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Features :

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Wetlands as a National Public Good

UPSC Syllabus: Gs Paper 3- Ecology and environment

Introduction

Wetlands are shared natural systems that support water security, livelihoods, biodiversity, and social wellbeing. In India, wetlands have sustained communities through traditional knowledge that balanced use and conservation. They provide vital ecosystem services but remain under severe pressure due to development, pollution, and weak implementation of existing laws. Recognising wetlands as a national public good is necessary to protect ecological stability and long-term resilience.

Understanding Wetlands

1. **Definition and ecological character:** Wetlands are areas where water is the main factor shaping the environment and associated plant and animal life. They include freshwater, coastal, urban, riparian, natural, and high-altitude systems.

2. **Wetlands as productive and multiple-use ecosystems:** Wetlands are among the most productive environments. They provide food, water, fibre, groundwater recharge, water purification, flood moderation, erosion control, climate regulation, and support agriculture, fishing, drinking water, livelihoods, and biodiversity, which makes them valuable but vulnerable.
3. **Traditional wetland management:** Community-based systems managed water flow and storage for irrigation, drinking water, rituals, and festivals. Shallow wells in Wayanad, built over 200 years ago, and tank systems in southern India supported sustainable use.

4. **Cultural and social significance:** Wetlands function as ecology and economy, habitat and heritage. They are essential to social wellbeing and community identity across regions.

Status and Threats to Wetlands in India

1. **Scale of wetland loss:** Nearly 40% of India's wetlands have disappeared over the last three decades. Around 50% of the remaining wetlands show signs of ecological degradation.

2. **Encroachment and land conversion:** Natural wetlands have been replaced by infrastructure, real estate, and road networks. Altered catchments and mismatches between cadastral maps and ground reality worsen protection efforts.

3. **Hydrological disruption:** Wetlands depend on timing and flow of water. Dams, embankments, channelisation, sand mining, and groundwater over-extraction disrupt these flows and damage wetland character.

4. **Pressure on riparian and urban wetlands:** Floodplains are treated as spare land rather than active river space. Urban wetlands are burdened with flood control, storm runoff, and sewage inflows, often without legal buffers.

5. **Pollution and ecological collapse:** Untreated sewage, industrial effluents, agricultural runoff, and solid waste cause eutrophication. Biodiversity declines along with flood buffering and water purification capacity.

6. **Coastal and climate-related stress:** Sea-level rise, cyclones, and shoreline change combine with ports, tourism, aquaculture, and settlement growth. Mangroves and lagoons face pressure from both landward development and rising seas.

7. **Institutional capacity gaps:** State wetland authorities are understaffed and underfunded. Skill gaps in hydrology, ecology, GIS, legal enforcement, and community engagement weaken management.

Policy and Institutional Framework for Wetland Conservation

1. **Wetlands (Conservation and Management) Rules, 2017:** The rules provide a legal framework for identifying, notifying, and regulating activities in wetlands. Their strength depends on proper demarcation and enforcement.

2. **National Plan for Conservation of Aquatic Ecosystems (NPCA):** Updated NPCA guidelines promote structured planning, monitoring, and outcome-oriented management. They support science-based and monitorable wetland restoration.

3. **Coastal Regulation Zone framework:** CRZ aims to protect the ecological integrity of coastal wetlands. Effective enforcement is critical in areas facing development pressure.

4. **Ramsar Convention and international commitments:** The Ramsar Convention, signed in 1971 and in force in India since February 1, 1982, promotes wise use of wetlands. Over 170 countries are parties, with more than 2,400 Ramsar sites covering over 2.5 million square kilometres.

5. **Ramsar sites in India:** India has 98 Ramsar sites, the highest number in South Asia. These sites represent commitments to conservation and monitoring, not symbolic recognition.

6. **Montreux Record:** The Montreux Record tracks Ramsar sites facing ecological change. Keoladeo National Park in Rajasthan and Loktak Lake in Manipur are listed from India.

7. **Role of institutions and partnerships:** Site-based initiatives involving State governments, local communities, and institutions such as the M.S. Swaminathan Research Foundation support mapping, participatory planning, and livelihood-linked conservation.

Way Forward

1. **Shift in governance approach:** Wetland management must move from short-term projects to long-term programmes. Focus should shift from beautification to ecological functionality and from silos to watershed-scale governance.

2. **Notification and boundary protection:** Clear notification, demarcation, public maps, grievance redress, and participatory ground-truthing are essential for effective protection under the 2017 Rules.

3. **Wastewater management:** Urban and peri-urban wetlands must receive treated inflows. Wetlands cannot replace sewage treatment plants, though constructed wetlands can support treatment.

4. **Catchment and hydrological connectivity:** Wetlands should be managed as basin systems. Feeder channels must be restored, blockages removed, solid waste dumping stopped, and extraction regulated.

5. **Wetlands in disaster risk reduction:** Mangroves, floodplains, mudflats, and urban wetlands act as natural buffers. They should receive investment comparable to built infrastructure.

6. **Livelihood-sensitive coastal protection:** CRZ enforcement should protect ecological no-go areas while supporting coastal livelihoods.

7. **Capacity building and performance:** A national capacity mission is needed with accredited training and measurable performance indicators. NPCA investments should link conservation outcomes with livelihood benefits.

8. **Technology and community stewardship:** Satellite data, drones, and time-series analytics improve monitoring. Traditional knowledge should guide restoration and compliance when treated as evidence.

Conclusion

Wetlands sustain water, livelihoods, and ecological stability across India. Their decline shows a gap between strong policies and weak implementation. Treating wetlands as shared public assets requires coordinated action, better planning, and sustained monitoring. When science-based management works alongside community stewardship and traditional knowledge, wetlands can function as living ecosystems that strengthen environmental resilience and long-term water security..

Question for practice:

Examine how wetlands function as a national public good in India and analyse the key threats, policy responses, and measures needed for their effective conservation.

Source: Hindu

A cautious nudge: On the 16th Finance Commission's recommendations

Introduction

The **Finance Commission** is a constitutional body established under **Article 280 of the Constitution** to recommend tax devolution, grants-in-aid, and fiscal reforms to maintain balance in India's federal structure. The **Sixteenth Finance Commission**, constituted for the period **2026–27 to 2030–31**, submitted its recommendations amid growing fiscal stress faced by States due to post-GST revenue constraints and rising expenditure responsibilities, necessitating a recalibration of Centre–State fiscal relations.

16th Finance Commission

Period and leadership: The Sixteenth Finance Commission covers the five-year period from **2026–27 to 2030–31**. It is chaired by **Dr. Arvind Panagariya**, and its report was tabled in Parliament on **February 1, 2026**.

Recognition of State fiscal stress: The Commission acknowledges that States face **shrinking fiscal space under the GST framework**. It notes a growing mismatch between expenditure obligations and assured revenues, which has increasingly pushed States towards **market borrowings**.

Key recommendations of the 16th Finance Commission

A. Vertical Devolution

Devolution Continuity: The Commission recommends retaining the States' share in the divisible pool of Central taxes at **41% for the period 2026–31**, ensuring continuity with the Fifteenth Finance Commission.

B. Horizontal Devolution Criteria

1. **Income Distance:** Income distance is calculated using the gap between a State's per capita GSDP and the average of the **top three large States**, directing higher transfers to relatively poorer States.

2. **Population Weight:** Population share is based on **Census 2011 data**, with its weight modestly increased to reflect present expenditure and service delivery needs.

3. **Demographic Performance:** Demographic performance is measured using **population growth between 1971 and 2011**, aligning transfers with long-term demographic trends.

4. Forest Coverage: The forest criterion is expanded to include **total forest area, increase in forest cover, and open forests**, recognising ecological services provided by States.

5. **Economic Contribution:** The earlier "tax effort" criterion is replaced by a broader **"contribution to GDP"** parameter, with its weight increased to **10%**, rewarding productive and economically efficient States.

6. **Gradual Transition:** The Commission recommends that changes in horizontal devolution be implemented **gradually**, to ensure stability in inter-State fiscal transfers.

7. **Performance Recognition**
The revised formula provides **incremental gains to high-contributing States**, introducing a measured performance linkage in fiscal transfers.

C. Grants-in-Aid Structure

1. **Grant Allocation:** The Commission recommends **₹9.47 lakh crore** as grants-in-aid over five years, primarily for local bodies and disaster management.

2. **Grant Rationalisation:** Revenue deficit grants and sector-specific grants are discontinued to simplify and streamline the grants architecture.

3. Local Government Finance

- **Rural Support:** A total of **₹4.4 lakh crore** is recommended for rural local bodies to ensure predictable and stable funding.

- **Urban Support:** An allocation of **₹3.6 lakh crore** is recommended for urban local bodies.

• **Conditional Grants:** All local body grants will be made available upon fulfilment of three entry-level criteria: (i) constitution of he local bodies as per the Constitution, (ii) publication of provisional and audited accounts of the local bodies in the public domain, and (iii) timely constitution of the State

• **Basic Services:** 50% of the basic grant will be untied and the rest 50% will be tied to: (i) sanitation and solid waste management, and/or (ii) water management.

4. **Disaster Management grants:**

• The Commission has recommended **disaster management corpus of Rs 2,04,401 crore** for **State Disaster Relief and Management Funds (SDRF and SDMF).**

• The cost-sharing pattern between the centre and states is recommended to be: (i) 90:10 for north-eastern and Himalayan states, and ii) 75:25 for all other states. Centre's share in total will be Rs 1,55,916 crore.

D. Fiscal Roadmap:

• The Commission has recommended that the Centre should bring down fiscal deficit to 3.5% of GDP by 2030-31.

• It recommended the annual fiscal deficit limit for states to be 3% of GSDP.

• It also recommended strictly discontinuing the practice of off-budget borrowings for states and bringing all such borrowings onto their budgets.

E. Power-sector reforms: The Commission recommended that states should actively pursue privatisation of electricity distribution companies (DISCOMs).

F. Subsidy Reforms

• **Subsidy Review:** The Commission recommends States **review and rationalise subsidy expenditure**, particularly schemes involving unconditional cash transfers.

• **Targeted Delivery:** It advises setting **clear exclusion criteria** and adopting **rigorous review mechanisms** to ensure effective targeting.

• **Off-Budget Ban:** The Commission recommends **discontinuing off-budget borrowings** for financing subsidies.

• **Accounting Uniformity:** A **standardised framework for accounting and disclosure of subsidies and transfers** is recommended to address misclassification across States.

G. Public Enterprise Reforms

• **Inactive Closure:** The Commission recommends **review and closure of 308 inactive State Public Sector Enterprises (SPSEs)**.

- **Disinvestment Policy:** States are advised to formulate **State-level disinvestment policies** targeting inactive and underperforming SPSEs.

- **Loss Criteria:** State or Union PSEs incurring losses for **three out of four consecutive years** should be placed before the **respective Cabinet** for decision-making.

Major Concerns Related to the Sixteenth Finance Commission

1. Static Devolution: The States' share in the divisible pool remains at **41% for 2026–31**, despite States demanding **50%**, limiting fiscal autonomy.

2. GST Constraints: The Commission itself notes tighter fiscal space under GST, forcing States to rely increasingly on **market borrowings**.

3. Limited Signal: FC-16 avoided a phased rise in devolution, missing an opportunity to commit to a higher share, such as **45% by 2031**.

4. Restrained Incentives: The weight for **"contribution to GDP"** rose sharply from **2.5% (FC-15) to 10%**, yet gains for productive States remain modest.

5. Demographic Shift: Weight for demographic performance was reduced, while **population size weight increased**, diluting reform incentives.

6. Cess Shrinkage: Although it flags shrinking pools due to cesses and surcharges, FC-16 does not recommend their inclusion.

7. Centralised Transfers: Total transfers rise **12.2% (2025-26 RE to 2026-27 BE)**, but **₹1.2 lakh crore (42%)** comes via Centrally Sponsored Schemes, reinforcing Centre-led control.

Conclusion

Overall, the Sixteenth Finance Commission combines continuity with calibrated reform. While it strengthens performance-linked transfers, local government financing, and fiscal discipline, it adopts a cautious approach on vertical devolution and structural federal reforms. The recommendations seek to balance equity, efficiency, and stability, even as concerns persist regarding State fiscal autonomy and centralisation of transfers.

Question for practice:

Discuss the key recommendations of the Sixteenth Finance Commission and the major concerns arising from its approach to Centre–State fiscal relations.

Source: The Hindu

Budget's Manufacturing Thrust

Source: The **Union Budget 2026–27,** places **manufacturing at the core of India's growth strategy** amid **global trade disruptions, tariff wars** and **geopolitical uncertainties.** Anchored in ***Make in India*** and ***Atmanirbhar Bharat*,** the Budget seeks to **strengthen domestic manufacturing** in **strategic and frontier sectors** while maintaining fiscal discipline through a calibrated glide path**.**

Introduction

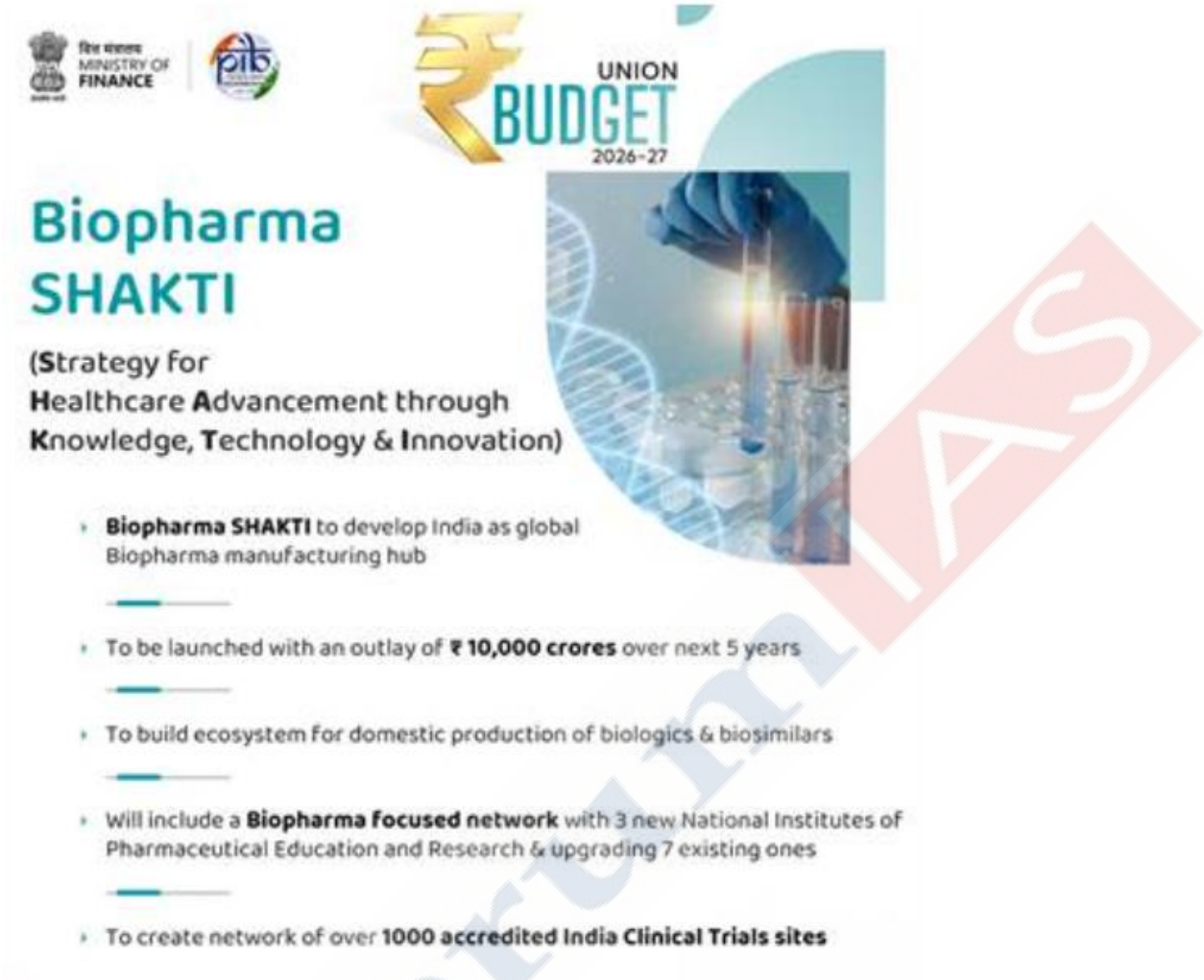
A key pillar of the Budget is its emphasis on scaling up manufacturing in **seven strategic** and high-value sectors**- semiconductors, biopharma, electronics components, rare earths, chemicals, capital goods** and **textiles.** This sectoral prioritisation is designed to **reduce import dependence, deepen domestic value chains, enhance technological capabilities** and improve India's global manufacturing competitiveness.

[Read More about Summary of Union Budget 2026-27]

Key Features of Budget's Manufacturing Thrust

Source: PIB

- **India Semiconductor Mission (ISM) 2.0** to develop equipment, materials, indigenous IP and resilient supply chains.
- **Biopharma SHAKTI** (₹10,000 crore) to position India as a global hub for biologics and biosimilars through regulatory and institutional strengthening.



Source: PIB

- **Electronics manufacturing** boost with outlay doubled to ₹40,000 crore, leveraging success in mobile and iPhone production.
- **Rare Earth Corridors** in mineral-rich states to secure critical inputs for clean energy, electronics and defence.
- **Chemical Parks** and **capital goods schemes,** including container manufacturing, to enhance industrial depth and productivity.
- **Integrated textile programme,** mega textile parks and support to khadi, handloom and handicrafts for employment and exports.
- **Dedicated sports goods** initiative to promote design, material sciences and export competitiveness.
- **₹10,000-crore SME Growth Fund** and customs duty rationalisation to improve MSME participation and cost competitiveness.

Challenges related to Manufacturing sector in India

- **Stagnant manufacturing** share in GDP despite a decade of Make in India.
- **Uneven outcomes** of PLI schemes, with limited domestic value addition in some sectors.
- **Technology and skill gaps i**n frontier sectors like semiconductors and biopharma.

- **Weak MSME integration** into global and domestic value chains.
- **Implementation bottlenecks** in cluster-based and Centre–State coordinated schemes.
- **Global trade uncertainties** and rising protectionism affecting export-led manufacturing.

Way Forward

- **Shift from incentive-led to innovation-led manufacturing,** with greater focus on R&D and design capabilities.
- **Deepen MSME linkages** through credit access, technology transfer and supply-chain integration.
- **Align skilling programmes** with advanced manufacturing needs and industry demand.
- **Promote state-specific i**ndustrial strategies via competitive federalism and challenge-based funding.
- **Encourage sustainable** and **green manufacturing** to meet global ESG standards.
- **Ensure policy stability and timely execution** to boost investor confidence.

Conclusion

The **Union Budget 2026–27** presents a strategic yet **fiscally prudent manufacturing roadmap,** aligning i**ndustrial ambition** with **macroeconomic stability.** Effective implementation and ecosystem development will be crucial to converting sectoral thrust into durable industrial transformation.

Question for practice

Source: BusinessLine

What does the Budget offer Urban India?

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

The Union Budget 2026 presents cities as engines of growth under the vision of *Viksit Bharat* and stresses capital investment and productivity. However, the actual budget numbers show a clear retreat from urban development. Central support for cities has reduced at a time when urban India faces rising pressure from migration, climate stress, job needs, and ageing infrastructure. This gap between vision and funding defines the core concern of the Budget for urban India.

Status of Urban Budgetary Support

1. **Decline in total urban allocation:** The central outlay for urban development has fallen from **₹96,777 crore to ₹85,522 crore**, a cut of **₹11,255 crore or 11.6%**. After accounting for inflation, the real reduction is even deeper.

2. **Mismatch between demand and support:** Cities are expected to manage migration, climate risks, infrastructure stress, and employment creation with reduced financial support. Urban India is being asked to do more with fewer resources.

3. **Urban development downgraded in priority:** While capital expenditure is highlighted at the macro level, urban development is treated as a residual sector. It is adjusted after other fiscal priorities, not seen as a growth-critical investment space.

Recent Budgetary Arrangement for Urban Development

1. **Metro rail dominance within a shrinking budget:** The allocation for metro and mass rapid transit projects declined from **₹31,239.28 crore to ₹28,740 crore**, a reduction of **₹2,499.28 crore**, or about **8%**. Despite this cut, metro projects continue to dominate urban spending.

2. **One-mode concentration of urban funds:** Out of the total urban outlay of **₹85,522 crore**, metro rail alone accounts for **₹28,740 crore**, which is **33.6%** of total central urban spending. Nearly one-third of the urban budget is absorbed by a single transport mode.

3. **Bias towards visible capital projects:** Metro systems are capital-intensive, spatially limited, and socially selective. They mainly serve dense corridors in large cities and benefit formal, middle-class commuters more than the urban majority.

Major Concerns Arising from Recent Urban Budgetary Support

1. **Cuts in affordable urban housing:** The allocation for **Pradhan Mantri Awas Yojana–Urban (PMAY-U)** declined from **₹19,794 crore to ₹18,625 crore**, a reduction of **₹1,169 crore or nearly 5.9%**. This weakens efforts to address housing shortages, worsening affordability, and the expansion of informal settlements.

2. **Sharp rollback in urban sanitation funding:** The allocation for **Swachh Bharat Mission–Urban (SBM-U)** was reduced from **₹5,000 crore to ₹2,500 crore**, a **50% cut**. Urban sanitation requires sustained investment in waste processing, sewage treatment, faecal sludge management, and worker safety, not one-time spending.

3. **Reduction in water and sewerage support:** Funding for the **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** fell from **₹10,000 crore to ₹8,000 crore**, a **20% reduction**. This affects cities already facing groundwater depletion, unequal access, ageing pipelines, and climate-induced water stress.

4. **Neglect of inclusive urban mobility:** There is no proportional investment in bus-based transport, non-motorised transport, or last-mile connectivity. These modes carry most urban trips and offer higher social returns than metro systems.

5. **Weak fiscal position of urban local bodies:** The contraction in central support is not offset by fiscal devolution or new municipal financing frameworks. Urban local bodies remain dependent on tied transfers and lack the capacity for long-term planning.

6. **Timing of these cuts matters:** These reductions come when cities are absorbing large-scale migration and demographic churn. Urban India is also facing rising unemployment, informalisation of work, and frequent climate shocks such as heat waves, floods, and water scarcity, making the fiscal rollback particularly damaging.

What Should Be Done

1. **Recognise cities as growth engines:** Urban India generates the bulk of GDP, absorbs labour, and supports innovation. Budget priorities should reflect this economic role.

2. **Expand and rebalance urban spending:** Urban allocations must increase in real terms and move beyond metro-centric planning. Everyday urban systems need priority.

3. **Strengthen inclusive urban systems:** Greater investment is required in buses, non-motorised transport, housing, sanitation, and water services to improve equity and resilience.

4. **Empower urban local bodies:** Cities need predictable, untied funding and stronger fiscal autonomy to plan and deliver long-term infrastructure and services.

Conclusion

The Union Budget 2026 celebrates cities in words but constrains them in finance. An 11.6% cut in urban allocations, deep reductions in housing, sanitation, and water, and one-third of funds locked into metro projects show a retreat from inclusive urban development. Without expanded, diversified, and decentralised urban financing, the promise of *Viksit Bharat* risks resting on underfunded cities and deferred futures.

Question for practice

Examine how the Union Budget 2026 reflects the government's approach towards urban development in India, with reference to fiscal allocations, spending priorities, and their implications for inclusive and sustainable cities.

Source: The Hindu

Union Budget 2026 bets big on Industrial Growth

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

Union Budget 2026–27 is presented during a rare goldilocks phase of high growth and low inflation. India has become the fourth-largest economy and remains one of the fastest-growing. However, global geopolitical tensions and tariff conflicts pose risks to long-term growth. The Budget tries to balance optimism with realism. It focuses on continuity, long-term vision, and capital-led growth while avoiding short-term stimulus-driven policies.

India's Fiscal Status and Strategy

1. **Macroeconomic context and fiscal approach:** The Budget is framed during a rare phase of strong growth and price stability. It recognises underlying risks that can weaken future growth if not managed carefully.

2. **Capex-led growth continuity:** Capital expenditure has been raised to ₹12.2 lakh crore for FY27 from ₹11.2 lakh crore in the current year. Public infrastructure spending continues to be the main engine of growth.

3. **Fiscal deficit and consolidation path:** The fiscal deficit target is set at 4.3% of GDP for 2026–27. This signals continued commitment to fiscal discipline while supporting growth through capital spending.

4. **Debt and borrowing profile:** Fiscal numbers indicate a medium-term path toward a debt-to-GDP ratio of 50%, though it stands at 55.6% in the current year. Gross borrowing is ₹17.2 trillion, while net borrowing is ₹11.7 trillion.

5. **Borrowing pressure and interest rate limits:** Although net market borrowing remains unchanged, higher gross borrowing reduces space for further rate cuts. Large borrowing requirements can keep interest rates firm.

6. **Growth and inflation assumptions:** Nominal GDP growth is assumed to be above 10%, which appears realistic. Real GDP growth is expected at 6.8–7.2%, with a GDP deflator inflation of 2.9–3.2%.

7. **Inflation outlook risks:** These assumptions suggest CPI inflation closer to 4% or higher in the coming year. Inflation outcomes may change once the new GDP series is introduced.

Industrial and Manufacturing Push

1. **Early focus on manufacturing:** The Budget places manufacturing at the centre of its strategy from the beginning. This marks a clear shift from earlier Budgets.

2. **Support across sectors and firm sizes:** Industrial growth is targeted across emerging sectors, legacy industries, and MSMEs, including khadi and handicrafts. This widens the base of industrial expansion.

3. **Strategic and frontier sectors:** Support is expanded for seven sectors such as semiconductors, electronics components, biopharma, chemicals, capital goods, and textiles. The intent is to move beyond incentive-only schemes.

4. **Electronics and semiconductor initiatives:** The Electronics Component Manufacturing Scheme outlay is raised to ₹40,000 crore. India Semiconductor Mission 2.0 aims to deepen domestic chip production and reduce supply chain risks.

5. **Logistics and container manufacturing:** ₹10,000 crore is allocated for a new container manufacturing scheme. Investment in freight corridors and transport strengthens export competitiveness.

6. **Response to global trade disruptions:** The Budget addresses disruptions from the China–US tariff conflict, which has restricted access to critical minerals. These minerals are vital for electronics, defence, EVs, and renewable energy.

Support to Exports and MSMEs

1. **Relief for export-oriented sectors:** Targeted measures are provided for export sectors affected by higher U.S. duties. Textiles, leather, and seafood receive specific attention.

2. **Shift in MSME financing approach:** The focus moves toward structural strengthening of MSME finance rather than short-term credit support.

3. **SME Growth Fund:** A ₹10,000 crore SME Growth Fund is proposed to address equity gaps for scalable firms. It is expected to complement bank lending.

Key Surprises and Policy Contradictions

1. **Disinvestment revenue expectations:** Despite weak execution, the Budget continues to expect disinvestment receipts. Last year's target was ₹47,000 crore, but only ₹8,768 crore was realised.

2. **Extended tax concessions for cloud services:** Global cloud service providers using Indian data centres are offered zero tax until 2047. A 22-year exemption is unusually long.

3. **Employment expectations in services:** Higher employment generation is expected from the services sector. This contradicts low employment elasticity and rising job displacement due to AI.

4. **Data centres and power mismatch:** The push for more data centres is not matched by a clear increase in power generation. Data centres have high electricity demand.

5. **Silence on rupee volatility:** Despite recognition of a volatile rupee alongside strong growth, the Budget does not address this issue.

Gaps and Structural Challenges

1. **Need for a comprehensive industrial policy:** Manufacturing initiatives lack integration into a broader industrial policy. Without this, measures risk remaining fragmented.

2. **Weak focus on domestic demand:** Sustained industrial growth requires strong domestic demand. The Budget offers limited discussion on this aspect.

3. **Capex execution shortfall:** Effective capital expenditure for 2025–26 was budgeted at ₹15.48 lakh crore but actual spending was ₹14.03 lakh crore. This weakens demand multipliers.

4. **Dependence on volatile external demand:** Export-led growth remains vulnerable to global uncertainty. Domestic employment and income growth are critical to offset this risk.

5. **Inflation and income challenge:** Price pressures can weaken purchasing power. This may emerge as the weakest link for manufacturing expansion.

Conclusion

The Budget presents a strong industrial vision anchored in fiscal prudence and capital-led growth. However, gaps in demand support, execution, and policy coherence remain. Sustaining growth in 2026–27 will require managing short-term pressures while building long-term industrial strength. This demands speed and endurance at the same time.

Question for practice:

Discuss how Union Budget 2026–27 seeks to balance fiscal prudence with an industrial and manufacturing-led growth strategy, and highlight the key challenges that may affect its effectiveness.

Source: The Hindu

Heatwaves and lightning should be added to national disaster list

Source: The post **"Heatwaves and lightning should be added to national disaster list"** has been created, based on **"Heatwaves and lightning should be added to national disaster list"** published in **"Down to Earth" on 03rd February 2026.**

UPSC Syllabus: GS Paper-3-Disaster Management

Context: The 16th Finance Commission has recommended the inclusion of heatwaves and lightning as nationally notified disasters in view of their increasing frequency, intensity, and mortality. This step aims to strengthen India's disaster management framework by ensuring predictable funding and institutional support for climate-induced disasters.

Key Recommendations and Provisions

a. **Inclusion in National Disaster List:** Heatwaves and lightning are proposed to be added to the notified disasters, enabling states to access SDRF and NDRF funds without procedural delays and improving response efficiency.
b. **Financial Allocations (2026–27):** ₹1.4 lakh crore has been allocated as Finance Commission grants, including disaster management funds. ₹14,370 crore is earmarked for disaster-related expenditure for 2026–27.
c. **Five-Year Disaster Funding (2026–31):** A total of ₹2,04,401 crore is recommended for SDRF and SDMF, ensuring long-term financial stability for disaster response and mitigation.
d. **Fund Distribution:** 80% of funds are allocated to SDRF for immediate relief, while 20% to SDMF for preventive and mitigation measures, promoting a balanced approach.
e. **State-Level Flexibility:** States may continue using up to 10% of SDRF funds for locally severe disasters, ensuring flexibility and responsiveness to regional needs.

Rationale for Inclusion

1. Heatwaves: Heatwaves have become more frequent and intense due to climate change. Rising daytime and nighttime temperatures reduce human adaptability, increasing heat-related illnesses. Vulnerable populations such as elderly people, outdoor workers, and urban poor are most affected, making institutional support essential.

2. Lightning: Lightning incidents have increased sharply, especially in rural and agricultural areas. Lack of awareness, inadequate shelters, and dependence on outdoor work expose people to high risk, making lightning a major cause of disaster mortality.

Significance of the Recommendation

1. **Improved Access to Funds:** States will receive assured and timely financial support, enabling faster relief and rehabilitation.
2. **Strengthened Disaster Preparedness:** Recognition will promote systematic planning, training, and infrastructure development.
3. **Climate Change Adaptation:** It aligns disaster management with India's climate adaptation goals.
4. **Protection of Vulnerable Groups:** Focused interventions can be designed for farmers, labourers, slum dwellers, and elderly populations.
5. **Institutional Recognition:** Formal inclusion reduces dependence on ad-hoc measures and improves accountability.

Challenges

1. **Financial Stress:** Increased claims on disaster funds may reduce resources available for other calamities.
2. **Identification and Assessment:** Measuring heatwave-related losses and attributing deaths remains technically difficult.
3. **Implementation Capacity:** Many states and districts lack trained personnel and modern equipment.
4. **Data and Reporting Gaps:** Under-reporting and absence of real-time databases weaken planning and compensation.
5. **Urban and Rural Vulnerability:** Poor housing, lack of cooling facilities, and weak healthcare infrastructure increase risks.

Way Forward

1. **Strengthen Early Warning Systems:** Improve IMD forecasts and ensure last-mile dissemination through mobile and community networks.
2. **Heat Action Plans (HAPs):** All states and cities should prepare and implement integrated Heat Action Plans linked with health services.
3. **Infrastructure Resilience:** Promote cool roofs, green cover, shaded public spaces, and lightning protection systems.
4. **Capacity Building:** Regular training of officials, healthcare workers, and disaster volunteers is essential.
5. **Data and Technology Use:** Use satellite data, GIS mapping, and digital platforms for monitoring and evaluation.
6. **Community Awareness:** Conduct awareness campaigns on preventive measures, first aid, and emergency response.
7. **Climate-Resilient Policies:** Integrate disaster risk reduction into urban planning, agriculture, and social welfare schemes.

Conclusion: The inclusion of heatwaves and lightning as national disasters reflects India's evolving climate risks. While it will strengthen financial and institutional support, success depends on effective implementation, technological integration, and community participation. A preventive and resilience-based approach is crucial for sustainable disaster management.

Question: Discuss the recommendation of the 16th Finance Commission to include heatwaves and lightning in India's national disaster list. Examine its significance, challenges, and **suggest a way forward.**

Source: Down To Earth

What 2026 Delhi Declaration tells about India's approach to the Middle East

Source: The post **"What 2026 Delhi Declaration tells about India's approach to the Middle East"** has been created, based on **"What 2026 Delhi Declaration tells about India's approach to the Middle East"** published in **"Down to Earth" on 03rd February 2026.**

UPSC Syllabus: GS Paper-2-International Relations

Context: The 2026 Delhi Declaration was issued after the second India–Arab League Foreign Ministers' Meeting held in New Delhi. It reflects India's pragmatic, balanced, and stability-oriented approach towards a region facing multiple conflicts and power rivalries. The Declaration highlights India's preference for sovereignty, dialogue, and strategic autonomy in West Asia.

Key Features of the Delhi Declaration

1. Emphasis on Sovereignty and Territorial Integrity

a. The Declaration reaffirmed support for the unity and territorial integrity of Sudan, Libya, and Somalia.
b. It rejected foreign interference in the internal affairs of these countries.
c. It supported internationally recognised governments in these states.
d. It condemned atrocities committed against civilians in conflict zones.
e. This shows India's commitment to international law and regional stability.

2. Position on Major Regional Conflicts

a) Yemen Conflict: The Declaration explicitly condemned Houthi attacks on navigation in the Red Sea. It supported Yemen's unity and territorial integrity. This position aligns closely with Saudi Arabia's regional policy.

b) Syria Issue: The Declaration made only a limited reference to Syria, focusing on counter-terrorism efforts. This reflects India's cautious and low-profile engagement with post-Assad Syria.

c) Israel–Palestine Conflict: The Declaration reaffirmed support for the Arab Peace Initiative of 2002. It supported the Two-State Solution based on pre-1967 borders. It emphasised Palestinian sovereignty and rights. It avoided endorsing the US-led "Board of Peace" initiative.

d) Iran Issue: The Declaration did not mention the US military build-up near Iran. It reflects India's attempt to balance its relations with both the US and Iran. India continued diplomatic engagement with Tehran through high-level visits.

3. Strategic Silence on Sensitive Issues

a. The Declaration avoided direct references to major power rivalries in the region.
b. It remained silent on US pressure on Iran and intra-Gulf tensions.
c. This indicates India's use of strategic ambiguity to avoid diplomatic confrontation.
d. It helps India maintain working relations with all regional actors.

4. Focus on Economic and Institutional Cooperation: The Declaration reaffirmed cooperation in economy, energy, education, media, and culture. It highlighted bilateral trade of more than 240 billion US dollars. It strengthened the institutional framework established in 2002. This shows India's emphasis on economic diplomacy.

5. Balancing Rival Regional Camps: The Middle East is divided between Saudi-led and UAE–Israel–US aligned blocs. India maintained friendly relations with both camps. It avoided taking sides in conflicts in Sudan, Libya, Yemen, and Somalia. This reflects India's policy of multi-alignment in foreign affairs.

India's Broader Diplomatic Approach Reflected

1. Normative and Status Quo-Oriented Policy: India consistently supports territorial integrity and recognised governments. It opposes secessionism and violent regime change and promotes peaceful resolution of disputes.

2. Strategic Autonomy: India followed an independent policy on Palestine, Iran, and Yemen. It avoided joining US-led military or political initiatives and preserved decision-making autonomy in foreign policy.

3. Transactional and Issue-Based Engagement: India's regional relations are driven by trade, energy security, and diaspora interests. Political disagreements are kept separate from economic cooperation. Engagement is based on mutual benefit.

4. Risk-Averse and Cautious Diplomacy: India avoided controversial positions that could invite sanctions or pressure. The absence of budget allocation for Chabahar reflects this caution. India prefers gradual and low-risk engagement.

Challenges for India

1. India faces difficulty in balancing relations between the US and Iran.
2. It must manage rivalry between Saudi Arabia and the UAE.
3. It needs to ensure maritime and energy security.
4. It has to protect its large diaspora in conflict-prone regions.
5. Its influence in conflict resolution remains limited.

Way Forward

1. India should continue its policy of **strategic autonomy** while deepening diplomatic engagement with all Middle Eastern powers.
2. It should enhance **economic and energy partnerships** to safeguard trade and energy security.
3. India should actively participate in **regional multilateral platforms** to promote stability and conflict resolution.
4. It should invest in **intelligence and maritime security** to protect its strategic interests in the Gulf and Red Sea.
5. India should strengthen **cultural and educational ties** to maintain long-term influence and soft power in the region.

Conclusion: The 2026 Delhi Declaration reflects India's balanced, pragmatic, and stability-oriented approach to West Asia. It prioritises sovereignty, economic cooperation, and strategic autonomy. It avoids ideological

alignment and regional entanglements. This approach strengthens India's image as a reliable and responsible partner in the Middle East.

Question: What does the 2026 Delhi Declaration indicate about India's approach to the Middle East?

Source: **Indian Express**

Twists and turns in our ties with America

Source: The post **"Twists and turns in our ties with America"** has been created, based on **"Twists and turns in our ties with America"** published in **"Business line " on 04th February 2026.**

UPSC Syllabus: GS Paper-2- International Relations

Context: India–US relations since Independence have displayed a repeated cycle of initial resistance followed by gradual compromise. This pattern indicates that India often begins with assertive posturing to protect strategic autonomy but later adjusts due to practical constraints. It reflects a gap between ideological aspirations and material capabilities. This recurring behaviour is influenced by domestic politics, economic limitations, historical experiences, and institutional weaknesses. These factors together shape India's cautious and sometimes contradictory foreign policy approach towards the United States.

Historical Pattern

1. From 1947 to 1962, India adopted non-alignment under Jawaharlal Nehru and avoided close engagement with the US. Nehru believed that moral leadership and independence from power blocs would enhance India's global standing. However, this idealism reduced strategic support during crises such as the 1962 China war.
2. After China's aggression in 1962, India had to seek American military and economic assistance. This demonstrated that complete distance from major powers was not feasible in times of national emergency. It marked the first major instance of adjustment after resistance.
3. During the 1960s and 1970s, India experienced severe economic stress and food shortages. In 1966, Indira Gandhi accepted currency devaluation under US and World Bank pressure to secure aid. This showed that economic vulnerability limited India's diplomatic independence.
4. In 1971, India signed the Treaty of Peace, Friendship, and Cooperation with the Soviet Union. This alignment reduced American trust and reinforced Cold War divisions. As a result, India–US relations remained strained for many years.
5. In the late 1980s, India rejected IMF assistance despite rising fiscal and external deficits. Leaders such as Rajiv Gandhi and V.P. Singh believed that accepting Western loans would compromise sovereignty. However, this delayed reforms and worsened the crisis.
6. In 1991, India faced a severe balance of payments crisis and had foreign exchange reserves for only a few weeks. The government was forced to approach the IMF and implement structural reforms. This clearly demonstrated the cost of prolonged defiance.
7. In 1998, India conducted nuclear tests to assert strategic autonomy and regional power status. The United States responded with economic sanctions and diplomatic isolation. India later engaged in negotiations to normalise relations.
8. By 2005, India signed the Civil Nuclear Agreement with the US. India accepted international safeguards and regulatory commitments to gain access to nuclear technology. This represented strategic accommodation after years of confrontation.

9. From 2016 onwards, India and the US strengthened defence and security cooperation through agreements like LEMOA and COMCASA. However, trade disputes and protectionist policies created tensions. India again adjusted its policies under economic and strategic pressure.

Reasons for the recurring Pattern

1. India's foreign policy is strongly influenced by the idea of strategic autonomy inherited from the non-alignment movement. Policymakers fear that close alignment may restrict independent decision-making. This mindset often leads to initial resistance to American initiatives.
2. Domestic politics plays a significant role in shaping India–US relations. Political parties and interest groups have frequently portrayed the US as imperialistic to mobilise popular support. This limits the government's diplomatic flexibility.
3. India's economy has historically suffered from low growth, limited reserves, and dependence on foreign capital. These weaknesses force India to seek Western assistance during crises. As a result, ideological resistance gives way to economic necessity.
4. Indian leaders have often overestimated India's strategic importance and bargaining power. They have assumed that the US needs India for regional stability and China containment. This belief has sometimes led to delayed compromise.
5. Institutional weaknesses in foreign policy formulation have also contributed to inconsistency. Decision-making is often concentrated in a few individuals without long-term planning mechanisms. This reduces continuity across governments.

Consequences of This Approach

1. Frequent shifts between resistance and cooperation have reduced India's credibility in international relations. Partners find it difficult to predict India's long-term commitments. This weakens trust.
2. Inconsistent policies have reduced India's negotiating leverage. When India ultimately compromises after prolonged resistance, it often does so from a weaker position. This limits favourable outcomes.
3. Delayed integration with global economic systems has slowed India's development. Hesitation in embracing reforms and trade liberalisation has reduced competitiveness. This has long-term economic costs.
4. Reactive diplomacy has prevented India from shaping international agendas. Instead of setting rules, India often responds to external pressure. This reduces its influence in global governance.

Exception: Indira Gandhi

1. Indira Gandhi followed a relatively consistent policy of maintaining distance from the United States.
2. Her alignment with the Soviet Union provided strategic security and diplomatic support. This reduced uncertainty in foreign policy.
3. However, excessive dependence on the Soviet bloc limited India's diplomatic flexibility.
4. After the collapse of the USSR, India had to rapidly reorient its foreign policy. This exposed the risks of one-sided alignment.

Contemporary Relevance

1. The rise of China and increasing geopolitical competition in the Indo-Pacific have made the US an important strategic partner for India.
2. Cooperation is essential for maintaining regional balance. This requires stable relations.

3. Access to advanced technology, defence equipment, and global markets depends heavily on relations with the US.
4. A confrontational approach can harm India's development goals. Therefore, pragmatism is necessary.

Way Forward

1. India must develop a realistic assessment of its capabilities and limitations. Foreign policy should be based on national interests rather than ideological symbolism. This will reduce unnecessary confrontation.
2. Issue-based diplomacy should be prioritised. India should cooperate with the US in areas of convergence and manage differences through dialogue. This will improve mutual trust.
3. Strengthening domestic economic capacity is essential. A strong economy reduces vulnerability to external pressure. This enhances strategic autonomy in real terms.
4. Institutional reforms are needed to ensure policy continuity. Strengthening the Ministry of External Affairs and strategic think tanks can improve long-term planning. This will promote consistency.

Conclusion

India's repeated cycle of defiance followed by accommodation reflects internal contradictions in policy thinking. It shows the tension between the desire for autonomy and the reality of dependence. This pattern has weakened India's strategic position. A mature foreign policy requires balancing ideals with pragmatism and autonomy with engagement. Through consistency, institutional strength, and economic resilience, India can build a stable and mutually beneficial partnership with the United States.

Question: "India's relations with the United States have followed a recurring pattern of initial defiance followed by eventual accommodation." Critically examine this pattern in the context of India's foreign policy since Independence.

Source: Business Standard

There is no case for scrapping MPLADS funds

Source: The post "**There is no case for scrapping MPLADS funds"** has been created, based on "**There is no case for scrapping MPLADS funds"** published in "Business line " on 04th February 2026.

UPSC Syllabus: GS Paper-2- Indian Economy

Context: The Members of Parliament Local Area Development Scheme (MPLADS), introduced in 1993, enables MPs to recommend works worth ₹5 crore annually to address locally felt development needs. Recent debates have questioned the relevance of MPLADS, citing misuse and role conflict. However, scrapping the scheme is neither necessary nor desirable.

Arguments in favour of continuing MPLADS

1. Addresses local and immediate needs: MPLADS allows MPs to respond quickly to grassroots issues such as drinking water, sanitation, schools, health facilities and community assets, which often remain unmet due to bureaucratic delays.

2. Complements local government efforts: The scheme does not replace Panchayats or municipalities but supplements their limited financial capacity, especially in backward and remote areas.

3. MP's role remains recommendatory: MPs only recommend works; execution and implementation lie with district authorities. Hence, it does not violate separation of powers between legislature and executive.

4. Proven utility during emergencies: MPLADS funds have been effectively used during natural disasters, pandemics and infrastructure gaps, showing its flexibility and relevance.

5. Issues are of implementation, not design: Problems such as under-utilisation, delays or misuse arise due to weak monitoring and administrative inefficiencies—not because the scheme itself is flawed.

Criticism of MPLADS

1. **Alleged violation of separation of powers**: Critics argue that MPLADS blurs the line between the legislature and the executive by allowing MPs to influence development works. This raises concerns about constitutional propriety.

2. **Under-utilisation and uneven spending:** Many MPs fail to utilise their full allocation, leading to accumulation of unspent funds. Utilisation levels also vary widely across constituencies and states.

3. **Delays in project execution:** Projects recommended under MPLADS often face delays due to administrative bottlenecks, weak coordination between MPs and district authorities, and slow tendering processes.

4. **Transparency and accountability concerns:** Instances of poor quality works, cost overruns and lack of public disclosure have raised doubts about financial accountability and monitoring.

5. **Overlap with local government functions:** It is argued that MPLADS undermines Panchayati Raj Institutions and urban local bodies by bypassing local planning processes.

6. **Risk of political patronage:** There is concern that MPLADS funds may be used selectively to favour certain areas or groups, leading to inequitable development.

Way Forward

1. **Strengthen monitoring and auditing mechanisms:** Regular social audits, third-party inspections and stricter Comptroller and Auditor General (CAG) oversight can address misuse and quality concerns.

2. **Enhance transparency through digital platforms:** Real-time online dashboards showing fund allocation, project status and expenditure can improve public accountability.

3. **Time-bound execution of projects:** Clear timelines with penalties for delays should be enforced to improve efficiency and utilisation.

4. **Better coordination with local governments**: MPLADS works should be aligned with district and local development plans to avoid duplication and strengthen cooperative federalism.

5. **Capacity building of district administration**: Training and technical support for implementing agencies can improve project planning, execution and monitoring.

6. **Clear role demarcation:** Reinforcing the recommendatory role of MPs and the executive role of district authorities will address constitutional concerns.

Conclusion

MPLADS serves as an important bridge between elected representatives and local development needs. Rather than abolishing the scheme, focused reforms and stronger oversight can enhance its effectiveness.

Question: Critically examine the arguments for and against the Members of Parliament Local Area Development Scheme (MPLADS). Do the concerns raised justify scrapping the scheme? Suggest reforms.

Source: The Hindu

India's next industrial shift — electrons over molecules

UPSC Syllabus: Gs Paper 3- Infrastructure (Energy)

Introduction

For more than a century, industry has depended on burning coal, oil and gas for heat and motion. This fuel-based model is now giving way to an electricity-based system. Clean and reliable power is becoming the main source of industrial competitiveness. Countries that move faster from molecules to electrons gain advantages in exports, jobs, capital flows and energy security. In this shift, **China** is far ahead, while **India** is still catching up.

Understanding the Electrons vs Molecules Shift

1. **Meaning of molecules and electrons:** Molecules include coal, oil, gas, LPG and biofuels that are burned directly in engines, boilers and furnaces. Electrons refer to electricity supplied through the grid to run machines and industrial processes.

2. **Shift in the role of coal:** Coal is increasingly used for centralised power generation instead of direct combustion at factory sites. This allows industries to rely more on electricity rather than fuel burning.

3. **Efficiency advantage of electrification:** Electric motors convert over 90% of input energy into useful work, while internal combustion engines convert less than 35%. Each rise in electrification replaces more fuel than raw energy numbers suggest.

4. **Ease of decarbonisation and control:** Electrification enables better automation, precise process control and easier integration of clean energy. This makes emissions reduction simpler over time.

Why China Is Ahead Through Strategic Industrial Electrification

1. **High industrial electrification levels:** Nearly half of China's industrial energy use comes from electricity. India's share is closer to one quarter, creating a large competitiveness gap.

2. **Leadership in green electrons:** China has the highest share of green electricity in industrial use. The **United States** and the global average stand near 12%, while India is around 7%.

3. **Strategic focus on industry:** At the economy level, China, the U.S. and the **European Union** are all near one-third electrification. China directs far more electricity into industry than its peers.

4. **Export-oriented design:** As a major manufacturing hub, China ensures reliable and cleaner power for factories. This strengthens export competitiveness where carbon intensity is closely examined.

China's Industrial Transformation Model

1. **Grid-first approach:** Since 2010, China has invested heavily in power generation, ultra-high-voltage transmission, flexible substations and grid-scale storage. This created a strong base for industrial electrification.

2. **Steel sector electrification:** Electric arc furnace (EAF) steel production rose from about 44 million tonnes in 2010 to 106 million tonnes in 2024. Even after this increase, EAF steel makes up only around 15% of China's total steel output.

3. **Role of policy incentives:** Scrap recycling support and preferential tariffs encouraged the shift to electric steelmaking. This shows deliberate policy direction.

4. **Cement sector measures and its limits:** Grinding mills, material handling and digital controls are electrified. Waste-heat recovery provides 30–35 kWh per tonne of cement, improving efficiency. However, Calcination emissions in cement cannot be avoided. This makes carbon capture, utilisation and storage pilots necessary.

India's Current Status and Industrial Electrification Roadmap

1. **Present level of electrification:** India has doubled grid capacity in a decade and leads in solar additions. Still, industrial electricity use is only about one quarter, with green electricity at 7–8%.

2. **Reasons for slow transition:** Legacy dependence on on-site fuel combustion locks industries into molecules. Power quality and reliability remain uneven. Policy attention focuses more on generation than industrial use.

3. **Steel sector opportunities:** Around 30% of India's steel is produced through electric arc furnaces, compared to about 70% in the U.S. Improving scrap collection and trading systems can raise this share.

4. **Trade pressure from carbon rules:** Renewable-linked incentives for electric steel are important due to carbon-based trade measures targeting steel exports.

5. **Cement sector pathway:** Support is needed for electrified kilns, large-scale waste-heat recovery and CCUS hubs. A 20% reduction in fuel use per tonne is targeted this decade.

6. **MSME transition needs:** Most MSMEs depend on coal boilers and diesel generators. Concessional finance, pooled renewable procurement and technical support are essential.

7. **Role of digitalisation:** Advanced controls in new industrial clusters reduce power waste, enable demand response and provide reliable carbon data for global buyers.

Why the Transition Matters

1. **Competitiveness in global markets:** Export competitiveness is shaped by carbon intensity, and green electrons embedded in supply chains influence contract outcomes.

2. **Energy security gains:** Electrification reduces exposure to imported oil and gas price shocks by shifting demand to domestically produced electricity.

3. **Industrial sovereignty:** Industries can locate based on skills and logistics rather than fuel availability, strengthening economic independence.

Conclusion

The global industrial race now depends on green electrons rather than fuel molecules. China's strategy shows that directing clean power into industry creates lasting manufacturing strength. Without a rapid rise in green industrial electricity, India risks trade penalties and lost export opportunities. Policy must focus on power flowing into factories, not just capacity addition. The next industrial phase demands fast and deliberate electrification.

Question for practice:

Discuss how the shift from fuel-based industrial processes to electricity-based systems affects industrial competitiveness and what lessons India can draw from China's experience.

Source: The Hindu

Visible Progress, Invisible Exclusion

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

Budget 2026–27 marks a clear shift in India's fiscal strategy. The focus has moved from crisis support to a borrowing-led, capex-driven growth model. High public investment and a controlled fiscal deficit project confidence and long-term intent. Infrastructure and MSMEs are now treated as permanent growth pillars. However, behind this visible progress lies a deeper concern. The link between rising capital investment and employment generation is weakening, creating growth without broad labour inclusion.

Capex as a Permanent Growth Doctrine

1. **Shift from counter-cyclical to core strategy:** Earlier, capital expenditure expanded only when revenues allowed and was cut during fiscal stress. After the pandemic, capex became the main pillar of fiscal policy and no longer a temporary tool.

2. **Scale and fiscal commitment:** The fiscal deficit is guided to 4.3% of GDP, while public capex is raised to ₹12.2 lakh crore. This signals a borrowing-heavy approach to finance long-term growth.

3. **Structural role of infrastructure and MSMEs:** Public infrastructure and MSME-led manufacturing are no longer framed as short-term stimulus. They are positioned as the structural backbone of the economy and the basis of the "Viksit Bharat" vision.

4. **Underlying growth assumption:** The strategy rests on the belief that public investment will crowd in private investment, raise productivity, and generate employment over time.

Breakdown in the Growth–Employment Transmission

1. **GDP growth without labour absorption:** Capital formation has succeeded in driving headline GDP growth. However, labour absorption has stalled, weakening the link between growth and jobs.

2. **Persistent youth exclusion:** The youth NEET rate for ages 15–29 remains between 23% and 25%. Nearly one in four young Indians stays outside education, employment, or training even as public investment rises.

3. **Employment as a residual outcome:** Employment is no longer treated as a variable that must be directly engineered. It is increasingly seen as an eventual by-product of growth.

4. **Manufacturing-led growth with weak jobs link:** Expansion in MSMEs, semiconductors, and biopharma has not translated into proportionate employment gains, making the growth–jobs mechanism fragile.

Sectoral Signals of a Structural Reversal

1. **Construction losing job intensity:** Construction, the sector most directly supported by infrastructure spending, shows declining employment elasticity despite record public investment.

2. **Elasticity decline despite higher spending:** Employment elasticity in construction fell from 0.59 in 2011–12 to 2019–20 to 0.42 in 2021–22 to 2023–24. Each unit of capex now creates fewer jobs than before.

3. **Agriculture reabsorbing labour:** Instead of releasing labour, agriculture is pulling workers back. Employment elasticity rose sharply from 0.04 to 1.51 across the same periods.

4. **Distress-driven fallback:** This reabsorption reflects distress rather than productivity gains. Workers return to low-productivity agriculture due to lack of alternatives.

5. **Structural U-turn:** India is expanding modern physical assets while its workforce moves back toward subsistence sectors, reversing expected development patterns.

Growth Without Absorption

1. **Capital-intensive production bias:** The current capex-led model favours capital intensity. Infrastructure supports efficiency but reduces the need for labour.

2. **Widening productivity–wage gap:** Net value added per worker has increased sharply, while average emoluments remain much lower. Efficiency gains flow mainly as profits, not wages.

3. **Industrial structure constraints:** Most factories remain small, employ fewer than 100 workers, and contribute little to output. They struggle to scale or compete.

4. **Large firms dominate value creation:** Big firms integrate better into new logistics and infrastructure networks. They drive output growth but remain relatively labour light.

5. **Two-layer economy:** A capital-intensive upper layer drives GDP growth with limited jobs. A vast lower layer absorbs labour through informality and self-employment with low productivity.

Conclusion

Fiscal strategy and labour outcomes together show a silent shift in priorities. Growth advances through capital, automation, and productivity rather than employment. Inclusion now depends on skills, location, and adaptability. Those outside this profile move into informality or agriculture. The economy continues to grow, but it no longer requires broad-based labour absorption.

Question for practice:

Examine how India's post-pandemic capex-led growth strategy has weakened the growth–employment linkage, leading to visible economic progress alongside rising labour exclusion.

Source: The Hindu

A Turning Point for Nuclear Deterrence

UPSC Syllabus: Gs Paper 2- International Relations

Introduction

Europe's security debate has reached a critical stage due to a breakdown of trust in the U.S. as a nuclear guarantor. Tensions over Greenland and the possible expiry of the last arms control treaty with Russia have exposed deep cracks in the transatlantic alliance. At the same time, renewed nuclear modernisation and strategic rivalry have forced Europe to reconsider its defence architecture and reassess the role of nuclear deterrence in ensuring its security.

NATO's Crisis and the Erosion of Alliance Trust

1. **NATO's original security role:** North Atlantic Treaty Organization was created in 1949 as a defensive nuclear alliance against the Soviet Union. The U.S. acted as the primary guarantor of security for Western Europe.

2. **Breakdown of alliance trust:** U.S. pressure over Greenland, a Danish territory under NATO jurisdiction, showed the alliance turning against itself. Bullying and economic coercion damaged trust, which is essential for a nuclear alliance to function.

3. **Impact on European security thinking:** Without trust in the U.S., NATO's nuclear guarantee loses credibility. Europe must now rethink its security structure, which will directly shape future nuclear deterrence debates.

4. **Risk of outdated nuclear thinking:** If Europe relies only on nuclear deterrence, it may repeat Cold War ideas shaped by the Nuclear Non-Proliferation Treaty, which divided the world into nuclear haves and have-nots.

Evolving Nuclear Deterrence From Arms Control to Rearmament

1. **Changing global threat landscape:** Since the NPT limited horizontal proliferation, major threats have shifted to terrorism, extremism, climate change, inequality, economic stress, and regional rivalries. Nuclear weapons cannot address these challenges.

2. **Persistence of nuclear centrality:** Despite this shift, nuclear weapons continue to be treated as the ultimate security guarantee. Deterrence thinking has remained largely unchanged and rigid.

3. **Certainty versus uncertainty in deterrence:** Early nuclear debates focused on whether deterrence rested on uncertainty or certainty. India and Pakistan relied on uncertainty between the 1980s and 1998, while Israel continues to rely on nuclear opacity.

4. **Stockpiles and proof of resolve:** Other nuclear powers pursued certainty through growing arsenals. Testing demonstrated intent, while the number of weapons signalled resolve.

5. **Strengthening of the nuclear taboo:** Even as stockpiles expanded, a strong taboo against nuclear use emerged. No nuclear weapon has been used since 1945, despite repeated threats and the development of tactical nuclear weapons.

6. **Role of arms control agreements:** Arms control between the U.S. and the Soviet Union and later Russia helped prevent nuclear use. However, core deterrence thinking did not evolve.

7. **Return of nuclear expansion:** China, Russia, and the U.S. are modernising their arsenals. China has added around 100 warheads per year since 2023, reaching about 600.

8. **Reversal of reductions by the U.K.:** The U.K. reversed its 2006 reduction decision in 2015 and now maintains about 225 nuclear warheads.

9. **End of treaty-based restraint:** The last remaining arms control treaty, New START, expires on February 5. If the U.S. and Russia expand beyond 5,459 and 5,277 warheads, it will clearly signal a return to Cold War-style deterrence.

Ukraine War and the Limits of Nuclear Coercion

1. **Nuclear threats without nuclear use:** Russia issued nuclear threats before invading Ukraine and again in October 2022. These threats did not lead to nuclear escalation.

2. **Deterrence through conventional certainty:** Deterrence worked through the certainty of a strong response, while the nuclear element remained deliberately unclear.

3. **Ukraine's non-nuclear resistance:** Ukraine, a non-nuclear state, has resisted a nuclear-armed neighbour. Despite support and territorial losses, it has not been defeated.

4. **Challenge to nuclear dominance theory:** The conflict shows that nuclear weapons do not guarantee success. Nuclear possession alone does not decide outcomes.

5. **Europe's emerging security options:** Earlier debates focused on relying even more closely on the U.S., but this approach now appears inadequate. Europe is exploring alternatives that reduce dependence on U.S. guarantees.

6. **New cooperative arrangements:** European states have formed the Coalition of the Willing to support Ukraine's security. Ukraine's experience now informs future European defence thinking.

Conclusion

Europe stands at a decisive moment in shaping its security future. It can pursue a replacement nuclear arrangement or build a defence model where nuclear weapons play a limited role. This choice will determine whether nuclear deterrence thinking adapts to post-Cold War realities or remains locked in outdated assumptions.

Question for practice:

Examine how the erosion of trust within NATO and the changing dynamics of nuclear deterrence are reshaping Europe's security choices in the post–Cold War era.

Source: The Hindu

The Budget and the imperative of fiscal consolidation

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

The Union Budget 2026–27 places strong focus on spending programmes to support the goal of becoming a developed country by 2047. It shifts attention towards advanced technology and long-term growth drivers. At the same time, it raises concerns about implementation capacity, revenue strength, Centre–State finances, and the slowing pace of fiscal consolidation, all of which shape the credibility of this development strategy.

How the government is changing its spending approach

1. **Shift from revenue to capital expenditure:** The share of revenue expenditure in total spending has declined from 88% in 2014–15 to about 77% in 2026–27, creating space for higher capital expenditure.

2. **Reduction in subsidies:** Central subsidies have fallen by about 7 percentage points of total expenditure, signalling tighter control over recurring spending.

3. **Capital expenditure as a growth tool:** Higher capital expenditure has supported GDP growth in the post-COVID period and remains a key policy lever.

4. **Slowing momentum in capital spending growth:** Capital expenditure growth peaked at 28.3% in 2023–24 but fell to 10.8% in 2024–25 and 4.2% in 2025–26, before being budgeted at 11.5% in 2026–27.

5. **Capital spending stagnation as share of GDP:** Capital expenditure remains nearly unchanged at about 3.1% of GDP in both 2025–26 and 2026–27, as the budgeted growth of 11.5% is only marginally higher than the assumed nominal GDP growth of 10.0%.

6. **Implementation gap in capital expenditure:** Although capital expenditure growth of 10.1% was budgeted for 2025–26, only 4.2% growth was actually achieved, raising concerns about implementation capacity.

Whether revenues are strong enough to support these priorities

1. **Cautious tax revenue projections:** Tax revenue estimates for 2026–27 appear realistic and are likely to be met, reflecting conservative budgeting.

2. **Weak overall tax buoyancy:** Gross tax buoyancy is projected at only 0.8, well below the benchmark of 1, raising concerns about revenue responsiveness to growth.

3. **Dependence on direct taxes:** Direct taxes show buoyancy of 1.1 and account for 61.2% of gross tax revenues, supporting collections.

4. **GST drag on indirect taxes:** Indirect tax buoyancy is only 0.3, with GST collections not expected to match GDP growth in 2026–27.

5. **Need to reform indirect taxes:** Given rising developmental and welfare spending, improving indirect tax buoyancy to at least 1 becomes essential.

What this means for States and federal finances

1. **No increase in States' tax share:** The Sixteenth Finance Commission retained the States' share in the divisible pool at 41%, unchanged from the previous period.

2. **Stagnant tax assignment to States:** States' assigned taxes remain at 3.9% of GDP in both 2025–26 and 2026–27, offering no additional fiscal room.

3. **Discontinuation of revenue deficit grants:** The absence of revenue deficit and sector-specific grants reduces overall transfers to States.

4. **Decline in Finance Commission grants:** Total Finance Commission grants fall from 0.43% of GDP in 2025–26 to 0.33% in 2026–27, contrary to the usual first-year increase.

5. **Pressure on State finances:** Lower transfers increase stress on State budgets and constrain their spending capacity.

Why fiscal consolidation and debt sustainability matter

1. **Slowing reduction in fiscal deficit:** The annual reduction in the fiscal deficit to GDP ratio has slowed from 0.7 percentage points in 2024–25 to just 0.1 point in 2026–27.

2. **Shift in targeting strategy:** Moving focus from fiscal deficit to debt-GDP ratio reduces clarity, as both indicators depend on nominal GDP growth.

3. **Need for a clear glide path:** A transparent five-year path for fiscal deficit and debt-GDP ratios, with growth assumptions, is required.

4. **Delayed FRBM targets:** The Budget does not clearly indicate when the FRBM targets of 3% fiscal deficit and 40% debt-GDP ratio will be achieved.

5. **Rising interest burden:** The effective interest rate on government debt is estimated at 7.12% in 2026–27, increasing steadily over recent years.

6. **Crowding out primary spending:** Interest payments consume nearly 40% of revenue receipts, squeezing funds for essential expenditure.

7. **Impact on private investment:** High combined fiscal deficits of the Centre and States reduce investible resources, discouraging private sector investment.

Conclusion

The Budget sets a clear development vision and identifies priority sectors for long-term growth. However, slower fiscal consolidation, weak indirect tax buoyancy, and reduced State transfers weaken its foundation. Sustained growth needs fiscal discipline, transparent targets, and stronger revenues. Re-aligning consolidation strategy is necessary to support stability, investment, and the 2047 development goal.

Question for practice:

Evaluate how the Union Budget 2026–27 balances development-oriented expenditure priorities with the need for fiscal consolidation and debt sustainability.

Source: The Hindu

16th Finance panel formula awards 'efficient' States

Source: The post **"16th Finance panel formula awards 'efficient' States"** has been created, based on **"16th Finance panel formula awards 'efficient' States"** published in **"Business line " on 05th February 2026.**

UPSC Syllabus: GS Paper-3- Indian Economy

Context: The 16th Finance Commission's award for the period 2026–31 seeks to balance equity and efficiency in Centre–State financial relations. It aims to reward better-performing States while ensuring fiscal discipline and strengthening cooperative federalism.

Key Features

1. Changes in Horizontal Devolution

a. The Commission has reduced the weight of income distance from 45% to 42.5% to limit excessive redistribution.
b. It has introduced the contribution to GDP as a new criterion to reward economically productive States.

c. It has reduced the weight given to demographic performance from 12.5% to 10% in view of the ageing population.
d. It has slightly reduced the weight assigned to area and other equity parameters.

Impact:

a. States such as Karnataka, Kerala, Gujarat, Andhra Pradesh, Punjab, and Haryana have emerged as major gainers.
b. States such as Bihar, Uttar Pradesh, West Bengal, Odisha, and Madhya Pradesh have relatively lost share.
c. However, poorer States continue to receive significant transfers due to population and poverty-related criteria.

2. Changes in Vertical Devolution

a. The Commission has retained the 41% share of States in the divisible tax pool.
b. It has abolished revenue deficit grants to promote fiscal discipline.
c. It has ended nearly ₹3 lakh crore worth of deficit grants provided by the 15th Finance Commission.
d. It has substantially increased grants to urban local bodies to ₹9.47 lakh crore.
e. It has encouraged States to meet their needs by rationalising expenditure.

3. Promotion of Fiscal Discipline

a. The Commission has discouraged unconditional cash transfers to States.
b. It has recommended stopping off-budget borrowings for financing subsidies.
c. It has emphasised the need for responsible budgeting and fiscal rectitude.
d. It has supported increasing the share of rule-based Finance Commission transfers over discretionary transfers.

4. Addressing Regional Imbalances

a. The Commission has recognised the concerns of southern and western States regarding declining shares.
b. It has rewarded them for better governance and economic performance.
c. It has acknowledged that their growth has been supported by migrant labour from northern States.
d. It has ensured that poorer States are not completely deprived of resources.

5. Approach Towards Cesses and Surcharges

a. The Commission has been less critical of cesses and surcharges compared to earlier panels.
b. It has urged States to maintain fiscal discipline.
c. However, it has not strongly recommended a limit on cesses and surcharges.
d. This weakens the divisible pool available for States.

Limitations of the 16th Finance Commission Award

1. The Commission has failed to impose strict limits on cesses and surcharges, which reduce States' fiscal autonomy.
2. The abolition of revenue deficit grants may hurt fiscally weaker States.

3. Performance-based criteria may disadvantage structurally backward States.
4. Rising responsibilities of States have not been fully matched with resources.
5. The formula still relies heavily on past data, limiting responsiveness to current realities.

Way Forward

1. The Centre should impose reasonable limits on cesses and surcharges to protect the divisible pool.
2. Special transitional support should be provided to fiscally weak States.
3. Capacity-building measures should be strengthened in backward regions.
4. Fiscal responsibility frameworks should be linked with incentives.
5. Periodic review of devolution criteria should be undertaken to reflect economic and demographic changes.
6. Greater transparency in Centre–State transfers should be ensured.

Conclusion: The 16th Finance Commission's award represents a balanced attempt to combine equity with efficiency in fiscal federalism. Despite certain limitations, it promotes responsible governance and cooperative federalism. With suitable reforms and safeguards, it can contribute to more balanced and sustainable development.

Question: What are the key features and limitations of the 16th Finance Commission (2026–31) award? Suggest a way forward.

Source: Business Line

Expert Explains: Why a conflict in Iran could be far more consequential than in Venezuela

Source: The post **"Expert Explains: Why a conflict in Iran could be far more consequential than in Venezuela"** has been created, based on **"Expert Explains: Why a conflict in Iran could be far more consequential than in Venezuela"** published in **"Indian Express" on 05th February 2026.**

UPSC Syllabus: GS Paper-2- International Relations

Context: Following weeks of escalating tensions and a noticeable build-up of American military assets, the U.S. and Iran are set to hold talks in Oman on Friday to address Iran's nuclear programme. A destabilising crisis in Iran could carry far more serious global consequences than one in Venezuela due to its **strategic location, abundant oil and gas reserves, and central role in global energy security**.

Reasons why Iran is considered more consequential than Venezuela

1. **Strategic Location and Energy Chokepoint**
   a. Iran is situated along the **Strait of Hormuz**, a critical waterway through which **nearly 20% of the world's crude oil and LNG** is transported.
   b. Any military escalation or blockade in this area could **disrupt energy flows from multiple Gulf countries** and cause a **sharp increase in global oil and gas prices**.
   c. In comparison, Venezuela does not control any major energy chokepoints, limiting the global impact of its oil sector.

2. Energy Resources and Market Impact

a. Iran holds the **third-largest oil reserves** and the **second-largest natural gas reserves** in the world.
b. The **South Pars gas field**, shared with Qatar, is the largest gas field globally, highlighting Iran's importance in natural gas supply.
c. Iranian crude oil is of **high quality and low extraction cost**, whereas Venezuela produces heavy crude that is **expensive and difficult to refine**.
d. Any disruption in Iran's energy supply can **immediately impact global oil prices**, while Venezuelan oil has a **more limited effect**.

3. Geopolitical and Great Power Considerations

a. The **United States**, as the world's largest oil and LNG producer, seeks to maintain **strategic dominance in West Asia**, prevent Iran from developing nuclear weapons, and reduce China's influence.
b. China imports over **1.5 million barrels of Iranian oil per day** and is Iran's **largest trading partner**, increasing the stakes for global geopolitics.

4. Internal Dynamics and Regional Stability

a. Iran has a **population of 90 million**, with a majority under 35, and faces **economic hardships**.
b. Historical experiences, such as the **1953 US-backed coup in Iran** and the **2003 Iraq invasion**, indicate that foreign intervention can create **long-term instability, power vacuums, and regional conflict**.

Way Forward:

1. **Diplomatic engagement:** The international community should actively support negotiations, such as the talks in Oman, to resolve Iran's nuclear issues through peaceful means.
2. **Energy diversification:** Global dependence on single chokepoints, particularly the Strait of Hormuz, should be reduced by diversifying energy supply routes and sources.
3. **Economic cooperation:** Iran should be encouraged to attract foreign investment by establishing a stable and transparent legal framework that ensures mutual benefits.
4. **Regional stability:** Multilateral dialogue involving Gulf states, the US, and China should be promoted to prevent escalation of conflicts and ensure long-term regional stability.
5. **Monitoring and contingency planning:** Countries should strengthen strategic petroleum reserves and develop robust mechanisms to respond effectively to potential energy crises.

Conclusion: Conflict in Iran could **disrupt global energy markets, raise oil prices, escalate geopolitical tensions, and destabilize West Asia**. Diplomatic engagement, negotiation, and peaceful resolution are essential to **ensure energy security and maintain regional stability**.

Question: A crisis in Iran is considered more serious for the world than a crisis in Venezuela. Analyse this statement in the context of the present geopolitical conditions.

Source: Indian Express

The fading of India's environmental jurisprudence

Source: The post **"The fading of India's environmental jurisprudences"** has been created, based on **"The fading of India's environmental jurisprudence"** published in **"The Hindu " on 06th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: India's judiciary has historically played a significant role in protecting the environment by expanding the scope of Article 21 and applying principles such as sustainable development and the public trust doctrine. However, in recent years, several judicial decisions indicate a gradual weakening of environmental safeguards in the name of development and economic growth.

Evidence of Dilution of Environmental Protection

1. The Supreme Court's 2025 decision on the Aravalli Hills accepted a height-based definition, which excluded large ecologically sensitive areas from legal protection.
2. This decision reversed the Court's earlier ecological approach adopted in 2010, which recognised the Aravallis as an integrated geomorphological system.
3. The recall of *Vanashakti vs Union of India (2025)* permitted retrospective environmental clearances, thereby weakening regulatory enforcement.
4. The Environmental Impact Assessment process has been undermined by allowing post-facto and conditional clearances.
5. Judicial approval for the destruction of mangroves in Mumbai and Raigarh has been granted on the basis of compensatory afforestation, which ignores ecological realities.
6. The Char Dham highway project was allowed despite scientific warnings about landslides and ecological fragility.
7. Courts have shown leniency towards mining and infrastructure violations by overlooking procedural lapses.

Constitutional Implications

1. The dilution of environmental protection weakens the right to a clean and healthy environment under Article 21.
2. Article 48A, which mandates environmental conservation by the State, is reduced to a symbolic provision.
3. Arbitrary classifications, such as height-based protection of hills, violate the principle of equality under Article 14.
4. The weakening of environmental governance undermines the citizens' duty under Article 51A(g).
5. Judicial approvals for resource exploitation weaken the public trust doctrine.

Ecological Consequences

1. The weakening of environmental safeguards leads to increased desertification and depletion of groundwater resources.
2. It contributes to the loss of biodiversity and degradation of wetlands and forests.
3. It increases vulnerability to floods, landslides, and extreme weather events.
4. It causes irreversible damage to fragile ecosystems such as the Himalayas and coastal regions.
5. It intensifies long-term climate change risks.

Issues of Governance and Fairness

1. Large corporations are able to obtain environmental clearances with relative ease.
2. Public hearings are often reduced to mere formalities without meaningful participation.
3. Environmental compliance is treated as a checklist rather than a substantive process.
4. Local communities and indigenous groups are marginalised in decision-making.
5. Such practices reduce public trust in environmental governance and institutions.

Way Forward

1. **Strengthening Judicial Commitment:** Courts must strictly apply the precautionary principle and public trust doctrine. Environmental protection should be treated as a constitutional priority.
2. **Reforming the EIA Process:** Post-facto clearances must be completely prohibited. Environmental assessments should be transparent, scientific, and location-specific.
3. **Establishing Regular Green Benches:** Permanent Green Benches should function in all High Courts. This will ensure specialised and consistent environmental adjudication.
4. **Greater Use of Scientific Evidence:** Judicial decisions must rely on independent expert studies. Scientific impact assessments should be mandatory before approvals.
5. **Enhancing Public Participation:** Public hearings should be conducted meaningfully in local languages. Community concerns must be given due importance.
6. **Strengthening Regulatory Institutions:** Pollution Control Boards and environmental authorities should be autonomous and well-funded. This will reduce political and corporate interference.
7. **Strict Enforcement and Penalties:** Environmental violations must attract heavy fines and criminal liability. Regularisation of illegal activities should be discouraged.
8. **Promoting Sustainable Development:** Projects must respect ecological carrying capacity. Green technologies and nature-based solutions should be prioritised.

Conclusion: There is a need to restore the judiciary's proactive role in environmental protection by strengthening the EIA process, prohibiting post-facto clearances, and ensuring strict enforcement of environmental laws. Regular functioning of Green Benches, greater transparency, and meaningful public participation are essential. Development must be pursued in harmony with ecological sustainability to uphold constitutional values and intergenerational equity.

Question: Discuss how recent judicial trends indicate a dilution of environmental jurisprudence in India. Examine its constitutional and ecological implications.

DISCOMs and the road ahead

Source: The post **"DISCOMs and the road ahead"** has been created, based on **"DISCOMs and the road ahead"** published in **"The Hindu " on 06th February 2026.**

UPSC Syllabus: GS Paper-3- Economy

Context: Power Distribution Companies (DISCOMs) play a vital role in supplying electricity to consumers and supporting economic growth. Although recent reforms have improved their financial and operational performance, many structural and governance-related problems still affect their long-term sustainability.

Recent Improvements in DISCOM Performance

1. Financial Turnaround: DISCOMs recorded a positive Profit After Tax in 2024–25 and reversed years of continuous losses. This reflects better revenue collection and improved financial management.

2. Reduction in Technical and Commercial Losses: Aggregate Technical and Commercial losses have declined significantly due to improved infrastructure and reduced electricity theft. Better billing systems have also enhanced revenue recovery.

3. Improved Cost Recovery: The gap between the Average Cost of Supply and the Average Revenue Realised has narrowed considerably. This indicates that DISCOMs are gradually moving towards financial self-sufficiency.

4. Impact of Government Reforms: Schemes such as the Revamped Distribution Sector Scheme and the Late Payment Surcharge Rules have strengthened financial discipline. These initiatives have modernised networks and reduced legacy dues.

5. Better Operational Efficiency: The adoption of smart meters, digital billing, and network automation has improved transparency and service delivery. These measures have reduced human errors and leakages.

Persistent Challenges Faced by DISCOMs

1. Dependence on Subsidies: Many DISCOMs continue to rely heavily on State government subsidies and loss takeovers to show profits. This creates fiscal stress and weakens financial autonomy.

2. Politically Determined Tariffs: Electricity tariffs are often kept below cost-recovery levels due to political pressures. Free power schemes further distort consumption and finances.

3. Weak Data and Metering: Unmetered agricultural supply and poor data systems prevent accurate assessment of losses and consumption. This limits effective planning and monitoring.

4. Rising Fixed Costs: Employee salaries, pensions, and future pay revisions increase long-term financial liabilities. These costs reduce operational flexibility.

5. Governance and Accountability Issues: Political interference and weak professional management reduce transparency and efficiency. Limited accountability affects long-term performance.

Way Forward for Sustainable Reforms

1. Tariff Rationalisation: Governments should gradually implement cost-reflective tariffs while protecting poor consumers through targeted subsidies. This will improve revenue stability.

2. Universal Metering and Feeder Segregation: Smart metering and feeder segregation should be expanded across all States. These measures will improve billing efficiency and loss control.

3. Promotion of Renewable Solutions: Solar pumps and decentralised renewable energy should be promoted in agriculture. This will reduce procurement costs and subsidy burdens.

4. Strengthening Regulatory Institutions: State Electricity Regulatory Commissions must be made independent and efficient. They should ensure timely tariff revisions and compliance.

5. Professional and Performance-Based Management: DISCOMs should adopt modern management practices and link incentives to performance. This will improve accountability and service quality.

Conclusion: Recent reforms have helped DISCOMs improve their financial health, but structural and governance challenges remain. Strong political will, regulatory independence, and technological adoption are essential to build financially viable and consumer-friendly power distribution utilities.

Question: Despite recent improvements, India's power distribution companies continue to face structural challenges. Examine the performance of DISCOMs and suggest measures for ensuring their long-term financial sustainability.

More money for defence, now fix the process

Source: The article *"More money for defence, now fix the process"* is an **editorial published in *The Hindu***. It analyses recent **Union Budget allocations for the defence sector**, focusing on procedural and structural issues beyond funding.

UPSC Syllabus: GS Paper-3- Indian Economy

Context: India's most recent defence budget signals a clear departure from years of stagnation, as it records the first sustained double-digit rise in allocations and brings defence spending to around 2% of GDP.

Key Features of the Defence Budget

- The total defence allocation stands at **₹7.84 lakh crore**, accounting for **14.7% of total government expenditure**.
- A major positive shift is the **rise in capital expenditure to 27.9%**, correcting years of over-reliance on revenue spending.
- The **Indian Air Force and Army** receive substantial hikes for platforms, heavy vehicles and weapons, strengthening deterrence across theatres.
- **Pension and salary shares have declined** compared to FY20, indicating gradual rebalancing away from manpower-heavy expenditure.
- **Boost to Indigenisation and Defence Industry**
    - Around **75% of capital acquisition** is reserved for domestic industry under *Aatmanirbhar Bharat*.
    - Defence production has risen sharply since 2014, and **exports have grown from ₹1,000 crore to over ₹23,000 crore**, reflecting industrial maturity.
    - Indigenous manufacturing in areas like mobility equipment and shipbuilding has strong **employment and growth multipliers**.

Structural Constraints and Risks

- A **weakened rupee** reduces the real purchasing power of capital allocations, especially for imported platforms.
- Persistent **bureaucratic delays**, rigid procurement norms like the *L1 rule*, and absence of assured demand discourage innovation and MSME participation.
- **Long-pending projects** (e.g., submarines, fighter aircraft) highlight chronic acquisition delays and result in **under-utilisation of funds**, with capital allocations often lapsing.

- The absence of a **Non-Lapsable Defence Modernisation Fund** continues to hinder long-term planning.
- **R&D and the Capability Gap**
    - While allocations to DRDO and allied institutions have increased, **research remains fragmented** and poorly integrated with production.
    - India's overall R&D spending remains low at **0.66% of GDP**, with minimal private-sector participation, limiting technological leapfrogging.
- **Reframing Defence Spending**
    - Viewing defence through a narrow **"guns vs butter"** lens is misplaced.
    - Defence investment supports **border infrastructure, manufacturing ecosystems, employment, and strategic autonomy**, aligning with the vision of a **$30-trillion Viksit Bharat economy**.

Way Forward

- **Streamline defence procurement processes** to reduce delays and cost overruns.
- **Strengthen indigenisation and defence manufacturing** under Atmanirbhar Bharat to reduce import dependence.
- **Prioritise capital expenditure and R&D** for modernisation and future warfare needs.
- **Enhance jointness and integrated planning** among the armed forces to ensure efficient utilisation of increased funds.

Conclusion

The FY27 defence budget reflects ambition, realism, and improved prioritisation. Yet, its success will depend on **process reform, faster acquisition, integrated R&D, and predictable funding mechanisms**. Without fixing structural bottlenecks, higher spending risks diminishing returns. If execution matches intent, India can convert this budgetary push into **durable military capability, industrial strength, and strategic autonomy** in an increasingly contested global order.

Question: Despite increased defence budget allocations, India faces several challenges in defence procurement and utilisation of funds. Discuss the key limitations and suggest a way forward.

16th Finance Commission (FC)- Recommendations for Strengthening Local Bodies (Mention challenges of financing faced by local bodies, recommendation of 16th FC, Sources of revenue of Local bodies)

Local bodies are constitutionally mandated institutions **under the 73rd and 74th Constitutional Amendments,** yet they continue to face severe fiscal constraints. Recognising the need for empowered grassroots governance, the **16th Finance Commission** has recommended a **total grant of about ₹7.9 lakh crore to Rural Local Bodies (RLBs)** and **Urban Local Bodies (ULBs)** for the period **FY 2026-27 to 2030-31,** along with key structural reforms to improve their financial autonomy and accountability.

Challenges in Financing of Local Bodies

1. **Structural Revenue Gaps**
    - **Poor property tax performance** due to incomplete and outdated property records, low coverage, undervaluation, and weak enforcement.
    - User charges often remain politically constrained and below cost-recovery levels.
2. **Overdependence on Union and State Governments**

- Panchayats derive **over 90% of their revenues** from grants, undermining fiscal autonomy and local accountability.

3. **Limited Access to Debt and Capital Markets**
   - Municipal borrowings ar**e less than 0.05% of GDP,** reflecting weak creditworthiness and shallow municipal bond markets.
4. **Institutional and Governance Issues**
   - Delays and irregularities in constitution of **State Finance Commissions (SFCs).**
   - **Data gaps,** weak accounting standards, and limited financial transparency.
   - Underdeveloped **bond markets** and **lack of pooled financing mechanisms** for small ULBs.

Key Recommendations of the 16th Finance Commission

1. **Substantial Grant Support**
   - Total grants of **~₹7.9 lakh crore** to local bodies for **five years (2026-31).**
   - **Rural–Urban split of 60:40** between RLBs and ULBs.
2. **Strengthening Property Tax Systems**
   - States to develop citizen-friendly, GIS-based property tax IT systems to enhance coverage, valuation accuracy, and collections.
3. **Urbanisation Premium**
   - **₹10,000 crore** earmarked to incentivise the merger of **peri-urban villages** into adjoining **large ULBs (population >1 lakh),** promoting planned urban expansion.
4. **Reforming Centre–State Fiscal Federalism**
   - Recommendation for a constitutional amendment to remove the requirement under **Articles 280(3)(bb)** and **(c)** that binds the **Central FC** to make recommendations **"on the basis of"** SFC recommendations, addressing chronic delays and quality issues of SFCs.
5. **Improving SFC Functioning**
   - **NITI Aayog** to study SFC processes across States and publish a compendium of best practices, fostering standardisation and timely devolution.

Sources of Revenue of Local Bodies

1. **Own Tax Revenue**
   - Empowered under **Article 243X.**
   - Includes property tax, profession tax, advertisement tax, entertainment tax (local level), etc.
2. **Non-Tax Revenue**
   - **User charges, licence fees,** permit fees, parking charges, rent from municipal assets, etc.
3. **Inter-Governmental Transfers**
   - **Finance Commission grants,** State government devolution, and scheme-specific transfers **(Centrally Sponsored Schemes).**
4. **Borrowings and Innovative Financing**
   - **Municipal bonds (including green bonds),** general obligation bonds.
   - Pooled financing mechanisms for smaller ULBs.
   - Land monetisation, PPPs, and value capture financing.

Way Forward

1. **Strengthen Own Revenues: Universal GIS-based property tax,** realistic valuation, and cost-recovering user charges.

2. **Fix Devolution Framework:** Timely, standardised SFCs and performance-linked transfers; reduce grant dependency.
3. **Unlock Market Finance:** Municipal bonds, pooled financing for small ULBs, credit enhancement mechanisms.
4. **Build Capacity & Data Systems:** Robust accounting, transparent audits, skilled municipal cadres, digital governance.

Conclusion

The **16th Finance Commission** marks a **shift from mere grant-based support to structural fiscal empowerment** of local bodies. By strengthening property taxation, incentivising urban consolidation, reforming SFC-FC linkages, and expanding access to market-based finance, its recommendations can transform local governments into self-reliant engines of grassroots development, aligned with the **vision of cooperative and competitive federalism.**

Question: How do the recommendations of the 16th Finance Commission attempt to address the structural weaknesses in local body financing in India?

The India-EU Trade Deal - A Strategic Turning Point

Source: The India–EU Free Trade Agreement was concluded on 27 January 2026 at the 16th India–EU Summit and has been officially announced by the Government of India and the European Union leadership. It has been widely covered in government releases and international economic commentary as a landmark trade and strategic agreement.

UPSC Syllabus: GS Paper-3- Indian Economy

Context: The India–EU FTA marks the culmination of nearly two decades of negotiations, reflecting renewed strategic trust between the world's fourth-largest economy and the EU, the second-largest. By creating a combined market of nearly 2 billion people and about 25% of global GDP.

Salient Features of the India–EU Free Trade Agreement (FTA)

- **Enhanced Market Access for Indian Exports**
  - **Over 99% of Indian exports** by trade value will receive preferential access to the EU market.
  - **Reduction of tariff and non-tariff barriers** will improve the competitiveness of Indian products and enable deeper integration into European supply chains.
- **Boost to Labour-Intensive Sectors**
  - The FTA provides **zero-duty access** to nearly USD 33 billion worth of labour-intensive exports, where earlier EU tariffs ranged from 4% to 26%.
  - **Key beneficiary sectors include:**
    - **Textiles and Apparel:** Zero-duty access across all tariff lines to the EU's USD 263.5 billion market.

        - **Leather and Footwear:** Removal of tariffs up to 17%.
        - **Marine Products:** Elimination of tariffs up to 26% on shrimp and processed seafood.
        - **Gems and Jewellery:** Zero-duty access across the entire trade value.
        - **Engineering Goods:** Preferential access supporting MSME-led industrial clusters.
    - These sectors are employment-intensive, particularly benefiting women, artisans, and youth.
- **Agricultural and Processed Food Exports**
    - Preferential access has been extended to products such as tea, coffee, spices, grapes, gherkins, dried onions, and processed foods, supporting farmers and agro-processors.
    - Sensitive sectors like dairy, cereals, poultry, and soymeal have been protected to safeguard food security and domestic interests.
- **Services, Digital Trade, and Professional Mobility**
    - The agreement places strong emphasis on services and digital trade, the fastest-growing segments of both economies.
    - The EU has opened 144 services subsectors to India, while India has opened 102 subsectors to EU firms, ensuring predictability and non-discriminatory treatment.
    - A structured professional mobility framework facilitates movement of Indian professionals, supported by a commitment to conclude Social Security Agreements within five years.
- **Strategic Sectors and 'Make in India'**
    - Automobile Sector: Gradual reduction of tariffs on EU car imports from 110% to 10%, with phased liberalisation protecting India's mass-market segment while supporting exports.
    - Pharmaceuticals and Medical Devices: Improved access to the EU's USD 572.3 billion market through tariff reduction and regulatory cooperation, while retaining a TRIPS-compliant framework to protect public health.
- **Sustainability and Climate Commitments**
    - Sustainability is a core pillar, with binding commitments under the Trade and Sustainable Development (TSD) chapter on environment, labour rights, and gender equity.
    - Under the Carbon Border Adjustment Mechanism (CBAM), India has secured Most-Favoured-Nation assurances and technical cooperation to support exporters in meeting compliance requirements.

Challenges Related to the India–EU Free Trade Agreement (FTA)

- **Regulatory and Compliance Burden:** Stringent EU standards on environment, labour, data protection, and product quality may increase compliance costs for Indian MSMEs and exporters.
- **Impact of CBAM:** The EU's Carbon Border Adjustment Mechanism could raise costs for carbon-intensive Indian exports such as steel, aluminium, and cement.
- **Domestic Industry Concerns:** Gradual tariff reduction in sensitive sectors like automobiles may create competitive pressure on domestic manufacturers.
- **Services Market Barriers:** Despite commitments, language requirements, recognition of qualifications, and domestic regulations in EU member states may limit real market access for Indian professionals.

Way Forward

- **Capacity Building for Exporters:** Strengthen institutional support to help MSMEs meet EU technical, environmental, and digital compliance standards.

- **Green Transition Support:** Invest in cleaner technologies and carbon accounting systems to mitigate CBAM-related risks and enhance sustainability.
- **Phased and Monitored Implementation:** Closely monitor sector-wise impact, especially in automobiles and agriculture, and use safeguard clauses where necessary.
- **Deeper Regulatory Cooperation:** Enhance mutual recognition of standards, professional qualifications, and digital regulations to realise services-sector potential.

Conclusion

The India–EU FTA is a transformative agreement that significantly expands India's access to one of the world's largest and most sophisticated markets. While implementation challenges remain, targeted reforms, institutional preparedness, and sustained regulatory cooperation can help India fully leverage the agreement for inclusive growth, global competitiveness, and long-term strategic partnership with the European Union.

Question for Practice
While India-EU FTA is a transformative agreement however it is marred by several challenges. Elucidate.

Source- The Hindu

In a fragmented global order, AI and energy will redefine the rules of power

About the Issue: AI and Energy in a Fragmented World Order

The contemporary world order is witnessing a shift from a rules-based multilateral system to a fragmented, power-centric and transactional framework. In this emerging order, Artificial Intelligence (AI) and energy security have become the primary determinants of national power, strategic autonomy, and geopolitical influence. Control over technology stacks, data, energy resources, and supply chains is increasingly shaping global alignments, replacing ideology-driven alliances.

Core Content: AI–Energy Nexus Reshaping Global Power

- **From Rules to Transactionalism:** Global governance is giving way to interest-based, hierarchical relations where power flows from military strength, economic capacity, and technological dominance.
- **Energy as the New Strategic Bottleneck:** Rapid expansion of AI data centres has sharply increased electricity demand, making reliable and affordable energy a critical input for technological leadership.
- **Rise of 'Sovereign AI':** Nations are prioritising domestic control over data, semiconductors, cloud infrastructure, and AI models, treating AI as a national security asset.
- **Shifting Alliances:** Global partnerships are increasingly organised around shared technology ecosystems (US-led, China-led, etc.) rather than shared political values.
- **AI as a Growth Engine:** AI is transitioning from experimentation to a driver of productivity, GDP growth, and state capacity.
- **Twin Transitions:** While AI intensifies energy demand, it is also being deployed to optimise grids, integrate renewables, and enhance energy efficiency.

Challenges Emerging from the AI–Energy Power Shift

- **Energy Stress and Infrastructure Gaps:** Existing grids are ill-equipped to handle AI-driven demand, risking energy shortages and economic slowdown.
- **Supply Chain Fragmentation:** Competition over semiconductors, rare earths, and critical minerals is deepening geopolitical and economic fragmentation.
- **Inequality Between Nations:** Countries lacking capital, technology, or energy resources risk becoming perpetual "rule-takers".
- **Weak Global Governance:** Absence of a cohesive global framework on AI ethics, data governance, and energy transition may increase instability.
- **Security Risks:** Concentration of AI and energy assets increases vulnerability to cyberattacks, sabotage, and coercive diplomacy.

Way Forward

- **Invest in Sustainable Energy Capacity:** Expand renewables, nuclear energy, and grid modernisation to meet AI-era power demands.
- **Develop Sovereign but Open AI Ecosystems:** Balance strategic autonomy with international collaboration to avoid technological isolation.
- **Strengthen Middle-Power Coalitions:** Countries like India should leverage data, talent, and digital public infrastructure to shape global norms.
- **Promote AI for Energy Optimisation:** Use AI to improve grid resilience, energy storage, and renewable integration.
- **Build Issue-Based Global Cooperation:** Foster flexible coalitions on AI safety, climate action, and critical minerals rather than rigid alliances.

Conclusion

In a fragmented global order defined by power rather than principles, AI and energy together constitute the new grammar of geopolitics. Nations that can secure sustainable energy, control AI ecosystems, and integrate both into their development strategies will shape the emerging world order. For India, this moment offers an opportunity to emerge as a rule-shaper by aligning technological ambition with energy security and strategic autonomy, while contributing to a more resilient and balanced global system.

Question for Practice
How in the fragmented global order, AI and energy will redefine the rules of power?

Source- The Indian Express

'Hop-on, hop-off' — the state of climate governance

Source: The post **"'Hop-on, hop-off' — the state of climate governance"** has been created, based on **"'Hop-on, hop-off' — the state of climate governance"** published in **"The Hindu " on 07th February 2026.**

UPSC Syllabus: GS Paper-3- Environment

Context: Global climate governance under the United Nations Framework Convention on Climate Change (UNFCCC) has been the primary mechanism for addressing climate change for more than three decades.

However, despite repeated Conferences of Parties and ambitious declarations, meaningful climate action remains inadequate and slow.

Present State of Global Climate Governance

1. Process-Oriented Negotiations: Climate negotiations under CMP and CMA focus more on procedures, platforms, and frameworks than on concrete outcomes. This creates an illusion of progress without corresponding action.

2. Political Dominance over Climate Urgency: National interests often override global environmental concerns in negotiations. The consensus-based decision-making system allows countries to block ambitious commitments.

3. Economic Short-Termism: Markets and corporations prioritise short-term profits over long-term ecological sustainability. Economic incentives do not adequately account for future generations.

4. Marginalisation of Common Citizens: Ordinary people focus on immediate livelihood concerns and remain disengaged from climate politics. This reduces public pressure on governments for strong climate action.

5. Weak Implementation of Scientific Evidence: Although scientific evidence on climate change is well established, political actors use uncertainty to justify inaction. Scientific warnings are often diluted in policy decisions.

Limitations of Recent Climate Conferences

1. Voluntary Commitments: Recent COPs, including COP30, have relied mainly on voluntary pledges without binding obligations. This weakens accountability and enforcement.

2. Failure to Meet Temperature Targets: The goal of limiting warming to 1.5°C has become unrealistic due to rising emissions. Global emissions reached record levels in 2024.

3. Inadequate Climate Finance: Developing countries require trillions of dollars annually for mitigation and adaptation. However, current financial flows remain far below actual needs.

4. Weak Adaptation Framework: Adaptation finance pledges lack clear baselines and funding sources. Monitoring indicators are disconnected from real financial support.

5. Limited Progress on Loss and Damage: Although a loss and damage fund has been created, its capitalisation remains insufficient. A large gap exists between disaster impacts and available support.

Way Forward for Effective Climate Governance

1. Strengthening Legal Obligations: Climate agreements must move from voluntary pledges to legally binding commitments. Clear timelines and enforcement mechanisms should be introduced.

2. Reforming Decision-Making Processes: Consensus-based veto mechanisms should be reviewed to prevent blockage of ambitious action. Qualified majority voting may be explored.

3. Scaling Up Climate Finance: Developed countries must fulfil their financial responsibilities under common but differentiated responsibilities. Predictable and time-bound funding mechanisms should be created.

4. Integrating Climate with Development: Climate action should be aligned with poverty reduction and employment generation. This will increase reliance and political acceptance.

5. Enhancing Public Participation: Governments should increase climate awareness and citizen engagement. Informed public pressure can strengthen political commitment.

Conclusion: Global climate governance today suffers from drift, inadequacy, and lack of leadership, with more emphasis on negotiation than action. While the UNFCCC remains the only legitimate global platform for climate cooperation, its effectiveness depends on political courage, financial responsibility, and institutional reforms. Since humanity cannot opt out of the planet, urgent and collective action is the only viable path forward.

Question: Critically examine the present state of global climate governance under the UNFCCC framework. Discuss the reasons for its limited effectiveness and suggest measures for improving climate action.

Source: The Hindu

Skills gap mismanaged

Source: The post **"Skills gap mismanaged"** has been created, based on **"Skills gap mismanaged"** published in **"BusinessLine " on 07th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: India faces a persistent skill gap, which has become more prominent due to emerging technologies like **artificial intelligence, cloud computing, data engineering, and cybersecurity**. Industry leaders often argue that **graduates are not job-ready**, while governments launch skilling missions and universities promise educational reforms. Skill gaps are **not a new problem**, and India historically addressed them more deliberately than it does today.

Historical Context

1. In the **1990s and early 2000s**, India's IT industry expanded rapidly despite a shortage of job-ready talent.
2. Companies such as **TCS, Infosys, and Wipro** recruited graduates based on their **learning potential**, not because they were fully skilled.
3. These companies provided **structured training programs lasting three to six months**, closely aligned with business needs.
4. Private institutions like **NIIT and Aptech** supported the effort, creating an ecosystem that bridged **industry demand and workforce supply**.

5. Many trained recruits **built long-term careers** within their organizations, demonstrating the **value of early-career skilling investments**.

Current Scenario

1. Today, most large organizations **show limited appetite for trainee hiring or long-term skilling programs**.
2. Expectations of **"day-one productivity"** dominate corporate hiring practices.
3. The **National Education Policy (NEP) 2020** encourages **industry-institute partnerships, flexible curricula, credit-based internships, practitioner-led courses, and applied learning**.
4. Universities are **revising syllabi, establishing innovation cells, inviting industry experts as adjunct faculty, and seeking collaborations**.
5. Industry engagement is often **transactional rather than deep**, which creates a **structural bottleneck** in improving employability.

Challenges to Industry–Academia Collaboration

1. **Complexity of Work:**
    a. Modern digital roles such as AI engineering, cloud security, and advanced analytics require **deep specialization**.
    b. Some emerging roles take **12–24 months to reach full productivity**, which increases corporate risk.
    c. Modular learning, apprenticeships, and **stackable credentials** co-designed with institutions can help **reduce risk while preserving entry-level access**.
2. **Attrition Concerns:**
    a. IT-sector attrition often ranges from **15–20 percent**, making firms cautious about training investments.
    b. Evidence shows that **early-career hires with structured growth pathways demonstrate higher long-term retention** than lateral recruits.
    c. Shared-cost training models can **reduce individual firm risk** while maintaining the talent pipeline.
3. **Higher Education Gaps:**
    a. India produces **over four million graduates annually**, but only about **half are immediately employable** for formal-sector roles.
    b. Outdated curricula and **limited industry exposure** reduce employability.
    c. Sustained **industry participation is crucial** for universities to receive **real-time feedback** on skill requirements.
4. **Corporate Responsibility:**
    a. Firms benefit from **publicly funded education, policy support, and demographic scale**.
    b. Historical IT growth succeeded because **shared investment in human capital** supplemented individual effort.

Policy Recommendations

1. The government should **incentivize corporate trainee and apprenticeship programs**.
2. Deep, meaningful **industry-institute partnerships should be rewarded**, not symbolic collaborations.

3. **Consortia-based training infrastructure** can reduce corporate risk while sustaining workforce development.
4. **Public funding should be aligned with employment outcomes** rather than merely enrollment statistics.

Conclusion: India faces a paradox of a **young population with rising educational aspirations** alongside persistent **graduate underemployment**. Skill gaps will **always exist**, but **structured, scalable, and modern entry-level skilling** can bridge this divide. India's historical IT success shows that **prioritizing potential over perfection**, supported by policy alignment and **shared investment in human capital**, delivers long-term economic benefits.

Question: How can industry–academia collaboration and corporate training address India's skill gap? Suggest measures to improve employability.

Source: BusinessLine

Budget makes good moves on the textile economy

UPSC Syllabus: GS Paper-3- Indian Economy

Introduction

The Union Budget 2026–27 places textiles back at the centre of economic growth, jobs, and exports. It shifts policy from scattered support to a full value-chain approach. The focus moves from only increasing output to strengthening fibres, clusters, skills, sustainability, and infrastructure. The Budget signals intent to modernise the sector while supporting artisans and rural livelihoods. It raises a key issue on whether India can also capture higher value.

Current Status of the Indian Textile Sector

1. **Economic contribution and scale:** Textiles contribute **2.3% of GDP**, **13% of industrial output**, and **12% of total exports**. It covers fibres, yarns, fabrics, and apparel across organised and unorganised segments.

2. **Employment generation:** The sector provides direct and indirect jobs to **over 45 million people**. It remains one of the largest employment generators, especially for women and rural workers.

3. **Growth and export potential:** The sector is expected to grow at **10% annually** and reach **$350 billion** by **2030**. Export potential is projected at **$100 billion**, driven by apparel, MMF, and technical textiles.

4. **Structural diversity:** India's strength lies in both mechanised mills and traditional crafts. Handloom, khadi, and handicrafts sustain large rural ecosystems alongside modern factories.

Budget 2026 Initiatives to Strengthen the Indian Textile Sector

1. **Shift to an integrated policy framework:** Budget 2026 treats textiles as a full value chain, not as isolated segments. Fibre supply, production, skills, artisans, sustainability, and exports are addressed together.

2. **National Fibre Scheme:** The scheme aims to ensure reliable availability of natural and new industrial fibres. It focuses on self-reliance and reducing raw-material cost pressures faced by manufacturers.

3. **Textile Expansion and Employment Scheme:** This scheme targets modernisation of traditional textile clusters. It provides capital support, technology upgrades, and access to common testing and processing facilities.

4. **National Handloom and Handicraft Programme:** Multiple existing schemes are merged into one consolidated programme. This simplifies implementation and improves support for artisans through training and market linkage.

5. **Mahatma Gandhi Gram Swaraj Initiative:** The initiative strengthens khadi, handloom, and handicrafts. It focuses on better branding, improved market access, and skill training for rural producers.

6. **Samarth 2.0 for skill development:** Samarth 2.0 upgrades workforce skills through industry–academia collaboration. It aims to align training with modern production needs and new textile segments.

7. **Tex-ECON initiative for sustainability:** Tex-ECON promotes environmentally responsible textile production. It encourages cleaner processes and supports the shift towards sustainable textiles.

8. **Mega textile parks in challenge mode:** New textile parks aim to improve scale and logistics efficiency. They support integrated manufacturing and higher value addition, especially in technical textiles.

9. **Push for technical textiles and MMF apparel:** The Budget lowers entry barriers through duty exemptions on specialised machinery. It seeks to reduce import dependence and expand exports in high-growth segments.

10. **Higher budgetary allocation:** The nearly **7% rise** in the Textiles Ministry allocation signals long-term policy commitment. It supports smoother implementation of existing schemes during global uncertainty.

Major Concerns in Strengthening the Indian Textile Sector

1. **Low value capture in global markets:** India exports large textile volumes but remains in low-margin segments. Budget 2026 focuses on production and scale, while design education, brand ownership, trend intelligence, and creative leadership receive little policy attention.

2. **Skilling limited to operational roles:** Samarth 2.0 focuses on shop-floor skills. Creative, managerial, and system-level capabilities remain underdeveloped.

3. **Artisan income insecurity:** Market access improves visibility but not pricing power. Fragmented supply chains and weak bargaining persist.

4. **SME access to finance:** Many small and household units remain outside formal systems. This limits access to credit and government support.

5. **Environmental challenges:** Wet processing is energy- and water-intensive. Dyeing alone uses **43% of total sector energy** and causes pollution.

6. **Global trade uncertainty:** Exporters face tariff pressures and strong competition from Bangladesh and Vietnam. Compliance norms are also tightening.

Way Forward

1. **Shift focus from volume to value:** Policy must support design, branding, and creative authorship. This is key to moving up the global value chain.

2. **Strengthen artisan protections:** Assured procurement, transparent pricing, and quality certification are needed. Direct market platforms can improve income security.

3. **Expand skill definition:** Skilling must include design, sustainability standards, and digital tools. This helps meet changing global demand.

4. **Promote green infrastructure:** Common boilers and shared facilities can cut pollution. Cluster-level solutions improve efficiency and compliance.

5. **Use trade openings strategically:** New trade agreements offer access. Competitiveness will depend on standards, branding, and differentiation.

Conclusion

Budget 2026 marks a clear shift in textile policy towards integration and long-term thinking. It strengthens fibres, infrastructure, skills, and rural livelihoods. Yet, production-led growth alone is not enough. Future success depends on value creation, artisan security, creative capacity, and sustainability. If these gaps are addressed, textiles can deliver not only exports and jobs, but dignity and global leadership.

Question for practice:

Examine how Budget 2026 seeks to strengthen the Indian textile sector and why challenges of value capture and competitiveness still remain.
Source: Indian Express

EU, US deals connect India to world's largest markets, open new trade vistas

UPSC Syllabus: GS Paper-2- International Relations
Introduction

India's recent trade engagements with the European Union and the United States reflect an evolution in India's trade negotiation strategy. While engaging in long bilateral negotiations, India has remained firm on protecting agriculture, dairy, MSMEs, and small farmers. This approach is supported by India's transition into a market-driven economy, strengthened by reforms in governance, regulation, and market infrastructure. Against this backdrop, the EU and US deals connect India to the world's largest markets while balancing domestic priorities with global integration.

Comparing the EU and US Trade Engagements

1. **Common protective approach:** In both trade engagements, India safeguarded sensitive agriculture and dairy sectors, ensuring domestic farmers and producers were not exposed to import pressure.

2. **Flexibility beyond tariffs:** Both the EU and the US showed willingness to engage on non-tariff barriers and digital trade, indicating a broader and strategic trade engagement.

3. **Key negotiation differences:** The EU talks involved issues like CBAM and stronger labour mobility provisions, while these concerns did not feature in the US interim deal.

4. **Nature and context of agreements:** The EU agreement is a comprehensive FTA, whereas the US arrangement is an interim deal shaped by evolving geopolitical realities.

EU FTA Benefits

1. **Unprecedented goods market access:** India secured access for over 99 % of its exports by trade value to the EU, strengthening manufacturing and export competitiveness.

2. **Boost to Make in India:** Preferential access integrates Indian producers into EU value chains, reinforcing domestic manufacturing expansion.

3. **Services and skilled mobility gains:** High-value services commitments are supported by a comprehensive mobility framework enabling smooth movement of skilled Indian professionals.

4. **Labour-intensive sector advantage:** Around $75 billion of Indian exports are positioned for growth, with $33 billion in labour-intensive sectors expected to benefit significantly.

For detailed information on **India's Growing Engagement with European Union** read this article here

US Interim Trade Deal and its Benefits

1. **Geopolitical context and sequencing:** The US deal emerged from shifting geopolitical realities and followed major agreements with the EU and UK, reflecting India's calibrated diplomacy.

2. **Managing tariff-related concerns:** Even with an 18 per cent tariff, India's gap from Most-Favoured-Nation (MFN) average tariffs remains among the lowest relative to peers.

3. **Export resilience despite tariffs:** In the first nine months of FY26, exports of goods and services grew by 4.3 per cent, nearly matching a no-tariff scenario.

4. **Energy import flexibility and inflation control:** Replacing Russian crude with Venezuelan heavy crude (Merey 16) can still provide discounts of $10–12 per barrel, saving up to $3 billion on the import bill and limiting inflationary impact.

5. **Sectoral openings and future pathway:** The deal opens a $118 billion textiles and apparel market and removes the 25 per cent penalty on Russian oil imports. It also serves as a step toward a full Bilateral Trade Agreement with further tariff reductions.

Impact of India's EU and US Trade Engagements

1. **Agri and food imports with safeguards:** India will reduce or eliminate tariffs on select US industrial and agri goods while protecting the broader domestic market.

2. **Soyabean oil and consumer benefit:** India remains the largest global importer of soyabean oil, with the US contributing only 3 per cent of $4.3 billion imports in Apr–Nov FY25, making tariff reduction economically beneficial.

3. **Tree nuts and fruit imports:** Lower duties on almonds, walnuts, pistachios, and cranberries benefit consumers, as domestic production is limited and demand is high.

4. **Chemical and pharmaceutical export gains:**

- India has a revealed comparative advantage in chemicals and pharmaceuticals, where China and Singapore hold higher shares in US imports.

- Capturing a 2 per cent share from them could add 0.2 per cent to GDP, while gaining an additional 1 per cent share from Japan, Malaysia, and South Korea could add another 0.1 per cent.

5. **Apparel export expansion:** India's 6 per cent share in US apparel imports could rise by 5 per cent, adding another 0.1 per cent to GDP.

6. **Import diversification strategy:** Planned $500 billion imports from the US over five years will diversify capital goods sourcing away from China.

Conclusion

The EU FTA and the US interim deal signal a new phase in India's trade journey. India balances domestic protection with global opportunity while responding to consumer-driven markets. By negotiating on its own pace and terms, India strengthens exports, diversifies imports, and positions itself as a central player in the evolving trade order.

Question for practice:

Critically examine how India's trade engagements with the European Union and the United States reflect an evolution in its negotiation strategy and reshape its position in global markets.
Source: Indian Express

A social media ban will not save our children

GS Paper II: Governance, Social Justice and Education
GS Paper I: Society

Context: In response to growing concerns over **mental health issues, cyberbullying, addiction, and exposure to harmful content among children,** several governments worldwide are considering or **implementing blanket bans or strict age-based restrictions on social media for minors.** Such bans are **simplistic and ineffective,** failing to address deeper structural and social issues affecting children in the digital age.

- Social media has become an integral part of children's **socialisation, learning,** and **self-expression.**

- The debate has shifted from **regulation and safety** to outright **prohibition,** driven by moral panic rather than evidence.
- **Technology itself is not the primary threat;** rather, **lack of digital literacy, weak regulation,** and **inadequate parental and** institutional support are the real problems.

Key Challenges with Ban on Social Media for Children

- False Sense of Safety
  - Bans create an illusion of protection without addressing **online harms that persist outside social media,** such as gaming platforms, messaging apps, and the dark web.
  - Children often bypass bans using **fake ages or VPNs.**
- Ignoring Structural Causes
  - Mental health crises among children stem from **academic pressure, family stress, social inequality, and lack of counselling,** not just social media.
  - Singling out social media oversimplifies a **multi-causal problem.**
- Exclusion from Digital Citizenship
  - A blanket ban deprives children of opportunities to develop **critical thinking, online etiquette,** and **digital resilience.**
  - This weakens their ability to navigate the internet safely as adults.
- Weak Regulatory Ecosystem
  - The focus on bans diverts attention from:
    - **Platform accountability**
    - **Algorithmic transparency**
    - **Data protection and child-friendly design**
- Enforcement and Equity Issues
  - Such bans disproportionately affect **children from poorer households** who rely on digital platforms for learning and social connection.
  - Enforcement is **arbitrary** and often **discriminatory.**

Way Forward for Social Media usage for Children

- Strengthen Child-Centric Regulation
  - Mandate robust **age-appropriate design codes,** safer algorithms, and default privacy settings for minors.
  - Enforce **accountability on platforms** for harmful content and addictive design.
- Digital Literacy and Life Skills
  - Integrate **digital literacy, media awareness, and mental health education** into school curricula.
  - Focus on teaching children how to **engage safely,** not avoid technology.
- Parental and Community Engagement
  - Equip parents with tools and awareness to guide children's online behaviour.
  - Promote **open conversations** rather than surveillance or coercion.
- Strengthen Mental Health Infrastructure
  - Expand access to **school counsellors, helplines,** and **adolescent mental health services.**
  - Address offline stressors such as academic pressure and social isolation.
- Evidence-Based Policymaking

- Frame policies based on **research and child psychology,** not moral panic or populist responses.
- Encourage continuous **review of digital policies as technologies evolve.**

Conclusion

Banning social media may appear decisive, but it is a **policy shortcut** that ignores the complex realities of childhood in a digital world. Protecting children requires **smart regulation, education, mental health support, and shared responsibility,** not blunt prohibitions. As the editorial argues, the goal should be to **empower children as safe and informed digital citizens,** not isolate them from the digital society they must inevitably navigate.

Source: The Hindu

Myanmar's military-scripted polls, India's strategic bind

GS Paper II – International Relations

Context: Myanmar's military junta has announced plans to conduct **elections under a tightly controlled framework**, nearly five years after the 2021 coup that overthrew the elected civilian government. The move seeks to gain **domestic legitimacy and international acceptance**, even as violence, repression, and civil conflict persist. For India, this creates a **strategic dilemma** between supporting democratic values and safeguarding geopolitical and security interests in its neighbourhood.

About the Myanmar Elections

- The proposed elections are being **scripted by the military**, with opposition parties dismantled, leaders jailed, and civil liberties curtailed.
- The polls aim to provide a **veneer of legitimacy** to continued military rule rather than restore genuine democracy.
- India shares a **1,600 km porous border** with Myanmar, making stability there crucial for internal security and regional connectivity.
- China's deepening influence in Myanmar further complicates India's strategic calculus.

Challenges for India created by the Myanmar Election

- **Democracy vs Realpolitik**
  - Supporting the junta risks **undermining India's democratic credentials**.
  - Open opposition may push Myanmar further into **China's strategic orbit**.
- **Border Security Concerns**
  - Ongoing conflict has led to **refugee inflows**, arms trafficking, and insurgent movement across the India–Myanmar border.
  - Instability affects India's **Northeast security architecture**.
- **Weak Regional Consensus**
  - ASEAN's divided response limits multilateral pressure on the junta.
  - India lacks strong regional mechanisms to influence outcomes.
- **Connectivity and Act East Setback:** Projects like the **Kaladan Multimodal Transit Transport Project** and India–Myanmar–Thailand Trilateral Highway face delays due to unrest.

- **Limited Diplomatic Leverage:** India's influence over Myanmar's military leadership remains constrained compared to China.

Way Forward

- **Principled Pragmatism:** Maintain engagement with Myanmar while **clearly articulating support for inclusive and credible political processes**.
- **Support Regional Diplomacy:** Work closely with **ASEAN** to push for dialogue, ceasefire, and humanitarian access.
- **Focus on Border Management:** Strengthen border infrastructure, intelligence sharing, and humanitarian assistance for refugees.
- **Diversify Engagement:** Engage civil society, ethnic groups, and democratic stakeholders alongside official channels.
- **Counterbalance External Influence:** Expand economic, development, and people-to-people ties to prevent **strategic overdependence on China**.

Conclusion

Myanmar's military-scripted elections are unlikely to restore democracy but may entrench authoritarian rule. For India, the challenge lies in navigating a **delicate balance between democratic values and strategic necessities**. A calibrated policy—combining engagement, regional cooperation, and principled pressure—offers the most sustainable path to protect India's long-term interests while supporting stability and democratic aspirations in its neighbourhood.

Source: The Hindu

A chance for India to polish the Kimberley Process

UPSC Syllabus: Gs Paper 2- International Relation
Introduction

India's assumption of the Kimberley Process chairmanship in 2026 offers a rare opportunity to reform a key global mechanism governing the trade in conflict diamonds. With its central role in the global diamond value chain, India is well placed to address long-standing gaps in definition, enforcement, and transparency within the Process. At the same time, India's diplomatic engagement with Malaysia reflects a broader effort to support its reform agenda through stable regional and multilateral partnerships.

What is the Kimberley Process?

1. **Origin and purpose:** The KP began in May 2000 when southern African countries started talks to stop the trade of conflict diamonds used by rebel groups to threaten governments.

2. **Kimberley Process Certification Scheme (KPCS):** In 2003, negotiations with 37 signatories created the KPCS to certify rough diamonds and block conflict-linked trade.

3. **Membership and global coverage:** The KP now has 60 participants representing 86 countries and covers about **99.8% of global rough diamond production**.

4. **Operational rules:** Rough diamonds can be traded only between KP-compliant members, with each shipment carrying a verified KP certificate.

5. **Data-sharing requirement:** Members must share timely and accurate data on diamond production and trade to maintain transparency.

India and the Kimberley Process

1. **India's chairmanship in 2026:** India's leadership role gives it influence to guide reforms in global diamond governance.

1. **India's position in the diamond value chain:** India is not a producer but imports around **40% of global rough diamonds** by quantity and value.

2. **Cutting and polishing hub:** Surat and Mumbai are global centres for diamond cutting and polishing, making India central to value addition.

3. **Major export destinations:** India re-exports polished diamonds to China, Hong Kong, Israel, the United Arab Emirates, and the United States.

4. **Strategic leverage:** India's central role in processing gives it strong influence within the KP despite limited domestic production.

Key Challenges within the Kimberley Process

1. **Narrow definition of conflict diamonds:** The KP definition focuses only on rebel funding and ignores state violence, human rights abuses, and environmental harm.

2. **Blind spots in governance:** Issues like human trafficking, artisanal mining abuses, and illicit trade channels fall outside the current scope.

3. **Consensus-based decision-making:** Any decision can be blocked by political veto, making it hard to formally identify conflict diamonds.

4. **Weak enforcement outcomes:** The KP lacks clarity on action after identifying conflict diamonds, reducing deterrence.

5. **Impact of embargoes:** The Central African Republic case shows that bans without support increase smuggling and violence.

6. **Community protection gap:** There is no agreement on whether the KP should address state-linked violence affecting mining communities.

India's Reform Agenda within the Kimberley Process

1. **Broadening the agenda carefully:** India can form a technical working group on violence and human rights risks beyond rebel insurgencies.

2. **Consensus-building approach:** Recommendations from this group can prepare ground for reform without reopening political conflicts.

3. **Digital certification systems:** India can promote tamper-proof digital KP certificates and harmonised customs data exchange.

4. **Blockchain-based traceability:** Unique, time-stamped digital records for shipments can reduce fraud and improve transparency.

5. **Support for producer countries:** Regional KP technical hubs in central and eastern Africa can provide training and certification support.

6. **Institutional transparency:** India can push for third-party audits and full public release of detailed KP statistics.

7. **Strengthening civil society role:** Open communication channels can preserve the tripartite balance of governments, industry, and civil society.

Way Forward

1. **Reforming the scope of conflict diamonds:** India can push the Kimberley Process to gradually address violence and human rights risks beyond rebel financing, without reopening political deadlocks.

2. **Using technology to strengthen certification:** Digital, tamper-proof KP certificates and harmonised customs data exchange can reduce fraud and improve transparency across the diamond supply chain.

3. **Modernising traceability systems:** Blockchain-based, time-stamped shipment records can create immutable audit trails and strengthen trust in KP compliance.

4. **Supporting producer countries through capacity-building:** Regional KP technical hubs in central and eastern Africa can provide training, IT support, certification help, and forensic capacity.

5. **Improving transparency and accountability:** Independent audits and full public release of detailed KP statistics can improve confidence in the system.

6. **Keeping the tripartite balance intact:** Strong civil society participation should remain central to ensure credibility and oversight.

7. **Linking diamond trade with community development:** KP reforms should recognise diamonds as a livelihood source and align revenues with health, education, and local infrastructure needs.

8. **Diplomatic support for reform leadership:** Stable regional ties, including improved engagement with Malaysia, can help India sustain its leadership role in global diamond governance.

Conclusion

India's chairmanship of the Kimberley Process provides a timely chance to strengthen a system that has struggled to keep pace with evolving forms of violence and illicit trade. By promoting technological solutions, capacity-building, and inclusive governance, India can help restore the Process's credibility and effectiveness. Supported by steady regional diplomacy, including improved ties with Malaysia, this approach positions India as a constructive reform leader in global economic governance.

Question for practice:

Discuss how India's chairmanship of the Kimberley Process in 2026 provides an opportunity to reform global diamond governance while addressing its structural limitations and advancing responsible trade practices.

Source: The Hindu

Back on track: On Malaysia–India ties

UPSC Syllabus: Gs Paper 2- International Relations

Introduction

India–Malaysia relations entered a phase of correction after diplomatic unease in 2025. Prime Minister **Narendra Modi**'s February 2026 visit to Kuala Lumpur signalled intent to restore trust and momentum. The visit focused on repairing political confidence, strengthening economic cooperation, and reaffirming shared positions on terrorism, the Indo-Pacific, and multilateral reforms, while carefully avoiding public discussion of contentious issues.

Historical and Institutional Foundations of the Relationship

1. **Civilisational links:** India and Malaysia share civilisational connections spanning over two millennia, shaped by Indian Ocean trade, religion, language, and cultural exchange. Sanskrit influences and Hindu-Buddhist traditions are visible in Malaysia's historical evolution.

2. **Diplomatic continuity:** Modern diplomatic relations were established in 1957, soon after India's independence, and have seen sustained political engagement. The relationship was elevated to a Comprehensive Strategic Partnership in August 2024.

3. **Institutional framework:** Regular Foreign Office Consultations, Joint Commission Meetings, and parliamentary exchanges provide structure and continuity to bilateral relations.

Sources of Friction in India–Malaysia Relations

1. **Security-related divergence in 2025:** While Malaysia condemned the Pahalgam terror attacks, Prime Minister **Anwar Ibrahim**'s call for enquiry, de-escalation, and mediation on India–Pakistan issues caused discomfort in New Delhi.

2. **Pakistan outreach concerns:** Malaysia's hosting of Pakistan Prime Minister Shahbaz Sharif in October 2025 added to Indian unease during a sensitive period.

3. **Trade and ASEAN-related strain:** India's absence from the ASEAN summit in 2025 weakened momentum on reviewing the ASEAN–India Trade in Goods Agreement. Critical remarks by India's Commerce Minister on the agreement and ASEAN partners further affected goodwill.

Key Outcomes and Agreements of the 2026 Visit

1. Repairing Trust Through Engagement

a. **Diplomatic reset:** India chose to set aside past irritants to rebuild trust. Malaysia became India's first foreign destination in 2026, signalling priority and reassurance.

b. **Convergence on terrorism:** Both sides unequivocally condemned terrorism, including cross-border terrorism. They agreed on zero tolerance, intelligence sharing, and coordination at the United Nations and the Financial Action Task Force.

c. **Signing of multiple agreements:** A total of 11 agreements and documents were concluded, covering trade, defence, energy, digital cooperation, and advanced manufacturing.

2. New and Emerging Areas of Cooperation

a. **Semiconductor cooperation:** A framework agreement strengthened collaboration in semiconductors, building on links between IIT Madras Global and Malaysia's Advanced Semiconductor Academy, with focus on workforce and supply chains.

b. **Trade, investment, and industry links:** Both sides committed to expanding trade and investment in infrastructure, advanced manufacturing, healthcare, and green technologies. The CEO Forum highlighted new business opportunities.

c. **Local currency trade settlement:** India and Malaysia promoted use of the Indian Rupee and Malaysian Ringgit for bilateral trade, aiming to reduce transaction costs and deepen financial cooperation.

d. **Energy and sustainability:** Cooperation expanded in renewable energy and green hydrogen, with Malaysian firms already active in India's clean energy landscape.

3. Defence, Security, and Indo-Pacific Cooperation

a. **Strengthening defence ties:** Regular military exercises, defence exchanges, and cooperation through the Malaysia–India Defence Cooperation Committee were reaffirmed.

b. **Counter-terrorism and maritime security:** Both sides agreed to deepen intelligence sharing, counter-radicalisation efforts, and maritime cooperation in the Indo-Pacific.

c. **ASEAN centrality and Indo-Pacific vision:** India reiterated support for ASEAN centrality and committed to a free, open, and stable Indo-Pacific, aligning with Malaysia's regional outlook.

4. Multilateral and Regional Dimensions

a. **United Nations and institutional reform:** Malaysia extended support for India's permanent membership in a reformed UNSC. Both sides backed reforms to make global institutions more representative.

b. **BRICS engagement:** India noted Malaysia's aspiration to join BRICS and welcomed its role as a partner country, while maintaining a calibrated position.

c. **ASEAN and regional balance:** The visit reassured Southeast Asia of India's continued engagement even as New Delhi advances trade agreements with Europe and the United States.

5. People Connect

a. Diaspora engagement: Meetings with Indian-origin political leaders highlighted their role in strengthening bilateral ties.

b. Education and mobility: Both sides promoted cooperation in education, skills, tourism, and people-to-people exchanges.

c. Institutional presence: India announced the establishment of an Indian Consulate General in Malaysia to support growing engagement.

Significance for India's Foreign Policy

1. **Act East Policy reaffirmed:** The visit underlined India's commitment to Southeast Asia despite earlier setbacks and broader global trade shifts.

2. **Pragmatic diplomacy:** By avoiding public disputes and focusing on shared interests, India demonstrated flexibility and strategic patience.

3. **Regional stability focus:** Emphasis on terrorism, maritime security, and multilateral cooperation aligned India's regional goals with broader Indo-Pacific stability.

Conclusion

The visit marked a careful course correction rather than a full reset. By restoring political trust, expanding economic cooperation, and aligning on security and multilateral issues, India and Malaysia placed their partnership back on a stable track. Sustained follow-up on trade reviews, semiconductor cooperation, and ASEAN engagement will determine whether this renewed momentum translates into long-term strategic convergence.

Question for practice:

Evaluate the significance of Prime Minister Narendra Modi's February 2026 visit to Malaysia in resetting bilateral ties and advancing India's strategic interests in Southeast Asia.
Source: The Hindu

Industrial Relations Code must balance job security in the AI era

Source: *The Hindu* Editorial, "Industrial Relations Code must balance job security in the AI era", published on 10 February 2026. The article examines the implications of the Industrial Relations Code in the context of rapid AI-driven technological change and its impact on employment and labour protections.

UPSC Syllabus- GS Paper II: Governance; Social Justice; Labour Policies.

Context: The Union government has notified the rollout of the four Labour Codes, including the Industrial Relations Code (IRC), 2020, which will come into force from 21 November 2025 and be fully implemented by April 2026, bringing major changes to employment security norms for industrial workers.

Key Issues Highlighted

Source: The Hindu

- **Higher Job-Security Threshold:** The IRC raises the threshold for mandatory government approval for layoffs, retrenchment, and closure from 100 to 300 workers, institutionalising greater operational flexibility already adopted by several states.
- **Dilution of Historical Safeguards:** Employment-protection thresholds, introduced during the Emergency to prevent mass layoffs amid economic or technological shocks, are now being relaxed, raising concerns about worker vulnerability.
- **AI-Driven Employment Risks:** Automation and AI are increasingly displacing not only routine work but also skilled and supervisory roles, making reduced job-security norms a potential source of heightened precarity.
- **Limited Worker Coverage:** The IRC's narrow definition of "worker" excludes managerial and higher-paid supervisory staff, leaving many formal-sector employees, especially in IT and services, outside job-security protections.
- **Pro-Business Policy Tilt:** The revised threshold reflects a shift towards a business-friendly labour framework, with some states expanding coverage selectively to maintain industrial stability.
- **Re-Skilling Support Mechanism:** The Code mandates a Worker Re-Skilling Fund, funded by employers, to aid retrenched workers in skill upgradation and re-employment in a technology-intensive economy.
- **Unclear Employment Relationships:** Lack of precise statutory criteria to define employer–employee relationships, coupled with varied judicial interpretations, creates uncertainty in extending labour protections in evolving work arrangements.

Challenges associated with job security in the AI era

- **Erosion of Job Security:** Higher thresholds and relaxed hiring–firing norms may weaken protections for workers in medium-sized enterprises, particularly during AI-led restructuring.
- **Worker Displacement and Skill Mismatch:** Automation may render many jobs obsolete, while existing laws offer limited support for reskilling, income security, and smooth transitions.
- **Weakening of Collective Bargaining:** New strike and dispute norms, combined with digital workplaces, risk reducing trade union influence in the AI era.
- **Gig and Informal Employment:** Despite partial recognition, job security and enforceable entitlements for gig and platform workers remain inadequate amid rapid technological change.

Way Forward

- **Balance Flexibility with Security:** Adopt a **flexicurity approach**, combining labour-market flexibility with strong social security and transition support.
- **Reskilling and Lifelong Learning:** Establish robust, government–industry-led frameworks for continuous upskilling and career transitions in AI-augmented roles.
- **Inclusive Social Dialogue:** Institutionalise **tripartite consultations** among government, employers, and workers to manage automation-related disruptions and sustain industrial harmony.
- **Adaptive Legal Frameworks:** Regularly update labour laws to address emerging challenges such as **algorithmic management, AI-driven layoffs, and digital workplace governance**.

Conclusion

The Industrial Relations Code marks a major shift in India's labour regulatory framework. However, in an era defined by AI and automation, regulatory flexibility alone is insufficient. Ensuring **job security, effective reskilling, and social protection** alongside industrial competitiveness is essential. A balanced and forward-looking approach will help safeguard workers' interests while enabling innovation, thereby promoting **inclusive and sustainable economic growth**.

Question: Does the Industrial Relations Code, 2020 adequately balance job security with labour-market flexibility in the AI era? Examine.

A social media ban will not save our children

Source: *The Hindu* Editorial, **"A social media ban will not save our children"**, published in **February 2026**. The article analyses the Ghaziabad tragedy and critically evaluates global and domestic calls for banning social media for children, arguing for regulation over prohibition.

UPSC Syllabus: GS Paper II: Governance, Social Justice and GS Paper I: Society – Youth, Social Issues

Context: On February 4, 2026, the suicide of three sisters aged 12, 14, and 16 in Ghaziabad, Uttar Pradesh, reportedly linked to screen addiction and parental conflict, triggered nationwide outrage. The tragedy has renewed demands for a blanket ban on social media for children, with policymakers citing global examples such as Australia and Spain.

About the Issue

- There is credible global evidence showing a **link between heavy social media use and adolescent mental health issues**, including anxiety, depression, self-harm, and body image concerns, especially among teenage girls.
- However, translating these concerns into **blanket bans** reflects a moral panic response rather than a nuanced policy solution.

Challenges Associated with Social Media Bans in India

- **Poor Enforceability & Higher Risks:** Bans are easily bypassed through VPNs or false age declarations, often pushing children to unregulated and unsafe digital spaces; mandatory age checks may also enable mass surveillance.
- **Mismatch with Adolescent Needs:** Social media acts as a vital support and identity space for rural youth, the urban poor, LGBTQ+ adolescents, and children with disabilities.
- **Democratic Deficit:** Children are rarely consulted in digital policy decisions, weakening participatory governance and policy effectiveness.
- **Worsening Gender Divide:** With low female internet access, age-based bans risk disproportionately excluding girls, limiting education, exposure, and social mobility.

Global Responses and Moral Panic: Australia has introduced a prohibition on social media access for users below 16 years on major platforms, backed by mandatory age-verification mechanisms and heavy financial penalties, while Spain has announced similar plans to adopt such restrictions.

Way Forward

- **Shift from Bans to Regulation:** Move away from censorship and takedown-centric approaches towards regulating platform design and power.
- **Duty of Care Framework:** Enforce child-safety obligations on platforms, supported by penalties and strong digital competition laws.
- **Evidence-Based & Inclusive Policy:** Invest in India-specific research and actively involve children in policymaking.
- **Technology-Neutral Regulation:** Address child safety consistently across social media and AI systems, including generative and conversational tools.

Conclusion

A social media ban may offer the **illusion of swift action**, but it risks undermining children's rights, safety, and future opportunities—especially for girls and marginalised groups. Protecting children in the digital age requires the harder task of building a **healthy media ecosystem**, grounded in regulation, accountability, research, and participation.

Question: Critically analyse the challenges associated with imposing social media bans on children in India. Suggest alternative regulatory approaches to protect children's well-being in the digital age.

The Approaching AI Surge, Its Global Consequences

UPSC Syllabus Topic: GS Paper3- Science and Technology- developments and their applications and effects in everyday life.

Introduction

Artificial Intelligence is emerging as the most decisive technology of our time. Its impact is comparable to the Industrial Revolution. Large Language Models are advancing at great speed, and rivalry between major powers is accelerating innovation. Yet global discussions on geopolitical rupture often overlook AI. The technology is already reshaping diplomacy, governance, and warfare. Its unchecked growth may fundamentally disturb the present international order.

The Rise of Artificial Intelligence as a Transformative Force

1. **AI as a Civilisational Shift:** AI promises transformation on a scale comparable to past revolutions. Its expansion signals a deep structural change in global systems.
2. **Rapid Expansion of Large Language Models:** Advanced LLMs are being deployed faster than expected. The success of recent Chinese models has intensified competition.
3. **Technological Rivalry Among Major Powers:** Competition between the United States and China has become intense. This rivalry is driving rapid AI development.
4. **AI as the Overlooked Disruptor:** The global order is described as facing rupture. However, AI remains the deeper force capable of overturning it.
5. **Limited Political Awareness:** Many leaders underestimate the scale of AI's disruption. The seriousness of the threat is not fully realised.

Global Consequences of the AI Surge

1. **AI as an Instrument of Diplomacy and Statecraft:** AI is already used as a diplomatic tool. Nations are urged to build resilience and sovereign stacks.
2. **Global Debate Focused on Opportunity, Not Risk:** Discussions at the World Economic Forum centred on how countries could exploit AI. The dangers of unchecked AI received limited attention.
3. **Strategic Competition Reflected in National Positions:** Ashwini Vaishnaw rejected the idea that India is a secondary AI power. This reflects how AI status shapes national prestige.
4. **Sectoral Transformation Beyond Security:** Digital transformation driven by AI is reshaping competitiveness in fintech and healthcare. AI also influences intelligence and governance systems.
5. **Judicial Risks from AI "Hallucinations":** The judicial fraternity warns that excessive reliance on AI may cause fabricated citations and improper judgments. This shows institutional vulnerability.
6. **Expansion Across Civilisational Networks:** AI enhances surveillance, communication, analytics, and information flows. Few technologies affect so many domains at once.
7. **Shift from Human-Controlled to Autonomous Warfare:** Warfare is moving from manned platforms to autonomous systems. AI systems can make decisions without direct human control.

8. **Deployment of Autonomous Military Technologies:** AI enables unmanned aerial vehicles capable of autonomous flight, cyber weapons, and intelligent ground vehicles. Operational decisions are increasingly automated.

9. **Asymmetric Power Shift:** The conflict between Ukraine and Russia demonstrates AI's asymmetric power. Ukrainian forces used drones, night vision equipment, quad bikes, and improvised explosive devices to resist a stronger conventional army.

10. **Colossal Transfer of Power and Force Amplification:** AI shifts power from traditional militaries to actors capable of using AI devices. It may become the greatest force amplifier in history.

11. **Risk of Autonomous Escalation:** Autonomous drone swarms could launch large-scale attacks. The moment when AI becomes fully independent of human control remains uncertain.

12. **Integration of Multi-Domain Warfare:** Space, cyber, and electronic warfare capacities are increasingly woven together. This fully transforms the nature of combat.

Way Forward

1. **Need for Effective Checks and Balances:** AI enables rapid data processing and predictive analysis. Oversight is necessary to prevent uncontrolled expansion.

2. **Preventing Militarised Misuse:** Military and security establishments may widely adopt autonomous systems. Regulation is essential to avoid destabilising escalation.

3. **Institutional Adaptation to Technological Speed:** Institutions meant to govern technology risk being outpaced. Governance mechanisms must evolve alongside AI capabilities.

4. **Collective Responsibility of Scientists and Leaders:** Political leaders and scientists must work together. AI must be guided to benefit humankind.

5. **Universal adoption of the Bletchley Declaration-** The push must be made towards universal adoption of the Bletchley Declaration by all the countries.

6. **Invest in AI research and education-** Governments, academic institutions, and industry stakeholders should allocate resources to R&D, and education in the field of AI. This will help create a well-informed workforce capable of addressing regulatory challenges and ensuring the safe and responsible deployment of AI technologies.

Conclusion

AI is transforming power structures, governance systems, and warfare at unprecedented speed. It strengthens capabilities but creates profound risks. Autonomous technologies may alter global stability and shift power beyond traditional control. Institutions are not yet prepared for this disruption. Responsible oversight, international cooperation, and ethical restraint are essential to ensure AI serves humanity safely.

Question for practice:

Examine how the rapid rise of Artificial Intelligence is transforming global power structures and warfare, and assess the risks it poses to the existing international order.

Source: The Hindu

A reckoning for India's aviation sector

UPSC Syllabus: Gs Paper 3- Infrastructure (Airports)

Introduction

India's civil aviation sector stands at a critical stage of rapid growth and rising stress. Passenger traffic, fleet size, airport capacity, and economic contribution have expanded significantly. At the same time, operational breakdowns, safety concerns, pilot shortages, and regulatory gaps have exposed structural weaknesses. The December IndiGo disruption highlighted systemic strain. The sector now faces a decisive moment where expansion must align with institutional strength and safety.

Status of India's Aviation Sector

- India recorded **376.43 million air passengers in FY24**, growing at **15% YoY**, with daily passengers crossing **5 lakh** in 2024.
- The sector contributes **5% to GDP**, supports **4 million jobs**, and adds **$72 billion in gross value** to the economy.
- Fleet strength stands at **941 aircraft (2025)**, while **162 airports** (up from 74 in 2014) are operational, with metro capacity targeted to reach **468 MPPA**.
- India handled **3,365.65 MMT air cargo in FY24**, strengthening logistics and e-commerce supply chains.
- India leads globally in gender diversity with **15% women pilots** (3× global average).
- Sustainability advances include **73 airports using 100% green energy**.

Major Concerns Related to India's Aviation Sector

1. **Operational breakdowns and financial strain:**The June 2025 crash, large-scale cancellations, and prolonged delays disrupted passengers and weakened confidence. Both IndiGo and the Air India group are preparing for major losses as profits have declined sharply.
2. **Overstretched expansion model:** India operates over **840 aircraft** and carries more than **350 million passengers annually**, making it the world's third-largest domestic market. This rapid expansion has outpaced institutional and manpower capacity.
3. **FDTL and crew incompatibility:** The revised Flight Duty Time Limitations reduced night operations and tightened flight-hour ceilings. Even the **60-hour weekly cap**, higher than the healthy 40-hour benchmark, proved incompatible with existing crew strength.

4. **Severe pilot shortage:** India needs **7,000 pilots between 2024–26** and **25,000–30,000 over the next decade**. Only **5,700 Commercial Pilot Licences** were issued between 2020–2024. Trainer shortages, simulator limits, and type-rating constraints restrict supply, while **236 temporary foreign approvals in 2025** remain a costly stopgap.

5. **Regulatory capacity deficit:** Nearly **50% of DGCA technical posts remain vacant** despite growing fleet size. Disruptions are managed through exemptions instead of strict enforcement, reflecting fragile oversight.

6. **Duopoly and systemic risk:** IndiGo holds **63–65%** of domestic traffic and the Air India Group holds **27–28%**, together controlling nearly **90%** of the market. IndiGo operates as the sole carrier on **60.4% of routes**, so disruptions lead to loss of connectivity.

7. **Structural financial vulnerabilities:** Failures of Kingfisher Airlines, Jet Airways, Go First and others show weaknesses such as cost competition, weak regional demand, poor management, infrastructure limits, and **ATF price volatility linked to the U.S. dollar**.

Initiatives Taken

1. **Grant of NOCs to regional carriers:** In December 2025, NOCs were granted to Shankh Air, Al Hind Air, and FlyExpress. These aim to improve regional connectivity and serve unattended routes.

2. **Expansion under the UDAN scheme:** The UDAN scheme operationalised 625 routes and 85 airports, including 102 new routes in the Northeast, targeting 1.5 crore commuters. It seeks to strengthen regional access and reduce dependence on major carriers.

3. **National Civil Aviation Policy (NCAP):** This aims to improve the international footprint of India-based airline services. Airlines can commence international operations, provided they deploy 20 aircrafts or 20% of their total capacity (whichever is higher) for domestic operations.
4. **Open sky policy:** Aims to liberalise the aviation sector in India by opening the airport sector to private participation. Currently, 6 PPP airports are being developed and 60% of airport traffic is handled under PPP.
5. **Open Sky Air Service Agreement:** Open Sky Air Service Agreement allows for airlines from the two countries to have an unlimited number of flights as well as seatsto each other's jurisdictions. India has signed these agreements with multiple nations like the US, Greece, Jamaica, Japan, Finland, Sri Lanka.
6. **FDI Policies :** 100% FDI is being allowed under the automatic route for greenfield projects, whereas 74% FDI is allowed under automatic route for brownfield projects.
7. Tax and Duty cuts: 100% tax exemption has been provided for airport projects for a period of 10 years. Indian aircraft Manufacture, Repair and Overhaul (MRO) service providers have been completely exempted from customs and countervailing duties.
8. **GAGAN (GPS-Aided Geo-Augmented Navigation):** Developed jointly by AAI and ISRO, GAGAN is India's own Satellite-Based Augmentation System (SBAS). Operational since 2015, it enhances the accuracy and integrity of GPS signals, improving navigation, especially for approach and landing, and enabling precision approaches at non-instrumented airports, thereby significantly enhancing safety, particularly in challenging terrains.
9. **Bhartiya Vayuyan Adhiniyam, 2024:** This is a landmark piece of legislation that came into effect on January 1, 2025, replacing the nearly century-old Aircraft Act of 1934. It modernizes India's aviation system, aligning it with contemporary needs and global standards (like the Chicago Convention and ICAO).

Need for a Systemic Solution

1. **Rising safety violations:** By late 2025, **19 DGCA safety notices** cited FDTL breaches, quality lapses, unauthorised cockpit access, and expired emergency equipment. This shows operations are near unsafe limits.

2. **Lack of operational buffers:** Globally, airlines maintain **20–25% spare crew capacity**, while Indian carriers operate at near-total utilisation. Minor disruptions therefore spread across the network.

3. **Future demand pressure:** India accounts for **4.2% of global air traffic**, and domestic demand may reach **715 million passengers by 2030**. Without structural reform, growth may convert into recurring crisis.

Way Forward

1. Expand workforce and training capacity: Pilot training, simulators, and type-rating facilities must expand before further fleet growth.

10. Strengthen regulatory enforcement: DGCA vacancies must be filled, and rule-based enforcement must replace exemption-based management.

11. Stabilise cost structure and regional support: Effective UDAN implementation, better slot allocation, coordinated Tier-2 and Tier-3 infrastructure, and measures to address ATF volatility are essential.

12. Learn from past failures: Earlier airline collapses show the risks of aggressive expansion, weak governance, and financial mismanagement. Structural reform must prevent repetition of these patterns.

13. **Promote 'Start-up India' initiative in the aviation sector-**Entrepreneurship must be promoted in the maintenance, repair, and overhaul (MRO) facilities of the aviation industry.

14. **Rationalisation of taxes-** Tax rationalisation must be initiated in aviation fuel taxes (State and Central, which in India are among the highest in the world), air cargo and airport operations.

15. **Safety Management Systems (SMS) Effectiveness:** Ensure that all aviation service providers (airlines, airports, MROs, ATC) have fully functional and effective SMS that are integrated into their daily operations and decision-making. Regulators should audit the effectiveness of these SMS, not just their presence.

Conclusion

India's aviation sector reflects both impressive expansion and emerging structural strain. Strong passenger growth, infrastructure expansion, and policy reforms coexist with pilot shortages, regulatory gaps, and safety concerns. With demand projected to reach 715 million passengers by 2030, sustained progress now depends on strengthening oversight, workforce capacity, financial stability, and resilience to ensure balanced and safe growth.

Question for practice:

Illustrate the key structural challenges facing India's aviation sector and explain why rapid expansion without matching institutional capacity has led to systemic stress despite significant growth and policy reforms.

Source: The Hindu

Role of University Townships in Integrating Education with Industrial and Logistics Corridors

UPSC Syllabus: Gs Paper 2- Issues relating to development and management of Social Sector/Services relating to Education and Human Resources.

Introduction

India's higher education system has expanded rapidly and now includes **more than 1,100 universities and 4.3 crore learners.** Access has improved, but outcomes remain a concern. India must now **move from access-led expansion to quality-led outcomes**. The focus must shift toward quality, learning outcomes, research relevance, and employability, while maintaining inclusion. In this context, the Union Budget has proposed the **creation of five university townships near major industrial and logistics corridors** to better align education with India's economic direction.

Structure and Purpose of the Proposed University Townships

1. **Planned Academic Zones:** These are structured academic ecosystems located near major industrial and logistics corridors. They will host multiple universities, research institutions, skill centres, and residential facilities.

2. **Challenge-Route Support to States:** The Union Budget proposes supporting States through a challenge route. This model links funding to measurable outcomes such as shared facilities, internships, and research translation.

3. **Quality and Relevance Intervention:** These townships are not merely infrastructure projects. They are designed as quality-and-relevance interventions to improve learning outcomes, employability, and research translation.

Importance of University Townships

1. **Linking Education with the Real Economy:** Industrial corridors generate production networks, supplier ecosystems, testing needs, standards, and skill demand. Education must connect with these systems to remain relevant. Physical and collaborative proximity enables real problem-solving and applied learning.

2. **Building Work-Ready Graduates:** Students should graduate with practical skills and real-world experience. Physical and collaborative interaction with industry builds credibility with employers.

3. **Strengthening Manufacturing Competitiveness:** India needs skilled engineers, technicians, designers, and researchers. Competitiveness depends on testing, certification, quality systems, and reliable supply chains.

4. **Aligning with Economic Direction:** India aims to expand high-quality manufacturing in semiconductors, electronics, clean energy components, biotech manufacturing, and advanced materials. Training must reflect real production standards and time-to-market demands.

5. **Responding to Global Disruptions:** The external environment can disrupt supply chains. New technologies are reshaping production. Education must prepare students for these realities.

Operational Design and Reform Support

1. **Shared Infrastructure for State Universities:** Many State universities lack high-end labs and validation facilities. Townships can provide shared access through scheduled use, transparent pricing, and joint supervision. This can improve research translation and practical application.

2. **Apprenticeship Embedded Degree Programme (AEDP):** The UGC allows structured workplace training within degrees. Corridor-linked townships can integrate industry-based training and assessment.

3. **Problem Banks and Applied Projects:** Firms and public agencies can announce real challenges. Students can solve them for academic credit, thesis, or capstone work.

4. **Professors of Practice (PoP):** Professionals from industry can offer credit-based micro-credentials. These can cover systems engineering, supply-chain analytics, safety standards, and regulatory issues.

5. **Mobility and Flexibility Frameworks:** The Academic Bank of Credits (ABC) supports credit transfer. The National Credit Framework (NCrF) promotes vertical and horizontal mobility. The Curriculum and Credit Framework allows multidisciplinary learning and multiple entry-exit options.

Global Experience Supporting the Model

1. **Research Triangle Park (U.S.):** This model links universities, firms, and research organisations. It promotes collaboration and talent flow.

2. **Fraunhofer-Gesellschaft (Germany):** It connects industry needs in engineering and manufacturing with translational labs and academic strengths.

3. **One-north and Jurong Innovation District (Singapore):** These are planned clusters that co-locate universities, research institutes, start-ups, and industry.

4. **Shared Platform Approach:** Global experience shows clusters work best when they remain open platforms that benefit both new and existing institutions. They should not become gated islands.

Way Forward

1. **Ensure Inclusion:** Townships must align with NEP 2020 goals. Credit-based short programmes, bridge courses, and subsidised lab access can expand opportunities for rural and State-university students.

2. **Prevent Elite Concentration:** States should reserve lab time and internships for State-university students. Access must be transparent and merit-based.

3. **Protect Autonomy and Student Welfare:** The design should avoid excessive metric-chasing and should not reduce quality to narrow indicators. Institutional autonomy and student welfare must remain central.

4. **Enhance Collaboration:** Townships should amplify existing reform tools like ABC, NCrF, and credit frameworks to promote flexible and collaborative learning.

Conclusion

University townships offer a model to move from **access-led expansion to quality-led outcomes**. By linking education with industrial corridors, they can strengthen manufacturing, innovation, and supply-chain resilience. With shared infrastructure, workplace integration, and inclusion safeguards, this model can build real capability. Effective execution can support India's long-term goal of **Viksit Bharat, 2047**.

Question for practice:

Evaluate the role of university townships in integrating higher education with industrial and logistics corridors to improve quality, employability, and manufacturing competitiveness in India.

Source: The Hindu

Redefining Inter-City Mobility: High-Speed Rail Corridors in India

UPSC Syllabus: Gs Paper 3- Infrastructure

Introduction

India's mobility pattern is changing due to rapid urbanisation, rising incomes, and expansion of metropolitan regions. Long-distance and inter-city travel demand has increased sharply. Indian Railways has expanded steadily, but present needs require faster, reliable, and high-capacity systems. The Union Budget 2026–27 introduces seven high-speed rail corridors as part of a structured, corridor-based strategy to transform inter-city mobility and support sustained economic growth.

What is High-Speed Rail (HSR)

- **Definition and Speed Standard:** High-speed rail refers to passenger rail systems operating at speeds above **250 kilometres per hour**, supported by advanced infrastructure and technology.
- **Dedicated Infrastructure:** These systems run on exclusive corridors with advanced rolling stock, signalling, communication, and safety systems to ensure efficiency and reliability.
- **Difference from Conventional Rail:** Conventional rail shares tracks with freight and slower trains. High-speed rail uses purpose-built infrastructure for sustained high-speed operations and predictable schedules.

Relevance of High-Speed Rail (HSR) for India

- **Rising Inter-City Travel Demand:** Rapid urbanisation, economic clusters, and metropolitan expansion have increased long-distance passenger movement.
- **Connecting High-Density City Pairs:** High-speed corridors are suitable for major city pairs generating high passenger volumes over medium and long distances.

- **Reducing Congestion and Supporting Sustainability:** Dedicated corridors reduce pressure on existing tracks and support the goal of sustainable transport.
- **Integration in Long-Term Planning:** The National Rail Plan up to 2030 recognises high-speed rail as part of the future passenger ecosystem, complementing conventional and suburban services.

Government Initiative Taken

Record Capital Outlay: The Union Budget 2026–27 allocated **₹2,78,000 crore**, the highest ever for Indian Railways, showing strong priority to rail infrastructure.

Seven High-Speed Rail Corridors: The government announced seven corridors covering nearly **4,000 kilometres** with expected investments of around **₹16 lakh crore**.

- Mumbai–Pune
- Pune–Hyderabad
- Hyderabad–Bengaluru
- Hyderabad–Chennai
- Chennai–Bengaluru
- Delhi–Varanasi
- Varanasi–Siliguri

Mumbai–Ahmedabad High-Speed Rail Corridor: This is India's first high-speed rail project covering **508 kilometres** with a designed speed of **320 kmph**.

Institutional Framework: The project is implemented by the National High Speed Rail Corporation Limited. It includes 12 stations and a mix of elevated, underground, and at-grade sections.

Economic & Strategic Significance

- **Faster Movement and Economic Integration:** Travel time will reduce sharply, such as **Mumbai–Pune in about 48 minutes** and **Delhi–Varanasi in about 3 hours 50 minutes**, improving inter-state business connectivity.
- **Regional Growth and Mobility:** Corridors like **Chennai–Bengaluru (about 1 hour 13 minutes)** and **Bengaluru–Hyderabad (around 2 hours)** will link major industrial and technology hubs, strengthening regional development.
- **Capacity Creation on Existing Routes:** Dedicated corridors will shift long-distance passengers from conventional tracks, creating space for other passenger and freight services.
- **Building Institutional Capability:** The **Mumbai–Ahmedabad corridor (508 km, 320 kmph design speed)** has developed technical and project-management capacity for future high-speed projects.
- **Structured Long-Term Framework:** Nearly **4,000 km of planned corridors with ₹16 lakh crore investment** reflects a planned and future-ready corridor-based mobility strategy.

Challenges & Implementation Considerations

- **High Capital Requirement:** High-speed rail projects are capital-intensive and require large financial commitment.
- **Land and Clearances:** Land acquisition, environmental clearances, and stakeholder coordination are important for smooth execution.
- **Technology and Safety Systems:** Advanced signalling, train control, and safety systems are essential for sustained high-speed operations.
- **Financing and Partnerships:** The government plans to work with international partners and private stakeholders for funding and construction.
- **Execution Risks:** The experience of the Mumbai–Ahmedabad project, which has faced delays, will influence investor confidence in future corridors.

Conclusion

High-speed rail marks a major shift in India's transport planning. The seven corridors reflect a move towards faster, reliable, and corridor-based inter-city mobility. With large investment and structured planning, these projects can reduce travel time, improve economic integration, and ease pressure on existing tracks. Coordinated institutions and sustained investment will determine the success of this long-term mobility vision.

Question for practice:

Evaluate the significance of the proposed seven high-speed rail corridors in transforming India's inter-city mobility and economic integration.

Source: PIB

US Trade Deal Softening: Implications for India

UPSC Syllabus: Gs Paper 2- International Relation

Introduction

On 6 February 2026, India and the United States issued a Joint Statement outlining an Interim Trade Agreement. It removes the punitive 25% tariff on Indian goods, reduces reciprocal tariffs from 25% to 18%, and proposes a $500 billion purchase plan over five years. Soon after, the US revised its fact sheet, softening language on agriculture, purchases, and digital services taxes. These revisions highlight ongoing negotiations and raise important implications for India.

US–India Trade Background

1. **Evolution and Emerging Tensions:** Trade ties moved from post-independence aid to deeper strategic engagement. However, tensions resurfaced in 2018 with Section 232 steel and aluminium tariffs and the 2019 revocation of India's Generalised System of Preferences status.

2. **Reciprocal Tariff Framework:** In April 2025, the US advanced a "reciprocal tariffs" approach to address trade deficits and higher duties faced by US exports. This increased pressure on Indian exports.

3. **Launch of Bilateral Trade Negotiations:** India and the US began talks for a Bilateral Trade Agreement in February 2025. The Interim Agreement, expected to be signed by March 2026, is positioned as a precursor to the full BTA.

4. **Core Features of the Interim Deal:** The framework removes the 25% punitive tariff and reduces reciprocal tariffs to 18%. It also proposes that India will purchase $500 billion worth of US goods over five years.

How Has the US Trade Deal Been Softened?

1. **Removal of 'Certain Pulses':** The earlier fact sheet included "certain pulses" among items for tariff reduction. The revised version deleted this reference, though pulses remain part of discussions.

2. **Modified Agricultural List:** The updated list includes industrial goods and items such as dried distillers' grains, red sorghum, tree nuts, fruits, soybean oil, wine and spirits. Pulses are no longer mentioned.

3. **Shift from 'Committed' to 'Intends':** The original wording said India had "committed" to purchasing over $500 billion of US goods. The revised version states India "intends" to purchase, making the provision non-binding.

4. **Clarification on Purchases:** Officials clarified that purchases will be made by private companies, not sovereign governments. Therefore, the amount is not legally enforceable.

5. **Deletion of Digital Services Tax Removal:** The earlier claim that India would remove digital services taxes was removed. The revised version only refers to negotiating bilateral digital trade rules.

6. **Alignment with Joint Statement:** The Joint Statement did not mention pulses or digital tax removal. The revision ensures consistency with the agreed text.

Significance of the Softening

1. **Agriculture as a Politically Sensitive Sector:** Agriculture affects livelihoods and electoral politics. Even small tariff concessions can trigger strong reactions.

2. **Central Role of Pulses:** India is the world's largest producer and consumer of pulses. It imports about one-fifth of annual consumption to meet domestic demand.

3. **Import Data Context:** In the first nine months of 2025-26, pulses imports were $2.53 billion, down 33%. In 2024-25, total imports reached $5.48 billion, with the US contributing only $90 million.

4. **Farmers' Protests and Concerns:** The Samyukta Kisan Morcha announced a nationwide strike. The Rashtriya Kisan Mahasangh criticised secrecy and raised concerns over imports and GM-linked DDGs.

5. **Legal Weight of Language Change:** Replacing "committed" with "intends" reduces obligation. It prevents measurable accountability at this stage.

6. **Digital Trade Sensitivities:** India had already removed the equalisation levy. There were concerns about limiting future regulatory space.

Implications for India

1. **Protection of Domestic Agriculture:** Removing pulses from the tariff list reduces immediate pressure on farmers. It avoids visible concessions in a sensitive sector.

2. **Preservation of Policy Autonomy:** The change in wording protects India from binding purchase targets. It allows procurement decisions to depend on demand and pricing.

3. **Managing Import Concerns:** Farmers feared that a surge in imports could affect domestic prices. Softer language lowers the perception of sudden market disruption.

4. **Digital Regulatory Space:** The deletion of explicit tax removal avoids framing policy changes as concessions. It keeps space open for future decisions on taxation and data governance.

5. **Strengthened Negotiation Position:** The revisions show that India defended key sensitivities. This may shape future discussions in the full Bilateral Trade Agreement.

6. **Controlled De-escalation of Trade Tensions:** The Interim Agreement removes the 25% punitive tariff and reduces reciprocal duties. The softening ensures that de-escalation does not come at the cost of rigid commitments.

Conclusion

The softening of the US fact sheet reflects calibrated negotiation rather than retreat. Sensitive sectors such as agriculture, large-scale purchases, and digital regulation remain carefully guarded. The shift from firm commitments to flexible intentions preserves India's policy space. The Interim Agreement acts as a transitional step toward a comprehensive Bilateral Trade Agreement, with negotiations still evolving.

Question for practice:

Examine how the recent softening of the US fact sheet on the Interim Trade Agreement reflects India's stance on agriculture, purchase commitments, and digital trade regulation.

Source: India Express

Centre Revises IT Rules to Address AI-Based Content

Source: The post **"Centre Revises IT Rules to Address AI-Based Content"** has been created, based on **"Take down deepfakes within two hours: India's new IT Rules"** published in **"The Hindu " on 12th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: The Government of India has notified the amended Information Technology (IT) Rules, 2026 to strengthen regulation of social media intermediaries and curb the misuse of Artificial Intelligence, particularly deepfakes and synthetic content. The amendments introduce stricter compliance timelines and revised obligations regarding AI-generated content.

Key Features of the Amended IT Rules, 2026

1. Regulation of AI-Generated Content

a. Social media intermediaries are required to label AI-generated or modified content only when such content appears real, authentic, or true.
b. The labelling requirement applies when the content depicts an individual or event in a manner that is indistinguishable from a natural person or real-world event.
c. The earlier proposal mandating watermarking of 10% of nearly all online content has been removed.
d. Routine or good-faith editing, such as filters, formatting, colour correction, compression, transcription, or technical enhancement, is exempt from the labelling requirement.

2. Stricter Takedown Timelines

a. Platforms must remove non-consensual sexual imagery, including AI-generated deepfakes, within two hours of receiving a complaint.
b. Intermediaries must remove other unlawful content within three hours of a user complaint or a government or court order.
c. Complaints related to defamation, harassment, or other legal violations must be resolved within thirty-six hours.
d. Grievance Redressal Officers must deliver a final decision on user complaints within seven days.

3. Enhanced User Awareness

a. Platforms are required to inform users about privacy policies, prohibited content, and grievance redressal mechanisms at least once every three months.
b. This replaces the earlier annual disclosure requirement.

4. Enforcement and Liability

a. Non-compliance with the revised timelines may attract criminal litigation under existing intermediary laws.
b. All entities classified as intermediaries must comply with the amended rules from 20 February, providing a ten-day transition window.
c. Intermediaries retain safe harbour protection only if they adhere to the prescribed compliance framework.

Significance of the Amendments

a. The amendments seek to address the growing threat of deepfakes, misinformation, and non-consensual sexual imagery enabled by AI.
b. The stricter timelines recognise the rapid generation and dissemination capacity of AI tools.

c. The removal of blanket watermarking reflects responsiveness to industry concerns and supports ease of doing business.
d. Faster grievance redressal enhances digital safety and strengthens the accountability of platforms.

Concerns and Challenges

a. The compressed timelines may impose operational and technological burdens, especially on smaller intermediaries.
b. The broad definition of intermediary may create ambiguity for AI-based startups and emerging digital businesses.
c. There is a risk of over-censorship as platforms may adopt precautionary takedowns to avoid liability.
d. The ten-day compliance window may be insufficient for restructuring internal moderation systems and legal workflows.

Way Forward

a. The government should consider issuing detailed implementation guidelines to reduce ambiguity in the definition of intermediary and AI-generated content.
b. A differentiated regulatory framework may be developed for various categories of digital businesses, particularly standalone AI tool providers.
c. Capacity-building support and transitional flexibility may be provided to smaller platforms to ensure uniform compliance.
d. Periodic stakeholder consultations with industry, civil society, and technical experts should be institutionalised to refine enforcement mechanisms.
e. Safeguards must be strengthened to prevent arbitrary takedowns and protect freedom of speech in line with constitutional principles.
f. Investment in AI-based automated moderation tools and digital forensic capabilities should be encouraged to improve efficiency and accuracy in content regulation.

Conclusion: The amended IT Rules, 2026, mark an important step in India's AI governance journey by tightening accountability mechanisms while moderating earlier regulatory excesses. Their long-term effectiveness will depend on balanced enforcement, clarity in classification, and sustained dialogue between the state and digital ecosystem stakeholders.

Question: Discuss the key features of the amended Information Technology (IT) Rules, 2026, analyse their implications, and suggest a way forward.

Source: Mint

The CPI base revision exercise measures a slice of life

Source: The post **"The CPI base revision exercise measures a slice of life"** has been created, based on **"The CPI base revision exercise measures a slice of life"** published in **"The Hindu " on 12th February 2026.**

UPSC Syllabus: GS Paper-3- Indian Economy

Context: The Consumer Price Index (CPI) is India's principal measure of retail inflation and reflects changes in the cost of living from the perspective of households. The ongoing base revision of the CPI from 2012 to 2024

seeks to align the index with evolving consumption patterns, structural changes in the economy, and improved statistical methodologies.

Need for CPI Base Revision

1. The structure of the Indian economy has changed significantly since 2012, with higher urbanisation, expansion of the services sector, and digitalisation of consumption.
2. Household expenditure patterns have diversified due to rising incomes and lifestyle changes.
3. Inflation measurement must reflect current consumption behaviour to remain relevant and credible.
4. Without periodic revision, the index risks misrepresenting the actual inflation experienced by households.

Key Features of the CPI 2024 Series

1. Updated Consumption Basket and Weights

a. The new CPI series is based on the Household Consumption Expenditure Survey (HCES) 2023–24.
b. Items that now account for a larger share of household expenditure have been assigned greater weight.
c. Goods and services with a reduced spending share have been given a lower weight.
d. The basket reflects increased spending on services and emerging consumption trends.

2. Improved Methodology

a. The revised CPI is aligned more closely with international statistical standards while retaining India-specific features.
b. The methodological framework has undergone scrutiny, expert consultation, and testing of alternatives. The revision ensures comparability of inflation across countries.

3. Enhanced Data Collection Mechanisms

a. The new series incorporates online price data for services such as telecom and airfares.
b. Computer-assisted price collection has been introduced to reduce manual errors and enable real-time validation.
c. The CPI now draws more extensively on administrative data sources such as rail fares, postal charges, fuel prices, and Public Distribution System prices.
d. The integration of survey data, administrative records, and digital sources improves reliability and timeliness.

Significance of the Base Revision

1. Better Reflection of Cost of Living: The revised CPI more accurately captures the inflation actually experienced by households. It ensures that price changes in essential goods and services are represented according to their real importance in household budgets.

2. Improved Monetary Policy Transmission: CPI-based inflation is the primary anchor for the Reserve Bank of India's monetary policy decisions. A more accurate index enables better calibration of interest rates and inflation-targeting measures.

3. Impact on Income and Social Security Adjustments: CPI is used to adjust wages, dearness allowance, pensions, and social security benefits. A realistic index protects purchasing power and ensures fairness in compensation adjustments.

4. Greater Statistical Credibility: Alignment with global standards enhances India's credibility in international economic comparisons. Improved transparency and methodological robustness strengthen trust in official statistics.

Institutional and Administrative Effort

1. The base revision exercise involves **coordination across statistical agencies, field offices, and expert bodies.**
2. The **Ministry of Statistics and Programme Implementation (MoSPI) has engaged with national and international experts** to ensure methodological soundness.
3. The **process ensures continuity with the previous series** while incorporating necessary improvements.

Conclusion: The CPI base revision from 2012 to 2024 represents more than a technical update; it is an essential recalibration of how inflation is measured in a changing economy. By updating the consumption basket, refining methodology, and modernising data collection, the revised CPI strengthens its role as a reliable indicator of the cost of living and a critical guide for monetary policy, income adjustments, and economic governance.

Question: Discuss the significance of the CPI base year revision from 2012 to 2024 and its implications for inflation measurement and policy formulation.

Source: The Hindu

Farmers' Pulse: On India and its Demand for Pulses

UPSC Syllabus: Gs Paper 3- Agricultural

Introduction

India manages its high demand for pulses through imports, price stabilisation, and limited MSP procurement. Yet domestic production remains below demand. Pulses are vital for nutrition and rural livelihoods. Recent concerns over possible import commitments have increased political sensitivity. The issue reflects deeper structural weaknesses in procurement, pricing, and productivity that affect both farmers and food security.

Status of India's Pulses Sector

1. **Persistent Demand–Supply Gap:** India produces around **2.5 crore tonnes**, while demand is nearly **3 crore tonnes**. Imports are used to bridge this gap.

2. **Rainfed Production Base:** Nearly **80% of pulse production depends on rainfed areas**, which makes output uncertain and vulnerable to weather risks.

3. Recovery After Decline: Production fell to **16.35 MT in 2015–16**, requiring **6 MT of imports**. By **2022–23**, production rose to **26.06 MT**, marking a **59.4% increase**, along with a **38% rise in productivity**.

4. **Reduced but Continued Import Dependence:** Import dependence declined from **29% to 10.4%**, but imports remain necessary to meet total demand.

5. **Regional Concentration:** Madhya Pradesh, Maharashtra, and Rajasthan contribute about **55% of output**. The top ten states account for over **91% of national production**.

6. **Future Production Outlook:** Domestic supply is projected at **30.59 MT by 2030** and **45.79 MT by 2047**. With focused strategy, supply may reach **48.44 MT by 2030** and **63.64 MT by 2047**.

Importance of India's Pulses Sector

1. **Nutritional Security:** Pulses provide nearly **one-fourth of non-cereal protein intake**, making them essential for balanced diets.

2.**Livelihood Support:** The sector sustains more than **5 crore farmers and their families**, forming a major part of rural income.

3.**Food Security and Sustainability:** Pulses are important for food security and support sustainable agriculture with environmental benefits.

4. **Crop Diversity Across Seasons:** India grows **12 pulse crops** across kharif, rabi, and summer seasons due to diverse agro-climatic conditions.

Structural Weaknesses and Market Risks in India's Pulses Sector

1. **Import Sensitivity and Price Impact:** A single import decision can reduce consumer prices quickly but may depress domestic prices when supply increases.

2. **Weak MSP Framework:** Unlike rice and wheat, pulses lack a reliable procurement system. Under the **Price Support Scheme**, procurement ranged between **2.9% and 12.4%** during 2019–24.

3. **Inadequate Procurement Infrastructure:** Many States do not have sufficient procurement centres. Farmers often sell to private traders regardless of MSP.

4. **Low Investment Trap:** Weak price assurance and rainfed risks discourage farmers from investing in pulses. This creates a cycle of low productivity and continued import dependence.

5. **Policy Contradictions and Political Sensitivity:** Opening markets to foreign pulses may reduce domestic prices and contradict self-sufficiency goals, increasing political tension.

Government Initiatives for Self-Reliance

1. **Mission for Atmanirbharta in Pulses:**

- Announced in Union Budget 2025–26 as a six-year focused initiative targeting pigeonpea, black gram, and lentil.

- The Mission has a **₹11,440 crore outlay**, targeting **310 lakh hectares** and **350 lakh tonnes production by 2030–31**.

2. **Two-Pillar Strategy:** Horizontal expansion aims to increase area using rice fallow lands and intercropping. Vertical expansion focuses on yield improvement through better practices and technology.

3. **Technology and Seed Improvement:**

- Measures include improved varieties, hybrids, seed treatment, quality assurance, scientific sowing, and integrated nutrient, pest, weed, and water management.

- **District-Focused Planning:** A district-wise quadrant approach identifies clusters for action. Special focus is on **111 high-potential districts contributing 75% of output**.

- **Cluster-Based Seed Systems:** "One Block–One Seed Village" hubs are promoted through FPOs to strengthen seed distribution.

4. Evidence-Based Recommendations: The framework is based on a primary field survey of **885 farmers across Rajasthan, Madhya Pradesh, Gujarat, Andhra Pradesh, and Karnataka**, ensuring that the recommendations reflect ground-level realities.

Conclusion

India has improved pulse production but still depends on imports to meet demand. Weak procurement systems and rainfed risks keep farmers insecure. Self-sufficiency requires strong MSP support, better infrastructure, and productivity gains. Without structural reforms, pulse farmers will remain vulnerable, and import dependence will continue, affecting food security and policy stability.

Question for practice:

Discuss the structural weaknesses in India's pulses sector and examine how recent government initiatives aim to achieve self-sufficiency while addressing import dependence and farmer vulnerability.

Source: The Hindu

Welfare for all — the AI race India should win

UPSC Syllabus: Gs Paper 3- Science and technology

Introduction

India's AI journey must move beyond global competition and technological display. The real opportunity lies in solving basic development gaps. **Seventy per cent of global food comes from low-productivity small farmers. 4.5 billion people lack essential healthcare. 739 million adults and 250 million children lack basic literacy.** AI offers practical tools to address these deep welfare challenges. The focus should be on improving lives, not winning a geopolitical race.India already has a growing AI ecosystem that can support this welfare-oriented transformation.

Current status of India's AI ecosystem

1. **Strong digital public infrastructure base:** India's digital public infrastructure gives AI developers a **rare structural advantage**. Platforms such as **Aadhaar, UPI, DigiLocker, Bhashini, and DEPA** allow fast scaling of **identity, payments, data sharing, and service delivery**. This **integrated national architecture** supports **real-world AI use at population scale**, which few countries can replicate.

2. **Rapid growth in AI adoption and industry size:** India's technology sector is projected to cross **USD 280 billion** in annual revenue. Over **6 million people** are employed in the tech and AI ecosystem. Around **87% of enterprises** actively use AI solutions, with strong adoption in **BFSI, healthcare, manufacturing, retail, and automotive** sectors.

3. **Expanding startup and developer ecosystem:** India hosts around **1.8 lakh startups**, and nearly **89% of new startups**launched last year used AI in their products or services. The country has **1,800+ Global Capability Centres**, including **500+ AI-focused centres**. India is also the **second-largest contributor** to AI projects on **GitHub**, showing strong developer participation.

4. Global recognition and competitiveness: India ranks among the **top four countries** in AI skills and policy readiness and stands **third globally** in AI competitiveness. This reflects **talent depth, research output, startup activity, and digital infrastructure**, but the strength remains **skewed towards deployment rather than core model building**.

India's Potential to Use AI

1. AI for Agriculture:

- **Improving smallholder productivity:** Most of the world's food comes from small farmers with low productivity. AI tools can improve yield, reduce costs, and increase income.

- **Kisan E-Mitra chatbot:** The national chatbot handles **20,000 queries daily in 11 regional languages.** It supports farmers at scale.

- **Saagu Baagu project in Telangana:** The AI-led project **doubled chilli farmers' earnings.** It increased yield, reduced pesticide and fertiliser use, and improved sale prices.

2. AI for Healthcare Access

- **Severe doctor shortage:** India's doctor-to-patient ratio in public hospitals is **1:11,000.** This creates a huge access gap.

- **eSanjeevani telemedicine platform:** By mid-2025, it conducted **389 million virtual consultations.** It expanded access without physical infrastructure.

- **AI-based disease detection:** Qure.ai's TB detection algorithms have reached millions. AI supports diagnosis at scale.

3. AI for Human Capital and Skills

- **Large but under-skilled workforce:** India has **950 million workers, but only 5% have formal skill training.** Skill building is a major challenge.

• **FutureSkills PRIME:** The programme enrolled **1.6 million learners. 41% are women and 85% are from Tier II and Tier III cities.**

• **DIKSHA platform:** It reached **275 million users with 70% rural penetration.** AI can democratise learning across regions.

Structural Issues in India's AI Road

1. **Digital divide and gender gap:** Only **24% of rural households have internet access compared to 66% in urban areas.** India is near the bottom in digital gender parity among 125 countries studied.

2. **Energy and infrastructure stress:** Weak grid reliability and transmission capacity will face more pressure due to AI's growing energy demand.

3. Talent shortage in AI roles: For every **10 AI roles, only one qualified engineer is available.** Talent is limited.

4.,**Dependence on foreign supply chains:** India imports **over 90% of semiconductor chips.** The US–China rivalry has fragmented the global tech system.

5. **Weak data and regulatory systems:** India lacks high-quality annotated datasets, especially in regional languages. Complex customs and varying state rules slow innovation.

6. **Funding and physical infrastructure gaps:** Late-stage startups lack scale funding and rely on foreign capital after Series B. Traffic congestion and fragmented operations increase costs.

Initiatives taken to strengthen India's AI strategy

1. **IndiaAI Mission:** The government launched the IndiaAI Mission in March 2024 with over ₹10,300 crore to build a strong indigenous AI ecosystem. It aims to democratise AI technology, improve data quality, and boost competitiveness.

2. **INDIAai National Portal:** INDIAai is India's national AI portal supporting knowledge sharing, research insights, industry news and resources to connect stakeholders across the ecosystem.

3. **AI Governance Guidelines:** Government has rolled out governance guidelines under IndiaAI that aim to make AI safe, inclusive and pro-innovation without heavy regulation that stifles growth.

4. **Centres of Excellence (CoEs):**The government set up **three CoEs** in **Healthcare, Agriculture, and Sustainable Cities**, and announced a **fourth CoE for Education** in **Budget 2025**, to support collaborative and scalable AI innovation.

5. **Sarvam AI and BharatGen Models:** Initiatives like Sarvam AI (for smarter public services) and BharatGen AI (multilingual, multimodal model) focus on homegrown capabilities that reflect India's linguistic and cultural diversity.

6. **AI Impact Summit 2026:** India will host the AI Impact Summit to showcase its AI capabilities, encourage innovation and build international collaborations.

Conclusion

India represents a fourth path beyond the US–China–EU model. AI leadership should be measured by **higher farm productivity, better healthcare access, and improved literacy.** The goal is not AI for power, but AI for people. India must build advanced AI systems while closing digital, energy, talent, and infrastructure gaps together.

Question for practice:

Examine how India can use artificial intelligence to improve agriculture, healthcare, and human capital while addressing structural challenges in its AI ecosystem to achieve inclusive welfare.

Source: The Hindu

AI Fakes and the Need for Disclosure

Source: The post **"AI Fakes and the Need for Disclosure"** has been created, based on **"AI Fakes and the Need for Disclosure"** published in **"The Hindu" on 13th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2026 mandate prominent labelling of AI-generated imagery on social media platforms. These amendments seek to introduce transparency in digital ecosystems that are increasingly saturated with synthetic and AI-manipulated content. While the requirement of labelling reflects a calibrated regulatory intervention, the simultaneous reduction in takedown timelines raises substantive concerns regarding due process, intermediary liability, and the constitutional guarantee of freedom of speech and expression.

Need for Labelling AI-Generated Imagery

1. **Protection against misinformation:** AI-generated images have the capacity to closely imitate real events and personalities, thereby influencing public opinion, electoral processes, and social harmony. Mandatory labelling acts as a preventive safeguard against the viral spread of deceptive synthetic content.
2. **User's Right to Information:** Transparency in digital communication enables users to make informed judgments about the authenticity of content. Labelling strengthens the informational autonomy of citizens in the digital public sphere.
3. **Preservation of Trust in Digital Spaces:** Clear identification of synthetic media helps maintain epistemic integrity in online platforms, thereby preserving user trust in digital communication networks.
4. **Regulatory Restraint:** The amendment does not prescribe a rigid format or size for disclosure, thereby allowing platforms operational flexibility. It also exempts clearly fictional or artistic AI-generated imagery, indicating that the regulation is minimal yet necessary.

5. **Global Context:** With AI governance becoming a central issue in international regulatory deliberations and multilateral forums, calibrated domestic regulation aligns India with emerging global best practices on synthetic media transparency.

Challenges in Implementation

1. **Technological Arms Race:** Detection mechanisms for AI-generated imagery face continuous obsolescence due to rapid advancements in generative AI technologies. Developers consistently innovate to bypass detection systems, creating a regulatory lag.
2. **Proactive Detection Burden on Platforms:** The requirement for platforms to identify and label AI-generated imagery proactively raises questions regarding technical feasibility. Smaller intermediaries may face disproportionate compliance costs, affecting innovation and competition.

Concerns Regarding Reduced Takedown Timelines

1. **Threat to Safe Harbour Protection:** Under Section 79 of the Information Technology Act, 2000, intermediaries enjoy safe harbour protection conditional upon due diligence compliance. Extremely short takedown timelines increase the risk of losing intermediary immunity.
2. **Chilling Effect on Free Speech:** Compressed compliance windows incentivise platforms to adopt a "take-down-first, verify-later" approach, which may result in over-censorship and suppression of legitimate expression protected under Article 19(1)(a) of the Constitution.
3. **Barrier to Entry for Smaller Platforms:** Large technology companies with substantial compliance infrastructure may manage round-the-clock monitoring, whereas startups and smaller platforms face structural disadvantages, thereby affecting market competition.
4. **Lack of Procedural Transparency:** The absence of publicly accessible consultation comments and the lack of prior indication regarding shortened timelines undermine procedural fairness and transparency in delegated legislation.
5. **Democratic Deficit:** Given that the IT Rules are framed under delegated legislative authority, major regulatory shifts without substantive parliamentary debate raise concerns about democratic accountability. This is particularly significant as aspects of the IT regulatory framework remain under judicial scrutiny.

Way Forward

1. **Transparent Consultation Mechanisms:** The government should institutionalise mechanisms to publish stakeholder comments and regulatory impact assessments to enhance accountability in rule-making.
2. **Graduated Compliance Framework:** A differentiated regulatory approach based on platform size and user base would balance regulatory objectives with ease of doing business.
3. **Strengthening Due Process Safeguards:** Clear criteria for issuing takedown notices and robust post-facto review mechanisms would reduce arbitrariness and protect constitutional freedoms.
4. **Investment in Independent AI Audit Systems:** Encouraging third-party certification and independent audit systems for synthetic content detection would improve credibility and reduce sole reliance on platform discretion.
5. **Parliamentary Oversight:** Major governance interventions affecting digital rights should undergo legislative scrutiny to ensure democratic legitimacy and constitutional conformity.

Conclusion: The labelling of AI-generated imagery constitutes a proportionate and necessary regulatory response to preserve informational integrity in an era of synthetic media proliferation. However, the abrupt shortening of takedown timelines risks undermining freedom of expression, procedural fairness, and competitive neutrality in the digital marketplace. Effective AI governance must therefore balance transparency with constitutional safeguards, ensuring that regulation remains restrained, accountable, and aligned with democratic principles.

Question: "The labelling of AI-generated imagery on social media is necessary to preserve informational integrity. However, recent amendments to the IT Rules raise concerns regarding freedom of expression and procedural transparency." Discuss.

Source: The Hindu

Fiscal Federalism and the 16th Finance Commission

Source: The post **"Fiscal Federalism and the 16th Finance Commission** has been created, based on **"Fiscal Federalism and the 16th Finance Commission"** published in **"The Hindu " on 13th February 2026.**

UPSC Syllabus: GS Paper-2- Polity

Context: The 16th Finance Commission, chaired by Arvind Panagariya, has submitted its recommendations for the award period 2026–31, and the Union government has accepted them. The key issue is whether the recommendations have enhanced the fiscal space and autonomy of States within India's federal framework.

Constitutional Background

1. Article 270 of the Constitution provides for the distribution of the net proceeds of certain Central taxes between the Union and the States.
2. Article 280 mandates the constitution of a Finance Commission every five years to recommend the principles governing such distribution.
3. The divisible pool includes corporation tax, personal income tax, Central Goods and Services Tax (CGST), and the Centre's share of Integrated GST (IGST).
4. Cess and surcharge levied by the Union government are excluded from the divisible pool.
5. For 2025–26, the divisible pool constitutes about 81% of the Centre's gross tax revenue after excluding cess and surcharge.

Past Trends in Devolution

1. The 13th Finance Commission had fixed vertical devolution at 32% of the divisible pool.
2. The 14th Finance Commission increased vertical devolution to 42% and reduced tied transfers under Centrally Sponsored Schemes, thereby strengthening fiscal federalism.
3. The 15th Finance Commission reduced the share to 41% due to the reorganisation of the erstwhile State of Jammu and Kashmir into Union Territories.

Demands of States Before the 16th FC

I. Vertical Devolution

a. Eighteen States demanded that the share of States be increased from 41% to 50%.

b. Some States demanded an increase to a range between 45% and 48%.
c. Many States demanded that cess and surcharge be included in the divisible pool.
d. Several States sought the imposition of a cap on cess and surcharge to prevent erosion of the divisible pool.

II. Horizontal Devolution

a. Many States demanded that equity-based parameters such as income distance, population, and area should continue to dominate the distribution criteria.
b. Some States recommended reducing the weight assigned to income distance.
c. Industrialised States such as Maharashtra, Gujarat, Tamil Nadu, Karnataka and Telangana demanded the inclusion of States' contribution to GDP as a criterion for horizontal devolution.

Key Recommendations of the 16th Finance Commission

I. On Vertical Devolution

a. The Commission has retained the States' share at 41% of the divisible pool.
b. It has rejected the demand to include cess and surcharge in the divisible pool.
c. It has also rejected the proposal to impose a cap on cess and surcharge.
d. The Commission has justified its decision by stating that the present constitutional framework does not permit inclusion of cess and surcharge in the divisible pool.
e. It has further stated that the Union government requires adequate fiscal space to meet national priorities such as defence and infrastructure.
f. It has also observed that a significant portion of Union expenditure under Centrally Sponsored Schemes is ultimately routed to the States.

II. On Horizontal Devolution

a. The Commission has followed the principle that changes in State shares should be gradual and not disruptive.
b. It has recognised the need to give due importance to efficiency and growth performance.
c. It has introduced a new criterion, namely States' contribution to GDP, in the horizontal devolution formula.
d. It has assigned weights to various criteria in a manner that produces a directional change without causing drastic redistribution.
e. As a result, the share of southern and western States has marginally increased.
f. The share of large northern and central States has marginally decreased.

Assessment of the Impact on States

1. The States have not gained significantly in terms of vertical devolution, as the share remains unchanged at 41%.
2. Industrialised and growth-oriented States have gained marginally through the recognition of their contribution to GDP.
3. The overall framework reflects continuity rather than a major restructuring of fiscal federalism.
4. Therefore, the outcome represents a status quo with incremental reform rather than a substantial fiscal gain for States.

Way Forward

1. The Union government should progressively reduce its reliance on cess and surcharge to strengthen the divisible pool.
2. A transparent and consultative mechanism should be institutionalised in future Finance Commissions to enhance cooperative federalism.
3. Greater weight may gradually be assigned to efficiency and tax effort while preserving equity concerns.
4. States should improve the targeting and efficiency of subsidies, especially in sectors such as power.
5. Both Centre and States should pursue fiscal consolidation to ensure long-term macroeconomic stability.
6. Public sector enterprise reforms at both levels should be accelerated to improve resource mobilisation and reduce fiscal stress.

Conclusion: The 16th Finance Commission largely maintains the existing fiscal architecture by retaining the 41% vertical devolution. However, the inclusion of States' contribution to GDP as a criterion signals a calibrated shift towards performance-based distribution. Thus, while States have not gained substantially in terms of quantum, the recommendations introduce a gradual move towards balancing equity with efficiency within India's federal fiscal framework.

Question: Have States gained from the 16th Finance Commission? Discuss.
Source: The Hindu

The SHANTI Act and India's Nuclear Liability Reforms

Source: The post **"The SHANTI Act and India's Nuclear Liability Reforms"** has been created, based on **"A case against the SHANTI Act | Explained"** published in **"The Hindu" on 14th February 2026.**

UPSC Syllabus: GS Paper-3- Science and Technology

Context: The SHANTI Act introduces major reforms in India's nuclear power sector by allowing private participation and modifying liability provisions under the Civil Liability for Nuclear Damage Act. While the Act aims to increase nuclear capacity and attract investment, it has raised serious concerns regarding safety, accountability, and victim compensation.

Key Features of the SHANTI Act

1. The Act allows private companies to operate nuclear power plants, thereby ending the Union government's monopoly in nuclear plant operations.
2. The Act indemnifies nuclear suppliers by shifting liability entirely to operators, even if defective equipment supplied by vendors causes an accident.
3. The Act removes the operator's "right of recourse," which earlier allowed operators to sue suppliers responsible for faulty equipment.
4. The Act caps operator liability between ₹100 crore and ₹3,000 crore depending on plant size and caps total liability, including government liability, at 300 million SDR (about ₹3,900 crore).
5. The Act removes Clause 46 of the CLNDA, which earlier allowed victims to seek remedies under other civil or criminal laws.

6. The Act provides statutory backing to the Atomic Energy Regulatory Board but restricts its independence because appointments are influenced by the Atomic Energy Commission.

Rationale and Critique of Supplier Indemnity

1. The government argues that supplier indemnity is necessary to attract foreign suppliers who were reluctant to enter India due to strict liability provisions.
2. International pressure also played a role, as provisions in the National Defense Authorization Act encouraged India to align its nuclear liability regime with global norms.
3. However, historical nuclear accidents show that supplier design defects often contributed significantly.
4. The accident at the Fukushima Daiichi Nuclear Power Plant revealed containment design flaws.
5. The disaster at the Chernobyl Nuclear Power Plant was linked to reactor design weaknesses.
6. The accident at the Three Mile Island Nuclear Generating Station involved control room design issues.
7. Therefore, supplier indemnity reduces accountability despite evidence of supplier responsibility in past accidents.

Liability Caps and the Risk of Moral Hazard

1. Capping liability creates moral hazard because firms protected from financial consequences may reduce investments in safety.
2. The liability cap of about ₹3,900 crore is extremely small compared to actual accident costs.
3. The Fukushima disaster is estimated to cost about ₹46 lakh crore, and the Chernobyl disaster caused losses of around ₹21 lakh crore.
4. Because compensation would cover only a small portion of real damages, victims may bear losses themselves.
5. The Act also indemnifies operators for accidents caused by natural disasters, weakening India's earlier principle of absolute liability for hazardous industries.

Significance of Nuclear Energy in India

1. Nuclear power contributes only about 3% of India's electricity generation.
2. India's target of 10 GW by 2000 resulted in only 2.86 GW of installed capacity.
3. India's target of 20 GW by 2020 resulted in only 6.78 GW of capacity.
4. These shortfalls were caused by high capital costs, technological delays, safety concerns, and public opposition.
5. Small modular reactors are still experimental and may be more expensive per unit of power.
6. Therefore, the new target of 100 GW by 2047 appears difficult to achieve.

Challenges Posed by the SHANTI Act

1. The Act may weaken nuclear safety because supplier indemnity reduces accountability for defective reactor designs and equipment.

2. The Act may reduce compensation for victims because liability caps are far below realistic accident damage estimates.
3. The Act may create regulatory capture because the Atomic Energy Regulatory Board lacks full independence from the Atomic Energy Commission.
4. The Act may increase public opposition to nuclear projects because communities fear inadequate compensation in case of accidents.
5. The Act may discourage safety innovation because companies facing limited liability have fewer incentives to invest in advanced safety technologies.
6. The Act may lead to fiscal burden on the government because taxpayers may ultimately bear costs beyond liability caps.
7. The Act may not significantly increase nuclear capacity because structural problems like high costs, land acquisition issues, and technological dependence remain unresolved.

Economic Implications

1. Nuclear projects create large commercial opportunities for private firms and multinational suppliers.
2. The Act ensures companies can profit from nuclear projects while facing limited liability in case of accidents.
3. Weak regulatory oversight may also lead to cost overruns and inefficient project execution.

Way Forward

1. The government should restore supplier liability in cases involving defective designs.
2. The liability cap should be increased and linked to realistic accident cost estimates.
3. The independence of the nuclear regulator should be strengthened.
4. Transparent safety audits and public disclosure of risks should be ensured.
5. Nuclear expansion should be balanced with renewable energy development.

Conclusion: The SHANTI Act aims to expand nuclear energy and attract investment, but its provisions on supplier indemnity and liability caps create safety, accountability, and compensation concerns. A balanced policy that prioritises public safety, regulatory independence, and realistic energy planning is essential for sustainable nuclear development.

Question: Critically examine the SHANTI Act in the context of nuclear liability, safety regulation, and India's energy policy. Does capping liability create moral hazard?

Source: The Hindu

SaaSpocalypse and India's IT Challenge

Source: The post **"SaaSpocalypse and India's IT Challenge"** has been created, based on **"Why the Indian IT sector must course-correct amidst 'SaaSpocalypse' fears"** published in **"Indian Express" on 14th February 2026.**

UPSC Syllabus: GS Paper-3- Science and Technology

Context: India's IT services sector, led by companies such as **Tata Consultancy Services**, **Infosys**, and **Wipro**, has been a key driver of exports, employment, and economic growth over the last two decades. However, new enterprise automation tools introduced by firms like **Anthropic** have raised concerns that artificial intelligence could disrupt traditional IT outsourcing models, leading to fears of a "SaaSpocalypse."

Drivers Behind 'SaaSpocalypse' Concerns

1. Automation of Core IT Services: Artificial intelligence tools are increasingly capable of performing tasks such as coding, testing, customer support, contract analysis, and data processing. These activities form the core of India's IT services exports, and their automation could reduce demand for traditional outsourcing.

2. Threat to Labour-Arbitrage Model: India's IT industry has historically relied on providing large-scale services using relatively lower-cost skilled manpower. As AI reduces the need for human intervention in routine knowledge work, this labour-arbitrage model may lose relevance.

3. Market Signals: Recent sharp declines in IT company stock prices and the fall in the Nifty IT index reflect investor concerns about the sector's future profitability. Analysts have also predicted potential revenue losses in the coming years due to AI adoption.

4. Shift from SaaS to AI Platforms: Many enterprise clients may move away from traditional software platforms toward autonomous AI systems that can perform complex tasks independently, thereby reducing reliance on IT service providers.

Challenges for Indian IT Sector

1. Business Model Crisis: The traditional billing model based on employee hours may become obsolete as companies increasingly demand outcome-based pricing and automated solutions.

2. Skill Obsolescence: A large portion of the IT workforce trained in legacy technologies may face redundancy unless they are reskilled in emerging areas such as AI, cloud computing, and data science.

3. Competition from Startups and Global AI Firms: AI-native startups and global technology companies can rapidly disrupt markets, posing serious competition to established Indian IT firms.

4. Profitability Pressure: IT companies will need to invest heavily in research and development, AI infrastructure, and employee training, which could reduce short-term profitability.

5. Dependence on Foreign Clients: India's IT sector depends heavily on clients from developed economies, and any slowdown in global demand or changes in outsourcing patterns can negatively affect growth.

Opportunities for Indian IT

1. AI Services and Consulting: Indian IT firms can provide services such as AI integration, digital transformation consulting, cloud migration, and enterprise automation, which are expected to see rising demand.

2. Platform and Intellectual Property Development: Companies can shift from manpower-based services to developing proprietary AI platforms, software products, and subscription-based solutions that generate long-term revenue.

3. Domain Expertise Advantage: Indian IT firms possess deep expertise in sectors such as banking, healthcare, insurance, and telecom, and combining this domain knowledge with AI solutions can create new value for clients.

4. Emerging Technology Areas: Opportunities also exist in fields such as cybersecurity, semiconductor design, blockchain technology, and quantum computing, which require advanced technical skills.

Roadmap for Course Correction

1. Move Up the Value Chain: Indian IT firms should transition from providing routine coding services to offering high-end consulting, system architecture design, and AI-driven business solutions.

2. Massive Reskilling: Companies and the government must invest in large-scale reskilling programmes in artificial intelligence, machine learning, data analytics, and cybersecurity to prepare the workforce for future needs.

3. Invest in Research and Development: IT companies should develop their own intellectual property, AI platforms, and software products rather than depending solely on outsourcing contracts.

4. Develop Domestic Market: Expanding IT adoption in sectors such as agriculture, manufacturing, healthcare, and governance can create new demand and reduce dependence on foreign clients.

5. Policy Support: The government should support innovation through favourable policies, funding for startups, improved digital infrastructure, and collaboration between academia and industry

6. Ethical and Responsible AI: Indian IT firms must focus on data security, privacy protection, and ethical AI frameworks to build trust and global credibility.

Conclusion: The rise of artificial intelligence represents a structural shift rather than an immediate collapse of India's IT sector. By moving toward innovation, skill development, and high-value services, India's IT industry can remain competitive and continue to contribute to economic growth in an increasingly automated world.

Question: The rise of enterprise AI tools has triggered concerns about a 'SaaSpocalypse' in India's IT services sector. Analyse the challenges posed by AI to India's IT industry and suggest a roadmap for course correction.

Source: Indian Express

Overdue upgrade: On the new series of the Consumer Price Index

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

India has updated the Consumer Price Index after more than a decade to reflect major economic and consumption changes. The new series uses **base year 2024** and consumption patterns from **Household Consumption Expenditure Survey 2023–24**. Changes in spending behaviour, growth of services, digital markets, and reduced food expenditure made revision necessary. The updated CPI aims to provide a **more realistic, stable and representative measure of inflation** for households and policymakers.

What is the Consumer Price Index (CPI)?

The Consumer Price Index measures the changes over time in general level of retail prices of selected goods and services that households purchase for the purpose of consumption.

Policy guide: CPI guides income adjustments, social security measures and monetary policy decisions, including interest rates.

Economic mirror: It converts everyday price experiences into an official indicator of inflation.

Published by: The index is published by the **Ministry of Statistics & Programme Implementation.** The **Field Operations Division of the National Sample Survey**, under MoSPI.

Structural Changes in the New CPI Series

1. **Base year:** The new CPI uses 2024 as base year, replacing 2012, and reflects consumption patterns of HCES 2023–24.

1. **Revised Item Basket**: The number of weighted items has **increased from 299 to 358 at the all-India level**, with **goods rising from 259 to 308** and **services from 40 to 50,** which improves the representation of present consumption patterns.

2. **Market coverage:** Price data is collected from 1,465 rural markets and 1,395 urban markets, with inclusion of 12 online marketplaces.

3. **COICOP 2018 Adoption**: The series follows the Classification of Individual Consumption According to Purpose 2018, which **replaces 6 broad groups with 12 divisions, 43 groups, 92 classes and 162 sub-classes for better classification and global comparability.**

4. **Food weight:** Food and beverages weight reduced to 36.75% from 45.86%, reflecting lower share in household spending.

5. **Housing expansion:** Housing now includes water, electricity, gas and fuels, with weight rising to 17.67% from 10.07%.

6. **New Items Added**: Items such as online media services, value added dairy products, barley and its product, pen-drive and external hard disk, attendant, babysitter and exercise equipment are included in the basket.

7. **Outdated Items Removed**: Items like VCR or DVD player, radio, tape recorder, second-hand clothing, CD or DVD cassettes and coir rope are removed from the basket.

8. **Digital Data Collection**: The series introduces Computer Assisted Personal Interviewing and includes e-commerce prices, online sources and administrative data to improve data quality, timeliness and coverage.

9. **Methods Used**

   • The **Jevons index** (geometric mean of price relatives) is used for compiling elementary indices at the item level.

   • The **Young or Modified Laspeyres' index** is used for compiling higher level indices.

   •This dual-stage methodology ensures accurate, consistent price measurement.

Significance of the Revised CPI

1. **Realistic inflation:** Updated basket and weights ensure inflation reflects current consumption patterns. As Spending behaviour has changed due to economic transformation, digital markets, service expansion and free foodgrain distribution to 80 crore households.

2. **Lower volatility:** Reduced food weight makes headline inflation more stable because food prices are highly volatile.

3. **Policy accuracy:** RBI's Monetary Policy Committee gets a clearer inflation picture for interest rate decisions.

4. **Fiscal predictability:** More stable inflation improves Budget planning and index-linked payments like dearness allowance.

5. **Service relevance:** Greater service coverage reflects structural change in the economy.

6. **Better comparison:** Alignment with international standards supports global inflation comparison.

7. **Household relevance:** CPI continues to capture how price changes affect daily life and spending.

8. **Improved data quality:** Wider sources and digital collection improve timeliness and accuracy of price information.

9. **Economic calibration:** Inflation signals are more closely matched with prevailing economic conditions.

Operational Issues

1. **Limited history:** Earlier index values are not fully available, so historical comparison is difficult.

2. **Partial back data:** Index values exist from January 2025, but year-on-year comparison is possible only for January 2026.

3. **Linking factor:** MoSPI provides a linking factor to estimate earlier data instead of full back series.

4. **Data transparency:** Providing complete back data would ease comparison across time.

5. **Revision cycle:** CPI should be revised every five years instead of long gaps like the previous eleven years.

Conclusion

The updated CPI reflects changing consumption, expanding services and digital markets, making inflation measurement more realistic and stable. It strengthens monetary and fiscal decision-making while preserving the link with household experience. Regular revision and full historical data will further improve transparency, comparability and reliability of inflation measurement in the future.

Question for practice

Discuss how the new series of the Consumer Price Index (CPI) reflects changes in India's consumption patterns and why it is important for economic policy and inflation measurement.

Source: The Hindu

The labour codes redefine wages, empower the worker

UPSC Syllabus: Gs Paper 3- Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment

Introduction

India's labour codes represent a major structural reform aimed at expanding **financial inclusion, social security, and income protection** within employment. By merging fragmented labour laws and embedding long-term financial safeguards, the reforms seek to ensure that economic growth benefits workers more equitably. They attempt to integrate millions of workers into formal systems of protection while modernising labour governance and addressing long-standing exclusions in India's labour market.

About India's Labour Codes Reform

1. **Second-generation labour reforms:** Labour reforms were widely demanded after economic liberalisation in 1991, but real legislative action began only in 2017 with the introduction of four labour codes.

2. **Coverage and consolidation:** The codes cover wages, industrial relations, social security, and occupational safety and health by merging 29 existing labour laws into a simplified framework.

3. **Legislative timeline and notification:** Parliament passed the codes in 2019 and 2020, and they were formally notified on 21 November 2025, marking their operational phase.

4. **Purpose of consolidation:** The reform aims to modernise labour governance, improve transparency, and create a predictable regulatory system for workers and employers.

5. **Addressing outdated legal structures:** Earlier labour laws were fragmented and no longer suited to changing labour markets, making consolidation necessary.

Structural Labour Reforms for Strengthening Workers' Financial Security

1. **Redefinition of wages for higher social security:** Wages must now form at least **50% of total remuneration**, increasing PF, pension and gratuity benefits and strengthening long-term financial protection.

2. **Correction of earlier contribution practices:** Many establishments earlier kept wages at **30–35% of remuneration** to reduce social security payments; the new rule removes this practice.

3. **Gratuity for fixed-term employees:** Workers on fixed-term contracts now receive gratuity after **one year of service**, ensuring they do not leave employment without terminal financial benefit.

4. **Higher financial responsibility for large employers:** Expanded gratuity coverage increases financial obligations for large corporations such as **TCS, Infosys, HCLTech and L&T**, where reliance on fixed-term employment is high.

5. **Expansion of social security to gig and unorganised workers:** For the first time, **gig, platform and informal workers are formally recognised**, enabling access to insurance, PF mechanisms and welfare schemes.

6. **Portability of social security benefits:** Benefits are transferable across **States and employment**, providing protection to migrant and informal workers who lacked stable coverage earlier.

7. **Income protection through wage regulation:** A universal wage definition, statutory minimum wages, limits on arbitrary deductions and mandatory timely payment strengthen income stability.

8. **Improved financial inclusion of workers:** Expanded social security and stable earnings help workers build savings, manage life-cycle risks and participate more meaningfully in the formal economy.

Macroeconomic and Distributional Impact of Labour Codes

1. **Redistribution of income towards labour:** Higher social security and wage protection shift economic value from capital to workers.

2. **Stronger purchasing power and consumption:** Income security increases workers' purchasing power and raises domestic consumption.

3. **Improved savings and financial engagement:** Workers show improved savings behaviour and greater engagement with formal financial institutions.

4. **Demand-led growth through worker income circulation:** Worker income largely circulates within the domestic economy, generating demand-led growth.

5. **Reduction of economic vulnerability:** Stronger financial protection reduces vulnerability to economic shocks and supports social stability.

6. **Labour codes as instruments of inclusive growth:** By strengthening workers' financial base, the reforms function as instruments of inclusive growth.

Conclusion

India labour codes represent a structural shift towards financial inclusion, income security and equitable growth. By expanding social protection and redefining wages, they strengthen workers' financial dignity. Their real success depends on effective implementation, ensuring benefits reach workers in practice and enabling every worker to participate fully in India's economic progress, stability and long-term social justice outcomes.

For detailed information on **New Labour Codes** read this article here

Question for practice:

Evaluate how India's labour codes strengthen workers' financial security and promote inclusive economic growth through social security expansion and wage reforms.

Source: The Hindu

The UAE-India corridor is sparking a growth story

Source: The post **"The UAE-India corridor is sparking a growth story"** has been created, based on **"The UAE-India corridor is sparking a growth story"** published in **"The Hindu" on 16th February 2026.**

UPSC Syllabus: GS Paper-2- International Relations

Context: The economic partnership between **India** and **United Arab Emirates** has transformed into a dynamic growth corridor that integrates trade, investment, technology, and people-to-people ties. The signing of the **Comprehensive Economic Partnership Agreement** in 2022 accelerated bilateral trade, allowing the countries to reach the $100-billion trade target five years earlier than planned. This corridor now represents a model of how strategic alignment of policy, capital, and execution can drive mutual economic growth.

Scale and Depth of the Economic Corridor

I. Trade Expansion

1. Bilateral trade between India and the UAE crossed $100 billion rapidly and has now been targeted to reach $200 billion by 2032, reflecting strong economic momentum.
2. Non-oil trade reached about $65 billion and grew nearly 20 percent, indicating that the partnership has diversified beyond traditional hydrocarbon trade.
3. The expansion of trade in sectors such as gems and jewellery, electronics, food processing, and services demonstrates deeper integration of supply chains.

II. Investment Flows

1. UAE entities have invested more than $22 billion in India across infrastructure, logistics, healthcare, and technology sectors.
2. Indian companies have invested over $16 billion in the UAE in manufacturing, construction, renewable energy, and services industries.
3. Companies like **Reliance Industries**, **Ashok Leyland**, and **Larsen & Toubro** are executing major industrial projects in the UAE, showing long-term commitment.

4. UAE companies such as **DP World**, **Emirates NBD**, and **ADNOC** are investing heavily in Indian infrastructure, banking, and energy sectors.

III. Human and Connectivity Links

1. Nearly five million Indians live in the UAE and form its largest expatriate community, strengthening cultural and economic relations.
2. More than 1,200 weekly flights between the two countries facilitate tourism, trade, and professional exchanges.
3. These people-to-people ties create trust and business networks that sustain long-term cooperation.

Key Drivers Behind the Corridor's Success

I. Policy Architecture

1. CEPA removed tariffs on about 90 percent of goods, reducing trade barriers and encouraging business expansion.
2. The Bilateral Investment Treaty of 2024 strengthened investor confidence through dispute-resolution mechanisms and protection guarantees.
3. Strategic defence and security cooperation increased political trust and stability, which are essential for long-term investments.

II. Sectoral Diversification

1. The corridor has moved beyond oil trade into advanced manufacturing, renewable energy, financial services, logistics, and healthcare sectors.
2. Joint projects in solar energy, electric mobility, low-carbon chemicals, and fintech demonstrate a shift towards sustainable and innovation-driven growth.
3. Indian banks, IT firms, and healthcare providers are building operational presence in the UAE, strengthening service sector integration.

Emerging Areas of Cooperation

I. Artificial Intelligence and Digital Economy

1. India hosting the **AI Impact Summit** reflects its rising role in shaping global AI governance and innovation.
2. The UAE, which invested early in AI infrastructure and policy frameworks, is collaborating with India on data centres, cloud computing, and AI-driven industrial applications.
3. Cooperation in AI can improve productivity in sectors like logistics, healthcare, energy management, and urban planning.

II. Third-Country Market Expansion

1. The **Bharat Mart** project in the UAE will act as a global distribution hub for Indian goods to Africa, West Asia, and Eurasia.
2. India and the UAE are exploring joint digital infrastructure and capacity-building projects in Africa, which can enhance their geopolitical influence.
3. Such initiatives convert a bilateral partnership into a global economic platform.

Significance for India

1. The corridor boosts India's exports, supports manufacturing growth, and increases foreign direct investment inflows.
2. The UAE acts as a gateway for Indian firms to access European, African, and Middle Eastern markets, aiding global expansion.
3. Long-term LNG supply agreements improve India's energy security and reduce supply disruptions.
4. Collaboration in AI and advanced technology strengthens India's digital economy and innovation ecosystem.
5. Employment opportunities in the UAE support remittances and improve livelihoods for Indian workers.

Challenges and Concerns

1. Political instability in West Asia could disrupt trade routes and investments.
2. Differences in regulatory systems, taxation, and labour laws may create operational challenges for companies.
3. Overdependence on expatriate labour markets can create social and economic vulnerabilities.
4. Trade imbalances may occur if diversification is not sustained and domestic industries are not strengthened.

Way Forward

1. Both countries should expand CEPA into services, digital trade, and startup ecosystems.
2. They should establish joint AI research centres and innovation funds.
3. They should enhance logistics connectivity through ports, shipping corridors, and multimodal transport.
4. They should promote sustainable practices in energy, labour standards, and climate cooperation.

Conclusion: The India–UAE corridor demonstrates how strategic policy alignment, strong diaspora links, and sustained investments can transform bilateral relations into a global growth engine. As both economies integrate further into technology, infrastructure, and third-country markets, this corridor can become a model for South-South economic cooperation and global value chain integration.

Question: The India–UAE economic corridor has evolved from an energy-based relationship into a comprehensive strategic partnership. Discuss the key drivers, opportunities, and challenges in the growing ties between India and United Arab Emirates.

Source: The Hindu

FTAs as a Catalyst for India's Electronics Export Surge

Source: The post **"FTAs as a Catalyst for India's Electronics Export Surge"** has been created, based on **"How FTAs could offer India a $1 trillion electronics export window, with caveats"** published in **"Indian Express" on 16th February 2026.**

UPSC Syllabus: GS Paper-3- Indian Economy

Context: India's electronics sector is emerging as one of the fastest-growing export sectors, and proposed free trade agreements with major markets like the **European Union** and the **United States** could open a massive export window. Together, these markets account for nearly one-third of global electronics demand, creating the potential for India to target exports worth up to $1 trillion in the long term. However, India must address structural challenges in supply chains, technology capability, and research and development to fully benefit from these FTAs.

Opportunities from FTAs

a) Access to Large Markets

1. The EU and the US together have an electronics demand of about $1.6 trillion, offering a huge export opportunity for Indian manufacturers.
2. India currently exports less than $9 billion worth of electronics to the EU, despite a potential market of more than $300 billion, showing significant untapped scope.
3. FTAs can reduce tariffs, remove non-tariff barriers, and improve standards recognition, making Indian products more competitive.

b) Boost to Manufacturing Growth

1. Electronics is already India's second-largest export sector and employs over two million workers directly.

2. FTAs can increase demand for Indian electronics manufacturing hubs in states like Tamil Nadu, Karnataka, Uttar Pradesh, and Maharashtra.
3. Higher exports can create multiplier effects in logistics, component manufacturing, and services industries.

c) Integration into Global Value Chains

1. FTAs can attract global firms looking to diversify supply chains away from China.
2. Companies such as **Apple Inc.** and **Samsung Electronics** have already expanded manufacturing in India.
3. Better trade access can help India become a reliable alternative manufacturing base in electronics.

d) Strategic and Geopolitical Gains

1. Trade deals with advanced economies can reduce India's dependence on imports from **China** and strengthen supply chain resilience.
2. Rules-of-origin provisions in FTAs can prevent indirect imports and encourage domestic value addition.

Key Challenges and Caveats

a) Import Dependence for Components

1. India remains heavily dependent on imports of semiconductors, integrated circuits, batteries, and display units.
2. Imports of electronic components from China and Hong Kong alone account for more than half of India's total imports in this sector.
3. Without local component manufacturing, export competitiveness will remain limited.

b) Weak Presence in High-Value Segments

1. India is competitive mainly in mobile phone assembly and telecom equipment but has a negligible share in chips, displays, and batteries.
2. Chips account for nearly one-third of global electronics demand, but India's export share in this category remains extremely low.
3. This limits India's ability to capture value in global electronics supply chains.

c) Low Research and Development Spending

1. India's Gross Expenditure on R&D is about 0.64% of GDP, which is far lower than countries like Japan, South Korea, and China.
2. Successful electronics manufacturing nations have maintained high R&D spending and strong industry-government coordination.
3. Without innovation capability, India may remain stuck in low-value assembly operations.

d) Global Competition

1. Emerging electronics hubs such as Thailand, Malaysia, and Vietnam are rapidly building semiconductor ecosystems.
2. These countries offer strong incentives, skilled workforce availability, and integrated supply chains.
3. India must compete with them on infrastructure, logistics, and policy stability.

Government Initiatives to Address Challenges

1. The India Semiconductor Mission aims to build domestic chip fabrication and packaging capacity.
2. Production-Linked Incentive schemes encourage smartphone, laptop, and component manufacturing.
3. A new scheme for passive electronics components is aimed at deepening local value addition.
4. WTO disputes with the EU over ICT tariffs have been resolved to facilitate smoother trade.

Way Forward

1. India must develop a complete electronics ecosystem including semiconductors, batteries, and displays.
2. It should increase R&D spending through public-private partnerships and university–industry collaboration.

3. It should invest in logistics infrastructure, ports, and reliable power supply to improve competitiveness.
4. Skill development programmes should be expanded to create a specialised electronics workforce.
5. India should ensure stable and predictable trade policies to attract long-term investments.

Conclusion: FTAs with the EU and the US offer India a historic opportunity to expand electronics exports and become a global manufacturing hub. However, this opportunity can be realised only if India strengthens domestic supply chains, boosts innovation, and moves up the electronics value chain. With strategic reforms and sustained investment, India can transform its electronics sector into a trillion-dollar export engine.

Question: Free Trade Agreements with major markets such as the European Union and the United States could open a trillion-dollar export opportunity for India's electronics sector. Discuss the opportunities, challenges, and policy measures required for India to realise this potential.

Source: Indian Express

Bridging a divide with an 'Indian Scientific Service'

UPSC Syllabus: Gs Paper 2- Governance

Introduction

India's governance structure was built after Independence around generalist administrators who ensured stability during nation-building. Over time, policy challenges became deeply scientific, technological, and environmental. Scientists entered government, but service rules did not evolve accordingly. This institutional mismatch has limited the effective use of scientific expertise in policymaking. The proposal for an Indian Scientific Service seeks to correct this structural gap and make science a regular partner in governance.

About the Indian Scientific Service

1. **Core institutional idea:** The **Indian Scientific Service (ISS)** is proposed as a permanent national scientific cadre working within government institutions.
2. **Purpose within governance:** It seeks to make scientific expertise a regular and structured part of policymaking rather than a temporary advisory input.
3. **Complementary administrative role:** The service is intended to work alongside civil services, combining administrative coordination with scientific evidence and risk assessment.
4. **Institutional objective:** The aim is to integrate scientific knowledge directly into governance processes for more informed and resilient public decisions.

Need for structured scientific role in governance

1. **Expansion of technically intensive sectors:** Government responsibilities now include climate change, environmental protection, public health, disaster management, nuclear safety, biotechnology, oceans, space science, and artificial intelligence, making scientific knowledge indispensable.
2. **Growing policy complexity:** Many public decisions require specialised expertise, risk assessment, and long-term evaluation rather than only administrative judgement.
3. **Institutional mismatch with governance evolution:** Service rules designed for early nation-building did not adjust to the scientific transformation of governance functions.
4. **Limited regular integration of science:** Scientific expertise is often consulted when needed but is not structurally embedded as a continuous component of policymaking.
5. **Need for anticipatory research:** Effective governance requires sustained research that identifies emerging risks and future challenges rather than responding only to immediate demands.

Major concerns in the existing system

1. **Different professional career pathways:** Administrative services rely on competitive examinations, while scientific careers develop through specialised education, research, and peer evaluation.
2. **Lack of structured institutional preparation for scientists:** Administrators receive role-specific governance training, but scientists lack comparable institutional orientation within government.

3. **Administrative rules restricting professional functioning:** Scientists operate under conduct and appraisal systems designed mainly for general administrative roles.
4. **Limited institutional authority of scientific expertise:** Technical inputs may not carry formal decision-making weight even in complex policy areas.
5. **Inadequate institutional recording of scientific assessment:** Governance processes do not consistently allow formal documentation of risks, uncertainties, or long-term consequences.
6. **Short-term use of scientific work:** Scientific research is often commissioned for immediate regulatory or legal needs instead of sustained policy development.
7. **Unclear organisational position of scientists:** Many scientists lack defined career progression and institutional authority within governance structures.

Way forward

1. **Establish a permanent scientific cadre:** Create a national service placing scientists directly within ministries and regulatory bodies as part of policy processes.
2. **Specialised recruitment and professional evaluation:** Selection should reflect advanced scientific training, research competence, and peer-reviewed expertise.
3. **Separate scientific service rules:** Institutional safeguards must protect professional integrity and allow transparent recording of scientific assessments.
4. **Formal recognition of scientific input in decision systems:** Governance must provide mechanisms to place technical analysis and risk evaluation within official processes.
5. **Long-term research support for policymaking:** Sustained scientific work should guide policy through continuous analysis of emerging challenges.
6. **Clear division of institutional roles:** Administrators manage coordination and implementation, while scientists provide technical knowledge and analytical evaluation.
7. **Sector-specific scientific cadres:** Dedicated divisions across environment, climate, water, oceans, public health, disaster resilience, energy, agriculture, technology policy, and regulatory science can support specialised governance needs.
8. **Alignment with national development priorities:** Evidence-informed governance is essential for leadership in environmental protection, public health, and technological advancement.
9. **Learning from international institutional models:** Countries such as France, Germany, Japan, the United Kingdom, and the United States maintain dedicated scientific cadres and professional safeguards that ensure transparent and independent scientific input.
10. **Full use of national scientific capacity for global leadership:** Evidence-based governance is necessary for India's leadership in climate action, environmental stewardship, public health, and technological advancement.

Conclusion

Creating an Indian Scientific Service would formally integrate scientific expertise into governance and strengthen evidence-based policymaking. By defining institutional roles, protecting professional integrity, and enabling transparent scientific assessment, it can improve policy resilience. Aligning administrative coordination with scientific knowledge will help India manage complex risks, support national priorities, and build future-ready governance for long-term stability and credibility.

Question for practice:

Examine the need for establishing an Indian Scientific Service to strengthen the integration of scientific expertise into India's governance and policymaking system.

Source: The Hindu

We need fiscal prudence during elections

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

Fiscal prudence often weakens during elections in India as governments expand welfare spending to attract voters. Large cash transfers and assistance schemes are announced close to polls, increasing public expenditure and fiscal pressure. These practices are common across states and political parties. While welfare has social importance, unchecked expansion raises concerns about sustainability, rising debt, and diversion of funds from development. Balancing electoral commitments with financial discipline has become a major governance challenge.

Rise of Election-Time Welfare Spending

1. **Large pre-poll cash transfers:** Governments release major financial assistance close to elections, such as lump-sum transfers and special support payments to beneficiaries. For example, Tamil Nadu transferred ₹5,000 each to 1.31 crore women under **the Kalaignar Magalir Urimai Thogai scheme**, creating an immediate ₹6,550 crore expenditure.
2. **Women-centric income schemes dominate:** Direct cash transfers to women have become a major electoral strategy across states. For example, Maharashtra released multiple instalments under Mukhyamantri Majhi Ladki Bahin Yojana before polls, and the ruling alliance won. **In Bihar, ₹10,000 each was transferred to 75 lakh women before** Assembly elections, followed by another electoral victory.
3. **Expansion of promised benefits:** Parties promise higher monthly payments or wider coverage if re-elected, increasing spending commitments. For example, The Tamil Nadu government indicated monthly assistance could rise to ₹2,000 if re-elected, showing expansion tied to elections.
4. **National-level pre-election schemes:** The **₹6,000 annual income support to farmers under PM-Kisan** was launched in **February 2019**, just before Lok Sabha elections.
5. **Shift from goods to recurring income support:** Earlier giveaways included consumer items, but recent schemes focus on regular financial transfers.

Nature and Structural Drivers of the Problem

1. **Blurred boundary between welfare and populism:** Election-time schemes mix social support with political incentives, making policy intent unclear.
2. **Weak linkage to measurable outcomes:** Some schemes provide benefits without performance conditions or clear evaluation mechanisms.
3. **Competitive escalation among parties:** Political rivalry encourages expanding benefits to match or exceed opponents' promises.
4. **Entrenched culture of welfare expansion:** Election-linked handouts have become a regular feature of the political system.
5. **Need for targeted and time-bound design:** Welfare often continues without defined duration or clear administrative efficiency.

Fiscal and Economic Implications

1. **Rising fiscal deficits in states:** Some states undertake large pre-election spending despite already high deficits. For example, **Bihar faced a fiscal deficit of about 6% of GDP, yet announced pre-election schemes worth 4% of GDP.**.
2. **Exceeding fiscal discipline limits:** The 3% fiscal deficit-to-GDP ceiling for states is frequently crossed, turning a limit into a baseline.

3. **Diversion from productive investment:** Pre-poll schemes may exceed capital outlay, reducing funds for job-creating assets and long-term development.
4. **Growing subsidy burden and debt pressure:** Overall state government debt in India remains about 28.5% of GDP, above the recommended 20% threshold, with subsidies rising sharply.
5. **Crowding out development expenditure:** Spending on transfers reduces resources for infrastructure and economic expansion.
6. **Unsustainable policy outcomes:** Some governments roll back promises when fiscal pressure intensifies, as seen in Maharashtra's deficit rise.

Government Fiscal Approach and Macroeconomic Position

1. **Effort to maintain fiscal discipline:** The Union government has reduced the fiscal deficit from 4.8% of GDP (2024–25) to 4.4% (2025–26) and targets 4.3% in 2026–27, showing a clear consolidation path.
2. **Strong economic growth foundation:** GDP growth is estimated at about 7.4%, among the highest globally.
3. **High public investment commitment:** Capital expenditure of ₹12.2 trillion supports infrastructure-led growth.
4. **Balance between growth and sustainability:** Fiscal strategy focuses on maintaining macroeconomic stability in a volatile global environment.

Way Forward

1. **Efficient and targeted welfare delivery:** Support should reach intended beneficiaries through well-designed administrative systems.
2. **Defined duration and measurable outcomes:** Welfare schemes must operate for fixed periods and show clear results.
3. **Contain and rationalise subsidies:** States must control subsidy expansion to avoid fiscal stress.
4. **Protect productive expenditure:** Infrastructure and development spending should not be displaced by election commitments.
5. **Maintain fiscal discipline despite political pressure:** Financial sustainability must guide policy decisions even during electoral cycles.

Conclusion

Election-driven welfare spending has become a central feature of India's political economy, but its fiscal costs are rising steadily. Social support is necessary, yet unchecked expansion weakens financial stability and development priorities. Sustainable governance requires targeted welfare, controlled subsidies, and firm fiscal discipline. Electoral competition must not override long-term economic sustainability and balanced public finances.

Question for practice:

Discuss how election-time welfare spending in India affects fiscal discipline and long-term economic sustainability, with suitable examples from recent state and Union-level policies.

Source: The Hindu

Cities of debt: On the Urban Challenge Fund

Source: The post **"Cities of debt: On the Urban Challenge Fund"** has been created, based on **"Cities of debt: On the Urban Challenge Fund"** published in **"The Hindu" on 17th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: India's rapid urbanisation requires large investments in infrastructure, housing, and basic services. The proposed Urban Challenge Fund encourages cities to raise funds through bonds, loans, and PPPs while the Centre contributes 25% of project costs. However, many urban local bodies lack the fiscal autonomy and administrative capacity required to safely access market finance.

Background: Role of ULBs in Urban Governance

1. Urban local bodies were given constitutional recognition through the 74th Constitutional Amendment Act.
2. ULBs are responsible for urban planning, water supply, sanitation, housing, roads, and public health services.
3. They are expected to mobilise their own revenues through property tax, user charges, and municipal bonds.
4. In reality, most ULBs remain dependent on State and Central transfers due to weak revenue bases.

Key Issues Highlighted by the Urban Challenge Fund

I. Limited Administrative Capacity

1. Many ULBs do not have proper accounting systems and rely on outdated financial records.
2. There is a shortage of trained municipal staff in finance, engineering, and urban planning.
3. Project implementation delays are common under schemes such as AMRUT, Swachh Bharat Mission Urban 2.0, and Smart Cities Mission.
4. As a result, funds remain underutilised and projects remain incomplete.

II. Weak Fiscal Autonomy

1. State governments control many municipal taxes and limit the fiscal independence of ULBs.
2. Property tax collection remains inefficient due to poor valuation systems and political resistance.
3. ULBs depend heavily on grants under schemes like Pradhan Mantri Awas Yojana and other transfers.
4. Without stable revenue streams, cities cannot build creditworthiness to borrow from markets.

III. Risk of Debt Burden

1. Experiences from other sectors show that borrowing without reforms can create financial stress.
2. The power sector reforms under Ujwal DISCOM Assurance Yojana revealed large implementation gaps.
3. Hospitals under National Health Mission often faced delays in fund releases while continuing services.
4. Similar borrowing pressures on ULBs may lead to higher user charges and reduced affordability of services.

IV. Inequality Among Cities

1. Large and economically strong cities are more likely to attract private finance.
2. Smaller towns and poorer municipalities may be excluded from funding opportunities.
3. Cities may prioritise monetisable assets instead of essential services like slum upgrading and sanitation.

V. Governance and Transparency Concerns

1. The eligibility criteria and application process for the Urban Challenge Fund remain unclear.
2. Lack of transparency may lead to politically influenced allocation of funds.
3. Weak land records, frequent violations of master plans, and poor urban planning reduce investor confidence.

Why Market-Based Financing Alone Is Problematic

1. Market borrowing requires predictable revenues, which most ULBs do not have.
2. Essential services may become profit-oriented and expensive for citizens.
3. Poor households may face higher tariffs and user charges.
4. Urban development priorities may shift toward real estate projects instead of public welfare.

Measures to Strengthen ULB Capacity

I. Fiscal Reforms

1. States should grant greater taxation powers to ULBs.
2. Property tax systems should be modernised using GIS mapping and better valuation.
3. Predictable transfers from Finance Commissions should be ensured.
4. User charges should be rationalised with subsidies for vulnerable groups.

II. Administrative Capacity Building

1. A professional municipal cadre should be created for urban governance.
2. ULB staff should be trained in accounting, PPP management, and municipal bond issuance.
3. Modern accrual-based accounting systems and independent audits should be adopted.

III. Governance Improvements

1. Land records should be digitised and integrated with planning systems.
2. Master plans should be enforced strictly to improve planning discipline.
3. Fund allocation criteria should be transparent and rule-based.

IV. Balanced Financing Model

1. Grants, loans, and PPPs should be used together rather than relying only on market borrowing.
2. Basic urban services should be prioritised before monetisable infrastructure projects.
3. Credit guarantees should be used cautiously to avoid moral hazard.

V. Inclusive Urban Development

1. Policies should protect renters, informal workers, and slum residents.
2. Financing should be linked to service delivery outcomes instead of only revenue generation.
3. Urban planning should focus on affordability and sustainability.

Way Forward

1. Urban infrastructure financing must be supported by strong municipal institutions.
2. Fiscal devolution, administrative reform, and transparent governance are essential before pushing ULBs toward market borrowing.
3. Coordinated efforts by the Centre, States, and ULBs are necessary to build resilient and inclusive cities.

Conclusion: The Urban Challenge Fund is an important step toward improving urban finance. However, without strengthening municipal capacity and fiscal autonomy, cities risk falling into debt traps. Sustainable urban development requires empowered local governments, accountable governance, and inclusive planning.

Question: The success of market-based urban financing depends on the fiscal and administrative strength of Urban Local Bodies. Discuss in the context of the proposed Urban Challenge Fund.

India's federalism is in need of a structural reset

Source: The post **"India's federalism is in need of a structural reset"** has been created, based on **"India's federalism is in need of a structural reset"** published in **"The Hindu" on 17th February 2026.**

UPSC Syllabus: GS Paper-2- Polity

Context: India adopted a federal system with a strong Union to ensure unity after Partition, integration of princely States, and linguistic diversity. Over time, however, constitutional practice has moved toward greater centralisation through legislation, fiscal control, and administrative oversight. Many scholars and political leaders argue that India now needs a structural reset to achieve balanced federalism with autonomous States and an efficient Union.

Constitutional Basis of Indian Federalism

1. India is described as a "Union of States" under the Constitution of India, which provides a federal structure with unitary features.
2. The design drew heavily from the Government of India Act 1935, which concentrated powers in the Centre.
3. Federalism was declared part of the basic structure of the Constitution in S.R. Bommai v. Union of India, affirming that States are not mere administrative units.
4. The Seventh Schedule distributes powers through Union, State, and Concurrent Lists, but residuary powers rest with the Union.

Reasons for Initial Centralisation

1. The trauma of Partition created fears of secession and fragmentation.

2. Integration of more than 500 princely States required a strong central authority.
3. Economic planning in the early decades favoured centralised decision-making.
4. One-party dominance in the early years reinforced the "high command culture" in governance.
5. Emergency provisions such as Article 356 allowed the Centre to intervene in State governance.

Thus, centralisation was historically justified but has persisted even after those conditions changed.

Present Challenges in Union–State Relations

I. Legislative Centralisation

1. The Union increasingly legislates on Concurrent List subjects such as education, agriculture, and labour.
2. National laws sometimes leave little flexibility for States to adapt policies to local conditions.
3. Subordinate legislation and regulations occasionally override State laws in practice.
4. This trend weakens the principle of State autonomy recognised by the Constitution.

II. Fiscal Centralisation

1. States rely heavily on Finance Commission transfers and centrally sponsored schemes.
2. Conditional grants often require States to follow rigid templates designed in New Delhi.
3. Implementation of the Goods and Services Tax reduced States' independent taxation powers.
4. Delays in GST compensation payments created fiscal stress for States.
5. Many States face rising debt while their fiscal flexibility declines.

III. Administrative Centralisation

1. Large Union ministries operate schemes in sectors such as health, education, and agriculture, which are State subjects.
2. Centrally sponsored schemes impose uniform guidelines despite regional differences.
3. Duplication of administrative functions leads to inefficiency and confusion.
4. Policy micromanagement reduces innovation at the State level.

IV. Role of Governors

1. Delays in granting assent to State bills have created constitutional controversies.
2. Governors are sometimes perceived as acting politically rather than neutrally.
3. Such conflicts undermine cooperative federalism and democratic accountability.

V. Weak Intergovernmental Institutions

1. Bodies like the Inter-State Council are rarely used for meaningful policy dialogue.
2. Mechanisms for resolving Centre–State disputes are slow or ineffective.
3. Lack of regular consultation creates mistrust between governments.

Consequences of Excessive Centralisation

1. Policies designed centrally may not suit diverse local conditions.
2. States lose incentives to innovate in governance.
3. Fiscal dependence reduces accountability of State governments to citizens.
4. Administrative overload at the Centre leads to inefficiency.
5. Political tensions increase between Union and State governments.

Importance of Balanced Federalism

1. India's diversity in language, culture, and economy requires decentralised policy solutions.
2. States can act as laboratories of democracy and experiment with innovative policies.
3. Successful State policies can later be adopted nationally.
4. Balanced federalism improves service delivery and accountability.
5. Strong States contribute to a stronger Union.

Examples of State innovations include Tamil Nadu's noon-meal scheme, Kerala's public health model, and Maharashtra's employment guarantee programme.

Recommendations for Structural Reset

I. Legislative Reforms

1. The Union should limit legislation on State subjects unless national uniformity is essential.
2. Pre-legislative consultation with States should be mandatory.
3. Governors' roles should be clarified with time-bound procedures for assent to State bills.

II. Fiscal Reforms

1. Increase untied transfers to States through Finance Commissions.
2. Restore fiscal autonomy by expanding States' taxation powers.
3. Simplify GST structure and ensure timely compensation.
4. Reduce the number of centrally sponsored schemes.

III. Institutional Reforms

1. Revitalise the Inter-State Council as a permanent policy forum.
2. Strengthen cooperative decision-making in GST Council.
3. Implement recommendations of the Sarkaria Commission and Punchhi Commission on Union–State relations.

IV. Administrative Reforms

1. Encourage decentralised planning at State and local levels.
2. Build administrative capacity of States and local bodies.
3. Reduce duplication between Union and State ministries.

V. Political and Democratic Reforms

1. Encourage constructive Centre–State dialogue rather than confrontation.
2. Respect electoral mandates of State governments.
3. Promote cooperative federalism through NITI Aayog and policy councils.

Way Forward

1. India must right-size the Union so it focuses on defence, foreign policy, macroeconomic stability, and national infrastructure.
2. States should have greater autonomy in health, education, agriculture, and policing.
3. Federalism should evolve with India's maturity as a democracy.
4. Balanced federalism will improve governance outcomes and reduce regional disparities.

Conclusion

India's unity is now strong and resilient, and greater State autonomy will not weaken the nation. A structural reset in federalism will align authority with accountability. Strong States and a focused Union together can ensure inclusive growth, better governance, and democratic stability.

Question: India's federal structure, though constitutionally balanced, has evolved with increasing centralisation. Discuss why India's federalism needs a structural reset. Suggest measures to achieve cooperative and balanced federalism.

Creative Industries as Growth Engines

UPSC Syllabus: Gs Paper 3- Indian economy .

Introduction

In the twenty-first century, economic strength is shaped not only by industry but also by ideas, digital platforms, and cultural influence. Creative industries now generate value through technology, intellectual property, and global content flows. These sectors are becoming central to growth, employment, and international competitiveness. India's expanding creative economy reflects this shift, where creativity is emerging as a structured economic capability driving development and global engagement.

Understanding the Creative Economy

1. **Definition:** The creative economy generates value from creativity, culture, technology, and intellectual property. It includes media, entertainment, animation, gaming, live experiences, and digital platforms operating globally.

2. **Global economic mainstreaming:** Creative industries contribute between **0.5 and over 7 percent of GDP** across countries. Live entertainment creates spillovers for tourism and urban services, linking culture with wider economic activity.
3. **Technology-intensive production systems:** These sectors rely on digital tools, immersive design, and global production pipelines. Creative work is embedded in modern service economies and value chains.

Key Growth Drivers of the Creative Economy

1. **AVGC-XR as innovation driver:** Animation, visual effects, gaming, comics, and extended reality combine creative talent with advanced computing. They produce scalable intellectual property used in global films, streaming platforms, and advertising.
2. **Gaming as mass digital participation:** Millions across metros and small towns engage daily through mobile-based interaction and competition. India is among the world's largest gaming markets with rising monetisation and global platform integration.
3. **Experiential live entertainment ecosystems:** Concerts, festivals, and events attract audiences who travel, spend, and return repeatedly. These activities energise cities, create employment, and strengthen cultural presence globally.

Current Status of India's Creative Economy

1. **Media and entertainment scale:** The sector was valued at **₹2.5 trillion in 2024** with output near **₹3 lakh crore**. It supports **over 10 million livelihoods** directly and indirectly.
2. **Digital revenue shift:** Digital media forms about one-third of sector revenues, reshaping production and distribution systems. Platform-based delivery expands reach across regions and markets.
3. **High-growth segments:** Animation and visual effects around **₹103 billion**, gaming about **₹232 billion**, and live entertainment over **₹100 billion**. These sectors show strong scaling within the media economy.
4. **Growth trajectory:** Revenues may grow about **7 percent annually until 2027**, rising from **₹2,502 billion in 2024 to ₹3,067 billion in 2027**. This confirms a stable services-sector growth engine.
5. **Global production integration:** India operates as a globally connected creative production base. Indian teams contribute to international films, streaming content, advertising, and immersive media through integrated global workflows supported by a layered and scalable talent pool.

Issues with India's Creative Economy

1. **Financing and infrastructure gaps:** Enterprises struggle to access credit and face infrastructure limits that restrict scaling of operations. Limited capacity slows expansion.
2. **Weak intellectual property protection:** Enforcement gaps make it difficult to protect original work. Infringement risks reduce incentives for innovation and investment levels.
3. **Digital divide impact:** Rural and semi-urban regions lack high-speed internet and digital literacy needed for participation. This limits market reach and inclusion.
4. **Fragmented informal markets:** Many creative sectors lack formal recognition and remain unstructured. Traditional artisans receive low income and limited institutional support.
5. **Declining traditional craft continuity:** Younger generations avoid traditional art forms because income potential remains low. This threatens preservation of cultural heritage.
6. **Artificial intelligence challenges:** AI creates opportunities but raises concerns over copyright, privacy, and content monopolisation. Rapid technological change challenges regulatory and ethical frameworks.
7. **Operational barriers:** Bureaucratic procedures, lack of mentorship, and non-transparent financial support systems create uncertainty for creators. Recognition and assistance processes remain uneven.

Initiatives Taken to Promote the Creative Economy

1. **National AVGC-XR roadmap:** Policy supports talent development, intellectual property creation, industry collaboration, and global market access. The sector may generate nearly **20 lakh jobs** over the next decade.
2. **Indian Institute of Creative Technologies:** IICT functions as a National Centre of Excellence for AVGC-XR and gaming. It provides training, infrastructure, and industry collaboration linked globally.
3. **Regional creative clusters:** Hubs in Bengaluru, Hyderabad, Mumbai, Pune, Chennai, and Thiruvananthapuram anchor growth. Emerging cities build new clusters that expand participation beyond major metropolitan centres.
4. **Event infrastructure systems:** Large venues and premium performance spaces support global touring circuits. Production companies, technicians, logistics teams, and hospitality services operate at international standards today.
5. **Orange Economy market platforms:** WAVES connects creators, startups, industry leaders, and policymakers for collaboration and deal-making. WaveX supports startup incubation, while WAVES Bazaar enables trade in scripts, music, and audiovisual rights.
6. **Creator discovery initiatives:** The Create in India Challenge identifies emerging talent and links them to international platforms. It enables local ideas to compete, collaborate, and commercialise globally.
7. **Education and skilling pipeline:** AVGC Content Creator Labs are proposed in **15,000 schools and 500 colleges** to build early skills. Demand may reach **nearly two million professionals by 2030**.

Conclusion

Conclusion: Creative industries now function as strategic economic infrastructure shaping employment, exports, and global cultural presence. India's expanding ecosystem shows strong market growth and institutional support. Continued investment in skills, platforms, and access will determine how effectively creativity becomes lasting economic strength and sustained global engagement in coming years and across emerging digital value chains future worldwide.

Question for practice:

Examine the role of creative industries as growth engines in India's economy, and assess the current status, and initiatives shaping the country's creative economy.

Source: PIB

A budgetary signal as banks cannot bear it all

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

Budget 2026 signals a limited but important shift in India's financial-sector reform approach. It reflects recognition that Indian banks are carrying risks that well-functioning markets usually absorb. Because corporate credit markets remain shallow, banks have become the main providers of long-term finance. This structural imbalance has steadily increased pressure on bank balance sheets and made the financial system more vulnerable. The proposed measures aim to redistribute risk through markets rather than concentrating it within banks.

Major Issue with India's Financial Architecture

1. **Structural imbalance between government and corporate bond markets:** Government securities outstanding are **close to 90% of GDP**, supported by a predictable issuance framework. **Corporate bonds remain only 15%–16% of GDP**, far smaller than in major economies.
2. **Banks as the default providers of long-term finance:** Long-term financing needs continue even when markets are weak. Banks step in because no alternative mechanism exists to absorb and distribute credit risk.

3. **High concentration of corporate debt in banks:** Banks carry **around 60%–65% of non-financial corporate debt,** compared **with 30% in the U.S. and 40% in Europe**. This reflects financial structure, not lending choice.
4. **Small size of the corporate bond market globally:** Corporate bonds are **less than 15% of GDP**, compared with **over 80% in the U.S., 55%–60% in Germany, and 45%–50% in China**.
5. **Limited market participation and weak liquidity:** Issuance is mainly through private placements, ownership is concentrated among institutional investors, and secondary market liquidity is weak.
6. **Restricted access and narrow investor base:** Households and foreign investors play only a marginal role. Issuance is heavily skewed toward top-rated firms.
7. **Overburdened bank balance sheets:** Banks bear risks that mature financial systems distribute across markets. This concentration increases systemic fragility.

Consequences of a Bank-Centric Financial System

1. **Severe maturity mismatch in bank financing:** Banks rely mainly on short-term deposits but fund infrastructure projects that take 15–20 years to generate returns.
2. **Higher vulnerability to economic shocks:** Extreme maturity transformation exposes banks to sudden stress when project outcomes or cash flows weaken.
3. **Direct absorption of project losses by banks:** When projects stall, losses accumulate immediately on bank balance sheets instead of being distributed across investors.
4. **Large fiscal cost of recapitalisation:** Since 2017, the government has injected over ₹3.2 lakh crore into public sector banks to stabilise the system.
5. **Transfer of private losses to public finances:** Recapitalisation shifts credit losses to the public balance sheet, creating a hidden fiscal burden.
6. **Opportunity cost in credit allocation:** Capital tied in long-term corporate loans reduces lending capacity for small firms, exporters, and first-time borrowers.
7. **Persistent constraints on SME credit:** Even after repeated clean-ups and capital injections, lending to small and medium enterprises remains limited.

Impact on Monetary Policy and Financial Stability

1. **Distorted transmission of interest-rate changes:** Banks burdened with long-term exposures are reluctant to pass on higher borrowing costs when policy rates rise.
2. **Restricted lending response during rate reductions:** Impaired balance sheets prevent banks from expanding credit fully when interest rates fall.
3. **Uneven adjustment of long-term borrowing costs:** Long-term interest rates do not respond smoothly to policy changes due to concentrated credit risk.
4. **Weak market-based repricing mechanisms:** Deep bond markets normally transmit policy signals through yield adjustments across maturities. This mechanism remains limited.
5. **Greater systemic fragility from risk concentration:** Heavy reliance on banks to absorb long-term risk increases financial system vulnerability.

Initiative Taken to Rebalance Risk

1. **Policy recognition of structural imbalance:** Budget 2026 acknowledges that banks are carrying risks that functioning markets should absorb.
2. **Market-making framework for corporate bonds:** The budget proposes mechanisms to improve liquidity and trading in corporate bond markets.
3. **Development of risk-transfer and hedging instruments:** Budget 2026 proposes total-return swaps and bond-index derivatives to help redistribute and manage credit risk.
4. **Infrastructure Risk Guarantee Fund:** The budget proposes partial credit guarantees to support infrastructure financing and reduce direct bank exposure.
5. **Recycling CPSE real estate through REITs:** Budget 2026 proposes dedicated REITs to monetise CPSE real estate and expand the supply of market-ready assets.

6. **Shift toward market-based allocation of risk:** These measures aim to move long-term credit risk from bank balance sheets to financial markets.

Conclusion

Budget 2026 signals clear recognition that banks cannot continue as the main absorbers of long-term credit risk. Structural imbalance, weak corporate bond markets, and concentrated exposures have increased fiscal costs and financial vulnerability. The proposed reforms aim to shift risk from banks to markets. **Sustained financial stability will depend on developing a deep corporate debt market that can price, distribute, and absorb long-term credit risk across a wider set of investors.**

Question for practice:

Discuss how Budget 2026 signals a shift in India's financial-sector approach by addressing the structural overdependence on banks and promoting market-based distribution of credit risk.

Source: The Hindu

Challenges faced by India's forest and vegetation cover

Source: The post **"Challenges faced by India's forest and vegetation cover"** has been created, based on **"What are the major challenges faced by India's forest and vegetation cover?"** published in **"Indian Express" on 18th February 2026.**

UPSC Syllabus: GS Paper-3- Environment

Context: India's forests are essential for biodiversity conservation, climate regulation, and livelihood support for millions of people. However, several ecological and developmental pressures are threatening India's forest and vegetation cover.

Major Challenges Faced by India's Forests

A. Forest Fires

1. Forest fires have become frequent and intense due to climate change, dry weather, and accumulation of pine needles.
2. More than half of India's forests are vulnerable to fires, especially in Himalayan and central Indian regions.
3. Forest fires lead to biodiversity loss, soil erosion, and large-scale carbon emissions.

B. Invasive Alien Species

1. Invasive plants such as Lantana and Prosopis have spread widely in Indian forests.
2. These species outcompete native vegetation and reduce biodiversity.
3. They also degrade habitat quality in wildlife reserves.

C. Monoculture Plantations

1. Large-scale plantations of pine, eucalyptus, and teak have replaced natural forests in many regions.
2. Monoculture plantations support less biodiversity and store less carbon than natural forests.
3. They are also more prone to fires and pest attacks.

D. Diversion of Forest Land for Development

1. Large infrastructure projects such as roads, mines, dams, and industrial corridors require forest land diversion.
2. For example, the development project on Great Nicobar Island involves clearing large areas of tropical rainforest.
3. Such projects cause habitat destruction, displacement of tribal communities, and ecological imbalance.

E. Climate Change

1. Rising temperatures, irregular rainfall, and prolonged droughts are weakening forest ecosystems.
2. Climate change increases pest outbreaks, forest fires, and species migration.

F. Governance and Policy Challenges

1. There are delays in updating forest policies and gaps in monitoring and enforcement.
2. Conflicts often arise between development needs and environmental conservation.
3. Compensatory afforestation is sometimes done in ecologically unsuitable areas.

How Forest Governance Addresses These Issues

A. Legal Framework

1. Forest laws regulate the diversion of forest land and promote conservation.
2. Wildlife protection laws help create national parks and sanctuaries.
3. Forest rights laws recognise the role of tribal communities in conservation.

B. Institutional Mechanisms

1. The National Green Tribunal reviews environmental clearances and resolves ecological disputes.
2. The Forest Survey of India monitors forest cover using satellite imagery.

C. Community Participation

1. Joint Forest Management programmes involve local communities in protecting forests.
2. Tribal rights recognition encourages sustainable use of forest resources.

D. Afforestation and Climate Initiatives

1. Government schemes such as Green India Mission promote afforestation.
2. India has committed to creating a large carbon sink by increasing forest cover.

Limitations of Current Governance

1. Compensatory afforestation cannot fully replace natural forests.
2. Enforcement of forest laws remains weak in many areas.
3. Development pressures often override ecological concerns.

Way Forward

1. India should promote mixed plantations with native species instead of monoculture forests.
2. Advanced fire warning systems and satellite monitoring should be strengthened.
3. Local communities should be empowered through better implementation of forest rights.
4. A balance must be maintained between development projects and environmental sustainability.

Conclusion: Protecting forests is essential for India's climate goals, biodiversity, and sustainable development. Strong governance, community participation, and scientific forest management are needed to address current challenges.

Question: Discuss the evolution of India's drone ecosystem and evaluate its role in transforming public service delivery. What policy measures have enabled its growth?

Source: Indian express

India's Drone Ecosystem

Source: The post **"India's Drone Ecosystem"** has been created, based on **"ndia's Drone Ecosystem"** published in **"PIB" on 18th February 2026.**

UPSC Syllabus: GS Paper-3- Science and technology

Context: Drone technology has become an important tool in governance because it provides accurate, real-time data that improves decision-making and monitoring. India has gradually built a structured drone ecosystem through supportive policies, training institutions, and digital regulation, which is helping integrate drones into development programmes and public administration.

Growth of India's Drone Ecosystem

1. India now has tens of thousands of registered drones and certified pilots, which shows that drone use is moving from experimental projects to mainstream governance applications.
2. A network of manufacturers, start-ups, software developers, training organisations, and regulatory bodies has emerged, creating an integrated ecosystem for production, services, and skill development.

3. Government support through incentives and simplified regulations has reduced entry barriers for entrepreneurs and encouraged innovation in drone-based services.

Transformation of Public Service Delivery

A. Land Mapping and Property Records

1. Drones are being used to map rural land accurately, which helps in creating digital property records and reducing land disputes.
2. The SVAMITVA programme has surveyed lakhs of villages, enabling villagers to obtain property cards that improve their access to bank credit and reduce litigation.
3. Drone-based mapping also supports better village planning and infrastructure development.

B. Agriculture and Rural Livelihoods

1. Drone technology is helping farmers adopt precision agriculture by spraying fertilisers and pesticides evenly and efficiently.
2. Schemes like Namo Drone Didi are empowering women Self-Help Groups by providing them drones and training, allowing them to earn income through farm services.
3. This approach reduces input costs, improves crop yield, and promotes rural entrepreneurship.

C. Infrastructure Monitoring

1. Drones are used to monitor highways, railways, bridges, and urban infrastructure, which helps detect faults and delays early.
2. The National Highways Authority of India uses drone footage to track construction progress and maintain digital records for accountability.
3. This improves transparency, reduces corruption, and speeds up project completion.

D. Disaster Management

1. Drones help authorities assess damage quickly during floods, landslides, earthquakes, and forest fires.
2. Organisations such as North East Centre for Technology Application and Reach deploy drones to send real-time visuals from disaster zones, improving rescue coordination.
3. They are also used to deliver medicines and relief materials in remote areas.

E. Defence and Security

1. Drones support surveillance along borders and sensitive locations, reducing risk to soldiers.
2. They provide intelligence gathering, target tracking, and precision strike capability.
3. Drone technology is also used for crowd management and monitoring critical infrastructure.

Policy Measures Enabling Drone Ecosystem

A. Liberalised Regulations

1. The Drone Rules simplified approval procedures, reduced paperwork, and allowed drones to operate in large parts of airspace.
2. Remote Pilot Certificates replaced traditional pilot licences, making it easier for citizens to become certified operators.
3. These reforms encouraged start-ups, farmers, and service providers to adopt drone technology.

B. Digital Governance Platforms

1. Digital platforms enable online registration of drones, pilot certification, and airspace permission, which ensures transparency and compliance.
2. Integration of drone services with e-governance systems has streamlined monitoring and improved regulatory oversight.
3. Such digital tools reduce bureaucratic delays and improve ease of doing business.

C. Financial Incentives

1. The Production Linked Incentive scheme promotes domestic drone manufacturing and reduces dependence on imports.
2. Reduction of GST rates on drones has lowered costs and encouraged wider adoption in agriculture and industry.

3. Innovation grants and expos help start-ups showcase indigenous drone technologies.

D. Skill Development Initiatives

1. Training institutes approved by regulators are increasing the number of certified drone pilots.
2. Capacity-building programmes train youth, engineers, and entrepreneurs in drone operations and maintenance.
3. These initiatives create employment opportunities and support a skilled workforce for the drone sector.

Benefits of India's Drone Ecosystem

1. Drones improve efficiency by reducing manual labour and increasing accuracy in surveys and inspections.
2. They enhance transparency and accountability in infrastructure projects and land records.
3. They create new jobs in manufacturing, services, and training sectors.
4. They improve disaster preparedness and national security capabilities.

Challenges in Drone Ecosystem

1. High initial cost of drones and maintenance limits adoption among small farmers and rural entrepreneurs.
2. Privacy concerns arise because drones collect sensitive data and images.
3. Dependence on imported components like sensors and chips weakens self-reliance.

Way Forward

1. India should promote indigenous manufacturing of drone components through research funding and industrial partnerships.
2. Training programmes should be expanded in rural areas to create more skilled pilots and technicians.
3. Strong data protection and privacy laws should regulate drone usage responsibly.
4. Integration of drones with AI, GIS, and satellite technology should be encouraged for better governance outcomes.

Conclusion: India's drone ecosystem demonstrates how technology, policy reforms, and innovation can transform public service delivery. With continued investment, skill development, and responsible regulation, drones can contribute significantly to agricultural growth, infrastructure monitoring, disaster management, and national security.

Question: Discuss the evolution of India's drone ecosystem and evaluate its role in transforming public service delivery. What policy measures have enabled its growth?

Source: PIB

The new world disorder, from rules to might

UPSC Syllabus: Gs Paper 2 - International Relation

Introduction

The new world disorder, from rules to might reflects a global shift from restraint to raw power. The post-war system promised that law would guide states and institutions would prevent domination. Today that confidence is weakening. Sovereignty is questioned, cooperation is shrinking, and global stability depends less on rules and more on strength. The world now stands in a fragile transitional phase between an eroding order and an uncertain future.

Foundations of the Rule-Based International Order

1. **Post-war vision of restraint:** The system created in 1945 assumed that **law could restrain power** and institutions could discipline states.
2. **Sovereign equality principle:** Sovereignty was treated as a right inherent in all nations, not a privilege granted by the strong.

3. **Role of the United Nations:** It was meant to help countries **settle differences peacefully** and prevent spheres of influence and predatory might.
4. **Expectation of self-restraint:** Powerful nations were expected to deny themselves the freedom to act only for narrow advantage if peace was to survive.
5. **Moral commitment to cooperation:** Global stability depended on shared responsibility and willingness to accept limits on national power for collective security.

The Return of Power Politics and Erosion of Norms

1. **Decline of binding rules:** International law increasingly appears optional, used when convenient and ignored when costly.
2. **Shift from hypocrisy to indifference:** Earlier violations still recognised norms, but now power openly disregards them without concern.
3. **Sovereignty becomes negotiable:** When major powers question territorial rights, others see that **force can override legal status**.
4. **Cascade effect of precedent:** Disregard for one country's sovereignty encourages others to reinterpret disputes as historical corrections or strategic necessities.
5. **Cost-based aggression logic:** The key question is no longer legality but whether the target is strong enough to raise costs.
6. **Risk of dispersed conflicts:** Weakening guardrails may produce many smaller wars that individually stay limited but collectively erode peace.
7. **Retreat from multilateral cooperation:** Withdrawal from organisations and agreements shows deep scepticism about shared governance.
8. **Global problems without borders:** Pandemics, climate change, cyber threats, and financial contagion cannot be solved by unilateral action.
9. **Power vacuum and influence shift:** When collective leadership weakens, other actors step in to shape institutions, norms, and standards.
10. **Fragmentation of governance structures:** Competing visions and reduced cooperation break unified global management into separate spheres.
11. **Fluid geopolitical environment:** Alliances blur, certainties fade, and countries struggle to define stable positions.
12. **Historical grievances persist:** Past conflicts and unresolved injustices continue to shape distrust and complicate peace efforts.
13. **Fear of global war as past stabiliser:** The threat of total conflict once restrained escalation and discouraged major confrontation.
14. **Small wars as cumulative danger:** Many limited conflicts together can slowly weaken the foundations of peace.

Structural Weakness and Legitimacy Crisis of Global Institutions

1. **Inequality in institutional design:** Post-war bodies reflected existing power hierarchies, concentrating authority in a few states.
2. **Guardians and rule-breakers paradox:** Those tasked with maintaining order also possess the greatest capacity to disrupt it.
3. **Authority without balanced responsibility:** Power is concentrated, but obligations are widely shared, creating structural imbalance.
4. **Selective application of rules:** When powerful states obey or ignore law as convenient, legitimacy declines.
5. **Dependence on political will:** Legal mandates exist, yet without good faith they remain largely aspirational.

6. **Erosion of credibility:** Institutions lose authority when enforcement appears inconsistent or partial.
7. **Peace requires trust:** Rules alone cannot sustain order without genuine commitment from major powers.
8. **Resource and legitimacy starvation:** Multilateral bodies lose strength when support and trust decline.
9. **Good faith deficit in enforcement:** Peace cannot be maintained when states lack sincere commitment.

Systemic Decline of the Liberal International Order and the Emerging Interregnum

1. **Patchwork nature of the order:** It combined norms, institutions, and habits of cooperation rather than a single unified system.
2. **Core principles under strain:** Sovereign equality, non-aggression, collective security, open trade, human rights, and cooperation face repeated violations.
3. **Paralysis of collective security:** Decision-making is blocked by vetoes and competing interests.
4. **Weaponisation of economic and political tools:** Trade and rights narratives become instruments of strategic pressure.
5. **Shrinking belief in shared order:** The system survived because states feared worse alternatives, but that belief is weakening.
6. **Persistence despite erosion:** Courts still function, peacekeepers deploy, and trade depends on predictable rules.
7. **Middle powers sustain engagement:** Europe, India, South Africa, Canada, and Brazil support multilateralism to avoid domination by stronger states.
8. **Future uncertainty of replacement:** Possibilities include new power-centred systems, competing blocs, issue-based coalitions, or unmediated anarchy.
9. **Interregnum condition of transition:** The old order fades while the new one remains undefined.
10. **Order survives by minimum function:** It prevents collapse even when expectations fall sharply.

Conclusion

The rule-based order has weakened but still prevents complete collapse. Power increasingly shapes rules, and institutions struggle without trust. The world stands in a prolonged transition where decay is gradual yet dangerous. The central challenge is preventing a future where power dominates law completely and global politics moves toward disorder without effective restraints.

Question for practice:

Examine how the weakening of the rule-based international order has led to the resurgence of power politics and created a transitional phase of global uncertainty.

Source: The Hindu

Circular Economy in Agriculture: Waste to Wealth

UPSC Syllabus: Gs Paper 3- Indian economy

Introduction

Agricultural waste is emerging as a major environmental and economic challenge, especially in agriculture-dependent economies like India. Large quantities of crop residues, food losses, and biodegradable waste create pollution while remaining underutilised resources. The circular economy approach promotes converting waste into energy, organic inputs, and valuable materials. By transforming waste into wealth, circular agriculture offers a practical pathway to improve resource efficiency, environmental sustainability, and long-term agricultural resilience.

Understanding Circular Economy in Agriculture

1. **Waste to wealth approach:** Circular economy treats waste as a valuable resource instead of an environmental burden or economic liability.

2. **Systemic transformation of production and consumption:** Circular economy redesigns material flows to recover, reuse, and reintegrate value across product life cycles to improve resource efficiency.
3. **Six Rs principles:** Circular economy follows Reduce, Reuse, Recycle, Refurbish, Recover, and Repair to keep materials in productive use for longer periods.
4. **True recycling concept:** Circular systems convert waste back to its original form without quality loss, enabling higher value recovery.
5. **Nature inspired sustainability model:** Circular economy draws inspiration from regenerative natural systems that use resources efficiently and generate minimal waste.

Sources and Types of Agricultural Waste in Circular Economy

1. **Farm to food plate waste chain:** Agricultural waste is generated at every stage, including cultivation, livestock rearing, processing, and consumption.
2. **Crop residues and stubble:** Post-harvest biomass such as straw, stalks, and husk forms a major share of agricultural waste, though a part is reused while some is burned.
3. **Biomass as a waste resource category:** Biomass includes organic material from plants and animals that forms an important component of agricultural waste streams.
4. **Animal manure, byproducts, and carcasses:** Livestock farming generates large quantities of dung, bedding waste, and animal remains, forming a major category of agricultural waste.
5. **Post-harvest losses:** Losses during storage, transport, and handling reduce both quantity and quality of agricultural produce.
6. **Food waste at consumption stage:** Edible food discarded at markets, retail outlets, and households forms a major waste stream in the agricultural value chain.

Importance of Circular Economy in Agriculture in India

1. **Environmental pollution reduction:** Proper waste management prevents methane emissions, air contamination, groundwater pollution, and environmental degradation.
2. **Magnitude of agricultural waste challenge:** India generates about **350 million tonnes annually**, making efficient management essential for resource recovery and environmental protection.
3. **Renewable energy generation potential:** Agricultural residues can generate more than **18,000 MW of power annually**, showing strong energy recovery opportunities.
4. **Soil health improvement:** Residue-based organic fertilisers enhance nutrient quality and reduce dependence on chemical inputs.
5. **Climate change mitigation need:** Organic waste decomposition in landfills releases greenhouse gases, making circular utilisation essential for emission reduction.
6. **Economic growth and employment potential:** Circular economy may reach **$2 trillion market value** and create **10 million jobs by 2050**.
7. **Global food waste burden:** Around **1.3 billion tonnes of food is wasted annually worldwide**, highlighting the need for efficient resource use and recovery systems.
8. **Household waste contribution:** Nearly **one-third of biodegradable municipal waste originates from household kitchens**, increasing pressure on waste management systems.
9. **Landfill environmental impact:** Improper decomposition of organic waste releases methane, pollutes groundwater, and produces harmful odours.

Government Initiatives Promoting Circular Economy in Agriculture

1. GOBARdhan

- It is a multi-ministerial programme to convert cattle dung, crop residues, and food waste into compressed biogas and organic manure.
- It promotes waste-to-wealth by turning organic waste into clean energy and soil nutrients.
- Unified GOBARdhan portal improves monitoring and coordination. Carbon credit inclusion, tax relief, and simplified fertiliser norms support adoption.

- **Implementation progress:** Covers **51.4% of India's districts** with **979 operational biogas plants by January 2026**.

2. Crop Residue Management (CRM)

- It is a national initiative to manage crop residues through in-situ soil incorporation and ex-situ collection for composting, biogas, and bioenergy.
- It reduces stubble burning, improves soil health, and supports productive use of agricultural biomass.
- Custom Hiring Centres provide residue management machinery to farmers for effective implementation.
- **Implementation progress: Rs 3,926.16 crore released (2018–19 to 2025–26)** with over **42,000 Custom Hiring Centres established** and **3.24 lakh machines supplied**.

3. Agriculture Infrastructure Fund (AIF)

- It is a financing facility providing medium to long-term institutional credit for post-harvest infrastructure and farm-level assets.
- The fund supports the establishment of warehouses, cold storage facilities, sorting and grading units, processing centres, and community farm assets to strengthen post-harvest management.
- **Implementation progress: Rs 66,310 crore sanctioned across 1,13,419 projects**, mobilising **Rs 1,07,502 crore investment**, including **545 organic input projects worth Rs 850 crore**.

4. Animal Husbandry Infrastructure Development Fund (AHIDF)

- It is a financial support programme to strengthen infrastructure across the livestock value chain.
- Under the fund, Multi-State Cooperative Societies promote organic manure production, biogas generation, and scientific management of animal by-products to ensure sustainable waste utilisation.
- **Implementation progress:** Launched with a **Rs 15,000 crore corpus** under Atmanirbhar Bharat Abhiyan.

5. Jal Shakti Initiatives

- They are programmes promoting wastewater treatment, reuse, and water conservation for sustainable agriculture and resource efficiency.
- They improve irrigation water availability, reduce groundwater pressure, and support sustainable water management.
- **Implementation progress:** Jal Jeevan Mission provides **55 litres per capita per day** functional household tap water supply in rural areas.

Circular Economy in Agriculture and Sustainable Development Goals

1. **Support for SDG 2:** Circular agriculture supports SDG 2 by promoting sustainable farming systems that improve nutrition and strengthen food security.
2. **Resilient farming systems:** Composting, biomass recycling, and biochar improve soil fertility and reduce dependence on chemical inputs, supporting sustainable and resilient agriculture.
3. **Global food waste reduction:** Circular practices help reduce **1.05 billion tonnes of food waste generated in 2022**, including **60% from households**, improving resource efficiency and sustainability.

Conclusion

India's transition towards circular agriculture shows that waste can become a productive resource rather than an environmental burden. Converting agricultural waste into energy, organic fertilisers, and reusable resources strengthens soil health, resource efficiency, and farm resilience. Continued policy support, infrastructure expansion, and coordinated implementation can scale waste-to-wealth systems, ensuring long-term food security, climate resilience, and sustainable rural development.

Question for practice:

Discuss how the circular economy in agriculture can transform waste into valuable resources while promoting environmental sustainability, economic growth, and resource efficiency in India.

Source: PIB

India's moment to restoring balance to copyright

Source: The post **"India's moment to restoring balance to copyright"** has been created, based on **"India's moment to restoring balance to copyright"** published in **"The Hindu" on 19th February 2026.**

UPSC Syllabus: GS Paper-3- Science and technology

Context: Copyright law was originally designed to balance incentives for creators with access to knowledge for society. Over time, copyright protection has expanded excessively and has begun to obstruct accessibility, creativity, and AI innovation. India's present framework under the Copyright Act, 1957 requires reforms to meet the needs of the digital and AI age.

Background & Historical Context

- Modern copyright law began with the Statute of Anne, which provided authors a limited monopoly of 14 years.
- Earlier copyright laws required registration and deposit of copies for public libraries, which ensured public benefit.
- Today, copyright protection is automatic, lasts for the life of the author plus 70 years, and applies even to trivial works like social media posts.
- This expansion has reduced the size of the public domain and restricted knowledge access.

Key Issues with Rigid Copyright Laws

1. Accessibility Barriers

- Rigid copyright laws can deny access to knowledge for persons with disabilities.
- Visually impaired persons were earlier unable to legally obtain accessible books across borders.
- The Marrakesh Treaty was created after global advocacy to allow accessible-format sharing.
- This shows that copyright law sometimes restricts even basic rights like the right to read.

2. Hindrance to AI Development

- Artificial Intelligence systems require large datasets, including copyrighted material, for training.
- India's current law does not clearly permit text-and-data mining for AI training.
- Countries like Japan, Singapore, and the European Union have introduced exceptions for such uses.
- Legal uncertainty discourages AI startups, research institutions, and innovation.

3. Blocking Technological Progress

- Web search engines must copy webpages temporarily to index and provide results.
- Strict copyright rules make such essential technological processes legally risky.
- Copyright laws have also been used to block assistive technologies like text-to-speech features.
- Such barriers slow digital innovation and reduce public welfare.

4. Over-Expansion of Copyright

- Copyright protection now lasts for very long periods, which delays works entering the public domain.
- Automatic copyright applies even to non-commercial or low-value works.
- Copyright law is increasingly used to protect existing jobs rather than promote creativity.
- This contradicts the original purpose of copyright.

Implications for India

1. India's AI sector may lag behind global competitors due to legal uncertainty.
2. Students, researchers, and disabled persons may face barriers to accessing knowledge.
3. Artists and creators may struggle because creativity depends on learning from previous works.
4. India's digital economy and innovation ecosystem may weaken.

Way Forward

1. Introduce Flexible Fair Use

- India should adopt a broad and flexible fair-use clause similar to the United States and Singapore.
- Such flexibility will allow law to adapt to new technologies.

2. Create Text & Data Mining Exceptions
- India should explicitly allow AI training on copyrighted material for non-consumptive purposes.
- Machine analysis should be treated differently from human reading or viewing.

3. Strengthen Accessibility Rights
- India should fully implement accessible-format exceptions and support disability-friendly publishing.
- This will ensure equal access to education.

4. Promote Knowledge Commons
- The government should fund open-source datasets and AI models for public use.
- Safe harbour provisions should protect such datasets from copyright claims.

5. Revisit Copyright Duration
- India should reconsider extremely long copyright terms.
- Shorter protection will expand the public domain and encourage innovation.

6. Support Creators through Other Means
- Governments can provide grants, fellowships, and cooperative models for artists.
- Taxes on large AI companies can fund cultural development programs.

Conclusion: Copyright law must restore its balance between protecting creators and serving the public good. Reforming the Copyright Act, 1957 will improve accessibility, promote AI innovation, and strengthen India's knowledge economy. India has an opportunity to lead globally by modernizing copyright for the 21st century.

Question: Rigid copyright regimes can undermine access to knowledge, creativity, and technological innovation. Discuss in the context of Artificial Intelligence and India's copyright framework. Suggest reforms.

Source: The Hindu

Great Nicobar project

Source: The post **"Great Nicobar project"** has been created, based on **"As NGT clears Great Nicobar project, a look at its strategic importance and ecological fallout"** published in **"Indian Express" on 19th February 2026.**

UPSC Syllabus: GS Paper-3- Environment

Context: The **Great Nicobar Island Development Project** is a mega infrastructure initiative worth about ₹72,000–81,000 crore that aims to transform **Great Nicobar Island** into an economic, logistics, and defence hub. The project is being implemented by **Andaman and Nicobar Islands Integrated Development Corporation Ltd** as part of India's long-term Indo-Pacific strategy. The project represents a major example of the development versus environment debate in India.

About the Great Nicobar Island Development Project
- The project covers around 16,610 hectares of land located in the southern part of Great Nicobar Island near **Indira Point**, which is India's southernmost tip.
- The project seeks to utilise the island's proximity to the **Malacca Strait**, one of the busiest maritime trade routes in the world.

Key Components
- An International Container Transshipment Terminal will be built at **Galathea Bay** to handle global cargo traffic and reduce India's dependence on foreign ports such as **Singapore** and **Colombo**.
- A greenfield international airport will be constructed to improve civilian connectivity and enable strategic military operations.
- Two greenfield cities and an integrated township will be created to accommodate a projected population increase to nearly 6.5 lakh people by 2050.
- A coastal mass rapid transport system will be developed to connect major infrastructure nodes across the island.

- A free trade zone and cruise tourism terminal will be established to attract investment and boost tourism revenue.
- A ship-breaking yard and gas-solar hybrid power plant will be set up to support industrial and energy needs.

Geography of Great Nicobar Island

- Great Nicobar Island is part of the **Andaman and Nicobar Islands**, which consists of more than 600 islands located in the Bay of Bengal.
- The island has dense tropical rainforests, mangroves, coral reefs, and hilly terrain, and it receives nearly 3,500 mm of rainfall annually.
- A large portion of the island lies within the **Great Nicobar Biosphere Reserve**, which hosts unique ecosystems.
- The island is home to endangered species such as leatherback turtles, Nicobar megapodes, and Nicobar crab-eating macaques.

Strategic Significance of the Project

1. Geo-Strategic Importance

- The island's location near the Malacca Strait allows India to monitor global maritime trade routes and enhance its influence in the Indo-Pacific region.
- Strengthening infrastructure on the island will improve India's maritime domain awareness and ensure security of sea lanes.

2. Geo-Security Importance

- The project complements defence facilities such as **INS Baaz** and the tri-services command at **Port Blair**.
- It will help India counter strategic expansion by **China** in the Indian Ocean Region.

3. Economic Importance

- The ICTT will help India become a major cargo transshipment hub and save foreign exchange currently spent on foreign ports.
- The free trade zone will encourage export-oriented industries and increase foreign investment.
- The project may support India's Blue Economy through shipping, fisheries, and tourism development.

4. Employment and Tourism

- Large infrastructure projects will create direct employment in construction, logistics, and services sectors.
- Cruise tourism and improved connectivity will promote eco-tourism and increase local incomes.

5. Social Development

- The project promises better hospitals, schools, digital connectivity, and transport infrastructure.
- Improved infrastructure will enhance living standards in remote island regions.

Concerns Associated with the Project

1. Threat to Biodiversity

- Nearly one million trees may be cut, which could destroy fragile rainforest ecosystems.
- Construction near Galathea Bay may damage nesting sites of leatherback turtles and other endemic species.

2. Impact on Indigenous Tribes

- The project threatens the traditional lands of Shompen and Nicobarese tribes.
- Exposure to outsiders may lead to disease spread and cultural disruption.
- The project may conflict with provisions of the **Forest Rights Act 2006**, which protects tribal land rights.

3. Seismic and Tsunami Risk

- The island lies in a high seismic zone that was affected by the **2004 Indian Ocean tsunami**.
- Large infrastructure projects may be vulnerable to earthquakes and rising sea levels.

4. **Lack of Adequate Consultation**
   - Tribal councils and environmental experts have argued that consultation processes were insufficient.
   - Reports related to environmental clearance were criticised for lack of transparency.

5. Economic Viability Concerns
   - The island's remote location and lack of hinterland connectivity may limit trade potential.
   - Competing with established transshipment hubs such as Singapore or Colombo may be difficult.
   - India already has projects like **Vizhinjam International Seaport**, which may reduce the need for another transshipment hub.

6. Social Impact
   - Rapid population growth may lead to displacement of local communities and cultural erosion.
   - Increased urbanisation may strain water, land, and waste-management systems.

Way Forward

1. Protect Tribal Rights
   - Development should follow the principle of free, prior, and informed consent for tribal communities.
   - Tribal welfare policies must be implemented strictly.

2. Separate Defence and Commercial Infrastructure
   - Defence infrastructure can be built with minimal ecological damage.
   - Large-scale commercial townships should be reconsidered.

3. Reassess Economic Feasibility
   - Independent cost-benefit studies should evaluate long-term profitability.
   - Phased development can reduce financial and ecological risks.

4. Conduct Robust Environmental Assessments
   - Comprehensive environmental and social impact assessments must be mandatory.
   - Transparent reporting and public consultation should be ensured.

5. Promote Eco-Friendly Infrastructure
   - Green buildings, renewable energy, and wildlife protection measures should be adopted.
   - Critical habitats like turtle nesting beaches should be protected.

6. Explore Alternative Development Models
   - Development could be distributed across multiple islands instead of concentrating on one island.
   - Eco-tourism and marine research could be prioritised over heavy industry.

Conclusion: The Great Nicobar Project has significant strategic and economic benefits for India's maritime future. However, ecological damage, tribal displacement, and seismic risks could have irreversible consequences. India must pursue sustainable island development by balancing national security, economic growth, environmental protection, and tribal rights.

Question: What is the Great Nicobar Island Development Project? Examine its strategic significance, ecological concerns, and suggest a balanced way forward.
Source: IndianExpress

India's 'Third Way' for AI Governance

UPSC Syllabus: Gs Paper 3- Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Introduction

India is hosting the AI Impact Summit at a time when the world is unsure how to govern artificial intelligence. Countries are struggling to balance innovation with risks that are both known and uncertain. India proposes a

"Third Way" that supports development while recognising limits of existing global models. This approach aims to suit countries whose economic and institutional realities differ from major AI powers.

The Global AI Governance Landscape

1. **Competing governance models:** The world follows three major approaches — **the European Union's compliance-heavy regime, the United States' hands-off market model, and China's centralised state control.** Each reflects different policy traditions.
2. **Limited transferability to other countries:** These governance systems were built for specific policy traditions. They do not easily fit the needs of countries outside major AI powers.
3. **Global uncertainty over the right balance:** There is confusion about how to promote innovation while managing risks. No single model has emerged as universally suitable.

India's Distinct AI Governance Approach

1. **Governance beyond regulation:** India's framework covers **adoption, diffusion, diplomacy, and capacity building**along with risk management, showing a broader governance vision. For e **xample — National AI governance guidelines (November 2025)** go beyond regulation and focus on scaling AI responsibly across sectors.
2. **Inclusive development as priority:** AI is meant to scale across **healthcare, agriculture, education, and public administration** to support broad social and economic development.
3. **Working through existing legal structures:** The framework does not create separate AI legislation. It uses current laws while remaining flexible and forward-looking.
4. **Agile and evolving policy design:** High-level principles are converted into practical guidelines. The framework can change as technology develops.
5. **Early implementation through regulatory action:** Amendments to IT rules (February 10) require **labelling of AI-generated content and a three-hour takedown window for harmful material.** This is the first government mandate for AI-generation disclosure.

Concern Related to India's Distinct AI Governance Approach

1. **Worker protection gap in rapid AI expansion:** Accelerating adoption without labour safeguards risks displacement and inequality, creating an unbalanced governance model.
2. **Insufficient minimum standards for accountability:** Clear requirements for transparency and responsibility of AI developers are not fully established.
3. **Weak institutional protection for vulnerable groups:** Mechanisms to safeguard whistleblowers and affected populations require stronger policy attention.
4. **Limited public awareness and participation:** Citizens need better understanding of AI risks and greater agency in governance processes.
5. **Incomplete people-centred governance structure:** Innovation expansion is not fully matched with social protection systems for those affected by technological change.
6. **Risk of coordination without safeguards:** Governance cooperation among countries may remain ineffective if social protections and accountability measures are not clearly defined.

Significance for the Global South and Middle Powers

1. **Unequal global AI investment landscape:** AI funding is concentrated among a few private actors in the Global North. This creates uneven access and influence.
2. **Dependence on external AI systems creates risks:** Reliance on proprietary technologies introduces new context-specific vulnerabilities and limits domestic control.
3. **Alternative governance pathway for developing economies:** India promotes **strategic autonomy, localised governance design, and strong public-private partnerships** suited to domestic needs.
4. **Need for shared research and safety infrastructure:** Middle powers require collaborative evaluation frameworks, joint research networks, and mechanisms to pool expertise on risks that no single country can assess alone.

5. **India's capacity to lead coordination efforts:** Its size, scale, and leading role in AI infrastructure, combined with historic success in digital development and access expansion, position it to convene collective governance.

Way Forward

1. **Expanding infrastructure and compute access:** Empowering national initiatives can widen AI adoption and reduce entry barriers for diverse users.
2. **Improving data governance and sharing systems:** Strong data governance and portability standards can support responsible innovation and accessibility.
3. **Promoting locally relevant datasets:** Developing culturally representative datasets enables inclusive and context-sensitive AI models.
4. **Ensuring evaluation datasets and compute availability:** Access to testing infrastructure supports safe deployment and continuous safety assessment.
5. **Integrating AI with digital public infrastructure:** Linking AI with existing systems allows scalable and inclusive technology delivery across sectors.
6. **Need for international coordination:** Effective enforcement against global technology firms requires cross-border regulatory cooperation.

Conclusion

India's "Third Way" seeks to balance innovation, strategic autonomy, and inclusive development while offering an alternative to dominant global models. Yet important gaps remain in worker protection, accountability, and public safeguards. The coming year will test whether India can align innovation with human welfare. Its choices will shape whether this governance model becomes globally influential.

For detailed information on **India's AI Guidelines for Tech Regulation** read this article here

Question for practice:

Examine how India's "Third Way" for AI governance differs from existing global governance models and evaluate its significance and challenges for developing countries and middle powers.

Source: The Hindu

India and France upgrade ties to Special Global Strategic Partnership

UPSC Syllabus: Gs Paper 2- International Relation

Introduction

India and France upgraded their relationship to a **Special Global Strategic Partnership** during President Emmanuel Macron's official visit to India in February 2026. The decision reflects the deepening and widening of bilateral cooperation across defence, technology, economy and global governance. It signals a long-term strategic alignment between the two countries to jointly address global uncertainty, strengthen institutional cooperation, and expand collaboration across emerging sectors while supporting stability and a rules-based international order.

Evolution of India–France Bilateral Relations

1. **Strategic partnership foundation since 1998:** India and France established a strategic partnership in **1998**, creating structured cooperation in defence, technology, diplomacy and economic engagement.
2. **Long-term roadmap guiding cooperation:** Both countries adopted the **Horizon 2047 Roadmap**, setting direction for cooperation up to India's independence centenary and the centenary of diplomatic relations.
3. **High-level leadership engagement continuity:** President Macron's 2026 visit followed Prime Minister Modi's 2025 visit to France, showing sustained political coordination at the highest level.

4. **Expansion beyond traditional defence focus:** Cooperation gradually expanded from defence to civil nuclear energy, space, artificial intelligence, research, health, education and cultural exchange.
5. **Institutional dialogue and review mechanisms:** An **annual Foreign Ministers Comprehensive Dialogue** was created to review progress and implement long-term partnership goals.

Vision and Purpose of the New Partnership

1. **Response to global uncertainty:** The upgraded partnership aims to jointly address geopolitical instability, economic disruption and changing international power dynamics.
2. **Force for global stability and progress:** Both countries see the partnership as supporting prosperity, resilience and a stable rules-based international order.
3. **Strengthening strategic autonomy:** Cooperation aims to reinforce sovereign decision-making in defence, technology and economic policy.
4. **Collective management of global challenges:** Both sides intend to work together on economic security, technological change, climate risks and international conflicts.
5. **Future-oriented cooperation framework:** The partnership focuses on innovation, digital technologies, health, sustainability and advanced research.
6. **Structured implementation commitment:** Institutional review mechanisms ensure continuous monitoring, coordination and long-term policy execution.

Core Pillars of Bilateral Relations

1. Defence and security

- **Deep and long-standing defence cooperation:** France remains one of India's foremost defence partners, focusing on joint design, development and production of advanced military systems.
- **Joint manufacturing expansion:** The **H125 helicopter final assembly line in Karnataka** will produce high-altitude aircraft capable of reaching Mount Everest and exporting globally.
- **Major defence procurement and platform collaboration:** Cooperation includes Rafale fighter jets, submarines, jet engines and helicopter development, strengthening India's defence capacity.
- **Missile production partnership:** A joint venture between **Bharat Electronics Limited and Safran** will produce HAMMER air-to-surface weapons in India.
- **Military operational coordination:** Reciprocal deployment of officers and joint exercises such as Varuna, Shakti and Garuda enhance interoperability.
- **Counter-terrorism cooperation commitment:** Both countries condemn terrorism and coordinate intelligence, financial monitoring and security cooperation through international mechanisms.

2. Technology and innovation

- **Institutional platforms for future technologies:** Launch of the Indo-French Centre for AI in Health, Centre for Digital Sciences and Technology and Innovation Network strengthens long-term research and innovation collaboration.
- **Co-development of critical and emerging technologies:** A Joint Advanced Technology Development Group will promote joint work in advanced and strategic technologies, including defence-related applications.
- **Responsible artificial intelligence and scientific research cooperation:** Both countries support secure and trustworthy AI and aim to bridge the global AI divide. Agreements between research institutions expand collaboration in advanced materials, applied mathematics and digital technologies.

3. Economic cooperation

- **Trade and investment strengthening:** Business partnerships expand across aerospace, logistics, energy, telecommunications and technology sectors.

- **Taxation reform to support investment:** Amendment of the bilateral tax treaty prevents double taxation and encourages cross-border economic activity.
- **Digital payments connectivity expansion:** France became the first European country to offer **UPI**, improving transactions and tourism convenience.
- **Industrial and infrastructure collaboration:** Cooperation covers railways, high-speed transport, hydrogen trains and aeronautics manufacturing, strengthening skills and production.

4. Climate and energy

- **Commitment to Paris Agreement goals:** Both countries support limiting temperature rise below 2°C and pursuing 1.5°C targets.
- **Renewable energy and sustainability initiatives:** Cooperation includes solar energy, green finance, disaster resilience and sustainable development programmes.
- **Civil nuclear energy collaboration expansion:** Partnership covers large nuclear plants, **Small Modular Reactors and Advanced Modular Reactors**, supporting low-carbon transition and energy security.
- **Ocean and biodiversity governance:** Both support marine protection, high seas treaty implementation and expansion of global marine protected areas.
- **Global climate institutions engagement:** Joint work through the International Solar Alliance and Disaster Resilient Infrastructure strengthens climate cooperation.

5. Global governance

- **Commitment to rules-based international order:** Both countries support international law, free trade and multilateral cooperation.
- **UN reform and diplomatic coordination:** France supports India's permanent membership in the **UN Security Council**, while both coordinate positions on global conflicts through dialogue and diplomacy.
- **Regional and multilateral cooperation:** Collaboration extends to the Indo-Pacific and broader economic partnerships to support stability and resilient supply chains.

6. People-to-people ties

- **Education, research and mobility expansion:** Both aim to host **30,000 Indian students in France by 2030** while expanding academic and research cooperation.
- **Health, skills and professional exchange:** Joint work in healthcare research, vocational training and migration partnerships supports workforce mobility and innovation.
- **Cultural and innovation linkages:** Cultural exchanges, language promotion and startup ecosystem collaboration strengthen long-term societal and entrepreneurial connections between both countries.

Significance and Strategic Implications

1. **Comprehensive partnership expansion:** The agreement produced **21 major outcomes** across defence, technology, innovation, health, energy and education.
2. **Strengthening industrial and technological capacity:** Joint manufacturing and research improve domestic production, workforce skills and technological competitiveness.
3. **Enhancing strategic autonomy and resilience:** Diversified supply chains, defence cooperation and innovation partnerships strengthen economic and policy independence.
4. **Institutionalising long-term cooperation:** Structured review mechanisms and roadmap planning ensure continuity and implementation across decades.
5. **Positioning both countries as global partners:** The partnership enhances their role in supporting stability and managing global challenges.

Conclusion

The Special Global Strategic Partnership represents a decisive transformation in India–France relations from sectoral cooperation to comprehensive long-term strategic alignment. Its institutional mechanisms, expanding

sectoral depth and shared global outlook provide a stable framework for sustained collaboration. Effective implementation, continued political commitment and deeper integration across priority sectors will determine how far the partnership strengthens resilience, enhances strategic autonomy and contributes to stability in an increasingly uncertain international environment.

Question for practice:

Evaluate the significance of the upgradation of India–France relations to a Special Global Strategic Partnership for bilateral cooperation and global strategic stability.

Source: Indian Express

AI in healthcare

Source: The post **"AI in healthcare"** has been created, based on **"People above platforms: AI in healthcare"** published in **"The Hindu" on 20th February 2026.**

UPSC Syllabus: GS Paper-3- Science and technology

Context: Artificial Intelligence is increasingly being used in healthcare for diagnostic imaging, data analysis, and hospital workflow management. However, discussions during consultations on people-led AI in health in Delhi highlight that AI must be evaluated through a rights-based public health approach rather than technological hype.

Potential Benefits of AI in Healthcare

1. AI has shown promise in radiology by improving accuracy in image recognition and early disease detection.
2. AI-based analytics can support doctors in diagnosis when used in controlled clinical settings.
3. AI tools can improve hospital workflow by assisting in record keeping, triage, and patient management.
4. AI can help strengthen preventive care by reminding patients about medication adherence and follow-up visits.

Limitations of AI in Healthcare

1. Healthcare involves ethical judgement, empathy, and social understanding, which AI cannot fully replicate.
2. Many AI tools that perform well in pilot studies often fail in real-world hospital settings.
3. AI systems are trained on limited datasets and may not reflect the diversity of Indian patients.
4. Healthcare requires trust and communication between doctors and patients, which algorithms cannot replace.

Need to Protect Patients' Rights

1. AI systems often collect large amounts of health data, raising concerns about who owns and controls the data.
2. Patients must have the right to understand AI-generated medical advice in simple language.
3. Health data should be processed locally wherever possible to avoid misuse and centralisation.
4. Patients must have the right to withdraw consent and control how their data is used in future.
5. AI systems must be tested for caste, gender, regional, and socio-economic bias to ensure equity.
6. Healthcare access should never be denied to patients who do not use AI-based systems.

AI Must Supplement Human Care

1. AI should assist doctors in decision-making rather than replacing them.
2. Medical decisions must remain with accountable healthcare professionals.
3. Health workers such as ASHAs and nurses should not face job loss due to AI automation.
4. Governments should conduct labour impact assessments before approving AI tools.
5. AI tools must enhance the dignity, skills, and working conditions of health workers.

Political Economy of AI

1. Many AI healthcare tools are developed by large private corporations aiming for profit.
2. Centralised data systems may lead to corporatisation of healthcare services.
3. Public data and public funds should be used to strengthen public health systems rather than private profits.
4. AI should not create an elite healthcare system accessible only to wealthy patients.

Structural Problems in India's Health System

1. India faces chronic underinvestment in public healthcare infrastructure.
2. There is a shortage of trained doctors, nurses, and health workers.
3. Private healthcare remains poorly regulated in many areas.
4. High out-of-pocket expenditure pushes many families into poverty.
5. These structural issues cannot be solved only through technological solutions like AI.

Way Forward

1. India must adopt a rights-based framework for AI in healthcare.
2. AI tools must be transparent, accountable, and regularly audited.
3. AI must be designed in regional languages to ensure accessibility.
4. Public investment should focus on strengthening primary healthcare.
5. Non-AI healthcare options must remain available for all patients.
6. AI must be used only as a support tool while keeping doctors and health workers at the centre of care.

Conclusion: Artificial Intelligence can improve efficiency in healthcare, but it cannot replace human care or solve structural health system problems. India must ensure that AI serves patients' rights, health equity, and public purpose while keeping health workers and public health systems at the centre of healthcare delivery.

Question: "Artificial Intelligence in healthcare must serve patients' rights, health equity, and public purpose while remaining supplementary to human care." Discuss in the context of India.

States' capex holds key to growth momentum

Source: The post **"States' capex holds key to growth momentum"** has been created, based on **"States' capex holds key to growth momentum"** published in **"Indian Exoress" on 20th February 2026.**

UPSC Syllabus: GS Paper-3- Economy

Context: After the Union Budget, State budgets provide a clearer picture of general government finances because States account for a major share of public spending in India. Analysis of 18 major States, which together contribute about 89% of India's GDP, shows that although revenue growth has been weaker than expected in 2025-26, States' capital expenditure is likely to grow significantly, which can support economic growth.

Current Trends in State Finances

1. Combined revenues of major States grew by only about 7.7%, which was far lower than the 22% growth projected in their budgets.
2. State GST collections grew by only around 3.3%, which limited revenue expansion.
3. Transfers and grants from the Union government were slightly lower than budget estimates, reducing fiscal space for States.
4. Because of modest revenue growth, States slowed their revenue expenditure growth to around 7%, which was much lower than budget projections.
5. However, capital expenditure grew strongly in the later part of the year, especially in the third quarter.

Importance of States' Capital Expenditure

1. Capital expenditure creates long-term productive assets such as roads, irrigation systems, hospitals, and schools.
2. Capital spending has a higher fiscal multiplier compared to revenue expenditure because it stimulates investment and employment.

3. States account for nearly two-thirds of public capital spending in India, making their investment decisions crucial for growth.
4. Increased State capex helps improve infrastructure, which boosts private investment and regional development.
5. Strong State capex can offset any slowdown in Union government capital spending.

Factors Supporting State Capex Growth

1. The Centre's 50-year interest-free capex loans to States have encouraged investment in infrastructure projects.
2. Improved fiscal discipline in revenue expenditure has allowed States to prioritise capital spending.
3. Continued spending momentum in the last quarter of the financial year could lead to 16-18% growth in State capex.
4. Higher excise duty collections and stamp duty revenues have provided some support to State finances.

Challenges Before States

1. Weak GST growth and lower-than-expected transfers from the Union government have constrained State revenues.
2. Rising welfare commitments and subsidies increase revenue expenditure pressure.
3. Many States face high debt levels, which limits borrowing capacity.
4. Regional disparities in fiscal capacity lead to uneven development.
5. Delays in project execution reduce the effectiveness of capital expenditure.

Way Forward

1. States must improve tax administration and expand GST compliance to increase revenues.
2. States should prioritise high-quality capital projects with strong economic returns.
3. Better coordination between the Centre and States can improve fund transfers and fiscal planning.
4. Public-private partnerships can help mobilise additional investment.
5. Fiscal responsibility laws should ensure sustainable borrowing while allowing productive capex.

Conclusion: States play a critical role in India's public investment strategy. Even when revenues are weak, maintaining strong capital expenditure can sustain economic momentum, create jobs, and improve infrastructure. Therefore, prudent fiscal management combined with higher quality capital spending by States is essential for India's long-term growth.

Question: "States' capital expenditure is crucial for sustaining India's economic growth momentum." Discuss in the context of recent trends in State finances.

India's Satirical Freedom and the Scope of State Power

UPSC Syllabus: Gs Paper 2- Constitution of India —historical underpinnings, evolution, features, amendments, significant
provisions and basic structure.

Introduction

India's public culture has long accepted satire as a way to question authority and expose social contradictions. Political humour, cartoons, and artistic exaggeration have traditionally existed within democratic tolerance. However, recent content blocking actions and expanded digital regulation have intensified debate over the limits of state power. The central question is whether satire can be legitimately treated as a threat under constitutional restrictions on free expression.

Recent Content Blocking and Expansion of State Regulatory Power

1. **Blocking of a satirical cartoon video:** Access to a 52 second cartoon video featuring Prime Minister Narendra Modi was blocked from the social media handles of *The Wire*, after authorities said it spread unverified information affecting defence, national security, reputation, and foreign relations.

2. Institutional criticism of democratic shrinking: The Editors Guild described the action as evidence of **rising intolerance toward scrutiny, humour, and critical commentary**.

3. **Reduced compliance window under amended rules:** The **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2026** mandate removal of illegal content within **three hours**, sharply reduced from earlier 24–36 hours.

4. **Automated enforcement through Sahyog portal:** The Sahyog platform enables authorities to issue notices to intermediaries for removing or disabling unlawful online information.

5. **Judicial validation of enforcement infrastructure:** The **Karnataka High Court (Sahyog portal case)** upheld the system despite claims it bypassed mandatory procedural safeguards.

Legal and Institutional Framework Governing Content Blocking

1. **Constitutional limits on blocking powers:** Under **Section 69A of the Information Technology Act, 2000**, content may be blocked only on grounds permitted by **Article 19(2)** of the Constitution.

2. **Procedural safeguards mandated by courts:** Reasons for blocking must be recorded in writing and remain subject to review by a designated committee.

3. **Shreya Singhal v. Union of India (2015):**

- **Mandatory hearing requirement:** The Supreme Court ruled that both the intermediary and the original content creator must be heard before blocking is ordered.
- **Restrictions tied strictly to constitutional grounds:** The same judgment clarified that blocking must relate to security, defence, foreign relations, public order, or incitement.

4. **Emergency blocking and limited notice (Rules 8 and 9 of the Blocking Rules, 2009) :** These provisions permit urgent blocking of online content, and informing the original creator of the information is not mandatory before action is taken.

5. **Confidentiality of blocking proceedings (Rule 16 of the Blocking Rules, 2009) :** The rule mandates confidentiality of blocking requests, complaints, and actions taken, limiting disclosure of the process and related information.

Constitutional and Judicial Understanding of Satire and Free Expression

1. **Meaning of satire in constitutional law:** The Supreme Court **(Indibily Creative (P) Ltd. v. State of West Bengal (2019) case)** defined satire as exaggeration that induces laughter while exposing social or political shortcomings.

2. Satire as powerful artistic communication: The same judgment recognised satire's **unique ability to reveal absurdities, hypocrisies, and contradictions clearly and quickly**.

3. **Danger of suppressing public debate —:** The Supreme Court (**D.C. Saxena v. Chief Justice of India (1997) case)** warned that restricting speech on public issues stifles debate and may destabilise society in the long run.

4. **Protection of artistic freedom through satire:** Judicial reasoning in **Indibily Creative (2019)** affirmed that artistic expression through satire counters oppression and promotes social understanding.

5. Nature of cartoons and caricature : The Court (**Kama v. M. Jothisorupan (Madras High Court, 2018)** case) described political cartoons as deliberate exaggerations and **"weapons of ridicule"** intended to sting, not flatter.

6. **Reasonable observer test applied by courts:** Satirical expression must be judged from the perspective of a reasonable person capable of humour, not a hypersensitive individual.

Democratic Acceptance and Social Function of Satire

1. **Democratic tolerance of ridicule:** Courts in democracies grant satire wide latitude as an essential element of public opinion and civic discourse.

2. **Historical acceptance of irreverent portrayal:** Even foundational national figures have historically been depicted in exaggerated or mocking ways without undermining democratic stability.

3. **Creative freedom in social representation :** The **Delhi High Court (Netflix streaming injunction plea)** affirmed that artists may portray society as they perceive it, including through satire.

4. **Social function of exaggeration:** Courts recognised that comedians and satirists highlight social flaws by exaggerating them until they become clearly visible.
5. **Judicial confidence in democratic resilience :**The Court **(March 2025 verdict in Imran Pratapgarhi case)** held that artistic expression, poetry, or entertainment cannot easily create communal hatred in a mature republic.

Ongoing Legal Challenges and Institutional Tensions

1. **Concerns about procedural fairness in blocking decisions:** Petitioners argue creators are sometimes not informed of proposed restrictions despite existing constitutional safeguards.
2. **Scrutiny of emergency blocking powers:** Critics contend urgent blocking provisions enable removal of content with limited opportunity for response.
3. **Transparency concerns arising from confidentiality rules:** Mandatory secrecy surrounding blocking processes is viewed as weakening public accountability.
4. **Legal resistance from digital media actors:** Technology organisations, journalists, and platform operators have approached courts against restrictions imposed on security or public order grounds.
5. **Continuing judicial engagement with digital regulation:** Courts are examining whether expanding enforcement tools remain consistent with constitutional protections of speech and due process.

Conclusion

India's constitutional order recognises satire as a core democratic safeguard, yet expanding digital regulation continues to test limits of state authority. Protecting expressive freedom requires strict adherence to procedural safeguards, transparency, and proportional use of power. Judicial oversight remains decisive in ensuring regulation strengthens governance without eroding democratic debate or public trust over time in the future.

Question for practice:

Discuss how recent content-blocking measures and expanding digital regulatory powers in India raise constitutional questions about the protection of satire and freedom of expression.

Source: The Hindu

India's Youth Dividend in the AI Era

UPSC Syllabus: Gs Paper 2- Issues relating to development and management of Social Sector/Services relating to Education, Human Resources.

Introduction

Artificial Intelligence is reshaping India's economic structure and employment patterns. The India-AI Impact Summit 2026 places young people at the centre of this transition. India is moving from passive education toward skill-based participation and industry-linked learning. The focus is on employability, productivity, and technology-driven careers. Youth capability is being treated as a national growth driver. By aligning skills, infrastructure, and opportunity, India is positioning its young population to lead long-term economic transformation in the AI-driven global economy.

From Demographic Potential to Active AI Participation in India

1. **Shift toward skill-based engagement:** India is moving learning beyond theory toward hands-on problem solving, practical innovation, and market-oriented skill development.
2. **Youth-led innovation platforms:** Innovation challenges, startup pitches, and live solution demonstrations connect young talent directly with industry needs and real economic applications.
3. **Education–industry alignment:** India is strengthening pathways from classrooms to employment by linking learning outcomes with job requirements in AI-driven sectors.

4. **Youth participation as growth engine:** India is converting demographic capacity into productive workforce capability, making youth engagement central to economic and technological expansion.

AI-Driven Employment Transformation and Emerging Opportunities in India

1. **AI restructuring labour markets:** Artificial Intelligence is creating new roles, increasing productivity, and expanding employment pathways across technology and related sectors.

2. Sharp rise in AI job demand: AI-related vacancies increased from **2.9% to 6.5% between January 2023 and March 2025**, while demand for AI skills grew **75% faster than non-AI roles**, indicating structural labour market change.

3. **New employment skill requirements:** Digital fluency, advanced technical knowledge, and interdisciplinary capability are becoming essential for workforce participation.

4. Expansion of creative technology sectors: Animation, Visual Effects, Gaming and Comics are projected to generate **nearly 2 million jobs by 2030**, strengthening employment potential.

5. **AI as a pathway to future-ready work:** Technology is becoming a major channel for skill-intensive careers across multiple industries.

India's AI Talent Strategy: National Vision and Economic Orientation

1. **AI supporting inclusive economic growth:** India is using Artificial Intelligence to expand employment opportunities, enhance productivity, and strengthen talent development across sectors.

2. **Integration of skills, innovation and market demand:** India is aligning talent creation with industry needs through structured platforms that connect learning, innovation, and employment.

3. **Employment-focused technology strategy:** National priorities emphasise workforce readiness, productivity gains, and expansion of technology-driven job markets.

4. **Long-term global competitiveness goal:** India is treating AI capability as a strategic national asset for sustaining growth and strengthening global positioning.

Policy Support and Infrastructure Expansion by India

1. **Budget prioritisation of AI-linked industries:** India's Union Budget 2026–27 supports animation, gaming, digital content, and immersive media within the Orange Economy framework.

2. Expansion of institutional skill infrastructure: India is establishing **AI-aligned Content Creator Labs in 15,000 schools and 500 colleges**, expected to generate **around 20 lakh jobs**.

3. **Institutional coordination for workforce planning:** India has proposed an **Education to Employment and Enterprise Standing Committee** to assess AI's impact on jobs and skill requirements.

4. **Large-scale expansion of compute capacity:** India has allocated **over ₹10,300 crore** to expand infrastructure from **38,000 to over 58,000 GPUs**.

5. **Affordable access to AI resources:** India is providing compute access at **₹65 per hour**, reducing barriers for startups, innovators, and educational institutions.

6. **Inclusive national innovation ecosystem:** India is extending access to datasets, models, and infrastructure beyond metropolitan regions to ensure wider participation.

India's Multi-Level AI Talent Development Ecosystem

1. Foundational AI literacy in education

- India is embedding digital and AI competencies across educational levels, introducing computational thinking and ethical awareness from early stages.
- India is expanding public AI awareness through free literacy programmes in **11 languages**, targeting **1 crore citizens**.

2. Vocational and industry-aligned workforce training

- India is integrating AI into skill development, with **1.34 lakh learners trained under SOAR** through industry partnerships.
- India's FutureSkills Prime platform has **25.3 lakh registered learners** across **3,000+ courses**, supporting workforce upskilling in emerging technologies.

• India's unified digital skill platforms provide structured AI and machine learning training from introductory to advanced levels.

3. Advanced talent and research development

• India is supporting **500 PhD scholars, 5,000 postgraduates, and 8,000 undergraduates** through specialised fellowships and advanced skill programmes.

• India has established **27 AI labs in Tier-2 and Tier-3 cities**, with approvals for **174 additional labs**, expanding regional access to high-end training and applied research.

Indicators of India's Emerging Global AI Leadership

1. Innovation expanding beyond metropolitan centres: More than 50% of startups in India now emerge outside metro cities, reflecting decentralised innovation growth.

2. **High global AI skill penetration:** India's AI skill presence is **2.5 times the global average**, demonstrating large-scale capability development.

3. **Widespread enterprise adoption of AI: 87% of enterprises in India actively use AI solutions**, sustaining demand for skilled workers and strengthening school-to-work transitions.

4. **Large digitally adaptable youth base:** India's extensive participation in national learning programmes supports continuous innovation capacity.

5. **Commitment to responsible AI use:** India recorded **over 2.5 lakh AI responsibility pledges in 24 hours**, demonstrating strong public engagement with ethical and accountable technology use.

Conclusion

India is transforming youth potential into technological capability through coordinated skilling, policy support, and infrastructure expansion. Youth participation, employment growth, and responsible AI adoption are strengthening productivity and competitiveness. Continued alignment between education, skills, and industry demand will sustain inclusion, expand regional participation, and reinforce India's long-term leadership in the global AI-driven economy.

Question for practice:

Examine how India is leveraging its youth population, policy initiatives, and skill development ecosystem to build a globally competitive workforce in the AI era.

Source: PIB

Supreme Court slammed the freebies culture of State Governments

Source: The post **"Supreme Court slammed the freebies culture of State Governments"** has been created, based on **"SC slams freebies culture, says states should open avenues for employment"** published in **"Hindustan Times" on 21 February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: The Supreme Court of India recently criticised the growing freebies culture while hearing a plea by Tamil Nadu Power Distribution Corporation Ltd regarding free electricity schemes. The Court observed that states should prioritise creating employment opportunities rather than distributing indiscriminate benefits. This debate highlights the tension between welfare policies and fiscal responsibility.

About the Freebies

1. Freebies are goods or services provided free of cost or at heavily subsidised rates without proper targeting of beneficiaries.
2. These schemes often include free electricity, free food grains, free bicycles, laptops, or unconditional cash transfers.
3. Political parties, including regional parties such as Dravida Munnetra Kazhagam, frequently promise such schemes during elections to attract voters.

Key Observations by the Supreme Court

1. The Supreme Court stated that excessive freebies can hamper economic development because they divert funds from productive investments.
2. The Court noted that many states are revenue-deficit states but still offer free schemes, which increases fiscal stress.
3. It emphasised that states should distinguish between those who can afford services and those who cannot.
4. The Court also expressed concern that excessive handouts could negatively affect work culture.
5. Finally, it suggested that states should focus on creating employment opportunities instead of distributing universal freebies.

Issues Associated with Freebies

1. Freebies create fiscal stress because they increase state expenditure without generating revenue, leading to higher debt levels.
2. They distort economic priorities because funds meant for infrastructure, education, and health are diverted to consumption-based schemes.
3. Freebies may create moral hazard because continuous handouts can reduce incentives to work or seek employment.
4. They encourage political populism because parties compete to offer more benefits for short-term electoral gains.
5. Freebies are often inefficiently targeted, as benefits sometimes reach wealthy households instead of the poor.

Arguments in Favour of Freebies

1. Freebies can promote social justice because they help vulnerable groups cope with poverty and inflation.
2. Welfare measures are consistent with the idea of a welfare state, which aims to support citizens in need.
3. Certain subsidies improve human development by increasing access to education, healthcare, and nutrition.
4. Some welfare spending also increases demand in the economy because poorer households tend to spend more of their income.

Difference Between Welfare and Freebies

1. Welfare measures are targeted and aim at long-term empowerment, while freebies are often universal and focus on short-term consumption.
2. Welfare policies improve productivity by investing in human capital, whereas freebies usually do not create lasting economic benefits.
3. For example, skill development programs create employment opportunities, whereas distributing free gadgets may not improve long-term productivity.

Way Forward

1. States should provide targeted subsidies using Direct Benefit Transfer systems to ensure that only the needy receive support.
2. Governments should prioritise employment generation through promotion of MSMEs, labour-intensive industries, and skill development programs.
3. Fiscal responsibility laws should be strengthened so that states maintain sustainable debt levels.
4. The Election Commission of India should require political parties to disclose the fiscal impact of their promises.
5. Governments should invest more in productive welfare such as education, healthcare, and infrastructure.
6. Power sector reforms should be implemented to reduce losses and ensure rational electricity pricing.

Conclusion: The Supreme Court's remarks highlight the need to balance compassionate welfare policies with fiscal discipline. India should move from a culture of indiscriminate freebies to policies that empower citizens through employment and human capital development. Such a balanced approach will ensure inclusive and sustainable economic growth.

Question: Discuss the issues associated with the freebies culture in India. Also examine the difference between welfare and freebies and suggest measures to ensure fiscal prudence while protecting social justice.

Source: Hindustan Times

ISA launches global AI-for-Energy mission

Source: The post **"ISA launches global AI-for-Energy mission"** has been created, based on **"International Solar Alliance launches global AI-for-Energy mission to accelerate clean power in 120+ countries"** published in **"Down to earth" on 21 February 2026.**

UPSC Syllabus: GS Paper-3- Science and technology

Context: The International Solar Alliance launched a Global AI-for-Energy Mission at the India AI Impact Summit 2026 to accelerate clean energy adoption across more than 120 member countries. The mission recognises that achieving universal clean energy access now requires not only renewable capacity expansion but also intelligent digital infrastructure, advanced data systems, and citizen-centric platforms. The initiative particularly targets developing economies where electricity access is uneven and grids are weak, inefficient, or unable to integrate decentralised renewables.

Objectives of the AI-for-Energy Mission

1. Transform Energy Systems through AI

a. The mission aims to use artificial intelligence to improve grid resilience by enabling accurate demand forecasting, automated outage management, and predictive maintenance of infrastructure.
b. It seeks to reduce transmission and distribution losses, which remain high in many developing countries due to outdated systems.
c. AI tools will also optimise bidirectional energy flows as rooftop solar users become both consumers and producers of electricity.

2. Accelerate Deployment of Renewable Energy

a. The mission intends to scale rooftop solar programmes by simplifying registration, monitoring, and financing processes through digital platforms.
b. It encourages decentralised renewable systems such as mini-grids and community solar projects that can provide reliable power in remote areas.
c. By improving planning and grid integration, AI can ensure faster renewable energy deployment without destabilising power systems.

3. Align Policy, Data, and Finance

a. The initiative plans to harmonise regulatory frameworks across ISA member countries so that investments in clean energy can scale more easily.
b. It aims to create interoperable data systems that connect utilities, regulators, consumers, and financial institutions.
c. The mission also seeks to mobilise global climate finance and private sector investment by improving transparency and reducing risks in renewable energy projects.

4. Build Citizen-Centric Energy Systems

a. The mission emphasises digital consumer interfaces that allow households to monitor energy usage, apply for rooftop solar, and track subsidies.
b. It promotes inclusive energy services so that rural populations, small businesses, and low-income households can benefit from clean power.

c. Transparent billing systems and grievance mechanisms can improve trust in utilities and reduce disputes.

Role of AI in the Clean Energy Transition

1. Grid Modernisation

a. AI algorithms can forecast electricity demand based on weather patterns, economic activity, and consumption trends, enabling efficient generation planning.
b. Digital twin technology can simulate distribution networks to test scenarios, detect vulnerabilities, and plan infrastructure upgrades.
c. Real-time monitoring can reduce outages and enable faster restoration of services.

2. Integration of Decentralised Renewables

a. AI systems can manage distributed solar panels, storage batteries, and electric vehicles by balancing load and supply dynamically.
b. Smart metering and automated net-metering systems can ensure accurate compensation for rooftop solar users.
c. These tools allow countries to integrate renewables without investing heavily in traditional large-scale infrastructure.

3. Improved Service Delivery

a. AI-enabled platforms can automate customer onboarding for solar installations and energy connections, reducing delays and corruption.
b. Smart billing and targeted subsidies can ensure that government benefits reach intended households.
c. Analytics can detect power theft and technical losses, improving financial viability of utilities.

India's Digital Public Infrastructure Model

1. India showcased its digital public infrastructure approach in the power sector as a model that other ISA countries can adapt.
2. Interoperable platforms connect consumers, vendors, utilities, and banks, making energy services faster and more transparent.
3. Large-scale rooftop solar programmes have been accelerated through digital monitoring, financing tools, and streamlined approvals.
4. AI-based forecasting and grid optimisation have helped India manage growing renewable capacity while maintaining grid stability.

Innovations Demonstrated under the Mission

1. The Digital Consumer Interface "One Solar App" allows users to register rooftop solar systems, track generation, and manage net-metering transparently.
2. Digital Twin solutions for utilities create virtual replicas of electricity networks, enabling predictive maintenance and renewable integration planning.
3. GIS-based distribution modernisation projects improve infrastructure planning, asset tracking, and outage management using geospatial mapping.

Significance of the Mission

1. For Developing Countries

a. The mission enables countries to leapfrog outdated energy systems by adopting smart grids and decentralised renewable technologies.
b. Reliable electricity access can support education, healthcare, and economic development in underserved regions.
c. Reduced reliance on fossil fuels improves energy security.

2. For Climate Action

a. Faster renewable energy deployment reduces greenhouse gas emissions and supports global climate commitments.
b. AI-optimised systems ensure efficient use of renewable resources and minimise wastage.

c. The initiative supports global efforts toward sustainable development goals.

3. For Economic Growth

a. The mission can create green jobs in solar installation, AI services, and digital infrastructure development.
b. Lower energy costs improve industrial competitiveness and support entrepreneurship.
c. Innovation ecosystems can emerge around clean-energy technologies.

4. For Governance

a. Transparent digital platforms improve accountability in subsidy distribution and billing.
b. Citizen-centric services strengthen trust between utilities and consumers.
c. Data-driven policymaking leads to better planning and resource allocation.

Challenges in Implementation

1. Many ISA member countries face shortages of skilled professionals in AI and energy management.
2. Financing constraints may limit large-scale deployment of digital infrastructure.
3. Data privacy and cybersecurity risks must be addressed through strong regulations.
4. Differences in regulatory frameworks across countries may slow interoperability.

Way Forward

1. ISA should promote international cooperation among governments, multilateral agencies, and private companies to share best practices and technologies.
2. Capacity-building programmes should train engineers, policymakers, and technicians in AI-based energy management.
3. Standardised data protocols and cybersecurity frameworks should be developed across ISA members.
4. Innovative financing models such as green bonds and blended finance should support implementation.

Conclusion: The AI-for-Energy mission represents a transformative step in the global energy transition by combining renewable energy expansion with digital intelligence. By focusing on citizen-centric platforms, interoperable systems, and AI-driven grid management, the initiative can accelerate clean energy adoption while ensuring equitable access. If implemented effectively, the mission can help developing countries achieve sustainable growth, climate resilience, and energy security simultaneously.

Question: Discuss how artificial intelligence can transform energy systems in developing economies. What institutional, financial, and technological challenges may hinder its implementation?

Source: Down to Earth

Gen Z and the Dynamics of Democratic Engagement

UPSC Syllabus: Gs Paper 1- Society

Introduction

Democratic systems across many societies are facing decline, weak accountability, and growing public frustration. In this setting, **Generation Z (1997–2012)** has emerged as a visible political force. Youth-led protests in Bangladesh (2024) and Nepal (2025) show new patterns of mobilisation. Their engagement reflects changing values, new social experiences, and different ways of practising democracy shaped by digital life, economic uncertainty, and evolving social expectations.

Understanding Gen Z

1. **Generational change in values:** Each generation reshapes ethics, social practices, and political expectations. New ideas carry traces of older traditions but appear unfamiliar to previous generations.
2. **Response to democratic decline:** Their rise occurs when many societies face authoritarian tendencies and unresponsive governance. Youth mobilisation reflects renewed democratic energy.

3. **Correcting the image of disengagement:** They were often seen as distracted and absorbed in virtual life. Organised protests showed structured and purposeful political expression.
4. **Democracy beyond formal institutions:** Democratic life depends not only on laws and structures but also on everyday moral practices and shared emotions. These deeper layers shape their responses.
5. **Emergent political subjectivity:** Their mobilisation reflects new forms of selfhood and social awareness. Their politics cannot be fully understood through conventional frameworks.

History of Gen Z Mobilisation

1. **Early participation before leadership:** Youth presence appeared in protests from 2010 onward, including UK student protests and riots. They participated even when not leading movements.
2. **Gradual global involvement in the 2010s:** Gen Z members appeared in events like the Arab Spring and Gezi Park protests. Their presence spread across regions over time.
3. **Rise of youth-led global campaigns:**
    - From the late 2010s, Gen Z began leading organised mobilisation. **March for Our Lives (2018)** and **Fridays for Future (2018)** marked early visible leadership.
    - Youth-led protests influenced major political events such as the Thai protests (2020–21) and the Sri Lankan uprising (2022).
4. **Global reach after 2024: Bangladesh (2024)** and **Nepal (2025)** saw regime-challenging protests led by Gen Z. Similar mobilisations spread across Asia, Africa, and South America.
5 **Recognition of a protest generation:** By 2025, widespread youth participation across countries led observers to describe a global protest wave shaped by Gen Z.

Characteristics of Gen Z

1. **Radical individualism with low prejudice:** They value personal autonomy but show less social prejudice and discrimination.
2. **Personal experience as political meaning:** Political understanding comes from lived experience and everyday treatment rather than abstract theory.
3. **Practice rather than ideology:** They prefer living their values instead of promoting rigid doctrines. They resist moral preaching and avoid preaching to others.
4. **Response to lived inequality:** They react strongly to direct experiences of hierarchy. However, they do not always frame these experiences in structural or systemic terms.
5. **Preference for virtual interaction:** They prefer expressing views on virtual platforms rather than physical interaction.
6. **Confidence combined with anxiety:** They are socially confident due to democratisation but deeply anxious due to shrinking economic opportunities.
7. **Mental health awareness:** Openness to counselling and therapy is common. Feelings of insecurity, workplace stress, and emotional strain influence political attitudes.
8. **Precarity shaping participation:** Economic uncertainty leads to fragmented and temporary involvement in political events.
9. **Consumption and identity formation:** Market access, technology, and education shape self-identity. Consumption patterns challenge inherited social hierarchies.
10. **Information as social dignity:** Access to information becomes a key source of dignity.

Comparison Between Gen Z Movements and Traditional Mass Movements

1. **Organisation versus spontaneity:** Traditional movements like the farmers' protest (2020–24) had leadership, structure, and sustained planning. Gen Z protests are spontaneous and decentralised.
2. **Duration and continuity:** Earlier movements continued for years with stable demands. Gen Z protests are episodic and short-lived.

3. **Ideological clarity versus fluid demands:** Traditional movements had clear ideological frameworks. Gen Z protests often lack defined ideological structures.
4. **Collective mobilisation versus individual participation:** Earlier protests relied on organised groups. Gen Z mobilisation reflects individual motivation and personal engagement.
5. **Sustained presence versus symbolic impact:** Traditional protests maintained physical continuity. Gen Z protests fade quickly but still produce significant psychological and political influence.

Why Gen Z Mobilisation Matters

1. **Challenge to democratic decline:** Their mobilisation offers renewed pressure against authoritarian tendencies and unresponsive governance.
2. **Transformation of protest culture:** Leaderless and episodic mobilisation changes how political participation operates.
3. **Shift from ideology to lived experience:** Political engagement increasingly reflects everyday emotions and personal realities.
4. **Social democratisation and self-awareness:** Expanded education and openness encourage reflection on identity and social position.
5. **Economic insecurity shaping political behaviour:** Limited opportunities create anxiety, influencing how and when they participate.
6. **Market and technology reshaping social equality:** Consumption and information weaken traditional caste and religious hierarchies.
7. **Unpredictable yet influential outcomes:** Even brief protests can reshape public discourse and political attention.

Conclusion

Gen Z represents a new form of democratic engagement shaped by individualism, digital interaction, and economic insecurity. Their protests are brief but influential, practical rather than ideological. They express politics through lived experience and personal assertion. Their impact is uncertain but transformative, making them central to understanding the evolving nature of democratic participation.

Question for practice:

Examine how Generation Z is reshaping the nature of democratic engagement through its distinct worldview, protest patterns, and forms of political participation.

Source: The Hindu

India–France Strategic Partnership in a Changing Global Order

UPSC Syllabus: Gs Paper 2- International relations

Introduction

India and France have strengthened their partnership through expanding defence cooperation, technological collaboration, and global coordination. The inauguration of the **Airbus H125 helicopter assembly line in Karnataka** and elevation of ties to a **Special Global Strategic Partnership** reflect growing strategic convergence. In a changing global order marked by uncertainty in Western alliances, France remains a stable and trusted partner for India, shaping cooperation across security, innovation, economic development, and global governance.

Foundations of France's Strategic Autonomy and India's Trust

1. **Gaullist strategic worldview:** France's political thinking is rooted in **Gaullism**, which emphasises sovereignty, strong national identity, and centralised state authority. This shapes its independent foreign policy and global strategic posture.

2. **Institutional independence in governance:** The **domaine réservé system (1958)** allows the French President to make long-term strategic decisions without domestic legislative gridlock. This ensures continuity in external commitments.
3. **Assertion of national interest in security policy:** France withdrew from NATO's integrated military command in **1966**, showing it would not operate under American control. This signals that national interest overrides bloc alignment.
4. **Transition from colonial past to strategic partner:** France moved from holding enclaves like **Pondicherry (Puducherry)** to becoming one of India's most dependable Western allies. Historical transformation strengthened mutual trust.
5. **Pragmatic diplomacy without ideological conditions:** France engages based on **mutual strategic and economic interests**, not domestic political standards or human rights conditionality. This makes agreements more flexible and predictable.

Diplomatic Support and Global Strategic Alignment

1. **Consistent backing in global institutions:** France acts as a strong diplomatic partner at the **UN Security Council**, often defending Indian interests and preventing international isolation.
2. **Support in critical geopolitical moments:** France refused to sanction India after the **1998 Pokhran-II nuclear tests** and blocked attempts to internationalise the **Article 370 decision in 2019**.
3. **Replacement of Russia as Western strategic defender:** France increasingly serves as India's most reliable Western diplomatic supporter, especially when broader Western consensus is divided.
4. **Shared commitment to global governance reform:** Both countries support **reformed multilateralism**, a **rules-based international order**, and India's permanent membership in a reformed UN Security Council.

Formalisation and Expansion of Strategic Partnership

1. **Elevation to Special Global Strategic Partnership:** The relationship now covers defence, critical minerals, advanced technology, climate action, health, education, and economic security.
2. **Long-term strategic roadmap:** The partnership builds on the **1998 Strategic Partnership** and the **Horizon 2047 Roadmap**, with an annual Foreign Ministers Comprehensive Dialogue for coordination.
3. **Deeper regional and global coordination:** Cooperation extends across bilateral, regional, and global levels, especially in the **Indo-Pacific**, economic security, and international diplomacy.
4. **Innovation and technology cooperation platforms:** The **2026 India–France Year of Innovation** and **India–France Innovation Network** link startups, institutions, and businesses across both countries.

Expanding Multi-Sector Strategic Cooperation

1. **Defence industrial collaboration:** Joint production initiatives include **HAMMER missile manufacturing**, reciprocal military officer deployment, and a Joint Advanced Technology Development Group for emerging technologies.
2. **Aerospace and military capability development:** The **H125 helicopter assembly line in Vemagal**, Rafale-Marine procurement, and cooperation on jet engines and multi-role helicopters strengthen defence manufacturing.
3. **Critical minerals and supply chain security:** Cooperation in exploration, processing, and recycling of **rare earths and critical minerals** aims to build resilient clean energy and manufacturing supply chains.
4. **Artificial intelligence and advanced research:** The **Indo-French Centre for AI in Health at AIIMS**, created with Sorbonne University and the Paris Brain Institute, promotes public-interest AI development.
5. **Economic and financial cooperation:** Amendment of the **Double Tax Avoidance Agreement (DTAA)** improves investor certainty, while France expands adoption of **India's UPI digital payment system**.
6. **Climate, nuclear and energy engagement:** Collaboration includes renewable energy, civil nuclear discussions, and joint initiatives like the **International Solar Alliance** and **Coalition for Disaster Resilient Infrastructure**.
7. **Indo-Pacific and global security coordination:** Both countries support a **free and open Indo-Pacific**, cooperate in IMEC and trilateral frameworks, and align on Ukraine conflict resolution and counter-terrorism.

8. **People-to-people and knowledge exchange:** France plans to host **30,000 Indian students by 2030**, expand academic partnerships, and support skill development and cultural cooperation.

Expanding Cooperation Amid Economic and Technological Challenges

1. **Trade imbalance and export decline:** Bilateral goods trade reached **$15.2 billion in FY 2024–25**, but Indian exports fell **11% in April–November 2025**, largely due to declining refined petroleum exports.
2. **Nuclear liability dispute**
    - **Delaying cooperation:** The **9,900 MW Jaitapur nuclear project** remains stalled because EDF rejects supplier liability under India's nuclear liability framework.
    - **Financial risk sharing tensions:** France supports India globally but expects India to bear the full financial risk of a potential nuclear accident in joint projects.
3. **Technology transfer and intellectual property concerns:** Industrial partnerships generate jobs but limited intellectual property access restricts true technological sovereignty.
4. **Risk of strategic dependency shift:** Replacing reliance on Russian defence equipment with French systems without deep technology transfer may only change the source of dependence.

Conclusion

France remains India's most reliable Western partner in a changing global order. Strong diplomatic trust, expanding cooperation, and shared strategic interests sustain the relationship. However, trade imbalances, nuclear liability disputes, and limited technology transfer require careful management. India must leverage this partnership to secure deeper technological capacity and achieve genuine long-term strategic autonomy.

Question for practice:

Discuss the significance of the India–France Strategic Partnership in the changing global order, highlighting its foundations, areas of cooperation, and key challenges.

Source: Indian Express

We need to underline value of collaboration on climate change

Source: The post **"We need to underline the value of collaboration on climate change"** has been created, based on **"We need to underline the value of collaboration on climate change"** published in **"Indian Express" on 23rd February 2026.**

UPSC Syllabus: GS Paper-3- Environment

Context: Global climate governance is facing serious stress because trust in multilateral institutions is weakening and major economies like the United States have reduced participation in international commitments. This weakens the rule-based global climate architecture under the UNFCCC and makes cooperation even more necessary to address climate change effectively.

Importance of Collaboration on Climate Change

1. Climate Change is a Global Commons Problem

a. Climate change is a transboundary issue because greenhouse gas emissions spread globally regardless of where they originate.
b. No single country can achieve targets like limiting warming to 1.5°C on its own.
c. Therefore, coordinated global action is necessary to prevent carbon leakage and policy inefficiencies.

2. Protecting Vulnerable Populations

a. Collective climate action is important because it protects vulnerable populations such as small island nations, poor communities, and developing countries that are most affected by climate disasters.
b. Climate justice requires shared responsibility so that the costs and benefits of climate action are distributed fairly.

3. Bridging the Climate Finance Gap

a. Climate transition requires massive financial investments that most developing countries cannot mobilise alone. Reports by NITI Aayog show that India needs huge investments to achieve net-zero targets.
b. Therefore, multilateral cooperation is essential for mobilising climate finance, technology transfer, and capacity building.

4. Technology Sharing and Innovation

a. International collaboration accelerates research and development in renewable energy and clean technologies.
b. Joint innovation reduces the cost of green technology and makes it accessible to developing countries. Technology partnerships also help in scaling climate solutions quickly.

5. Maintaining Rule-Based International Order

a. Multilateral agreements create predictable and transparent frameworks for climate action.
b. Bilateral deals based only on national interests can weaken global goals. Cooperation builds trust, accountability, and fairness in climate governance.

Challenges to Multilateral Climate Cooperation

1. Geopolitical Rivalries: Geopolitical rivalries among major powers have led to trade wars and protectionist policies, which weaken trust and reduce willingness to cooperate on climate action.

2. Climate Finance Disputes: There are persistent disagreements between developed and developing countries over climate finance responsibilities, with developing nations demanding greater financial support and technology transfer for their transition efforts.

3. Equity Concerns: Equity concerns arise because developed countries have historically contributed more to global emissions, while developing countries still need policy space for economic growth and poverty reduction.

4. Unilateral Trade Measures: Unilateral trade measures such as carbon border adjustment taxes create friction among countries and may be perceived as disguised protectionism rather than genuine climate action.

5. Implementation Gap: There is a large gap between climate commitments made by countries and their actual implementation, which undermines confidence in global climate agreements under the UNFCCC.

India's Role in Strengthening Collaboration

1. Advocacy for Equity-Based Framework: India has consistently advocated an equity-based global climate framework that recognises the principle of common but differentiated responsibilities.

2. Strong Domestic Renewable Push: India is pursuing ambitious domestic renewable energy targets and promoting initiatives such as solar expansion and green hydrogen to demonstrate leadership in climate action.

3. Promoting Global Dialogue: Platforms organised by The Energy and Resources Institute encourage dialogue between developed and developing countries and help build consensus on climate solutions.

4. Value-Based Leadership: India's climate diplomacy is grounded in principles like Vasudhaiva Kutumbakam, which emphasise global cooperation and shared responsibility.

Way Forward

1. Strengthen Multilateral Institutions: Countries should reinforce global climate processes under the UNFCCC and improve compliance mechanisms to ensure accountability.

2. Promote Innovative Climate Finance: Innovative financing instruments such as green bonds, blended finance, and debt-for-climate swaps should be expanded to mobilise large-scale investments for climate transition.

3. Ensure Inclusive Decision-Making: Decision-making processes must include representation from developing nations and local communities so that climate policies address real needs on the ground.

4. Focus on Implementation: Countries should shift attention from prolonged negotiations to effective implementation of agreed climate actions and create joint monitoring frameworks to track progress.

5. Build Trust Among Nations: Trust can be strengthened through transparent reporting, fair sharing of responsibilities, and predictable financial commitments from developed countries.

Conclusion: Collaboration on climate change is essential because climate problems are global in nature and affect the most vulnerable populations first. Collective action helps mobilise finance, technology, and trust while maintaining a rule-based global order. Strengthening multilateralism is therefore necessary for achieving climate goals and ensuring sustainable and equitable development for all.

Question: In the context of weakening multilateralism, underline the value of collaboration on climate change.

Source: Indian Express

Parliament's historic law, an extended wait for women

Source: The post **"Parliament's historic law, an extended wait for women"** has been created, based on **"Parliament's historic law, an extended wait for women"** published in **"The Hindu" on 23rd February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: The passage of the Women's Reservation Act in 2023 was hailed as a historic step towards gender justice in India. The Act promises 33% reservation for women in the Lok Sabha and State Assemblies. However, linking its implementation to Census and delimitation has created serious concerns about delay and effectiveness.

Key Features of the Women's Reservation Act

1. The Act reserves one-third of seats in the Lok Sabha and State Legislative Assemblies for women.
2. It includes sub-reservation for Scheduled Caste and Scheduled Tribe women.
3. It mandates rotation of reserved constituencies after every general election.
4. It makes implementation conditional upon the first Census after 2026 and subsequent delimitation.

Why the Implementation May Be Delayed

1. Census Requirement: The Act requires a national Census before reservation begins. Since the next Census is expected after 2026, implementation cannot start before data publication.

2. Delimitation Exercise: After the Census, a Delimitation Commission must redraw constituencies under Article 82. Past delimitation exercises have taken 3–6 years, making implementation before 2034 unlikely.

3. Legal and Logistical Constraints: Redrawing 543 Lok Sabha and thousands of Assembly constituencies is complex. It must balance population, geography, SC/ST reservations, and now women's quotas.

4. Political Calculations: Immediate reservation would displace many male incumbents. Linking reservation to delimitation allows expansion of seats instead of replacement, reducing political resistance.

Major Concerns with the Act

1. Representation Delayed: Women may not benefit from reservation until 2034 or later, defeating the purpose of timely gender justice.

2. Link with North–South Seat Debate: Delimitation may change seat distribution among States, reviving federal tensions about population growth and representation.

3. Exclusion of Upper Houses: The Act does not cover the Rajya Sabha and State Legislative Councils, limiting its scope.

4. No OBC Sub-Reservation: Other Backward Class women are not given separate quotas, despite their large population share.

5. Unclear Rotation Mechanism: The Act does not clearly explain how constituency rotation will work, creating administrative and political confusion.

Importance of Women's Political Representation

1. Women's representation improves policymaking on health, education, and welfare.
2. It strengthens inclusive democracy and gender equality.
3. Local government reservations in India have already shown positive governance outcomes.
4. Greater participation empowers marginalised communities.

Way Forward

1. Amend the Constitution for Immediate Implementation: Parliament can delink reservation from delimitation through another constitutional amendment.

2. Temporary Expansion of Lok Sabha: Seats could be increased to accommodate women's reservation without displacing existing members.

3. Clear Implementation Roadmap: The government should publish a timeline for Census, delimitation, and reservation rollout.

4. Extend Reservation to Upper Houses: Reservation should also cover the Rajya Sabha and Legislative Councils for complete representation.

5. Provide OBC Sub-Reservation: Including OBC women will ensure broader social justice.

6. Define Rotation Rules Clearly: Transparent rules must be created in consultation with experts and women's organisations.

Conclusion: The Women's Reservation Act is a landmark constitutional promise, but its linkage with Census and delimitation risks delaying justice to half of India's population. True empowerment requires immediate and sincere implementation. As rightly emphasised by S. Y. Quraishi, representation delayed is representation denied. India must now convert its historic legislation into real political empowerment for women.

Question: Discuss the Women's Reservation Act, 2023 and the concerns regarding its delayed implementation. Suggest the way forward.

Source: The Hindu

Protecting the Freedom of Speech of MPs

UPSC Syllabus: Gs Paper 2- Parliament and State legislatures—structure, functioning, conduct of business, powers & privileges and issues arising out of these.

Introduction

Recent developments in Parliament have brought renewed attention to the need for **protecting the freedom of speech of Members of Parliament**, a constitutional privilege guaranteed under Article 105. While procedural rules regulate debate and maintain order, concerns have arisen that their application may be restricting rather than safeguarding this freedom. The central issue is whether institutional practices are preserving or weakening the constitutional protection that enables Parliament to function through open and fearless discussion.

Constitutional and Institutional Framework Governing Parliamentary Speech

1. **Dual structure of free speech:** Article 19 guarantees freedom of speech to all citizens, while Articles 105 and 194 provide special legislative privilege to MPs and MLAs.

2. **Enhanced constitutional protection:** Legislators cannot be punished for any speech or vote inside the House, giving their expression stronger protection than that available to ordinary citizens.

3. **Immunity from judicial scrutiny:** Courts are barred from inquiring into parliamentary proceedings, ensuring that legislative deliberation remains institutionally autonomous and legally protected.

4. **Internal regulation by legislatures:** Speech is subject only to constitutional provisions and standing orders of the House, which organise debate without overriding constitutional guarantees.

5. **Limits cannot destroy rights:** Restrictions are valid only when they regulate conduct without eclipsing the substance of **freedom of speech** protected under the Constitution.

6. **Purpose of parliamentary privilege:** Special protection exists to ensure free, frank, and fearless debate, allowing legislatures to function effectively without external pressure or suppression.

7. **Regulation as facilitation, not control:** Procedural rules maintain order, dignity, and discipline, but they exist to support constitutional speech rights, not to replace them.

8. **Specific constitutional restriction:** Article 121 bars discussion on conduct of judges except during removal motions.

9. **Examples of procedural limits:** Rules restrict sub judice matters, personal allegations, and defamatory charges without prior notice.

The Expunction Controversy and Its Implications

1. **Right to recorded speech:** MPs are entitled to speak freely and have their full remarks entered in official records, because incomplete recording weakens representation and public accountability processes.

2. **Scope of Rule 380:** Presiding officers may remove unparliamentary, defamatory, indecent, or undignified words, but the rule allows deletion only of specific offending expressions, not entire sentences or paragraphs.

3. **Effects of excessive expunction:** Removing large portions of speeches can distort meaning, make arguments incoherent, and effectively undermine the constitutional protection given to parliamentary expression and representation itself.

4. **Duty while exercising authority:** Presiding officers must protect dignity of debate while ensuring that disciplinary powers do not diminish or narrow the essential **freedom of speech** of members.

5. **Mindless application and historical record:** Speeches preserved for posterity lose coherence when rules are applied mechanically, weakening institutional memory and reducing the value of parliamentary deliberation over time.

Importance of Free Speech in Parliamentary Democracy

1. **Protection from executive dominance:** Free speech allows legislators to debate without fear, preventing the executive from controlling or suppressing parliamentary discussion.

2. **Foundation of democratic governance:** Open expression in legislatures sustains liberal democracy by ensuring that diverse views are debated before decisions are made.

3. **Essential for legislative oversight:** Parliament can effectively check and scrutinise the executive only when members freely question policies, actions, and decisions.

4. **Integrity of legislative functioning:** Fearless discussion preserves credibility of parliamentary processes and ensures that public concerns are properly represented.

5. **Strengthening deliberative capacity:** Meaningful lawmaking depends on open, uninterrupted debate, and restricting speech weakens Parliament's ability to examine issues fully.

6. **Transparency and public confidence:** Open debate makes proceedings visible and understandable to citizens, building trust in fairness and accountability of institutions.

7. **Prevention of misuse of procedural powers:** When speech is protected, procedural rules cannot easily be used as tools to silence dissent or control debate.

8. **Maintenance of parliamentary equilibrium:** Democratic stability depends on the majority governing and the minority criticising, and free speech keeps this balance functional.

Functional Role of Opposition in Parliamentary Democracy

1. **Essential place of Opposition:** Democratic legislatures require active criticism of government actions, because questioning authority and challenging ministers are central responsibilities of opposition members in parliamentary governance systems.

2. **Informational value of dissenting voices:** Listening to opposition speeches helps reveal realities beyond official narratives, ensuring Parliament receives complete and accurate information necessary for responsible decision making processes.

3. **Mutual forbearance as democratic principle:** Parliamentary government functions when the majority governs and the minority critiques, with both sides respecting each other's constitutional roles and institutional legitimacy continuously.

4. **Erosion of working relationship:** Preventing opposition leaders from speaking and attempts at extreme punitive measures reflect breakdown of trust, cooperation, and balanced functioning within parliamentary political processes today.

Normative Foundations of Parliamentary Conduct and Practice

1. **Established democratic conventions:** Parliamentary conduct rests on shared norms of respect, accountability, and open debate, which guide behaviour beyond formal written rules and legal provisions governing legislative functioning.

2. **Accountability through presence and engagement:** Active participation during proceedings ensures correct and complete information reaches Parliament, strengthening transparency, responsibility, and informed decision making within institutional processes of governance.

3. **Respect for critical voices:** Hearing opposition arguments is necessary to understand realities that may not emerge from supportive party statements, thereby deepening deliberation and strengthening representative functioning overall.

4. **Norms protect democratic balance:** These practices sustain cooperation between government and Opposition, ensuring legislative work proceeds with restraint, responsibility, and recognition of institutional interdependence within parliamentary democracy itself.

Conclusion

Protecting **freedom of speech** in Parliament is essential for democratic balance and effective governance. Procedural rules must regulate debate without eroding constitutional guarantees or silencing dissenting voices. Restoring mutual respect between government and Opposition is necessary to preserve institutional integrity, meaningful deliberation, and the long term stability of parliamentary democracy for present and future generations across India.

Question for practice:

Evaluate whether the application of procedural rules in Parliament, particularly expunction of speeches, is undermining the constitutional freedom of speech of legislators and affecting democratic functioning.

Source: The Hindu

India's leap, from back office to global brain trust

UPSC Syllabus: Gs Paper 3- Indian Economy and issues relating to planning, mobilisation of resources, growth, development and employment.

Introduction

By early 2026, India has moved far beyond its old role as the world's low-cost outsourcing hub. It has become a strategic nerve centre for global corporations. Former captive units have transformed into **Global Capability Centres (GCCs)** that guide innovation, strategy, and intellectual property creation. These centres now drive global value creation rather than routine work. This structural shift marks a decisive turning point in India's economic role and positions it as a global knowledge and innovation powerhouse.

What is Global Capability Centres (GCCs)

1. **Strategic corporate command hubs:** GCCs are specialised global centres that now guide corporate strategy, innovation, and execution, not just operational support.

2. **End-to-end enterprise responsibility:** These centres manage complete product lifecycles from conceptualisation and architecture to global deployment and customer feedback.

3. **Drivers of innovation and competitiveness:** GCCs enable enterprise resilience, technological acceleration, and global competitiveness through high-end research and development.

4. **Extended headquarters with leadership roles:** They host global leadership functions and act as cognitive command hubs for breakthroughs across advanced technologies.

Evolution of Global Capability Centres (GCCs)

Four-wave transformation to GCC 4.0: India's GCC ecosystem has evolved through **four distinct waves**, culminating in the current innovation-led **GCC 4.0 era**.

Phase 1 — Labour arbitrage and cost efficiency: Early centres focused mainly on routine IT and business processes to reduce operational costs.

Phase 2 — Expanded enterprise support capability: Centres gradually handled broader organisational functions beyond routine processing, strengthening operational integration.

Phase 3 — Strategic integration and product ownership: GCCs shifted decisively toward **end-to-end product ownership**, managing design, architecture, and execution.

Phase 4 — Innovation leadership and enterprise strategy:

- Today's centres lead global strategy, high-end R&D, and proprietary intellectual property creation.
- **Enterprise-scale AI adoption as defining feature:** Nearly **58% of GCCs are investing heavily in Agentic AI**, enabling autonomous reasoning and execution of complex enterprise tasks.
- **Core position in global value chains:** GCCs have become indispensable nodes that shape corporate futures rather than merely support them.

Benefits of Global Capability Centres (GCCs)

1. Strategic advantages for multinational corporations

- **Unmatched talent scale and capacity:** India hosts over **1,800 GCCs employing nearly two million professionals**, providing unparalleled access to skilled talent.
- **Continuous global innovation cycles:** The **follow-the-sun model** (work continues 24 hours a day across different time zones) enables faster product development and round-the-clock operations.
- **Centres of Excellence for core functions:** GCCs centralise finance, legal, and human resources in high-skill, high-efficiency environments.
- **Leadership in frontier research domains:** They drive advanced R&D in **quantum computing, semiconductor design, and Agentic AI**.
- **Deep technical execution capability:** Many GCCs now possess greater technical depth and execution power than traditional headquarters.

2. Economic and social gains for India

- **Creation of high-value employment:** GCC roles are intellectually demanding and offer significantly higher compensation than traditional service-sector jobs.

- **Emergence of a global professional class:** The ecosystem is creating a new workforce with advanced global capabilities.

- **Regional economic expansion beyond metros:** Growth is spreading to **Tier-II and Tier-III cities like Coimbatore, Indore, and Kochi**.

- **Reduced pressure on major metropolitan centres:** Expansion beyond Bengaluru and Hyderabad reduces urban infrastructure strain.

- **Local economic multiplier effects:** Real estate, infrastructure, and retail sectors are expanding rapidly in emerging GCC locations.

Emerging Risks and Structural Challenges

1. Talent shortages and cost pressures

- **Severe deep-tech skill mismatch:** Demand for AI security, cloud architecture, and quantum-resistant cryptography far exceeds supply.

- **Rising wage inflation risk:** Intense competition for specialised talent may weaken the cost advantage for multinational corporations.

2. Cybersecurity and data governance risks

- **High-value cyber-attack exposure:** GCCs manage critical global data and are prime targets for state-sponsored attacks.

- **Strict regulatory compliance burden:** The **Digital Personal Data Protection Act** requires flawless cybersecurity governance.

- **Escalating operational costs:** Cybersecurity has become the most expensive mandate as India handles **13.7% of global cyber-attack incidents**.

3. Tax and regulatory uncertainty

- **Reduced tax arbitrage advantage:** The **OECD Global Minimum Tax (15%)** reduces the tax benefits that previously attracted multinational corporations.

- **Safe Harbour markup dispute:** India's **24% markup for software R&D under Safe Harbour rules** remains a key fiscal concern for global firms.

- **Fiscal predictability as a board-level concern:** Changing global tax rules are increasing uncertainty and affecting long-term investment planning.

4. Geopolitical and investment risks

• **Protectionism and reshoring pressures:** United States tariff volatility and data reshoring policies may affect global investment flows.

• **Digital sovereignty constraints:** Western efforts to localise data operations could slow new GCC expansion in India.

Way forward

1. **Active policy facilitation:** Policymakers must shift from regulation to enabling growth and investment in GCC expansion.

2. **Single-Window clearance mechanism:** A unified approval system can simplify entry and speed up establishment of new GCCs.

3. **Regulatory framework harmonisation:** SEZ, STPI, and IT policies should align to ensure coherence, stability, and clarity.

4. **Stable taxation and transfer pricing:** Rationalised norms and R&D tax safe harbours are needed to ensure fiscal predictability.

5. **Industry–academia skill partnerships:** Joint curriculum, research collaboration, and flexible skilling models can close deep-tech talent gaps.

6. **Regional expansion and talent hubs:** Strengthening Tier-II and Tier-III cities can distribute growth and unlock new talent pools.

7. **Business-ready physical and digital infrastructure:** Plug-and-play offices, reliable utilities, transport, and strong digital networks are essential for global competitiveness.

8. **Integrated national GCC growth framework:** Policy must focus on talent development, infrastructure readiness, city competitiveness, and innovation ecosystems.

Conclusion

India's GCC transformation reflects a structural shift from operational support to global strategic leadership. These centres now drive innovation, employment, and regional development while anchoring India firmly in global value chains. Sustaining this momentum requires proactive policy execution, talent development, fiscal certainty, and strong cybersecurity. With coordinated effort, India can secure its position as the world's innovation nerve centre.

Question for practice:

Discuss how India has transformed from the world's back office into a global brain trust through the rise of Global Capability Centres (GCCs), and examine their benefits, challenges, and policy requirements.

Source: The Hindu

Rethinking tribal women's inheritance rights

Source: The post **"Rethinking tribal women's inheritance rights"** has been created, based on **"Rethinking tribal women's inheritance rights"** published in **"The Hindu" on 24th February 2026.**

UPSC Syllabus: GS Paper-2- Governance

Context: The recent judgment of the Supreme Court of India in Nawang v. Bahadur clarified that the **Hindu Succession Act, 1956 does not apply to Scheduled Tribes.** The judgment has revived debate on the inheritance rights of tribal women because many tribal customary laws deny equal property rights to women.

Background

1. Most tribal customary inheritance systems give property rights mainly to male members of the family.
2. Section 2(2) of the Hindu Succession Act excludes Scheduled Tribes unless Parliament decides otherwise.
3. Earlier courts **sometimes allowed inheritance rights when tribal people adopted Hindu customs,** which created confusion.
4. This situation forced tribal women to choose between preserving tribal identity and gaining legal rights.

Supreme Court Ruling

1. The Supreme Court held that **the Hindu Succession Act cannot be applied to Scheduled Tribes in any situation.**
2. The Court stated tha**t only Parliament has the power to extend** such laws to tribal communities.
3. The Court also said that **High Courts cannot direct legislative changes in inheritance laws.**
4. The judgment **reaffirmed constitutional protection for tribal identity** and autonomy.

Major Issues

1. Gender Inequality: Many tribal women are **denied equal inheritance rights under customary laws.** This exclusion goes against **constitutional principles of equality and justice.**

2. Legal Uncertainty: Earlier decisions granting rights after "Hinduisation" created inconsistent legal outcomes. Tribal women **were unsure of their rights when property disputes arose.**

3. Identity vs Rights Conflict: Tribal women **sometimes had to abandon customary identity to claim inheritance.** This process **weakened tribal culture and autonomy.**

4. Customary Law vs Constitution: Some customary laws discriminate against women. There is a **conflict between respecting tradition and ensuring gender justice.**

Related Judicial Observation:

1. In **Ram Charan v. Sukhram, the Supreme Court observed that excluding daughters from ancestral property violates equality rights.**
2. This shows growing judicial concern about gender discrimination in inheritance.

Way Forward

1. Parliament should create a special inheritance law for the Scheduled Tribes. Such a law should ensure gender equality while respecting tribal customs.
2. Codifying customary laws with reforms, as done in Mizoram, can serve as a model.
3. The government should consult tribal leaders, women's organisations, and legal experts before drafting laws.
4. The new law should protect both tribal identity and women's constitutional rights.
5. Legal awareness programmes should inform tribal women about their rights.
6. Legal aid should be provided to help tribal women fight inheritance disputes.

Conclusion: The Supreme Court judgment has clarified the legal position but has exposed gender inequality in tribal inheritance systems. A balanced legislative solution is required to ensure equal rights for tribal women without harming indigenous cultural traditions.

Question: Customary tribal laws often conflict with constitutional guarantees of gender equality. Discuss in the context of tribal women's inheritance rights.

Source: The Hindu

India's Power Grid & Data Centre Boom: Can It Meet AI Demand?

Source: The post **"India's Power Grid & Data Centre Boom: Can It Meet AI Demand?"** has been created, based on "Can India's power system keep up with the explosion in data centres?" published in **"Indian Express"** on 24th February 2026.

UPSC Syllabus: GS Paper-3- Economy

Context: The rise of AI-based computing is driving a surge in electricity demand due to rapid expansion of data centres. India's installed data centre capacity is about **1.2 GW** and may increase fourfold by 2030. According to Grid India officials, such expansion could create a paradigm shift in grid planning and operations.

Reasons behind Data centres creating power challenges

1. Large and Complex Electricity Loads

- Data centres are high-intensity loads requiring transmission-level connectivity.
- Hyperscale facilities can require nearly 1 GW of power each.
- They are different from traditional industrial loads because they operate continuously.

2. Highly Dynamic and Variable Demand

- Data centre loads are "spiky" and unpredictable due to AI workloads.
- Sudden isolation from the grid can cause disturbances and voltage instability.
- Forecasting demand becomes difficult.

3. Strain on Transmission Infrastructure

- Massive power demand requires high-voltage substations.

- Poor planning could lead to chaotic infrastructure development and higher tariffs.
- Central and State Transmission Utilities need advance planning.

4. Resource Adequacy Concerns

- Power systems must provide not only electricity but also reserves and balancing capacity.
- Data centres must contribute to resource adequacy rather than rely entirely on the grid.

5. Baseload Supply Requirements: Hyperscale centres need stable, long-duration electricity supply. India's limited nuclear capacity constrains baseload options.

Opportunities from Data Centre Growth

1. Boost to Renewable Energy: Renewable energy through open-access power procurement can support data centres. Pumped hydro storage and battery storage can provide round-the-clock green electricity.

2. Efficiency Innovations: Semiconductor improvements such as Intel's energy-efficient chip designs reduce power demand. Heterogeneous AI workloads can optimize energy consumption.

3. Grid Modernisation: Data centre growth can drive smart grid technologies, storage solutions, and better forecasting.

Policy and Infrastructure Solutions

1. Planned Infrastructure Development: The Central Electricity Authority should create a national plan for data centre locations. Grid expansion and substations must be pre-planned.

2. Mandatory Captive Generation & Storage: Data centres should install on-site renewable generation or storage. Battery storage and pumped hydro should support peak demand.

3. Strengthening Resource Adequacy Rules: Regulations should ensure data centres contribute to reserves and balancing capacity. Compliance standards must evolve.

4. Diversified Energy Mix: A mix of solar, wind, storage, and stable baseload sources is needed. Nuclear power expansion could also support long-term demand.

5. Demand-Side Management: Workload scheduling and energy-efficient hardware can reduce peak demand.

Conclusion: AI-driven data centre expansion presents both an energy challenge and an opportunity. With proper planning, renewable integration, storage adoption, and regulatory reforms, India can meet rising demand while ensuring grid stability and sustainable growth.

Question: "The rapid growth of AI-driven data centres is emerging as a major challenge for India's power system." Examine the issues involved and suggest measures to ensure energy security and grid stability.

Source: Indian Express

Artificial Intelligence (AI) Transforming Rural India

UPSC Syllabus: Gs Paper 3- Science and Technology- developments and their applications and effects in everyday life.

Introduction

Artificial Intelligence (AI) refers to the ability of machines to perform tasks such as learning, reasoning, and decision-making. India, AI is being developed as a **public good to drive inclusive rural transformation**. It is moving from pilot projects to large-scale use through the **IndiaAI Mission and Digital India**. The focus is on strengthening rural governance, service delivery, and participation while ensuring fairness, transparency, and social inclusion.

Why is there a need for Artificial Intelligence (AI) to transform rural India?

1. **Bridging Rural Infrastructure Gaps:** Rural areas face gaps in roads, healthcare, education, and sanitation. AI helps identify underserved villages and plan targeted development using data from Mission Antyodaya, PMGSY, Census, and satellite mapping.

2. **Improving Service Delivery:** Many rural regions lack timely access to welfare services. AI supports data-driven governance and improves last-mile delivery across agriculture, healthcare, education, and local administration.

3. **Strengthening Participatory Governance:** Manual documentation and planning often reduce efficiency. AI-based systems improve transparency, reduce bias, and support evidence-based decision-making in Panchayats.

4. **Optimising Resource Allocation:** Limited public funds require better targeting. AI-based predictive models help prioritise investments in roads, electrification, and infrastructure based on population and economic trends.

5. **Reducing Linguistic and Digital Barriers:** Many rural citizens face language and literacy challenges. AI-powered multilingual tools ensure access to digital services in local languages.

National Strategy and Governance Framework for Inclusive AI

1. **National Strategy for Artificial Intelligence (2018):**

- **Launched by NITI Aayog**, it promotes **AI for All**. It focuses on improving access, affordability, and quality in agriculture, healthcare, and education, especially in rural India.

- **Human Augmentation Approach:** The strategy supports frontline workers instead of replacing them. AI works as a support system for farmers, teachers, health workers, and administrators.

2. **India AI Governance Guidelines (2025):**

- **Issued by MeitY,** the guidelines focus on fairness, accountability, transparency, and India-specific risk assessment in welfare systems.

• **The framework comprises four key components:**

- **Seven guiding principles (Sutras)** for ethical and responsible AI.
- **Key recommendations** across six pillars of AI governance.
- An **action plan** mapped to short, medium, and long-term timelines.
- **Practical guidelines** for industry, developers, and regulators to ensure transparent and accountable AI deployment.

• **Digital Public Infrastructure Integration:** Privacy, interoperability, and accountability are embedded by design. A whole-of-government approach strengthens grievance redressal and institutional capacity.

AI in Rural e-Governance and Local Administration

1. **SabhaSaar for Gram Sabha Documentation:**

• SabhaSaar is an **AI-enabled tool that generates structured minutes of Gram Sabha and Panchayat meetings** from audio or video inputs.

- Integrated with BHASHINI (an AI-enabled National Mission on Natural Language Translation platform that provides multilingual translation and voice-based services), it supports 14 Indian languages, making documentation unbiased and accessible across diverse rural communities.

2. **eGramSwaraj Digital Platform:**

• Launched in April 2020 under the e-Panchayat Mission Mode Project, eGramSwaraj brings planning, budgeting, accounting, monitoring, asset management, and payments onto a single digital platform.

• In FY 2024–25, it onboarded over **2.53 lakh gram panchayats, 6,409 block panchayats, and 650 Zila panchayats**, showing wide adoption.

3. **Gram Manchitra for GIS Planning:** It supports mapping of assets and integration of spatial data into Gram Panchayat Development Plans (**GPDPs)**.

4. AIKosh as Data Infrastructure: It serves as a national repository of AI datasets and models to advance public-sector innovation. It consolidates data from governmental and non-governmental sources and offers ready-to-deploy AI models across diverse sectors..

AI Infrastructure and Sectoral Integration in Rural India

1. **BhuPRAHARI for Asset Monitoring:** Launched in May 2025 by the Ministry of Rural Development with IIT Delhi, it uses AI and geospatial tools to monitor MGNREGA and VB-G RAM G assets through satellite and ground data.

2. **Digital ShramSetu Mission:** It deploys AI in the informal sector to improve service delivery and livelihood support for rural workers with regulatory alignment.

3. **AI in Agriculture:** AI supports weather forecasting, pest detection, and irrigation planning. **Kisan e-Mitra** provides scheme-related information, while **Crop Health Monitoring and the National Pest Surveillance System generate real-time advisories.**

4. **AI in Education and Skilling:**

- **NCERT's DIKSHA platform** integrates AI-enabled keyword-based video search and read-aloud tools to improve accessibility, especially for students with visual impairments and diverse learning needs.

- **YUVAI** equips students of Classes VIII–XII with foundational AI and socio-technical skills through experiential learning across sectors like agriculture, health, and rural development.

5. **State-Level Innovation – Suman Sakhi Chatbot:** Launched under the National Health Mission in Madhya Pradesh, it provides maternal and newborn health information via WhatsApp and supports frontline workers like ASHAs and ANMs.

AI for Language Inclusion and Multilingual Governance

1. **BHASHINI Platform:**

- Launched in July 2022, it provides translation, speech-to-text, and voice interfaces in more than 36 languages.

- It is integrated with over 23 government services and supports over 350 AI language models, with more than one million downloads as of October 2025.

2. **BHASHINI Sanchalan:** It strengthens multilingual governance by integrating voice-first interfaces into public systems and improving domain-specific translation accuracy.

3. **Bharat Gen Multilingual Model:** Launched in June 2025, Bharat Gen supports 22 Indian languages and integrates text, speech, and document-vision capabilities for public applications.

4. **Adi Vaani for Tribal Communities:** Developed under the Adi Karmayogi framework, it enables access to governance, healthcare, and education in tribal languages and supports language preservation.

What Should Be Done?

1. **Scale from Pilot to System-Wide Implementation:** The India–AI Impact Summit 2026 signals expansion of proven AI use cases across rural sectors under the IndiaAI Mission and Digital India.

2. **Strengthen Data-Driven Infrastructure Planning:** AI should use PMGSY, Census, Mission Antyodaya, and satellite data for underserved village detection and predictive infrastructure planning.

3. **Promote Predictive and Geospatial Solutions:** Time-series modelling, regression tools, and remote sensing should guide prioritisation of roads, electrification, and healthcare investments.

4. **Ensure Ethical and Inclusive Deployment:** Governance safeguards must remain central to prevent bias, exclusion, and opaque decision-making in welfare delivery.

Conclusion

Artificial Intelligence is becoming a **foundational pillar of rural transformation** in India. It strengthens governance, infrastructure planning, agriculture, healthcare, education, and language inclusion. With strategic

vision, governance safeguards, and Digital Public Infrastructure, AI augments human capacity rather than replaces it. Responsible and inclusive deployment will remain central to building equitable and resilient rural development systems.

Question for practice:

Discuss how Artificial Intelligence (AI) is transforming rural India through governance, infrastructure, and sectoral initiatives.

Source: PIB

The Quiet Crisis of Adolescent Mental Health in India

UPSC Syllabus: Gs Paper 2 -Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Introduction

The recent deaths of three adolescent girls in Ghaziabad, Uttar Pradesh, brought national attention to child and adolescent mental health. Such incidents should not be seen as isolated tragedies. They point to deeper structural concerns. Emotional disorders are appearing at younger ages, and digital overexposure is increasing vulnerability. Schools often fail to detect early warning signs, and specialist care remains limited, which together widen this public health challenge.

Current Status of Mental Health Burden Among Children in India

1. **Early Emergence of Disorders:** Emotional and behavioural problems can appear as early as four or five years of age. Anxiety, depression, attention disorders and behavioural disturbances are increasingly seen in young children.

2. **Rising Prevalence:** National survey findings show that **7–10% of adolescents** in India have diagnosable mental health conditions. Among school-aged children, **5–7% live with** Attention Deficit Hyperactivity Disorder (**ADHD)**.

3. **Growing Comorbidity:** Multiple conditions now appear together. ADHD often coexists with anxiety, and depression is frequently linked with compulsive digital use or learning difficulties.

4. **Dismissed Warning Signs:** Withdrawal, impulsivity and sudden behaviour changes are often ignored. This delay increases academic stress, social isolation and long-term emotional damage.

Causes of Rising Mental Health Burden Among Children

1. **Impact of Early Trauma and Stress:** Neglect, loss and chronic stress disrupt emotional and cognitive growth. These disruptions often resurface more intensely during adolescence.

2. **Rapid Digital Expansion:** More than **800 million Indians** use smartphones and affordable Internet services. Many children are active users, and digital exposure now begins early.

3. **Blurring of Daily Boundaries:** Education, communication and entertainment operate on the same device. This reduces offline engagement and weakens natural social interaction.

4. **Clinical Concerns Linked to Screen Use:** Internet addiction is marked by loss of control, irritability, sleep disruption and withdrawal. Excessive screen use does not cause ADHD or autism, but it worsens symptoms and delays recognition.

5. **Academic-Centred School Culture:** Examinations and rankings dominate school systems. Emotional regulation and stress management receive limited structured attention.

Concerns Emerging from the Crisis

1. **Severe Specialist Shortage:** India has **fewer than 10,000 psychiatrists** for a population exceeding 1.4 billion. Only a small proportion specialise in child mental health, and shortages of psychologists and psychiatric social workers deepen the gap.

2. **Fragmented and Delayed Care:** Families often manage complex conditions alone. Help is usually sought during crisis stages rather than at early warning signs.

3. **Weak Institutional Detection:** Paediatric consultations largely focus on physical growth. Emotional wellbeing, sleep patterns and screen use are not routinely examined.

4. **Gap Between Research and Practice:** India's research base on child mental health and digital behaviour has grown steadily. However, translation into routine school and clinical practice remains slow.

5. **Persistent Stigma:** Fear of labelling and judgement prevents early care. Child psychiatry carries strong misunderstanding and hesitation.

6. **Unequal Digital Health Access:** Telepsychiatry has expanded reach, yet access remains uneven across underserved families.

Government Initiatives

1. **Policy Recognition:** The **Economic Survey 2025–26** acknowledged rising mental health challenges among young people and proposed preventive strategies.

2. **Existing National Platforms:** The **National Mental Health Programme**, school health services under **Ayushman Bharat Health and Wellness Centres**, and tele-mental health initiatives provide a foundation for action.

3. **State-Level Digital Regulation Efforts:** Some States are considering regulatory limits on adolescent social media use. These efforts draw from global precedents and aim to balance protection with awareness.

4. **Implementation Gaps:** Despite platforms and policy acknowledgement, routine school screening, structured referral pathways and targeted child-focused funding remain limited.

What Should Be Done?

1. **Routine School-Based Screening:** Schools should integrate regular emotional and behavioural screening. Early detection can prevent severe outcomes.

2. **Structured Professional Training:** Teachers, counsellors and frontline workers must receive training to recognise warning signs and Internet-related harms. This becomes crucial in a system with limited child specialists.

3. **Strengthened Referral Systems:** Clear coordination between schools, paediatricians and mental health professionals is needed for timely support.

4. **Trauma-Informed Parenting:** Parents should observe changes in sleep, mood and social behaviour. Listening without judgement and seeking help early can alter developmental paths.

5. **Community Support Networks:** Parent support groups reduce isolation and normalise help-seeking. Adolescent peer groups build resilience and coping skills through shared learning.

6. **Clear Digital Guidelines in Schools:** Schools must set boundaries for healthy screen use. Human interaction should not be displaced during key developmental stages.

7. **Dedicated Funding and Normalised Dialogue:** Child mental health requires earmarked funding. Open conversations in families, schools and health systems must replace silence and stigma.

Conclusion

Child and adolescent mental health is central to India's long-term social and economic stability. Rising disorders, digital overexposure and weak early detection demand coordinated action. Strengthening families, schools and health systems is urgent. Childhood must promote wellbeing, resilience and connection. Delayed response will lead to deeper social and developmental costs in the future.

Question for practice:

Examine the structural factors contributing to the rising burden of child and adolescent mental health problems in India, and evaluate the adequacy of institutional and policy responses in addressing this challenge.

Source: The Hindu

Export Promotion Mission: Enabling MSMEs in Global Trade

Source: The post **"Export Promotion Mission: Enabling MSMEs in Global Trade"** has been created, based on **"Export Promotion Mission: Enabling MSMEs in Global Trade"** published in **"PIB" on 25th February 2026.**

UPSC Syllabus: GS Paper-3-Economy

Context: The **Export Promotion Mission (EPM)** is a flagship initiative approved in November 2025 to strengthen India's export ecosystem. The Mission focuses on MSMEs, first-time exporters, and labour-intensive sectors to expand global market access. The government has allocated ₹25,060 crore for the period FY 2025–26 to FY 2030–31 to enhance export competitiveness.

Objectives of the Mission

1. The Mission **aims to improve access** to affordable and diversified trade finance for MSMEs.
2. It also aims to strengthen export branding, logistics infrastructure, and overseas warehousing.
3. It seeks to help exporters comply with international quality, technical, and sustainability standards.
4. The Mission also seeks to expand market access and provide trade intelligence support.
5. It encourages broader participation of MSMEs, including cross-border e-commerce exports.

Structure of EPM

1. The Mission is implemented through two sub-schemes called **Niryat Protsahan** and **Niryat Disha**.
2. Niryat Protsahan focuses on financial enablers such as trade finance and credit support.
3. Niryat Disha focuses on non-financial support such as compliance, logistics, and market access.

Key Features of EPM

1. The Mission provides stage-wise support across the export journey from market exploration to post-shipment activities.
2. It provides support for market analysis, export finance, trade compliance, logistics, overseas warehousing, and buyer connectivity.
3. The Mission adopts a whole-of-government approach by integrating policy support, finance, logistics, and market linkages.

Major Interventions under EPM

I. Financial Enablers under Niryat Protsahan

1. The Mission provides support for export factoring to unlock working capital and manage payment risk.
2. It offers credit assistance to e-commerce exporters through the **Export-Import Bank of India**.
3. It supports exporters entering new markets through shared-risk and credit instruments.
4. It provides interest subvention on pre-shipment and post-shipment export credit.
5. It facilitates collateral-free export credit through credit guarantee support.

II. Non-Financial Enablers under Niryat Disha

1. TRACE provides financial assistance for testing, inspection, and certification required for global markets.
2. LIFT provides financial support to reduce logistics and transportation costs.
3. INSIGHT provides trade intelligence, training, research, and capacity building.
4. FLOW supports overseas warehousing, fulfilment, and e-commerce export hubs.
5. MAS supports buyer-seller meets, trade fairs, and trade delegations.

Significance of the Mission

1. The Mission reduces export finance constraints faced by MSMEs.
2. It improves compliance readiness for international markets.
3. It mitigates logistics disadvantages faced by exporters in hinterland regions.

4. It strengthens overseas market access and distribution networks.
5. The Mission promotes inclusive and export-led growth.

Challenges of EPM

1. The Mission is thoughtfully structured, but its impact will depend on effective execution by both government and industry.
2. The annual budget allocation of ₹2,250 crore for FY 2025–26 is smaller than the total outlay, which may slow implementation.
3. Exporters continue to face uneven access to export credit and rising compliance costs due to non-tariff measures in foreign markets.
4. Many exporters face documentation gaps and weak overseas distribution networks that reduce competitiveness.
5. Exporters must improve their own compliance systems, financing options, and digital adoption to benefit from the Mission.
6. Digital trade reforms requiring electronic documentation may be difficult for smaller firms to adopt.
7. Long-term export competitiveness depends on productivity gains, digital readiness, and better use of data and technology.

Way Forward

1. The government should ensure the **timely and efficient implementation of schemes** to translate policy intent into real export growth.
2. Exporters **should use consultation opportunities to provide feedback to policymakers** and improve scheme design.
3. MSMEs should strengthen their internal compliance systems and adopt global quality standards.
4. Exporters should diversify financing options and use available trade finance tools such as factoring and credit guarantees.
5. Firms should adopt digital documentation practices to benefit from the proposed digital trade reforms.
6. Exporters should build reliable overseas market linkages and distribution networks.
7. The government and industry should focus on productivity improvements, digital adoption, and data-driven supply chains to ensure sustained export competitiveness.

Conclusion: The Export Promotion Mission provides an integrated framework combining finance, logistics, compliance, and market access support. The Mission has strong design potential to expand MSME participation in global trade. However, its success will depend on disciplined execution, exporter preparedness, and sustained improvements in competitiveness.

Question: Discuss the objectives and key features of the Export Promotion Mission (EPM). Examine its significance for MSMEs and the challenges in its implementation.

Source: PIB

Tourism and the Architecture of Growth

Source: The post **"Tourism and the Architecture of Growth"** has been created, based on **"Tourism and the Architecture of Growth"** published in **"PIB" on 25th February 2026.**

UPSC Syllabus: GS Paper-3-Economy

Context: Tourism is a key sector of the Indian economy because it generates employment, earns foreign exchange, and promotes balanced regional development. According to the India Tourism Data Compendium 2025, tourism contributes 5.22% to GDP and supports 13.34% of total employment. Recognising its multiplier effect, the Union Budget 2026–27 has proposed several initiatives to strengthen tourism infrastructure, skills, connectivity, and destination competitiveness.

Major Budget 2026–27 Tourism Initiatives

1. Thematic and Destination-Based Tourism Development

1. The government has proposed preservation of temples and monasteries and creation of pilgrimage centres in North-East states such as Arunachal Pradesh, Sikkim, Assam, Manipur, Mizoram, and Tripura.
2. A new scheme for development of Buddhist Circuits in the North-East will strengthen tourism infrastructure at important spiritual sites.
3. The initiative builds on earlier programmes like **Swadesh Darshan Scheme** and its upgraded version **Swadesh Darshan 2.0**.

2. Eco-Tourism and Connectivity

1. The Budget proposes eco-trails in Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Araku Valley, and Podhigai Malai.
2. Turtle trails in Odisha, Karnataka, and Kerala and bird-watching trails at Pulicat Lake will promote biodiversity-based tourism.
3. Expansion of rail and regional connectivity and provision of 4,000 electric buses in Purvodaya states will improve tourist mobility.

3. Global Positioning and Eco-Tourism Diplomacy

1. India will host the first Global Big Cat Summit in 2026, bringing together leaders from 95 countries.
2. This builds on India's leadership in wildlife conservation through the **International Big Cat Alliance**, which promotes global cooperation for big cat conservation.
3. The initiative will enhance India's reputation in eco-tourism diplomacy.

4. Institutional and Skill Development

1. The Budget proposes upgrading the National Council for Hotel Management into a National Institute of Hospitality to address skill gaps.
2. A pilot programme will train 10,000 tourist guides at iconic destinations through partnerships with leading institutions.
3. These initiatives complement programmes like Capacity Building for Service Providers and Incredible India Tourist Facilitator schemes.

5. Digital and Heritage Infrastructure

1. The Budget proposes creating a National Destination Digital Knowledge Grid to document heritage and cultural assets.
2. Fifteen archaeological sites such as Lothal, Dholavira, Rakhigarhi, Sarnath, Hastinapur, and Leh Palace will be developed into experiential destinations.
3. These initiatives will strengthen heritage conservation and visitor engagement.

6. Medical Tourism Development

1. The Budget proposes five regional medical hubs to promote India as a global medical tourism destination.
2. These hubs will integrate advanced healthcare, AYUSH centres, diagnostics, and rehabilitation facilities.

7. Regional Development through Tourism

1. Five tourism destinations will be developed in Purvodaya states such as Bihar, Jharkhand, West Bengal, Odisha, and Andhra Pradesh.
2. Improved transport connectivity and tourism infrastructure will promote regional growth and local entrepreneurship.

Significance of These Initiatives

1. Tourism initiatives will generate employment across hospitality, transport, handicrafts, and allied sectors.
2. Improved connectivity and infrastructure will integrate remote regions into the tourism economy.
3. Heritage conservation and eco-tourism will promote sustainable development.
4. Medical tourism and global events will enhance foreign exchange earnings.
5. Tourism-led development will support inclusive growth and regional balance.

Challenges

1. Tourism infrastructure development requires effective coordination between central and state governments, which may be difficult in practice.
2. Preservation of heritage and ecological sites must balance tourism growth with environmental sustainability.
3. Skill development initiatives require consistent quality training and certification standards.
4. Remote regions may face connectivity gaps despite planned investments.
5. Successful medical tourism hubs require strong healthcare infrastructure and international accreditation.
6. Implementation delays or funding constraints could reduce the impact of tourism initiatives.

Way Forward

1. The government should ensure coordinated implementation among ministries, states, and local bodies.
2. Tourism development should follow sustainable practices to protect biodiversity and heritage assets.
3. Skill training programmes should be aligned with industry needs and international standards.

4. Digital tools like the National Destination Digital Knowledge Grid should be used for data-driven planning and promotion.
5. Community participation should be encouraged to ensure livelihood benefits for local populations.
6. Infrastructure investments in transport and hospitality should be completed on time.
7. India should promote branding campaigns to position itself as a global tourism and medical tourism destination.

Conclusion

The Union Budget 2026–27 positions tourism as a major driver of economic growth, employment generation, and regional development. The focus on infrastructure, heritage, eco-tourism, skills, and digital platforms creates a comprehensive framework for tourism expansion. With effective implementation and sustainable practices, tourism can become a key pillar of India's socio-economic growth.

Question: "Tourism has a strong multiplier effect on employment, regional development, and foreign exchange earnings." In light of Union Budget 2026–27 initiatives, discuss how tourism can act as an engine of economic growth in India.

Source: PIB

India's Trade Strategy in a Multipolar World

UPSC Syllabus: Gs Paper 2- International Relation .

Introduction

India's trade strategy in a multipolar world is shaped by rising exports, ambitious free trade agreements, and a clear goal of reaching **$2 trillion exports by 2030** under the 2023 Foreign Trade Policy. In 2025, total exports reached **$825.25 billion with 6.05% growth**. Trade is now linked with strategic autonomy, supply chains, and national security in a fragmented global order.

The Shift in India's Trade Approach

1. **From cautious FTAs to active engagement:** For many years, India signed agreements mainly with similar developing economies. Now it pursues comprehensive FTAs with major developed economies that were earlier beyond reach.

2. **Expansion of FTA coverage:** India's FTA network is projected to cover **71% of its export basket by 2026**, up from **22% in 2019**, showing a decisive policy shift.

3. **Integration with advanced markets:** Agreements with Australia, the EU, the UAE, the U.K., and the U.S. show a move from regional focus to deeper integration with high-value economies.

4. **Balancing domestic strength and global openness:** After opting out of RCEP, India adopted a calibrated strategy by boosting domestic manufacturing through production-linked incentives and infrastructure expansion while deepening global integration.

Major Trade Agreements as Strategic Milestones

1. **India–EU Free Trade Agreement:**

• Signed on January 27, 2026, it creates a free trade zone of nearly two billion people and reduces or eliminates tariffs on over **90% of traded goods**.

• **Sectoral gains under the EU deal:** It boosts textiles, leather, pharmaceuticals, chemicals, and marine products, enhances regulatory cooperation, lowers production costs through easier access to advanced machinery, and promotes digital trade and investor confidence.

• **Improved competitiveness and MSME integration:** The EU agreement strengthens India's position against Bangladesh and Vietnam and integrates MSMEs into Global Value Chains.

2. **U.S. interim reciprocal trade framework:**

• Signed in February 2026, it reduces tariffs progressively and advances negotiations toward a broader Bilateral Trade Agreement.

• **Strategic sector cooperation with the U.S.:** Collaboration in rare earths and semiconductors supports high-technology manufacturing and strengthens India's role as a reliable electronics and semiconductor hub.

3. **Diversification and flexibility:** These agreements reduce overdependence on specific markets and enhance strategic and economic flexibility.

Trade in the Context of Global Transformation

1. **Blurring of trade and national security:** Economic coercion, technological exclusion, and supply chain weaponisation now directly affect sovereignty.

2. **Integration and fragmentation together:** Sanctions, export controls, industrial regulations, and technology limits increasingly shape cross-border flows.

3. **Power through system control:** Influence depends on control over payment systems, logistics networks, standards bodies, and compliance infrastructure, not only trade volume.

4. **Weakening of multilateral discipline:** The erosion of global trade governance shows that rules alone cannot constrain major powers.

5. **Chokepoints as pressure tools:** Financial sanctions, semiconductor export restrictions, and shipping or insurance disruptions show how economic access can be limited without military conflict.

Strategic Dimensions of India's Trade Policy

1. **Preferential access to high-demand markets:** Engagement with advanced economies strengthens export potential and supports labour-intensive sectors and MSMEs.

2. **Integration into global supply chains:** Reduction of barriers on exports and intermediate imports improves competitiveness in technology, electronics, pharmaceuticals, and services.

3. **Export diversification across continents:** Agreements across regions enhance economic resilience and reduce vulnerability to market concentration.

4. **Enhanced diplomatic leverage:** Deeper economic interdependence strengthens India's voice in global economic governance and trade norm-setting.

Way Forward

1. **Building platform power:** India must influence the systems and standards that govern trade to reduce structural vulnerability.

2. **Focus on operational systems:** Priority should be given to compliance systems, logistics coordination, payment infrastructure, and trusted digital verification frameworks.

3. **Reimagining services and digital trade:** India should move from executing services to building trusted systems such as digital identity, secure payments, and automated compliance.

4. **Institutional reforms and speed:** Integrated doctrine, mission-driven governance, predictable data rules, standards participation, modular system export, and faster institutional response are necessary to strengthen long-term resilience.

Conclusion

India's trade strategy combines export expansion, diversification, and strategic engagement with major economies. In a fragmented global order, sovereignty depends on resilience and freedom of choice. By deepening FTAs, strengthening supply chains, and building trusted trade systems, India aims to move from being a large market to becoming a rule-shaping and system-influencing power in global commerce.

Source - The Hindu

An Israel Visit Its Strategic, Economic, Regional Impact

UPSC Syllabus: Gs Paper 2 -International Relation

Introduction

West Asia is facing rising tensions, including a large American military buildup in the Persian Gulf, Iran's defiance, and fragile peace in Gaza since October 2025. Regional fault lines are also pulling countries like the UAE and Saudi Arabia into opposing blocs. In this uncertain situation, Prime Minister Narendra Modi's February 25–26, 2026 visit to Israel gains strategic, economic, and geopolitical importance.

Evolution of India–Israel Relationship

1. **From Diplomatic Ties to Strategic Partnership:** India and Israel established full diplomatic relations in 1992. The partnership deepened after Modi's historic 2017 visit, the first by an Indian Prime Minister.

2. **De-hyphenation Policy:** The 2026 visit is a standalone engagement without meeting Palestinian leadership. This reflects India's success in separating its Israel ties from the Palestine issue.

3. **Growing Strategic Convergence:** Both countries face hostile neighbourhoods and frequent terror threats. This shared security concern has shaped a strong and practical partnership.

Why Modi's Israel Visit Matters

1. Defence and Security Cooperation

- **Largest Defence Partnership:** India accounted for about **34% of Israel's total arms exports between 2020 and 2024**, according to SIPRI. Cooperation has moved from imports to joint development and technology collaboration.

- **Advanced Military Technology:** Israel has supplied UAVs, missiles, radar systems, and special forces equipment. The jointly developed **Barak-8 air and missile defence system** is a major example.

- **Future-Oriented Defence Vision:** The 2022 '**India-Israel Vision on Defence Cooperation'** and the November 2025 agreement aim to deepen cooperation in advanced systems, defence industry, and joint production.

- **Air and Missile Defence Focus:** Lessons from Operation Sindoor (May 2025) highlighted the need for a strong air and anti-drone shield under Mission 'Sudarshan Chakra'. Discussions may include co-production of the **Iron Beam 100kW laser system**.

- **Private Sector Defence Linkages:** Autonomous Guard signed a deal worth about **$1.9 million** with an Indian defence firm for advanced surveillance and sensor-based threat detection systems.

2. Technology, Innovation, and Development Partnership

- **Agricultural Transformation:** More than **35 Centres of Excellence** in India promote high-density production of fruits, vegetables, flowers, and beekeeping.

- **Water Resource Cooperation:** MASHAV signed agreements with Haryana (June 2022) and Rajasthan (December 2024) for integrated water management and capacity building.

- **Emerging Technology Collaboration:** Artificial Intelligence is expected to become an important focus area in future bilateral innovation initiatives.

3. Trade, Investment, and Economic Expansion

- **Strong Trade Base:** Bilateral trade reached **$3.75 billion in FY 2024–25**, making India Israel's second-largest trading partner in Asia.

- **Expanding Trade Basket:** While diamonds, petroleum, and chemicals dominate, trade is expanding into electronics, communications, high-tech products, and medical equipment.

- **Investment and FTA Momentum:** A Bilateral Investment Agreement was signed in September 2025. The Terms of Reference for a Free Trade Agreement were signed in November 2025, and the visit may accelerate negotiations.

• **Infrastructure and Mobility Discussions:** Israel seeks arrangements for Indian infrastructure companies in road and port projects. It may also pursue a "human mobility" agreement to attract skilled Indian professionals.

4. People-to-People and Symbolic Engagement

• **Parliamentary Diplomacy:** Modi's address to the Knesset, an honour usually reserved for select global leaders, reflects the maturity of bilateral ties.

• **Cultural and Historical Connect:** His visit to Yad Vashem highlights shared respect for history and remembrance.

• **Diaspora and Innovation Outreach:** Interaction with the Indian Jewish community and participation in a technology exhibition strengthen social and innovation linkages beyond formal agreements.

Regional and Geopolitical Implications

1. Iran Tensions and Energy Security

• **Impact on India's Interests:** Rising Iran-U.S. tensions may affect regional stability and India's energy security. This will form an important part of discussions.

2. Gaza Peace Process and India's Role

• **Global Stabilisation Efforts:** At the February 19, 2026 Summit of the Board of Peace, over 50 countries pledged support, including **$7 billion** and troop commitments. India attended as an observer.

• **Balanced Regional Approach:** India maintains strong ties with both Israel and Gulf nations. Its recent diplomatic engagements show a careful balancing strategy.

3. IMEC and Strategic Connectivity

• **Economic Corridor Significance:** The India-Middle East-Europe Economic Corridor (IMEC), announced at the 2023 G-20 Summit in Delhi, is strategically important for both countries.

• **Alternative to Suez Route:** With the Suez Canal vulnerable to disruptions, IMEC offers a shorter and safer transport corridor. Its success depends on lasting peace in Gaza.

4. Alliance Politics and Strategic Autonomy

• **Hexagon Proposal:** Israel proposed a regional "hexagon" alliance including India and several other nations. India does not necessarily view the region through bloc politics.

• **Independent Foreign Policy:** India's response will reflect its broader regional relationships and strategic autonomy.

Conclusion

PM Modi's visit goes beyond symbolism. It strengthens **defence cooperation, technology partnership, trade expansion, and regional engagement**. It also tests India's balancing role amid West Asian tensions. The visit shows that India and Israel are deepening a mature strategic partnership while India carefully protects its wider regional interests.

Question for practice:

Discuss the strategic, economic, and regional significance of Prime Minister Narendra Modi's 2026 visit to Israel in the context of evolving India–Israel relations and emerging West Asian geopolitical challenges.

Source: The Hindu

Large Language Models (LLMs) Training in India

Source: The post **"Large Language Models (LLMs) Training in India"** has been created, based on **"How are Indian firms training LLMs? | Explained"** published in **"The Hindu" on 26th February 2026.**

UPSC Syllabus: GS Paper-3-Science and technology

Context: Bengaluru-based **Sarvam AI** released two Large Language Models trained on 35 billion and 105 billion parameters at the AI Impact Summit in New Delhi. These models aim to improve performance in Indian languages while maintaining computational efficiency. This initiative aligns with India's broader effort under the **IndiaAI Mission** to build indigenous AI capabilities.

Training of Large Language Models (LLMs)

1. Large Language Models are trained using clusters of Graphics Processing Units (GPUs), which handle the intensive parallel computations required for deep learning.
2. The training process requires enormous datasets, most of which are scraped from the internet and are dominated by English and other globally prominent languages.
3. The combined cost of GPUs, electricity, cooling systems, and infrastructure often runs into millions of dollars for a single training run.
4. Indian firms are focusing on building mid-sized models that balance performance and efficiency, rather than immediately attempting trillion-parameter frontier systems.
5. For instance, Sarvam AI trained its models from scratch using subsidised compute access, while **BharatGen** developed a 17-billion-parameter multilingual model for sectors such as healthcare and education.

Challenges in Training Large Language Models on Indian Soil

I. Data Scarcity

1. Indian languages are underrepresented on the internet, resulting in limited high-quality datasets for training.
2. Many LLMs rely on translating Indian-language inputs into English internally, which increases token usage and inference cost.
3. Translation-based approaches may reduce efficiency and affect performance in low-resource settings.

II. Capital Constraints

1. The acquisition and operation of high-end GPUs require substantial capital investment, which is often beyond the reach of startups.
2. Indian firms do not yet possess the financial scale of global technology giants that can absorb massive upfront costs.
3. There may be limited immediate commercial returns to justify frontier-scale model training.

III. Infrastructure Limitations

1. Access to advanced semiconductor hardware remains dependent on imports.
2. Establishing and maintaining large-scale AI data centres requires long-term strategic planning and financial commitment.

Government Support under IndiaAI Mission

1. The IndiaAI Mission has commissioned over 36,000 GPUs in domestic data centres to support AI development.
2. The government has collaborated with firms such as **Yotta** to host this infrastructure.
3. Startups and research institutions can access GPU clusters at subsidised rates for training and inference.
4. Sarvam AI received access to 4,096 GPUs, with an estimated subsidy of nearly ₹100 crore.
5. The total cost of the compute cluster is approximately ₹246 crore, and the infrastructure remains reusable for other developers.
6. The initiative seeks to promote technological sovereignty, enhance AI talent, and ensure that Indian languages receive adequate representation in AI systems.

Cost Efficiency of the Mixture of Experts (MoE) Architecture

1. In traditional dense LLMs, all parameters are activated during inference, making each query computationally expensive.
2. The Mixture of Experts (MoE) architecture activates only a subset of parameters for any given query.
3. This selective activation reduces computational load and lowers energy consumption.
4. As a result, MoE models achieve faster inference speeds at lower operational costs.
5. Therefore, a 105-billion-parameter MoE model can be significantly cheaper to operate than a dense model with the same parameter size.

Way Forward

1. The government should expand initiatives to create high-quality, publicly available datasets in Indian languages through collaboration with academic institutions and state agencies.
2. Greater private sector participation and venture capital investment are required to sustain large-scale AI research and development.
3. India should strengthen its semiconductor manufacturing and GPU supply chain capabilities to reduce import dependence.
4. Transparent benchmarking and open evaluation of domestic models should be encouraged to build global credibility.
5. Sector-specific LLMs tailored for governance, healthcare, education, and agriculture should be prioritised to generate immediate social and economic impact.

6. Long-term public–private partnerships should be institutionalised to ensure continuity of compute infrastructure and research funding.

Conclusion: India's efforts to develop indigenous Large Language Models represent a strategic move toward digital sovereignty and technological self-reliance. Although challenges related to data availability, capital investment, and infrastructure remain significant, targeted government support through the IndiaAI Mission and the adoption of efficient architectures such as MoE have laid a strong foundation. Sustained investment, ecosystem development, and policy stability will determine India's ability to compete with global frontier AI systems.

Question: Examine how Indian firms are developing Large Language Models (LLMs). Discuss the challenges of training them in India, the role of the IndiaAI Mission, the cost advantage of Mixture of Experts architecture, and suggest the way forward.

Source: The Hindu

Carbon Capture and Utilisation Technologies

Source: The post **"Carbon Capture and Utilisation Technologies"** has been created, based on **"What are carbon capture and utilisation technologies? | Explained"** published in **"The Hindu" on 26th February 2026.**

UPSC Syllabus: GS Paper-3-Economy

Context: Carbon Capture and Utilisation (CCU) technologies are emerging as an important tool to reduce emissions from hard-to-abate sectors while creating new low-carbon industrial value chains.

About Carbon Capture and Utilisation (CCU) Technologies

1. Carbon Capture and Utilisation (CCU) refers to a set of technologies that capture carbon dioxide (CO_2) emissions from industrial sources or directly from the atmosphere.
2. The captured CO_2 is converted into useful products such as fuels, chemicals, building materials, and polymers instead of being permanently stored underground.
3. CCU differs from Carbon Capture and Storage (CCS), where the captured carbon dioxide is injected into geological formations for long-term storage.
4. CCU aims to remove carbon from the atmosphere and reintegrate it into economic value chains.

Need of CCU for India

1. India is the world's third-largest emitter of carbon dioxide, with emissions largely coming from power generation, cement, steel, and chemical industries.
2. Many of these industries are considered "hard-to-abate" sectors because their production processes are inherently carbon-intensive.
3. Renewable energy can reduce future emissions from power generation, but it cannot fully eliminate emissions from industrial processes.
4. CCU provides a pathway to reduce industrial emissions while creating new industrial value chains.
5. CCU aligns with India's net-zero target of 2070 and its goal of building a circular and low-carbon economy.

Role of Carbon Capture and Utilisation in Reducing Carbon Dioxide Emissions

1. CCU captures CO_2 before it is released into the atmosphere, thereby reducing direct emissions from industrial sources.
2. It converts captured CO_2 into alternative fuels and materials, thereby reducing dependence on virgin fossil resources.
3. By integrating carbon into reusable products, CCU supports the principles of a circular economy.
4. When combined with green hydrogen and renewable energy, CCU can significantly reduce lifecycle emissions.

Status of India

1. The Department of Science and Technology has funded research and prepared a dedicated research and development roadmap for CCU technologies.
2. The Ministry of Petroleum and Natural Gas has presented a draft 2030 roadmap for Carbon Capture, Utilisation and Storage (CCUS), identifying potential projects.
3. **Ambuja Cements** is collaborating with IIT Bombay on an Indo-Swedish CCU pilot project to convert captured CO_2 into fuels and materials.
4. **JK Cement** is developing a CCU testbed to use captured CO_2 in lightweight concrete blocks and olefins.
5. **Organic Recycling Systems Limited** is leading India's first pilot-scale Bio-CCU platform to convert CO_2 from biogas into bio-alcohols and specialty chemicals.

Other Countries Practices

1. The European Union's **EU Bioeconomy Strategy** promotes the conversion of CO_2 into feedstocks for fuels, chemicals, and materials to advance sustainability.
2. The EU's **Circular Economy Action Plan** integrates CCU into broader circularity and climate goals.
3. **ArcelorMittal** and **Mitsubishi Heavy Industries, Ltd.** are collaborating with climate tech firm D-CRBN to convert captured CO_2 into carbon monoxide for industrial reuse in Belgium.
4. The United States supports CCU through tax credits and financial incentives for CO_2-derived fuels and chemicals.
5. The UAE's Al Reyadah project integrates CCU with green hydrogen to produce low-carbon industrial outputs.

Risks and Challenges

1. The primary challenge is cost competitiveness, as capturing and converting CO_2 is energy-intensive and expensive.
2. Without policy incentives, CCU-derived products may not compete with cheaper fossil-based alternatives.
3. India lacks fully developed infrastructure for CO_2 transport, industrial clustering, and downstream integration.
4. There is insufficient clarity regarding standards, certification systems, and long-term market signals for CO_2-based products.
5. Investor uncertainty may slow private sector participation in large-scale deployment.

Way Forward

1. The government should introduce targeted financial incentives, including carbon pricing mechanisms and tax benefits, to improve cost competitiveness.
2. India should develop industrial clusters where CO_2 capture, transport, and utilisation facilities are co-located.
3. Clear regulatory standards and certification frameworks should be established to create market confidence.
4. Public-private partnerships should be strengthened to accelerate pilot projects into commercial-scale operations.
5. Integration of CCU with renewable energy and green hydrogen initiatives should be prioritised to maximise emissions reduction.
6. Continuous implementation of the national CCUS roadmap will be essential for achieving India's net-zero target by 2070.

Conclusion: Carbon Capture and Utilisation technologies offer India a strategic pathway to decarbonise hard-to-abate sectors while creating new industrial opportunities. Although challenges related to cost, infrastructure, and policy clarity remain, targeted implementation of roadmaps, financial incentives, and global best practices can enable India to scale up CCU and move toward a circular, low-carbon economy.

Question: What are Carbon Capture and Utilisation (CCU) technologies? How can they reduce carbon dioxide emissions? Discuss global initiatives such as the EU Bioeconomy Strategy and Circular Economy Action Plan, India's current status, challenges, and the way forward for scaling up CCU in India.

Source: The Hindu

Unpackaging the Myth of Safe Bottled Water in India

UPSC Syllabus: Gs Paper 3- Infrastructure .

Introduction

Bottled water in India has shifted from occasional convenience to daily necessity due to declining trust in municipal water and belief in plastic-sealed safety. It is generally microbiologically safe, but scientific evidence now highlights risks from **microplastics and plastic-derived chemicals**. These invisible contaminants raise concerns about **long-term health, environmental sustainability, and regulatory gaps.** Bottled water remains essential in emergencies and areas lacking safe public supply, but growing dependence has created new safety and governance challenges.

Major Concerns Related to Bottled Water in India

1. Microplastic contamination: Microplastics, plastic particles smaller than five millimetres, are found in bottled water, making it a direct exposure source. A Nagpur study detected 72 to 212 particles per litre in all tested brands, with higher levels in locally bottled water.

2. **Widespread presence:** Studies from Mumbai and coastal Andhra Pradesh found microplastics in every tested sample. This confirms contamination across regions, brands, and supply chains.

3. **Health risk uncertainty:** Microplastics carry toxic additives and pollutants, and smaller particles may cross biological barriers. Nanoplastics remain outside detection and regulation, increasing long-term safety concerns.

4. **Chemical leaching:** Plastic bottles release antimony, phthalates, and plasticisers, especially when exposed to heat and sunlight. Such exposure commonly occurs during transport, storage, and retail display.

5. **Long-term exposure gap:** Chemicals remain within limits, but standards assess short-term exposure to individual substances. They do not address combined and long-term exposure to multiple plastic-derived contaminants.

6. **Environmental contamination:** India generates millions of tonnes of plastic waste annually, with water bottles forming a major share. Plastic waste breaks into microplastics, contaminating ecosystems and water sources, including bottled water.

Factors Responsible for Bottled Water Safety Concerns in India

1. Trust deficit: Declining trust in municipal water safety has increased dependence on bottled water. People consider plastic-sealed water safer than public supply.

2. **Regulatory limitations:** Existing regulations under FSSAI do not include testing or limits for microplastics. They also do not adequately assess long-term exposure to plastic-derived chemicals under real storage and usage conditions.

3. **Weak enforcement gaps:** State-level surveys, including those in Karnataka, have found bottled water samples that are unsafe or substandard. This shows gaps in enforcement rather than absence of regulations.

4. **Fragmented bottling structure:** The industry consists of thousands of small bottling units operating with minimal oversight. This creates uneven quality control and increases the risk of contamination.

5. **Heat exposure:** Bottles are frequently exposed to heat and sunlight during transportation, warehousing, and retail display. Elevated temperature and ultraviolet exposure increase chemical leaching from plastic into water.

6. **Plastic waste cycle:** India generates large amounts of plastic waste, and discarded bottles break into microplastics. These particles re-enter ecosystems and water sources, contributing to contamination of bottled water supplies.

Way forward

1. Regulatory reforms: Safety standards should include **routine testing and limits for microplastics and plastic-derived chemicals**, which are currently not covered. This will ensure monitoring reflects real exposure risks under actual storage and usage conditions.

2. Strengthening public water system: Improving municipal water supply and ensuring **transparent public disclosure of water quality** can rebuild trust in monitored public systems. This will reduce excessive dependence on bottled water as a default choice.

3. Safe usage practices: Point-of-use filtration can help remove particulate contaminants present in water. Avoiding prolonged storage and heat exposure can reduce chemical leaching from plastic bottles.

4. Alternative safer water access: Increasing access to **refill stations, public water dispensing systems, and affordable household filtration** can provide reliable alternatives. This will reduce reliance on single-use bottled water.

5. **Consumer awareness:** Improving awareness about contamination risks and safe handling practices can help people make informed choices. This can encourage reduced dependence on bottled water where safe alternatives exist.

Conclusion

Bottled water in India is microbiologically safe but faces risks from **microplastics, chemical leaching, and regulatory gaps**. These arise due to weak regulation, plastic waste, poor storage, and declining trust in public water. Ensuring safe drinking water requires **stronger regulations, better enforcement, improved municipal supply, and reduced dependence on plastic bottles**, supported by accountable and transparent public water systems.

Question for practice:

Evaluate the emerging safety concerns associated with bottled water in India and discuss the regulatory and policy measures required to address them.

Source: The Hindu

Balancing Faith, Dignity and Constitutional Rights

UPSC Syllabus: Gs Paper 2- Constitution of India —historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

Introduction

The Supreme Court's 2018 judgment allowed women of all ages to enter the Sabarimala temple, leading to protests and constitutional debate. Review petitions now challenge both the verdict and the legal principles used in the decision. A nine-judge Bench will examine broader constitutional questions on religious freedom, especially how courts should resolve conflicts between religious autonomy and constitutional guarantees of dignity, equality, and individual rights.

Constitutional protection of religious freedom and its limits

1. Dual protection: The Constitution protects the individual right to practise religion and also protects the rights of religious denominations to manage their own affairs in matters of religion. This ensures recognition of both personal belief and collective religious autonomy.

2. **Constitutional limits:** These rights are not absolute and are subject to public order, morality, and health. The individual right to religious freedom is also subject to other fundamental rights, including equality and dignity.

3. **Core conflict:** The Constitution creates a balance between religious autonomy and individual rights. This balance becomes difficult when religious practices exclude individuals and affect their dignity and equal participation.

Supreme Court's Sabarimala judgment and judicial opinions

Majority ruling: The Supreme Court, by a 4:1 majority, gave the following findings:

- **No separate denomination:** The Court held that devotees of Lord Ayyappa do not constitute a separate religious denomination.
- **Violation of religious freedom:** The exclusion of women aged **10–50** was held to violate women's constitutional right to freedom of religion.
- **Rule declared unconstitutional:** The **Supreme Court struck down Rule 3(b) of the Kerala Hindu Places of Public Worship Rules, 1965**, as it violated the Constitution.
- **Violation of parent law:** The Court also held that Rule 3(b) violated **Section 3 of the parent law**, which guaranteed temple access to all classes of Hindus.

Minority view: Justice Indu Malhotra, in her dissent, gave the following findings:

- **Need for harmonisation:** She held that **fundamental rights in a secular polity must be harmonised**, and equality cannot automatically override religious freedom.
- **Protection of religious customs:** She stated that **individuals have the collective right to practise their faith according to their customs and beliefs**, which deserve constitutional protection.
- **Essential religious practice:** She found that the **exclusion of women of a certain age was based on long-standing custom and constituted an essential religious practice**, which should not be interfered with.

Essential religious practices test and its role in judicial review

1. **Test meaning:** The essential religious practices test is used by courts to determine whether a religious practice qualifies for constitutional protection. Courts examine whether the practice is essential to the religion.

2. **Judicial authority:** This test allows courts to interpret religious doctrine and decide which practices are essential. As a result, courts determine the scope of constitutional protection for religious practices.

3. **Judicial example:** In the 1966 Swaminarayan sect case, the Court determined essential religious practices using selective references to Hindu texts. It concluded what was essential without relying on the conscience of followers.

4. **Test limitations:** The test allows courts to sit in theological judgment over religion, which is inconsistent with secular principles. It also requires courts to reach factual conclusions without oral evidence or cross-examination and fails to resolve situations where essential practices violate dignity.

Anti-exclusion test and shift towards dignity-based constitutional approach

1. Test meaning: The anti-exclusion test examines whether a religious practice excludes individuals in a way that harms their dignity or denies access to basic goods. If such exclusion occurs, constitutional values of equality and dignity prevail over religious freedom.

2. **Test purpose:** Justice D.Y. Chandrachud proposed the anti-exclusion test to address the limitations of the essential religious practices test. It allows religious groups to define their own beliefs while preventing exclusion that harms dignity.

3. **Constitutional focus:** The test examines whether exclusion violates constitutional guarantees of equal treatment and protection. It focuses on the consequences of exclusion rather than on whether a practice is essential to religion.

4. **Religious autonomy:** The test accepts religious autonomy as a starting point and respects the right of religious communities to manage their affairs. Courts intervene only when exclusion affects dignity and access to basic goods.

5. **Key distinction:** Unlike the essential religious practices test, the anti-exclusion test does not ask whether a practice is essential to religion. It examines whether exclusion violates constitutional guarantees of dignity and equal access.

Broader implications for religious freedom jurisprudence

1. Constitutional review: The nine-judge Bench will examine broader constitutional questions on religious freedom while hearing the review petitions and related issues. Its ruling will determine how courts should resolve conflicts between religious autonomy and individual dignity.

2. **Bohra exclusion:** The issue involves the right of Dawoodi Bohra religious authorities to exclude members from the community. It raises the constitutional question of whether such exclusion violates dignity and equal religious participation.

3. **Parsi women rights:** The issue concerns whether Parsi women can continue practising the Zoroastrian faith after marrying outside the religion. It raises questions about access to religious life and protection of individual religious freedom.

4. **Social consequences:** Religion and social life are closely connected, and religious practices affect access to important institutions. Courts cannot remain indifferent when such practices affect dignity and equal participation.

5. **Individual priority:** The Constitution places the individual at the centre of concern and protects equal moral membership. Religious autonomy cannot override a person's dignity and access to religious and civic spaces.

Conclusion:

The Constitution protects both religious autonomy and individual dignity. Courts must avoid theological judgment while ensuring that religious practices do not cause exclusion and discrimination. The anti-exclusion test provides a dignity-based constitutional framework. It protects religious belief while ensuring equal access and reinforces the Constitution's commitment to equality, dignity, and individual rights in matters of religion.

Question for practice:

Examine how the Supreme Court's Sabarimala judgment reflects the tension between religious autonomy and constitutional principles of dignity and equality, and discuss the significance of the anti-exclusion test in resolving this conflict.

Source: The Hindu

How India and Canada mended their frayed ties

Source: The post **"How India and Canada mended their frayed ties"** has been created, based on **"How India and Canada mended their frayed ties"** published in **"Indian Express" on 27th February 2026.**

UPSC Syllabus: GS Paper-2-International Relations

Context: The visit of Canadian Prime Minister **Mark Carney** to India marks a significant attempt to reset India–Canada relations after a severe diplomatic crisis that began in 2023 following allegations made by **Justin Trudeau** regarding the killing of **Hardeep Singh Nijjar**. Both countries realised the importance of restoring ties due to strong economic, strategic, and diaspora linkages.

Background of the Diplomatic Crisis

1. The crisis began in September 2023 when Justin Trudeau alleged that Indian agents were involved in the killing of Hardeep Singh Nijjar in Canada.
2. Prime Minister **Narendra Modi** rejected these allegations and called them politically motivated.
3. Both countries expelled diplomats and withdrew High Commissioners, which led to a sharp deterioration in diplomatic relations.
4. Visa restrictions and closure of consulates affected students, businesses, and diaspora interactions.
5. The crisis also damaged mutual trust and created tensions in trade, security cooperation, and public perception.

Steps Taken to Mend Relations

1. After Mark Carney became Prime Minister in 2025, he showed willingness to rebuild relations with India.
2. Carney treated the Nijjar case as a law enforcement issue rather than a diplomatic dispute.
3. He invited Narendra Modi to the G7 outreach summit, which helped restart political dialogue.
4. Both countries agreed to restore High Commissioners and resume diplomatic engagement.
5. Visa restrictions were eased, and ministerial-level visits resumed.
6. India and Canada created an NSA-level mechanism to address concerns about transnational crimes and extremist activities.

Major Pillars of India–Canada Relations

I. Trade and Economic Relations

1. India and Canada agreed to negotiate a Comprehensive Economic Partnership Agreement to double trade to 70 billion dollars by 2030.
2. India exports pharmaceuticals, machinery, electronics, textiles, and seafood to Canada.
3. India imports pulses, fertilizers, and minerals from Canada.
4. Canada is among the important foreign investors in India.

II. Security and Defence Cooperation

1. India and Canada cooperate through the Joint Working Group on Counter-Terrorism established in 1997.
2. Both countries signed a framework on Countering Terrorism and Violent Extremism in 2018.
3. Recent meetings between national security advisors helped rebuild trust.

III. Energy Cooperation

1. Canada's large reserves of oil, gas, LNG, and critical minerals match India's growing energy needs.
2. Both countries aim to expand cooperation in conventional and renewable energy sectors.

IV. Education Links

1. Indian students form the largest group of international students in Canada.
2. Academic partnerships, joint research programmes, and mobility initiatives strengthen people-to-people ties.

V. Diaspora Relations

1. Canada hosts over 1.8 million Indo-Canadians, making the diaspora an important bridge between the two countries.
2. Only a small minority among them supports Khalistan, but their activities had strained relations earlier.
3. Both governments now aim to prevent extremist issues from affecting bilateral ties.

VI. Geopolitical Importance

1. Canada is part of the G7 and Five Eyes alliance and shares strategic partnerships with India's key allies.

2. Cooperation in technology, supply chains, and innovation has increased.
3. Global trade uncertainties caused by policies of **Donald Trump** have made India–Canada cooperation more important.

Challenges Ahead

1. The Khalistan issue continues to be sensitive and needs careful handling.
2. Domestic political pressures in Canada may influence India policy.
3. Mutual trust in intelligence sharing must be strengthened.
4. Economic negotiations like the trade agreement may face delays.

Way Forward

1. Both countries should institutionalise high-level dialogue mechanisms.
2. They should fast-track the Comprehensive Economic Partnership Agreement.
3. They should strengthen cooperation against extremism and transnational crimes.
4. They should promote student exchanges and diaspora engagement.
5. They should collaborate in critical minerals, clean energy, and emerging technologies.

Conclusion: India and Canada have taken pragmatic steps to repair their strained relationship by restoring diplomatic channels, separating political disputes from cooperation, and focusing on shared economic and strategic interests. Sustained dialogue, respect for sovereignty, and deeper cooperation in trade, energy, and security will determine the long-term success of this partnership.

Question: Discuss how India and Canada have mended their frayed ties and analyse the future prospects of the relationship.

Source: Indian Express

Travelling Across the Industrial Corridors of India

Source: The post **"Travelling Across the Industrial Corridors of India"** has been created, based on **"Travelling Across the Industrial Corridors of India"** published in **"PIB" on 27th February 2026.**

UPSC Syllabus: GS Paper-3-Economy

Context: Industrial corridors have emerged as a key strategy to strengthen India's manufacturing ecosystem by connecting major economic centres with high-quality infrastructure. The Union Budget 2026–27 announced an integrated East Coast Industrial Corridor with a major node at Durgapur, showing the government's continued focus on corridor-led industrialisation under the **National Industrial Corridor Development Programme**.

About Industrial Corridors

1. Industrial corridors are planned development zones that connect major economic hubs through integrated transport networks such as highways, railways, ports, and airports.
2. They promote industrial clustering by linking manufacturing centres with efficient logistics and infrastructure.
3. They provide globally competitive infrastructure and business-friendly environments for industries.

4. They are developed along major transport routes to ensure efficient movement of goods and labour.

Importance of Industrial Corridors

1. Industrial corridors reduce production and logistics costs by improving multimodal transport connectivity.
2. They provide plug-and-play infrastructure that helps industries start operations quickly.
3. They encourage industrial clustering, which increases productivity and innovation.
4. They generate employment opportunities through skill development programmes.
5. They attract foreign investment through Special Economic Zones and industrial parks.
6. They promote sustainable development through renewable energy use, waste recycling, and green urban planning.
7. They improve quality of life through walk-to-work city planning and better urban infrastructure.

Government Initiatives for Industrial Corridors

I. National Industrial Corridor Development Programme (NICDP)

1. The Government of India is implementing projects across 11 industrial corridors under NICDP.
2. These corridors are guided by the PM GatiShakti framework for integrated multimodal connectivity.
3. The programme promotes Low Carbon Cities through green spaces, renewable energy, water recycling, and sustainable transport.
4. Projects are developed as smart industrial cities with plug-and-play infrastructure.

II. Major Industrial Corridors in India

1. The **Delhi-Mumbai Industrial Corridor** includes nodes such as Dholera Special Investment Region and Shendra-Bidkin Industrial Area.
2. The **Chennai-Bengaluru Industrial Corridor** connects southern manufacturing hubs like Tumakuru and Krishnapatnam.
3. The **Amritsar-Kolkata Industrial Corridor** aims to boost development in northern and eastern states.
4. The **Vizag-Chennai Industrial Corridor** strengthens coastal manufacturing and port connectivity.
5. Other corridors include Hyderabad–Nagpur, Hyderabad–Bengaluru, Odisha Economic Corridor, and Bengaluru–Mumbai corridors.

III. Budgetary Support

1. The Budget 2026–27 allocated ₹3,000 crore to the **National Industrial Corridor Development and Implementation Trust** for infrastructure funding.
2. Twelve additional smart city projects under NICDP were approved with a total cost of ₹28,602 crore.
3. These projects are expected to attract large investments and generate significant employment.

IV. Role of National Industrial Corridor Development Corporation

1. The **National Industrial Corridor Development Corporation Limited** coordinates planning and implementation of industrial corridor projects.
2. It develops smart industrial townships, logistics hubs, and integrated manufacturing clusters.
3. It aims to increase exports and strengthen India's manufacturing sector.

Current Status of Industrial Corridors

1. Projects across 11 corridors are under implementation.
2. Four projects have been completed and four are nearing completion.
3. Projects such as Dholera Special Investment Region and Shendra-Bidkin Industrial Area are attracting large investments.
4. These projects are expected to generate lakhs of jobs and boost regional development.

Benefits of Industrial Corridors

1. **Industrial corridors promote balanced** regional development by bringing industries to new areas.
2. They improve logistics efficiency and reduce supply chain bottlenecks.
3. They strengthen India's participation in global value chains.
4. They increase exports and improve manufacturing competitiveness.
5. They create large-scale employment opportunities.
6. They encourage private investment through Public-Private Partnerships.

Challenges

1. Land acquisition and environmental clearance issues can delay projects.
2. Coordination between central and state governments may be complex.
3. Infrastructure financing requirements are very high.
4. Skill gaps in labour may affect industrial productivity.
5. Global economic uncertainties may slow investment.

Way Forward

1. The government should ensure faster land acquisition and clearances through digital platforms.
2. Skill development programmes should be expanded in corridor regions.
3. Greater private investment should be encouraged through PPP models.
4. Environmental sustainability must remain a priority.
5. Trade agreements and export promotion policies should complement corridor development.

Conclusion: Industrial corridors are transforming India's industrial landscape by providing world-class infrastructure, attracting investment, and generating employment. Government initiatives under NICDP, supported by institutions like NICDC and NICDIT, are helping India move towards becoming a global manufacturing hub. With sustained policy support, improved coordination, and focus on sustainability, industrial corridors can play a decisive role in achieving long-term economic growth.

Question: Discuss the role of Industrial Corridors in India's economic development and analyse recent government initiatives to promote them.

Source: PIB

India's Trade Partnerships Powering Global Integration and Growth

Syllabus- GS 2- Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Introduction:

India's global trade integration entered a new phase in 2026, driven by expanding Free Trade Agreements (FTAs) and diversified partnerships. As per UNCTAD's Trade and Development Report 2025, India ranks third among Global South economies in trade partnership diversity, surpassing all Global North nations, reflecting resilience amid tariff uncertainties.

Aligned with the Viksit Bharat vision, India's trade strategy emphasizes export growth, global value chain integration, and employment generation

India's New Trade Partnerships (2025–26)

1. India–EU FTA: The 'Mother of All Deals'

Concluded in January 2026, the India–EU FTA is the most comprehensive agreement in India's trade history.

Key highlights include:

- Preferential access across 97% of EU tariff lines, covering 99.5% of trade value.
- Immediate duty elimination on 70.4% of tariff lines (90.7% of India's exports), benefiting textiles, leather, footwear, tea, coffee, spices, gems & jewellery, and marine products.
- Phased duty elimination (3–5 years) on 20.3% of tariff lines; tariff-rate quotas for processed foods, steel, and select shrimp/prawn products.
- Exports worth over INR 2.87 lakh crore (USD 33 billion) from labour-intensive industries gain enhanced competitiveness.
- Services: EU committed across 144 sub-sectors including IT/ITeS, professional, education, and business services. Sensitive sectors — dairy, meat, poultry, and cereals — remain fully safeguarded.

Key FTAs concluded in 2025–26 at a Glance

Agreement	Key Market Access	Notable Feature

India–EU FTA (Jan 2026)	97% tariff lines; 99.5% trade value	Mother of All Deals; USD 33B labour exports benefit
India–UK CETA (2025)	~99% of India's exports duty-free	Double Contribution Convention; Rs. 4,000 cr savings
India–Oman CEPA (Dec 2025	Zero duty on 98.08% Oman tariff lines	First country to commit on AYUSH/traditional medicine
India–New Zealand FTA (2025)	100% tariff lines zero-duty from day 1	USD 20B investment; gateway to Oceania/Pacific
India–EFTA TEPA (Oct 2025)	92.2% tariff lines; 99.6% trade value	USD 100B FDI pledge; 1 million direct jobs

2. India-UK Comprehensive Economic and Trade Agreement (CETA)

Bilateral trade stands at USD 56 billion with a target to double by 2030. The agreement grants near-universal duty-free access (99% of exports). A first-of-its-kind Double Contribution Convention eliminates dual social security payments, saving Indian companies over ₹4,000 crore. Agriculture and processed food exports are projected to grow by over 50% in three years.

3. India-Oman Comprehensive Economic Partnership Agreement (CEPA)

Signed in December 2025, the CEPA opens zero-duty access on 98.08% of Oman's tariff lines (99.38% of export value). Remarkably, it is the first agreement globally to extend commitments on traditional medicine (AYUSH) across all modes of supply — a significant win for India's wellness sector.

4. India-New Zealand Free Trade Agreement (FTA)

India's fastest-concluded FTA grants 100% zero-duty access for all Indian exports from day one, supporting farmers, MSMEs, and labour-intensive sectors. The agreement is backed by a USD 20 billion investment commitment over 15 years and positions India as a skilled workforce provider for Oceania and Pacific markets.

5. Previously Operationalised FTAs

India–UAE CEPA (2022) has already crossed the bilateral trade target of USD 100 billion in FY 2024-25. India–Australia ECTA (April 2022) has delivered 8% export growth in FY 2024-25, with full zero-duty access from January 2026. The India–Mauritius CECPA (2021) remains India's first trade agreement with an African country, offering preferential access across 300+ product lines.

Domestic Enablers Strengthening Export Competitiveness

Trade agreements alone cannot deliver results without a supportive domestic ecosystem. India has deployed a multi-layered framework of policy, financial, and regulatory measures:

- **Trade Connect ePlatform**: A tariff explorer service enables exporters to access real-time FTA

concession data, reducing information asymmetry.

- **Export Promotion Mission (EPM):** A comprehensive digitally driven framework designed to facilitate export initiatives and align domestic production with global demand.
- **Credit Guarantee Scheme for Exporters**: Provides financial assistance and liquidity support during periods of global uncertainty.
- **RBI Measures**: Extension of export credit tenor to 450 days; repatriation period extended from 9 to 15 months; shipment period against advance payments raised from 1 to 3 years — significantly easing the credit cycle for exporters.
- **Union Budget 2026-27**: Removal of ₹10 lakh value cap on courier exports; duty-free imports of inputs for leather/synthetic footwear and seafood processing; export time limit extended to 1 year for garment and footwear exporters; direct clearance of export cargo from factory premises via electronic sealing.

Together, these measures create an integrated support architecture ensuring liquidity, regulatory clarity, and operational flexibility for India's export ecosystem

India's Expanding Trade Negotiations

India is widening its trade outreach across regions:

- **India–US Interim Agreement (Feb 2026):** Framework for reciprocal trade, paving the way for a broader Bilateral Trade Agreement (BTA).
- **India–Israel FTA:** First round concluded; focus on fintech, agri-tech, AI, pharma, space, and defence.
- **India–GCC FTA:** Terms of Reference signed to begin talks on goods, services, and food/energy security.
- **ASEAN–India AITIGA Review:** Ongoing talks to unlock greater trade potential.
- **India–Canada CEPA:** Target to raise bilateral trade to USD 50 billion by 2030.
- **India–Mexico:** Discussions to expand trade and sectoral investment ties.

Challenges need to be addressed

1. **Non-tariff barriers (NTBs)** like differing standards, certifications, and sanitary norms continue to restrict India's export potential despite tariff concessions.
2. **Limited MSME integration** into global value chains restricts the trickle-down benefits of FTAs to smaller enterprises.
3. **Supply-side constraints** in sunrise sectors like electronics and semiconductors reduce India's ability to capitalise on new market access.
4. **Trade deficit risks** with partners like ASEAN highlight the need for careful calibration to prevent import surges in sensitive sectors.
5. **Lack of awareness among exporters** about FTA provisions, rules of origin, and preferential tariff utilisation reduces effective implementation.

Way Forward

1. **Strengthen standards infrastructure** (BIS, FSSAI, pharma regulators) to meet importing countries' compliance requirements and reduce export rejections.
2. **Develop dedicated export clusters** integrating MSMEs with technology, logistics, and credit support to deepen GVC participation.
3. **Expand supply-side capacity** in electronics, defence, and green energy to convert FTA market access into actual export growth.
4. **Conduct targeted outreach and capacity-building programmes** to improve FTA utilisation rates among exporters, especially MSMEs.
5. **Complement FTAs with Bilateral Investment Treaties (BITs)** to attract quality FDI into manufacturing and protect Indian investments abroad.

Conclusion

India's 2025–26 trade partnerships mark a shift from a reactive to a proactive global trade strategy. Landmark FTAs with the EU and UK, along with negotiations with the US, GCC, Israel, and ASEAN, position India as a trusted partner in the emerging multipolar trade order.

Backed by domestic reforms enhancing exporter competitiveness, India's trade ecosystem is becoming more resilient and globally integrated. As India advances toward Viksit Bharat 2047, these partnerships serve as pillars of strategic autonomy and geopolitical influence.

Question for Practice: India's recent Free Trade Agreements (2025–26) mark a shift towards a proactive and strategic trade policy." Discuss how these trade partnerships can enhance India's global integration and economic growth. Also examine the key challenges that need to be addressed for effective implementation

Source- PIB

India's Revised GDP Estimates and New Measurement Framework

Syllabus- GS 3- Indian Economy

Introduction

India has revised its GDP base year from **2011–12 to 2022–23**, marking a major reform in its statistical framework. This update improves accuracy, detail, and global comparability of national income data -crucial for evidence-based policymaking under the Viksit Bharat vision.

The revision reflects India's rapid structural changes, including growth in digital services, renewable energy, and the gig economy, which were underrepresented earlier. The new series follows the System of **National Accounts (SNA) 2008** and aligns with the IMF's Quarterly National Accounts Manual 2017.

Key Growth Numbers:

The revised GDP estimates paint a robust picture of India's economic momentum:

- Real GDP growth for FY 2025–26 is estimated at 7.6%, up from 7.1% in FY 2024–25.
- Nominal GDP (at current prices) is projected to grow by 8.6% in FY 2025–26.

- The manufacturing sector has recorded double-digit growth in both FY 2023–24 and FY 2025–26.
- Secondary and tertiary sectors have exceeded 9.0% growth in FY 2025–26.
- The 'Trade, Repair, Hotels, Transport & Communication' sector grew at 10.1% at constant prices.
- Q3 (October–December 2025–26) real GDP stands at ₹84.54 lakh crore — a 7.8% growth, accelerating from 7.4% in Q3 FY 2024–25.

Key Structural Changes in the New Gross Domestic Product (GDP) Series

1. **Revised Base Year (2022–23):** The base year has been updated from 2011–12 to 2022–23 to reflect the current economic structure. The year was chosen as a normal post-pandemic year, improving comparability and accuracy.
2. **Improved Sector-wise Estimation:**
    - Private corporate Gross Value Added (GVA) is now allocated using an activity-wise revenue share method instead of the dominant-sector approach.
    - Better coverage of the general government sector, including housing services and autonomous/local bodies.
3. **Better Measurement of Household and Informal Sector:** Annual Survey of Unincorporated Sector Enterprises (ASUSE) and Periodic Labour Force Survey (PLFS) are used for direct annual estimation, improving coverage of informal enterprises and unincorporated activities.
4. **Enhanced Consumption and Demand Estimation:** Private Final Consumption Expenditure (PFCE) is estimated using Household Consumer Expenditure Surveys, production data, and administrative datasets, strengthening domestic demand assessment.
5. **Expanded Use of Administrative and GST Data:** Greater use of Goods and Services Tax (GST) data, Ministry of Corporate Affairs filings, and other administrative records improves formal sector measurement and reduces estimation errors.

6. **Methodological Upgrade – Double Deflation and SUT Integration:**Adoption of double deflation (separate adjustment of inputs and outputs) and integration of Supply and Use Tables (SUT) enhance consistency between production and expenditure estimates and reduce statistical discrepancies.
7. **Improved Financial and Agriculture Sector Estimation:** Use of Reserve Bank of India (RBI) banking data, actual financial data of Non-Banking Financial Companies (NBFCs), and updated agriculture datasets improves estimation of financial services, livestock, fisheries, and related activities.

Key Challenges in India's New GDP Series

1. **Methodological Complexity:** Implementation of double deflation and integration of multiple high-frequency data sources increase technical challenges.
2. **Informal Sector Measurement Gaps:** Limited real-time data coverage of the informal and unorganised sectors affects estimate accuracy.
3. **State-Level Capacity Variations:** Differences in statistical capacity across States and Union Territories hinder Gross State Domestic Product (GSDP) harmonisation.
4. **Back-Series and Data Lag Issues:** Delay in releasing historical back-series data limits long-term trend analysis.
5. **Transition to SNA 2025**: The United Nations Statistical Division is transitioning to the System of National Accounts (SNA) 2025, expected for global adoption around 2029–30. India will need another major revision in its next base year update to remain aligned.

Way Forward

1. **Complete Price Index Reforms:** Expedite the revised Wholesale Price Index (WPI) series and introduce the Producer Price Index (PPI) for better price deflation.
2. **Strengthen State Statistical Systems:** Enhance Gross State Domestic Product (GSDP) estimation capacity in States and Union Territories with support from the National Statistical Office (NSO) and the Ministry of Statistics and Programme Implementation (MoSPI).
3. **Integrate Real-Time Administrative Data:** Expand the use of Goods and Services Tax (GST), Public Financial Management System (PFMS), e-Vahan, and Employees' Provident Fund Organisation (EPFO) data to reduce estimation delays.
4. **Improve Transparency:** Publish detailed "Sources and Methods" documentation to boost credibility and allow independent scrutiny.
5. **Align with Global Standards:** Initiate preparations for adopting System of National Accounts (SNA) 2025, especially in digital economy and environmental accounting.

Conclusion

The revision of India's GDP base year to 2022–23 is a significant stride in building a credible, modern, and internationally aligned statistical system. By integrating richer data sources, deploying advanced methodological tools like double deflation and SUT-balancing, and expanding coverage of the informal and digital economy, the new series provides a far more accurate mirror of India's economic reality.

Question for Practice- India has revised its Gross Domestic Product (GDP) base year to 2022–23, introducing significant methodological and structural changes in national income estimation. Discuss the key structural reforms introduced in the new GDP series. Also briefly highlight the major challenges associated with its implementation.

Source- PIB

A holistic semicon push

Source: The post **"A holistic semicon push"** has been created, based on **"A holistic semicon push"** published in **"BusinessLine" on 28th February 2026.**

UPSC Syllabus: GS Paper-3-Science and technology

Context: Semiconductors form the foundation of the digital economy by enabling telecommunications, artificial intelligence, defence systems, electric mobility, and renewable energy technologies. In the backdrop of geopolitical tensions and pandemic-induced supply chain disruptions, strategic control over semiconductor supply chains has become a national priority. In this context, Budget 2026–27 introduced **India Semiconductor Mission (ISM) 2.0** along with an expanded Electronics Components Manufacturing Scheme (ECMS), signalling a transition towards a comprehensive semiconductor ecosystem.

Background: ISM 1.0 and Its Limitations

1. The first phase of the India Semiconductor Mission was approved in December 2021 with an outlay of ₹76,000 crore.
2. It primarily focused on developing domestic fabrication and packaging capacity.
3. It successfully attracted anchor investments such as Tata Electronics' fabrication facility in Gujarat, Micron's ATMP unit at Sanand, and CG Power's OSAT operations.
4. The regulatory framework relied largely on upfront capital subsidies and State-level fiscal and infrastructure incentives to reduce entry barriers in a capital-intensive and high-risk sector.
5. However, ISM 1.0 remained concentrated on downstream manufacturing outcomes. Upstream segments such as fabrication equipment, specialty materials, advanced wafers, and design infrastructure received limited attention.
6. As a result, India's semiconductor manufacturing ecosystem continued to depend significantly on imports and foreign technology.

Objectives and Focus Areas of ISM 2.0

ISM 2.0 seeks to correct these structural gaps through an integrated policy approach.

1. **Domestic Production of Equipment and Materials**
   a. ISM 2.0 prioritises the domestic manufacturing of fabrication equipment, specialty chemicals, gases, advanced wafers, precision machinery, and advanced packaging services.
   b. The expanded ECMS with an outlay of ₹40,000 crore plays a central role in strengthening component and material manufacturing.
2. **Development of Full-Stack Indian Intellectual Property**
   a. The mission aims to move beyond fabrication capacity and promote indigenous chip design and full-stack intellectual property development.
   b. This approach seeks to embed manufacturing within a broader innovation ecosystem.
3. **Creation of Industry-Led Research and Training Infrastructure**
   a. The policy emphasises the establishment of research centres and skilling hubs to build a specialised semiconductor workforce.

b. This marks a shift towards non-fiscal regulatory instruments that focus on human capital development and institutional capacity building.

Policy Instruments under ISM 2.0

1. The government has adopted a mix of fiscal and non-fiscal tools. Concessional customs duty regimes have continued to reduce cost pressures.
2. The absence of sector-specific levies improves investment attractiveness. Cluster-based development models are being promoted to ensure coordinated infrastructure development and supply chain integration.
3. Additionally, greater emphasis on research, skilling, and supplier development enhances long-term sustainability.

Significance of ISM 2.0

1. **Strategic Significance:** ISM 2.0 enhances India's strategic autonomy by reducing dependence on foreign semiconductor supply chains. It strengthens national security in critical sectors such as defence and telecommunications.
2. **Economic Significance:** The mission has the potential to generate high-value employment and deepen the electronics manufacturing ecosystem. It can improve India's export competitiveness in advanced technology sectors.
3. **Technological Significance:** By focusing on indigenous intellectual property and research capacity, ISM 2.0 promotes innovation and reduces technological dependence on foreign firms.
4. **Supply Chain Resilience:** The emphasis on upstream segments such as equipment and materials enhances supply chain resilience and reduces vulnerability to global disruptions.

Challenges

1. **High Capital Intensity and Long Gestation Periods:** Semiconductor fabrication requires extremely high capital investment and involves long payback periods, which can deter private participation despite subsidies.
2. **Technological Complexity:** The semiconductor industry evolves rapidly, and catching up with established global leaders requires continuous technological upgrades and sustained innovation.
3. **Dependence on Global Supply Chains:** Despite policy support, India may continue to rely on imported equipment, raw materials, and foreign technology in the short to medium term.
4. **Skill Gaps:** The domestic workforce may face shortages of highly specialised engineers and technicians required for advanced semiconductor manufacturing and design.
5. **Global Competition:** Countries such as the United States, Taiwan, South Korea, and China are offering aggressive incentives, making global competition intense.

Way Forward

1. **Deepening Upstream Integration:** India must accelerate domestic production of semiconductor-grade materials and fabrication equipment to reduce import dependence.
2. **Strengthening R&D Ecosystem:** Public–private partnerships in semiconductor research should be expanded, and long-term funding mechanisms must be institutionalised.
3. **Skilling and Academic Collaboration:** Industry–academia collaboration should be strengthened to create specialised semiconductor curricula and research programs.
4. **Stable and Predictable Policy Environment:** The government must ensure regulatory certainty, timely disbursal of incentives, and ease of doing business to build investor confidence.
5. **Global Strategic Partnerships:** India should leverage strategic partnerships for technology transfer while simultaneously building domestic intellectual property capabilities.

Conclusion: India Semiconductor Mission 2.0 represents a transition from subsidy-driven capacity creation to ecosystem-led industrial policy. By integrating fabrication, design, materials, research, and skilling within a coherent framework, the mission seeks to create a robust and sustainable semiconductor ecosystem. However, addressing structural challenges related to capital intensity, technological gaps, and skill shortages will be critical for achieving long-term technological self-reliance and strategic autonomy.

Question: "India's semiconductor strategy must move beyond fabrication to ecosystem building." In light of ISM 2.0, examine the opportunities and challenges in achieving this objective.

Source: BusinessLine

'Pax Silica' Alliance and India

Source: The post **"'Pax Silica' Alliance and India"** has been created, based on **"What is 'Pax Silica' alliance that India joined and how does it matter?"** published in **"Deccan Herald" on 28th February 2026.**

UPSC Syllabus: GS Paper-3-International Relations

News: India recently joined the **Pax Silica**, a US-led initiative aimed at securing critical minerals, semiconductor supply chains, and artificial intelligence ecosystems. The alliance was proposed by **Jacob Helberg** and was signed in the presence of Union Minister **Ashwini Vaishnaw** and US envoy **Sergio Gor**.

About Pax Silica

- Pax Silica is an **international alliance** formed in **December 2025** to build **cooperation in critical minerals** and **artificial intelligence supply chains.**
- The **name combines "Pax", meaning peace and "Silica" referring to the mineral base of semiconductor chips.**
- The alliance seeks **to secure the entire production lifecycle from the extraction of critical minerals** to semiconductor fabrication and the development of frontier AI models.
- It aims **to build a trusted ecosystem of countries and companies** that collaborate across mining, refining, manufacturing, software platforms, and AI systems.
- **Members of the Alliance:** The alliance includes **Australia, Japan, South Korea, Singapore, the UK, Israel, UAE, Netherlands, Greece, Qatar,** and **India as signatory members.**
    - **Canada, the European Union, Taiwan, and OECD participate** as **non-signatory members.**

Importance of Pax Silica

- **China dominates global rare earth production and processing** and produces **around 270,000 tonnes annually.**
- **China has previously restricted rare earth exports** during trade tensions with the US, exposing vulnerabilities in global supply chains.
- **Critical minerals are essential** for electric vehicles, smartphones, data centres, defence equipment, and AI systems.
- **Semiconductor shortages recently disrupted** the automobile and electronics industries worldwide, including in India.
- Pax Silica aims **to reduce overdependence on China and create diversified, resilient supply networks.**

Importance of India Joining

- **India's entry signals renewed strategic convergence** with the US and other partner nations.
- India **holds approximately 8.52 million tonnes of rare earth reserves**, which are among the largest globally, though production remains low.
- India has **a fast-growing semiconductor design ecosystem**.
- **Around 10 semiconductor fabrication plants** are established or under development, with initial production expected soon.
- **India strengthens the alliance** through its mineral reserves, growing market, and skilled human capital.

Benefits for India

- India will **gain access to advanced semiconductor** manufacturing equipment and global supply chain networks.
- India will **benefit from GPU infrastructure** and AI ecosystem collaboration.
- India will **reduce dependence on China-dominated mineral** and chip supply chains.
- The **alliance complements India's National Critical Mineral Mission.**
- The **alliance also strengthens the India Semiconductor Mission** and accelerates domestic chip manufacturing.

Challenges

- **India's rare earth production remains significantly below** its reserve potential due to technological and regulatory constraints.
- **Establishing semiconductor fabrication plants** requires high capital investment and advanced technological expertise.
- **Overalignment with a US-led framework may complicate** India's strategic autonomy in dealing with China.
- **Supply chain diversification** may increase short-term production costs for industries.
- **Geopolitical tensions between major powers could disrupt cooperation** within the alliance.

Way Forward

- India should **enhance domestic mining, refining, and processing capabilities** for rare earth elements.
- India **must invest in research and development** to strengthen semiconductor manufacturing and AI capabilities.
- **Public-private partnerships should be promoted** to accelerate fabrication plant completion and technology transfer.
- India should **balance strategic partnerships** while maintaining its policy of strategic autonomy.
- **Regulatory reforms should be introduced** to streamline approvals in the mining and high-tech manufacturing sectors.
- **Skill development initiatives should be expanded** to create a workforce capable of handling advanced chip and AI technologies.

Conclusion: Pax Silica represents a strategic shift toward securing critical minerals, semiconductor supply chains, and AI ecosystems. India's participation enhances its economic security, technological advancement,

and global strategic position. Effective domestic reforms and careful geopolitical balancing will determine how fully India benefits from this alliance.

Question: Discuss the objectives and scope of the Pax Silica alliance. How does India's participation strengthen both the alliance and India's strategic interests?

Source: Deccan Herald