIX GROWTH ENGINES UNDER GOBARdhan

-  1. Assured CBG Offtake
-  2. Stable CBG Pricing Framework
-  3. Capital Assistance
-  4. Development of Pipeline Infrastructure
-  5. Credit Guarantee Support
-  6. CBG Ecosystem Challenge Fund

India's waste will fuel India's growth. India's villages will become centres of clean energy production. India's farmers will become partners in the nation's energy security.



EX POST FACTO ENVIRONMENTAL CLEARANCES

The Supreme Court quashed the 2021 Office Memorandum (OM) that permitted ex post facto (retrospective) Environmental Clearances (ECs) for projects that had begun without prior approval.

Supreme Court's Ruling

- ➔ The Court held that such a mechanism **cannot be created through an administrative OM**. However, in exceptional cases and in **public interest**, the Central Government may provide such a mechanism through a **statutory notification** issued under the **Environment (Protection) Act, 1986**.
 - ♦ Existing clearances granted under the 2021 OM remain protected as the judgement operates **prospectively**.
- ➔ The **2021 OM** was an **administrative instruction**. It did not have the force of law.
- ➔ It could not modify the **mandatory prior Environmental Clearance** requirement under the **EIA Notification, 2006**.
- ➔ The Court clarified that only a **statutory notification**, issued under delegated powers of the **Environment (Protection) Act, 1986**, can create a limited ex post facto EC mechanism in exceptional circumstances.

Office Memorandum vs Statutory Notification

- ➔ **Office Memorandum (OM)**: Administrative instruction issued by a ministry. It does **not** have statutory force.
- ➔ **Statutory Notification**: Issued under powers conferred by a statute. It has **legal enforceability** after publication in the Official Gazette.

Environmental Impact Assessment (EIA)

- ➔ **EIA** is a process that assesses the likely environmental impacts of a proposed project **before approval**.
- ➔ It helps minimise environmental damage through mitigation measures.
- ➔ It supports **sustainable development**, informed decision-making, public participation and efficient resource use.

EIA Framework in India

- ➔ **1986: Environment (Protection) Act** enacted.
- ➔ **1994: First EIA Notification** made prior to **Environmental Clearance (EC)** mandatory for specified projects.
- ➔ **2006: Revised EIA Notification** became the current regulatory framework. It classifies projects into:
 - ♦ **Category A**: Appraised by the **Expert Appraisal Committee (EAC)**. EC granted by **MoEFCC**.
 - ♦ **Category B**: Appraised by **State Expert Appraisal Committee (SEAC)**. EC granted by the **State Environment Impact Assessment Authority (SEIAA)**.

Concerns

- ➔ Frequent amendments to the **EIA Notification, 2006**, have raised concerns over **transparency, public consultation** and **environmental safeguards**.

Way Forward

- ➔ Strengthen **scientific and transparent EIAs**.
- ➔ Improve **public consultation**, including local-language access.
- ➔ Enhance **post-clearance monitoring and compliance audits**.
- ➔ Ensure that any future ex post facto EC mechanism is **strictly backed by statutory authority** and used only in **exceptional public-interest cases**.

HOUBARA BUSTARD (ASIAN HOUBARA / MACQUEEN'S BUSTARD)

Uzbekistan, Kazakhstan and the UAE jointly released 672 captive-bred Asian Houbara Bustards into the Aral Sea region of Karakalpakstan, Uzbekistan.

About the Houbara Bustard

- ➔ The **Asian Houbara (Chlamydotis macqueenii)**, also known as **MacQueen's Bustard**, is a medium-sized, ground-dwelling migratory bird belonging to the bustard family (**Otididae**).
- ➔ It belongs to the same family as **India's Great Indian Bustard**, although the two species differ significantly in their distribution and conservation status.
- ➔ It inhabits **arid and semi-arid landscapes**, including **sandy and rocky deserts, gravel plains, dry steppes and open shrublands**.
- ➔ Its range extends across **Central Asia, the Middle East, North Africa and parts of South Asia**, including the **Thar Desert** and the **Rann of Kutch** in India.



Key Features

- ➔ **Excellent Camouflage**: Sandy-brown mottled upperparts and a pale underside help it blend with desert surroundings.
- ➔ **Ground-dwelling Behaviour**: Its strong legs enable it to walk and run swiftly across rough terrain. It usually flies only when threatened.

- **Courtship Display:** Males raise their distinctive black-and-white neck feathers and perform elaborate display runs to attract females.
- **Diet:** It is an **opportunistic omnivore** that feeds on **seeds, shoots, insects, small reptiles and other invertebrates**.
- **Migration:** Northern breeding populations migrate seasonally from **Central Asia** to wintering grounds in **India, Pakistan and the Arabian Peninsula**, while southern populations are comparatively more sedentary.

Conservation Status

- **IUCN Red List:** Vulnerable
- **CITES:** Appendix I
- **Convention on Migratory Species (CMS):** Appendix I

Significance

- It is a **flagship species** for the conservation of **fragile desert ecosystems**. It also serves as an **indicator of the ecological health of desert habitats**.
- Its conservation demonstrates the importance of **international cooperation, captive breeding and habitat restoration** for protecting migratory wildlife.

CLOUDED LEOPARD CONSERVATION ACTION PLAN (CAP)

The CAP was launched on International Clouded Leopard Day (4 August) to strengthen the long-term conservation of one of Asia's most elusive wild cats. The plan adopts a scientific, landscape-based and community-centric approach to secure the species and its habitats in India.

Clouded Leopard (*Neofelis nebulosa*)

- The **Clouded Leopard (*Neofelis nebulosa*)** is a **medium-sized, highly arboreal and primarily nocturnal wild cat**. The **Sunda Clouded Leopard (*Neofelis diardi*)** is a separate species found only in **Borneo and Sumatra**.
- It is recognised by its cloud-shaped markings, exceptionally long tail and the largest canine teeth relative to skull size among living cats.
- It preys on both **arboreal and terrestrial animals**, including **deer, primates, porcupines, pangolins and squirrels**. It can **purr** but **cannot roar** because of the structure of its hyoid bone.
- In areas shared with **Tigers and Common Leopards**, it becomes more **nocturnal and arboreal** to reduce competition.

Distribution and Habitat

- Occurs from the **Himalayan foothills of Nepal** across **Northeast India, Mainland Southeast Asia** and **southern China**.
- In India, it is found mainly in **Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland and Tripura**.
- It inhabits **primary and secondary forests, dry forests, mangroves and Himalayan forests above 3,500 m**.

- It is **extinct in Taiwan**, while populations in **Bangladesh, Vietnam** and parts of **China** are close to local extinction.

Threats

- **Habitat loss and fragmentation** due to deforestation and infrastructure development.
- **Illegal hunting, snaring, and wildlife trade** remain the primary causes of population decline.

Clouded Leopard Conservation Action Plan (CAP)

- Developed under the **Government of India–Global Environment Facility (GEF)–United Nations Development Programme (UNDP)** initiative.
- Included under the **Species Recovery Programme** of the **Integrated Development of Wildlife Habitats (IDWH)** Scheme.
- Focuses on **habitat protection, landscape connectivity, scientific monitoring and community participation**.
- Identifies **14 priority conservation landscapes** across **Northeast India** for habitat restoration and wildlife corridor conservation.
- Promotes **camera traps, occupancy surveys, genetic studies and environmental DNA (eDNA)** for standardised population monitoring.
- Strengthens anti-poaching efforts through the **M-STRIPES** application.
- Encourages **climate-resilient conservation, sustainable livelihoods and transboundary cooperation** with neighbouring range countries.

Conservation Status

- **IUCN Red List:** Vulnerable
- **CITES:** Appendix I
- **Wildlife (Protection) Act, 1972:** Schedule I
- **State Animal:** Meghalaya

Additional Information

- **International Clouded Leopard Day** is observed on **4 August**. It was established in **2018** by **The Aspinall Foundation** to raise awareness about the conservation of the species. It is **not a United Nations-designated observance**.
- **Clouded Leopard National Park** within **Sepahijala Wildlife Sanctuary, Tripura**, is India's first dedicated wildlife park for the species.
- Other important Indian habitats include **Manas Tiger Reserve (Assam), Dampa Tiger Reserve (Mizoram)** and **Pakke Tiger Reserve (Arunachal Pradesh)**.

GLAW LAKE DECLARED INDIA'S 101ST RAMSAR SITE

Glaw Lake in Arunachal Pradesh has been designated as India's 101st Ramsar Site under the Ramsar Convention on Wetlands.

About Glaw Lake

- Located in **Lohit district**, within the **Kamlang Tiger Reserve and Wildlife Sanctuary**, in the **Eastern Himalayan biodiversity hotspot**.
- It is a **pristine freshwater lake**.
- The **Kamlang River** flows to the north of the lake.
- It is recognised as an **Important Bird and Biodiversity Area (IBA)**.
- The wetland and its catchment support **over 150 tree species** and **49 orchid species**, reflecting rich floral diversity.
- It is a **sacred site** for the **Mishmi community**.
- It is the **first Ramsar Site in Arunachal Pradesh**.

Ecological Importance

- Provides habitat for **Tiger, Leopard, Clouded Leopard** and **Snow Leopard**.
- Serves as an important habitat and wintering ground for the **Critically Endangered White-bellied Heron**.
- Other notable fauna include **Great Hornbill, Hoolock Gibbon, Asian Golden Cat, Asiatic Black Bear** and **Barking Deer**.

Ramsar Convention

- It is an **intergovernmental treaty** for the **conservation and wise use of wetlands**.
- **Wise use** means maintaining the **ecological character** of wetlands through sustainable management.
- It was **adopted at Ramsar, Iran, in 1971** and **entered into force in 1975**.
- **India acceded to the Convention in 1982**.
- Wetlands meeting international criteria are designated as **Ramsar Sites (Wetlands of International Importance)**.
- The Convention currently has **172 Contracting Parties**.
- With the inclusion of **Glaw Lake, India now has 101 Ramsar Sites**, the **highest in Asia** and the **third highest globally**, after the **United Kingdom** and **Mexico**.

SLENDER-BILLED AND WHITE-RUMPED VULTURES

In a world-first conservation milestone, five captive-bred Slender-billed Vultures and five White-rumped Vultures were released into the wild through the Soft Release method at the Jatayu Soft Release Centre in Kaziranga National Park and Tiger Reserve, Assam.

Slender-billed Vulture (*Gyps tenuirostris*)

- It is an **Old World scavenging bird of prey** belonging to the **Accipitridae** family. It was earlier treated as a subspecies of the Indian Vulture but is now recognised as a **distinct species**.
- It inhabits **open forests, dry deciduous forests, riverine habitats and adjoining open landscapes**, generally away from dense human settlements.
- It feeds almost entirely on **carrion** and often gathers in **large feeding groups** and **communal roosts**.

- It is found in **India, Nepal, Bangladesh, Myanmar and Cambodia**. In India, it occurs mainly in the **Gangetic plains, Himachal Pradesh, Haryana, West Bengal and Assam**. It is believed to be **locally extinct in Thailand and Malaysia**.
- It plays a vital **ecological role** by naturally disposing of animal carcasses, reducing disease transmission and maintaining ecosystem health.

Key Characteristics

- It is a **medium-to-large**, dark-coloured vulture with **broad wings**, a **long bare neck**, **pale underparts** and a **slender bill** adapted for extracting flesh from deep carcasses.

Threats

- **Veterinary diclofenac poisoning** is the principal cause of decline, leading to fatal kidney failure.
- Other threats include decline in safe carrion availability, other toxic veterinary NSAIDs, pesticide poisoning, habitat and nesting tree loss, electrocution, collision with power infrastructure, and persecution.

Conservation Status

- **IUCN Red List:** Critically Endangered
- **CITES:** Appendix II
- **Wildlife (Protection) Act, 1972:** Schedule I

White-Rumped Vulture (*Gyps Bengalensis*)

- It inhabits plains, open woodlands, villages and urban areas across South and Southeast Asia.
- It feeds on carrion, is highly social, and breeds colonially in tall trees.
- It is easily identified by the prominent white rump, which is clearly visible during flight.
- Its population has declined by more than 99%, mainly because of diclofenac and other toxic veterinary NSAIDs.
- **IUCN Red List:** Critically Endangered
- **CITES:** Appendix II
- **Wildlife (Protection) Act, 1972:** Schedule I

MODIFIED MIX SEAL SURFACING PLUS (MSS+) TECHNOLOGY

The CSIR-Central Road Research Institute (CSIR-CRRI) demonstrated its indigenously developed Modified Mix Seal Surfacing Plus (MSS+) technology before the Government of Rajasthan.

About

- **MSS+** is an **indigenous road surfacing technology** developed by the **CSIR-Central Road Research Institute (CSIR-CRRI)**, New Delhi.
- It provides a **cost-effective, durable and environmentally friendly** alternative to conventional **hot-mix asphalt**.

- The technology uses a **customised bitumen emulsion**, enabling road surfacing at **ambient temperature** without heating aggregates or binders.

Key Features

- It **eliminates the need for pre-heating aggregates and binders**, thereby reducing **energy consumption**, **construction costs** and **carbon emissions**.
- It supports **low-emission** and **climate-resilient** road infrastructure.
- It offers **better durability** than conventional **Mix Seal Surfacing** and is compatible with **different types of aggregates**.
- It enables **faster road construction and maintenance**, improving operational efficiency.
- The **MSS+ Smart Mix Pro Automatic Plant**, India's first indigenously developed automatic mobile mixing plant designed exclusively for MSS+, supports the technology.
- The plant provides **automated proportioning and mixing of materials**, ensuring **uniform quality**, reducing **manual intervention** and **material wastage**, and enhancing construction efficiency.

Field Performance

- A **live demonstration** was conducted on a **Jaipur city road** before the Government of Rajasthan.
- MSS+ has already demonstrated **excellent field performance** on **more than 100 km of roads in Uttar Pradesh**.
- Rajasthan is evaluating the technology for wider adoption in its **road construction and maintenance programmes**.

Significance

- It promotes **indigenous innovation** in road engineering.
- It supports **sustainable road infrastructure** through lower emissions, reduced energy consumption, lower construction costs, reduced dependence on conventional hot-mix technology, and improved road durability.

INDIAN PEAFOWL (PAVO CRISTATUS)

India has donated five Indian Peafowls, comprising four blue and one white, to the United Nations Office at Geneva (UNOG), reviving a 45-year tradition of maintaining peafowls at Ariana Park.

About

- It is a **large terrestrial bird** belonging to the **Phasianidae (pheasant) family**, which also includes **junglefowl, pheasants, partridges and quails**.
- The collective name is **peafowl**. The male is called a **peacock**, while the female is called a **peahen**.
- The **Indian Peacock** is the **National Bird of India**.

Distribution and Habitat

- It is **native to the Indian subcontinent**, occurring naturally in **India, Sri Lanka and parts of Pakistan**.

- It inhabits **dry and moist deciduous forests, forest edges, scrublands and cultivated landscapes**. It adapts well to **agricultural areas**.

Key Characteristics

- The species exhibits pronounced **sexual dimorphism**, which refers to the differences in appearance between males and females of the same species, such as in colour, shape, size, and structure.
 - ♦ **Male (Peacock):** Bright blue plumage with a long, iridescent tail train, which is displayed during courtship.
 - ♦ **Female (Peahen):** Smaller in size with brown plumage, a shorter tail and greenish neck feathers, providing effective camouflage during nesting.
- It is an **opportunistic omnivore** that feeds on **seeds, grains, flowers, insects, small reptiles and small mammals**.
- It is known for its loud "**may-yow**" call, which becomes more frequent during the **monsoon breeding season**.

Ecological Significance and Concerns

- It helps **control insect and small pest populations** and also contributes to **seed dispersal**.
- In some regions, particularly **Kerala**, increasing populations have led to **crop damage**, especially in paddy fields, resulting in **human-wildlife conflict**.
- The species thrives in **dry conditions**, and its expanding distribution has been associated with **changing climatic conditions**.

Conservation Status

- **IUCN Red List:** Least Concern
- **Wildlife (Protection) Act, 1972:** Schedule I

WORLD ELEPHANT DAY 2026

World Elephant Day was observed on 12 August 2026 to promote global awareness about elephant conservation.

About Elephants

- **Elephants** are the world's largest land mammals and possess the **longest gestation period** among mammals.
- **Three living species** are recognised:
 - ♦ Asian Elephant (*Elephas maximus*)
 - ♦ African Savanna Elephant (*Loxodonta africana*)
 - ♦ African Forest Elephant (*Loxodonta cyclotis*)
- **African Savanna Elephant** is the largest living elephant species.
- **Ecological Importance:**
 - ♦ They are **keystone species** that maintain forest and grassland ecosystems.
 - ♦ They disperse seeds and create pathways that benefit many other species.

Major Threats:

- ♦ **Asian Elephant:** Habitat loss, fragmentation and human-elephant conflict.
- ♦ **African Elephants:** Illegal ivory poaching, habitat loss and conflict with humans.

Conservation Status (IUCN):

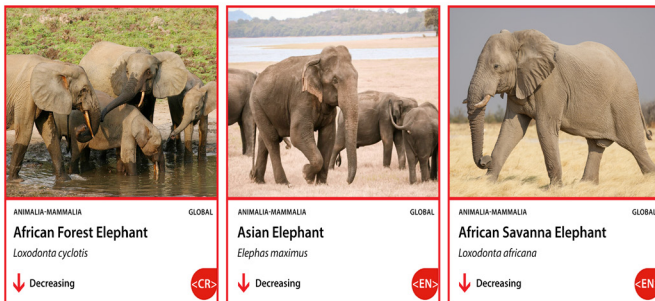
- ♦ Asian Elephant: Endangered
- ♦ African Savanna Elephant: Endangered
- ♦ African Forest Elephant: Critically Endangered

Elephant Conservation in India

- ➔ India supports over 60% of the world's wild Asian elephants.
- ➔ The Synchronous All India Population Estimation of Elephants (SAIEE) 2021–25 estimated 22,446 wild elephants in the country.
- ➔ The Indian Elephant has been declared the National Heritage Animal.

Major Conservation Initiatives

- ➔ **Project Elephant (1992):** Provides financial and technical support for elephant conservation, habitat protection, corridor management and mitigation of human-elephant conflict.
- ➔ **Legal Protection:** The Indian Elephant receives the highest protection under Schedule I of the Wildlife (Protection) Act, 1972.
- ➔ **Elephant Corridors:** Around 150 identified corridors facilitate safe seasonal movement between habitats.
- ➔ **Railway Mitigation Measures:** Joint surveys identified 127 sensitive railway stretches (3,452.4 km). Measures such as underpasses, overpasses, ramps and bridge modifications have reduced elephant deaths due to train collisions.
- ➔ **MIKE Programme:** An international initiative that monitors the illegal killing of elephants across Asia and Africa.
- ➔ **Operation Thunderbird:** Coordinated by the Wildlife Crime Control Bureau (WCCB) to combat wildlife crime.
- ➔ **Captive Elephant (Transfer or Transport) Rules, 2024:** Regulate the transfer and transport of captive elephants while ensuring their welfare.



COASTAL EROSION ALONG ODISHA COAST

The Union Minister for Ports, Shipping and Waterways informed that about 28.3% of Odisha's 564-km coastline is affected by coastal erosion.

Key Findings

- ➔ NCCR, under the Ministry of Earth Sciences (MoES), regularly monitors long-term shoreline changes along India's coastline.
- ➔ The Odisha coastline assessment recorded 28.3% under erosion, 17.6% stable and 54.1% under accretion (coastal growth).
- ➔ An earlier NCCR assessment (1990–2018) for the entire Indian coastline reported 33.6% under erosion, 26.9% under accretion and 39.6% stable.

What is Coastal Erosion?

- ➔ Coastal erosion is the gradual landward retreat of the shoreline caused by the action of waves, tides, currents, coastal flooding and sea level rise.
- ➔ It results in the removal of sand, soil and rocks, leading to the loss of coastal land.

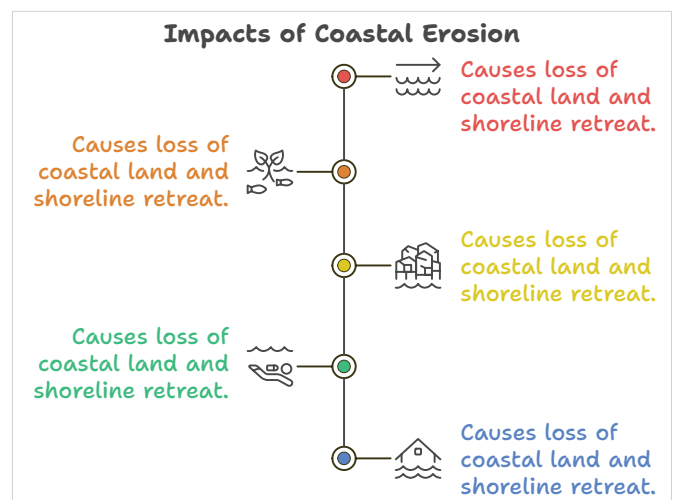
Major Causes

Natural Factors:

- ♦ Sea level rise due to climate change increases coastal flooding and storm surges.
- ♦ Strong waves, tides and storms continuously wear away the shoreline.

Human-induced Factors:

- ♦ Unregulated sand mining reduces the natural sediment available to replenish beaches.
- ♦ Ports, seawalls and breakwaters interrupt sediment transport and accelerate erosion in nearby areas.
- ♦ Mangrove degradation removes a natural barrier that protects the coast from wave action.



Government Measures

- ➔ **Hazard Line Mapping:** MoEFCC has delineated the Hazard Line for the entire coastline to indicate shoreline changes, including the impact of sea level rise. It serves as a planning tool for disaster management and climate adaptation.

- ➔ **Coastal Regulation Zone (CRZ) Notification, 2019:** Regulates activities along the coast to conserve coastal ecosystems and protect the livelihoods of fishing and other coastal communities.
- ➔ **National Strategy for Coastal Protection:** Provides policy guidelines to Coastal States and Union Territories for shoreline protection and sustainable coastal management.
- ➔ **Flood Management Scheme:** The **Ministry of Jal Shakti** supports anti-sea erosion works, which are planned and implemented by State Governments according to local priorities.
- ➔ **Coastal Management Information System (CMIS):** Collects nearshore coastal data to support the planning, design, construction and maintenance of coastal protection measures.
- ➔ **Technical Support:** The Central Government assists Coastal States in preparing **Shoreline Management Plans** and designing suitable coastal protection measures.

BLACK-NECKED CRANE (GRUS NIGRICOLLIS)

The **Bombay Natural History Society (BNHS)** has sterilised over 2,950 **Free-Ranging Dogs (FRDs)** in **Ladakh** to reduce predation on **Black-necked Crane** eggs and chicks.

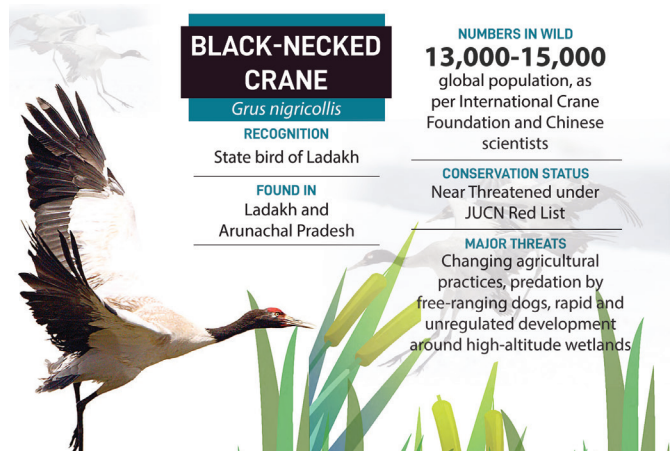
About Black-necked Crane

- ➔ The **Black-necked Crane** (*Grus nigricollis*) is the world's only crane species adapted to breeding in high-altitude alpine wetlands.
- ➔ **Habitat & Distribution:** It inhabits high-altitude wetlands, marshes, lakes and alpine bogs across the **Tibetan Plateau** and adjoining regions of **China, India, Bhutan and Nepal**.
- ➔ In India, it **breeds in Ladakh** and a small population winters in the **Sangti and Zimithang** valleys of **Arunachal Pradesh**.
- ➔ **Population:** Fewer than **100 individuals** are estimated to occur in India, out of a global population of about **15,000**.
- ➔ **Physical Features:** It has a whitish-grey body, black head and upper neck, red patch around the eyes, and **long legs** adapted for wading.
- ➔ **Diet:** It feeds on sedge tubers, plant roots, insects, earthworms, frogs and other small invertebrates.
- ➔ **Breeding:** It breeds at elevations of **2,600–4,900 m**. Major breeding sites include the **Changthang Cold Desert Wildlife Sanctuary**, particularly **Hanle, Tso Kar, Nyoma** and nearby wetlands.
- ➔ **Cultural Importance:** It is the **State Bird of Ladakh** and is revered in **Ladakh's Buddhist culture** as a symbol of **peace, purity and good fortune**.

Major Threats

- ➔ **Predation by Free-Ranging Dogs (FRDs)** on eggs and chicks.
- ➔ **Habitat degradation** and disturbance of wetlands.
- ➔ Expansion of roads and other linear infrastructure.

- ➔ **Growing tourism** and unregulated development.
- ➔ **Climate change** affecting high-altitude wetland ecosystems.



Conservation Status

- ➔ **IUCN Red List:** Near Threatened
- ➔ **CITES:** Appendix I
- ➔ **Convention on Migratory Species (CMS):** Appendix I
- ➔ **Wildlife (Protection) Act, 1972:** Schedule I

Bombay Natural History Society (BNHS)

- ➔ **BNHS** is one of India's oldest and premier scientific institutions dedicated to biodiversity research and nature conservation.
- ➔ It was established in **1883** in **Mumbai**.
- ➔ It promotes conservation through scientific research, education, public awareness and field-based conservation programmes.

HARA MANGROVE FORESTS

A major oil spill off the southern coast of Iran has threatened the ecologically significant **Hara Mangrove Forests**.

About

- ➔ The **Hara Mangrove Forests**, also known as the **Qeshm-Hara Mangrove Forests**, are located around **Qeshm Island** and the **Khuran Strait** near the **Strait of Hormuz** in southern Iran.
- ➔ They are dominated by the **Grey Mangrove** (*Avicennia marina*), a salt-tolerant species adapted to highly saline coastal environments through specialised salt-regulating adaptations.
- ➔ The forests are part of the **UNESCO Man and the Biosphere (MAB) Programme's Hara Biosphere Reserve**.

Ecological Significance

- ➔ They provide **breeding, nursery and feeding grounds** for **fish, shrimp, crabs and other marine organisms**.
- ➔ They support **migratory birds, marine mammals such as dolphins**, and the **Critically Endangered Hawksbill Sea Turtle**.

- They sustain the livelihoods of **local fishing communities**.
- They also support **eco-tourism**, including boat-based nature tourism around Qeshm Island.

What are Mangroves?

- **Mangroves** are **salt-tolerant trees and shrubs** that grow in **tropical and subtropical coastal intertidal zones**.
- They are adapted to **saline water, tidal inundation and oxygen-deficient soils**.
- Their specialised **prop roots** and **pneumatophores** provide support and enable respiration in waterlogged conditions.
- They commonly occur in **estuaries, tidal creeks, mudflats and deltaic regions**.

Mangroves in India

- India has about **4,900 sq. km** of mangrove cover.
- Major mangrove ecosystems include the **Sundarbans**, **Bhitarkanika**, and the **Krishna-Godavari Delta**.

BLACKBUCK REINTRODUCTION INTO BANNI GRASSLAND

The Gujarat Forest Department, supported by the Greens Zoological Rescue and Rehabilitation Centre (Vantara), has released 20 Blackbucks into the Banni Grassland of Kutch as part of a rewilding and wildlife translocation programme.

Blackbuck (*Antelope cervicapra*)

- **About:** A medium-sized antelope **endemic to the Indian subcontinent** and one of India's flagship grassland mammals.
- **Identification:**
 - ♦ **Males:** Dark brown to black coat with long **spiral (corkscrew-shaped) horns**.
 - ♦ **Females:** Fawn-coloured and generally **hornless**.
- **Habitat:** Open **grasslands, semi-arid plains, thorn scrub, scrublands, lightly wooded areas and agricultural margins**.
- **Distribution:** Native to the **Indian subcontinent**. It occurs across **northwestern, western, central, southern and parts of eastern India**, with small populations in **Nepal**.
- **Cultural Significance:** Revered and protected by the **Bishnoi community**.
- **State Animal:** Andhra Pradesh, Haryana and Punjab.
- **Conservation Status:**
 - ♦ **IUCN Red List:** Least Concern
 - ♦ **Wildlife (Protection) Act, 1972:** Schedule I

Banni Grassland

- Located in **Kutch district, Gujarat**, near the **Great Rann of Kutch**.
- It is **one of Asia's largest natural tropical grassland ecosystems** and is adapted to **saline and arid conditions**.
- It supports over 250 plant species, more than 350 bird species, about 50 mammals, 30 reptiles and 10 amphibians.

- Notable wildlife includes **Blackbuck, Chinkara, Caracal, Desert Fox, Indian Wild Ass, Great Indian Bustard, Sarus Crane and Flamingos**.
- It is inhabited by pastoral communities such as the **Maldharis, Rabaris, Jats, Mutwas and Meghwals**.

Conservation Significance

- **Rewilding** restores native species to revive ecosystem functions and ecological balance.
- **Wildlife translocation** supports **species recovery, habitat restoration and prey-base augmentation**.
- Animals undergo **health screening, quarantine, disease surveillance and post-release monitoring** before release.
- The programme received approvals from the **Central Zoo Authority** and the **Chief Wildlife Warden of Gujarat**.
- It forms part of a wider initiative to translocate **500 Blackbucks** and **100 Chinkaras** to suitable habitats across Gujarat.

SATKOSIA TIGER RESERVE (STR)

The Odisha Government has constituted a high-level inquiry committee to examine the relocation of villages from Satkosia Tiger Reserve (STR) following allegations of forced displacement.

About

- **Location:** Situated in **Odisha**, spanning **Angul, Cuttack, Boudh and Nayagarh districts**, at the meeting point of the **Deccan Peninsula and Eastern Ghats** biogeographic regions.
- **Established:** Declared a **Tiger Reserve in 2007** under **Project Tiger** by combining the **Satkosia Gorge Wildlife Sanctuary (1976)** and **Baisipalli Wildlife Sanctuary (1981)**.
- **Area:** Covers **1,136.70 km²** and forms part of the **Mahanadi Elephant Reserve**.
- **Geographical Significance:** The **Mahanadi River** flows through the **22.5-km-long Satkosia Gorge**, creating diverse **riverine, wetland and forest habitats**.
- **Vegetation:** Dominated by **tropical moist and dry deciduous forests**, with **Sal (*Shorea robusta*)** as the principal species. **Biodiversity**
- Supports **Leopard, Elephant, Gaur, Dhole (Wild Dog), Gharial, Mugger Crocodile**, reptiles, amphibians, rich fish diversity and over **200 bird species**.
- The reserve is an important habitat for the **Gharial** and serves as a key landscape for **elephant movement and habitat connectivity**.

Conservation Significance

- India's first **inter-State tiger relocation programme** was undertaken here in **2018** using tigers from **Madhya Pradesh**, but the programme was unsuccessful.
- Tiger numbers fell from 12 in 2007 to just one in 2018–19, and the **2022 All India Tiger Estimation** recorded **no tigers** in the reserve.

- Major challenges include **village relocation**, creation of **involute habitats**, **tiger supplementation**, and balancing **wildlife conservation** with **forest rights and local livelihoods**.

BARREN-LAND FALLACY

Recently, ecologists highlighted that the **Barren-land Fallacy** promotes inappropriate afforestation by treating naturally treeless landscapes as degraded land.

What is the Barren-land Fallacy?

- It is the **mistaken belief** that **naturally non-forested land** is ecologically deficient and should be converted into forests.
- It incorrectly **equates higher tree cover with better ecological health**, ignoring that many ecosystems naturally exist with little or no tree cover.

Key Concerns

- **Damage to Open Ecosystems:** Naturally open ecosystems such as **grasslands, savannas, scrublands, wetlands, marshes and deserts** may be wrongly afforested even though they are complete and healthy ecosystems.
- **Loss of Biodiversity:** Many **specialist native plants, birds, insects and animals** depend on open habitats. Converting these landscapes into forests destroys their natural habitat.
- **Stress on Water Resources:** Planting **water-intensive or ecologically unsuitable species**, such as **eucalyptus**, in water-scarce regions can increase water stress and disturb local hydrology.
- **Disruption of Natural Processes:** Inappropriate afforestation can alter **soil conditions, water cycles, nutrient cycling and natural ecological balance**, reducing ecosystem resilience.

RIGHT APPROACH



Identify the Native Ecosystem First

Restoration should begin by recognising whether the area is naturally a **forest, grassland, wetland, scrubland or desert**.



Protect Native Ecosystems

Conservation efforts should preserve and strengthen the ecosystem that naturally belongs to that landscape.



Restore Natural Processes

Ecological restoration should recover the area's **natural ecological functions and processes**, rather than forcing artificial changes.



Ecosystem-specific Restoration

The objective of restoration is to **restore the native ecosystem, not merely to increase tree cover**.

Right Approach

- **Identify the Native Ecosystem First:** Restoration should begin by recognising whether the area is naturally a **forest, grassland, wetland, scrubland or desert**.

- **Protect Native Ecosystems:** Conservation efforts should preserve and strengthen the ecosystem that naturally belongs to that landscape.
- **Restore Natural Processes:** Ecological restoration should recover the area's **natural ecological functions and processes**, rather than forcing artificial changes.
- **Ecosystem-specific Restoration:** The objective of restoration is to **restore the native ecosystem, not merely to increase tree cover**.

RAICHUR MIYAWAKI FOREST

Raichur district in Karnataka has transformed the Yakalaspura legacy dumpsite into a green ecological asset through scientific waste remediation and the Miyawaki afforestation method under Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0).

Miyawaki Method

- It is an **afforestation technique** developed in the **1970s** by Japanese botanist **Dr. Akira Miyawaki**.
- It is based on the concept of **Potential Natural Vegetation (PNV)**, which recreates the forest that would naturally grow in a region.
- It involves planting multiple indigenous tree, shrub and understory species at high density (about 3-5 saplings per square metre) to create a **dense, multi-layered forest** in a short period.
- It is suitable for **small urban spaces** and degraded land.

Raichur Initiative

- **Location:** Yakalaspura, Raichur district, Karnataka.
- **Land Restoration:** Around **22 acres** of land reclaimed after scientific processing of **62,252 metric tonnes of legacy waste** from a **35-acre dumpsite**.
- **'Waste to Woods' Model:** Demonstrates the conversion of degraded waste-disposal land into a productive ecological landscape.
- The reclaimed site is being developed with **native species** to restore ecological functions.

Significance

- **Afforestation:** Establishes forests on degraded land to restore ecological health.
- Promotes **land restoration** and **urban forestry**.
- Enhances **biodiversity** by providing habitat for **birds, insects and other small fauna**.
- Improves **soil quality** and supports **groundwater infiltration**.
- Increases **carbon sequestration**, reduces **dust**, moderates **local temperature** and improves the **microclimate**.
- Demonstrates the potential of **nature-based solutions** for restoring **urban and peri-urban landscapes** while strengthening **climate resilience**.

WILD WATER BUFFALO

The Chhattisgarh Forest Department plans to translocate Wild Water Buffaloes from Assam and keep them in enclosures at Pamed Wildlife Sanctuary to support conservation and population recovery.

About

- The Wild Water Buffalo (*Bubalus arnee*) is the wild ancestor of the domestic water buffalo.
- It is native to the **Indian subcontinent and Southeast Asia**.
- It is a **keystone herbivore** of **wetlands, floodplains and riverine grasslands**, helping maintain ecosystem balance.

Distribution

- **Global:** India, Nepal, Bhutan, Myanmar, Thailand and Cambodia.
- **India:** Home to **over 90% of the global population**. Major populations occur in **Assam**, with smaller populations in **Chhattisgarh, Arunachal Pradesh, Meghalaya and Maharashtra (Kolamarka forests)**.
- Important protected areas include **Kaziranga National Park, Manas National Park, Orang National Park, Dibru-Saikhowa National Park and Udanti-Sitanadi Tiger Reserve**.

Habitat and Features

- Inhabits **floodplain grasslands, marshes, swamps, wetlands, riverine forests and alluvial plains**. Depends on **perennial water bodies** and frequently wallows in mud.
- Has a **massive body, dark grey to black coat, broad hooves and long crescent-shaped horns**, which are the largest among bovines.
- Both sexes possess horns. It is also an excellent swimmer.

Ecological Importance

- Maintains **grassland structure** through grazing.
- Disperses seeds and enhances **nutrient cycling**.
- Creates wallows that support amphibians and other aquatic organisms.
- Conserving it also protects **wetland biodiversity**, including the **Indian Rhinoceros, Swamp Deer, Bengal Florican and Asian Elephant**.

Threats

- **Habitat loss** due to agriculture, settlements and infrastructure.
- **Hybridisation** with domestic buffaloes causes genetic dilution.
- **Diseases** transmitted from livestock.
- **Poaching, human-wildlife conflict** and invasive plants such as **Mikania micrantha**.

Conservation Status

- **IUCN Red List:** Endangered
- **CITES:** Appendix III (Nepal population)
- **Wildlife (Protection) Act, 1972:** Schedule I (highest legal protection in India)

Conservation Measures

- **Habitat restoration**, wetland and grassland management, and invasive species control.
- **Restriction of domestic buffalo grazing** near protected areas.
- **Genetic monitoring** to maintain population purity.
- **Livestock vaccination** to reduce disease transmission.
- **Community participation** through conservation and conflict-mitigation programmes.

Wild Water Buffalo



HABITAT

Found in Asia, especially in countries like India, China, Nepal and Bangladesh. They live in wetlands, rivers, lakes and muddy areas.

APPEARANCE

Large and powerful with a dark, shiny body, wide curved horns and strong legs built for strength and endurance.

USEFULNESS

Help in ploughing fields, pulling carts and carrying heavy loads. Their milk is rich and nutritious.

BEHAVIOR

Calm, gentle and intelligent. They enjoy wallowing in water or mud to stay cool and protect their skin.



Strong and hardy animals.



Love water and heat.



Mostly herbivores – they eat grass and aquatic plants.



Long-lived and loyal companions in rural life.

BROAD PEAK (FALCHAN KANGRI)

A massive avalanche struck a 10-member international climbing expedition on the slopes of Broad Peak in the Karakoram Range.

About Broad Peak

- Broad Peak, locally known as **Falchan Kangri**, is the **12th-highest mountain** in the world, with an elevation of **8,051 m**.
- It is located in the **Karakoram Range** on the border of **Gilgit-Baltistan (Pakistan)** and **Xinjiang (China)**.
- It lies in the **Gasherbrum massif**, about **8 km southeast of K2**.
- It was named by **Sir Martin Conway (1892)** after its **1.5-km-wide summit ridge**, resembling the **Breithorn** in the Swiss Alps.
- It was **first ascended in 1957** by a **four-member Austrian team** without **supplementary oxygen** or **high-altitude porters**.

Key Features

- It is one of the world's **14 eight-thousanders**.
- It has **five prominent summits**, including **three above 8,000 m**.
- It was formed by the collision of the **Indo-Australian** and **Eurasian tectonic plates** and consists mainly of **granite and metamorphic rocks**.
- It feeds the **Godwin-Austen Glacier** and the **Baltoro Glacier**.
- Its **broad summit ridge** and upper slopes are highly prone to **slab avalanches** and **strong winds**.
- It lies within the **Central Karakoram National Park**, an important region for studying the **Karakoram Anomaly**, where some glaciers remain relatively stable despite global warming.



SHIPKI LA PASS

India-China cross-border trade through Shipki La Pass resumed on 1 August 2026 after a six-year suspension caused by the COVID-19 pandemic.

About

- Shipki La is a **high-altitude motorable mountain pass** situated at about **4,000 m** in **Kinnaur district, Himachal Pradesh**, on the **India-China border** with the **Tibet Autonomous Region**.
- Earlier known as **Pema La (Shared Gate)**, it was renamed **Shipki La** by the **Indo-Tibetan Border Police (ITBP)** after **1962**.
- **Namgia** is the **last Indian village** before the pass.
- The **Sutlej River**, known as **Langqen Zangbo** in Tibet, enters India through the **Shipki La** region.
- It has been part of the **ancient India-Tibet trade route (Silk Route network)** for centuries. Before Independence, Tibetan traders travelled via the **Hindustan-Tibet Road** to **Rampur Bushahr**, especially during the **Lavi Fair**.

Significance

- The pass is **strategically important** because Indian positions sit at a **higher elevation** than those on the Chinese side.
- It was **closed after the 1962 India-China War** and reopened in the **early 1990s** under a bilateral agreement. Later it was suspended during the **Doklam standoff** and the **COVID-19 pandemic**.
- Seasonal trade includes **wool, yak products, livestock, borax and religious items** from Tibet, while **grains, spices, dried fruits, timber and metal goods** are exported from India.
- Unlike **Nathu La** and **Lipulekh Pass**, **Shipki La** has traditionally followed a **barter system**, preserving centuries-old **economic, cultural and Buddhist links** between India and Tibet.

CAUVERY (KAVERI) RIVER

Recently, Tamil Nadu has urged the Union Government not to approve Karnataka's Mekedatu Project unless it complies with the Cauvery Water Disputes Tribunal (2007) award and the Supreme Court's 2018 judgment.

Cauvery (Kaveri) River

- Cauvery is a major **east-flowing inter-State peninsular river**, popularly known as the **"Ganga of the South"**.
- It originates at **Talakaveri** in the **Brahmagiri Hills** of **Kodagu (Karnataka)** and drains into the Bay of Bengal near **Poompuhar (Tamil Nadu)**, forming a fertile Cauvery Delta.
- The river is about **800 km** long and drains a basin of about **81,155 sq. km** across **Karnataka, Tamil Nadu, Kerala and Puducherry**.

- It is a perennial river, receiving water from both the Southwest Monsoon (upper basin) and the Northeast Monsoon (lower basin).
- **Major tributaries:**
 - ◆ **Left bank:** Harangi, Hemavati, Shimsha, Arkavati
 - ◆ **Right bank:** Lakshmana Tirtha, Kabini, Suvarnavathi, Bhavani, Noyyal, Amaravati
- **Major dams:** Krishna Raja Sagara and Mettur Dam.
- Protected areas in the basin include Nagarhole National Park, Wayanad Wildlife Sanctuary, Sathyamangalam Tiger Reserve.

Cauvery Water Management Authority (CWMA)

- **Established:** Constituted by the Central Government in 2018 under the Cauvery Water Management Scheme, 2018.
- **Nature:** It is a statutory, quasi-judicial body under the Inter-State River Water Disputes Act, 1956, functioning under the Ministry of Jal Shakti to implement the modified Cauvery Water Disputes Tribunal Award as upheld by the Supreme Court (2018).
- **Function:** It functions with the support of the Cauvery Water Regulation Committee (CWRC).



- **Key functions:**
 - ◆ Regulates inter-State water releases.
 - ◆ Monitors reservoir storage, inflows and outflows.
 - ◆ Determines distress-sharing during deficient rainfall years.
 - ◆ Promotes efficient water use and improved irrigation practices.
- **Current issue:** The dispute centres on water sharing during distress years and Karnataka's proposed Mekedatu Balancing Reservoir Project.

LAKE MEAD

Lake Mead, the largest reservoir in the United States, has fallen to its lowest water level since it was filled nearly 90 years ago.

About Lake Mead

- Lake Mead is a man-made reservoir formed by the Hoover Dam on the Colorado River, located on the Arizona–Nevada border.

- It is the **largest reservoir in the U.S. by water capacity** when full and is primarily fed by **snowmelt from the Rocky Mountains**.
- It supplies water to **Arizona, California, Nevada**, and parts of **Mexico**, serving nearly **25 million people** and supporting extensive irrigation.
- Since **1999**, prolonged **drought**, rising **water demand**, and **population growth** have caused a sharp decline in water levels.
- The surrounding region supports wildlife such as **desert bighorn sheep, mountain lions, beavers, coyotes, and bats**.



Key Facts about the Colorado River

- A major **North American river**, often called the "**Lifeline of the Southwest**."
- Originates in the **Rocky Mountains (Colorado, USA)** and flows about **2,330 km** into the **Gulf of California (Mexico)**.
- Flows through **seven U.S. states** and **two Mexican states**, draining a vast **arid and semi-arid region**.
- Forms major reservoirs, including **Lake Mead** and **Lake Powell**.
- Major tributaries include the **Green, Gunnison, San Juan, Gila, Little Colorado, Dolores, and Virgin** rivers.
- The river carved the **Grand Canyon**, a **UNESCO World Heritage Site**, and also flows through **Canyonlands National Park**.

DANUBE RIVER

A Russian attack targeted Izmail, Ukraine's largest Danube River port, near the Romanian border.

About the Danube River

- The **Danube** is **Europe's second-longest river** after the **Volga** and one of the world's most international rivers.
- It originates in the **Black Forest Mountains of Germany**, at the confluence of the **Breg** and **Brigach** rivers, and drains into the **Black Sea** through the **Danube Delta**.
- It flows about **2,850 km** through **10 countries**: **Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Bulgaria, Romania, Moldova, and Ukraine**.

- It is divided into the **Upper, Middle, and Lower** courses.
- Major tributaries include the **Inn, Drava, Sava, Tisza, and Prut** rivers.
- It flows through or borders **four European capitals: Vienna, Bratislava, Budapest, and Belgrade**.
- The **Danube Delta** (Romania–Ukraine) is a **UNESCO World Heritage Site** and one of Europe's largest wetlands, supporting rich biodiversity and migratory birds.
- The river is a major **international inland waterway** connecting **Central and Eastern Europe** with the **Black Sea**. Through the **Rhine–Main–Danube Canal**, it also provides a continuous navigation route between the **North Sea** and the **Black Sea**.
- Major engineering works include the **Iron Gate I & II Hydroelectric Projects** between **Serbia and Romania**.

TAMIRABHARANI (PORUNAI) RIVER

The Madurai Bench of the Madras High Court granted legal personhood to the Tamirabharani (Porunai) River to strengthen its protection from pollution caused by waste dumping and certain ritual practices.

About

- **Tamirabharani** (also called **Tamraparni** or **Porunai**) is a **perennial river** flowing entirely within **Tamil Nadu**.
- It originates from **Agastyakoodam Peak** in the **Pothigai Hills** of the **Western Ghats**. It flows through **Tirunelveli** and **Thoothukudi** districts before draining into the **Gulf of Mannar**.
- It is fed by both the **Southwest and Northeast Monsoons**.
- Major tributaries include **Manimuthar, Servalar, Gadanathi, and Chittar**.
- Major dams include **Karaiyar, Manimuthar, Gadanathi, and Ramanathi**.
- In ancient literature, it was known as **Tamraparni**, from which **Sri Lanka (Taprobane/Tambapanni)** derived one of its early names.

Legal Personhood of Rivers

- In **2017**, the **Uttarakhand High Court** recognised the **Ganga** and **Yamuna** as legal persons, but the **Supreme Court** later stayed the order due to practical and administrative concerns.
- **New Zealand's Whanganui River** became the **first river in the world** to receive **legal personhood** through an **Act of Parliament** in **2017**.

LIBERIA

A 12-member **Liberian parliamentary delegation** visited **India** under **South-South Cooperation** to study women's political participation and gender-responsive governance.

About

- **Location:** Liberia is a country on the **west coast of Africa**. It is bordered by **Sierra Leone** (west), **Guinea** (north), **Côte d'Ivoire** (east) and the **Atlantic Ocean** (south and southwest).

- **Historical Significance:** It is **Africa's oldest republic** and, along with **Ethiopia**, has never been **formally colonised by a European power**.
- **Climate:** It has a **tropical hot and humid climate** with heavy seasonal rainfall.
- **Relief:** **Mount Wuteve** is the **highest peak**. Other notable uplands include **Cape Mount, Cape Mesurado** and **Cape Palmas**.
- **Major Rivers:** The **Mano** and **Morro** rivers form part of the northwestern boundary, while the **Cavalla River** forms much of the boundary with **Côte d'Ivoire**.
- **Biodiversity:** Around 35–40% of the remaining **Upper Guinean Rainforest** lies in **Liberia**. **Sapo National Park** and **Gola Forest National Park** protect species such as the **pygmy hippopotamus** and **Diana monkey**.
- **Natural Resources:** The country has significant deposits of **iron ore, diamonds, gold, manganese, graphite** and **kyanite**.
- **International Role:** Liberia was a founding member of the **United Nations (1945)** and the **Organization of African Unity (1963)**, now the **African Union (AU)**.
- **India–Liberia Relations:** India deployed the **first all-female UN Police Unit** in **Liberia (2007–2016)**, which strengthened peacekeeping efforts and encouraged greater participation of **Liberian women** in security services.

- **Capital:** **Monrovia**



INDIA'S DISASTER FINANCE ARCHITECTURE

The Ministry of Home Affairs (MHA) has added **heatwaves and lightning** to India's list of notified natural calamities, enabling States to access dedicated disaster funds for both immediate relief and long-term climate resilience.

India's Disaster Finance Architecture

- **Constitutional Basis:** Under **Article 280**, the **Finance Commission (FC)** recommends arrangements for disaster management funds.

- **Legal Framework:** The Disaster Management Act, 2005 establishes a two-tier disaster financing framework for disaster response and mitigation.
- **State Disaster Response Fund (SDRF):**
 - ♦ It is financed jointly by the **Centre and States** in a **75:25 ratio (90:10** for Himalayan and North-Eastern States).
 - ♦ Provides **immediate relief**, including shelter, food, medical assistance and compensation.
 - ♦ States can notify **heatwaves as local disasters** and use up to **10% of their annual SDRF allocation**.
- **State Disaster Mitigation Fund (SDMF):**
 - ♦ Supports **long-term risk reduction** measures to minimise disaster impacts.
 - ♦ Finances Heat Action Plans (HAPs), cooling shelters, early-warning systems, blue-green infrastructure and cool roofs.
- **National Disaster Response Fund (NDRF):**
 - ♦ Fully funded by the Union Government.
 - ♦ Assists States when a disaster is **of severe nature** and exceeds their financial capacity.
- **Finance Commission-XVI (2026–31):**
 - ♦ Recommended **₹2.04 lakh crore** for State disaster funds, about **28% higher** than the previous Commission.
 - ♦ Allocation includes **₹1.6 lakh crore** for **SDRF** and the remaining amount for **SDMF**.
 - ♦ Also recommended **₹79,406 crore** for **National Disaster Funds**.
- **Fund Allocation:** Distribution among States is based on a Disaster Risk Index, considering hazard frequency, intensity, exposure, vulnerability and past expenditure.
- **Implementation:** State Disaster Management Authorities (SDMAs) and State Emergency Operations Centres (SEOCs) serve as the nodal agencies for managing disaster funds.
- **Notified Natural Calamities:** Include heatwaves, lightning, cyclones, droughts, earthquakes, floods, tsunamis, fires, hailstorms, landslides, avalanches, cloudbursts, pest attacks, and frost & cold waves.
- **Significance:** The revised framework bridges the funding gap in Heat Action Plans by supporting both immediate disaster response and long-term climate adaptation, strengthening India's resilience against increasing climate-related disasters.

- **Size:** It is the smallest Great Lake by surface area, the easternmost lake of the Great Lakes system, and the only Great Lake that does not border Michigan.
- **Hydrology:** The Niagara River is its principal inflow, supplying about 85% of its water. The lake drains into the Saint Lawrence River, which connects the Great Lakes to the Atlantic Ocean. It is also linked to Lake Erie through the Welland Canal, forming part of the Great Lakes–Saint Lawrence navigation system.



- **Ecological Importance:** The lake supports rich freshwater biodiversity, including the Lake Sturgeon, a species facing conservation challenges.
- **Great Lakes System:** The Great Lakes comprise Superior, Michigan, Huron, Erie and Ontario, along with connecting canals and the St. Lawrence Seaway.
 - ♦ Together, they contain about 20% of the world's surface freshwater and nearly 90% of the United States' surface freshwater, providing drinking water to about 40 million people in the United States and Canada.
- **Formation:** The lakes were formed by the retreat of the Laurentide Ice Sheet after the last Ice Age and attained their present form around 3,000 years ago.

LAKE ONTARIO

The U.S. President signed an executive order to rename Lake Ontario as "Lake America". Canada opposed the move, noting that "Ontario" has Indigenous Wendat origins and has been in use for over 400 years.

Key Facts about Lake Ontario

- **Location:** Lake Ontario is one of the five Great Lakes of North America. It lies between Ontario (Canada) and New York (USA) and forms part of the international boundary.

BARRIER LAKES

Following a massive ice-rock avalanche in the Bhote Koshi-Trishuli river system, new barrier lakes have formed near the Nepal-Tibet (China) border.

About Barrier Lakes

- A **barrier lake**, also called a **landslide-dammed lake**, is a temporary lake formed when a **landslide, rockfall, or avalanche** completely blocks the flow of a **river or stream**.

- Such lakes usually develop in **steep mountainous valleys** that frequently experience **earthquakes, heavy rainfall, glacier collapse, or mass wasting**.
- Since the natural debris dam has **no stable outlet**, water continues to accumulate behind it.

Formation and Hazards

- Continuous water accumulation can eventually **overtop or breach** the debris dam.
- The sudden release of stored water causes a **Landslide Lake Outburst Flood (LLOF)**.
- An **LLOF** can release **millions of cubic metres of water** within a short time. It causes **flash floods**, carries huge quantities of **sediment and debris**, and may trigger **secondary landslides** downstream.
- A breach may occur **within days or even decades** after the lake forms.

LLOF and GLOF

- LLOF**: Occurs when a **landslide-dammed lake** suddenly breaches.
- GLOF**: Occurs when water stored behind a **glacier or moraine dam** is suddenly released.
- Both events have similar impacts but differ in the **type of natural dam** involved.

SLOWING ZANSKAR GLACIERS

A recent study reported that **12 glaciers in Ladakh's Zaskar region** slowed by an average of **2.4 m/year per decade between 1992 and 2023**, accompanied by **accelerated glacier thinning**.

About Glaciers

- Glaciers** are large, persistent masses of ice formed on land through the accumulation and compaction of snow over centuries.
- They store nearly **70% of the Earth's freshwater** and cover about **10% of the global land surface**.
- They function as **natural freshwater reservoirs**, releasing meltwater during warmer months and sustaining rivers, ecosystems and human settlements.

Key Findings of the Study

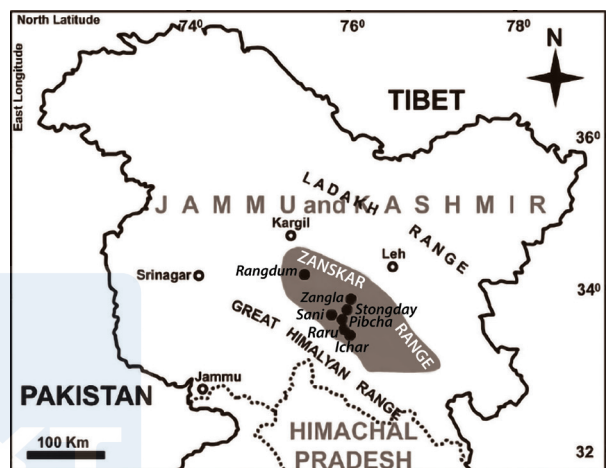
- Reduced Surface Velocity**: The average surface velocity of the studied glaciers declined by **2.4 m/year per decade** over the last three decades.
- Accelerated Thinning**: Glacier thinning increased from about **0.22 m/year (2000–05)** to **0.57 m/year (2015–20)**.
- Cause**: Rising temperatures increase ice loss. As glaciers become thinner, the **driving stress** decreases, reducing the force that moves ice downslope.
- Reduced Ice Transport**: Slower glaciers transfer less ice from

high-altitude accumulation zones to lower-altitude melting zones, weakening long-term glacier sustainability.

- Regional Variation**: Glacier response differs depending on **glacier geometry, debris cover and conditions at the glacier snout**.

Significance of Zaskar Glaciers

- The **Zaskar region** contains some of the largest Himalayan glaciers, including **Machoi Glacier** and **Parkachik Glacier**.
- These glaciers provide a reliable seasonal supply of freshwater for **rivers, ecosystems, agriculture and local communities** in the cold desert region of Ladakh.



Implications for the Indus Basin

- Glacier melt sustains the **Indus River** during the dry summer months when rainfall is limited.
- Initially, accelerated melting may temporarily increase river discharge, a phenomenon known as **Peak Water**. After this stage, river flows gradually decline as glacier ice reserves diminish.
- Continued glacier loss may**:
 - Reduce long-term meltwater availability.
 - Increase uncertainty in water resources.
 - Threaten agriculture, hydropower, ecosystems and downstream water security.

Major Conservation Initiatives

- Paris Agreement (2015)**: Seeks to limit global warming to **well below 2°C**, while pursuing efforts to limit it to **1.5°C**.
- National Mission for Sustaining the Himalayan Ecosystem (NMSHE)**: Supports research, monitoring and climate adaptation for Himalayan ecosystems, glaciers and water resources.
- High Mountain Summit (WMO)**: Promotes glacier monitoring, early warning systems and scientific cooperation.
- International Cryosphere Climate Initiative (ICCI)**: Supports policies for protecting glaciers and the cryosphere.
- Global Cryosphere Watch (GCW)** and the **CryoSat Mission**: Monitor glaciers and ice sheets using coordinated observations and satellite-based remote sensing.



INTERNAL SECURITY

THEATERISATION OF THE INDIAN ARMED FORCES

India is close to completing theaterisation, bringing the Army, Navy and Air Force into joint theatre commands.

About Theaterisation

- It integrates the Army, Air Force and Navy's command structures, unifying resources under a **single commander** to optimize decisions and resource use.
- India currently has **seven Army**, **seven Air Force** and **three Naval** commands, plus two tri-service commands: **Andaman and Nicobar Command**, and **Strategic Forces Command**.
- The **Headquarters Integrated Defence Staff (HQIDS)** assists higher defence coordination.

Need of Theaterisation for India

- The traditional command structure hasn't kept pace with threats from **China and Pakistan**; the **2020 Galwan clash** and **2025 Operation Sindoor** exposed the need for jointness among services operating largely independently.
- Countries like the **US and UK** show integrated commands enhance operational efficiency and **unity of command**.
- It aims to build **joint multi-domain warfighting** capability and improve planning, logistics and intelligence sharing.

Proposed Theatre Commands

- **Western Theatre** (Pakistan-focused): an **Air Force officer** heads it, headquartered in **Jaipur**, given air power's growing role seen in Operation Sindoor.
- **Northern Theatre** (China-focused): an **Army officer** heads it, headquartered in **Lucknow**, reflecting ground forces' dominant Himalayan role.
- **Maritime Theatre**: a **Navy officer** heads it, headquartered in **Thiruvananthapuram**, strengthening **Indian Ocean security**.
- A four-star **Vice Chief of Defence Staff** will handle daily joint operations; the **CDS**, currently **Lt Gen N.S. Raja Subramani**, heads the **Joint Chiefs of Staff Committee** and remains **Secretary, Department of Military Affairs**. Each command gets a deputy from another service.

Present Status

- The proposal is undergoing final internal military consultations before **Defence Ministry review** and top-leadership approval; it has undergone several revisions since **2021**.

Major Challenges

- These include commanders' limited familiarity with unfamiliar domains, differing service cultures, slower decisions from

the added **VCDS layer**, transition-phase **logistics gaps**, and reduced readiness amid simultaneous **China-Pakistan threats**.

'GARUD' BINOCULARS FOR CIVILIAN USE

India Optel Limited (IOL), a Mini Ratna Category-I Defence PSU under the Department of Defence Production, launched the indigenous GARUD binoculars for the civilian market on 13 August 2026.

Key Features

- The 8x magnification and 7.6° field of view enable distant observation while providing a broad viewing area.
- **±5 diopter adjustment** allows users to adapt focus to individual eyesight.
- Soft-touch eyecups and an ergonomic grip support comfortable prolonged use.
- Its **weather-resistant construction** enables outdoor use.
- It weighs about **610 grams**, balancing portability and stability.
- Applications include **birdwatching**, **wildlife observation**, **forestry**, **travel**, **sports** and **marine activities**.

Significance

- Developed by the **Ordnance Factory, Dehradun**, GARUD extends India's defence optical expertise to civilian applications.
- GARUD reflects **Aatmanirbhar Bharat** by commercialising indigenous defence-optical capabilities.
- It also marks IOL's entry into the **civilian optics market**, widening access to technologies developed over decades of defence use.

AGNI-4

India successfully test-fired the medium-range ballistic missile Agni-4 on 6 August 2026, from the Integrated Test Range, Chandipur, Odisha, under the Strategic Forces Command.

About

- It is a **two-stage, nuclear-capable** surface-to-surface ballistic missile powered by **solid-fuel rocket motors**, with a strike range of up to **4,000 km**, forming a vital part of India's **strategic deterrence**.
- The missile is **20 metres** long, **1.3 metres** in diameter, weighs about **17 tonnes**, and carries a payload of roughly **1,000 kg**.
- It launches from a **road-mobile, self-contained launcher**, enhancing survivability and operational flexibility.
- Agni-4 belongs to India's **Agni missile series**, spanning **Agni-I to Agni-V** and the newer **Agni-Prime**.

AGNI MISSILE SERIES BREAKDOWN

AGNI-I

SHORT-RANGE BALLISTIC MISSILE (SRBM)

PURPOSE | Tactical nuclear deterrence against neighbouring threats

LAUNCH PLATFORM | Road and rail mobile launcher

KEY FEATURE | Quick deployment and high mobility

RANGE
700–1,200 km



AGNI-II

MEDIUM-RANGE BALLISTIC MISSILE (MRBM)

STAGES | Two-stage solid-fuel missile

CAPABILITY | Can carry conventional or nuclear warheads

KEY FEATURE | Rail and road mobile launch system

RANGE
2,000 km



AGNI-III

INTERMEDIATE-RANGE BALLISTIC MISSILE (IRBM)

WEIGHT | Heavier payload carrying capability

PURPOSE | Strengthening strategic deterrence

KEY FEATURE | Designed for deeper strike capability

RANGE
3,000–3,500 km



AGNI MISSILE SERIES BREAKDOWN

AGNI-IV

Advanced IRBM

PURPOSE | Tactical nuclear deterrence against neighbouring threats

TECHNOLOGY | Ring laser gyro and composite rocket motor

CAPABILITY | Nuclear-capable precision strike missile

RANGE
3,500–4,000 km



AGNI-V

INTERCONTINENTAL BALLISTIC MISSILE (ICBM)

STAGES | Three-stage solid-fuel missile

TECHNOLOGY | Canister launch system and MIRV capability

KEY FEATURE | Faster launch readiness and multiple warhead delivery

STATUS | Successfully tested with MIRV technology in 2024 and 2025

RANGE
5,000+ km



AGNI-P (Prime)

NEXT-GENERATION BALLISTIC MISSILE

PURPOSE | Replacement for Agni-I and Agni-II

TECHNOLOGY | Lighter composite body with advanced guidance

KEY FEATURE | High accuracy and dual-canister launch capability

RANGE
1,000–2,000 km (estimated)



INTEGRATED GUIDED MISSILE DEVELOPMENT PROGRAMME (IGMDP)



Launched:
26 July 1983



Agency:
Defence Research and Development Organisation (DRDO)



Project Director:
Dr. A.P.J. Abdul Kalam



Objective:
Achieve self-reliance in missile technology and overcome technology-denial regimes.

FIVE CORE MISSILES

PRITHVI



Short-range surface-to-surface ballistic missile; first inducted into the Army.

AGNI



Intermediate-range surface-to-surface ballistic missile; evolved from a re-entry technology demonstrator.

TRISHUL



Short-range surface-to-air missile (SAM) (~9 km).

AKASH



Medium-range SAM (~25–30 km) for air defence.

NAG



Third-generation Anti-Tank Guided Missile (ATGM) with lock-on capability (~4 km).

MQ-9B SEAGUARDIAN HALE RPAS

The Ministry of Defence (MoD) has signed a contract with General Atomics Aeronautical Systems Inc. (GA-ASI), USA, to lease two MQ-9B SeaGuardian High Altitude Long Endurance (HALE) Remotely Piloted Aircraft Systems (RPAS) for the Indian Navy.

MQ-9B SeaGuardian

- The MQ-9B SeaGuardian is the **maritime variant** of the MQ-9B family and is designed for **Intelligence, Surveillance and Reconnaissance (ISR)** and **precision strike** operations.
- It can remain airborne for **over 30 hours**, operate at **altitudes above 40,000 feet**, and provide persistent surveillance over vast **maritime and land areas**.
- It enhances **Maritime Domain Awareness (MDA)** by enabling continuous monitoring of activities across the **Indian Ocean Region (IOR)**.
- The lease will increase the Indian Navy's **leased HALE RPAS fleet from two to four**, enabling simultaneous surveillance of the eastern and western seaboard while familiarising personnel with the configuration of the future fleet.

Significance

- The broader MQ-9B programme includes establishing a **Maintenance, Repair and Overhaul (MRO)** facility in India.
- It also provides for **assembly of a part of the contracted MQ-9B fleet in India** and **indigenous sourcing of specified components**, supporting **Atmanirbhar Bharat**, technology absorption and the growth of India's **defence manufacturing ecosystem**.

TERRIER CYBER QUEST (TCQ) 3.0

The Territorial Army, in collaboration with CyberPeace, has launched the third edition of Terrier Cyber Quest (TCQ) 3.0.

About

- Terrier Cyber Quest (TCQ) is a **national-level hackathon** that brings together talent from **academia, industry, research institutions, government organisations and the Armed Forces**.
- It promotes **innovation and indigenous technological solutions** in **AI, cybersecurity, threat mitigation and digital awareness**, strengthening India's national security ecosystem.
- TCQ 3.0 will be conducted through **three competition tracks**:
 - ♦ **Bug Hunting**: Participants identify and document vulnerabilities in **simulated critical infrastructure environments** through an online **Capture-the-Flag (CTF)** qualifier followed by a live sandbox finale.
 - ♦ **AI Kavach**: Focuses on **Artificial Intelligence (AI)** and **Machine Learning (ML)** solutions for **predictive threat intelligence, automated cyber defence and anomaly detection**.
 - ♦ **Creators Challenge**: A **digital media and storytelling** competition to develop awareness campaigns against **deepfakes, phishing, online scams and misinformation**.

Significance

- The initiative encourages participants to develop **real-world cybersecurity solutions** and strengthens India's capabilities in **cyber defence, information security and indigenous technology development**.
- Outstanding performers may receive opportunities to **visit defence establishments** and contribute to future **cybersecurity initiatives** with the **Territorial Army**.

Territorial Army (TA)

- The **Territorial Army** is a **voluntary reserve force** of the **Indian Army**, comprising **trained civilian volunteers** who continue their regular professions while serving the nation.
- Known as India's **Second Line of Defence**, it supports the regular Army in **internal security, disaster relief, maintenance of essential services** and other operational requirements.
- **Motto**: Savdhani Va Shoorta (Vigilance and Valour).

INS MANGROL

Recently, Cochin Shipyard Limited (CSL), Kochi, has delivered INS Mangrol, the third Anti-Submarine Warfare Shallow Water Craft (ASW SWC), to the Indian Navy.

About

- INS Mangrol is the **third of eight ASW SWCs** that Cochin Shipyard Limited (CSL) is indigenously designing and building for the Indian Navy.
- The ship is named after the **coastal town and minor port of Mangrol in Gujarat**, which is known for its marine fishing industry.
- It also carries forward the legacy of the **erstwhile INS Mangrol**, a naval minesweeper that served the Indian Navy until **2004**.

Key Features

- It is designed primarily for **Anti-Submarine Warfare (ASW)** in **shallow coastal waters**, where submarine detection is more challenging.
- It can also undertake **underwater surveillance, Low-Intensity Maritime Operations (LIMO), Search and Rescue (SAR)** missions and **mine warfare**, including mine-laying.
- The ship is **78 metres** long with a displacement of about **900 tonnes**.
- It can achieve a **maximum speed of 25 knots**.
- It is powered by a **Diesel Engine-Waterjet Propulsion System**, providing high manoeuvrability in shallow waters.
- It is equipped with **lightweight torpedoes, indigenous anti-submarine rockets, advanced radars and shallow-water sonars** for effective underwater operations.
- The vessel has **more than 80% indigenous content**, which reflects India's growing self-reliance in defence manufacturing.

- It has been designed and built in accordance with the classification standards of **Det Norske Veritas (DNV)**, a globally recognised maritime classification society.

Significance

- INS Mangrol** enhances the Indian Navy's capability to detect and neutralise submarine threats in coastal waters.
- It strengthens **maritime security**, **coastal defence**, and **surveillance capabilities**.
- The project promotes **indigenous defence production**, technological self-reliance and the vision of **Aatmanirbhar Bharat**.

INS NIPUN

The Indian Navy will commission **INS Nipun**, the second **Diving Support Vessel (DSV)** of the **Nistar-class**, at **Naval Dockyard, Mumbai**.

About INS Nipun

- INS Nipun** is a specialised **Diving Support Vessel (DSV)** designed for **deep-sea diving**, **diver support**, **underwater intervention**, **salvage operations** and **other complex maritime missions**.
- It has been indigenously designed and built by **Hindustan Shipyard Limited (HSL)**, **Visakhapatnam**, with nearly **75% indigenous content**, reinforcing the **Aatmanirbhar Bharat** initiative.
- The vessel has been constructed in accordance with **Indian Register of Shipping (IRS)** classification standards.

Key Features

- INS Nipun** is equipped with **deep-sea saturation diving** systems for prolonged underwater operations. Its **side-diving stage** supports diving operations up to **75 metres**.
- Remotely Operated Vehicles (ROVs)** can undertake diver monitoring and salvage missions up to **1,000 metres** depth.
- It will function as the **mother ship for Deep Submergence Rescue Vehicles (DSRVs)**, enabling rescue of submariners during underwater emergencies.
- The ship is fitted with **advanced navigation systems**, **platform management systems**, **precise station-keeping capability** and **onboard medical facilities** for sustained underwater missions.

Significance

- The induction of **INS Nipun** enhances the Indian Navy's capability in **deep-sea operations**, **underwater rescue**, **salvage missions** and **submarine support**.
- The name '**Nipun**', derived from **Sanskrit**, means '**skilled, capable and proficient**.' Its crest, depicting a **whale** and a **diving helmet**, symbolises endurance, diver safety and excellence in deep-ocean operations.
- It also reflects India's growing capabilities in **indigenous defence shipbuilding** and specialised maritime technologies.

MISSILE TECHNOLOGY TRANSFER TO DEFENCE INDUSTRY

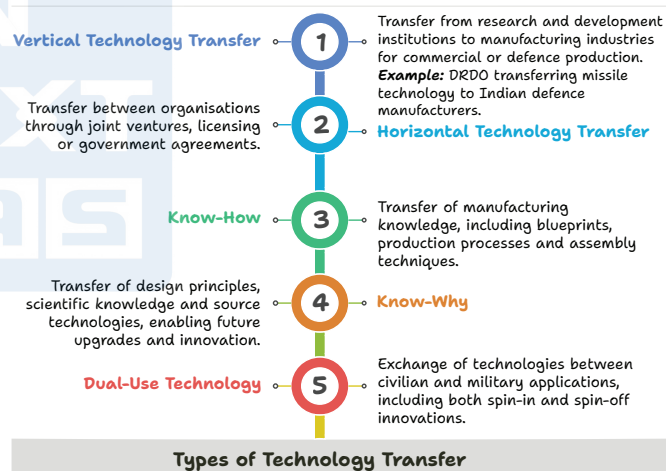
The Defence Minister has approved the transfer of **DRDO-developed technologies** for all conventional missile systems to eligible Indian defence companies for domestic production.

About the Initiative

- The transfer will enable **eligible Indian industries** to manufacture **DRDO-developed conventional missile systems** after meeting prescribed **technical, certification and regulatory requirements**.
- It seeks to bridge the gap between **research and large-scale production**, enabling faster induction of indigenous missile systems.

Missile Technology Transfer

- It refers to the transfer of **design, production, integration and operational know-how** from research organisations to industrial partners or through government-approved collaborations.
- It has become increasingly important due to the growing role of **precision-guided and stand-off weapons** in modern warfare.



Significance

- Strengthens indigenous manufacturing** by enabling industrial-scale production of advanced missile systems.
- Promotes private-sector participation**, including **MSMEs**, in India's defence manufacturing ecosystem.
- Enhances indigenous value addition** and builds a resilient domestic defence supply chain.
- Reduces import dependence** and improves preparedness against global supply disruptions.
- Boosts defence exports** by expanding the manufacturing base, subject to international obligations such as the **Missile Technology Control Regime (MTCR)**.
- India possesses a strong indigenous missile portfolio, including the **Agni ballistic missile series** and the **BrahMos supersonic cruise missile**.

- India recorded its **highest-ever defence production of ₹1.54 lakh crore in 2024–25**, while **defence exports reached ₹23,622 crore**. The Government targets **₹1.75 lakh crore** defence production in the current fiscal year and **₹3 lakh crore by 2029**.

Challenges

- Export control regimes** limit access to certain advanced missile technologies.
- Some industries may lack **specialised infrastructure, testing facilities and skilled manpower**.
- Wider industrial participation increases risks of **cyber threats, intellectual property theft and technology leakage**.
- Missile production requires **high capital investment** and has a **long gestation period**.

T-SERIES TANK OVERHAUL FACILITY AT JABALPUR

The Defence Minister laid the foundation stone for the T-Series Tank Overhaul Facility at Vehicle Factory, Jabalpur (Madhya Pradesh). The project will enhance the Indian Army's capability to maintain T-72 and T-90 tanks, ensuring higher operational readiness.

About the Project

- The project aims to establish a dedicated facility for **overhauling T-72 and T-90 main battle tanks**.
- It is being developed at the **Vehicle Factory, Jabalpur**, a unit of **Armoured Vehicles Nigam Limited (AVNL)**, a **Mini Ratna Defence Public Sector Undertaking (DPSU)**.
- The project has an estimated cost of **₹472 crore**.

New Tank Overhaul Facility at Jabalpur

Jabalpur Facility Capacity	Indian Army Requirement	Heavy Vehicles Factory, Avadi (Chennai)	The Jabalpur Facility Bridges the Gap
 The new facility will have the capacity to overhaul 80 tanks annually.	 The Indian Army needs to overhaul around 230 tanks every year.	 The Heavy Vehicles Factory, Avadi (Chennai) currently has an annual overhaul capacity of 150 tanks .	 The Jabalpur facility will bridge the existing capacity gap and ensure the timely availability of refurbished tanks.

Significance

- The project will improve the **operational readiness** and service life of the Army's armoured fleet.
- It will strengthen India's **Maintenance, Repair and Overhaul (MRO)** capability for indigenous defence assets.
- The initiative will reinforce **Jabalpur's position as a major hub for defence manufacturing and maintenance**.
- It also supports the **Aatmanirbhar Bharat** initiative by strengthening domestic defence infrastructure and reducing dependence on external maintenance support.
- Modern warfare increasingly depends on the integration of **tanks, infantry, artillery, drones, air power, surveillance systems and precision weapons**, making efficient maintenance of armoured platforms essential.

Defence Production

- India's **defence production** increased to about **₹1.80 lakh crore in FY 2025–26**, compared to **₹46,000 crore in 2014**.
- Defence exports** rose to around **₹39,000 crore in FY 2025–26**, up from **less than ₹1,000 crore in 2014**, reflecting the growth of India's indigenous defence manufacturing ecosystem.

INDIA-US JAVELIN ANTI-TANK GUIDED MISSILE (ATGM) DEAL

India and the United States have signed a **₹292-crore Letter of Offer and Acceptance (LOA)** under the **Foreign Military Sales (FMS)** route for the **government-to-government procurement of about 60 Javelin Anti-Tank Guided Missiles (ATGMs)** for the Indian Army.

Javelin Missile System

- FGM-148 Javelin** is a **man-portable, shoulder-fired, medium-range, third-generation, fire-and-forget ATGM**.
- It is jointly developed and manufactured by the **Javelin Joint Venture**, comprising **Lockheed Martin** and **RTX (formerly Raytheon Technologies)**.
- It is designed to destroy **main battle tanks, armoured vehicles, bunkers and fortified positions**.
- It uses a **passive Imaging Infrared (IIR) seeker**, which locks onto the target before launch and automatically tracks it throughout flight.
- It features a **top-attack capability that strikes** the weaker upper armour of tanks. It can also operate in **direct-attack mode** against bunkers and buildings.
- It has **soft-launch capability**, enabling safe firing from **confined spaces** such as bunkers and buildings with minimal backblast.
- It has an effective operational range of about **2.5–4 km** and weighs around **22 kg**, ensuring high mobility for infantry.
- It is **combat proven** and has been extensively used in **Iraq, Afghanistan and Ukraine**.

Key Aspects of the Procurement

- The procurement is being carried out under the **6th tranche of Emergency Procurement (EP-6)**, which allows fast-track acquisitions up to **₹300 crore** per equipment category.
- Deliveries are expected to commence during **FY 2026–27**.
- The missiles are intended to bridge critical **anti-armour and bunker-busting capability gaps**, particularly after **Operation Sindoor**.
- India had earlier procured a limited number of **Spike-LR ATGMs** under emergency procurement in **2019** to meet urgent operational requirements.

Indigenous Man-Portable Anti-Tank Guided Missile (MPATGM)

- MPATGM**, developed by **DRDO**, is intended to replace the ageing **Milan-2T** and **Konkurs** missile systems.

- It is a **third-generation, fire-and-forget ATGM** with **top-attack capability**.
- In **January 2026**, it successfully hit a **moving target** during flight trials at **KK Ranges, Ahilya Nagar, Maharashtra**.
- It incorporates indigenous technologies, including an **IIR seeker, tandem warhead, propulsion system, fire-control system and all-electric control actuation system**.
- It can be launched from **tripods** and **vehicle-mounted launchers** and supports **day-and-night operations**.
- **Bharat Dynamics Limited (BDL)** and **Bharat Electronics Limited (BEL)** are its **Development-cum-Production Partners (DcPPs)**.

Significance

- The acquisition strengthens the **India-US Major Defence Partnership** and enhances the Indian Army's **anti-armour capability**.
- It provides an immediate operational solution while supporting **Aatmanirbhar Bharat** through the phased induction of the indigenous **MPATGM**.

DRAFT SHANTI RULES, 2026

The Department of Atomic Energy (DAE) has released the **Draft SHANTI Rules, 2026** to operationalise the **Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Act, 2025**.

SHANTI Act, 2025

- Provides the **legal framework for the next phase of India's civil nuclear programme**.
- Establishes a **modern and integrated regulatory framework** for nuclear energy.
- Enables **regulated private-sector participation** while retaining **Government control over strategic activities**.
- Strengthens the framework for **licensing, civil nuclear liability and compensation**.
- Promotes peaceful applications in **power generation, healthcare, agriculture, industry, research and innovation**.

- Ensures nuclear safety, security, environmental protection and emergency preparedness.
- Supports India's energy security and clean-energy transition.

Major Provisions of the Draft SHANTI Rules, 2026

- **Single Composite Licence:** Introduces a unified licence covering construction, ownership, operation and decommissioning, reducing multiple licensing stages.
- **In-Principle Approval:** Allows preliminary approval before finalising the reactor technology or project site, facilitating early investment, land acquisition and vendor negotiations.
- **Civil Liability:** Imposes **strict, no-fault liability** on nuclear operators, including accidents during the **transport of nuclear material**.
- **Financial Security:** Mandates insurance or other financial security throughout the project life cycle, including spent-fuel management, radioactive waste disposal, decommissioning and site restoration.
- **Liability Review:** Requires an **expert committee** to review operator liability limits every **five years**.
- **Government Liability:** Specified **Central Government-owned installations** may remain exempt from insurance, with liability assumed by the Union Government.
- **Expanded Applications:** Extends nuclear use to captive power, hydrogen production, industrial process heat, medical isotope production, education, research, semiconductors, quantum technologies, high-performance computing, artificial intelligence and data centres.

Small Modular Reactors (SMRs)

- SMRs are advanced nuclear reactors with about one-third the capacity of conventional nuclear plants.
- They are factory-manufactured, modular and faster to deploy.
- They are suitable for remote regions, industrial clusters and decentralised low-carbon power generation.

IMPORTANT EXERCISES

Name (Year)	Venue	Nature	Participants	Remarks
Maitree-XV	Vibhavadi Rangsit Camp, Surat Thani, Thailand	Military	India and Thailand	Execution of Joint Counter Insurgency/Terrorist Operations in Jungle and Semi-Urban Environments under Chapter VII of the United Nations Charter.
Pitch Black	Australia	Air Force	Multi-national	The name 'Pitch Black' was derived from the emphasis on nighttime flying over large unpopulated areas. Emphasis on nighttime flying over large unpopulated areas .
Udara Shakti	Malaysia	Air Force	India-Malaysia	Training together and enhancing interoperability.



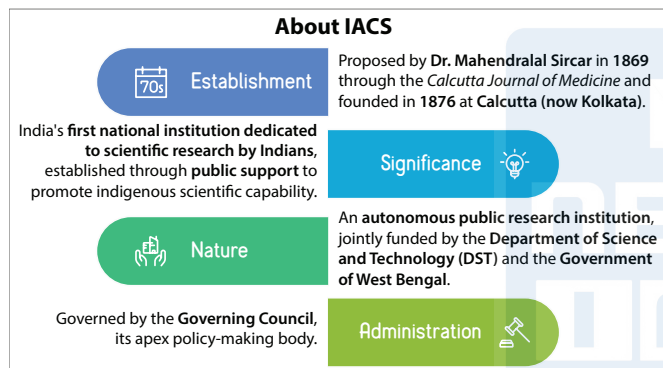
SCIENCE & TECHNOLOGY

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE (IACS)

The Indian Association for the Cultivation of Science (IACS) completes 150 years in 2026, commemorating India's first national institution dedicated to scientific research by Indians.

Historical Background

- The **Bengal Renaissance** of the 18th and 19th centuries promoted scientific temper, rational thinking, modern education, social reform, and the establishment of scientific institutions.
- This intellectual awakening laid the foundation for **indigenous scientific research** in India.



Scientific Legacy

- **Scientific Self-Reliance:** Enabled Indians to undertake **original scientific research** despite limited opportunities under colonial rule, making IACS a symbol of **scientific nationalism**.
- **C.V. Raman:** Discovered the **Raman Effect** at IACS, announced on **28 February 1928**. It showed that a small fraction of scattered light undergoes a change in **wavelength (or frequency)** after interacting with a transparent material. He received the **1930 Nobel Prize in Physics**, becoming the **first Asian scientist to win a Nobel Prize in the sciences**.
- **Associated Scientists:** Jagadish Chandra Bose (radio science and plant physiology), Meghnad Saha (Saha Ionisation Equation), and Satyendra Nath Bose (Bose-Einstein Statistics and bosons).

NAVIGATION WITH INDIAN CONSTELLATION (NavIC)

The Government informed Parliament that NavIC has temporarily lost its standalone positioning capability because only three navigation satellites are currently providing Positioning, Navigation and Timing (PNT) services, whereas at least four are required for independent positioning.

About NavIC

- NavIC (Navigation with Indian Constellation) is India's **indigenous regional satellite navigation system**, developed by the **Indian Space Research Organisation (ISRO)** under the **Indian Regional Navigation Satellite System (IRNSS)**.
- It was **renamed as NavIC in 2016** to promote wider public adoption.
- It provides **Positioning, Navigation and Timing (PNT)** services across **India and up to 1,500 km beyond its borders**.
- The original constellation was designed with **7 satellites**, comprising **3 geostationary** and **4 inclined geosynchronous** satellites.
- ISRO has launched **11 satellites**, including replacement satellites, under the programme.
- **Signals:** NavIC transmits navigation signals in the **L5 and S bands**, with the **S-band** being a distinctive feature among satellite navigation systems.
- **Service Types:**
 - ♦ **Standard Positioning Service (SPS):** Open to civilian users.
 - ♦ **Restricted Service (RS):** An encrypted service for **authorised strategic users**, including the **Armed Forces** and security agencies.
- **Accuracy:** Better than **10 metres** across the primary service area and **better than 5 metres** over the Indian landmass.
- NavIC is **interoperable** with other **Global Navigation Satellite Systems (GNSS)**, including **GPS, GLONASS, Galileo and BeiDou**.

Reasons for Impact on Standalone Navigation

- **IRNSS-1F**, launched in **2016**, completed its mission life, and its **atomic clock stopped functioning** in **March 2026**, reducing the number of operational navigation satellites.
- Currently, only **IRNSS-1B, IRNSS-1I and NVS-01** provide **PNT services**.
- A navigation receiver uses **trilateration**. It requires **at least four satellites** to determine **three-dimensional position (latitude, longitude and altitude)** while correcting the receiver's clock error.
- Consequently, **standalone positioning is unavailable**, although **timing services** and **one-way emergency message broadcasting** continues to function.

Significance

- **Limited User Impact:** Most smartphones, aircraft, ships and vehicles use **multi-constellation GNSS receivers**, combining signals from **GPS, Galileo, GLONASS, BeiDou and NavIC**. Hence, navigation services continue with minimal disruption.

➤ Strategic Importance:

- ◆ NavIC strengthens **India's technological and strategic autonomy** by reducing dependence on foreign navigation systems.
- ◆ It supports defence, disaster management, aviation, maritime navigation, railways, road transport, precision agriculture, and surveying and mapping.
- ◆ It also helps ensure continuity of navigation services during emergencies or geopolitical disruptions.

Future Roadmap

- **NVS-03** is ready for launch, while **NVS-04** and **NVS-05** are under development.
- These satellites are expected to **restore the full operational constellation and NavIC's standalone positioning capability**.

AI-POWERED PALLETISING

According to Future Market Insights (FMI), the global AI palletising and depalletising market is projected to grow from USD 1.8 billion in 2026 to USD 9 billion by 2036.

AI-Powered Palletising and Depalletising

- **Meaning:** It is an industrial automation technology that combines AI, computer vision, machine learning and robotic arms to automatically stack goods onto pallets (palletising) and unload goods from pallets (depalletising).
- **Objective:** It improves **speed, accuracy, safety and operational efficiency** in warehouses and manufacturing facilities.

Need

- **Traditional robotic palletisers** operate using **fixed programming** and perform best with **uniform packages**.
- They struggle to handle **mixed Stock Keeping Units (SKUs), irregular packaging and damaged cartons**.
- **AI-powered systems** automatically adapt to changing package sizes, shapes and configurations, without requiring manual reprogramming.

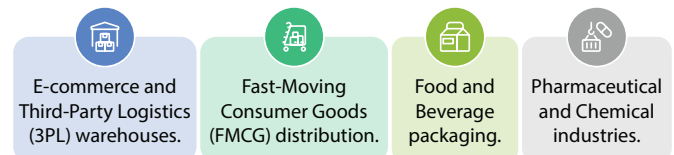
Working Mechanism

- **Computer Vision:** High-resolution cameras scan each package to identify its **size, shape, orientation and condition** in real time.
- **AI Algorithms and Machine Learning:** The system identifies the **best gripping point** and calculates the **safest and most stable stacking pattern**.
- **Robotic Execution:** Multi-axis robotic arms lift, stack and unload packages while continuously adjusting movement using **real-time sensor feedback**.
- **Continuous Learning:** Machine learning models continuously improve **stacking efficiency, gripping accuracy and recovery from operational errors** using real-time operational data.

Key Features

- Handles **mixed SKUs** with different **sizes, shapes and weights** on the same pallet.
- Adapts to **irregular and damaged packages** without manual reprogramming.
- Performs **real-time quality inspection** using computer vision.
- Optimises **pallet stability, storage density and material handling efficiency**.
- Reduces **manual intervention, operational errors and workplace injuries**.

Distribution of Applications in Warehousing and Distribution



Challenges

- **High initial investment** in robotic systems, AI software and vision sensors.
- **Complex integration** with legacy conveyor systems and **Warehouse Management Systems (WMS)**.
- Dependence on **reliable sensor data and seamless software integration**.
- Operational delays may occur if **robotic error recovery** is inadequate.

Significance

- Improves **warehouse productivity and operational efficiency**.
- Reduces **labour-intensive repetitive work**.
- Enhances **worker safety** by automating heavy lifting.
- Supports **Industry 4.0**, smart manufacturing and intelligent logistics.
- Strengthens **supply chain efficiency** through faster and more reliable material handling.

INDIA'S CHALLENGE OF RETAINING SCIENTIFIC TALENT

Recent reports of nearly 120 scientists resigning from the Indian Space Research Organisation (ISRO) have raised concerns about India's ability to retain scientific talent.

Brain Drain

- **Brain Drain** is the migration of **highly skilled and educated professionals** to other countries in search of better career opportunities.
- In India, it mainly involves **scientists, engineers, doctors, IT professionals and academics** moving to countries such as the **United States, Canada, the United Kingdom and Australia**.
- Between **2015 and 2022**, around **1.3 million Indians** migrated abroad, many of whom were highly skilled professionals.

Attrition in ISRO

- **Rigid Institutional Hierarchy:** Many research institutions continue to function through hierarchical administrative structures that restrict scientific independence.
- **Bureaucratic Culture:** Administrative procedures and status often overshadow academic merit, creativity and evidence-based scientific inquiry.
- **Better Professional Opportunities:** Scientists increasingly join private research organisations, deep-tech companies, foreign universities and international collaborations, where they enjoy greater research autonomy.
- **Low Investment in R&D:** India's Gross Expenditure on Research and Development (GERD) remains around 0.6–0.7% of GDP, while private-sector contribution is only about 36%, significantly lower than leading innovation-driven economies.
- **Limited Research Ecosystem:** Insufficient access to advanced laboratories, modern infrastructure, global collaborations and long-term career opportunities encourages migration.
- **Economic and Lifestyle Factors:** Higher salaries, better research funding, superior infrastructure, quality healthcare, improved living standards and international recognition also attract scientists abroad.

Government Initiatives

- **Research, Development and Innovation (RDI) Scheme:** ₹1 lakh crore corpus to strengthen private-sector R&D and deep-tech innovation.
- **Anusandhan National Research Foundation (ANRF):** Promotes research, innovation and entrepreneurship through strategic funding.
- **Indian Space Policy, 2023:** Expands participation of non-governmental entities in the space sector.
- **National Quantum Mission, IndiaAI Mission, India Semiconductor Mission, BioE3 Policy, National Supercomputing Mission, National Geospatial Policy, 2022, and Atal Innovation Mission (AIM)** aim to strengthen India's scientific and innovation ecosystem.

Way Forward

- Increase public and private investment in research and development.
- Promote academic autonomy, transparent governance and effective grievance redressal in scientific institutions.
- Strengthen merit-based leadership, mentorship and interdisciplinary collaboration.
- Develop world-class research infrastructure and provide competitive career opportunities.
- Build an ecosystem where scientific freedom, innovation and original research are encouraged, enabling India to retain and nurture its best scientific talent.

LEPTOSPIROSIS

Kerala has reported a sharp rise in leptospirosis cases and deaths in 2026.

Leptospirosis

- **Leptospirosis** is a zoonotic bacterial disease caused by *Leptospira* bacteria.
- It spreads through contact with the urine or body fluids of infected animals, or through water, soil, or food contaminated with infected urine.
- The bacteria enter the body through cuts or abrasions on the skin or through the eyes, nose, or mouth.
- Person-to-person transmission is rare.

Risk Factors

- It is most common in tropical and subtropical regions, where high rainfall, humidity, and flooding favour bacterial survival.
- People at higher risk include farmers, animal handlers, sanitation workers, outdoor labourers, gardeners, and those involved in water-based activities such as swimming or wading in contaminated water.

Symptoms and Complications

- **Common symptoms:** High fever, severe headache, chills, muscle pain, vomiting, red eyes, jaundice, abdominal pain, diarrhoea, rash, and flu-like illness.
- Severe infection may cause kidney failure, liver failure, meningitis, respiratory complications, multi-organ failure, and death if untreated.

Treatment

- **Mild cases:** Treated with oral antibiotics such as doxycycline or penicillin.
- **Severe cases** require hospitalisation and intravenous (IV) antibiotics.

Key Fact

- Kerala has reported leptospirosis since 1989.
- It has remained endemic for over three decades and currently has the highest mortality among communicable diseases in the State.

LAB-GROWN DIAMONDS

Lab-grown diamonds are emerging as a sustainable, ethical, and resource-efficient alternative to natural diamonds.

Reasons for the Shift

- Major diamond mines, including Argyle (Australia) and Diavik (Canada), have reached the end of their productive life.
- Around 40 mines account for nearly 90% of global diamond production, and many are expected to be exhausted within the next 50 years.

- As a result, global natural diamond production has declined to a **multi-decade low**.

Concerns with Diamond Mining

- Environmental Impact:** Mining causes **deforestation, habitat loss, soil erosion, water pollution**, and large-scale land disturbance. It also requires substantial **water and energy**.
- Health Risks:** Mine workers may be exposed to **asbestos**, increasing the risk of **asbestosis, pleural plaques, and mesothelioma**.
- Blood Diamonds:** These are diamonds traded illegally to finance armed conflicts. Although the **Kimberley Process** aims to certify conflict-free diamonds, regulatory gaps continue to enable illegal trade.
- High Carbon Footprint:** Diamond mining and processing can generate significant greenhouse gas emissions. Lab-grown diamonds also have varying emissions depending on the **energy source** used during production.

Lab-Grown Diamonds

- The first successful **synthetic diamonds** were produced by **General Electric (GE)** in **1954** under **Project Superpressure**.
- They are **chemically, physically, and optically identical** to natural diamonds.
- Composition:** Pure carbon.
- Crystal Structure:** **Cubic crystal lattice**, identical to natural diamonds.
- They are produced using:**
 - High Pressure High Temperature (HPHT):** Replicates the high pressure and temperature of the Earth's mantle.
 - Chemical Vapour Deposition (CVD):** Deposits carbon atoms from a carbon-rich gas onto a diamond seed crystal layer by layer.

This Table presents a comparison of natural and lab-grown diamonds, drawing on findings from the Natural Diamond Council's 2025 report.

Criterion	Natural Diamonds	Lab-grown Diamonds
Cost per carat in India	₹1.5–7 lakhs	₹80,000
Water consumption	0.077 m³/ct	0–0.002 m³/ct
Energy consumption	150 kWh/ct (DeBeers)	36 kWh/ct (HPHT) 214.7 kWh/ct (MP-CVD)
CO ₂ emissions	160 kg/ct	17–260 kg/ct

Diamond prices vary based on the **4Cs - carat, cut, colour and clarity**. The values shown are representative market ranges.

- Many **lab-grown diamonds** contain **little or no nitrogen impurities**, unlike many natural diamonds.

Advantages

- Lower Environmental Impact:** They generally require **less land, water, and energy** than conventional mining.
- Conflict-free and Traceable:** They avoid the ethical concerns associated with **blood diamonds**.
- Lower Carbon Footprint:** Their emissions are significantly reduced when manufactured using **renewable energy**.

Market Trends

- As of **2024**, **India processes nearly 90% of the world's diamonds**, accounting for about **75% of global diamond turnover by value**.
- The **lab-grown diamond market** is projected to increase from **12% of the global diamond market in 2024 to 16% by 2029**.

Significance

- Lab-grown diamonds support the **United Nations Sustainable Development Goals (SDGs)** by promoting **sustainable manufacturing, resource efficiency, and cleaner energy use**.
- They also advance the **circular economy** by reducing dependence on finite natural resources and minimising environmental impacts throughout the product life cycle.

INDIA'S FIRST INDIGENOUS AFRICAN SWINE FEVER (ASF) VACCINE

The Indian Council of Agricultural Research (ICAR) has developed India's first indigenous **MA-104 Cell Line-Based Live Attenuated Vaccine** against **African Swine Fever (ASF)**.

About the Vaccine

- Developed by **ICAR–National Institute of High Security Animal Diseases (ICAR-NIHSAD)**, Bhopal.
- It is a **live attenuated vaccine** developed using an **attenuated Genotype II ASFV** with specific gene deletions.
- It uses the **MA-104 cell line**, making **large-scale and cost-effective production** feasible.
- It is recommended for **healthy pigs above eight weeks of age**.
- It is administered as a **1 mL intramuscular injection**, followed by a **booster dose after 14 days**.

African Swine Fever (ASF)

- ASF** is a **highly contagious transboundary animal disease (TAD)** caused by the **African Swine Fever Virus**. It affects **domestic pigs and wild boar**.
- It **poses no direct risk to human health**.
- It spreads through **infected pigs or carcasses, contaminated feed, food waste (swill), pork products, equipment, vehicles, clothing, and soft ticks** in certain regions.
- The disease is characterised by **high fever, internal haemorrhages, and mortality rates of up to 100%**.
- ASF was first reported in **Kenya in 1921**. It is now present across **Africa, Europe, Asia, and parts of Oceania and the Caribbean**.

- In **India**, ASF was first detected in **2020**. It has spread across several States and Union Territories, particularly affecting the **North-Eastern region**, causing **large-scale pig mortality, movement restrictions, disruption of pig production and trade**, and severe livelihood losses.
- ASF is a **listed disease of the World Organisation for Animal Health (WOAH)**, and member countries must report outbreaks under the **Terrestrial Animal Health Code**.

Significance

- The vaccine can **reduce pig mortality, minimise economic losses**, and improve the **livelihoods of pig farmers**.
- It will strengthen **livestock biosecurity and food security** and support India's emergence as a **supplier of affordable veterinary vaccines**.

VEHICLE-TO-VEHICLE (V2V) COMMUNICATION

The Ministry of Road Transport and Highways (MoRTH) has issued draft amendments to the Central Motor Vehicles Rules, 1989, proposing mandatory Vehicle-to-Vehicle (V2V) communication systems in new vehicles from 1 October 2028 to improve road safety.

About

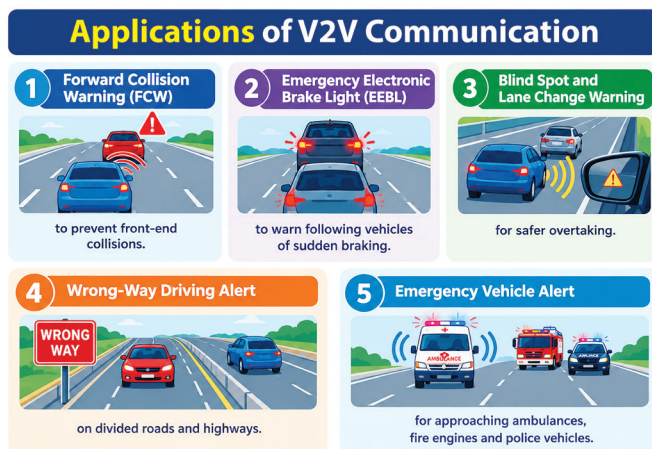
- **Vehicle-to-Vehicle (V2V) communication** is a wireless technology that enables **nearby vehicles to exchange real-time information** such as **location, speed, direction, acceleration and braking status**.
- It provides **early warnings** about potential hazards, allowing drivers or vehicle systems to respond before an accident occurs.
- Unlike conventional safety systems that rely mainly on **onboard sensors and driver observation**, V2V can detect risks **beyond the driver's line of sight**, such as around blind curves or behind large vehicles.

Working Mechanism

- Vehicles are equipped with **On-Board Units (OBUs)** that continuously exchange information with nearby vehicles.
- The system analyses the received data to identify potential collision risks within milliseconds.
- It then issues **visual, audio or haptic alerts** to the driver for timely action.
- The system operates using **Cellular Vehicle-to-Everything (C-V2X)** technology in the **5.875-5.925 GHz** licence-exempt spectrum.

Implementation in India

- **AIS-230 (Automotive Industry Standard)** lays down the technical framework for V2V communication.
- **From 1 October 2027**: Voluntary compliance for vehicles equipped with V2V systems.
- **From 1 October 2028**: Mandatory from 1 October 2028 for all newly manufactured **L (two-/three-wheelers), M (passenger vehicles) and N (goods vehicles)** category vehicles.



Significance

- **Complements Advanced Driver Assistance Systems (ADAS)** by improving situational awareness.
- **Reduces road accidents and fatalities** through proactive hazard warnings.
- Supports **connected mobility** and the development of **Intelligent Transport Systems (ITS)**.
- Provides a technological foundation for future **connected and autonomous vehicles**.

FIRST PRIVATELY DEVELOPED FFSC ROCKET ENGINE (EVEREST)

Astrobase Space Technologies has unveiled **EVEREST**, India's first privately developed 800 kN Full-Flow Staged Combustion (FFSC) rocket engine.

EVEREST Rocket Engine

- **Developer:** Astrobase Space Technologies, Bengaluru.
- **Type:** 800 kN LOX-Methane Full-Flow Staged Combustion (FFSC) liquid rocket engine.
- Astrobase has become only the **fourth commercial company globally** to develop a **high-thrust FFSC engine**.
- **Designed for:** Reusable medium-lift launch vehicles.
- **Performance:**
 - ◆ **Thrust:** 800 kN
 - ◆ **Specific Impulse:** 340 seconds
- **Throttle Range:** 50% to 110%
- The company aims to achieve the **first orbital flight by 2028**.
- Around **20 engines** are planned to be manufactured and tested before the first orbital mission.
- The project is supported under the **Technology Adoption Fund (TAF)** of the **Indian National Space Promotion and Authorisation Centre (IN-SPACe)**.

About FFSC Engine

- **FFSC** is one of the **most advanced liquid-propellant rocket engine cycles**.

- It uses **liquid oxygen (LOX)** as the oxidiser and **liquid methane** as the fuel.
- In this cycle, **all the fuel passes through a fuel-rich preburner** and **all the oxidiser passes through an oxidiser-rich preburner** before entering the main combustion chamber.
- Since **the entire propellant flow passes through the turbines**, the cycle is called **Full-Flow Staged Combustion**.
- This maximises propellant utilisation and improves the overall engine efficiency.

Advantages

- Produces **higher thrust** with the same amount of propellant.
- Delivers **higher fuel efficiency**.
- Operates at **lower temperatures**, reducing wear on engine components.
- Enables **multiple reuse**, lowering launch costs.
- Supports **high launch frequency** and **launch-on-demand** capability.

Significance

- Strengthens **India's self-reliance in advanced rocket propulsion**.
- Accelerates the development of **reusable orbital-class launch vehicles**.
- Enhances the capabilities of India's **private space ecosystem**.
- Reduces dependence on **foreign propulsion technologies**.
- Improves India's competitiveness in the **global commercial launch market**, where the country currently accounts for **less than 2% of the global space economy**.

EPIGENETIC INHERITANCE BEYOND MENDELIAN GENETICS

A recent study on the mouse genome suggests that some inherited traits are influenced by epigenetic mechanisms, which are not fully explained by the classical Mendelian laws of inheritance.

Key Findings of the Study

- The study found that **heritable variation** may arise from **epigenetic changes** in addition to changes in the DNA sequence.
- It suggests that **Genome-Wide Association Studies (GWAS)**, which primarily identify **DNA sequence variants** linked to diseases, may miss a significant proportion of heritable variation.
- The researchers propose that **Allele-Specific Epigenome-Wide Association Studies (ASEWAS)**, which analyse **DNA methylation patterns**, could identify disease-associated genomic regions that conventional genetic studies fail to detect.
- The findings may improve understanding of **complex inherited disorders** and diseases that have long resisted conventional genetic analysis.

DNA Methylation

- **DNA methylation** is an **epigenetic mechanism** in which a **methyl group is added to the C5 position of cytosine**, forming **5-methylcytosine**.
- It regulates **gene expression** by suppressing gene activity or preventing the binding of transcription factors to DNA.
- It is a **reversible epigenetic modification** that **does not alter the DNA sequence**.

Mendel's Laws of Inheritance

- **Gregor Mendel**, regarded as the **Father of Genetics**, established the fundamental principles of heredity through experiments on **pea plants**.
- **Law of Segregation:** Every individual possesses **two alleles** for a trait. During gamete formation, the alleles separate, and each gamete receives **one allele**.
- **Law of Independent Assortment:** Genes controlling **different traits** assort independently during gamete formation, provided they are **located on different chromosomes**.
- **Law of Dominance:** When two different alleles are present, the **dominant allele** masks the expression of the **recessive allele** in a heterozygous individual.

Significance

- Highlights the important role of **epigenetics** in inheritance.
- May improve the identification of **disease-associated genomic regions**.
- Supports advances in **precision medicine** and **disease-risk prediction**.
- Enhances understanding of **complex hereditary disorders**.
- Complements, rather than replaces, **Mendelian genetics**, showing that inheritance can also be influenced by **epigenetic modifications** under certain conditions.

MOON BASE PROGRAMME

NASA has invited ISRO to join its Moon Base Programme, a historic turning point in India-US civil space cooperation.

Artemis Programme and Moon Base

- The Artemis Programme is NASA's flagship **human lunar exploration programme** to return astronauts to the Moon for the first time since the Apollo missions (last crewed landing in 1972) and prepare for future crewed missions to Mars.
- **Moon Base** is a **three-phase programme** to establish a **permanent human outpost** near the **Moon's South Pole**, where astronauts will **live, work and conduct long-term scientific research**.
- **Why the Lunar South Pole?**
 - ♦ It contains **water ice** trapped in **permanently shadowed craters**.
 - ♦ The ice can provide **drinking water, oxygen and rocket fuel**, making long-duration human missions more feasible.

Implementation Phases:

- ♦ **Phase I (Through 2029):** Robotic missions to explore the South Pole, test technologies and prepare the site.
- ♦ **Phase II (2029–2032):** Development of infrastructure required for sustained human presence.
- ♦ **Phase III:** Establishment of a **permanent lunar base** for scientific research, technology demonstration and future deep-space missions.

India-US Space Cooperation

- ♦ The invitation was extended during the **9th India–US Civil Space Joint Working Group (CSJWG)** meeting held at **ISRO Headquarters, Bengaluru**.
- ♦ The meeting advanced **civil, commercial and human spaceflight cooperation** under the **US-India TRUST** (Transforming the Relationship Utilising Strategic Technology) initiative.
- ♦ Both countries reviewed the successful **NASA-ISRO Synthetic Aperture Radar (NISAR) Earth observation mission** and explored future collaboration in space science and human spaceflight technologies.
- ♦ They also reaffirmed their commitment to the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) guidelines on the **long-term sustainability of outer space activities**.

Artemis Accords

- ➔ It is a non-binding international framework launched in 2020 by NASA, the US Department of State and seven founding signatories to promote the peaceful, transparent and sustainable civil exploration and use of outer space.
- ➔ India became the 27th signatory in June 2023.

Significance for India

- ➔ Strengthens India-US strategic space partnership and expands cooperation beyond satellite missions.
- ➔ Supports **ISRO's Space Vision 2047**, which targets an Indian Moon landing by 2040 and the **Bharatiya Antariksh Station**, with the first module by 2028 and the complete station by 2035.
- ➔ Provides opportunities in human spaceflight, **in-situ resource utilisation (ISRU)**, reusable space technologies and deep-space exploration.
- ➔ Strengthens India's role in future multinational lunar and deep-space exploration missions.

CLOUD SEEDING TO COMBAT DROUGHT IN KAZAKHSTAN

Kazakhstan has adopted cloud seeding to address recurring droughts and water shortages, particularly in the Turkestan region.

About

- ➔ **Cloud seeding** is a **weather modification technique** used to **enhance rainfall or snowfall** by increasing the precipitation potential of existing clouds.
- ➔ It was first demonstrated in **1946** by **Vincent J. Schaefer**, an American chemist and meteorologist.
- ➔ **Working Principle:**
 - ♦ Meteorologists first identify **moisture-bearing clouds** that are unlikely to produce sufficient precipitation naturally.
 - ♦ **Seeding agents** act as **condensation or ice nuclei**, allowing water droplets or ice crystals to grow.
 - ♦ As the droplets or crystals become larger and heavier, they fall as **rain or snow**.
 - ♦ Cloud seeding **cannot create new clouds**. It only enhances precipitation from **existing suitable clouds**.
- ➔ **Methods of Delivery:** Seeding agents are dispersed using **aircraft, rockets or ground-based generators**.

Seeding Agents

- ➔ **Silver iodide** and **dry ice (solid carbon dioxide)** are mainly used in **supercooled clouds** below the freezing point.
- ➔ **Sodium chloride, potassium chloride and calcium chloride** are mainly used for **warm-cloud (hygroscopic) seeding**, where they attract moisture to form larger raindrops.

Kazakhstan Initiative

- ➔ The programme covers about **9,110 sq km** of agricultural land in the **Turkestan region**, an important **cotton-growing area**.
- ➔ It is being implemented in collaboration with the **United Arab Emirates' meteorological centre** using **aircraft-based cloud-seeding systems**.
- ➔ The project aims to **increase precipitation by about 15–20%**, improve agricultural productivity and generate **annual economic benefits of about USD 75 million**.

Applications and Challenges of Cloud Seeding

Applications

- ➔ **Drought Areas:** Inducing rain in areas experiencing drought.
- ➔ **Snowfall Enhancement:** Enhancing snowfall in catchment areas for water resources.
- ➔ **Weather Modification:** Reducing smog, fog dissipation, and preventing hailstorms.

Challenges

- ➔ **Moisture-laden clouds:** Moisture-laden clouds are a prerequisite for cloud seeding.
- ➔ **Risk of flooding:** There is a risk of flooding if cloud seeding is done in excess.
- ➔ **Environmental concerns:** Potential chemical contamination and disrupted local climate patterns are environmental concerns.

GLUEBALLS

The Beijing Spectrometer III (BESIII) experiment has provided strong evidence that X(2370) may be a glueball, a long-predicted particle composed predominantly of gluons, the carriers of the strong nuclear force.

About

- A **glueball** is a **hypothetical hadron** composed predominantly, or possibly entirely, of **gluons**, with little or no valence quark content.
- **Gluons** are the **force-carrying particles** of the **strong nuclear force**, which binds **quarks** together to form **protons, neutrons, and other hadrons**.
- Unlike **photons**, gluons carry **colour charge** and can interact with one another, allowing them to form bound states called **glueballs**.
- Glueballs are predicted by **Quantum Chromodynamics (QCD)**, the theory that explains the interaction of **quarks and gluons** through the **strong nuclear force**.

Fundamental Forces of Nature



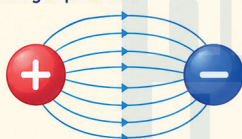
Gravity

- Attracts objects with mass.



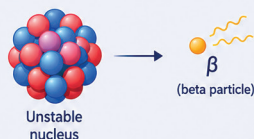
Electromagnetic Force

- Acts between electrically charged particles.



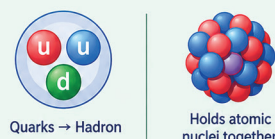
Weak Nuclear Force

- Responsible for radioactive decay and certain nuclear reactions.



Strong Nuclear Force

- Binds quarks into hadrons and indirectly holds atomic nuclei together.



Types of Particles

- **Elementary Particles:** Fundamental particles that are not made of smaller constituents, such as **quarks, leptons, and gauge bosons**.
- **Composite Particles:** Particles formed from elementary particles, such as **protons, neutrons, mesons, and glueballs**.

Evidence from the BESIII Experiment

- The X(2370) particle was **first observed in 2011** during the **BESIII experiment** in Beijing.
- Its **mass and decay patterns** suggested that it could be a **glueball candidate**.
- New experimental data has revealed additional properties that **strengthen the evidence** that X(2370) is predominantly a glueball.

- **Identification remains challenging** because glueballs can **mix with ordinary mesons** having similar quantum numbers.
- Further experimental studies are underway to establish its identity conclusively.

Significance

- Provides one of the **strongest pieces of experimental evidence** so far for the existence of **glueballs** predicted by **QCD**.
- Strengthens our understanding of the **strong nuclear force** and the behaviour of **gluons**.
- Improves knowledge of **hadron structure** and the fundamental constituents of matter.
- Could represent the **first confirmed form of matter composed predominantly of force-carrying particles (gluons)** rather than quarks.

SraVaani

Researchers at IISc's SPIRE Lab, in collaboration with ARTPARK and with support from Google, have released SraVaani. It is India's first multilingual speech recognition model trained on 65 Indian languages and dialects.

About

- SraVaani is a **multilingual Automatic Speech Recognition (ASR) model** that converts spoken language into text.
- It is the **first Indian speech recognition model** trained on **65 Indian languages and dialects**, including **over 40 languages** that are not officially supported by most existing speech recognition systems.
- The model has been released as **open-source** on **Hugging Face** under the **MIT Licence**, enabling wider research and development.

Key Features

- Supports **20 scheduled languages** and **45 regional languages and dialects**.
- Provides **pan-India language coverage**, including **English and Sanskrit**.
- Recognises several under-represented languages such as **Garo, Angika, Chakma, Kokborok, Tulu, Bundeli, and Bajjika**.
- Extends speech AI access to nearly **25 crore people** (2011 Census) whose languages current systems inadequately support.
- Delivers **high recognition accuracy**, achieving a **9.5% Word Error Rate (WER)** for **Garo**, compared to **69.4%** for the next-best evaluated system.

FRIEDREICH'S ATAXIA (FRDA)

A recent study has reaffirmed that **Friedreich's Ataxia (FRDA)** is caused by **mutations in the FXN gene**, leading to **progressive damage to the nervous system and heart**.

About

- Friedreich's Ataxia (FRDA) is a **rare autosomal recessive inherited genetic disorder** that progressively affects the nervous system and the heart.
- It is caused by mutations in the **FXN (Frataxin)** gene.
- The FXN gene produces frataxin, a protein essential for the normal functioning of mitochondria, the energy-producing structures of cells.
- Deficiency of frataxin reduces ATP (**cellular energy**) production and causes the accumulation of toxic by-products, leading to damage of the brain, spinal cord, peripheral nerves, and heart muscle.

Cause and Inheritance

- FRDA develops when an individual inherits **two defective copies** of the **FXN gene**, one from each parent.
- A person with **one defective copy** is a **carrier** and usually does not develop the disease.
- **Consanguineous marriages** do not cause FRDA but **increase the probability that both parents carry the same recessive mutation**, thereby increasing the risk of affected children.

Symptoms

- Symptoms usually begin between **5 and 15 years** of age.
- **Progressive ataxia** causing difficulty in walking and maintaining balance.
- **Muscle weakness** and loss of sensation in the limbs.
- **Slurred speech** and difficulty in swallowing.
- **Hearing and vision impairment.**
- **Involuntary eye movements** and **scoliosis** may develop.
- **Cardiomyopathy** and heart palpitations are common complications. Most patients require a **wheelchair within 15–20 years** after symptom onset.
- Severe cases may result in **early death**, most commonly due to **cardiac complications**.

Treatment

- There is currently no definitive cure for FRDA.
- Treatment is **supportive and symptomatic**, aiming to slow functional decline and improve quality of life.
- **Physiotherapy, occupational therapy, speech therapy, cardiac care**, and other supportive measures help maintain mobility and daily functioning for as long as possible.

ROTATING DETONATION ENGINE (RDE)

Indian defence start-up D-Propulse has successfully demonstrated India's first indigenous 5 kN air-breathing Rotating Detonation Engine (RDE) at a DRDO facility in Hyderabad.

About

- A RDE is an advanced **propulsion cycle** that can be used in **air-breathing engines** and **liquid rocket engines**.

- Unlike conventional engines, it generates thrust using **continuous supersonic detonation waves** instead of conventional combustion.
- It offers **higher thermodynamic efficiency, pressure-gain combustion**, improved fuel utilisation, and a **compact combustion chamber**.

Working Principle

- In conventional engines, fuel burns through **deflagration**, where the flame travels at **subsonic speed** under **approximately constant-pressure combustion**.
- In an **RDE**, the fuel-air or fuel-oxidiser mixture undergoes **detonation**, where a **supersonic shock wave** rapidly compresses and ignites the mixture.
- One or more **detonation waves** continuously travel around an **annular (ring-shaped) combustion chamber**.
- Fuel and oxidiser are continuously injected ahead of the moving detonation wave, sustaining continuous combustion.
- The resulting **high-pressure gases** expand through a **nozzle** to generate thrust.

RDE vs Conventional Engines

- **Conventional engines:** Use **subsonic deflagration**, resulting in relatively lower efficiency and greater heat loss.
- **RDEs:** Use **supersonic detonation** under **approximately constant-volume combustion**, converting more chemical energy directly into pressure and thrust.

Advantages

- Delivers **10–25% higher thermodynamic efficiency** than conventional rocket engines.
- Achieves **pressure-gain combustion**, improving propulsion efficiency.
- A **20% efficiency gain** can reduce fuel requirement by nearly 17%.
- Produces **higher thrust for the same amount of propellant**.
- Enables **higher payload capacity** or lower launch costs due to reduced fuel consumption.
- Uses a **compact and lightweight engine design**, making it suitable for reusable propulsion systems.

Applications

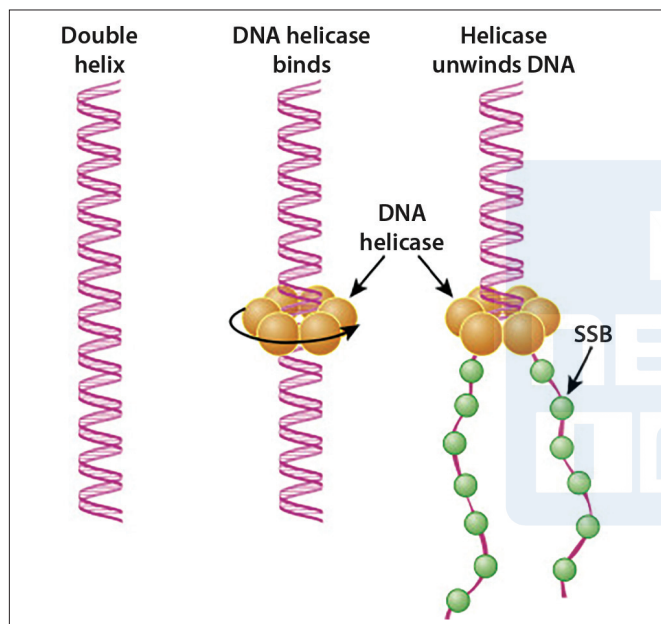
- Hypersonic cruise missiles and advanced missile systems.
- High-speed aircraft and Unmanned Aerial Vehicles (UAVs).
- **Ramjet-based** and other advanced air-breathing propulsion systems.
- **Space launch vehicles** with improved payload-to-fuel ratio.
- **Deep-space and in-space propulsion** for future space missions.

HELICASE

A recent study has revealed how cells ensure DNA replication starts only at the correct stage of the cell cycle, highlighting the activation mechanism of replicative helicase.

About Helicase

- **Helicase** is an **ATP-dependent enzyme** that unwinds the **DNA double helix** by breaking the hydrogen bonds between complementary DNA strands during **DNA replication**.
- DNA replication begins at specific **origins of replication**, where helicase is loaded onto DNA.
- Using energy from **ATP hydrolysis**, helicase moves along DNA and separates the two strands.
- This forms a **Y-shaped replication fork**, allowing each parental strand to serve as a **template** for the synthesis of a new complementary DNA strand.
- DNA unwinding creates **supercoiling and torsional stress**. **Topoisomerases** relieve this stress and prevent DNA tangling or breakage.



- DNA replication is **tightly regulated** to ensure accurate genome duplication.
- The recent study shows that inactive **MCM2-7 double hexamers** are converted into active **CMG helicases**, initiating DNA unwinding only at the correct stage of the cell cycle.
- The findings improve understanding of **genome stability** and diseases associated with defective DNA replication.

GAGANYAAN'S THERMAL PROTECTION SYSTEM (TPS)

The Gaganyaan Mission requires the safe re-entry of astronauts from Low Earth Orbit (LEO).

Why is TPS Critical?

- During re-entry, the crew module travels at **hypersonic speed**, converting kinetic energy into intense heat. Plasma temperatures can reach **about 1,800°C**.

- Once re-entry begins, the mission **cannot be aborted**. The TPS must function reliably without external intervention.
- It acts as a **passive, fail-safe shield**, protecting astronauts from extreme heat during rapid deceleration.
- It also keeps the **crew cabin** and the underlying **aluminium-alloy/CFRP structure** within safe temperature limits.

Thermal Protection System (TPS)

- **TPS** is a combination of **specialised materials and structures** that prevents re-entry heat from reaching the spacecraft's internal structure.

Types of TPS

- **Ablative TPS:** The outer heat shield **erodes intentionally** by decomposing under extreme heat. The released gases form a protective boundary layer that reduces heat transfer. **Gaganyaan uses an Ablative TPS.**
 - ◆ Examples: **Carbon-phenolic**, **Silica-phenolic** and **PICA** (Phenolic Impregnated Carbon Ablator).
- **Radiative TPS:** Absorbs heat and radiates it back, mainly as **infrared radiation**. It is suitable for **reusable spacecraft**.
- **Heat-Sink TPS:** Absorbs and stores heat without major decomposition. **Copper** and **aluminium** are commonly used heat-sink materials.

Gaganyaan Mission

- **Objective:** Demonstrate India's capability to send **three astronauts** to **Low Earth Orbit** and return them safely to Earth. It will be **ISRO's first human spaceflight mission**.
- **Launch Vehicle:** **LVM3 (Launch Vehicle Mark-3)**.
- **Crew Escape System (CES):** Uses high-burn-rate solid motors to safely separate the **Crew Module** during launch emergencies.
- **Orbital Module:** Consists of the **Crew Module (CM)**, which provides a habitable environment, and the **Service Module (SM)**, which supplies propulsion, power, thermal control, avionics and other support systems.

VACUUM BIREFRINGENCE

A recent study reported strong evidence of vacuum birefringence around the magnetar 1E 1547.0-5408, with X-rays showing up to 80% polarisation.

About

- It is a **quantum phenomenon** predicted by **Quantum Electrodynamics (QED)**.
- It was first proposed in the **1930s** by **Werner Heisenberg** and **Hans Heinrich Euler**.
- Under an **extremely strong magnetic field**, empty space behaves like a **birefringent crystal**, giving light with different polarisation directions different refractive properties.

Working Mechanism

- According to **QED**, empty space contains short-lived **virtual electron-positron pairs**.
- Near a **magnetar**, the intense magnetic field distorts these virtual particles.
- As **X-rays** pass through this region, light polarised parallel and perpendicular to the magnetic field travels differently.
- This produces **strong linear polarisation**, causing the vacuum to behave like an optical crystal.
- At certain X-ray energies, **vacuum resonance** may suddenly change the direction or degree of polarisation.

Key Features

- This effect requires ultra-strong magnetic fields, which are found around **magnetars**.
- The effect varies with the **energy of X-rays**.
- Magnetars act as natural laboratories for studying this phenomenon.

Significance

- Provides a direct test of **Quantum Electrodynamics** under extreme conditions.
- Confirms that the **quantum vacuum** is a dynamic medium rather than empty space.
- Improves understanding of **magnetars**, **neutron-star magnetic fields**, and the propagation of light in extreme environments.

SWINE INFLUENZA (H1N1)

Delhi has reported a sharp rise in Swine Influenza (H1N1) cases, with hospitals witnessing increased infections across all age groups, highlighting the importance of timely diagnosis and preventive measures.

About Swine Influenza

- **Swine Influenza (Swine Flu)** is an **acute respiratory disease** caused by **Influenza A viruses** that originally infected pigs but can also spread among humans.
- The common **Influenza A subtypes** are **H1N1, H1N2 and H3N2**. **Influenza B** also contributes to seasonal flu outbreaks.
- **H1N1** stands for **Hemagglutinin-1 (H1)** and **Neuraminidase-1 (N1)**, the two surface proteins used to classify Influenza A viruses.
- The **A(H1N1)pdm09** strain caused the **2009 global pandemic** and continues to circulate as a **seasonal influenza virus**.
- India reported its **first confirmed H1N1 case in May 2009**.

Transmission and Diagnosis

- The virus spreads mainly through **respiratory droplets** released during coughing and sneezing.
- Infection can also occur by touching **contaminated surfaces** and then touching the **mouth, nose or eyes**.
- The **incubation period** is usually **1–4 days** (about **2 days** on average).

- Diagnosis is primarily clinical, while **RT-PCR** is the confirmatory test with high sensitivity.

PRECAUTIONS TO PREVENT SWINE FLU

Simple steps. Strong protection.



1. VACCINATION

Get the seasonal influenza vaccine, the most effective way to prevent infection.



2. HAND HYGIENE

Wash hands frequently with soap or use hand sanitizer to reduce virus spread.



3. AVOID CROWDED PLACES

Limit time in densely populated indoor settings during peak flu activity.



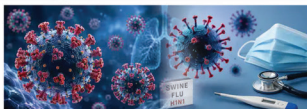
4. MASK USE

Wear masks in crowded or enclosed environments to block infectious droplets.



5. RESPIRATORY ETIQUETTE

Cover your mouth and nose with a tissue or elbow when coughing or sneezing.



ADDITIONAL PRECAUTIONS



AVOID EATING OUT

Avoid eating out during flu season.



AVOID COLD BEVERAGES & ICE CREAMS

Avoid cold beverages and ice creams.



REST, DIET & SLEEP WELL

Take adequate rest, eat well and sleep sufficiently.



STAY HYDRATED

Drink plenty of fluids to help loosen secretions and bring up phlegm.



QUARANTINE YOURSELF

- You could infect other members of the family.
- Stay home for 5 days so the virus becomes non-contagious.
- Before resuming your regular hours at the office, make sure you are up and about in your home environment.
- If moving around and doing light activities don't stress you out, you can venture out.



Small steps today, a healthier tomorrow.
Stay safe. Stay healthy.



MEDICINES CLASSIFIED AS CARCINOGENIC

The International Agency for Research on Cancer (IARC) has classified three widely used medicines, **Hydrochlorothiazide**, **Voriconazole**, and **Tacrolimus**, as **Group 1 (Carcinogenic to Humans)** based on available scientific evidence.

Medicines Classified

- **Hydrochlorothiazide**: A medicine used to treat **hypertension (high blood pressure)**. It has been linked to **squamous cell carcinoma of the skin** and **lip cancer**, mainly due to increased sensitivity to **ultraviolet (UV) radiation**.
- **Voriconazole**: An **antifungal medicine** used to treat serious invasive fungal infections. Long-term use has been associated with **squamous cell skin carcinoma**, particularly in **transplant recipients**.
- **Tacrolimus**: An **immunosuppressant** used to prevent **organ transplant rejection**. It has been associated with **non-Hodgkin lymphoma** and **post-transplant lymphoproliferative disorder (PTLD)** because of its immunosuppressive action.

Meaning of Group 1 Classification

- **Group 1** means there is sufficient scientific evidence that an agent can cause cancer in humans. It is a hazard classification and not a risk assessment.
- It identifies the **potential to cause cancer** under certain circumstances. It does **not** measure the actual risk at prescribed doses or compare the benefits and risks of treatment.
- Patients should **continue prescribed medicines unless advised otherwise by their treating doctor**.

International Agency for Research on Cancer (IARC)

- It is the specialised cancer research agency of the WHO, established in 1965 and headquartered at Lyon, France.
- It evaluates environmental, occupational and lifestyle factors to identify **preventable causes of human cancer**.
- **IARC Classification Groups:**
 - ◆ **Group 1:** Carcinogenic to humans.
 - ◆ **Group 2A:** Probably carcinogenic to humans.
 - ◆ **Group 2B:** Possibly carcinogenic to humans.
 - ◆ **Group 3:** Not classifiable as to its carcinogenicity to humans.

POLYSILICON

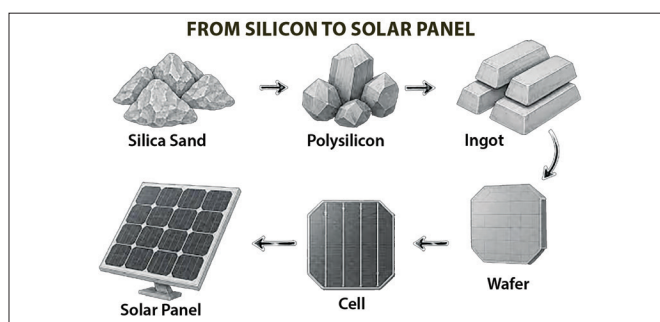
The Govt. of India is planning a support scheme to establish 30 GW domestic polysilicon manufacturing capacity by 2030, with an investment of over ₹25,000 cr, to strengthen the country's solar manufacturing value chain.

About

- Polysilicon (Polycrystalline Silicon or Poly-Si) is a high-purity crystalline form of elemental silicon and the primary raw material for solar photovoltaic cells and semiconductor chips.
- It is the **upstream** and **highly electricity-intensive** stage of the solar manufacturing chain. The manufacturing sequence: Polysilicon → Ingots → Wafers → Solar Cells → Solar Modules.

Manufacturing Process

- **Quartz (SiO_2)** is reduced with carbon in an electric arc furnace to produce **Metallurgical-Grade Silicon (MG-Si)**.



- MG-Si is converted into **Trichlorosilane (TCS)** or **Monosilane**, followed by **fractional distillation** to remove impurities.
- Ultra-pure polysilicon is produced through **Chemical Vapour Deposition (Siemens Process)** or the **Fluidized Bed Reactor (FBR)** process.

Key Features

- Available as **Solar-Grade (6N–9N)** and **Electronic-Grade (9N–11N)** polysilicon.
- Possesses excellent **semiconductor properties**, making it suitable for photovoltaic and electronic applications.
- Polycrystalline silicon is later converted into **monocrystalline ingots** using the **Czochralski process**.

Applications

- Manufacturing **solar PV wafers, cells and modules**.
- Production of **semiconductor wafers**, microprocessors and memory chips.
- Fabrication of **power electronic devices** such as **MOSFETs, diodes and thyristors**.
- Used in **poly-Si thin-film transistors (TFTs)** for **AMOLED** and **LCD displays**.

Global Scenario

- **China** produces about **94% of global polysilicon**, followed by **Germany** and the **United States**.
- India currently has **limited commercial-scale polysilicon production** and depends heavily on **imports** for this critical raw material.

India's Solar Manufacturing Capacity across the Value Chain

Stage	Operational Capacity	Benchmarks & Schemes	Key Details
Polysilicon	Limited Commercial Production	Expected PLI Scheme	Large-scale facilities are currently under construction/commissioning by Adani Solar, Reliance, Lanco Solar.
Ingots & Wafers	Commercial Limited Production	Expected PLI Scheme	Large-scale facilities are currently under construction.
Solar PV Cells	25-30 GW	ALMM List-II /PLI Scheme	MNRE released ALMM List-II to enforce domestic content requirements.
Solar PV Modules	172-190 GW	ALMM List-I /PLI Scheme	Exponential expansion under ALMM List-I, self-sufficiency in domestic module assembly.

CHILDREN'S ONLINE SAFETY

Meta to introduce new default safety restrictions for teens on Instagram and Facebook in the United States following a landmark \$18 billion settlement.

Background

- The lawsuits alleged that **Meta intentionally designed its platforms to encourage compulsive use** among children and teenagers despite being aware of associated mental health risks.
- Meta was also accused of **collecting personal data of children below 13 years** without complying with the **Children's Online Privacy Protection Act (COPPA)**.

Key Teen Safety Measures

- **Daily usage limit:** A **two-hour cumulative limit** across Facebook and Instagram. It can be relaxed only with **parental approval**. Messaging is excluded.
- **Night mode:** Access to **Feeds, Stories and Reels** will remain blocked between **12 a.m. and 6 a.m.** Messaging will remain available.
- **Autoplay controls:** Teens and parents can disable **autoplay**, requiring manual scrolling or tapping for additional content.
- **Hidden engagement metrics:** **Likes and reaction counts** will be hidden by default for minors.
- **Non-algorithmic feed:** Teens can choose a **chronological feed** showing content only from accounts they follow.
- **Stronger age verification:** Enhanced **age-assurance technology** will identify underage users, remove accounts of children below 13 years and ensure age-appropriate platform access.
- **Platform-wide approach:** Meta has also urged similar child safety standards across other major social media platforms.

Need for Stronger Regulation in India

- **Protects children** from cyberbullying, online harassment and grooming.
- **Reduces digital addiction** and improves mental well-being.
- **Limits exposure** to harmful, violent and misleading content.
- **Safeguards privacy** by reducing misuse of children's personal data.
- **Improves academic focus** by reducing excessive screen time.
- **Reduces vulnerability** to misinformation and online radicalisation.

Implementation Challenges

- **Reliable age verification** remains difficult without raising privacy concerns.

- **Enforcement** across multiple platforms is complex.
- **Blanket restrictions** may affect children's access to information and freedom of expression.
- Users may migrate to **less regulated platforms**.
- Restrictions could widen the **digital divide** for children using social media for education.

Australia's Model

- Australia became the **first country** to prescribe a **minimum social media age of 16 years**.
- Platforms must **block under-16 users**, remove existing accounts, prevent new accounts and provide mechanisms to correct erroneous removals.
- The law aims to reduce **cyberbullying, addictive platform design and mental health harms** among children.

VOLUNTARY DRUG SCREENING

The Union Government has introduced optional, confidential drug testing for students joining top institutions like IITs and IIMs. This is part of the NCB's Vision Document on Narcotics Control 2026-29.

About the Initiative

- The **Department of Higher Education** has urged centrally sponsored institutions to encourage **voluntary urine drug screening** of new admissions.
- The rollout starts with **IITs, IIMs and one Central University** in 2026-27.
- **AIIMS Delhi's National Drug Dependency Treatment Centre** will design the screening protocol.
- It aims to cover about **170 institutions** and over **10 lakh students** by 2029.

Key Features

- Screening is **voluntary**.
- Students may choose not to undergo it.
- Tests screen for **amphetamines, cocaine, marijuana, benzodiazepines and phencyclidine**.
- Reports go to **student wellness committees** in sealed, confidential envelopes.
- Results stay **anonymised** and are used only for counselling, not admissions or grading.

Phased Rollout

- **2027-28** adds **NITs, IISERs, IIITs, SPAs** and other centrally funded technical institutes.
- **2028-29** covers **Central and Deemed-to-be Universities**.

Significance

- It shifts policy from punishment toward **early detection and rehabilitation**.
- It enables early intervention before dependence worsens, and supports the Government's planned **national substance-use survey**.
- It aims to build **safer, healthier campuses**.

Drivers of the Drug Menace

- India's proximity to the **Golden Crescent and Golden Triangle** raises trafficking risk.
- Drug trafficking fuels **organised crime, money laundering** and **narco-terrorism**.
- Traffickers increasingly use **maritime routes, cargo shipments** and **encrypted communication**.

GOVERNMENT INITIATIVES



The **Kashi Declaration (2025)** sets a five-year roadmap for youth-led de-addiction efforts. The **Nasha Mukht Bharat Abhiyaan** drives nationwide anti-drug awareness, with the **Nasha Mukht Yuva for Viksit Bharat Sankalp Abhiyan** as its youth-focused component.



The **NAPDDR**, run by the Social Justice Ministry, supports de-addiction and rehabilitation. The **NDPS Act, 1985** is the legal framework against drug trafficking, enforced through **Anti-Narcotics Task Forces**, a **Joint Coordination Committee** and the **NIA**.

Key Concerns

- These include **confidentiality**, ensuring genuine **consent**, avoiding **stigma**, and building institutional **counselling capacity** and **data protection**.

Way Forward

- Steps include **free campus counselling**, strong **data privacy** rules, awareness for parents and staff, **life-skills education**, periodic evaluation, and a multidisciplinary approach spanning **education, health** and **law enforcement**.

UNIVERSAL IMMUNISATION PROGRAMME

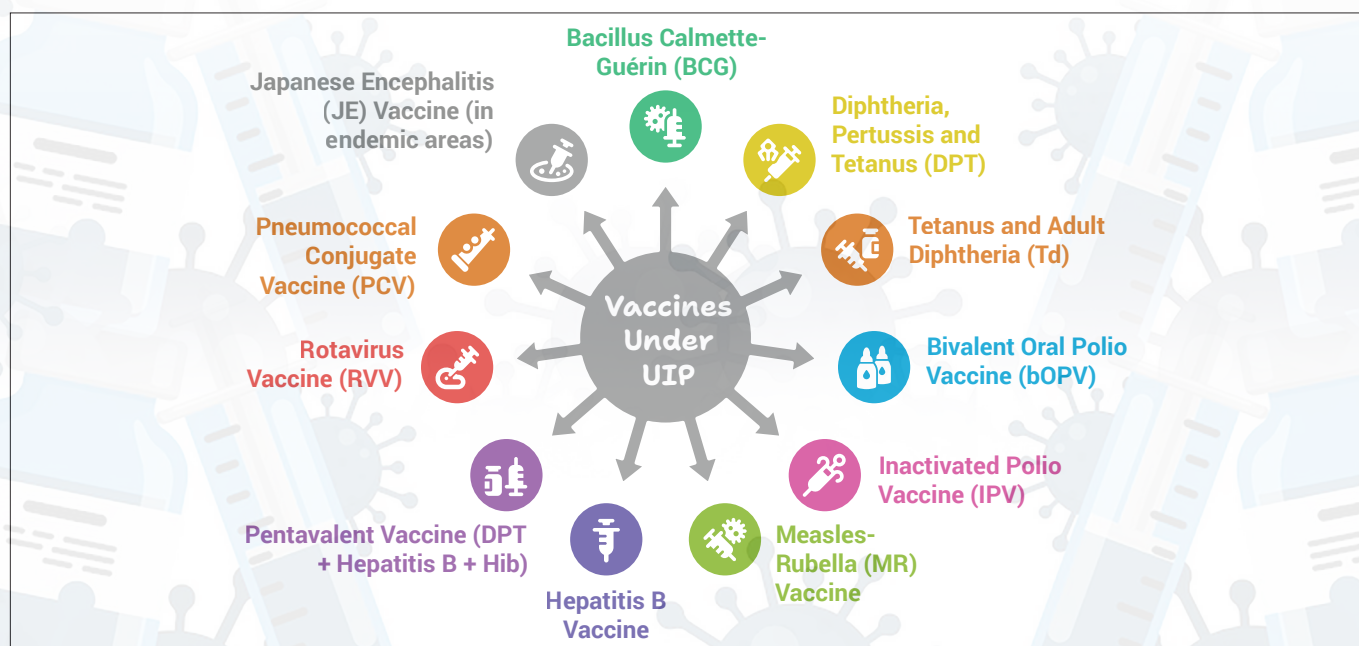
A Union Ministry of Health and Family Welfare study found that introducing the **hexavalent (six-in-one) vaccine** into India's **Universal Immunisation Programme (UIP)** can improve the efficiency of childhood immunisation by reducing the number of injections and simplifying vaccine delivery.

Hexavalent Vaccine

- A **hexavalent vaccine** protects infants against **Diphtheria, Tetanus, Pertussis (Whooping Cough), Hepatitis B, Poliomyelitis (Polio)** and **Haemophilus influenzae type b (Hib)** through a **single injection**.
- It reduces the workload of frontline health workers, lowers cold-chain requirements, and saves caregivers' time.

Universal Immunisation Programme

- **Expanded Programme on Immunization (EPI)** was launched in **1978** and was expanded as the **Universal Immunisation Programme (UIP)** in **1985**.
- It is one of the largest public immunisation programmes in the world.
- The programme covers about **2.9 crore pregnant women** and **2.54 crore infants** every year.
- It provides free vaccination to **pregnant women, newborns, children and adolescents** against **12 vaccine-preventable diseases**.

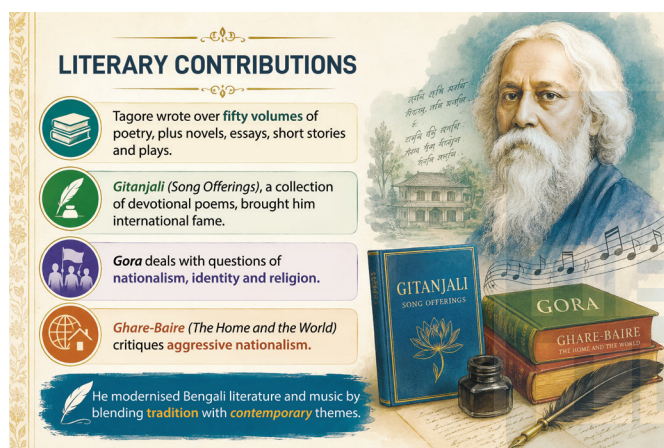


GURUDEV RABINDRANATH TAGORE

Poet Laureate Gurudev Rabindranath Tagore's death anniversary was observed recently.

About

- He was born on **7 May 1861** in Calcutta. His birth anniversary is celebrated as **Pochishe Boishakh** in West Bengal and Bangladesh.
- He was an eminent **poet, novelist, playwright, composer, philosopher, painter and social reformer**.
- His father **Debendranath Tagore** led the **Brahmo Samaj**.



Literary Contributions

- Tagore wrote over **fifty volumes** of poetry, plus novels, essays, short stories and plays.
- *Gitanjali* (Song Offerings), a collection of devotional poems, brought him international fame.
- *Gora* deals with questions of **nationalism, identity and religion**.
- *Ghare-Baire* (The Home and the World) critiques **aggressive nationalism**.
- He modernised Bengali literature and music by blending tradition with contemporary themes.

Education and Social Reform

- He founded a school at **Shantiniketan**, which became **Visva-Bharati University** in 1921 and is now a **UNESCO World Heritage Site**.
- He advocated **humanism, creativity, freedom of thought, harmony with nature, and holistic education**.

Honours and Legacy

- He won the **1913 Nobel Prize in Literature** for *Gitanjali*, becoming the **first Indian** and **first non-European** laureate.

- He composed India's anthem **Jana Gana Mana** and Bangladesh's anthem **Amar Shonar Bangla**.
- His song **Banglar Mati Banglar Jol** is the **State Anthem of West Bengal**.
- The British **knighted** him in 1915. He **renounced** it in 1919 to protest the **Jallianwala Bagh Massacre**.
- He was revered as **Gurudev, Kobiguru** and **Biswokobi**.

MAITHILI SHARAN GUPT JAYANTI

Maithili Sharan Gupta Jayanti is celebrated every year on 3 August, marking the birth anniversary of the legendary Indian poet.

About Maithili Sharan Gupta

- Born on **3 August 1886** in Chirgaon, Jhansi, Uttar Pradesh, he died on **12 December 1964**, aged **78**, in the same town.
- He popularised **Khari Boli Hindi** as a literary language, displacing **Braj Bhasha's** dominance in modern poetry, and his work addressed **nationalism, social justice** and **Indian cultural values**.
- Notable works include *Saket* (the Ramayana retold from **Urmila's** perspective), *Bharat Bharati*, *Yashodhara*, *Panchavati* and *Jayadrath Vadh*.
- **Mahatma Gandhi** conferred on him the title "**Rashtrakavi**" (National Poet) for his patriotic masterpiece *Bharat-Bharati* (1912).
- He was a **nominated Rajya Sabha member** from 1952–1964, and received the **Padma Bhushan** in 1954.

ACHARYA PRAFULLA CHANDRA ROY

2nd August is observed as the 165th birth anniversary of Acharya Prafulla Chandra Roy.

About

- Born on **2 August 1861** in **Khulna** (now in Bangladesh), he died on **16 June 1944**, rising to prominence as a pioneering **scientist, educator and industrialist**.
- He founded India's **first pharmaceutical company**, **Bengal Chemicals & Pharmaceuticals**, in 1901.
- Widely regarded as the **father of modern chemical science** in India, he promoted **scientific education** and established the country's **first modern chemistry research school**.
- He is remembered for discovering **mercurous nitrite** in 1896, opening new research into **metal nitrites** and establishing modern chemical research in India.
- He was **knighted** by the British government in 1919.

NATIONAL HANDLOOM DAY 2026

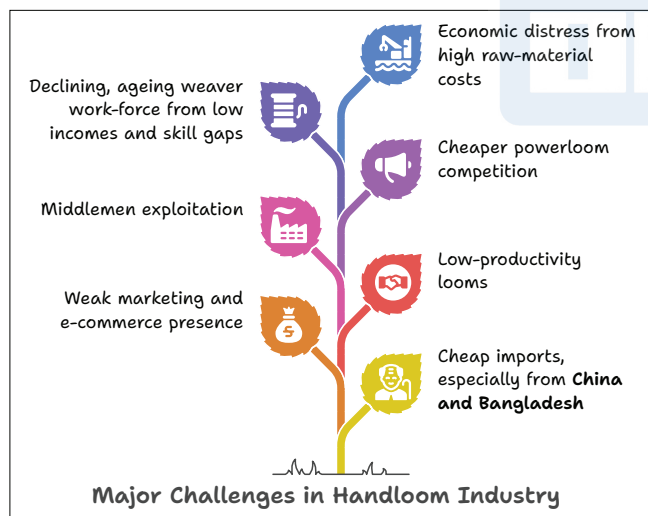
On the 12th National Handloom Day the Government of India recognised the handloom sector's contribution to Viksit Bharat 2047.

About

- Celebrated annually on **7 August**, it commemorates the **1905 Swadeshi Movement**, which promoted indigenous goods and self-reliance.
- The Government declared this date National Handloom Day in **2015**.
- The theme for 2026 was '**Hands that Weave the Nation**'.
- It celebrates India's weaving traditions and recognises **35.22 lakh weavers** and allied workers, over **72%** of them women.
- President **Droupadi Murmu** presented the **Sant Kabir Handloom Awards** and **National Handloom Awards 2025** on the occasion.

Handloom Industry of India

- One of the world's oldest and most vibrant cottage industries, surveyed through **four Handloom Censuses** (1987-88, 1995-96, 2009-10, 2019-20), conducted at **8-12 year** intervals.
- In **FY 2024-25**, the **US** was the top export destination, followed by the **UAE, Netherlands, France and UK**.
- **Made-ups** (cushion covers, curtains, table linen) led products at **42.4%**, followed by **floor coverings (40.6%)**, **clothing accessories (12.7%)** and **fabrics (4.3%)**.



Major Challenges

- Declining, ageing weaver workforce from low incomes and skill gaps.
- Economic distress from high raw-material costs
- Middlemen exploitation
- Cheaper powerloom competition
- Weak marketing and e-commerce presence.
- Low-productivity looms
- Cheap imports, especially from **China and Bangladesh**.

Support Ecosystem

- The **National Handloom Development Programme (2021-26)** follows a need-based, integrated welfare approach.
- The **Raw Material Supply Scheme** reimburses yarn freight and offers a **15% price subsidy** on specified yarns.
- The **2025 GST Council reforms** cut tax on **36 handicraft items**, handloom rugs, carpets and sewing machines from **12% to 5%**.
- The **Union Budget 2026-27** introduced the **National Fibre Scheme**, **Textile Expansion and Employment Scheme**, and **Mahatma Gandhi Gram Swaraj Initiative** supporting khadi, handloom, handicrafts and **ODOP**.



PINGALI VENKAYYA

Prime Minister Narendra Modi paid tributes to freedom fighter Pingali Venkayya on his 150th birth anniversary.

About

- Born on **2 August 1876** in **Krishna district, Andhra Pradesh**, he died on **4 July 1963**.
- He was a freedom fighter and designer of the **Indian national flag**, which later evolved into today's **Tricolour**.

Flag Design

- In **1921**, he presented a flag design to **Mahatma Gandhi** at a Congress session in **Vijayawada**.
- His design featured **three stripes** representing India's major communities and a **spinning wheel (charkha)** symbolising self-reliance.
- In **1947**, the design was modified to include the **Ashoka Chakra**, symbolising law and progress.

Recognition

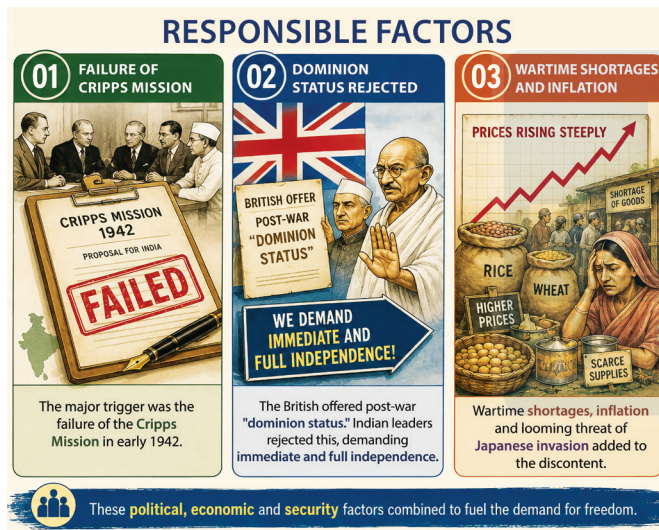
- ➔ The Government of India has issued **postage stamps** in his honour and organised events like **Tiranga Utsav** to celebrate his legacy.

QUIT INDIA MOVEMENT

Recently, the Prime Minister paid homage to brave participants of the Quit India Movement.

About the Movement

- ➔ **Mahatma Gandhi** launched it on **8 August 1942**. The launch came during the **All-India Congress Committee** session in Bombay.
- ➔ Gandhi gave his call at **Gowalia Tank Maidan**, now renamed **August Kranti Maidan**.
- ➔ He gave the historic slogan **"Do or Die" (Karo ya Maro)**. It inspired millions to demand complete independence, or **Purna Swaraj**.



Major Leaders

- ➔ Mahatma Gandhi led the movement with his resolve, **"Do or Die."**
- ➔ The colonial government responded ruthlessly.
- ➔ It arrested top leaders, including Gandhi, **Jawaharlal Nehru**, **Sardar Vallabhbhai Patel** and **Abul Kalam Azad**.
- ➔ Young underground leaders kept the movement alive. These included **Aruna Asaf Ali**, **Jayaprakash Narayan**, **Ram Manohar Lohia** and **Usha Mehta**, who ran a **secret radio station**.

Effects

- ➔ British repression was severe. It included **mass arrests** and **censorship**.
- ➔ This made the movement a **spontaneous, leaderless, nationwide agitation**.
- ➔ It united **peasants, factory workers, women, students** and **rural communities** in active opposition. This built deep national unity.

- ➔ It redefined the Freedom Struggle. The political agenda shifted from negotiating minor reforms to demanding Britain's **complete, non-negotiable exit**.

UTKALMANI PANDIT GOPABANDHU DAS

President Droupadi Murmu unveiled the statue of Utkalmani Pandit Gopabandhu Das at Lajpat Bhawan, New Delhi.

About

- ➔ Pandit Gopabandhu Das (1877–1928), popularly known as **Utkalmani** (Gem of Odisha), was a prominent **freedom fighter, social reformer, educationist, poet and journalist** from Odisha.
- ➔ Devoted to serving the poor, he founded the **Satyabadi Bana Vidyalaya** at **Sakhigopal** to promote nationalist ideals through education.
- ➔ His relief work during the **1912 floods** and the **1918 influenza epidemic** earned him widespread public respect.
- ➔ He was elected to the **Legislative Council in 1917**, and actively participated in the freedom movement as a **Congress** member.
- ➔ He founded the Odia newspaper **The Samaja** in **1919**, an important platform for promoting **nationalism** and public awareness.
- ➔ He also contributed significantly to **Odia literature**, with notable works including **Abakasha Chinta**, **Go-Mahatmya**, **Nachiketa Upakhyaana**, **Karakabita**, **Dharmapada** and **Bandira Atmakatha**, many written during his time at **Ravenshaw College**.

SRI AUROBINDO (1872–1950)

15 August marks the birth anniversary of Sri Aurobindo, one of India's foremost revolutionary nationalists, philosopher, yogi and spiritual thinker.

About Sri Aurobindo

- ➔ Born on **15 August 1872** in **Calcutta**. He passed away on **5 December 1950** in **Puducherry**.
- ➔ He studied at **St. Paul's School, London**, and **King's College, Cambridge**.
- ➔ He qualified for the **Indian Civil Service (ICS)** examination but did not join the service after remaining absent from the compulsory **horse-riding test**.
- ➔ He returned to India in **1893** and served in the **Baroda State**. He also taught at **Baroda College**.

Role in the Freedom Movement

- ➔ He was among the **earliest leaders to advocate complete independence** from British rule.
- ➔ His famous series **New Lamps for Old** criticised the moderate approach of the **Indian National Congress**.
- ➔ He was associated with **Anushilan Samiti** and contributed to nationalist newspapers such as **Bande Mataram** and **Jugantar**.

- He also started two influential weeklies, **Karmayogin** (English) and **Dharma** (Bengali).
- In **1906**, he became the **first Principal of Bengal National College**, promoting national education.
- He was arrested in the **Alipore Bomb Case (1908)** and was successfully defended by **Chittaranjan Das**.

Spiritual and Literary Contributions

- In **1910**, he moved to **Puducherry** and withdrew from active politics.
- He developed **Integral Yoga**, which aims at the **integral transformation of human consciousness** through the synthesis of different paths of yoga.
- He founded the **Sri Aurobindo Ashram** in **1926** with **Mirra Alfassa (The Mother)**, who later founded **Auroville**.
- His important literary works include:
 - ♦ **The Life Divine**, which explains the philosophical foundations of **Integral Yoga**.
 - ♦ **The Synthesis of Yoga**, which discusses the principles and methods of **Integral Yoga**.
 - ♦ **Savitri: A Legend and a Symbol**, an epic philosophical poem.
 - ♦ **Essays on the Gita** and **The Foundations of Indian Culture**.
- He was nominated for the **Nobel Prize in Literature (1943)** and the **Nobel Peace Prize (1950)**.
- He envisioned India's **spiritual and civilisational resurgence**, emphasising **human unity** and the evolution of human consciousness.

ROYAL INDIAN NAVY (RIN) MUTINY, 1946

India marked 80th year of the Royal Indian Navy (RIN) Mutiny of 1946. It is also known as the Royal Indian Navy Revolt and is remembered as a landmark anti-colonial uprising that severely weakened British authority and hastened the transfer of power.

About the RIN Mutiny

- The **RIN Mutiny** was a large-scale revolt by Indian naval ratings against British rule in **February 1946**.
- It began at **HMIS Talwar**, a **shore-based signals establishment** in **Bombay**, and spread through the **wireless communication network** to **78 ships, 20 shore establishments** and nearly **20,000 naval personnel** across **Bombay, Karachi, Calcutta, Madras, Visakhapatnam, Jamnagar** and other centres.
- It is regarded as one of the **last major military challenges** to British rule before Independence.

Causes

- **Post-war uncertainty:** The RIN expanded from **less than 2,000 personnel** before the Second World War to about **30,000** during the war. Planned post-war demobilisation created insecurity among sailors.

- **Service grievances:** Ratings faced **racial discrimination, poor food, inadequate housing, low pay, limited allowances** and harsh treatment by British officers.
- **Nationalist influence:** The **INA trials** and the wider freedom movement strengthened anti-colonial sentiment among naval personnel.
- **Immediate trigger:** Commander **Arthur Frederick King** allegedly abused Indian sailors and ignored their complaints, leading to a strike on **18 February 1946**.

Major Demands

- **Improved service conditions** including food, housing, pay, allowances and fair demobilisation.
- **Equal facilities** with Royal Navy personnel, including access to **NAAFI** services.
- **Political demands** included the release of **INA prisoners**, action against Commander King, withdrawal of British forces from **Indonesia**, and an end to the use of Indian troops for British imperial interests.

Course of the Revolt

- The ratings formed the **Naval Central Strike Committee (NCSC)**.
- They identified themselves as the **Indian National Navy (Azad Hindis)**.
- They hoisted the **Congress, Muslim League and Communist Party flags**, symbolising broad anti-colonial unity.
- The revolt received widespread public support from workers, students and railway employees, while citizens supplied food to the sailors.
- The British suppressed the uprising by force. Police firing in Bombay caused heavy civilian casualties. Similar unrest also appeared in sections of the **Royal Indian Air Force** and the **Indian Army**.

Significance

- It exposed the **erosion of British control over the Indian armed forces**.
- It showed that the loyalty of Indian military personnel was no longer assured.
- Along with the **INA movement**, it strengthened the case for an early British withdrawal from India.
- It also highlighted how **economic grievances and nationalist aspirations** could unite servicemen across religious and regional lines.

DAHI HANDI FESTIVAL

The Maharashtra Government has initiated formal efforts to secure UNESCO Intangible Cultural Heritage (ICH) inscription for the Dahi Handi Festival. It also plans to promote the tradition internationally by sending Govinda teams to Spain for cultural exchange programmes.

About

- **Dahi Handi** is a traditional **religious, cultural and community festival** celebrated during **Krishna Janmashtami** to commemorate the childhood exploits (**Bal Leela**) of **Lord Krishna**.
- It is inspired by the legend of **Makhan Chor**, where young Krishna and his companions formed **human pyramids** to reach earthen pots filled with butter and curd hung high by the **Gopis**.
- Teams known as **Govinda Pathaks** form **multi-tier human pyramids** to break a suspended earthen pot (**Handi**) containing **curd, butter, milk, flattened rice and fruits**.
- The **topmost Govinda** climbs to the apex of the pyramid and breaks the pot, symbolising Krishna's playful childhood.
- The festival is celebrated on a grand scale in **Maharashtra**, especially in **Mumbai, Thane, Pune** and the **Konkan region**. It is also known as **Gopalakala** in western India and **Utlotsavam** in parts of **Andhra Pradesh** and **Telangana**.
- Modern celebrations involve trained **Govinda Pathaks**, including **all-women teams**, which practise for months. Spectators traditionally splash water on the participants, adding to the challenge and festive spirit.

UNESCO Intangible Cultural Heritage (ICH)

- **Intangible Cultural Heritage** includes **oral traditions, performing arts, social practices, rituals, festive events, traditional knowledge, and craftsmanship** that communities recognise as part of their cultural identity.
- UNESCO adopted the **Convention for the Safeguarding of the Intangible Cultural Heritage** in 2003. India ratified the Convention in 2005.
- India currently has **16 elements** inscribed on UNESCO's **Representative List of the Intangible Cultural Heritage of Humanity**.

RAJGHAT EXCAVATIONS, VARANASI

Banaras Hindu University (BHU) recently reopened 22 sealed boxes containing over 10,000 archaeological artefacts excavated from Rajghat, Varanasi, during the 1957 excavation led by archaeologist T. N. Roy.

About Excavations

- **Rajghat** is situated on the **north-eastern edge of Varanasi**, near the **confluence of the Ganga and Varuna rivers**.
- It formed an important part of **ancient Varanasi**, the capital of the **Kashi Mahajanapada**, making it a key site for understanding early urbanisation in northern India.
- The **earliest archaeological remains** were identified in 1939 during the expansion of the **Kashi railway station**.

- Major excavations were conducted jointly by **BHU** and the **Archaeological Survey of India (ASI)** between **1957 and 1969** under the supervision of **A. K. Narain** and **T. N. Roy**.

Major Discoveries

- The reopened boxes contained over **10,000 artefacts**, including **painted black pottery** dating back nearly **3,000 years**.
- Other finds include **ancient sculptures, coins, tools, stamp seals**, and objects made of **copper, ivory, and bone**.
- Several **inscribed seals**, including examples in the **Brahmi script**, were recovered.
- **Seals and sealings** bearing the name "**Varanasi**" helped confirm the site's identification with ancient Varanasi.
- Researchers also reopened a sealed box containing a **human skeleton** excavated from the site nearly **70 years ago**.
- The collection includes around **3,000 glass slides** and over **5,000 photographic negatives** documenting archaeological sites such as **Rajghat, Manjhi, Ratnagiri, Ajanta, and Ellora**.
- These archival images preserve the original condition of monuments and sculptures before later weathering, restoration, and modern development.

VAISHYA TEKRI STUPA, UJJAIN

The Madhya Pradesh Government is considering fresh excavation at Vaishya Tekri, Ujjain, where excavations in 1938–39 revealed the remains of a massive Mauryan-period Buddhist stupa, believed to be potentially larger than the Great Stupa at Sanchi.

Vaishya Tekri

- **Vaishya Tekri** is a large **archaeological mound** located near **Ujjain, Madhya Pradesh**.
- Excavations conducted in **1938–39** exposed parts of a **main Buddhist stupa** and the remains of **two smaller stupas**.
- The site is **tentatively dated** to the **3rd century BCE (Mauryan period)**.
- It is **traditionally associated with Emperor Ashoka**, who served as the Mauryan governor of Ujjain before becoming emperor, although this association is **not yet conclusively established** by archaeological evidence.
- Earlier excavation reports estimated the monument to be about **350 feet in diameter** and **over 100 feet in height**, suggesting it **may exceed the size of the Great Stupa at Sanchi** if confirmed through fresh excavations.
- Ancient **Ujjain** was the capital of the **Avanti Mahajanapada** and later became an important **trade, cultural and administrative centre** under the Mauryas.

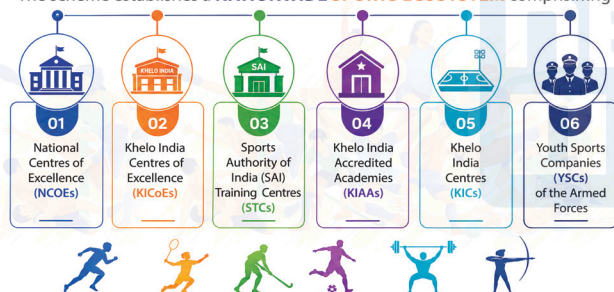
REVAMPED KHELO INDIA SCHEME

The Union Cabinet has approved the revamped Khelo India Scheme and an enhanced Assistance to National Sports Federations (ANSFs) with a combined outlay of ₹36,441 crore for 2026–27 to 2030–31 to strengthen India's sports ecosystem from the grassroots to the elite level.

About

- Khelo India, officially known as the **National Programme for Development of Sports**, was launched in 2016–17 to promote **mass participation** and **sporting excellence** across the country.
- The revamped scheme aims to create a **continuous athlete development pathway** from schools and villages to international competitions, including the **Olympic and Paralympic Games**.
- It is aligned with **Khelo Bharat Niti, 2025** and the **National Education Policy (NEP), 2020**, integrating sports with education, fitness and youth development.

The scheme establishes a **NATIONWIDE SPORTS ECOSYSTEM** comprising



- These institutions will provide **scientific coaching, sports science support, modern infrastructure and athlete development**.
- A new **Emerging Khelo India Athletes (E-KIA)** category will significantly expand the structured talent pool.
- **Khelo India Feeder Schools** and **Khelo India Utkrishta Vidyalayas** will strengthen sports education at the school level.
- The **Fit India Movement** will be expanded to promote fitness, women's participation, indigenous sports, para-sports and sports-based awareness against substance abuse.
- A **National Coach Accreditation Board (NCAB)** will standardise coaching qualifications and improve professional standards.
- A **digital sports platform** will support athlete tracking, talent identification and sports governance.

Enhanced Assistance to National Sports Federations

- The strengthened **ANSF Scheme (2026–31)** will provide financial support for:
 - ♦ Coaching and sports science
 - ♦ Modern equipment
 - ♦ Training camps
 - ♦ International exposure
 - ♦ Foreign experts
 - ♦ Participation in major international competitions

- The scheme also promotes **sports cooperation with Global South countries** and supports the international promotion of **India's indigenous sports**.

Significance

- The revamped programme aims to build a **strong grassroots-to-elite sports ecosystem**, improve India's international sporting performance and support the vision of making India a **global sporting nation**.

FIELDS MEDAL 2026

The Fields Medal 2026, the world's most prestigious honour in mathematics, has been awarded to Yu Deng, John Pardon, Jacob Tsimerman and Hong Wang for their outstanding contributions to mathematical research.

About

- The **Fields Medal** was established in 1936 through the efforts of Canadian mathematician **John Charles (J.C.) Fields**.
- It is awarded by the **International Mathematical Union (IMU)** during the **International Congress of Mathematicians (ICM)**.
- The award recognises both **outstanding mathematical achievements** and the **promise of future contributions**.
- It is conferred **once every four years**.
- **Eligibility:** Recipients must be **below 40 years of age** on 1 January of the award year.
- **Awardees:** **Two to four mathematicians** may receive the medal in each award cycle.
- **Funding:** The medals and cash prizes are financed through a **trust established by J.C. Fields at the University of Toronto**. The **2026 prize fund** also received support from the **Fields Institute**.
- **Prize:** Each recipient receives the **Fields Medal** and a **cash award of 15,000 Canadian dollars**.

Points to Ponder

- **Hong Wang** became the **third woman** to receive the Fields Medal after **Maryam Mirzakhani (2014)** and **Maryna Viazovska (2022)**.
- **Yu Deng** and **Hong Wang** became the **first Chinese nationals** to receive the award.
- **Indian-origin mathematicians** **Manjul Bhargava (2014)** and **Akshay Venkatesh (2018)** are previous Fields Medal recipients.

DR. M. S. SWAMINATHAN AWARD FOR ENVIRONMENT PROTECTION

P. Pechiyammal of Ramanathapuram and Govindhmal of Villupuram received the Dr. M. S. Swaminathan Award for Environment Protection 2026 for their outstanding contributions to environmental conservation and sustainable livelihoods.

About the Award

- The award was instituted by the **Rotary Club of Madras East (RCME)** in memory of **Dr. M. S. Swaminathan**.
- It is supported by **CavinKare Pvt. Ltd.**
- It honours an **individual, organisation, or company** for their outstanding contributions to **environmental protection, conservation, and environmental awareness**.

2026 Awardees

- **P. Pechiyammal** was recognised for pioneering the collection of **ghost fishing gear**, including abandoned fishing nets, nylon ropes, and plastic waste, which has helped reduce **marine pollution**.
- **Govindhmal** was honoured for promoting **sustainable agriculture** through improved seeds, better farming practices, and farmer empowerment.

Dr. M. S. Swaminathan

- **Born: 7 August 1925** at Kumbakonam, Tamil Nadu.
- Inspired by the **Bengal Famine (1943)**, he chose agricultural science to strengthen India's food security.

Major Contributions

- Led India's **Green Revolution** by promoting **high-yielding semi-dwarf wheat** and improved rice varieties, helping India achieve **food self-sufficiency**.
- Collaborated with **Norman E. Borlaug** and **Orville Vogel** to introduce **Mexican dwarf wheat**, laying the foundation of India's **Wheat Revolution**.
- Served as the first Indian Director General of the International Rice Research Institute (IRRI), Philippines (1982–1988).
- Received the **first World Food Prize (1987)** for his contribution to global food security.
- Promoted **mangrove conservation** and **coastal ecosystem restoration**, particularly in **Kendrapara (Odisha)**. He also advocated large-scale mangrove plantation after the **2004 Indian Ocean Tsunami**.
- Helped establish the **Gulf of Mannar Biosphere Reserve Trust** with support from the **Global Environment Facility (GEF)**.
- As **Chairman of the National Commission on Farmers (2004-06)**, recommended **Minimum Support Price (MSP)** at least **50% above the comprehensive cost of cultivation (C2+50%)**.
- He was awarded the **Bharat Ratna posthumously in 2024**.
- He was recognised by the **United Nations Environment Programme (UNEP)** as the **"Father of Economic Ecology"**.

COSPAR VIKRAM SARABHAI MEDAL 2026

Indian astrophysicist **Prof. Annapurni Subramaniam**, Director of the Indian Institute of Astrophysics (IIA), Bengaluru, has been awarded the COSPAR Vikram Sarabhai Medal 2026 for her outstanding contributions to space research.

About

- It is an **international award** instituted in **1990** to honour the legacy of **Dr. Vikram Sarabhai**, the founder of India's space programme.
- The medal is **jointly awarded** by the **Committee on Space Research (COSPAR)** and the **Indian Space Research Organisation (ISRO)**.
- COSPAR is an international scientific body affiliated with the **International Science Council (ISC)** and recognised by the **United Nations Committee on the Peaceful Uses of Outer Space (UN-COPUOS)**.
- The medal is awarded for outstanding contributions to space research in **developing countries**. The medal is open to **candidates from any country**.
- It is presented during the **COSPAR Scientific Assembly**, which is held **every two years**.

2026 Recipient

- **Prof. Annapurni Subramaniam** received the award for her pioneering work in **stellar populations, star clusters, galaxy evolution**, and her contributions to **AstroSat's Ultra Violet Imaging Telescope (UVIT)**.
- She is the **fourth Indian** to receive this honour.
- She is the **first Indian woman** and only the **third woman globally** to receive the medal.

Previous Indian Awardees

- **Udupi Ramachandra Rao (1996)**
- **Gurbax Singh Lakhina (2014)**
- **Anil Bhardwaj (2024)**

BLUE ZONES

Okinawa (Japan), one of the world's recognised **Blue Zones**, has attracted global attention for its **high life expectancy and exceptional healthy ageing**.

About

- **Blue Zones** are geographic regions where people live **significantly longer and healthier lives** than the global average.
- These regions have an unusually high concentration of **centenarians**, people aged **100 years or more**.
- The concept was developed by **Dan Buettner**, **Michel Poulain**, and **Gianni Pes** through research on populations with exceptional longevity.
- The **five recognised Blue Zones** are:
 - ◆ **Okinawa (Japan)**

- ♦ Sardinia (Italy)
 - ♦ Nicoya Peninsula (Costa Rica)
 - ♦ Ikaria (Greece)
 - ♦ Loma Linda, California (United States)
- ➔ Blue Zones provide valuable insights into **healthy ageing**, **longevity**, and **preventive healthcare**, making them important reference models for public health research and policy.

2026 DIRAC MEDAL

Professor Deepak Dhar, a distinguished Indian theoretical physicist, has been awarded the 2026 Dirac Medal by the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, for his pioneering contributions to statistical physics, particularly the Abelian Sandpile Model. He shares the honour with Bernard Derrida, Marc Mézard, and Haim Sompolinsky.

About the Dirac Medal

- ➔ **Instituted:** 1985 by the ICTP.
- ➔ **Named after:** Paul A. M. Dirac, Nobel Laureate and one of the founders of quantum mechanics.
- ➔ **Awarded annually** on **8 August**, the birth anniversary of Paul Dirac.
- ➔ Recognises **scientists who have made significant contributions to theoretical physics**.
- ➔ By convention, it is **not awarded** to recipients of the **Nobel Prize, Fields Medal, or Wolf Prize**, although several recipients have later won these honours.
- ➔ Each recipient receives the **Dirac Medal** and a **US\$5,000** prize.
- ➔ **ICTP**, founded in **1964** by **Abdus Salam**, promotes advanced research and scientific capacity-building, especially in developing countries.
- ➔ It operates under a tripartite agreement between **UNESCO**, the **International Atomic Energy Agency (IAEA)**, and the **Government of Italy**.

Abelian Sandpile Model

- ➔ Developed by **Deepak Dhar** in **1990** as a rigorous mathematical extension of the **Self-Organized Criticality** concept proposed in **1987**.
- ➔ Explains how **simple local interactions** can naturally drive a system to a **critical state**, where a small disturbance may trigger **complex cascading events**.
- ➔ Its **Abelian property** proves that the **final stable configuration is independent of the order of toppling**, making the model mathematically tractable.
- ➔ The model has applications in understanding **earthquakes**, **forest fires**, **traffic flow**, **neuronal activity**, **power-grid failures**, and **financial market fluctuations**.

About Deepak Dhar

- ➔ Born in **1951** in **Pratapgarh**, **Uttar Pradesh**.

- ➔ Studied at **Allahabad University** and **IIT Kanpur** and earned his **Ph.D. from the California Institute of Technology (Caltech)** in **1978**.
- ➔ Served as a **teaching assistant to Richard Feynman** during his doctoral studies.
- ➔ He became the first Indian to receive the **Boltzmann Medal (2022)**, which is widely regarded as the **highest international honour in statistical physics**.
- ➔ Other major honours include the **Shanti Swarup Bhatnagar Prize (1991)**, **TWAS Prize (2002)**, and **Padma Bhushan (2023)**.
- ➔ He is among **only a handful of scientists worldwide** to have received **both the Boltzmann Medal and the Dirac Medal**.

NATIONAL GOPAL RATNA AWARDS 2026

The Department of Animal Husbandry and Dairying, under the Ministry of Fisheries, Animal Husbandry and Dairying, has invited nominations for the National Gopal Ratna Awards (NGRA) 2026.

About the NGRA

- ➔ The **National Gopal Ratna Awards (NGRA)** are among India's **highest national honours** in the **livestock and dairy sector**.
- ➔ The awards were instituted under the **Rashtriya Gokul Mission (RGM)** in **2021**.
- ➔ They are presented annually on **National Milk Day (26 November)**.
- ➔ **Rashtriya Gokul Mission**, launched in **December 2014**, aims to **scientifically conserve, develop, and promote indigenous bovine breeds**.
- ➔ The awards encourage excellence among **milk-producing farmers, dairy cooperatives, Milk Producer Companies (MPCs), Dairy Farmer Producer Organisations (FPOs), and Artificial Insemination Technicians (AITs)**.

Award Categories

- ➔ **Best Dairy Farmer** rearing indigenous cattle or buffalo breeds.
- ➔ **Best Dairy Cooperative Society (DCS)**, **Milk Producer Company (MPC)**, or **Dairy Farmer Producer Organisation (FPO)**.
- ➔ **Best Artificial Insemination Technician (AIT)**.
- ➔ A **Special Award** is also given to deserving nominees from the **North Eastern Region (NER)** and **Himalayan States** to promote dairy development in these regions.

Awards and Incentives

- ➔ In the **Best Dairy Farmer** and **Best DCS/MPC/FPO** categories, the **1st, 2nd and 3rd prizes** carry **₹5 lakh, ₹3 lakh and ₹2 lakh**, respectively, along with a **certificate of merit** and a **memento**.
- ➔ The **Special Award** carries **₹2 lakh**, a **certificate of merit**, and a **memento**.
- ➔ In the **Best Artificial Insemination Technician (AIT)** category, recipients receive a **certificate of merit** and a **memento**. There is **no cash prize**.

SARDAR PATEL NATIONAL UNITY AWARD

The Sardar Patel National Unity Award is expected to be announced on 31 October, marking National Unity Day and Sardar Vallabhbhai Patel's birth anniversary.

About the Award

- It was instituted in September 2019 in the name of Sardar Vallabhbhai Patel.
- It recognises citizens, institutions and organisations for exceptional contributions to promoting India's unity and integrity.
- It is regarded as the highest civilian honour in the field of national unity and integrity and is considered equivalent to the Padma Vibhushan.
- The award is announced annually on 31 October (National Unity Day).
- It is conferred by the President of India.



Eligibility

- The recipient should have made outstanding and inspiring contributions towards strengthening national unity and integrity.

Award Committee

- The committee is **constituted by the Prime Minister**.
- It comprises:
 - Cabinet Secretary
 - Principal Secretary to the Prime Minister
 - Secretary to the President
 - Home Secretary
 - Three or four eminent persons nominated by the Prime Minister

Award Features

- The award consists of a medal and a citation.
- No cash prize or monetary grant is attached.
- The medal is shaped like a lotus leaf, made of gold and silver, with Sardar Patel's portrait on one side and the National Emblem on the other.
- It is generally not conferred posthumously, except in rare and highly deserving cases.
- Not more than three awards are presented in a year.

2026 Edition

- The **first recipients** are expected to be announced on **31 October 2026**.
- Two or three awardees** may be selected in the inaugural edition.

GARBHINI MITRA COURSE

The All India Institute of Ayurveda (AIIA), New Delhi, an autonomous institution under the Ministry of AYUSH, has launched the Garbhini Mitra Course for the 2026-27 academic session.

About the Course

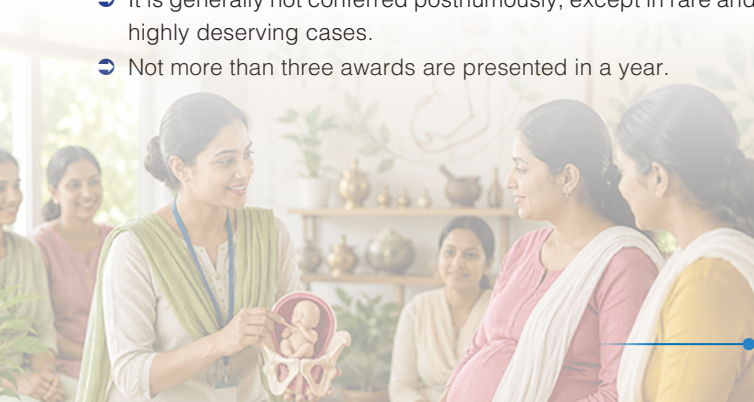
- It is a six-month, offline healthcare skill-development programme conducted at the AIIA campus in Sarita Vihar, New Delhi.
- It aims to develop a cadre of **community-level maternal wellness guides** who provide **non-clinical support** during the **pre-conception, pregnancy and postnatal periods**.
- The course is designed to **complement**, and **not replace**, professional medical and obstetric care through timely guidance and referral.

Key Features

- It is based on three classical Ayurvedic concepts:**
 - Garbhadhana Vidhi:** Pre-conception care.
 - Garbhini Paricharya:** Antenatal care.
 - Sutika Paricharya:** Postnatal care.
- The curriculum includes:**
 - Trimester-specific diet and lifestyle management
 - Pregnancy-safe yoga and breathing exercises
 - Emotional support during labour
 - Newborn massage (Abhyanga)
 - Basic Life Support (BLS)
 - Infection control, sanitation and biomedical waste management.
- Participants are trained to identify **high-risk pregnancy warning signs**, monitor routine health indicators, and facilitate **timely referral to qualified healthcare professionals**.
- Each batch admits 20 students** to ensure intensive practical training.

Eligibility

- Applicants must be **18 years of age or above**.
- They should have passed the **Senior Secondary (10+2)** examination from a recognised board.
- Candidates awaiting **Class 12 results** may also apply provisionally.



DATA RECAP

- Census 2027 will record caste in a regular census for the first time since 1931. Ladakh is to be enumerated first, from September 2026.
- PM-Vidyalaxmi gives collateral-free loans to students in 1,425 institutions, backed by a 75% credit guarantee up to Rs 7.5 lakh.
- Zonal Councils are statutory bodies under the States Reorganisation Act, 1956; the 31st Southern Zonal Council met in Tamil Nadu.
- Eleven AAI airports will be leased for 50 years in five bundles under PPP, pairing strong and weak airports.
- India has been an Arctic Council observer since 2013; its station Himadri is at Svalbard, Norway, since 2008.
- The Arctic warms three to four times faster than the global average, directly affecting India's monsoon and sea levels.
- The 1996 Farakka Treaty with Bangladesh on Ganga water sharing expires 12 December 2026, prompting review calls over Bihar's needs.
- Iran plans to join the BRICS-founded New Development Bank to deepen banking cooperation with member countries.
- CBAM, the EU's Carbon Border Adjustment Mechanism, targets carbon-heavy imports like iron and steel, prompting India to invoke CBDR-RC.
- India's core sector, covering nine industries, saw growth slow to 5.4% in July 2026 from 6% in June.
- APEDA sent the first-ever commercial sea shipment of GI-tagged Mithila Makhana, or fox nut, from Bihar to Australia.
- The Clouded Leopard Conservation Action Plan was launched on International Clouded Leopard Day, 4 August, to protect Asia's wild cats.
- Five captive-bred Slender-billed and five White-rumped Vultures were released via Soft Release at Jatayu Centre, Kaziranga, Assam.
- Twelve glaciers in Ladakh's Zaskar region slowed by an average 2.4 metres per year per decade between 1992 and 2023.
- World Elephant Day is observed on 12 August; elephants have the longest gestation period of any land mammal.
- The Barren-land Fallacy wrongly treats naturally treeless landscapes as degraded, encouraging inappropriate afforestation.
- Broad Peak, or Falchan Kangri, in the Karakoram Range is the world's 12th-highest mountain, at 8,051 metres.
- Lake Mead, America's largest reservoir, formed by the Hoover Dam, hit its lowest level in nearly 90 years.
- The BESIII experiment found strong evidence that particle X(2370) may be a glueball, made mostly of gluons.
- Indian start-up D-Propulse tested India's first indigenous 5 kN air-breathing Rotating Detonation Engine at a DRDO facility in Hyderabad.
- India plans a scheme for 30 GW domestic polysilicon manufacturing by 2030, with over Rs 25,000 crore investment.
- Maithili Sharan Gupta, born 3 August 1886 in Chirgaon, Jhansi, is remembered every year on his birth anniversary.
- Pingali Venkayya, born 2 August 1876 in Krishna district, Andhra Pradesh, designed India's national flag.
- The Quit India Movement was launched by Mahatma Gandhi on 8 August 1942, a final phase of the freedom struggle.
- Vaishya Tekri, Ujjain, holds a Mauryan-era Buddhist stupa excavated in 1938-39, possibly larger than the Great Stupa at Sanchi.
- Fields Medal 2026, mathematics' top honour, went to Yu Deng, John Pardon, Jacob Tsimerman and Hong Wang; recipients must be under 40.
- Hong Wang became only the third woman, after Maryam Mirzakhani (2014) and Maryna Viazovska (2022), to win the Fields Medal.
- Blue Zones, regions of exceptionally long healthy lives, include Okinawa, Sardinia, Nicoya Peninsula, Ikaria and Loma Linda.
- The Garbhini Mitra Course by AIIA New Delhi trains community maternal-wellness guides using classical Ayurvedic concepts.
- The revamped Khelo India Scheme got a combined outlay of Rs 36,441 crore for 2026-27 to 2030-31.
- The Sardar Patel National Unity Award, instituted in 2019, is considered equivalent to the Padma Vibhushan, announced every 31 October.
- India's 60-plus population is projected to rise from 149 million in 2022 to 347 million by 2050.
- The Royal Indian Navy Mutiny of February 1946 began at HMIS Talwar, Bombay, and spread to 78 ships and 20,000 personnel.
- India ratified the UNESCO Intangible Cultural Heritage Convention in 2005 and now has 16 elements on its Representative List.

TEST YOURSELF

Objective Questions

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SUBJECTIVE QUESTIONS

1. "A strong care economy is not merely a welfare initiative but a strategic investment in human capital." In the light of the NITI Aayog report 'Reimagining Care', examine the challenges facing India's caregiving ecosystem and discuss measures needed to professionalise it.
2. "Limited disruption may serve as a democratic instrument, but persistent disruption weakens Parliament's constitutional role." Critically examine the causes of recurring disruptions in Indian Parliament and their impact on legislative scrutiny and executive accountability.
3. Examine the constitutional provisions governing the legislative, financial and accountability functions of the Indian Parliament, and discuss why the continued vacancy of the office of Deputy Speaker under Article 93 raises concerns of institutional balance.
4. The inclusion of caste enumeration in Census 2027 marks a historic departure from India's post-1931 practice. Discuss the significance of caste data for evidence-based welfare planning and affirmative action, and the concerns of data quality and privacy it raises.
5. "Criminalisation of politics replaces the rule of law with the rule of money and muscle." Examine the structural causes behind the rising number of legislators with criminal antecedents in India, and discuss the adequacy of existing legal safeguards.
6. Examine why legal provisions such as Section 8 of the Representation of the People Act, 1951 have failed to prevent candidates facing serious criminal charges from contesting and winning elections, and discuss the case for stronger disqualification norms.
7. "The Himalayas, recognised as the Third Pole, give India a legitimate stake in polar governance." Discuss the strategic, economic and scientific significance of the Arctic region for India.
8. Cultural diplomacy is an important instrument of soft power that enables nations to shape International opinion through attraction rather than coercion. Discuss the key dimensions of India's cultural diplomacy and the institutional challenges limiting its effectiveness.
9. Examine how statutory incorporation of premier research institutions like the ISI can improve administrative efficiency and financial accountability, while also assessing the risk of excessive executive control over academic governance.
10. Examine the legal and institutional framework governing extradition and the repatriation of fugitive economic offenders in India, and discuss the persistent challenges such as dual criminality and treaty gaps that hinder their return.
11. Discuss the key concerns relating to executive influence, administrative fragmentation and accessibility that have historically undermined the functioning of tribunals in India, and examine whether the National Tribunals Commission can address them effectively.
12. Discuss the significance of the Supreme Court's judgment in *State of Punjab v. Davinder Singh* (2024) for the sub-classification of Scheduled Castes, and examine how it differs from the application of the creamy layer principle.
12. Examine the significance of the Northern Sea Route and Arctic critical mineral reserves for India's economic and energy security.
14. Examine the connectivity constraints and the challenge posed by China's expanding footprint in Central Asia for India's engagement with Uzbekistan, and suggest measures to realise the full potential of bilateral trade and investment.
15. Examine the significance of 100% FDI in the insurance sector and the establishment of the Policyholders' Education and Protection Fund for deepening insurance penetration in India.
16. "Worker misclassification continues to deny platform workers basic labour rights." Critically examine the adequacy of the Code on Social Security, 2020 in protecting India's gig and platform workforce, and suggest measures to strengthen social security for this workforce.
17. Discuss the significance of India's ethanol blending programme for energy security and farmer incomes, and examine the concerns it raises regarding food security, water use and vehicle compatibility.
18. Examine the significance of the Public-Private Partnership model for airport privatisation in India, and discuss the safeguards needed to ensure that private investment improves connectivity and passenger services without compromising public interest.
19. Discuss the key features of the Ministry of Civil Aviation's proposal to privatise AAI airports, and examine the regulatory challenges in balancing operational efficiency with consumer protection and regional connectivity.
20. "The Himalayan region is not merely fragile; it is being actively destabilised by both natural processes and human intervention." Examine the geological, climatic and anthropogenic drivers behind recurring Himalayan flash flood disasters.