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UPSC / PCS

MONTHLY CURRENT AFFAIRS JANUARY 2026

Topic Covered

PM MODI TO INAUGURATE MAJOR NATIONAL HIGHWAY PROJECTS IN WEST BENGAL REINFORCING INFRASTRUCTURE-LED GOVERNANCE AND COOPERATIVE FEDERALISM



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Now, Current Affairs are no longer merely current; they are Contemporary Affairs. Questions asked in both Prelims as well as the Mains assess the conceptual clarity of an aspirant. This magazine is prepared with the aim of helping you understand the interlinkages of both Static and Dynamic news events and internalize the concepts required to crack this examination.

The Plutus IAS team wishes you all the best. Prepare for the UPSC Civil Services Examination with a calm, composed, or serene mind and some patience to crack this examination in one go.

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Sources:
The Hindu | The Indian Express | The Economic Times | Press Information Bureau | PRS Legislative Research | IDSA: Institute for Defense Studies and Analysis | Yojana and Kurukshetra | Lok Sabha and Rajya Sabha Debates.



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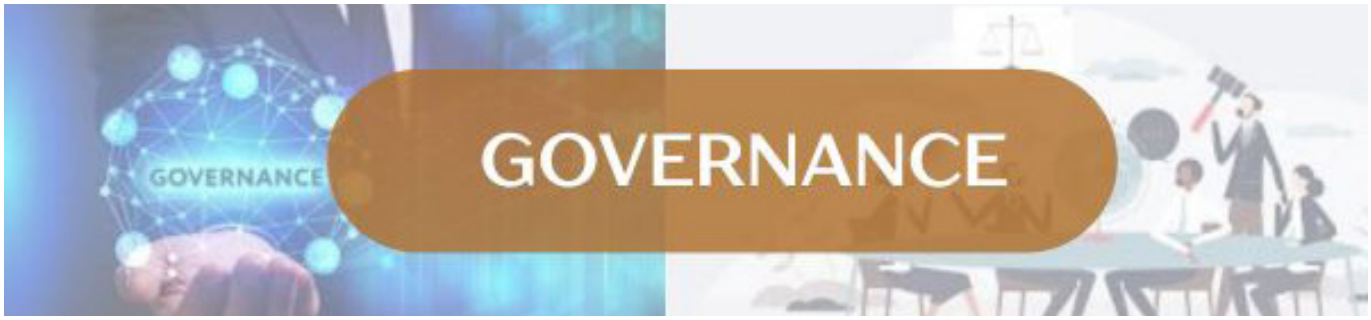
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PM MODI TO INAUGURATE MAJOR NATIONAL HIGHWAY PROJECTS IN WEST BENGAL : REINFORCING INFRASTRUCTURE-LED GOVERNANCE AND COOPERATIVE FEDERALISM

WHY IN THE NEWS?

The topic is in news due to the Prime Minister's scheduled visit to West Bengal to inaugurate and lay the foundation stone for major National Highway projects, reflecting the Union government's continued emphasis on infrastructure-led growth. The event has drawn attention because it involves central infrastructure initiatives in a state governed by an opposition party, bringing issues of cooperative federalism, Centre–state coordination, and fiscal priorities into focus. Additionally, the projects are significant for improving connectivity in eastern India, reducing logistics costs, and supporting regional economic integration, making the development relevant from a governance and policy perspective.



INFRASTRUCTURE AS A PILLAR OF GOOD GOVERNANCE

Dimension	Expanded Explanation	Governance Significance
Enhancing State Capacity and Service Delivery	Robust road infrastructure strengthens the state's logistical and administrative capacity by ensuring last-mile connectivity to remote, border, and underserved regions. It enables smoother movement of public officials, medical teams, disaster-response units, and welfare goods, thereby converting policy intent into tangible outcomes on the ground.	Enhances state capacity, a core attribute of good governance; bridges the gap between policy formulation and implementation; supports inclusive development and territorial equity.
Administrative Efficiency and Responsiveness	Improved transport networks reduce time, cost, and bureaucratic friction within governance systems. Faster inter-departmental coordination, quicker fund utilization, and efficient monitoring of projects improve administrative responsiveness and reduce governance lag.	Promotes efficiency, accountability, and effectiveness—key principles of good governance; enables time-bound delivery of schemes and responsive grievance redressal.

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Citizen-Centric Outcomes	Highways expand citizens' access to markets, healthcare, education, and employment opportunities by reducing travel time and economic barriers. Enhanced mobility integrates rural economies with urban growth centres, empowering marginalized communities and improving quality of life.	Advances social justice and inclusive growth; operationalizes the rights-based approach to development; strengthens trust between citizens and the state.
Economic Integration and Development	Road infrastructure facilitates inter-regional trade, industrial clustering, and supply-chain efficiency. It supports MSMEs, agriculture value chains, and tourism, creating multiplier effects across the economy.	Reinforces developmental governance; aligns with growth-led welfare models; contributes to employment generation and regional economic balance.
Disaster Management and Internal Security	Reliable highways improve disaster preparedness, emergency evacuation, and rapid deployment of security forces. Strategic road networks in border and insurgency-affected areas enhance surveillance and response capability.	Strengthens resilience and national security; supports cooperative federalism in crisis management; ensures continuity of governance during emergencies.
Constitutional and Institutional Dimension	National Highways, being part of the Union List (Seventh Schedule), empower the Union government to ensure uniform infrastructure standards and strategic connectivity. This enables addressing regional disparities while respecting the federal structure through coordination with states.	Reflects cooperative federalism; balances central leadership with state participation; promotes national integration and equitable development.

FEDERAL RELATIONS AND COOPERATIVE FEDERALISM

- **Functional Cooperation in a Diverse Polity:** The execution of centrally sponsored highway projects in states ruled by different political parties reflects the functional aspect of cooperative federalism. Successful implementation requires coordination on land acquisition, law and order, and local clearances, making cooperation indispensable.
- **Fiscal Federalism and Redistribution:** Centrally funded infrastructure projects demonstrate the Union's redistributive role, especially in states with limited fiscal capacity. Such investments help bridge development gaps and support balanced regional growth.
- **Competitive Federalism and Investment Climate:** Enhanced connectivity improves a state's attractiveness for private investment, logistics, and industry. This promotes competitive federalism, where states compete on governance efficiency rather than political alignment.
- **Constitutional Spirit in Practice:** These engagements test the constitutional vision of federalism based on cooperation, consultation, and coordination, rather than confrontation.

ECONOMIC GROWTH AND REGIONAL DEVELOPMENT

- **Reducing Logistics Costs and Improving Efficiency:** Highway infrastructure significantly lowers logistics costs and travel time, improving the competitiveness of Indian goods and services. This is crucial for

achieving long-term economic growth and export competitiveness.

- **Supporting MSMEs and Agricultural Markets:** Improved road connectivity strengthens supply chains for MSMEs and agriculture by facilitating easier access to markets, storage facilities, and processing units, thereby enhancing rural incomes.
- **Employment Generation:** Infrastructure projects generate employment during construction and create long-term economic opportunities through improved connectivity and industrial expansion.
- **Regional Integration and Strategic Connectivity:** For states like West Bengal, better highways strengthen links with eastern and northeastern India, promoting regional integration, border area development, and national unity.

GOVERNANCE AND FISCAL POLICY PRIORITIES

- **Capex-Led Growth Strategy:** The focus on large-scale highway projects reflects a capital expenditure–driven growth model, where public investment is prioritised to crowd in private investment and create durable assets.
- **High Multiplier Effects:** Infrastructure spending has a high fiscal multiplier, stimulating demand, employment, and productivity across sectors.
- **Transparency and Accountability:** Effective governance requires transparent project execution, digital monitoring, and performance audits to ensure timely completion and optimal utilisation of public funds.
- **Balancing Growth with Sustainability:** Fiscal prioritisation of infrastructure must be complemented by safeguards for environmental sustainability and social equity to maintain public trust.

CHALLENGES AND GOVERNANCE CONCERNS

- **Land Acquisition and Rehabilitation:** Delays and disputes related to land acquisition and inadequate rehabilitation measures often undermine project timelines and social legitimacy.
- **Centre–State Coordination Issues:** Political differences may sometimes create coordination gaps, affecting implementation efficiency and public perception.
- **Environmental and Social Impact:** Large infrastructure projects raise concerns regarding environmental degradation, displacement, and loss of livelihoods, requiring robust impact assessments.
- **Politicisation of Infrastructure:** There is a risk of infrastructure being perceived as a political tool rather than an outcome-oriented governance initiative, which may dilute its developmental intent.

WAY FORWARD

- **Strengthening Cooperative Federalism:** Institutionalised mechanisms for Centre–state consultation and dispute resolution can improve coordination and trust in infrastructure implementation.
- **Participatory and Inclusive Planning:** Involving local communities, Panchayati Raj Institutions, and urban local bodies in planning and execution can reduce conflicts and improve outcomes.
- **Accountability and Outcome-Based Monitoring:** Adoption of digital dashboards, independent audits, and social impact assessments can ensure transparency and timely project delivery.
- **Sustainable Infrastructure Development:** Integrating environmental safeguards, green construction practices, and climate resilience into highway projects will ensure long-term sustainability.
- **Citizen-Centric Governance Approach:** Infrastructure development should be aligned with citizen needs, focusing on accessibility, affordability, and equity rather than symbolic visibility.

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CONCLUSION

PM Modi's inauguration of National Highway projects in West Bengal exemplifies the intersection of infrastructure development and governance. It demonstrates how public investment can act as a catalyst for economic growth, federal cooperation, and enhanced state capacity. For governance to be truly transformative, such initiatives must be anchored in transparency, cooperative federalism, sustainability, and citizen-centric outcomes—ensuring that infrastructure becomes not merely a marker of development, but a durable foundation for inclusive and accountable governance.

Prelims question:

Q. With reference to National Highways in India, consider the following statements:

1. National Highways are included in the Union List of the Constitution.
2. The responsibility for construction and maintenance of National Highways lies exclusively with State Governments.
3. Development of National Highways plays a role in promoting cooperative federalism and regional integration.

Which of the statements given above is/are correct?

(a) 1 and 3 only (b) 1 only

(c) 2 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. "Infrastructure development has emerged as a key instrument of governance in contemporary India." In this context, examine how National Highway projects contribute to state capacity, cooperative federalism, and inclusive growth.

GOOD GOVERNANCE DAY 2025: STRENGTHENING ACCOUNTABILITY, TRANSPARENCY AND COMPETITIVE FEDERALISM

WHY IN THE NEWS?

Good Governance Day is observed annually on 25 December, marking the birth anniversary of Shri Atal Bihari Vajpayee, one of India's most respected statesmen. His leadership symbolised accountability, transparency, inclusiveness, and democratic consensus, reinforcing the idea that governance is not merely administration, but a continuous effort to improve the quality of life of citizens. The observance serves as a reminder that effective governance lies at the heart of sustainable development, social justice, and public trust.



ATAL BIHARI VAJPAYEE: ARCHITECT OF MODERN DEMOCRATIC GOVERNANCE

Shri Atal Bihari Vajpayee (1924–2018) served as India's Prime Minister on three occasions and had a distinguished parliamentary career spanning over four decades. Rising from humble beginnings in Gwalior, he became a mass leader admired across political lines. Awarded the Padma Vibhushan (1992) and Bharat Ratna (2015), his governance philosophy blended economic reforms with social sensitivity.

As Prime Minister, Vajpayee laid the foundations of modern infrastructure-led growth through initiatives such as the National Highways Development Project, rural connectivity expansion, telecom reforms, and strategic economic liberalisation. His commitment

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to women's empowerment, social equality, and democratic values earned him the title of "Best Parliamentarian" in 1994. His legacy continues to guide India's emphasis on transparent, accountable, and citizen-focused governance.



CONCEPTUAL FRAMEWORK OF GOOD GOVERNANCE

According to the United Nations, good governance is participatory, consensus-oriented, accountable, transparent, responsive, effective, efficient, equitable, inclusive, and rule of law–based. These principles ensure that institutions function in a manner that serves citizens' interests, protects rights, and promotes sustainable development. India's governance framework increasingly reflects these principles through institutional reforms, digital transformation, decentralisation, and performance-based evaluation mechanisms.

MEASURING GOVERNANCE PERFORMANCE: THE GOOD GOVERNANCE INDEX

To translate the idea of good governance into measurable outcomes, the Department of Administrative Reforms and Public Grievances (DARPG) launched the Good Governance Index (GGI) on 25 December 2019. The Index evaluates governance performance across States and Union Territories using 58 citizen-centric indicators across 10 key sectors.

CATEGORISATION OF STATES AND UNION TERRITORIES (DARPG)

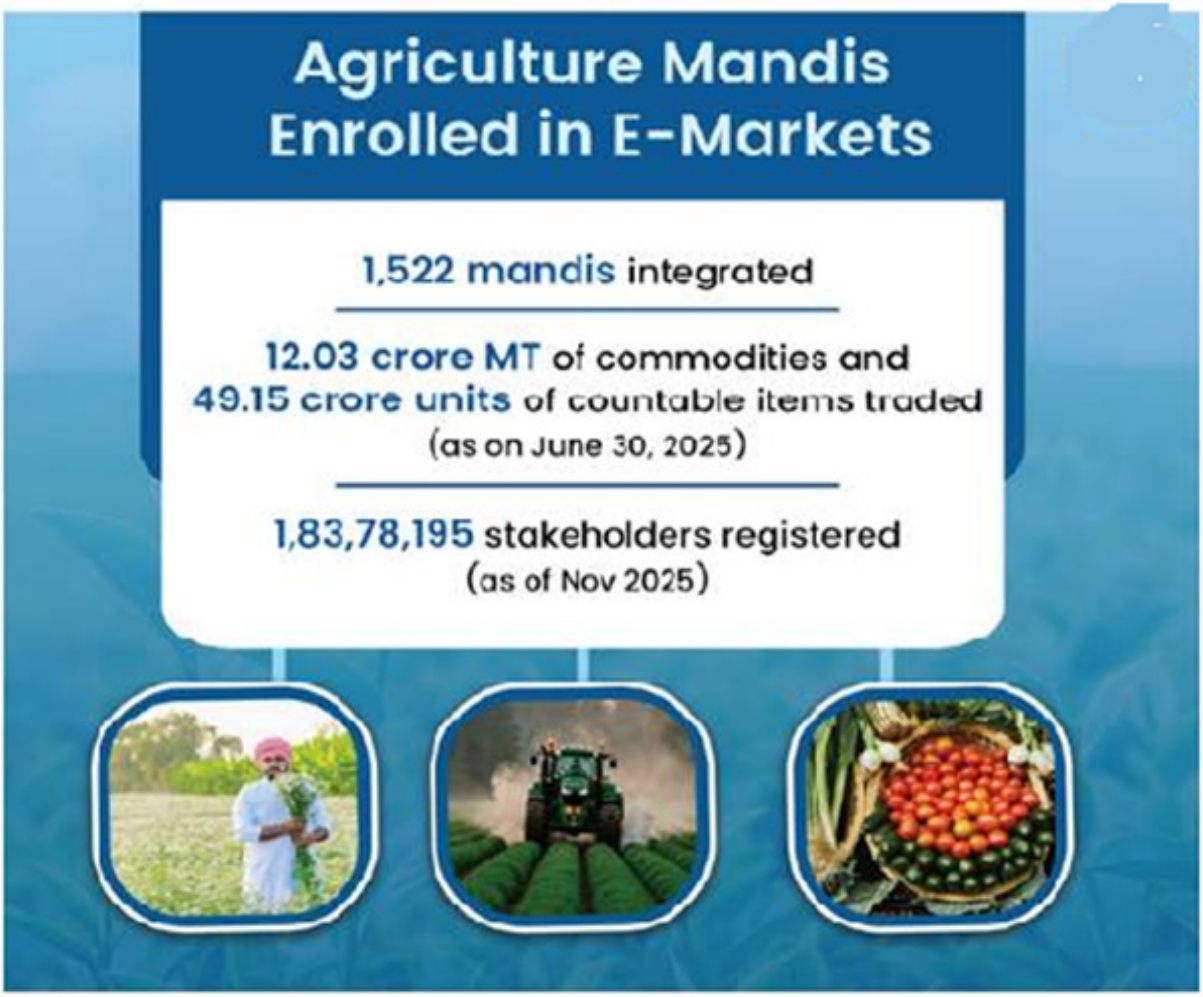
Group A States	Group B States	North-East & Hill States	Union Territories
Andhra Pradesh	Bihar	Arunachal Pradesh	Andaman & Nicobar Islands
Goa	Chhattisgarh	Assam	Chandigarh
Gujarat	Jharkhand	Himachal Pradesh	Dadra & Nagar Haveli
Haryana	Madhya Pradesh	Jammu & Kashmir	Daman & Diu
Karnataka	Odisha	Manipur	Lakshadweep
Kerala	Rajasthan	Meghalaya	Delhi
Maharashtra	Uttar Pradesh	Mizoram	Puducherry
Punjab	West Bengal	Nagaland	
Tamil Nadu		Sikkim	
Telangana		Tripura	
		Uttarakhand	

SECTOR-WISE DIMENSIONS OF GOOD GOVERNANCE

1. **Agriculture and Allied Sectors:** Indicators include growth in agriculture, food grains, horticulture, milk, meat and poultry production, crop insurance coverage, and integration of mandis with the e-NAM platform—strengthening farmer incomes and market access.
2. **Commerce and Industry:** Governance improvements are seen in Ease of Doing Business, MSME formalisation through Udyam registration, GST enrolment, industrial growth, and the startup ecosystem—driving entrepreneurship and job creation.


Crop Insurance Coverage
(Coverage of Farmer Applications in Crores)
Pradhan Mantri Fasal Bima Yojana Provides Crop Insurance to Farmers
3.71
15.10
2014-15
2021-25
78.487 crore farmer applications insured since 2016
22.667 crore farmers received claims worth ₹1.83 lakh crore


Growth of Egg/Poultry Production
India ranks 2nd in egg production globally, according to the Food and Agriculture Organisation
Egg production:
142.77 billion (2023-24) => 149.11 billion (2024-25) [+4.44%]
Per capita egg availability:
103 eggs/annum (2023-24) => 106 eggs/annum (2024-25) [+2.91%]
Meat production:
10.26 million tonnes (2023-24) => 10.50 million tonnes (2024-25) [+2.66%]
Per capita meat availability:
7.29 kg/annum (2023-24) => 7.51 kg/annum (2024-25) [+3.07%]


Agriculture Mandis Enrolled in E-Markets
1,522 mandis integrated
12.03 crore MT of commodities and
49.15 crore units of countable items traded
(as on June 30, 2025)
1,83,78,195 stakeholders registered
(as of Nov 2025)

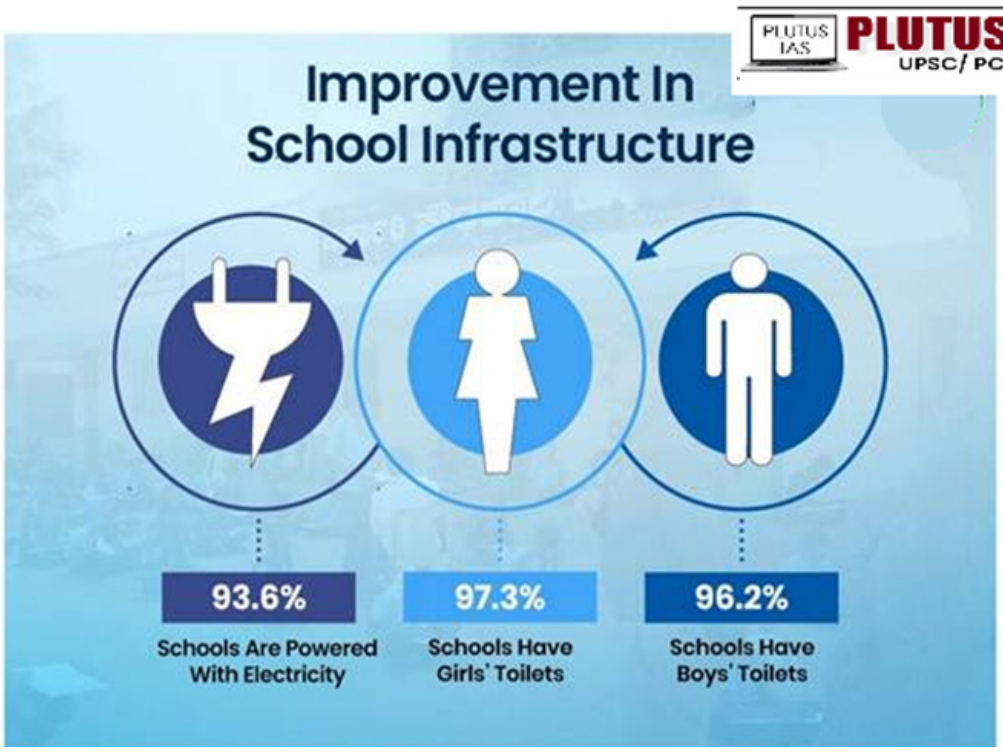


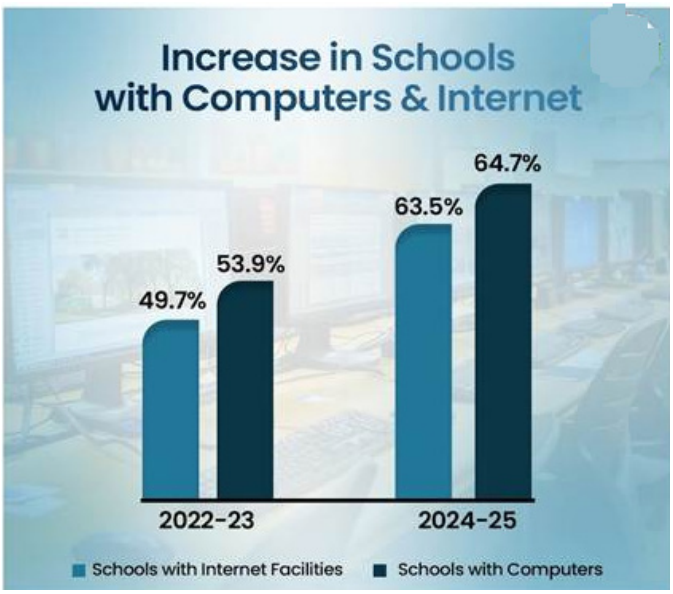






3. **Human Resource Development:** Progress is measured through education quality, retention rates, gender parity, SC/ST enrolment, digital access in schools, skill training, and placement outcomes, aligning with demographic dividend objectives.





4. **Public Health:** Key indicators include operationalisation of Health and Wellness Centres, doctor availability, MMR, IMR, immunisation coverage, and hospital bed availability—strengthening universal health access.











5. **Public Infrastructure and Utilities:** Governance outcomes are visible in potable water access, rural connectivity, LPG coverage, energy availability, power consumption, and urban waste management—enhancing quality of life.

6. **Economic Governance:** Indicators such as per capita GSDP growth, fiscal deficit management, tax revenue mobilisation, and debt sustainability reflect macroeconomic prudence and fiscal responsibility.

7. **Social Welfare and Development:** Progress is tracked through sex ratio at birth, health insurance coverage, employment generation, housing for all, women's economic empowerment, inclusion of SCs, STs, OBCs and minorities, financial inclusion, and Aadhaar-linked welfare delivery.

8. **Judiciary and Public Safety:** Governance efficiency is reflected in conviction rates, police availability, women representation in police forces, and case disposal rates in courts and consumer forums.

9. **Environment:** Environmental governance is assessed through changes in forest cover, waste recycling ratios, land degradation levels, and renewable energy capacity—aligning governance with sustainability goals.

10. **Citizen-Centric Governance:** Indicators include Right to Services legislation, grievance redressal effectiveness, and online service delivery—placing citizens at the core of administration.

GOVERNANCE REFORMS AND CAPACITY BUILDING IN 2025

1. In 2025, DARPG strengthened governance capacity through multiple initiatives:

2. 28th National Conference on e-Governance, Visakhapatnam, focused on Civil Service and Digital Transformation and adopted the Visakhapatnam Declaration aligned with Viksit Bharat 2047.

3. IIAS–DARPG Conference (New Delhi) brought global best practices to India, marking India's leadership in administrative reforms.

4. State Collaborative Initiative (SCI) Scheme promoted AI-enabled governance platforms, real-time dashboards, and service delivery innovation across states and UTs.

CONCLUSION

Good Governance Day 2025 reaffirms India's commitment to accountable, transparent, inclusive, and citizen-centric governance, inspired by the vision of Atal Bihari Vajpayee. The Good Governance Index has emerged as a powerful institutional tool to measure outcomes, identify best practices, and promote competitive federalism. As India advances towards Viksit Bharat 2047, strengthening governance through innovation, digital transformation, and inclusive policies will remain central to achieving equitable, sustainable, and participatory development.

Prelims question:

Q. With reference to the Good Governance Index (GGI), consider the following statements:

1. The Good Governance Index was launched by the Department of Administrative Reforms and Public Grievances (DARPG) on Good Governance Day.
2. The Index assesses governance performance using more than 50 indicators across 10 sectors.
3. States and Union Territories are ranked together without any categorisation to ensure uniform benchmarking.
4. Citizen-centric governance and environmental sustainability are included as as-

sessment dimensions.

Which of the statements given above are correct?

(a) 1, 2 and 4 only (b) 1 and 3 only

(c) 2 and 3 only (d) 1, 2, 3 and 4

Answesr: A

Mains Question:

Q. "Good governance is not merely about administration but about improving the quality of life of citizens." In the light of Good Governance Day 2025 and the Good Governance Index, examine how India institutionalises the principles of good governance through measurement, reforms, and citizen-centric initiatives.

(250 words)

ADVANCING LEGAL EMPOWERMENT AND CONSTITUTIONAL LITERACY IN INDIA

WHY IN THE NEWS?

The year 2024–2025 marked one of the most significant civic mobilisation efforts in India's democratic history through the nationwide constitutional literacy campaign "Hamara Samvidhan – Hamara Samman", later expanded as "Hamara Samvidhan – Hamara Swabhiman". Anchored within the Government of India's DISHA scheme—Designing Innovative Solutions for Holistic Access to Justice—the campaign transformed constitutional awareness from symbolic commemoration into a vibrant movement of public engagement, legal empowerment, and participatory democracy.

DISHA: THE PARENT FRAMEWORK FOR ACCESSIBLE JUSTICE

Launched in 2021 for a five-year period, the DISHA scheme aims to ensure easy, affordable, transparent, and citizen-centric delivery of justice. It integrates:

- **Tele-Law:** Digital legal advice for remote citizens
- **Nyaya Bandhu:** Pro Bono legal services
- Legal Literacy & Awareness Programmes

DISHA thus provides the operational backbone for the Samvidhan campaigns, ensuring real-time legal assistance to citizens alongside constitutional literacy.

GENESIS OF THE CAMPAIGN: CELEBRATING 75 YEARS OF THE CONSTITUTION

India celebrates 26 November as Constitution Day to mark the adoption of the Constitution in 1949. As India approached the 75th year of becoming a Republic, the Department of Justice launched a year-long, nationwide constitutional literacy drive titled "Hamara Samvidhan Hamara Samman" on 24 January 2024.

The initiative was inaugurated by the Vice-President at the Dr. B.R. Ambedkar International Centre, New Delhi. The campaign sought not only to commemorate the Constitution but to simplify it, democratise it, and make it meaningful in everyday life.

Transition to "Hamara Samvidhan – Hamara Swabhiman" (2025)

On 24 January 2025, the initiative evolved into "Hamara Samvidhan – Hamara Swabhiman", marking a shift from awareness to pride and constitutional consciousness. It represents a continuum of efforts to internalise constitutional values in public behaviour, citizenship, and governance.

OBJECTIVES OF THE NATIONAL CAMPAIGN

1. Create a strong visual and emotional association with the Constitution of India
2. Deepen citizens' understanding of constitutional provisions and ideals
3. Highlight the rigorous effort behind Constitution-making

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4. Instill a sense of pride and duty among citizens With 13,700+ events and 1 crore+ participants, the campaign stands as a landmark effort in constitutional literacy.

THREE PILLARS OF THE NATIONWIDE CAMPAIGN

Pillar / Sub-Campaign	Objective	Key Components / Initiatives	Major Outcomes / Coverage
1. Sabko Nyay – Har Ghar Nyaya	To ensure justice accessibility at the grassroots; promote legal awareness, duties, and empowerment.	a) Panch Pran Pledge – Five commitments: nation-first development, ending colonial mindsets, pride in heritage, unity and integrity, commitment to citizen duties. Disseminated via MyGov, VLEs, QR codes, social media. b) Nyaya Seva Mela – Organised in 25 States/UTs; showcased Tele-Law; released State profiles, beneficiary books; strengthened DLSAs/SLSAs linkages. c) Nyaya Sahayak – Community legal messengers; door-to-door awareness; monthly Vidhi Baithaks with SHGs, Anganwadi workers, Panchayat bodies, schools.	Panch Pran became mass movement. Nyaya Seva Melas reached 84 lakh+ citizens. Nyaya Sahayaks facilitated 14,598+ cases and community meetings.
2. Nav Bharat Nav Sankalp	To engage youth with the Constitution and inspire commitment to Viksit Bharat 2047.	Digital interactive activities; MyGov challenges; constitutional quizzes; debates; contests; pledge campaigns.	Strengthened constitutional literacy and youth participation in nation-building.
3. Vidhi Jagriti Abhiyaan	To deepen legal consciousness among marginalised groups.	• Gram Vidhi Chetna – Students conducted village-level legal awareness; reached 10,000+ beneficiaries. • Vanchit Varg Samman Abhiyaan – Workshops with IGNOU & Doordarshan on rights of children, women, PwDs, SCs, transgender persons, senior citizens; used 7 thematic legal modules. • Nari Bhagidaari – Gender rights programmes; focused on women's legal protections; executed through law universities & field agencies.	Improved outreach to vulnerable groups; enhanced rights awareness; strengthened gender justice initiatives.

MAJOR REGIONAL EVENTS OF THE CAMPAIGN

Event Location & Date	Key Highlights / Activities	Participation
Bikaner, Rajasthan March 9, 2024	• Launch of Nyaya Sahayak initiative • Special programme: "Voices of Beneficiaries – Women's Edition"	**900+**
Prayagraj, Uttar Pradesh July 16, 2024	• Launch of the Hamara Samvidhan Hamara Samman Portal • Digital hub for constitutional resources	**800+**
Guwahati, Assam November 19, 2024	• Release of Samvidhan Katta (75 Stories) • Comic book on Tele-Law & Nyaya Bandhu beneficiaries • Release of 8 legal empowerment podcasts	**1400+**
Kumbh, Prayagraj (U.P.) January 24, 2025	• Culmination of year-long campaign • Launch of Achievement Booklet • National livestream event	**2000+ (plus national livestream)**

SIGNIFICANCE AND IMPACT

1. **Massive Citizen Outreach:** The campaign reached over 1 crore citizens through digital platforms, legal aid fairs, regional events, and grassroots awareness drives, making it one of India's largest civic literacy movements.
2. **Extensive Nationwide Engagement:** With 13,700+ events across States and UTs, it fostered unprecedented participation and created a sustained public dialogue around constitutional values and rights.
3. **Bridging Rights with Remedies:** By integrating Tele-Law, Nyaya Bandhu, and Nyaya Sahayak initiatives, the campaign linked constitutional rights with accessible, real-time legal remedies, enhancing justice delivery at the grassroots.
4. **Empowerment of Marginalised Sections:** Targeted outreach through programmes like Vanchit Varg Samman Abhiyaan and Nari Bhagidaari helped educate disadvantaged groups—children, SCs, STs, women, transgender persons, PwDs—about their legal protections.
5. **Strengthening Constitutional Literacy:** Workshops, competitions, podcasts, comic books, and digital resources simplified complex constitutional concepts, deepening legal awareness among youth and rural communities.
6. **Fostering Constitutional Pride:** The initiative moved beyond ceremonial observance by instilling a sense of pride, ownership, and emotional connection to the Constitution, especially through the Panch Pran pledge and cultural outreach tools.
7. **Boosting Participatory Democracy:** By encouraging citizen engagement, duty consciousness, and awareness of rights and responsibilities, the campaign strengthened participatory governance and aligned public behaviour with the vision of Viksit Bharat 2047.

CONCLUSION

The Hamara Samvidhan – Hamara Samman and Hamara Swabhiman campaigns constitute one of India's most extensive civic engagements since Independence. By merging legal literacy, digital empowerment, community mobilisation, and youth participation, the initiative has successfully revitalised public understanding of the Constitution.

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Its seamless progression from Samman (respect) to Swabhiman (pride) reflects a maturing democratic ethos—where every citizen is not only aware of their constitutional rights and duties but carries a sense of responsibility and ownership toward India's constitutional values. As India moves towards Viksit Bharat 2047, this mass mobilisation stands as a crucial step in realising an empowered, legally aware, and constitutionally conscious citizenry.

Prelims question:

Q Consider the following statements regarding the 'Hamara Samvidhan – Hamara Samman / Swabhiman' campaign:

1. It is implemented under the DISHA scheme of the Department of Justice.
2. It aims to promote constitutional literacy through Tele-Law and Nyaya Bandhu services.
3. It was launched in 2024 to commemorate 75 years of India's independence.
4. The campaign includes initiatives such as the Panch Pran Pledge and Nyaya Seva Melas.

How many of the above statements are correct?

(a) Only one (b) Only two
(c) Only three (d) All four

Answer: C

Main question

Q. The "Hamara Samvidhan – Hamara Samman / Swabhiman" campaign is regarded as one of the largest constitutional literacy initiatives in independent India. Discuss how this campaign, implemented under the DISHA scheme, strengthens legal empowerment, constitutional awareness, and participatory democracy in India (250 words)

UNITE TO END DIGITAL VIOLENCE 2025: INDIA'S COMPREHENSIVE FRAMEWORK TO PROTECT WOMEN

WHY IN THE NEWS?

November 25 is observed globally as the International Day for the Elimination of Violence against Women, marking the beginning of the 16 Days of Activism against Gender-Based Violence (November 25–December 10). In 2025, the day gains special significance with the UN announcing the global theme "UNiTE to End Digital Violence against All Women and Girls." The theme highlights the alarming rise of technology-facilitated violence—including cyberstalking, online harassment, deepfakes, doxxing, and misogynistic digital abuse—prompting governments, civil society, and international organisations to intensify efforts toward legal reforms, digital safety, and gender justice. India too has strengthened its laws and support mechanisms to combat both offline and online violence against women.



INDIA'S FIGHT TO END VIOLENCE AGAINST WOMEN: LAWS AND LEGISLATIONS



The Government of India has prioritised the elimination of violence against women through a multi-pronged approach, encompassing robust legal frameworks, institutional support, dedicated helplines, and flagship schemes. These efforts align with the observance of the International Day for Elimination of Violence Against Women (November 25), emphasising not only immediate redressal but also long-term empowerment. The Ministry of Women and Child Development (MWCD) leads these initiatives, integrating safety (Sambal) and empowerment (Samarthya) components under the umbrella Mission Shakti scheme.

NATIONAL COMMISSION FOR WOMEN (NCW)

This Commission was established as a statutory body by the Government of India on January 31, 1992, with the mandate to examine and monitor all constitutional and legal safeguards for women, recommend amendments to existing laws wherever required, and investigate complaints related to the deprivation of women's rights. Most states have also constituted State Commissions for Women (SCWs) with parallel responsibilities. The NCW receives complaints of violence and rights violations against women, both in writing and online through its portal www.ncw.nic.in and actively processes them to ensure prompt and effective redressal.

KEY LEGAL PROVISIONS FOR WOMEN'S SAFETY IN INDIA

Law / Act	Key Features	Coverage / Applicability	Mechanisms & Penalties	Special Provisions
Bharatiya Nyaya Sanhita (BNS), 2023 (effective 1 July 2024)	Replaces the IPC; strengthens provisions for sexual crimes	Applicable across India	• Stricter penalties, including life imprisonment for rape of minors (<18) • Fast-track trials for crimes against women/children • Mandatory audio-video recording of victim statements	• Expanded definition of sexual offences • Priority investigation & trial for women and child-related crimes
Protection of Women from Domestic Violence Act (PWDVA), 2005	Comprehensive law to address domestic violence	Any woman in a domestic relationship (marriage, adoption, family ties, shared household)	• Covers physical, sexual, verbal, emotional, and economic abuse, including dowry harassment • Provides Protection Orders, Residence Orders, Custody Orders, and Monetary Relief	• "Aggrieved person" includes any woman living in a shared household • Provides for Protection Officers and Service Providers
Sexual Harassment of Women at Workplace (POSH Act), 2013	Prevents and redresses workplace sexual harassment	All workplaces: public, private, unorganized sectors; all women employees, interns, and visitors	• Mandatory Internal Committee (IC) in establishments with 10+ employees • Local Committee (LC) for smaller organisations • Inquiry to be completed within 90 days	• SHe-Box portal for online complaints • Mandatory annual report & awareness training • Overseen by Ministry of Women & Child Development (MWCD)

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MISSION SHAKTI – COMPONENTS AND KEY FEATURES

Component	Objective / Purpose	Target Group / Coverage	Key Services / Features	Implementing Agency
Swadhar Greh	Provide shelter & support to women in difficult circumstances	Women facing violence, abandonment, family conflict, mental stress, trafficking risk	• Safe shelter • Food & clothing • Counselling & legal aid • Skill training & rehabilitation	Ministry of Women & Child Development (MWCD)
One Stop Centres (OSCs)	Offer integrated support to women affected by violence	All women facing physical, sexual, emotional, digital, or economic violence	• Medical assistance • Police facilitation • Legal aid • Counselling services • Temporary shelter • Available in every district	MWCD in convergence with Health Dept., Police, Legal Services Authority
Stree Manoraksha Project	Strengthen mental health support for women survivors of violence	OSC staff, counsellors, frontline workers	• Capacity-building on psychosocial care • Trauma-informed counselling • Mental health first aid	NIMHANS (National Institute of Mental Health & Neurosciences)
Digital Shakti Campaign	Improve cyber safety and digital literacy among women	Women & girls across schools, colleges, workplaces	• Awareness on cybercrime prevention • Online safety training • Empowering victims to report cybercrimes • Creation of safer online spaces	National Commission for Women (NCW)

INSTITUTIONAL MECHANISMS FOR WOMEN'S SAFETY

Institutional Mechanism	Key Features / Purpose	Latest Data (2025)
Fast Track Special Courts (FTSCs)	• Set up under the Nirbhaya Fund to ensure speedy trial of rape and POCSO cases. • Includes exclusive e-POCSO courts for child protection.	• 773 FTSCs functional (including 400 exclusive e-POCSO courts). • 3,34,213 cases disposed since inception (as of Aug 2025).
Women Help Desks (WHDs)	• Gender-sensitive desks in police stations. • Facilitate FIR registration, counselling, legal aid, and victim support.	14,658 WHDs operational nationwide (as of Feb 2025).
SHe-Box Portal	• Unified digital grievance redressal platform under POSH Act, 2013. • Auto-routing to Internal/Local Committees. • Real-time complaint tracking. • Mandatory Nodal Officers for updating complaint progress and committee details.	Ensures stronger employer accountability and transparent POSH compliance.

LEGAL & TECHNOLOGY-DRIVEN MEASURES FOR WOMEN'S SAFETY

To strengthen the criminal justice system for sexual offences, the Government enacted the Criminal Law (Amendment) Act, 2018 which introduced stricter punishments for rape, especially involving minors.

Key Technology-Driven Initiatives

1. Investigation Tracking System for Sexual Offences (ITSSO): Online tool for real-time monitoring of police investigations. Ensures investigations are completed within mandated timelines.
2. National Database on Sexual Offenders (NDSO): Centralised database of convicted sexual offenders. Helps police track offenders and identify repeat criminal behaviour.
3. Crime Multi-Agency Centre (Cri-MAC): Launched on 12 March 2020. Enables instant sharing of information on heinous and inter-state crimes across states/UTs via:

Alerts, Emails, SMS, strengthen coordination, speeding up response and arrests.

CONCLUSION

This year as the world marks the International Day for the Elimination of Violence Against Women on November 25 under the powerful global theme "UNiTE to End Digital Violence Against All Women and Girls", India is intensifying its efforts to confront gender-based violence in all its forms-both offline and online. Through Mission Shakti's expanding network of One Stop Centres, Women Help Desks, and emergency helplines, along with reforms like the Bharatiya Nyaya Sanhita, 2023 and targeted tools such as SHe-Box, ITSSO, and the Digital Shakti Campaign, India is ensuring accessible reporting, survivor support, and faster justice. These integrated efforts reflect the nation's commitment to building a safer, more inclusive environment where every woman and girl — both offline and online can live with dignity, freedom, and equal opportunity.

Prelims question:

Q. Consider the following pairs:

Initiative Ministry	Agency
1. She-Box Portal	Ministry of Women & Child Development (MWCD)
2. Digital Shakti Campaign	National Commission for Women (NCW)
3. ITSSO	Ministry of Home Affairs (MHA)

Which of the above pairs are correctly matched?

(a) 1 and 2 only (b) 2 and 3 only

(c) 1, 2 and 3 (d) 1 and 3 only

Answer: C

Mains Question:

Q. Technology has emerged as both a tool for empowerment and a space of vulnerability for women. In this context, discuss India's evolving legal, institutional, and technological measures to combat both offline and online violence against women." (250 words)





NATIONAL MILK DAY 2025: INDIA'S DAIRY REVOLUTION AND THE ROAD TO GLOBAL LEADERSHIP

WHY IN THE NEWS?

National Milk Day is being celebrated across India on 26 November 2025 to mark the birth anniversary of Dr. Verghese Kurien, the Father of the White Revolution. The day highlights the pivotal role of India's 8 crore dairy farmers, especially women, in sustaining the country's position as the world's largest milk producer, contributing nearly one-fourth of global output. This year's observance gains significance as India records a 70% growth in its dairy sector over the last 11 years, with the sector contributing around 5% to GDP and emerging as a powerful engine of women-led rural development.

Key Takeaways

- *India is the world's **largest** milk producer, with output rising to **239.30 million tonnes** and **projected** to reach **242 million tonnes in 2026**, contributing **32 per cent** to global supply.*
- ***Amul** leads the global cooperative rankings and recorded a turnover of over **Rs.90,000 crore in 2024–25**.*
- ***National Programme for Dairy Development (NPDD)** has revived over **31,000 dairy cooperative societies** and strengthened milk chilling and quality testing infrastructure.*
- ***White Revolution 2.0** aims to form **75,000 new dairy cooperatives** and significantly scale up procurement and processing capacity by **2028–29**.*
- *GST reforms in 2025 reduced tax on most dairy products to nil or 5 per cent.*

HISTORICAL TRAJECTORY OF INDIA'S DAIRY SECTOR

Phase	Key Features / Events	Impact
Pre-White Revolution Challenges (1950–1970)	• Post-independence milk shortages; dependence on imports. • Low productivity despite world's largest cattle population. • Weak veterinary services and fragmented markets. • Milk production growth slow: 1.64% CAGR in 1950s, 1.15% in 1960s.	• India remained a milk-deficient nation. • Limited income generation for rural households. • Stagnant dairy economy.
Rise of the Cooperative Model	• Emergence of the Anand model under Sardar Patel, Tribhuvandas Patel, and Dr. Kurien. • 1965: NDDB established to replicate cooperative success. • 1970: Launch of Operation Flood. • Created: village dairy cooperatives, national milk grid, and efficient procurement–processing–marketing chain.	• Enabled large-scale rural participation. • Streamlined supply chains. • Improved milk availability and farmer incomes. • By late 1990s, India became the world's largest milk producer.
Institutional Strengthening	• 1987: NDDB declared an Institution of National Importance.	• Strengthened governance and capacity building in the dairy sector. • Supported sustained growth and modernization.

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INDIA'S DAIRY PROGRESS IN THE LAST DECADE

1. **Rapid Growth in Production and Availability:** Milk output increased from 146.3 million tonnes (2014-15) to 239.3 million tonnes (2023-24) — a surge of 63.56%. Per capita milk availability rose from 124 grams to 471 grams/day.

2. **Improved Bovine Productivity:** India's 303.76 million bovines (cattle, buffalo, mithun, yak) form the backbone of its dairy wealth. Productivity increased 27.39% (2014–2022) — the highest globally, compared to the world average of 13.97%.

3. **Indigenous Breeds Making a Comeback:** Indigenous cow milk production grew from 29 million tonnes to 50 million tonnes. The number of milch animals increased from 86 million to 112 million.

4. **Livestock Health & Ayurveda Integration:** Programmes like LHDCP, ethno-veterinary medicine (EVM), and vaccination drives have helped reduce disease burden and dependence on antibiotics.

PROGRESS UNDER RASHTRIYA GOKUL MISSION (RGM)

Component	Details / Achievements	Impact
Mission Overview	• Launched in 2014, revised in 2025. • Allocation: ₹3,400 crore (2021–2026). • Objectives: conservation of indigenous breeds, genetic improvement, productivity enhancement	• Strengthened long-term sustainability of India's dairy sector. • Boosted productivity of native breeds.
Overall Achievements	• 92 million animals benefited. • 56 million farmers supported. • Strengthening of semen stations. • Expansion of AI infrastructure.	• Improved breed quality and milk yield. • Direct benefits to small and marginal farmers.
Artificial Insemination (AI) Coverage	• Current AI coverage: 33% of breedable bovines (still low; high future potential).	• Scope for rapid productivity gains in coming years.
National AI Programme (NAIP)	• Free doorstep AI services for farmers. • 9.16 crore animals covered. • 14.12 crore inseminations performed. • 22 IVF labs established. • 1 crore sex-sorted semen doses produced.	• Higher share of female calves → future milk production growth. • Reduction in unproductive male population.
MAITRIs (Rural Technicians)	• 38,736 MAITRIs trained and deployed. • Provide AI + basic veterinary support. • Significant participation of women farmers.	• Enhanced last-mile service delivery. • Improved access to breeding services in remote villages.
Progeny Testing Programme	• 3,747 bulls scientifically evaluated (2021–24). • 132 breed multiplication farms sanctioned.	• Ensures high genetic merit in future offspring. • Strengthens long-term genetic improvement of bovines.



NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT (NPDD) KEY FACTS (2021-26)

Category	Details
Revision Year	Revised in 2021 for the 2021–26 period
Component A: Infrastructure Strengthening	• Milk testing equipment • Bulk Milk Coolers (BMCs) • Primary chilling facilities
Component B: Dairying through Cooperatives	• Enhancing cooperative capacity • Improving marketing & processing • Modernised dairy plant laboratories
Cooperative Network Expansion	• 31,908 dairy cooperatives formed/revived • 17.63 lakh new producers enrolled • Milk procurement increased by 120.68 lakh kg/day
Key Infrastructure Achievements	• 61,677 milk testing labs • 6,000 bulk milk coolers installed
New/ Modernised Dairy Plants	Major plants in Mehsana, Indore, Bhilwara, Karimnagar and new units in Andhra Pradesh, Telangana, Haryana
Women's Leadership in Dairy Sector	• Women constitute 70% of the dairy workforce • 48,000+ women-led cooperatives • 16 all-women Milk Producer Organisations (MPOs), including award-winning Shreeja MPP (AP)

GST REFORMS 2025 – BOOST TO DAIRY SECTOR (56TH GST COUNCIL, SEPT 2025)

Category	Details
Context	56th GST Council Meeting (September 2025) introduced major dairy-sector tax rationalisation measures
Tax Exemptions (0%)	• UHT milk → 0% • Pre-packaged paneer → 0%
Slab Reductions: 12% → 5%	• Butter • Ghee • Cheese • Dairy spreads • Condensed milk • Milk-based beverages
Slab Reduction: 18% → 5%	• Ice cream
Other Reductions	• Milk cans: 12% → 5%
Major Impact	• Lowers production and retail prices • Benefits 8 crore rural households involved in dairying • Encourages formal processing → reduces adulteration • Improves export competitiveness of Indian dairy products

WHITE REVOLUTION 2.0 (2024–2029)

A transformative national plan to rejuvenate the cooperative dairy framework.

Key Targets

- Expand cooperatives to 75,000 new villages.
- Strengthen 46,422 existing DCSs.
- Raise cooperative procurement to 1,007 lakh kg/day.

Three Multi-State Cooperative Societies

- Cattle feed & inputs
- Organic manure, waste-to-wealth, biogas
- Hides, bones & by-products management
- Focus: Sustainability, circular economy, women-led enterprises.

FUTURE OUTLOOK: INDIA'S EXPANDING DAIRY LANDSCAPE (2025–26 AND BEYOND)

Category	Details
APEDA Projections (2025–26)	• India to supply 32% of global milk output • Expected production by 2026: 242 million tonnes
Processing Capacity Goals	• Target: 100 million litres/day processing by 2028–29 • Current capacity: 660 lakh litres/day

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Pashudhan Data Initiative	• Creation of a comprehensive digital livestock database to improve planning, breeding, disease control, and productivity
Disease Eradication by 2030	• Free nationwide vaccination drives against: • Foot-and-Mouth Disease (FMD) • Brucellosis
Expansion under NPDD (2025–26)	• 21,902 new dairy cooperatives planned to be created/ strengthened
Overall Vision	India aims to emerge as a global dairy export hub driven by technology adoption, genetic improvement, digital systems, and organised value chains

HONOURING EXCELLENCE: GOPAL RATNA AWARDS 2025

Awards to be presented on 26 November 2025 for:

1. Best dairy farmers (indigenous breeds)

2. Best dairy cooperatives / MPOs

3. Best AI technicians

4. Prizes: ₹5 lakh, ₹3 lakh, ₹2 lakh.

Purpose: Promote innovation, quality, and leadership in dairying.

CONCLUSION

National Milk Day 2025 is both a celebration of India's dairy revolution and a reaffirmation of its commitment to farmers. From the visionary leadership of Dr. Verghese Kurien to the monumental success of Operation Flood and the rise of cooperative institutions, India's dairy story exemplifies rural empowerment, women's leadership, and sustainable development. Government programmes including RGM, NAIP, NPDD, GST reforms, and White Revolution 2.0 have strengthened every link of the dairy value chain—from genetic improvement and animal health to procurement, processing, and marketing. With expanding digital tools, rising processing capacity, structured cooperatives, and women-led growth, India is well-positioned to not only remain the world's largest milk producer but also emerge as a global dairy exporter.

Prelims question:

Q. Consider the following statements regarding India's dairy sector:

1. India contributes nearly one-fourth of global milk production.
2. Artificial Insemination (AI) coverage under the National AI Programme has crossed 60% of breedable bovines.
3. Women constitute more than half of India's dairy workforce.
4. GST reforms in 2025 reduced the tax on ice cream from 18% to 5%.

Which of the statements given above are correct?

(a) 1, 3 and 4 only (b) 1 and 4 only

(c) 1, 2 and 3 only (d) 2, 3 and 4 only

Answer: A

Main question:

Q. Discuss the recent developments in India's dairy sector with reference to National Milk Day 2025. How are initiatives such as RGM, NPDD, NAIP, and GST reforms strengthening the dairy value chain and promoting women-led rural development? (250 words)

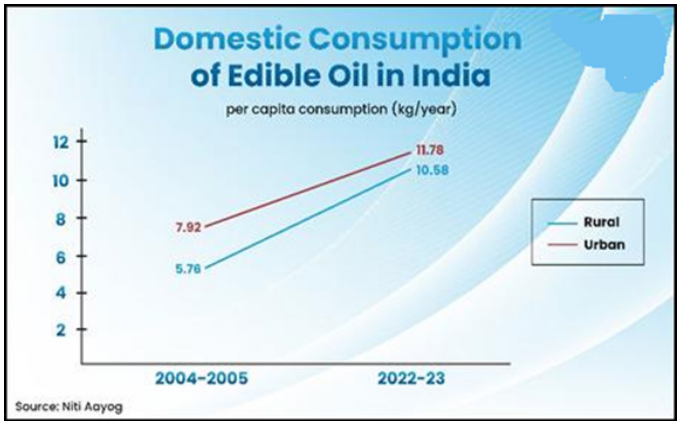
NATIONAL MISSION ON EDIBLE OILS: REFORMING INDIA'S OILSEED ECONOMY FOR FOOD AND NUTRITIONAL SECURITY

WHY IN THE NEWS?

Edible oils are a critical pillar of India's food and nutritional security as well as rural livelihoods. They are a major source of dietary fats, energy, and fat-

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soluble vitamins (A, D, E and K), playing an important role in combating hidden hunger and improving calorie intake, especially among vulnerable and undernourished populations. At the same time, oilseeds are vital cash crops, supporting the incomes of millions of small and marginal farmers and generating employment across the agricultural value chain. Despite this dual significance, India faces a persistent structural challenge: domestic edible oil production has not kept pace with rapidly rising consumption.



RISING DEMAND AND IMPORT DEPENDENCE

India's per capita consumption of edible oils has increased sharply over the last two decades due to rising incomes, urbanisation, dietary diversification, and population growth. Rural per capita consumption rose from 5.76 kg/year in 2004–05 to 10.58 kg/year in 2022–23, while urban consumption increased from 7.92 kg/year to 11.78 kg/year over the same period. This represents an 83.68% rise in rural and 48.74% rise in urban consumption.

In contrast, domestic production remains constrained. During 2023–24, India produced around 12.18 million tonnes of edible oils, meeting only about 44% of total domestic demand. Although import dependence has declined modestly from 63.2% in 2015–16 to about 56.25% in 2023–24, imports still stood at 15.66 million tonnes, making India one of the world's largest edible oil importers. This dependence not only strains foreign exchange reserves but also transmits global price shocks directly to Indian consumers.

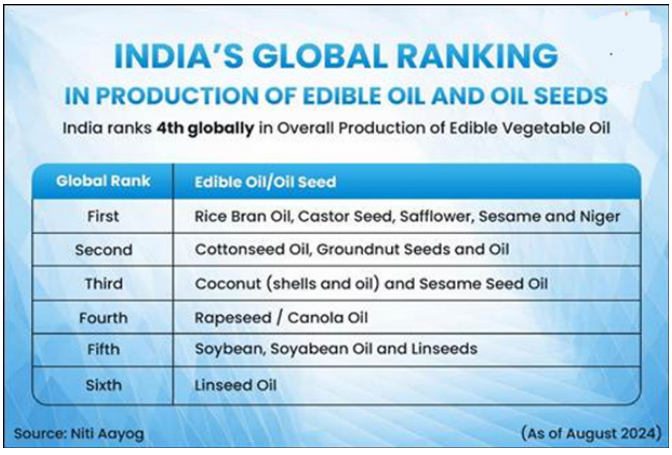
HISTORICAL CONTEXT AND STRUCTURAL CONSTRAINTS

India achieved near self-sufficiency during the Yellow Revolution of the 1990s, driven by the Technology Mission on Oilseeds (TMO), which combined price support, research investment, and import substitution policies. However, post-WTO commitments led to a gradual reduction in import tariffs and price support, while consumption continued to grow faster than domestic production.

Globally, edible oil growth has been driven largely by soybean, palm, and rapeseed oils. India ranks as the fourth-largest oilseed economy after the USA, China, and Brazil, accounting for 15–20% of global oilseed area, but only 6–7% of global vegetable oil production, reflecting low yields and productivity gaps. Limited irrigation, rainfed dependence, poor seed replacement rates, and fragmented value chains have constrained output growth.

INDIA'S OILSEED PRODUCTION LANDSCAPE

Oilseeds occupy a central place in Indian agriculture, accounting for 14.3% of gross cropped area, contributing 12–13% of dietary energy, and around 8% of agricultural exports. India produces nine major oilseeds—groundnut, soybean, rapeseed-mustard, sunflower, sesame, safflower, niger, castor, and linseed.



Global Rank	Edible Oil/Oil Seed
First	Rice Bran Oil, Castor Seed, Safflower, Sesame and Niger
Second	Cottonseed Oil, Groundnut Seeds and Oil
Third	Coconut (shells and oil) and Sesame Seed Oil
Fourth	Rapeseed / Canola Oil
Fifth	Soybean, Soyabean Oil and Linseeds
Sixth	Linseed Oil

However, nearly 76% of oilseed cultivation is rainfed, making production highly vulnerable to climate variability. Geographically, production is concentrated in a few states—Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra—which

together contribute over 77% of total output, increasing regional concentration risks.

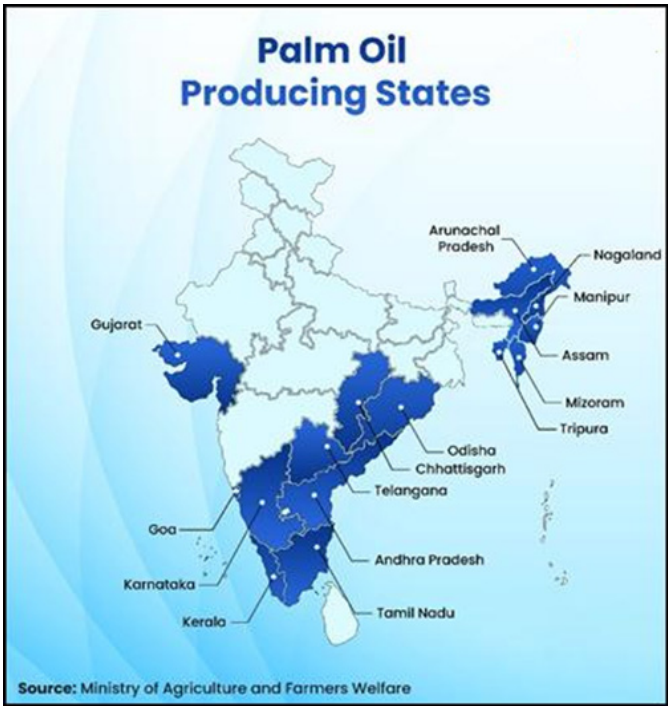
NMEO – OIL PALM: LEVERAGING HIGH YIELD POTENTIAL

Oil palm is the highest oil-yielding crop, producing nearly five times more oil per hectare than traditional oilseeds. It yields both palm oil and palm kernel oil, used for food and industrial purposes.

Approved in 2021 as a Centrally Sponsored Scheme with a total outlay of ₹11,040 crore, NMEO-OP focuses on area expansion, productivity enhancement, and assured farmer returns. Andhra Pradesh and Telangana currently account for nearly 98% of production, while significant expansion is being pursued in the North-Eastern states, leveraging their agro-climatic potential.

Key interventions include:

1. Expansion to 6.5 lakh hectares by 2025–26
2. Targeting 11.2 lakh tonnes of CPO by 2025–26 and 28 lakh tonnes by 2029–30
3. Establishment of seed gardens and nurseries to ensure quality planting material
4. Promotion of drip irrigation, intercropping during the gestation period, and rejuvenation of old plantations



A major innovation is the Viability Price (VP) mechanism, which assures farmers a minimum price for Fresh Fruit Bunches (FFBs) linked to international CPO prices, protecting them from global volatility. Assistance for planting material has been raised significantly, enhancing farmer incentives.



NMEO – OILEEDS: REVITALISING TRADITIONAL CROPS

Launched in 2024 for the period 2024–25 to 2030–31 with an outlay of ₹10,103 crore, NMEO-OS targets traditional oilseeds and secondary sources such as cottonseed, rice bran, coconut, and tree-borne oilseeds.

The mission aims to:

1. Increase oilseed area from 29 million ha to 33 million ha
2. Raise production from 39 million tonnes to nearly 70 million tonnes
3. Improve yields from 1,353 kg/ha to over 2,100 kg/ha
4. Achieve 72% self-sufficiency in edible oils by 2030–31 (with NMEO-OP)

Core strategies include:

1. Value Chain Clusters (600+ clusters covering over 10 lakh ha annually)
2. Free distribution of high-quality seeds, GAP training, and digital advisories
3. Expansion into rice and potato fallows, intercropping, and crop diversification
4. Strengthening post-harvest infrastructure for better oil extraction and recovery

Digital tools like the SATHI portal and Krishi Mapper ensure seed traceability, real-time monitoring, and data-driven governance, while Krishi Sakhis and SHGs provide last-mile extension support.

RESEARCH, TECHNOLOGY AND SEED SYSTEMS

The ICAR plays a central role through All India Coordinated Research Projects (AICRPs) and flagship initiatives on hybrid development and gene editing. Between 2014 and 2025, over 430 high-yielding varieties and hybrids were released across oilseed crops. Efforts to improve Seed Replacement Rate (SRR) and Varietal Replacement Rate (VRR) are critical to realising genetic gains. Seed hubs, breeder seed production, and public-private partnerships are being expanded to ensure timely access to quality seeds.

COMPLEMENTARY POLICY SUPPORT

NMEO is reinforced by broader policy measures:

1. MSP increases and procurement under PM-AASHA
2. PMFBY crop insurance coverage for oilseeds
3. Higher customs duties on crude and refined edible oils to protect domestic producers
4. Awareness campaigns promoting healthy and balanced oil consumption

These measures aim to balance farmer incentives, consumer interests, and trade stability.

India remains heavily dependent on imports to meet its edible oil requirements despite being one of the world's largest producers of oilseeds. In this context, examine the structural challenges in India's edible oil sector and critically analyse how the National Mission on Edible Oils (NMEO) seeks to address them.

CHALLENGES AND SUSTAINABILITY CONCERNS

1. **Land Availability and Competing Land Use:** Expansion of oil palm and oilseed cultivation faces constraints due to limited availability of suitable land and competition with food crops, forests, and ecologically sensitive areas, especially in the North-Eastern region.
2. **High Water Requirement and Irrigation Stress:** Oil palm is a water-intensive crop, requiring assured irrigation. In water-stressed regions, its expansion may aggravate groundwater depletion and create long-term sustainability concerns if micro-irrigation is not effectively implemented.
3. **Environmental and Biodiversity Concerns:** Large-scale monoculture plantations risk biodiversity loss, soil degradation, and ecosystem disruption, particularly when expansion occurs near forested or fragile landscapes without robust environmental safeguards.
4. **Climate Vulnerability of Rainfed Oilseeds:** Nearly three-fourths of oilseed cultivation remains rainfed, making production highly vulnerable to climate variability, erratic monsoons, heat stress, and pest outbreaks, which can undermine productivity gains.
5. **Farmer Adoption and Economic Risks:** Long gestation periods (4–5 years for oil palm), limited awareness, access to quality planting material, and price uncertainties may discourage small and marginal farmers despite assured pricing mechanisms.
6. **Processing, Storage, and Value Chain Gaps:** Inadequate oil extraction units, poor post-harvest infrastructure, and weak market linkages reduce oil recovery efficiency and farmer returns, limiting the full impact of production-side interventions under NMEO.

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CONCLUSION

The National Mission on Edible Oils represents a decisive shift in India's approach to edible oil security—from reactive import dependence to proactive domestic capacity building. By combining oil palm expansion, revitalisation of traditional oilseeds, assured pricing, technological innovation, and institutional coordination, NMEO seeks to build a resilient, farmer-centric, and sustainable edible oil ecosystem. If implemented effectively, the mission can significantly reduce import dependence, conserve foreign exchange, enhance farm incomes, and strengthen India's food and nutritional security—making edible oil self-reliance a cornerstone of Atmanirbhar Bharat.

Prelims question:

Q. With reference to the National Mission on Edible Oils (NMEO), consider the following statements:

1. NMEO consists of two sub-missions—one focusing on oil palm and the other on traditional oilseeds.
2. Oil palm cultivation yields significantly higher oil per hectare compared to traditional oilseeds.
3. Under NMEO–Oil Palm, the Government of India provides a Viability Price mechanism to protect farmers from international price volatility.
4. NMEO–Oilseeds focuses exclusively on primary oilseeds and excludes secondary sources like rice bran and cottonseed.

Which of the statements given above are correct?

(a) 1, 2 and 3 only (b) 1 and 4 only

(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. India remains heavily dependent on imports to meet its edible oil requirements despite being one of the world's largest producers of oilseeds. In this context, examine the structural challenges in India's edible oil sector and critically analyse how the National Mission on Edible Oils (NMEO) seeks to address them. (250 words)





GEM FORWARD AUCTIONS: DIGITALISING GOVERNMENT ASSET DISPOSAL FOR TRANSPARENT AND EFFICIENT GOVERNANCE

WHY IN THE NEWS?



The Government e-Marketplace (GeM) has significantly expanded its role beyond procurement through its Forward Auction module, enabling fully digital, transparent, and rule-based disposal of Government assets. Between December 2021 and November 2025, assets worth over ₹2,200 crore have been auctioned, highlighting a structural reform in public asset management aligned with the vision of Minimum Government, Maximum Governance.

EVOLVING PARADIGM OF PUBLIC ASSET MANAGEMENT

- **Traditional Challenges in Asset Disposal:** Manual disposal processes were opaque, slow, and value-destructive. They often resulted in undervaluation and allegations of favouritism.
- **Emergence of Forward Auctions:** GeM's forward auction module introduces competitive digital bidding. It transforms disposal into a transparent market-driven process.
- **Technology as a Governance Enabler:** Digital platforms replace discretion with predefined rules. This improves trust and efficiency in public administration.
- **Shift from Disposal to Value Creation:** Asset disposal is now viewed as fiscal and strategic activity. It contributes to revenue generation and resource optimisation.
- **Relevance to Public Financial Management:** Efficient asset monetisation strengthens non-tax revenues. It improves overall fiscal discipline of the State.



FORWARD AUCTIONS AS A TOOL OF GOOD GOVERNANCE

- **Rule-Based Decision Making:** Auction rules are standardised and digitally enforced. This limits arbitrariness and administrative discretion.
- **Transparency in Public Transactions:** All bids are visible on the platform in real time. This enhances public trust and institutional credibility.
- **Accountability of Departments:** Digital records ensure traceability of every transaction. Officials are accountable for reserve prices and outcomes.

- **Reduction in Corruption Risks:** Limited human interface reduces rent-seeking behaviour. It curtails cartelisation and collusive practices.
- **Strengthening Institutional Integrity:** Fair and open competition reinforces ethical governance. It aligns with constitutional values of equality and fairness.

ECONOMICANDFISCALSIGNIFICANCE

- **Efficient Price Discovery:** Competitive bidding ensures assets fetch market-aligned prices. Often, final bids exceed reserve prices.
- **Augmenting Non-Tax Revenue:** Proceeds from auctions add to government revenues. This reduces dependence on taxation and borrowing.
- **Optimal Utilisation of Idle Assets:** Unused land, scrap, and vehicles are monetised efficiently. This improves overall resource productivity.
- **Support to Fiscal Consolidation:** Asset monetisation complements budgetary reforms. It supports sustainable fiscal management.
- **Market Integration:** A single digital platform connects buyers nationwide. This widens participation and improves outcomes.

ENVIRONMENTAL AND SOCIAL DIMENSIONS

- **Scientific Disposal of E-Waste:** Digital auctions ensure disposal through authorised channels. This reduces environmental hazards and pollution.
- **Promotion of Circular Economy:** Scrap and obsolete materials are recycled and reused. This aligns with sustainable development goals.
- **Inclusive Participation of MSMEs:** Small traders and enterprises can participate equally. It democratises access to government asset markets.
- **Regional Economic Opportunities:** Local bidders gain access to national auctions. This supports decentralised economic activity.
- **Social Equity in Asset Allocation:** Transparent auctions prevent elite capture. They ensure fair access across socio-economic groups.

ALIGNMENT WITH BROADER GOVERNANCE REFORMS AND ASSOCIATED CHALLENGES

Theme / Dimension	Governance Reform Linkage	Expanded Explanation & Significance
Digital India Mission	End-to-end digitisation of asset disposal	Forward auctions extend the Digital India vision beyond service delivery to public asset management. By enabling online discovery, bidding, and allocation, they institutionalise transparency and data-driven decision-making, strengthening India's overall digital governance ecosystem.
Ease of Doing Business	Reduction in procedural and transaction costs	Online participation eliminates physical inspections, discretionary approvals, and informal networks. This lowers entry barriers for bidders, improves predictability, and enhances the credibility of government as a market participant, aligning with ease-of-doing-business reforms.
Minimum Government, Maximum Governance	Automation and rule - based administration	Automated auction processes reduce human discretion in valuation and allocation. This limits rent-seeking, ensures objective outcomes, and reflects the principle of efficient governance with minimal administrative intervention.
Cooperative Federalism	Common digital platform for Centre and States	A unified auction platform allows central ministries, PSUs, and state governments to follow standardised procedures. This promotes harmonisation of governance norms, shared learning, and inter-governmental coordination in asset monetisation.
Public Sector Modernisation	Transition from legacy systems to digital tools	Forward auctions replace manual registers, paper-based tenders, and negotiated sales. This modernises administrative culture, encourages performance orientation, and embeds technology as a permanent governance instrument in the public sector.

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Uneven Adoption Across Departments	Implementation gap in reform diffusion	While some departments actively use digital auctions, others remain dependent on traditional disposal methods. This uneven adoption dilutes reform impact and reflects institutional inertia and resistance to change.
Capacity Constraints	Skill gaps in valuation and auction design	Many officials lack specialised knowledge in asset valuation, market assessment, and digital auction mechanics. This can lead to inappropriate reserve prices and suboptimal outcomes, necessitating targeted capacity-building initiatives.
Asset Quality Disclosure	Transparency and information asymmetry	Inadequate or incomplete asset descriptions reduce bidder confidence and competition. High-quality disclosure is essential to ensure fair price discovery and uphold the transparency objectives of digital auctions.
Digital Divide	Unequal access to digital infrastructure	Small vendors, informal players, and bidders from remote areas may face challenges in accessing online platforms. Without digital facilitation and handholding, digital reforms risk excluding marginal participants.
Regulatory Oversight	Accountability and system integrity	As digital auctions scale up, robust oversight mechanisms are required to prevent collusion, data manipulation, or procedural misuse. Institutional checks must evolve to match the complexity and volume of digital transactions.

WAY FORWARD

- **Creation of Public Asset Registry:** A unified database of government assets is needed. It will enable systematic identification for disposal.
- **Capacity Building of Officials:** Training in valuation and digital auctioning is essential. This ensures informed and effective participation.
- **Standardisation of Valuation Norms:** Uniform reserve pricing guidelines should be developed. This improves bidder confidence and outcomes.
- **Expansion of Asset Monetisation:** Leasing and subletting models can be scaled up. This complements the National Monetisation Pipeline.
- **Strengthening Monitoring Mechanisms:** Real-time audits and analytics should be used. They ensure integrity and continuous improvement.

CONCLUSION

GeM's Forward Auction module marks a decisive shift in the way the State manages and monetises its assets. By replacing opaque, manual procedures with a transparent, competitive, and fully digital mechanism, it ensures higher value realisation, faster disposal, and greater public trust. The integration of efficiency, accountability, and sustainability within a single platform reflects the essence of Minimum Government, Maximum Governance. As adoption expands across departments, forward auctions have the potential to become a cornerstone of modern public financial management and technology-driven good governance in India.

Prelims question:

Q. Consider the following statements regarding Forward Auctions on the Government e-Marketplace (GeM):

1. Forward auctions enable government departments to sell obsolete and unused assets through a digital bidding process.
2. The highest bidder wins the auction, subject to reserve price conditions set by the seller.
3. Forward auctions on GeM are conducted only for scrap and e-waste.
4. The process aims to reduce discretion and enhance transparency in asset disposal.

Which of the statements given above are correct?

(a) 1, 2 and 4 only (b) 1 and 3 only

(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

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Mains Question:

Q. How do forward auctions on the Government e-Marketplace (GeM) strengthen transparency and accountability in public asset disposal? Examine their role in advancing the principle of "Minimum Government, Maximum Governance".

POSTAL SYSTEM MODERNIZATION IN INDIA: THE GEN Z POST OFFICE INITIATIVE

WHY IN THE NEWS?



India Post, established in 1854, has been a cornerstone of India's administrative and communication architecture. With over 1.55 lakh post offices, it is the world's most extensive postal network and a critical instrument for financial inclusion, service delivery, and state presence in remote areas. However, the rise of digital communication, private logistics players, and fintech platforms has challenged the relevance of traditional postal systems. Against this backdrop, the Gen Z Post Office initiative represents a strategic shift from a legacy institution to a modern, citizen-centric public service platform, aligned with India's demographic realities and governance reforms.

UNDERSTANDING THE GEN Z POST OFFICE CONCEPT

A Gen Z Post Office is a reimagined postal facility designed to meet the expectations of young, digitally native citizens, while retaining the core mandate of India Post.

It is not merely a cosmetic makeover but a functional transformation, combining:

1. Postal services
2. Digital banking and insurance
3. Financial inclusion services
4. Customer-friendly infrastructure

Recent launches, including the first Gen Z Post Office at AIIMS Vijaypur (J&K), signal the institutionalization of this model.

KEY FEATURES OF THE GEN Z POST OFFICE

Feature Area	Key Components	Governance / UPSC Relevance
1. Digital Transformation of Services	• Cashless transactions via UPI & QR codes • Integration with India Post Payments Bank (IPPB) • Digital account opening, bill payments, DBT facilitation • Reduced paperwork and faster grievance redressal	• Digital governance • Ease of Doing Business • Service delivery reforms • Use of fintech in public institutions
2. Integrated Service Delivery Model	• Postal and logistics services • Savings accounts, insurance, pension schemes • E-commerce parcel handling & last-mile delivery • Government scheme facilitation (DBT, small savings)	• Whole-of-government approach • Administrative efficiency • Financial inclusion • Convergence of services
3. Youth-Centric Infrastructure and Design	• Contemporary interiors & open layouts • Informal seating & interactive spaces • Creative artwork, modern branding • Wi-Fi-enabled premises	• Design thinking in governance • Citizen-centric public services • Behavioural change in service usage

4. Campus-Based and Urban Outreach	• Located in IITs, IIMs, AIIMS, universities • Targets students & young professionals • Promotes early adoption of savings, insurance & digital banking	• Demographic dividend utilisation • Formalisation of economy • Youth engagement in governance

WHY WAS THIS REFORM NECESSARY

1. **Structural Decline in Traditional Postal Functions:** India Post has been witnessing a steady decline in its traditional services such as letter delivery and money orders. The rapid digitisation of communication, coupled with the rise of private courier companies and digital payment platforms, has eroded the relevance of conventional postal functions. In this context, reform became essential to reinvent India Post's role from a legacy service provider to a modern, multifunctional public institution aligned with the needs of a digital economy.

2. **Leveraging India's Demographic Dividend:** With over 65% of India's population below the age of 35, the expectations of citizens—especially Gen Z—are rapidly evolving. This demographic values speed, transparency, and seamless digital interfaces in service delivery. For public institutions like India Post to remain credible, relevant, and accessible, adapting to these changing behavioural patterns was imperative. The reform responds to this generational shift by redesigning postal services to match contemporary user expectations.

3. **Reinforcing the Financial Inclusion Architecture:** India Post already serves as a critical pillar of India's financial inclusion ecosystem through its involvement in Jan Dhan accounts, Direct Benefit Transfers (DBT), and the delivery of pension and insurance schemes. The reform, particularly through Gen Z–oriented Post Offices, strengthens this role by making financial services more aspirational, user-friendly, and digitally accessible. This ensures deeper penetration of formal financial services while sustaining trust among last-mile beneficiaries.

GOVERNANCE AND ADMINISTRATIVE SIGNIFICANCE

Citizen-Centric Governance

- Focus shifts from rules and procedures to user experience
- Enhances trust in public institutions
- Encourages voluntary participation rather than forced compliance

Digital India and E-Governance

- Supports cashless economy and paperless governance
- Bridges the digital divide by offering assisted digital access
- Strengthens last-mile delivery of government services

Institutional Innovation in the Public Sector

- Demonstrates that legacy institutions can innovate without privatization
- Sets a precedent for modernization of other public utilities (railways, banks, municipalities)

SOCIO-ECONOMIC IMPACT OF THE REFORM

- **Youth-Centric Financial Awareness:** The reform actively engages young citizens by familiarising them with formal financial systems at an early stage. By presenting postal financial services in a modern and relatable manner, it promotes a culture of savings, improves awareness of government-backed financial instruments, and encourages responsible financial behaviour among the youth.
- **Deepening Financial Inclusion:** By simplifying access to savings accounts, insurance, and small investment products, the initiative strengthens

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financial inclusion. It reduces entry barriers for first-time users, particularly students and young earners, thereby integrating a wider section of society into the formal economy.

- **Employment Generation in the Digital Economy:** The modernisation of postal services increases the demand for a digitally skilled workforce. This transition opens up new employment opportunities in technology-enabled service delivery, data handling, and customer facilitation within the postal system.
- **Upskilling and Capacity Building of Postal Employees:** The reform necessitates continuous upskilling of existing postal staff in digital tools, fintech platforms, and customer-centric service delivery. This enhances workforce productivity and ensures that public sector employees remain relevant in a rapidly evolving service environment.
- **Strengthening Service-Oriented Public Administration:** By shifting focus from purely transactional functions to citizen-centric services, the initiative creates demand for service-oriented administrative roles. This transformation contributes to a more responsive, efficient, and people-friendly public service delivery model.

CHALLENGES AND CONCERNS

- **Risk of Urban-Centric Implementation:** The concentration of modernised or Gen Z–oriented Post Offices in urban areas, campuses, and cities raises concerns of urban bias. Such a focus may inadvertently sideline rural post offices, limiting access for rural youth and undermining the inclusive mandate of India Post.
- **Unequal Access for Rural Youth:** Rural youth, who could benefit significantly from improved financial and digital services, may not receive equal exposure due to infrastructural constraints and slower rollout in remote regions. This risks widening existing rural–urban disparities rather than bridging them.
- **Persistent Digital Literacy Gap:** While technological upgrades are essential, technology alone cannot guarantee meaningful inclusion. Without parallel investments in digital literacy, handholding, and capacity building, vulnerable sections may struggle to use new interfaces effectively, reducing the reform's overall impact.
- **Sustainability, Scale, and Institutional Commitment:** The long-term success of the initiative depends on its ability to scale uniformly across regions. This requires sustained funding, continuous policy support, and strong institutional commitment to avoid the reform remaining a limited pilot rather than a nationwide transformation.

WAY FORWARD

- **Balanced and Inclusive Expansion:** Extend Gen Z Post Office features to rural and semi-urban areas through a hybrid model that combines digital interfaces with assisted service delivery.
- **Bridging the Digital Divide:** Complement technological upgrades with on-ground digital literacy initiatives to ensure effective usage by first-time and vulnerable users.
- **Integration with National Missions:** Align Gen Z Post Offices with Digital India, Skill India, and Startup India to transform post offices into hubs of financial awareness and grassroots entrepreneurship.
- **Continuous Capacity Building:** Provide regular training to postal staff in digital tools, fintech platforms, and citizen-centric service delivery.
- **Incentivising Service Quality:** Introduce performance-based incentives to encourage efficiency, innovation, and improved customer experience in postal services.

CONCLUSION

The Gen Z Post Office initiative is a powerful example of adaptive governance, where a 170-year-old institution reinvents itself to meet contemporary needs. By integrating technology, service convergence, and citizen-centric design, India Post is repositioning itself as a modern public service platform rather than a relic of the past

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Prelims question:

Q. With reference to the "Gen Z Post Office" initiative, consider the following statements:

1. It aims to modernize post offices by integrating digital payment and banking services.
2. It is implemented by the Ministry of Electronics and Information Technology.
3. It seeks to increase youth engagement with postal and financial services.

Which of the statements given above is/are correct?

(a) 1 and 3 only (b) 1 only

(c) 2 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. Evaluate the role of India Post's modernization in strengthening financial inclusion and last-mile service delivery in India.

INDIA'S EXPORT RESILIENCE AMID US TARIFFS

WHY IN THE NEWS?

India's export resilience has come into focus after official trade data showed a robust ~19% year-on-year growth in exports in November 2025, despite the continuation of selective US tariff measures and a challenging global economic environment marked by slowing demand and protectionist trends. The development has drawn attention as it underscores India's strengthening export competitiveness, ability to withstand external trade shocks, and its improving position in ongoing India–US trade discussions.



BACKGROUND

India's exports recorded a robust growth of around 19% in November 2025, even as selective tariff measures imposed by the United States remained in force and global trade conditions continued to be challenging. This performance stands out at a time when the world economy is experiencing a slowdown, with subdued demand in advanced economies, persistent high interest rates, supply-chain disruptions arising from geopolitical conflicts, and a revival of protectionist trade policies across major markets. Against this uncertain global backdrop, India's export growth reflects not just cyclical recovery but structural strengthening of the export ecosystem. It signals improved competitiveness of Indian goods and services, greater diversification of export markets and products, and enhanced capacity of domestic firms to adapt to changing global trade dynamics. The trend also highlights India's evolving role as a reliable supply-chain partner, capable of sustaining trade momentum despite external pressures, thereby reinforcing confidence in its long-term export-led growth strategy.

DRIVERS OF EXPORT GROWTH

Driver	Key Components	Explanation / Impact on Exports
Sectoral Diversification	Expansion into engineering goods, pharmaceuticals, electronics, chemicals, petroleum products, IT-enabled services	Reduced dependence on traditional exports (agriculture, textiles, gems & jewellery); mitigates sector-specific and commodity price shocks; promotes value-added and technology-intensive exports
	Shift towards high-value and knowledge-intensive sectors	Enhances export earnings, quality competitiveness and long-term resilience
Policy Support & Structural Reforms	Production Linked Incentive (PLI) schemes	Encourages scale, efficiency, technology adoption and domestic manufacturing in key sectors such as electronics, pharma and automobiles
	Corporate tax reduction & ease of doing business reforms	Lowers cost of production, improves investor confidence and export competitiveness
	Logistics reforms under PM Gati Shakti	Faster logistics, reduced turnaround time, improved port connectivity and supply-chain reliability
Global Supply-Chain Realignment	China+1 strategy by MNCs	Diversification of global manufacturing bases benefits India as an alternative production hub
	Rising FDI inflows	Enhances manufacturing capacity, technology transfer and export potential
	Integration into Global Value Chains (GVCs)	Improves access to global markets, quality standards and stable external demand

ECONOMIC SIGNIFICANCE

- **Foreign Exchange Earnings and Reserve Adequacy:** Robust exports generate steady foreign exchange inflows, strengthening India's reserve position and enhancing its ability to withstand external shocks such as capital outflows or global financial volatility.
- **Current Account Sustainability:** Higher exports help offset rising imports of energy, capital goods and technology, contributing to a sustainable current account balance and reducing external sector vulnerabilities.
- **Growth Multiplier Effect on the Economy:** Export expansion has strong backward and forward linkages with logistics, MSMEs, services and infrastructure, creating a multiplier effect that boosts overall economic growth.
- **Technology Upgradation and Productivity Gains:** Exposure to international markets incentivises firms to upgrade technology, improve productivity and adopt best global practices, enhancing long-term industrial efficiency.
- **MSME Integration and Regional Development:** Export growth integrates MSMEs into global markets, promotes cluster-based development and supports balanced regional growth by spreading industrial activity beyond major urban centres.
- **Trade-led Structural Transformation:** A diversified and competitive export base facilitates the transition from low-value traditional exports to high-value manufacturing and services, supporting structural transformation of the economy.
- **Resilience Against Global Economic Shocks:** A broad-based export basket and diversified markets reduce dependence on a few geographies or products, increasing resilience

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against global demand slowdowns or trade disruptions.

IMPLICATIONS FOR INDIA–US TRADE RELATIONS

- **Enhanced Negotiating Leverage in Trade Talks:** India's strong export performance, despite tariff pressures and global slowdown, strengthens its bargaining position in negotiations with the United States. Sustained growth in sectors such as engineering goods, pharmaceuticals, electronics and IT services signals India's competitiveness and reduces vulnerability to unilateral trade actions. This enables India to negotiate more confidently on issues like tariff rationalisation, easing of non-tariff barriers, mutual recognition of standards and smoother customs procedures.

- **Improved Market Access for Indian Goods and Services:** Export resilience strengthens India's case for wider market access in the US, particularly in labour-intensive sectors such as textiles, gems and jewellery, and high-skill services like IT and healthcare. It also bolsters India's demand for predictable visa regimes (H-1B, L-1) and reduced regulatory frictions affecting service exports.

- **Deepening Bilateral Trade Volumes and Balance:** India–US bilateral trade has crossed the USD 190 billion mark in recent years, making the US India's largest trading partner. Export momentum supports a more balanced trade relationship, addressing US concerns over trade deficits while reinforcing India's image as a reliable long-term trade partner.

- **Strengthening Strategic Economic Partnership:** Robust trade ties complement defence, technology and geopolitical cooperation under frameworks such as QUAD and IPEF. Economic interdependence enhances trust, aligning both countries' interests in maintaining a free, open and rules-based global trading system.

- **Supply Chain Diversification and China+1 Strategy:** India's export growth positions it as a key beneficiary of the US-led diversification away from China. Increased US investments in electronics, semiconductors, pharmaceuticals and clean energy manufacturing deepen supply-chain integration and enhance India's role in resilient global value chains.

- **Boost to Investment and Technology Transfers:** Strong exports signal policy stability and manufacturing capability, encouraging US firms to expand investments under schemes like PLI. This supports technology transfer, innovation ecosystems and higher value-added manufacturing in India.

- **Reinforcement of India's Global Economic Standing:** Export resilience enhances India's credibility as a responsible economic power capable of absorbing global shocks. This strengthens its voice in global trade forums such as WTO and G20, often in convergence with US positions on transparency, supply-chain security and digital trade norms.

WAY FORWARD

- **Logistics and Trade Facilitation Reforms:** Accelerate PM Gati Shakti, port modernisation and digitised customs to reduce turnaround time and logistics costs closer to global benchmarks.

- **Export Market Diversification:** Pursue targeted trade diplomacy and FTAs to deepen export presence in Africa, Latin America and ASEAN, reducing overdependence on a few markets.

- **Strengthening MSME Export Capability:** Improve access to affordable credit, technology upgradation and standards compliance support to integrate MSMEs into global value chains.

- **Value Addition and Product Upgradation:** Shift from low-value exports to high-value manufacturing through R&D incentives, design support and advanced manufacturing technologies.

- **Quality Standards and Regulatory Alignment:** Enhance testing, certification and mutual recognition agreements to ensure Indian exports meet global technical and safety standards.

- **Trade Finance and Risk Mitigation:** Expand export credit, insurance coverage and hedging

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instruments to protect exporters from payment risks and currency volatility.

- **Digital Trade and E-commerce Enablement:** Leverage cross-border e-commerce platforms and digital public infrastructure to support small exporters and service exports.
- **Sustainable and Green Exports:** Promote low-carbon manufacturing, green certifications and ESG compliance to align with evolving global trade norms.
- **Skilling and Workforce Upgradation:** Invest in sector-specific skilling to ensure availability of a globally competitive, industry-ready workforce.

CONCLUSION

India's ability to sustain export growth despite tariff pressures reflects structural improvements, policy support and strategic positioning in global trade. Strengthening export competitiveness and supply-chain integration will be critical for achieving export-led growth, macroeconomic stability and long-term economic resilience

Prelims question

Q. With reference to India's recent export performance, consider the following statements:

1. India's exports showed strong growth despite the continuation of tariff barriers by some developed countries.
2. Export diversification helps reduce dependence on a few markets and products.
3. Higher exports can contribute to improving a country's current account balance.

Which of the statements given above are correct?

A. 1 and 2 only B. 2 and 3 only

C. 1 and 3 only D. 1, 2 and 3

Answer: D

Mains Question

Q. "India's recent export growth despite rising global protectionism reflects structural improvements in its economy." Discuss. (250 words)

INDIA AND PAX SILICA: BETWEEN STRATEGIC ABSENCE AND EMERGING ASPIRATIONS

WHY IN THE NEWS?

The issue of Pax Silica is in the news due to the recent launch of a US-led multilateral initiative and declaration aimed at securing global silicon, semiconductor, AI, and critical technology supply chains amid intensifying US–China technological rivalry. Several key US allies such as Japan, South Korea, and others have joined this framework, highlighting the emergence of a technology-centric global order where control over chips and digital infrastructure defines geopolitical power. India's absence from the initial grouping has attracted attention, especially given its ambitions in semiconductor manufacturing and strategic partnerships with the US, raising debates about India's position in the evolving tech-driven world order.

INDIA AND PAX SILICA: BETWEEN STRATEGIC ABSENCE AND EMERGING ASPIRATIONS

In recent geopolitical and technological discourse, the term "Pax Silica" has emerged to describe a new global order shaped by control over silicon-based technologies, especially semiconductors, artificial intelligence, advanced computing, and digital infrastructure. Much like Pax Americana denoted US-led political and military dominance, Pax Silica signifies technological dominance as the foundation of global power. Despite being a major economy and a leading digital market, India is often described as being outside the core of Pax Silica, raising concerns for its strategic and economic future.

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WHAT IS PAX SILICA?



Pax Silica refers to a technology-driven world order where:

- Power flows from control over semiconductors, chip design, fabrication, and supply chains
- Dominance in AI, cloud computing, quantum technologies, and advanced manufacturing shapes geopolitics
- Countries setting tech standards and intellectual property regimes exercise disproportionate global influence

Key Pillars of Pax Silica:

- Semiconductor Manufacturing (fabs)
- Advanced Chip Design & IP
- AI and Data Ecosystems
- Tech Alliances & Supply Chains
- Standard-setting Institutions

WHY INDIA IS NOT CENTRALLY PLACED IN PAX SILICA

Factor	Explanation
Absence of Advanced Semiconductor Fabrication	India lacks cutting-edge semiconductor fabrication plants (below 10 nm technology). Global chip manufacturing is concentrated in Taiwan, South Korea, and the US. Semiconductor fabrication demands very high capital investment, deeply integrated global supply chains, and decades of industrial learning, which India is still building.
Weak Position in Core Chip Design IP	While India is strong in chip verification and back-end design, it lacks ownership of core processor architectures. Indian firms depend on foreign intellectual property such as ARM and x86 ecosystems, resulting in limited value capture despite a large engineering workforce.
Limited Role in Global Tech Rule-Making	India often functions as a rule-taker rather than a rule-maker in areas such as semiconductor standards, AI governance frameworks, and digital trade rules. These standards are largely shaped in Western-led institutions and forums.
Late Entry into Strategic Tech Industrial Policy	Compared to proactive initiatives like the US CHIPS Act, EU Chips Act, and China's long-term state-led semiconductor push, India's focused semiconductor policy has gained momentum only in recent years, placing it at a relative disadvantage.
Infrastructure and Ecosystem Constraints	Semiconductor fabs require uninterrupted power supply, ultra-pure water, specialized logistics, and dense supplier ecosystems. Such supporting ecosystems are still under development in India, affecting large-scale and high-end semiconductor manufacturing.

STRATEGIC IMPLICATIONS FOR INDIA

- **Economic Implications:** India's continued dependence on imported semiconductors limits the development of a robust domestic chip ecosystem and results in a missed opportunity to expand into high-value manufacturing. This reliance also exposes the economy to global supply-chain disruptions, price volatility, and external shocks, which can affect industrial growth and technological competitiveness.
- **Geopolitical Implications:** In an increasingly technology-driven global order, limited domestic semiconductor capacity reduces India's leverage in geopolitics. Dependence on strategic alliances for access to critical technologies constrains policy autonomy and raises the risk of exclusion

from emerging technology blocs that may shape future standards, trade, and innovation networks.

- **National Security Concerns:** Semiconductors are foundational to defence systems, space programmes, and cybersecurity infrastructure. Heavy import dependence in such critical sectors creates strategic vulnerabilities, as supply restrictions or disruptions during geopolitical tensions could directly impact national security preparedness and strategic autonomy.

IS INDIA COMPLETELY OUTSIDE PAX SILICA?

No. India is not outside Pax Silica; rather, it occupies a peripheral yet ascending position within the emerging semiconductor-driven global order. While India does not currently dominate advanced chip fabrication, it is steadily strengthening its role across design, policy, and strategic partnerships.

- **India's Structural Strengths:** India possesses a large and skilled STEM workforce, making it a global hub for semiconductor design, verification, and embedded systems. Its rapidly expanding digital public infrastructure (DPI) demonstrates strong state capacity in deploying technology at scale. Additionally, India's strategic partnerships with the United States, Japan, the European Union, and Quad nations enhance access to critical technologies, investment, and supply-chain collaboration.

- **Policy Push and Recent Initiatives:** The government has launched the India Semiconductor Mission (ISM) to build an end-to-end semiconductor ecosystem, complemented by Production Linked Incentive (PLI) schemes to attract global manufacturers. Planned semiconductor fabrication units in Gujarat and Assam signal intent to enter manufacturing, while focused investment in compound semiconductors, advanced packaging, and chip assembly reflects a pragmatic strategy to integrate into global value chains before moving up the technology ladder.

- **Overall Assessment:** India's approach reflects strategic gradualism—leveraging existing strengths in design and partnerships while building manufacturing capacity. This positions India as a rising stakeholder in Pax Silica rather than an outsider, with the potential to gain greater influence as its semiconductor ecosystem matures.

WAY FORWARD FOR INDIA

1. **Focus on Strategic Niches:** India should prioritize segments of the semiconductor value chain where entry barriers are relatively lower and market demand is growing. Chip packaging, testing, and assembly (OSAT), along with power electronics and automotive semiconductors, offer viable pathways to build scale, gain manufacturing experience, and integrate into global supply chains without immediately competing in the most advanced fabrication nodes.
2. **Strengthen Design-to-Manufacturing Linkages:** Moving beyond a services-led model, India must bridge the gap between chip design and fabrication. Encouraging intellectual property (IP) creation and supporting fabless Indian semiconductor firms will help retain value domestically, foster innovation, and gradually transition India from a design services hub to a product- and IP-owning ecosystem.
3. **Deepen Global Tech Alliances:** Strategic cooperation with key technology leaders such as the United States, Japan, the European Union, and Taiwan is essential for accessing advanced know-how, capital, and equipment. Through friend-shoring arrangements, India can secure resilient supply chains while positioning itself as a trusted partner in the global semiconductor ecosystem.
4. **Invest in R&D and Human Capital:** Long-term competitiveness requires sustained investment in research and skilled manpower. Establishing semiconductor-focused universities, research labs, and industry-academia partnerships, alongside stable public funding for deep-tech research, will help build indigenous capabilities and reduce technological dependence.
5. **Become a Rule-Shaper in Global Governance:** India should actively participate in international

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forums shaping rules for semiconductors, artificial intelligence, and digital technologies. By contributing to standard-setting and governance frameworks, India can protect its strategic interests, influence emerging norms, and enhance its standing as a responsible and proactive technology power.

CONCLUSION

Pax Silica marks a shift in global power where control over semiconductors and advanced technologies defines economic strength, geopolitical influence, and security. India's position is currently peripheral due to structural and policy constraints and a late start in high-end manufacturing, rather than a lack of capability. With its strong talent base, growing design ecosystem, and strategic partnerships, India retains significant potential. Sustained investment, coherent industrial policy, and deeper integration into global tech value chains can enable India to gradually move from the margins toward a meaningful role in the emerging silicon-based world order.

Prelims question:

Q. Consider the following reasons for India not being centrally placed in Pax Silica:

1. Absence of cutting-edge semiconductor fabrication facilities
2. Dependence on foreign core processor intellectual property
3. Dominance of India in global semiconductor standard-setting bodies

Which of the above are correct?

(a) 1 and 2 only (b) 2 and 3 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question

Q. Critically examine India's semiconductor policy in the context of the emerging Pax Silica global order. What gaps remain in achieving technological self-reliance? (250 words)

INDUSTRIAL PARKS IN INDIA: ENGINES OF COMPETITIVE, SUSTAINABLE AND INCLUSIVE INDUSTRIAL GROWTH

WHY IN THE NEWS?

Industrial parks have emerged as a cornerstone of India's evolving industrial and innovation strategy. Developed through collaboration between the Union Government, State Governments, and the private sector, industrial parks are reshaping India's manufacturing landscape by enabling investment-led growth, technological upgrading, and employment generation. As the State transitions from a regulator to a facilitator, industrial parks are becoming vital instruments for building a globally competitive, resilient, and sustainable industrial economy.



CONCEPT AND SALIENT FEATURES OF INDUSTRIAL PARKS

An industrial park is a planned, demarcated zone developed for industrial use, equipped with shared infrastructure and common services to

support multiple enterprises. These parks reduce transaction costs, enhance productivity, and promote agglomeration economies.

Key Building Blocks:

1. **Special regulatory regime:** Liberal labour norms, simplified land-use rules, and FDI-friendly policies
2. **Integrated infrastructure:** Power, water, roads, telecom, waste management, testing labs, logistics, and single-window clearances
3. **Defined geography:** Master-planned land with uniform standards
4. **Dedicated governance:** Single authority for approvals, compliance, and long-term development
5. **Multi-tenant clustering:** Encourages collaboration, innovation, and scale efficiencies



ECONOMIC DIMENSION: ENGINES OF GROWTH AND COMPETITIVENESS

Industrial parks improve economic efficiency by spatially integrating capital, labour, technology, and infrastructure. Cluster-based development enhances productivity, supports industrial upgrading, and strengthens India's participation in global value chains (GVCs).

They:

1. Attract domestic and foreign investment
2. Enable technology and knowledge spillovers
3. Support MSMEs through shared facilities
4. Act as growth poles for urban and regional development

India's rising FDI inflows—USD 43.76 billion during April–August 2025–26—underscore the role of industrial parks as anchors of investment-led growth.

EMPLOYMENT AND SOCIAL DIMENSION

Industrial parks are major drivers of employment generation and skill development, improving wages and labour participation. They also promote social well-being through:

1. Worker housing and social infrastructure
2. Health and safety mechanisms
3. Gender-sensitive facilities and inclusive workplaces
4. Engagement with trade unions and local communities

This strengthens social capital, reduces regional disparities, and enhances community trust.

ENVIRONMENTAL AND SUSTAINABILITY DIMENSION

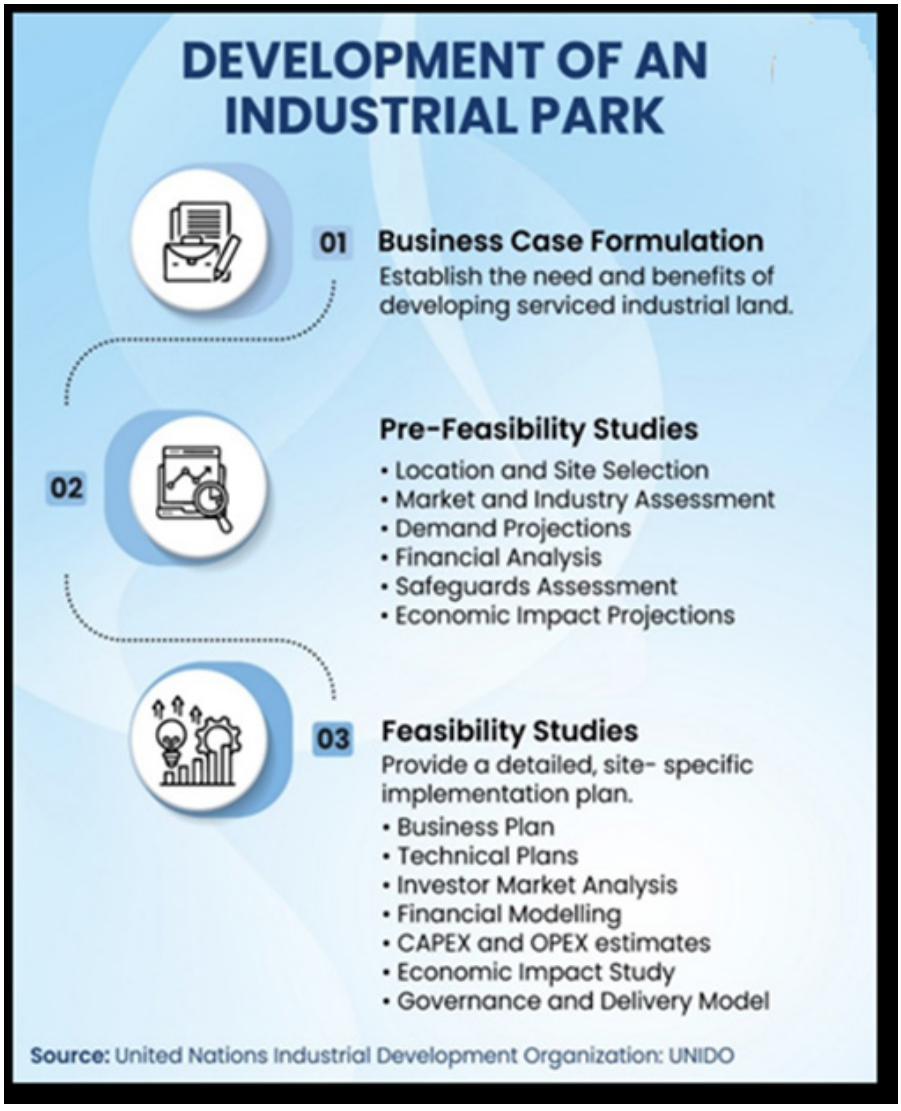
Modern industrial parks increasingly integrate sustainable and green practices:

1. Compliance with environmental laws
2. Monitoring of air, noise, light, soil, and groundwater pollution
3. Resource efficiency audits and cleaner technologies
4. Biodiversity-sensitive land use planning
5. Climate risk mitigation and efficient land utilisation

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GOVERNANCE AND INSTITUTIONAL DIMENSION OF INDUSTRIAL PARKS

Aspect / Initiative	Key Features	Significance for Governance & Industry
Coordinated Governance Model	Dedicated park authorities for approvals, compliance, and planning	Ensures regulatory certainty, investor facilitation, and long-term sustainability
Plug-and-Play Industrial Parks	• ₹2,500 crore allocation (Union Budget 2025–26) • Ready-to-use, industry-specific infrastructure • 306 operational parks; 20 more under NICDC	Reduces project gestation period, improves ease of doing business, boosts industrial readiness
India Industrial Land Bank (IILB)	• DPIIT-led GIS-based digital platform • Covers 4,523 industrial parks over ~7.7 lakh hectares	Enhances transparency, land availability visibility, and informed investor decision-making
Industrial Park Rating System (IPRS)	• Performance-based assessment framework • IPRS 3.0 (2025) includes sustainability, logistics, digitalisation, skill linkages, tenant feedback	Promotes competition among states, quality benchmarking, and evidence-based policymaking





According to the IPRS 2.0 Top Rated Parks Report:

1. 41 parks were classified as 'Leaders', having strong infrastructure and stable industrial activity.
2. 90 parks were identified as 'Challengers', showing rapid improvement and growth potential.
3. 185 parks were recognised as 'Aspirers', indicating early-stage parks with scope for future development.

These classifications enhance transparency for investors and support evidence-based policymaking.

In September 2025, IPRS 3.0 was launched to further strengthen India's industrial ecosystem. Building on earlier versions, it introduced new parameters such as sustainability, green infrastructure, logistics connectivity, digitalisation, skill linkages, and tenant feedback, reflecting India's shift towards competitive and sustainable industrial development.



EASE OF DOING BUSINESS AND POLICY REFORMS

Industrial parks are central to India's Ease of Doing Business agenda:

1. National Business Reforms Action Plan (BRAP)
2. GST unification
3. tartup India and DPIIT recognition
4. RoDTEP for export competitiveness
5. Large-scale compliance reduction and decriminalisation

REGIONAL AND SPATIAL DEVELOPMENT DIMENSION

Industrial parks function as regional growth hubs, catalysing:

1. Urban expansion
2. Infrastructure development
3. Balanced regional industrialisation

States such as Gujarat, Maharashtra, Tamil Nadu, Telangana, and Andhra Pradesh have leveraged industrial parks to attract manufacturing and logistics investments.

GLOBAL AND STRATEGIC DIMENSION

Globally, industrial parks enhance India's position as a preferred manufacturing and investment destination. As competition for FDI intensifies and the global economy shifts towards green and circular production models, India's industrial parks are upgrading infrastructure, sustainability standards, and service delivery to align with global best practices.

CONCLUSION

Industrial parks lie at the heart of India's industrial transformation. Their planned design, shared infrastructure, and coordinated governance foster productivity, innovation, employment, and sustainability. Government initiatives such as plug-and-play parks, the India Industrial Land Bank, and the Industrial Park Rating System reflect a

sustained commitment to industrial excellence. As India navigates intensifying global competition and transitions towards a green industrial future, continuously upgrading industrial parks will be crucial for deepening value chains, enhancing investor confidence, and integrating India more effectively into global manufacturing networks.

Prelims question:

Q. With reference to industrial parks in India, consider the following statements:

1. Industrial parks promote agglomeration economies by providing shared infrastructure and common services.
2. Plug-and-play industrial parks aim to reduce project gestation periods by offering ready-to-use industrial infrastructure.
3. The India Industrial Land Bank (IILB) is a GIS-enabled platform developed by NITI Aayog to map industrial land across India.

Which of the statements given above are correct?

(a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. Discuss the role of industrial parks in promoting economic efficiency, employment generation, environmental sustainability and ease of doing business. Highlight the significance of recent government initiatives in strengthening the industrial parks ecosystem. (250 words)

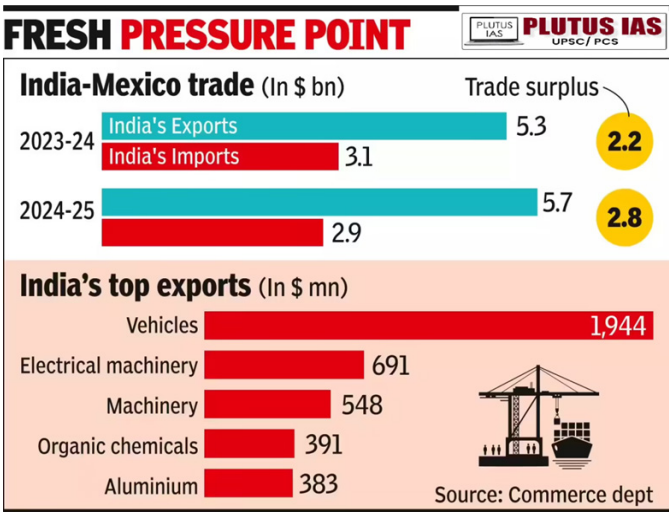
MEXICO IMPOSES UP TO 50% TARIFFS ON INDIAN & ASIAN IMPORTS

WHY IN THE NEWS?

Mexico has approved new import tariffs of up to 50% on goods from countries without a free-trade agreement, including India. The tariffs, applicable from 1 January 2026, cover 1,400 product categories such as automobiles, textiles, steel, and plastics. India's automobile exports (≈$1 billion) are expected to be the most affected as duties on vehicles rise sharply.

MEXICO IMPOSES UP TO 50% TARIFFS ON INDIA

Mexico's Senate has approved new import tariffs of up to 50% on a wide range of goods from countries that do not have a free-trade agreement with Mexico, including India, China, South Korea, Thailand, and Indonesia. The tariffs are scheduled to take effect from January 1, 2026. The policy covers around 1,400 product lines, including automobiles, auto parts, textiles, plastics, steel, and other manufactured goods.



RATIONALE BEHIND MEXICO'S TARIFFS

1. **Protect Domestic Industry:** Shield local manufacturers from cheaper Asian imports.
2. **Revenue Generation:** Expected to add ~USD 3–4 billion annually to Mexico's fiscal resources.
3. Reduce Import Dependency: Encourage domestic production and local value chains.
4. Geopolitical Alignment: Aligning with the U.S.'s broader protectionist shift, given the integrated North American supply chains.
5. Trade Balance Concerns: Rising imports from Asia were seen as undercutting Mexican producers.

IMPACT ON INDIA

a. Sectoral Impact

- **Automobiles:** Highest impact; tariff rise from ~20% to 50% threatens $1 billion export market.
- **Auto Components:** Increased duties make Indian suppliers less competitive.
- **Textiles & Clothing:** Higher tariffs reduce India's cost advantage.
- **Engineering Goods, Steel, Plastics:** Increased landed costs may lead to reduced market share.

b. Macroeconomic Impact

- **India's Export Diversification Setback:** Mexico is India's top trade partner in Latin America after Brazil.
- **Potential Export Decline:** Higher tariffs may shrink India's footprint in a growing North American market.
- **Supply Chain Disruptions:** Automakers using Mexico as a gateway to the U.S. may face complications.

IMPACT ON MEXICO

- **Higher Production Costs:** Domestic industries depend on imported components.
- **Inflationary Pressure:** Increased tariffs may raise consumer prices.
- **Risk to Trade Relations:** Could strain ties with major Asian partners.
- **Mixed Industrial Reaction:** Beneficial for local manufacturers, but industries relying on imported inputs may suffer.

GLOBAL & GEOPOLITICAL DIMENSIONS

- **Rising Protectionism:** Follows similar U.S. and EU tariff actions on Asian economies.
- **Shift in Global Supply Chains:** Countries are increasingly prioritizing local manufacturing resilience.
- **USMCA Context:** Mexico may be attempting to show compliance with U.S. expectations in North American trade architecture.
- **China Factor:** Mexico's move affects Chinese exports the most, drawing criticism from Beijing.

INDIA'S STRATEGIC OPTIONS

- **Diplomatic Measures:** Engage Mexico bilaterally to seek tariff relaxations or product-specific carve-outs. Leverage multilateral forums like WTO to express concerns.
- **Trade Strategy Adjustments:** Explore a Preferential Trade Agreement (PTA) or FTA with Mexico or the broader Latin American region. Diversify export destinations to reduce concentration risks. Strengthen India's global value chain integration in automobiles and manufacturing.
- **Domestic Policy Responses:** Promote sectoral resilience by boosting competitiveness and reducing logistics costs. Encourage Indian firms to set up manufacturing bases in Mexico to bypass tariffs and tap the USMCA market.

WAY FORWARD

1. **Diplomatic Engagement with Mexico:** India should initiate high-level talks to seek tariff relaxations, sector-specific exemptions, or

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phased implementation to reduce immediate export disruptions.

2. **Strengthening Ties with Latin America:** Broader engagement with Latin American economies can help India diversify markets and reduce dependence on individual partners like Mexico.
3. **Accelerating FTA and PTA Negotiations:** India should fast-track trade agreements with key regions (EU, UK, Latin America) to secure better market access and insulate exporters from sudden tariff shocks.
4. **Enhancing Export Competitiveness:** Improving logistics, reducing production costs, and boosting product quality will help Indian industries remain competitive even in high-tariff markets.
5. **Integrating into Global Value Chains (GVCs):** India should deepen participation in global supply chains, especially in automobiles and electronics, to make exports indispensable for partner economies.
6. **Encouraging Overseas Manufacturing:** Indian firms can consider setting up manufacturing units in Mexico or nearby USMCA countries to bypass tariffs and access the North American market more effectively.

CONCLUSION

Mexico's decision to impose steep tariffs on non-FTA nations signals a sharp rise in global protectionism. For India, the move poses a significant challenge, especially to automobile and manufacturing exports. However, it also underscores the urgency for diversified trade partnerships, stronger export competitiveness, and deeper integration into global value chains.

Prelims question:

Q. Which of the following sectors are directly impacted by Mexico's new tariff structure impacting India?

a) Automobiles b) Textiles c) Electronics d) All of the above

Answer: D

Mains Question

Q. "Examine the implications of Mexico's new tariffs for India's automobile and manufacturing sectors." (250 words)

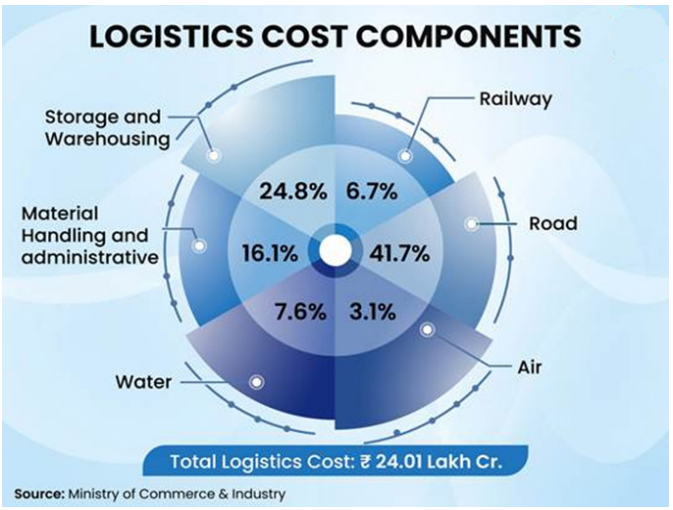
INDIA'S LOGISTICS TRANSFORMATION: BUILDING FASTER, SMARTER, AND GREENER SUPPLY CHAINS

WHY IN THE NEWS?

India's logistics sector is entering a transformative phase, evolving into a faster, smarter, and globally competitive ecosystem. This transformation is driven by the integration of digital platforms, modern infrastructure, and targeted policy reforms. By aligning logistics with national priorities, the government is positioning it as a key driver of economic growth, ease of doing business, and global trade competitiveness.

TRANSFORMING LOGISTICS THROUGH POLICY AND TECHNOLOGY

Several structural reforms are reshaping logistics planning, execution, and scalability. Platforms like ULIP (Unified Logistics Interface Platform) integrate data across government departments, while LDB 2.0 (Logistics Data Bank) provides real-time visibility of millions of containers. Every HSN (Harmonized System of Nomenclature) code is now mapped to its respective line ministry, improving accountability and streamlining policy interventions. City and state logistics plans under the SMILE (Strengthening Multimodal and Integrated Logistics Ecosystem) programme are being synchronized with national priorities, enhancing efficiency and coordination. On-the-ground reforms such as GST and the e-Way Bill have removed long-standing frictions in interstate transport, reducing costs and improving service reliability.



MULTIMODAL LOGISTICS ALONG THE GANGETIC PLAIN

India is implementing an integrated multimodal logistics approach along the Gangetic Plain, combining road, rail, and inland waterways to make transport faster, cheaper, and environmentally sustainable. The Eastern Dedicated Freight Corridor (EDFC) has reduced wagon turnaround from 15–16 days to 2–3 days, and transit times from over 60 hours to 35–38 hours. Freight operations are centrally coordinated from Prayagraj, easing congestion. The revival of the Ganga Waterway, linked to the EDFC at Varanasi, enables efficient cargo movement to eastern ports like Haldia. Rapid development of warehousing and industrial zones has created employment, improved inventory management, and facilitated timely production and exports. With significant investments from the World Bank—$1.96 billion for EDFC and rail logistics initiatives and $375 million for Ganga Waterway development—India is creating an integrated, cost-efficient, and green logistics network.

THE ECONOMIC IMPORTANCE OF LOGISTICS

Efficient logistics is central to India's growth and competitiveness. Historically, logistics costs were estimated at 13–14% of GDP based on partial data, creating policy confusion. A first-of-its-kind study by DPIIT and NCAER now provides a data-driven assessment, placing logistics costs at 7.97% of GDP and 9.09% of non-services output for 2023–24, amounting to ₹24.01 lakh crore. The study highlights higher costs for smaller firms, impacting their scalability and competitiveness. It also benchmarks freight costs across transport modes and distances, emphasizing that improvements in the first and last 50 kilometres of a journey can significantly reduce costs. This evidence-based approach allows policymakers and industry stakeholders to make informed decisions on investments, infrastructure, and pricing.

KEY INITIATIVES DRIVING LOGISTICS TRANSFORMATION

1. **PM GatiShakti: Integrated Planning:** PM GatiShakti has revolutionized logistics planning through integrated district master plans in 112 aspirational districts, consolidating geospatial data for infrastructure projects, offshore projects, and coastal development. Platforms like PM GatiShakti Public, dashboards, and knowledge management systems enhance transparency, data-driven decision-making, and cross-sectoral collaboration.

2. **SMILE: City-Level Logistics Optimization:** The SMILE programme, in partnership with the Asian Development Bank, aligns city and state logistics plans with national priorities. Pilot projects in eight cities focus on optimizing urban freight, e-commerce deliveries, warehousing, truck terminals, and last-mile connectivity, while promoting low- and zero-emission vehicles, noise reduction, and congestion management.



3. **LEADS 2025: Benchmarking State Logistics:** LEADS 2025 assesses states on infrastructure, regulatory support, services, and sustainability.

By monitoring transport corridors and real-time metrics like truck speeds and waiting times, it identifies bottlenecks and supports policy interventions to improve supply chain efficiency.



4. **LDB 2.0: Real-Time Visibility:** The upgraded Logistics Data Bank 2.0, integrated with ULIP, enables exporters and MSMEs to track shipments across road, rail, sea, and high seas in real time. Live heatmaps highlight delays, ensuring swift corrective actions and minimizing disruption in supply chains.

5. **IPRS 3.0: Ranking Industrial Parks:** The Industrial Park Rating System 3.0 evaluates industrial parks on connectivity, digital readiness, sustainability, and tenant satisfaction. Under NICDC, 20 plug-and-play parks are being developed to reduce entry barriers for industries and attract investment.



6. **HSN Code Guidebook: Simplifying Compliance:** A guidebook mapping 12,167 HSN codes across 31 ministries enhances clarity for businesses, improves policymaking, and strengthens India's negotiation capacity in global trade.

TOWARDS A GREENER AND MORE EFFICIENT LOGISTICS NETWORK

The new-generation logistics ecosystem emphasizes multimodal integration, green corridors, and technology-enabled efficiency. Initiatives focus on reducing carbon emissions, improving last-mile delivery, and linking production centers with ports and international markets. By combining policy reforms, digital platforms, and infrastructure upgrades, logistics is transitioning from a cost center to a strategic competitive advantage.

CONCLUSION

India's logistics sector is no longer a "black box." With initiatives like PM GatiShakti, SMILE, LEADS 2025, LDB 2.0, and IPRS 3.0, combined with investments in waterways, rail, and industrial parks, India is building faster, greener, and fully integrated supply chains. Logistics now serves as the backbone of Make in India, enabling efficient movement of goods, reducing costs, promoting sustainability, and strengthening India's position in global supply chains. The journey from growth engine to global logistics hub has truly begun.

Prelims question:

Q. Which of the following statements about India's logistics sector is/are correct?

1. The Unified Logistics Interface Platform (ULIP) integrates data across government departments to improve freight visibility.
2. The Eastern Dedicated Freight Corridor (EDFC) has reduced wagon turnaround from 15–16 days to 2–3 days.
3. Oceanic transport accounts for 80% of India's domestic logistics costs.
4. The SMILE programme focuses on city-level logistics planning and last-mile delivery optimization.

Options:

(a) 1 and 2 only (b) 1, 2, and 4 only

(c) 2 and 3 only (d) All of the above

Answer: B

Mains Question:

Q. Discuss the recent reforms and initiatives in India's logistics sector and their impact on economic growth, efficiency, and sustainability. (250 words)

INDIA'S GROWTH RENAISSANCE: RESILIENT, STABLE, AND POISED FOR GLOBAL LEADERSHIP

WHY IN THE NEWS?

India's economic ascent continues to capture global attention. Already the world's fourth largest economy, the nation is charting a confident course toward becoming the third largest by 2030, with GDP projected at USD 7.3 trillion. The current growth phase reflects the strength of decisive policymaking, structural reforms, and India's deepening global integration.

With growth accelerating, India has once again outpaced global peers, reinforcing its position as the fastest-growing major economy. The surge is supported by resilient domestic demand, moderating inflation, and higher labour force participation. A revival in domestic investment and strong investor sentiment signals a stable and broad-based economy. As reforms gather pace and consumption remains optimistic, India's economic outlook continues to upbeat, signalling sustained momentum and growth across sectors.

KEY ECONOMIC INDICATORS: INDIA'S STEADY AND RESILIENT GROWTH

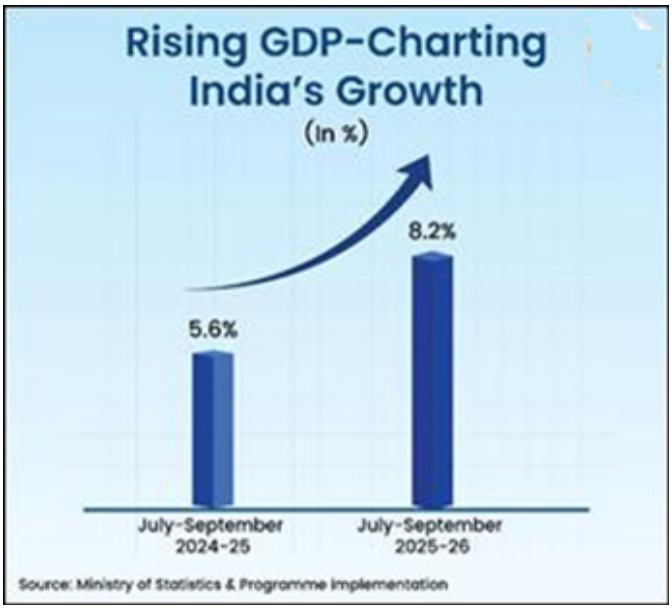
Robust GDP Performance

Gross Domestic Product (GDP) remains the central measure of economic health, reflecting how rapidly the economy is expanding. As per the latest data, India's real GDP grew by 8.2% in Q2 of FY 2025–26, a significant rise from 5.6% in Q2 of FY 2024–25. In Q1 of FY 2025–26, real GDP grew by 7.8%, compared to 6.5% in the previous year.

Nominal GDP growth stood at 8.7% in Q2 FY 2025–26. Each major sector contributed positively:

- Primary Sector: 3.1%
- Secondary Sector: 8.1%
- Tertiary Sector: 9.2%

Overall, India recorded 8% H1 (Apr–Sep 2025–26) growth, higher than 6.1% in H1 FY 2024–25, with the secondary and tertiary sectors showing strong and sustained expansion.



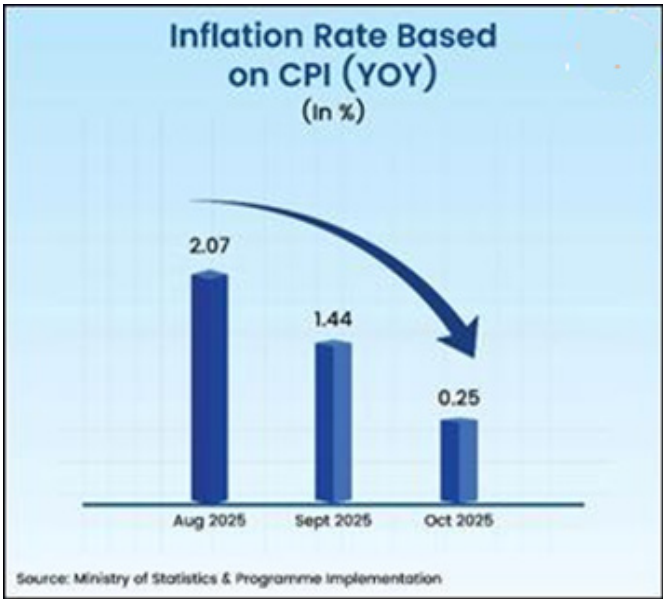
INFLATION SHOWS STABILITY AND IMPROVEMENT

India's inflation trends in October 2025 demonstrate strong macroeconomic management. Headline inflation (CPI) eased sharply to 0.25%, the lowest in the current CPI series, and comfortably within the RBI's tolerance band. This aligns with the RBI's decision to maintain the repo rate at 5.50% with a neutral stance.

Indicator	September 2025	October 2025
CPI	1.44	0.25

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CFPI	–2.33	–5.02
Rural Inflation	1.07	–0.25
Urban Inflation	1.83	0.88



This sharp moderation was largely driven by lower food prices—vegetables, oils, fruits, eggs, and cereals—along with the positive impact of GST rate cuts.

Wholesale inflation (WPI) also declined to –1.21% in October 2025, supported by lower prices of crude petroleum, natural gas, electricity, and metal products. The WPI Food Index fell to –5.04%, signalling stronger purchasing power for producers and businesses.

INDUSTRIAL ACTIVITY PICKS UP: STRONG IIP GROWTH

The Index of Industrial Production (IIP), a key measure of manufacturing and mining performance, grew by 4.0% in September 2025. Manufacturing output rose by 4.8%, driven by:

- Basic Metals: 12.3%
- Electrical Equipment: 28.7%
- Motor Vehicles & Trailers: 14.6%

Use-based categories also posted strong increases:

- Infrastructure & Construction Goods: 10.5%
- Consumer Durables: 10.2%
- Intermediate Goods: 5.3%

This balanced industrial improvement reflects rising consumption, expanding investment, and a broad-based manufacturing recovery.

MANUFACTURING SECTOR STRENGTHENED BY GOVERNMENT INTERVENTIONS

Manufacturing has become a central pillar of India's growth model. The Production Linked Incentive (PLI) Scheme remains a major driver, covering 14 strategic sectors and aiming to boost domestic capacity, exports, and jobs.

- Approved outlay: ₹1.97 lakh crore
- Investments attracted: ₹1.76 lakh crore
- Applications approved: 800+

Complementary initiatives like Make in India, Skill India, National Manufacturing Mission, and GST reforms have built a strong and competitive manufacturing ecosystem integrated with global value chains.

EMPLOYMENT & LABOUR MARKET INDICATORS (OCTOBER 2025)

Category	Indicator / Data	Value / Details
Labour Market Performance (CWS)	Labour Force Participation Rate (LFPR)	55.4% (highest in 6 months)
	Worker Participation Rate (WPR)	52.5%
	Female LFPR	34.2% (highest since May 2025)
	Unemployment Rate	5.2%
Formal Employment	EPFO Net Additions (July 2025)	21.04 lakh

	YoY Growth	5.55% increase
White-Collar Hiring (Naukri JobSpeak Index)	Overall YoY hiring growth	10.1%
	AI & ML job roles	61% increase
	Fresher hiring	15% increase
Government Skill & Employment Programs	PMKVY (Skilling)	27 lakh candidates trained
	NAVYA	Skilling adolescent girls for emerging sectors
	PMMY	₹4.91 lakh crore sanctioned
	Stand-Up India	₹62,790 crore sanctioned
	Start-Up India	2.00 lakh recognised startups
Rozgar Mela	Latest Edition	17th Rozgar Mela
	Appointment Letters Distributed	51,000

INDIA'S TRADE PERFORMANCE STRENGTHENS

1. Exports (Merchandise + Services)

USD 491.80 billion, up 4.84% from last year

2. Merchandise Exports:

- USD 254.25 billion, growing despite global uncertainties
- Key markets: Spain, China, Hong Kong, USA, UAE
- Strong categories: Electronic Goods (37.82%), Cashew (28.32%), Marine Products (16.18%)

3. Services Exports:

- USD 237.55 billion, up 9.75%
- Driven by computer services, business services, and digital trade

4. Trade Facilitation Measures

- Extended export value realisation period to 15 months
- Shipment time extended to 3 years
- **Credit Guarantee Scheme for Exporters:** Coverage up to ₹20,000 crore
- **Export Promotion Mission:** Outlay of ₹25,060 crore (2025–31)
- Initiatives like RoDTEP, SEZ reforms, and Districts as Export Hubs support diversification and logistics efficiency.

SUCCESS OF GST 2.0

GST 2.0 introduced a simplified two-slab structure (5% and 18%) with significant rate rationalisation across essential goods and labour-intensive sectors.

GST collections (Oct 2025): ₹1.96 lakh crore

YoY increase: 4.6%

Lower rates have boosted consumption, reduced compliance burden, and expanded the tax base, ensuring sustainable revenue generation.

INDIA'S GROWTH PROJECTIONS IMPROVE

Global institutions reflect growing confidence in India's economic performance:

- **RBI:** Upgraded FY26 forecast from 6.5% → 6.8%
- **World Bank:** 6.5% (2026)
- **Moody's:** 6.4% (2026), 6.5% (2027)
- **IMF:** 6.6% (2025), 6.2% (2026)
- **OECD:** 6.7% (2025), 6.2% (2026)
- **S&P:** 6.5% (FY26), 6.7% (2027)

CONCLUSION

India's economy continues to advance on a stable, resilient, and inclusive growth path, supported by structural reforms, digitalisation, improved ease of

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doing business, and robust policy frameworks. With inflation well-anchored, employment improving, manufacturing accelerating, and global institutions expressing confidence in India's trajectory, the country is well-positioned to sustain its momentum in the coming years. Government initiatives—ranging from GST simplification and employment generation to export promotion and industrial policy—are making the economy more competitive, productive, and people-centric. Together, these trends underscore India's evolving strength as a major global economic powerhouse.

Prelims question:

Q. With reference to India's recent economic performance, consider the following statements:

1. India's real GDP growth in Q2 of FY 2025–26 was above 8%.
2. Headline inflation (CPI) in October 2025 was within the RBI's tolerance band.
3. The Index of Industrial Production (IIP) for September 2025 showed a contraction in manufacturing output.

How many of the above statements are correct?

(a) Only one (b) Only two

(c) All thre (d) None

Answer: B

Mains Question:

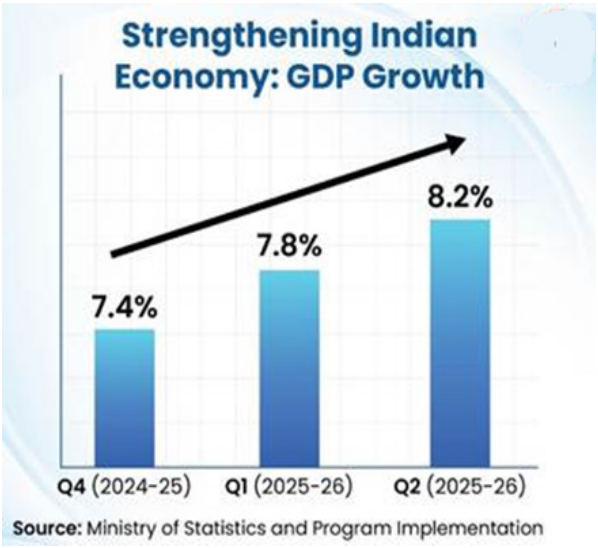
Q. India is projected to become the world's third-largest economy by 2030. Discuss the key drivers of India's current economic growth, particularly in terms of GDP performance, inflation management, industrial activity, employment trends, and trade performance. (250 words)

INDIA'S HIGH-GROWTH, LOW-INFLATION MOMENT: LAYING THE FOUNDATIONS FOR VIKSIT BHARAT @2047

WHY IN THE NEWS?

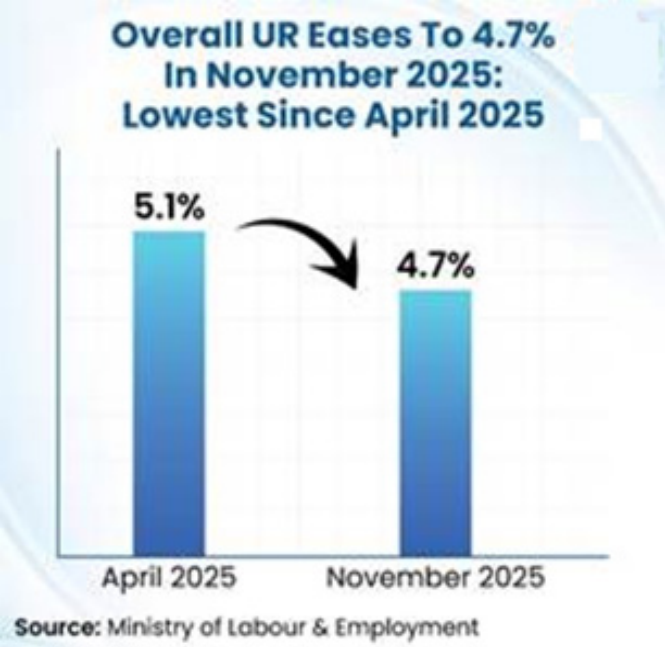
India stands at a defining moment in its economic journey. Emerging as one of the world's fastest-growing major economies, the country has built strong macroeconomic foundations that place it on a credible path towards achieving high middle-income status by 2047, the centenary year of its independence. Anchored in robust domestic demand, structural reforms, improving labour market outcomes and macroeconomic stability, India's growth trajectory reflects resilience amid persistent global uncertainties.

GROWTH MOMENTUM AND DOMESTIC DEMAND



India's economic momentum strengthened further in Q2 of FY 2025–26, with real GDP growth accelerating to 8.2%, the highest in six quarters. This followed growth rates of 7.8% in Q1 FY26 and 7.4% in Q4 FY25. Real Gross Value Added (GVA) expanded by 8.1%, led by buoyant industrial activity and resilient services. Crucially, growth has been domestically driven, with private consumption emerging as the principal engine. High-frequency indicators point to sustained activity—benign inflation, falling unemployment, strong credit

growth and improving export performance. Urban consumption has strengthened further, while rural demand has benefited from improved agricultural prospects. Recognising these trends, the Reserve Bank of India (RBI) revised India's FY 2025–26 growth forecast upward from 6.8% to 7.3%, reflecting confidence in domestic fundamentals.



STRUCTURAL DRIVERS OF GROWTH

India's growth is being reinforced by a confluence of structural and policy-led factors:

1. Tax rationalisation under GST and personal income tax reforms enhancing disposable incomes
2. Front-loading of government capital expenditure, crowding in private investment
3. Softening crude oil prices, easing input and fiscal pressures
4. Facilitative monetary and financial conditions, supported by a stable inflation outlook
5. Strong balance sheets of corporates and financial institutions, enabling investment revival
6. Together, these factors have created what may be described as a rare "Goldilocks phase"—high growth combined with low inflation.

EMPLOYMENT: LINKING GROWTH WITH PROSPERITY

1. **Employment as the growth–inclusion bridge:** Job creation converts economic growth into incomes, social mobility, and inclusive development.
2. **Demographic dividend potential:** With 26% of the population aged 10–24, India's youth bulge can accelerate growth if matched with productive employment.
3. **Lowest unemployment in recent months:** PLFS 2025 shows unemployment (15+) declining to 4.8% in Nov 2025, the lowest since April 2025.
4. **Broad-based labour market improvement:** Unemployment fell in both rural (3.9%) and urban (6.5%) areas, indicating economy-wide recovery.
5. **Women's employment gains:** A sharp decline in female unemployment reflects improving labour market inclusion and empowerment.
6. **Rising workforce engagement:** LFPR at 55.8% and WPR at 53.2% show stronger participation and effective employment absorption.
7. **Virtuous growth–employment cycle:** Sustained growth is creating jobs, while rising employment is boosting demand, productivity, and long-term prosperity.

INFLATION: ANCHORING MACROECONOMIC STABILITY

India witnessed a remarkably benign inflation environment in 2025. CPI inflation declined from 4.26% in January to multi-year lows of around 0.25% in October, before edging up slightly to 0.71% in November. This decline was led primarily by a sharp correction in food prices, defying seasonal inflationary patterns. For FY 2025–26, CPI inflation is projected at 2%, well within the RBI's target band of 2–6%. The RBI responded by cutting the policy repo rate by 25 basis points to 5.25%, maintaining a neutral stance that balances growth support with price stability. Wholesale Price Index (WPI) trends mirrored this moderation, with inflation easing to a provisional –0.32% in November 2025,

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underscoring subdued cost pressures across the economy.



TRADE AND EXTERNAL SECTOR PERFORMANCE

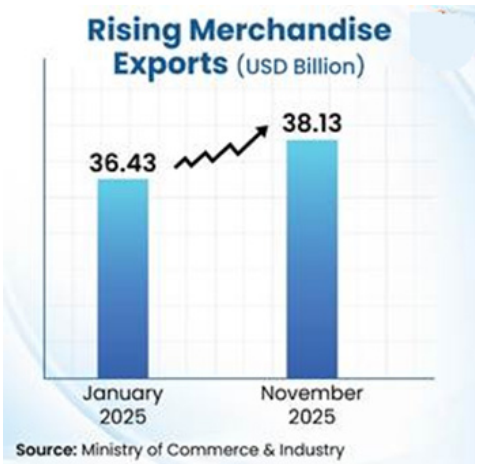
India's external sector has shown notable resilience amid global trade disruptions. Total exports reached USD 74.97 billion in January 2025, growing nearly 10% year-on-year. By April–June 2025, cumulative exports rose to USD 210.31 billion, maintaining steady momentum through November.

Merchandise exports were supported by strong performance in:

1. Engineering goods
2. Electronic goods
3. Pharmaceuticals
4. Gems and jewellery
5. Petroleum products

Several commodities such as cashew, marine products, electronic goods and engineering goods recorded double-digit growth.

Services exports emerged as a key stabiliser, expanding by 8.65% to USD 270.06 billion (April–November 2025), led by computer and business services. India's growing role in global value chains and digital trade has strengthened external resilience.



EXTERNAL STABILITY AND CAPITAL FLOWS

India's external buffers remain strong. As of November 2025, foreign exchange reserves stood at USD 686.2 billion, providing over 11 months of import cover.

The current account deficit (CAD) moderated from 2.2% of GDP in Q2 FY25 to 1.3% in Q2 FY26, supported by robust services exports and rising remittances (up 10.7% y-o-y).

On the capital account:

1. Gross FDI rose by 19.4% to USD 51.8 billion (April–September 2025–26)
2. Net FDI surged by 127.6%, aided by lower repatriation
3. Portfolio flows witnessed mild volatility, reflecting global risk conditions

CONCLUSION

India's current macroeconomic environment—characterised by high growth, falling unemployment, low inflation and external resilience—presents a historic opportunity. Sustaining this momentum will require continued focus on quality employment generation, productivity-enhancing reforms, human capital investment and export competitiveness. If effectively harnessed, this phase can serve as the launchpad for India's transformation into a prosperous, inclusive and resilient economy by 2047, firmly establishing its role as a global economic leader.

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Prelims question:

Q. Consider the following statements regarding India's recent macroeconomic trends:

1. India recorded its highest GDP growth in six quarters during Q2 FY 2025–26.
2. CPI inflation in FY 2025–26 is projected to remain within the RBI's tolerance band.
3. Services exports have played a significant role in reducing India's current account deficit.

Which of the statements given above are correct?

(a) 1 and 2 only (b) 2 and 3 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: D

Mains Question:

Q. India is experiencing a phase of high growth with macroeconomic stability amid global uncertainties. Examine the key drivers of India's recent economic performance and discuss how employment generation and inflation management are critical for sustaining inclusive growth. (250 words)

EXPORT PROMOTION MISSION (EPM): A UNIFIED, TECHNOLOGY-DRIVEN PUSH FOR INDIA'S EXPORT COMPETITIVENESS

WHY IN THE NEWS?

The Export Promotion Mission (EPM) is in the news because the Government of India, through the Union Budget 2025–26, has approved a major structural reform aimed at boosting India's export competitiveness. With an outlay of ₹25,060 crore for 2025–26 to 2030–31, the Mission consolidates multiple export-support schemes into a single, digitally integrated, outcome-driven framework. It focuses on strengthening MSME participation, improving access to affordable trade finance, expanding India's presence in global value chains, and enhancing market readiness for exporters across sectors. EPM is expected to play a pivotal role in achieving India's long-term export targets and generating employment.

WHY A MISSION?

India's export ecosystem has historically been supported through a set of targeted interventions such as interest equalisation schemes, market access initiatives, export-linked incentives, and infrastructure development programmes. However, these efforts have often operated in silos. The Export Promotion Mission (EPM) seeks to consolidate and scale these interventions by addressing structural drivers of export competitiveness—affordable trade finance, support for compliance with global quality and sustainability standards, coordinated export branding, market-access facilitation, and reduction of logistics disadvantages, particularly for MSMEs, first-time exporters and firms located in interior regions.

Recent export trends, including sectoral volatility and rising global non-tariff barriers, highlight the need for a digitally enabled, unified, and outcome-driven support system that can respond swiftly to global shifts and strengthen competitiveness across both merchandise and services exports.

By merging multiple schemes into a single digitally managed architecture, the EPM aims to deliver streamlined, transparent and responsive support. The Mission enables better coordination, reduced duplication, greater policy predictability, and real-time monitoring, aligning India's export promotion strategy with evolving global value chains and international trade conditions.

STRUCTURE, GOVERNANCE AND FINANCING

The Export Promotion Mission will operate for six years (FY 2025–26 to FY 2030–31) with a total financial outlay of ₹25,060 crore. Its institutional design integrates central ministries,

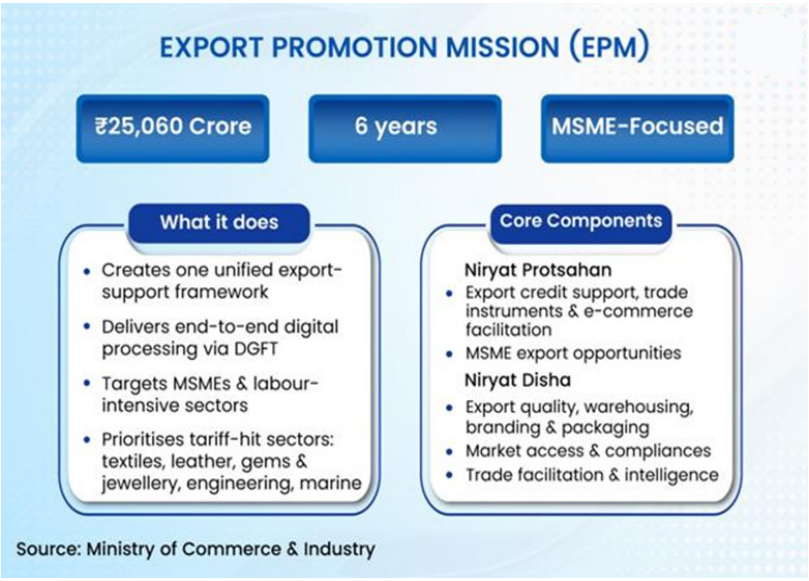
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state governments and industry bodies to ensure collaborative implementation.

1. **Department of Commerce:** Nodal Ministry responsible for strategic direction and policy convergence.
2. **DGFT:** Core implementing agency, managing a dedicated digital platform for end-to-end workflows—application, approval, monitoring and disbursal—seamlessly integrated with customs and trade systems.
3. **Ministry of MSME & Ministry of Finance:** Support credit access, guarantee mechanisms, and MSME-led export initiatives.
4. **Export Promotion Councils, Commodity Boards & Industry Associations:** Provide sector insights, market intelligence, and handholding for exporters.
5. **State Governments:** Key partners for regional export hubs, logistics improvements, and last-mile facilitation.

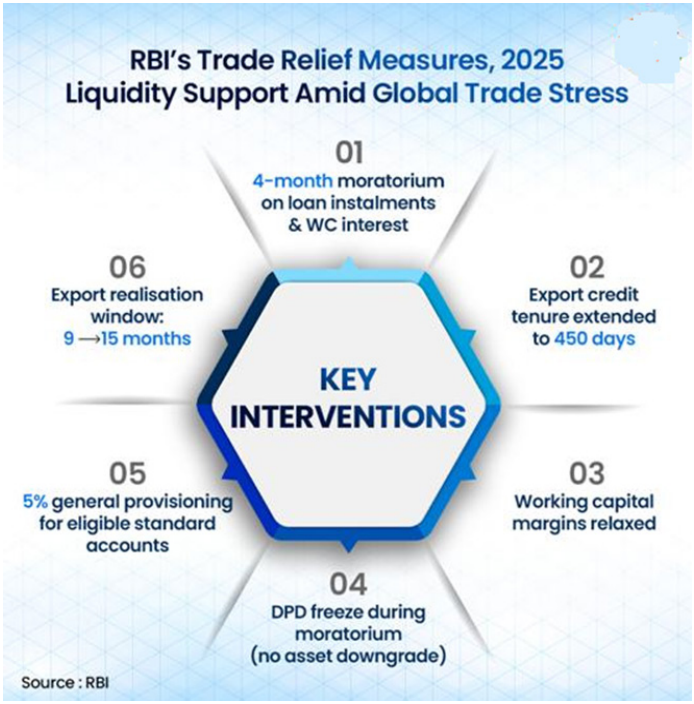
TWO INTEGRATED SUB-SCHEMES OF THE EXPORT PROMOTION MISSION (EPM)

Sub-Scheme	Type of Support	Key Features / Interventions	Purpose / Impact
Niryat Protsahan	Financial Enablers	• Interest subvention on pre- & post-shipment credit • Export factoring & deep-tier financing • Credit cards for e-commerce exporters • Collateral support & credit-enhancement for new/high-risk markets	• Reduce borrowing costs & liquidity constraints • Facilitate MSMEs & first-time exporters • Expand production & global competitiveness
Niryat Disha	Non-Financial Enablers	• Export quality & compliance support (testing, certification, audits) • Branding, packaging & international marketing assistance • Participation in trade fairs, buyer-seller meets, promotional campaigns • Export warehousing, logistics & inland transport reimbursements • Capacity-building at clusters, associations & district facilitation centers	• Improve market readiness & competitiveness • Strengthen institutional & skill support • Enable efficient scaling and global market integration



EXPORT PROMOTION MISSION (EPM) – DIGITAL, SECTORAL & CREDIT SUPPORT

Category	Key Features / Interventions	Impact / Significance
Digital Implementation & Monitoring	• Dedicated digital platform managed by DGFT • Paperless end-to-end application, approval & disbursal • Integration with existing trade systems • Outcome-based, adaptive mechanism with real-time monitoring	• Faster processing and transparent delivery • Ensures efficiency, accountability & inclusiveness • Supports timely oversight and outcome-linked delivery
Sectoral & Regional Focus	• Priority sectors: textiles, leather, gems & jewellery, engineering goods, marine products • Flexibility to support emerging sectors • Targeted support for MSMEs, first-time exporters, labour-intensive value chains • Interior & low-export-intensity districts receive inland transport reimbursement, warehousing/ logistics support, trade fair participation, branding/packaging help, and district-level capacity building	• Broadens geographic & sectoral spread of exports • Promotes inclusive participation in global trade • Strengthens competitiveness of small & medium exporters
Credit Guarantee Scheme for Exporters (CGSE)	• ₹20,000 crore additional credit support for eligible exporters (MSMEs) • Implemented via DFS & NCGTC with 100% credit guarantee coverage to MLIs • Collateral-free credit access and extra working capital up to 20% of sanctioned limits • Valid till 31 March 2026	• Strengthens liquidity & working capital access • Encourages exploration of new export markets • Enhances global competitiveness of Indian exporters



EXPECTED OUTCOMES AND MACROECONOMIC LINKAGES

To enable a more competitive and resilient export ecosystem, the Mission is designed to deliver measurable outcomes across financing, quality standards, market access and institutional capacity. By providing a coordinated, technology-driven and industry-responsive framework, EPM strengthens support in areas such as trade finance, compliance readiness and district-level participation.

EPM is expected to:

1. Improve access to affordable trade finance for MSMEs
2. Raise export-readiness through compliance and certification support
3. Enhance market access, branding and visibility of Indian products
4. Boost exports from non-traditional districts and sectors
5. Generate employment across manufacturing, logistics, and allied services
6. These outcomes align with national objectives, strengthening export-led growth, promoting Atmanirbhar Bharat and contributing to the long-term vision of Viksit Bharat @ 2047.

CONCLUSION

The Export Promotion Mission marks a decisive step toward a coherent, technology-driven and inclusive export ecosystem. By merging fiscal incentives, financial facilitation, digital governance and regulatory flexibility into a single mission-mode framework, the government has created a powerful platform to enhance India's global trade competitiveness. As the Mission unfolds alongside the RBI's relief measures and the expanded Credit Guarantee Scheme, it underscores a whole-of-government approach to export-led growth, empowering MSMEs, diversifying markets and positioning India as a resilient, reliable partner in global commerce.

Prelims question:

Q. With reference to the Export Promotion Mission (EPM), consider the following statements:

1. The Mission consolidates multiple export-support schemes into a single, digitally integrated architecture managed by DGFT.
2. Niryat Protsahan provides non-financial enablers such as branding and marketing assistance to exporters.
3. The Credit Guarantee Scheme for Exporters (CGSE) under EPM offers 100% guarantee coverage for collateral-free credit to eligible MSME exporters.
4. EPM aims to support both merchandise and services exports with a sectoral–regional focus, particularly benefiting interior districts.

Which of the above statements are correct?

(a) 1 and 3 only (b) 1, 2 and 3 only

(c) 1, 3 and 4 only (d) 1, 2, 3 and 4

Answer: C

Mains Question:

Q. The Government of India has launched the Export Promotion Mission (EPM) as a major structural reform to strengthen export competitiveness. Discuss the policy rationale behind the Mission, its core components and governance structure, and evaluate how it is expected to enhance India's export performance. (250 words)

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PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY) TRANSFORMING RURAL CONNECTIVITY IN INDIA

WHY IN THE NEWS?



Road infrastructure is a foundational pillar of rural development, facilitating access to markets, education, healthcare, and employment opportunities while contributing significantly to poverty reduction. As it completes 25 years in 2025, the Pradhan Mantri Gram Sadak Yojana (PMGSY) stands out as one of India's most impactful rural infrastructure initiatives. Launched on 25 December 2000, the programme aimed to provide all-weather road connectivity to previously unconnected rural habitations. Over the years, PMGSY has emerged as a catalyst for agricultural growth, employment generation, market integration, and socio-economic transformation, thereby reinforcing inclusive and sustainable rural development.



FROM CONNECTIVITY TO CONSOLIDATION: PHASED PROGRESS UNDER PMGSY

Since its inception, PMGSY has sanctioned 8,25,114 km of rural roads, of which 7,87,520 km have been completed, reflecting nearly 95% physical progress as of December 2025. The government's sustained commitment is reflected in the ₹19,000 crore allocation for FY 2025–26, underscoring the priority accorded to rural connectivity as a driver of economic opportunity and social inclusion.

PHASE-WISE EVOLUTION OF PMGSY

Phase / Intervention	Launch Year	Primary Objective	Target / Coverage	Funding Pattern (Centre:State)
PMGSY-I	2000	New Connectivity: Providing all-weather roads to unconnected habitations.	1,63,339 habitations (based on Census 2001).	100% Central (initially); 60:40 (since 2015)
PMGSY-II	2013	Upgradation: Improving existing rural roads to enhance transport efficiency.	50,000 km of the existing rural road network.	75:25 (initially); 60:40 (since 2015)
RCPLWEA	2016	Security & Development: Connectivity in Naxal-affected areas.	44 severely LWE-affected districts across 9 states.	60:40

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PMGSY-III	2019	Consolidation: Linking habitations to Markets (GrAMs), Schools, and Hospitals.	1,25,000 km of Through Routes & Major Rural Links.	60:40 (90:10 for NE/ Himalayan)
PMGSY-IV	2024	Last-Mile Connectivity: Reaching habitations newly eligible due to population growth.	25,000 habitations via 62,500 km of new roads.	60:40 (90:10 for NE/ Himalayan)

APPLICATION OF ADVANCED TECHNOLOGIES IN RURAL ROAD DEVELOPMENT

Digital Monitoring and Transparency

1. **Online Management, Monitoring, and Accounting System (OMMAS):**

- Enables real-time monitoring of the physical and financial progress of PMGSY projects.
- Integrates the Project Management Information System (PMIS) for effective project execution.
- Captures quality inspections conducted by National Quality Monitors (NQMs) and State Quality Monitors (SQMs).
- Uses geo-tagged photographs uploaded through the Quality Monitoring System (QMS) mobile application.
- Enhances transparency, accountability, and quality assurance in rural road construction.

2. **e-MARG (Electronic Maintenance of Rural Roads):**

- Ensures systematic monitoring of road maintenance during the five-year Defect Liability Period (DLP).
- Links maintenance payments to performance outcomes, promoting accountability.
- Improves maintenance standards and long-term durability of PMGSY road assets.

3. **GPS-enabled Vehicle Tracking System (VTS):**

- Mandatory since May 2022 for PMGSY-III works.
- Enables continuous monitoring of vehicles, machinery, and equipment deployment.
- Tracks construction duration and operational efficiency.
- Ensures adherence to prescribed construction processes and quality standards.

ROBUST TECHNICAL STANDARDS AND SUSTAINABILITY

The programme promotes the use of eco-friendly and climate-resilient materials, guided by standards formulated by the Indian Roads Congress (IRC). Materials such as fly ash, waste plastic, slag, crumb rubber modified bitumen, geosynthetics, and bio-bitumen are increasingly being adopted, subject to feasibility.

Innovation and Climate Resilience Innovative techniques such as cold mix technology, Full Depth Reclamation, and plastic waste utilisation have been employed in over 1.24 lakh km of roads (as of July 2025), reflecting a strategic shift towards sustainable rural infrastructure.

THREE-TIER QUALITY MONITORING MECHANISM

To ensure construction quality and durability, PMGSY follows a robust three-tier monitoring system:

- **Tier 1:** Field-level checks by executing agencies
- **Tier 2:** Independent inspections by State Quality Monitors (SQMs)
- **Tier 3:** Surprise audits by National Quality Monitors (NQMs)

All assessments are monitored in real time through OMMAS.

CONCLUSION

As PMGSY completes 25 years in 2025, it stands as a cornerstone of India's rural development strategy. With nearly 96% of sanctioned road

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length completed, the programme has transformed rural accessibility, strengthened market linkages, enhanced access to education and healthcare, and accelerated inclusive growth. Its phased evolution—from basic connectivity to network consolidation and universal last-mile access—combined with advanced digital monitoring, robust quality assurance, and climate-resilient practices, has ensured transparency, durability, and sustainability. Aligned with the Sustainable Development Goals, PMGSY transcends infrastructure creation to foster poverty reduction, environmental sustainability, and inclusive rural transformation.

Prelims question:

Q. With reference to the Pradhan Mantri Gram Sadak Yojana (PMGSY), consider the following statements:

1. PMGSY was launched to provide all-weather road connectivity to unconnected rural habitations.
2. PMGSY-III focuses on connecting rural habitations with Gramin Agricultural Markets, higher secondary schools, and healthcare facilities.
3. The e-MARG platform links maintenance payments of PMGSY roads to performance during the Defect Liability Period.
4. PMGSY is fully funded by the Central Government in all its phases.

Which of the statements given above are correct?

A. 1, 2 and 3 only B. 1 and 4 only

C. 2 and 3 only D. 1, 2, 3 and 4

Answer: A

Mains Question:

Q. The Pradhan Mantri Gram Sadak Yojana (PMGSY) has evolved from a rural connectivity programme into a catalyst for inclusive and sustainable rural development. Discuss its phased evolution and highlight the role of technology and quality assurance in enhancing its effectiveness. (250 words)

INDIA'S GIG ECONOMY ENTERS THE FORMAL FOLD: KEY PROVISIONS OF THE SOCIAL SECURITY CODE, 2020

WHY IN THE NEWS?

India's gig and platform economy has rapidly emerged as a vital pillar of the country's digital and service ecosystem. Fuelled by a young workforce, fast-paced urbanisation, and expanding digital access, millions today earn livelihoods through ride-hailing, food delivery, logistics, household services, and freelance digital platforms. Yet, despite their growing economic significance, these workers have long operated without formal recognition or social protection.

KEY TAKEAWAYS

1. Gig and platform workers formally recognised under Indian labour law.
2. Social security benefits extended—health, maternity, pension, life and disability cover, accident insurance, and crèche facilities.
3. Aggregators mandated to contribute 1–2% of annual turnover to a newly established Social Security Fund.
4. Aadhaar-linked e-Shram ID ensures full portability of benefits across platforms and employers.
5. Facilitation centres and grievance mechanisms to support worker protection and empowerment.

RECOGNISING A NEW WORKFORCE

Until now, gig and platform workers fell outside traditional labour laws such as the Payment of Wages Act (1936), Minimum Wages Act (1948), EPF Act, and ESI Act, leaving them unprotected and categorised as informal workers.

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The SS Code reshapes this landscape with formal definitions:

1. Gig Worker: One who earns outside a traditional employer–employee arrangement.
2. Platform Worker: A person performing tasks mediated by an online platform.
3. Aggregator: A digital intermediary connecting users and service providers.
4. Platform Work: Services delivered through digital platforms outside standard employment structures.

By codifying these terms, the law acknowledges gig and platform workers as legitimate contributors to India's economy and extends to them long-denied legal recognition

SOCIAL SECURITY FUND: BUILDING SHARED RESPONSIBILITY

A cornerstone of the reform is the creation of a dedicated Social Security Fund. Aggregators—including ride-hailing, food delivery, and e-commerce logistics platforms—must now contribute 1–2% of their annual turnover, capped at 5% of the total payments made to workers.

The fund may also be strengthened through:

1. Government contributions
2. CSR support
3. Other notified sources
4. This shifts the system from one where workers bore all risks, to a shared-risk model, with platforms directly contributing to worker welfare.

EXPANDED SOCIAL SECURITY BENEFITS

For the first time, gig and platform workers are entitled to statutory, government-notified social security benefits, such as:

1. Life and disability insurance
2. Accident insurance
3. Health and maternity benefits
4. Pension and old-age protection
5. Crèche facilities
6. Any other benefits introduced by the Government

This transition from voluntary, CSR-led schemes to mandatory protections brings essential stability to workers historically exposed to income shocks and occupational risks.

PORTABILITY THROUGH A UNIVERSAL E-SHRAM ID

A major innovation under the SS Code is portability of benefits. Workers registering on the e-Shram portal receive a unique Aadhaar-linked ID, enabling:

1. Seamless transfer of benefits across platforms
2. Continuity of entitlements despite multiple job engagements
3. Social security that aligns with the inherently flexible nature of gig work

GRIEVANCE REDRESSAL: STRENGTHENING WORKER VOICE

For the first time, gig workers will have structured avenues to seek redress. Governments may establish:

1. Toll-free helplines
2. Call centres
3. Facilitation centres

These mechanisms will offer guidance, support, and resolution of grievances—an important step in ensuring dignity and fairness for workers.

A TRANSFORMATIVE LEAP: FROM INFORMAL TO PROTECTED

The integration of gig and platform workers into India's social security framework represents one of the most forward-looking labour reforms in recent decades. The SS Code:

1. Formalises the gig economy

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2. Extends a protective safety net to millions

3 Enhances income security and resilience

4. Balances flexibility with social protection

5. Strengthens trust between workers and platforms

As India advances toward a digital-first economy, these reforms ensure that growth is not only fast—but also fair. By recognising and safeguarding the workforce that powers its platforms, India sets a progressive global benchmark for the future of work.

CONCLUSION

The formal inclusion of gig and platform workers under the Social Security Code, 2020 marks a landmark moment in India's labour policy evolution. By extending legal recognition, social protection, and structured grievance mechanisms to a workforce that has long operated on the margins, the reform bridges a critical gap in the country's rapidly expanding digital economy. The creation of a dedicated Social Security Fund, coupled with the portability of benefits through the e-Shram ID, ensures that workers receive stable, continuous protection regardless of the platforms they engage with.

Prelims question:

Q. With reference to gig and platform workers in India, consider the following statements:

1. They have been formally recognised as a distinct category of workers under the Code on Social Security, 2020.
2. Aggregator platforms are required to contribute a fixed 5% of their annual turnover to the Social Security Fund.
3. Benefits availed by gig workers through the e-Shram ID are portable across different platforms.

Which of the statements given above is/are correct?

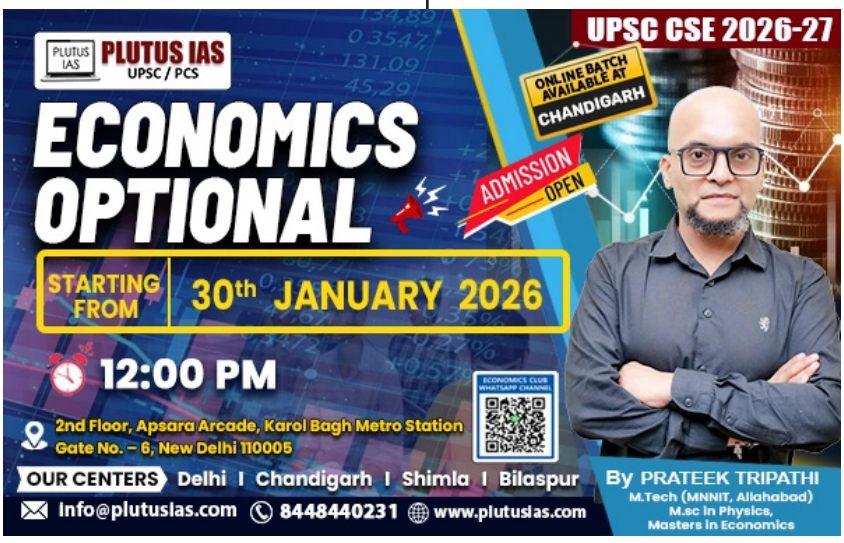
(a) 1 and 2 only (b) 2 and 3 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: C

Mains Question:

Q. The Code on Social Security, 2020 marks a transformative shift in safeguarding India's gig and platform workforce." Examine the significance of these reforms and discuss the key challenges that may emerge in their implementation. (250 words)





ISRO CLEARS CRITICAL SAFETY MILESTONE WITH SUCCESSFUL DROGUE PARACHUTE TEST FOR GAGANYAAN MISSION

WHY IN THE NEWS?



The Indian Space Research Organisation (ISRO) has successfully conducted drogue parachute tests for the Gaganyaan human spaceflight mission, validating a critical subsystem responsible for the safe atmospheric descent and recovery of the Crew Module. The test marks another milestone in India's preparation for its first crewed space mission.

GAGANYAAN MISSION: INDIA'S HUMAN SPACEFLIGHT AMBITION

- **Demonstration of Human-Rated Launch Capability:** A core objective of Gaganyaan is to establish India's ability to safely launch humans into space using indigenous systems. This involves human-rating of the LVM-3 launch vehicle, crew module, and life-support systems, ensuring high reliability, redundancy, and safety margins. Success would mark India's transition from robotic missions to complex crewed spaceflight operations.
- **Development of Critical Life-Support and Crew Safety Systems:** The mission seeks to master Environmental Control and Life Support Systems (ECLSS), crew escape mechanisms, and emergency response protocols. These technologies are vital for sustaining astronauts in microgravity and ensuring safe aborts during launch or re-entry. Such capabilities lay the foundation for future long-duration missions, including space stations.
- **Enhancement of Strategic Autonomy and National Security:** Human spaceflight strengthens India's strategic autonomy by reducing dependence on foreign launch systems for crewed missions. Dual-use technologies developed under Gaganyaan—such as advanced navigation, communication, and surveillance systems—also have spillover benefits for defence preparedness, situational awareness, and space-based intelligence infrastructure.
- **Catalyst for Advanced Aerospace Research and Industrial Ecosystem:** Gaganyaan acts as a driver for innovation across India's aerospace and manufacturing sectors. It promotes collaboration between ISRO, academia, startups, and private industry in areas like materials science, avionics, robotics, and biomedical research. This ecosystem-building supports India's long-term goals in space exploration and high-technology self-reliance.

PARACHUTE-BASED CREW MODULE RECOVERY SYSTEM: ARCHITECTURE, STAGES AND SAFETY ROLE IN GAGANYAAN

Aspect	Details
Purpose in Mission	The parachute-based recovery system forms the final and most critical safety layer of the Gaganyaan Crew Module Recovery System. It ensures safe deceleration of the crew module from supersonic re-entry speeds to splashdown-compatible velocities, directly safeguarding astronaut survival.
Overall Role in Crew Safety	By progressively reducing speed and stabilising orientation, the parachute system enables a controlled sea splashdown, preventing excessive impact forces and structural damage to the crew module.
Deployment Philosophy	The system follows a sequential, multi-stage deployment approach to manage extreme aerodynamic loads gradually rather than abruptly, enhancing reliability and safety.
Stages of Parachute Deployment	1. Drogue Parachutes – Deployed first at high altitude and high speed for stabilisation.2. Pilot Parachutes – Assist in extracting the main parachutes.3. Main Parachutes – Provide maximum deceleration and controlled descent before splashdown.
Drogue Parachutes – Definition	Drogue parachutes are small, high-strength parachutes deployed during the early descent phase to stabilise the spacecraft, reduce dynamic pressure, and ensure correct orientation for subsequent parachute deployment.
Functional Importance of Drogue Parachutes	They prevent tumbling of the crew module, reduce aerodynamic stress, and create suitable conditions for safe deployment of larger main parachutes, acting as a bridge between re-entry and final descent phases.
Operational Environment	Drogue parachutes operate under extreme conditions—high-speed airflow, intense thermal loads, fluctuating pressure, and violent aerodynamic forces during atmospheric re-entry.
Design and Engineering Challenges	Materials must withstand high mechanical stress, thermal shock, and dynamic instability. Precision in timing, deployment angle, and structural integrity is essential, making extensive testing indispensable.
Significance for Mission Success	Any failure at the drogue stage can compromise the entire recovery sequence, highlighting why successful drogue parachute tests are a major milestone for India's human spaceflight programme.

SIGNIFICANCE OF THE RECENT TEST

- **Validation of Indigenous Human-Rated Parachute Technology:** The successful test establishes the reliability of fully indigenous parachute systems designed to meet stringent human-rating standards. This reinforces India's Atmanirbhar Bharat push by reducing dependence on foreign aerospace technologies for critical crew safety systems.
- **Assurance of Crew Safety During Critical Mission Phases:** Parachutes play a decisive role during the descent and landing phase, where margins for error are minimal. The test validates controlled deceleration and stability, directly enhancing astronaut survivability during atmospheric re-entry and splashdown.
- **Enhanced Readiness for Uncrewed Qualification Missions:** The test demonstrates that the recovery subsystem is prepared for upcoming uncrewed missions. Such qualification flights are mandatory to certify system performance under real flight conditions before any human spaceflight attempt.
- **Strengthening Systems Integration and Redundancy:** Successful deployment confirms seamless integration between drogue and main parachutes, sensors, and deployment

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mechanisms. It also validates redundancy features, ensuring fail-safe performance even in off-nominal conditions.

- **Boost to ISRO's Human Spaceflight Confidence and Credibility:** The achievement enhances institutional confidence in mission timelines and strengthens ISRO's credibility in executing complex human spaceflight programs. It also positions India among a select group of nations with proven crew recovery capabilities.

TECHNOLOGICAL AND SCIENTIFIC IMPLICATIONS

- **Advancement in Indigenous Aerospace Engineering Capabilities:** The test highlights India's progress in advanced aerospace engineering, particularly in designing high-load parachute systems capable of operating under extreme thermal and aerodynamic conditions. It reflects growing competence in precision engineering for human spaceflight.

- **Innovation in High-Performance Materials and Textiles:** Development of parachutes requires specialised fabrics with high strength-to-weight ratios, thermal resistance, and durability. The success demonstrates indigenous capability in advanced textile engineering, benefitting both space and strategic sectors.

- **Improved Aerodynamic Modelling and Simulation Expertise:** Accurate prediction of parachute behaviour during high-speed descent relies on complex computational modelling. The test validates India's advancements in aerodynamic simulations, wind tunnel testing, and real-time performance analysis.

- **Development of Reliable Real-Time Deployment and Control Systems:** The successful sequencing of drogue and main parachutes confirms robustness in sensor-driven deployment mechanisms. This strengthens expertise in autonomous control systems and real-time decision-making technologies critical for crewed missions.

- **Spin-off Applications Across Strategic and Civil Domains:** Technologies developed can be adapted for defence aircraft recovery systems, reusable launch vehicles, space tourism modules, planetary landers, and emergency evacuation systems, generating broader scientific and economic benefits beyond the Gaganyaan mission.

GAGANYAAN IN THE GLOBAL SPACEFLIGHT CONTEXT

- **India's Entry into the Exclusive Human Spaceflight Club:** With the Gaganyaan mission, India positions itself among a select group of nations—such as the US, Russia, and China—that possess independent human spaceflight capability. This achievement marks a transition from satellite-launch proficiency to human-rated launch, orbital, and recovery systems.

- **Strategic Autonomy in Crewed Space Missions:** An indigenous human spaceflight program reduces dependence on foreign launch vehicles, crew capsules, and recovery infrastructure. This autonomy is strategically significant, particularly in an era where space access is increasingly linked to national security and geopolitical influence.

- **Strengthening India's Role in Global Space Governance:** Human spaceflight capability enhances India's voice in shaping norms related to space safety, crew rescue, orbital debris mitigation, and responsible use of outer space. It strengthens India's standing in multilateral forums such as the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS).

- **Balanced Model of International Collaboration:** While core mission systems remain indigenous, Gaganyaan benefits from international cooperation in astronaut training, crew health monitoring, life-support technologies, and safety protocols. This reflects a balanced approach—leveraging global expertise without compromising sovereign control.

- **Enabling Future Multinational and Commercial Missions:** A successful Gaganyaan program lays the foundation for India's participation in future multinational space stations, joint deep-space

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missions, and commercial human spaceflight initiatives. It positions India as a reliable partner in the evolving global space economy.

WAY FORWARD

- **Integrated System-Level Testing:** Conduct combined trials of parachute systems with the Crew Module and Crew Escape System to validate coordinated performance under real mission conditions.
- **Uncrewed Orbital Qualification Missions:** Complete multiple uncrewed orbital flights to test end-to-end mission safety, including launch, on-orbit operations, re-entry, and recovery.
- **Strengthening Human-Rating Certification Frameworks:** Adopt rigorous human-rating standards aligned with global best practices to ensure maximum crew safety and mission reliability.
- **Investment in Advanced Materials and Manufacturing:** Develop next-generation high-performance materials to enhance parachute durability, thermal resistance, and load-bearing capacity.
- **Enhancing Redundancy and Fail-Safe Mechanisms:** Improve system redundancy across deployment, sensing, and control components to mitigate risks from single-point failures.
- **Upgrading Recovery and Post-Landing Logistics:** Strengthen naval, aerial, and ground recovery infrastructure for swift crew retrieval and post-mission safety assurance.

CONCLUSION

The successful drogue parachute test is a crucial step in ensuring astronaut safety and mission reliability under the Gaganyaan programme. It reflects ISRO's systematic, safety-first approach and India's growing maturity in human spaceflight technologies. As India moves closer to its first crewed mission, such milestones reaffirm the country's commitment to safe, indigenous, and globally competitive space exploration.

Prelims question:

Q. With reference to the Gaganyaan mission, consider the following statements:

1. Drogue parachutes are deployed during the initial phase of atmospheric descent to stabilise and slow down the Crew Module.
2. The parachute system in Gaganyaan is designed to ensure a safe land landing of the Crew Module.
3. Gaganyaan aims to place Indian astronauts in Low Earth Orbit using an indigenous launch vehicle.

Which of the statements given above is/are correct?

(a) 1 and 3 only (b) 1 only

(c) 2 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. "The successful testing of drogue parachutes marks a critical milestone in India's human spaceflight programme." Examine the significance of the recent parachute tests conducted by ISRO for the Gaganyaan mission.

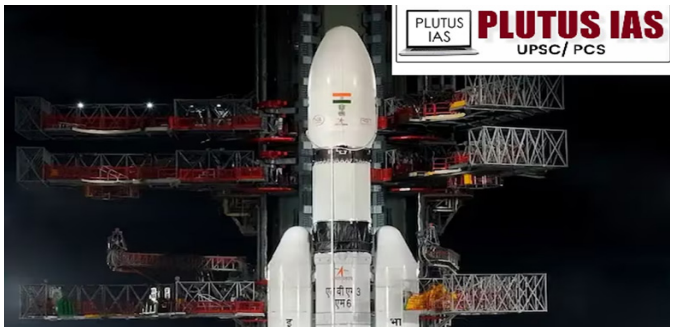
ISRO BREAKS PAYLOAD RECORD AS LVM3 LAUNCH SIGNALS INDIA'S HEAVY-LIFT AMBITIONS

WHY IN THE NEWS?

India's space programme has entered a decisive phase marked by heavy-lift launch capability, commercial expansion, private sector participation, and human spaceflight preparedness. Recent achievements by the Indian Space Research Organisation (ISRO) underscore India's transition

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from a developmental space agency to a global space service provider and strategic power.



LVM3-M6 MISSION

A Major Technological Milestone for India : Record-Breaking Payload Capability

The LVM3 (formerly Gaganyaan Mark-III) successfully launched a ~6,100 kg communication satellite (BlueBird Block-2) into Low Earth Orbit (LEO), marking the heaviest payload ever carried by an Indian launch vehicle. This achievement represents a significant leap in India's heavy-lift launch capability.

WHY THIS ACHIEVEMENT IS SIGNIFICANT

1. **Entry into the Heavy-Lift Launch Club:** With a payload capacity of approximately 8–10 tonnes to LEO, LVM3 places India alongside a select group of space-faring nations possessing reliable heavy-lift launch systems.
2. **Validation of Human Spaceflight Readiness:** The mission reinforces LVM3's suitability for crew module launches under the Gaganyaan programme, validating its structural integrity, propulsion systems, and mission reliability.
3. **Enabler of Advanced Space Missions:** Such payload capability is crucial for launching space station modules, large communication satellites, and deep-space or interplanetary missions, reducing dependence on foreign launch services.
4. **Strategic and Commercial Implications:** Enhanced lift capacity strengthens India's position in the global launch market, boosts strategic autonomy, and supports the growth of NewSpace and private satellite operators.
5. **Significance for India:** The LVM3-M6 mission signifies India's transition from a cost-effective launch provider to a technologically mature heavy-lift space power, capable of supporting human spaceflight, strategic missions, and next-generation space infrastructure.

COMMERCIAL SPACE EXPANSION: ECONOMIC DATA

India's Space Economy (Current Status)

- Global space economy: ~USD 450 billion
- India's share: ~2%
- Target by 2030: USD 40–50 billion (~8–10%)

Role of NSIL

- NewSpace India Limited (NSIL) is ISRO's commercial interface
- Responsible for foreign satellite launches, technology transfer, and revenue generation

Revenue Impact

- Commercial launches generate foreign exchange earnings
- Cost advantage: Indian launches are 30–40% cheaper than many global competitors

INDUSTRY PARTICIPATION AND SPACE SECTOR REFORMS

Key Reform Measures (Post-2020)

- Creation of IN-SPACe as a regulator and facilitator
- Opening launch, satellite, and data services to private firms
- Gradual transfer of PSLV production to industry consortia

Current Plan

- 50% of PSLV manufacturing to be handled by Indian industry
- Firms involved: HAL, L&T, Godrej Aerospace (and others)

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Significance

- Moves ISRO from "manufacturer" to technology architect
- Encourages start-ups, MSMEs, and innovation ecosystems
- Aligns with Atmanirbhar Bharat and Make-in-India

GAGANYAAN PROGRAMME: HUMAN SPACEFLIGHT DATA

Mission Profile

- Objective: Send 3 Indian astronauts to LEO (~400 km) for ~3 days
- Launch Vehicle: Human-rated LVM3
- Total estimated cost: ₹90,000+ crore (long-term ecosystem)

Progress Achieved

- Successful Crew Escape System tests
- Development of Environmental Control & Life Support Systems (ECLSS)
- Astronaut training underway (India + Russia)
- Planned uncrewed test flights using humanoid robot Vyommitra

Strategic Value

- Makes India the 4th nation with indigenous human spaceflight capability
- High spillover benefits in materials science, medicine, robotics, AI

STRATEGIC AND SECURITY DIMENSIONS OF ISRO'S GROWTH

Space as the 4th Dimension of Warfare: Satellites critical for

- Secure communication
- Navigation (NavIC)
- Intelligence, Surveillance & Reconnaissance (ISR)

Dual-Use Technologies

- Launch vehicles & sensors support both civilian and defence needs
- Enhances India's position in space deterrence and situational awareness

Global Context

- Growing space militarisation (US, China, Russia)
- India's approach: Defensive, responsible, rule-based use of outer space

SCIENTIFIC AND DEVELOPMENTAL APPLICATIONS OF SPACE TECHNOLOGY

Domain	Application Area	How Satellites Contribute	Developmental Significance for India
Disaster Management	Cyclones & Floods	Real-time tracking, early warning systems, floodplain mapping	Reduces loss of life and property; supports timely evacuation and relief
	Forest Fires	Thermal imaging and hotspot detection	Enables rapid response and ecosystem protection
Agriculture & Food Security	Crop Mapping	Remote sensing for crop area estimation and health assessment	Improves yield forecasting and policy planning
	Drought Assessment	Soil moisture and rainfall anomaly monitoring	Strengthens drought preparedness and farmer support
Urban Planning	Infrastructure Mapping	High-resolution imagery for land-use analysis	Supports smart cities and sustainable urban growth
	Resource Management	Monitoring water bodies and green cover	Enhances urban resilience

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Climate Change Monitoring	Carbon Monitoring	Tracking carbon sinks and emission patterns	Supports India's climate commitments
	Glacier Retreat	Observation of Himalayan glaciers and snow cover	Assesses long-term water security risks
	Monsoon Prediction	Atmospheric data assimilation	Improves rainfall forecasts and agricultural planning

CHALLENGES IN INDIA'S EXPANDING SPACE PROGRAMME

- Space Debris Management: The rapid increase in satellite launches has intensified the problem of space debris, raising the risk of in-orbit collisions and cascading effects such as the Kessler Syndrome. Limited global enforceability of debris-mitigation norms further complicates tracking, coordination, and accountability.
- **Long-Term Funding Sustainability:** Ambitious missions involving human spaceflight, deep-space exploration, and satellite constellations require predictable and sustained financial commitment. Dependence on annual budgetary allocations can constrain long-term planning and technology development.
- **Safety and Reliability in Crewed Missions:** Human spaceflight demands exceptionally high safety standards, including reliable launch systems, life-support mechanisms, emergency abort protocols, and post-mission recovery infrastructure. Ensuring mission safety remains a complex technological and ethical responsibility.
- **Absence of a Comprehensive Space Activities Act:** The lack of an updated and comprehensive Space Activities Act creates regulatory uncertainty, particularly for private players. Clear legal frameworks are essential for liability, insurance, licensing, and compliance with international space law.

WAY FORWARD FOR A SUSTAINABLE AND SECURE SPACE ECOSYSTEM

- **Strengthening the Space Governance Framework:** India should expedite the enactment of a comprehensive space legislation aligned with international treaties while clearly defining the roles of government agencies, private entities, and regulators to ensure transparency and accountability.
- **Investment in Space Situational Awareness (SSA):** Enhancing indigenous capabilities in space surveillance, tracking, and data-sharing will help monitor orbital congestion, predict collision risks, and contribute to global space safety initiatives.
- **Promoting Public – Private – Academic Collaboration:** Deeper collaboration between ISRO, private industry, start-ups, and academic institutions can accelerate innovation, reduce costs, and build a skilled space workforce, supporting long-term mission sustainability.
- **Focus on Green Propulsion and Debris Mitigation:** Adopting environment-friendly propulsion technologies, active debris removal systems, and end-of-life disposal mechanisms will ensure that space exploration remains ecologically responsible and future-ready.

CONCLUSION

ISRO's recent developments mark a structural transformation of India's space programme—from a low-cost launcher to a strategic enabler of national power. Heavy-lift launches, commercial integration, and human spaceflight readiness collectively position India as a credible, responsible, and competitive space power. The challenge ahead lies in converting technological prowess into sustained economic, strategic, and scientific leadership.

Prelims question:

Q. With reference to ISRO's LVM3 launch vehicle, consider the following statements:

1. LVM3 is capable of placing payloads exceeding 8 tonnes into Low Earth Orbit.

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2. It is the launch vehicle identified for India's human spaceflight programme.
3. LVM3 uses a cryogenic upper stage developed indigenously.

Which of the statements given above are correct?

(a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Answer: B

Mains Question:

Q. ISRO's recent achievements reflect India's transition from a developmental space agency to a space power. Critically examine.

SKYROOT AEROSPACE AND INDIA'S JOURNEY TOWARDS A THRIVING PRIVATE SPACE SECTOR

WHY IN THE NEWS?



Prime Minister Narendra Modi inaugurated Skyroot Aerospace's Infinity Campus in Hyderabad via video conferencing and unveiled India's first private orbital rocket, Vikram-I, capable of launching satellites into orbit. This event marks a significant milestone in India's rapidly growing private space sector, reflecting the country's ambition to become a global leader in space technology.

FROM TWO ENGINEERS TO INDIA'S FIRST PRIVATE ORBITAL ROCKET

Skyroot Aerospace was founded in 2018 by former ISRO engineers Pawan Kumar Chandana and Naga Bharath Daka with a team of barely 10 people working out of a small office. Seven years later, the company employs over 350 engineers and has built India's largest private rocket factory – the 6-acre Infinity Campus that was inaugurated today.

The Vikram-I rocket family (named after Dr Vikram Sarabhai, the father of India's space programme) uses a unique all-carbon-fibre body, 3D-printed engines, and innovative propulsion stages. The maiden flight is targeted for early 2026 from Sriharikota, carrying customer satellites into precise sun-synchronous orbits.

300+ STARTUPS AND A $380 MILLION PRIVATE SPACE ECONOMY

The numbers tell a dramatic story:

2014 → 1 space startup in India

2025 → More than 300 active space startups

Cumulative private investment → Over ₹3,000 crore ($380 million)

Projected Indian space economy by 2033 → $44 billion (according to IN-SPACe and Arthur D. Little)

Companies like Skyroot, Agnikul Cosmos, Pixxel, Dhruva Space, Bellatrix Aerospace and Digantara are building everything from launch vehicles and orbital transfer vehicles to hyperspectral Earth-observation satellites and space situational awareness systems.

REFORMS THAT CHANGED THE GAME

The Prime Minister credited a series of bold policy decisions:

1. Creation of IN-SPACe (Indian National Space Promotion and Authorization Center) in 2020 as a single-window agency for private players
2. 100% FDI allowance in satellite manufacturing and launch services
3. Liberalised geospatial data policy

4. Upcoming Indian Space Policy 2023 and Space Activities Act
5. ₹1 lakh crore Anusandhan National Research Foundation fund for deep-tech R&D

"Earlier, space was considered only a government domain. Today, private companies are building rockets, satellites, and even planning space stations," PM Modi noted.

A STRATEGIC ASSET FOR THE 21ST-CENTURY INDIA

The Prime Minister underlined how space has become indispensable:

1. Communication: 5G/6G backhaul, direct-to-mobile broadband
2. Agriculture: Precision farming and crop insurance
3. Disaster management: Real-time flood and cyclone monitoring
4. Urban planning: Smart cities and infrastructure mapping
5. National security: Border surveillance and secure military communications

With global demand for small-satellite launches exploding (over 18,000 smallsats expected to be launched this decade), India's cost advantage and proven reliability give it a unique edge.

THE NEXT FRONTIER: PRIVATE NUCLEAR AND DEEP-TECH PUSH

In a surprise announcement, PM Modi revealed that the government will soon open India's nuclear energy sector to private participation, especially for Small Modular Reactors (SMRs) and advanced nuclear technologies – a move that could mirror the space sector's liberalization.

He also highlighted continuing initiatives:

1. ₹1 lakh crore research fund over five years
2. 10,000+ Atal Tinkering Labs in schools
3. Quantum Mission, Semiconductor Mission, and National Deep Tech Startup Policy

A NEW GENERATION TAKES FLIGHT

Perhaps the most inspiring part of today's event was the presence of dozens of Gen-Z engineers – many in their mid-20s – who left high-paying jobs at global tech giants to build rockets in Hyderabad and Bengaluru.

As one Skyroot engineer told reporters after the ceremony, "We grew up watching ISRO's PSLV launches on Doordarshan. Today, we are building the next chapter ourselves."

THE ROAD TO 2030 AND BEYOND

With Vikram-I poised for its debut flight, Agnikul's Agnibaan already in advanced testing, and several Indian startups booking rides on foreign rockets while preparing their own, India is sprinting toward a future where multiple private orbital launch vehicles fly every year.

CONCLUSION

The inauguration of Skyroot's Infinity Campus and the unveiling of Vikram-I signal a new era in India's private space sector. With strong government reforms, youth-driven innovation, and growing private investment, India is positioning itself as a global hub for space technology, combining strategic, economic, and technological advantages.

Prelims question:

Q. Who are the founders of Skyroot Aerospace?

(a) Naga Bharath Daka & Pawan Kumar Chandana

(b) K. Radhakrishnan & A. S. Kiran Kumar

(c) Satish Dhawan & Vikram Sarabhai

(d) Rakesh Sharma & Gaganyaan Team

Answer: A

Mains Question:

Q. Discuss the significance of India's private space sector with reference to Skyroot

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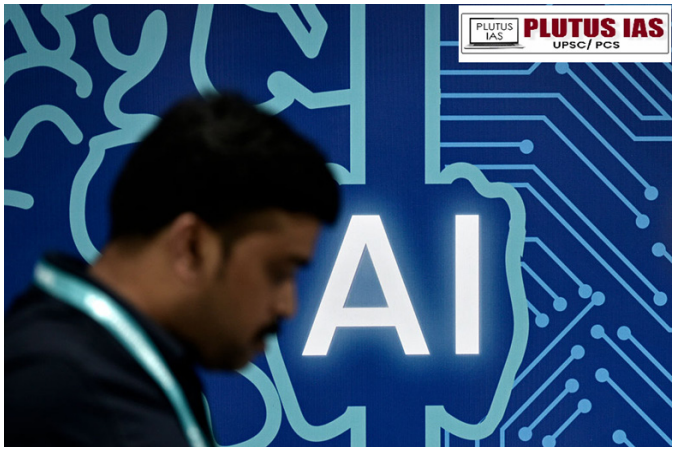
Aerospace and Vikram-I. How have government reforms, youth innovation, and private investments contributed to building India's global space competitiveness?

(250 words)

INDIA AI PRE-SUMMIT 2025: STRENGTHENING DIGITAL GOVERNANCE AND INCLUSION

WHY IN THE NEWS?

India has intensified its focus on building a responsible, scalable and inclusive Artificial Intelligence ecosystem by hosting the IndiaAI Regional Pre-Summit in Gandhinagar, Gujarat. Organised by the IndiaAI Mission under the Ministry of Electronics and Information Technology (MeitY), in collaboration with the Government of Gujarat and IIT Gandhinagar, the conference is a key preparatory milestone ahead of the India-AI Impact Summit 2026, scheduled in New Delhi from 15–20 February 2026.



THEME OF THE PRE-SUMMIT

"AI for Good Governance: Empowering India's Digital Future"

The theme underscores India's commitment to:

strengthening governance systems through AI,

improving public service delivery,

enhancing digital inclusion across regions, and

ensuring AI development remains rooted in ethics, accountability and public interest.

KEY OBJECTIVES AND FOCUS AREAS OF AI INITIATIVES

Focus Area	Key Points / Details
1. AI for Good Governance	• Modernises public administration through data-driven decision-making • Automated service delivery • Predictive governance tools • Fraud detection systems • AI-enabled citizen grievance redressal • Better monitoring of government schemes • Goal: Improve efficiency, transparency, and responsiveness
2. AI for Economic and Social Development	Agriculture: crop monitoring, precision farming, weather prediction Healthcare: AI diagnostics, telemedicine, triaging, disease surveillance Rural Development: smart planning, village-level data analytics, digital access Fintech: secure transactions, fraud analytics, credit scoring Industry: automation, supply chain optimisation Focus: Scalable, indigenous AI solutions suited to India's needs
3. Multilingual AI & Digital Inclusion	• Focus on Bhashini, India's AI language platform • Removes linguistic barriers in digital services • Supports e-governance access in local languages • Promotes inclusion for rural/ marginal communities • Helps startups with open datasets and tools • Goal: Realise India's vision of "AI for All"

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HIGH-LEVEL PARTICIPATION

The inauguration was attended by top dignitaries, including:

1. Gujarat Chief Minister Bhupendrabhai Patel
2. Deputy Chief Minister Harsh Rameshbhai Sanghavi
3. Science & Technology Minister Arjunbhai Modhwadia
4. Chief Secretary Manoj Kumar Das
5. MeitY Additional Secretary & NIC DG Abhishek Singh
6. DST Gujarat Secretary Ponugumatla Bharathi

KNOWLEDGE SESSIONS BY GLOBAL EXPERTS

Leading organisations such as:

1. MeitY
2. Bhashini
3. Google Cloud
4. Microsoft
5. IBM Research
6. NVIDIA
7. Oracle
8. AWS

Delivered keynotes and panel discussions on:

1. generative AI applications,
2. AI in public administration,
3. secure cloud-based AI systems,
4. digital public infrastructure,
5. ethical AI frameworks, and
6. the future of AI regulation.

EXPERIENCE ZONE: SHOWCASING INDIA'S AI INNOVATION

The Pre-Summit featured an Experience Zone curated by IndiaAI and the Department of Science & Technology, Gujarat, demonstrating real-world AI solutions in:

1. governance and citizen services
2. healthcare screening tools
3. agricultural analytics systems
4. industrial automation and predictive maintenance

This highlighted India's growing capabilities in deploying home-grown AI technologies at scale.

SIGNIFICANCEOFTHEGANDHINAGAR PRE-SUMMIT

1. **Identifying National AI Priorities:** Mapping sector-wise needs (health, agriculture, education, governance). Aligning national goals with emerging global AI standards.
2. **Building Consensus on Ethical & Responsible AI:** Developing shared principles on safety, transparency, and fairness. Addressing concerns on data protection, bias, and accountability.
3. **Strengthening Government – Industry – Academia Collaboration:** Creating joint research and innovation pathways. Encouraging startups and industry participation in public-sector AI projects.
4. **Mainstreaming AI in Public Services & Rural Development:** Leveraging AI for Gram Panchayat-level digital governanc. Enhancing delivery of welfare schemes, agriculture advisories, and skilling.
5. **Preparing Policy Frameworks for the India-AI Impact Summit 2026:** Drafting actionable recommendations for national AI architecture. Setting measurable milestones for implementation and monitoring.

CONCLUSION

The IndiaAI Pre-Summit in Gandhinagar marks a major step toward shaping India's AI-driven governance and development model. With its focus on good governance, multilingual inclusion, sectoral transformation and public-interest AI, the Pre-Summit reinforces India's commitment to building a responsible, equitable and future-ready AI ecosystem. As the country prepares for the India-AI Impact Summit 2026, such regional events create strong foundations for scaling AI frameworks that are ethical, trustworthy and aligned with national priorities.

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Prelims question:

Q. Consider the following statements regarding the IndiaAI Regional Pre-Summit, Gandhinagar:

1. It was organised by the IndiaAI Mission under MeitY in collaboration with the Government of Gujarat.
2. The Pre-Summit theme was "AI for Inclusive Agriculture and Healthcare".
3. It acts as a preparatory platform for the India-AI Impact Summit 2026.

Which of the statements given above is/are correct?

(a) 1 only (b) 1 and 3 only

(c) 2 and 3 only (d) 1, 2 and 3

Answer: B

Mains Question:

Q. "The IndiaAI Regional Pre-Summit in Gandhinagar reflects India's vision of leveraging Artificial Intelligence for good governance, digital inclusion and public service transformation." Discuss. (250 words)

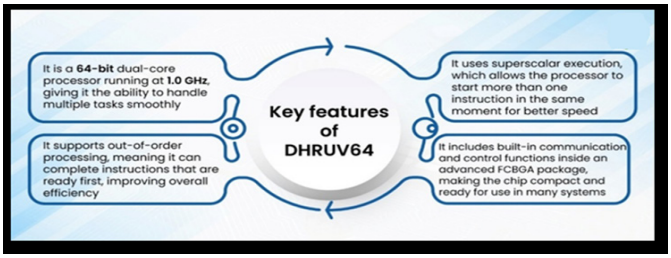
BUILDING TRUSTED SILICON: DHRUV64 AND INDIA'S SEMICONDUCTOR ROADMAP

WHY IN THE NEWS?

India has reached a major milestone in its semiconductor and strategic technology ecosystem with the launch of DHRUV64, a fully indigenous 64-bit microprocessor developed by the Centre for Development of Advanced Computing (C-DAC) under the Microprocessor Development Programme (MDP). The development of DHRUV64 marks a significant step towards self-reliance in advanced chip design, providing India with a secure, homegrown processor capable of supporting both strategic and commercial applications, and strengthening the country's ambitions under Atmanirbhar Bharat in the semiconductor domain.

Did you know?Microprocessors are the brains of modern electronic devices such as mobiles, computers, automobiles, medical equipment, defence systems and satellites. For India, building and owning such core technologies is important to reduce reliance on foreign suppliers and support the growing electronics and digital economy.

DHRUV64 is built with modern architectural features. It delivers higher efficiency, enhanced multitasking capability and improved reliability. Its advanced design enables seamless integration with a wide range of external hardware systems. The processor's modern fabrication leverages technologies used for high-performance chips. This makes DHRUV64 suitable for sectors such as 5G infrastructure, automotive systems, consumer electronics, industrial automation and the Internet of Things (IoT).



STRATEGIC SIGNIFICANCE OF DHRUV64 FOR INDIA

DHRUV64 represents a major milestone in India's pursuit of technological sovereignty and self-reliance in semiconductors. It significantly strengthens India's indigenous capability in advanced 64-bit processor design, a critical component of modern digital infrastructure.

By supporting core digital systems—ranging from computing platforms to strategic and industrial applications—DHRUV64 helps reduce India's long-term dependence on imported microprocessors, which are vulnerable to supply chain disruptions and geopolitical pressures. This aligns directly with the objectives of Atmanirbhar Bharat and the India Semiconductor Mission.

India consumes nearly 20% of the world's microprocessors, yet remains heavily import-dependent. The development of DHRUV64 provides India's vast talent pool—start-ups, academia, and R&D institutions—with access to a fully modern, indigenous processor platform, catalysing the growth of a domestic semiconductor design and innovation ecosystem.

Even prior to DHRUV64, India had initiated efforts to build an indigenous processor landscape:

- **SHAKTI (2018, IIT Madras):** Designed for strategic, defence, and space applications
- **AJIT (2018, IIT Bombay):** Focused on industrial and robotics applications
- **VIKRAM (2025, ISRO–SCL):** Developed for space missions, capable of withstanding extreme conditions
- **THEJAS64 (2025, C-DAC):** Targeted at industrial automation

The addition of DHRUV64 strengthens this continuum and signals India's transition from isolated processor projects to a coherent processor ecosystem. Collectively, these indigenous processors enhance national security, promote trusted hardware, enable innovation, and position India as an emerging player in the global semiconductor value chain

DHRUV64'S IMPACT ON INDIA'S R&D AND INNOVATION

- DHRUV64 provides a homegrown microprocessor technology designed for startups, academia, and industry to build, test, and scale indigenous computing products without relying on foreign processors.
- DHRUV64 supports prototype development for new system architectures at lower cost.
- India already has 20% of the world's chip design engineers. DHRUV64 further helps in building a strong pipeline of skilled semiconductor chip professionals.
- The success of DHRUV64 accelerates the roadmap for Dhanush and Dhanush+ processors. They are now under development phase.

ROLLOUT OF DHRUV64 AND INDIA'S DIGITAL INDIA RISC-V (DIR-V) PROGRESS

The Government of India launched the Digital India RISC-V (DIR-V) Programme to advance the vision of Aatmanirbhar Bharat. It aims to establish India as a global hub for Electronics System Design and Manufacturing (ESDM). The initiative develops a complete portfolio of RISC-V–based microprocessors. These processors will power applications across industry, strategic sectors, and consumer technologies.



RISC-V OPEN ARCHITECTURE AND ITS SIGNIFICANCE FOR INDIA

RISC-V is an open architecture that provides a set of instructions for chip design. It involves no licence costs, which allows wider adoption through shared innovation by industry, start-ups and research institutions.

It helps build a complete portfolio of indigenous microprocessors under the DIR-V Programme for use in various sectors.

It encourages shared innovation by providing common tools and standards for developers, improving collaboration across research organisations and companies.

DHRUV64: DRIVING INDIA'S INDIGENOUS CHIP ROADMAP

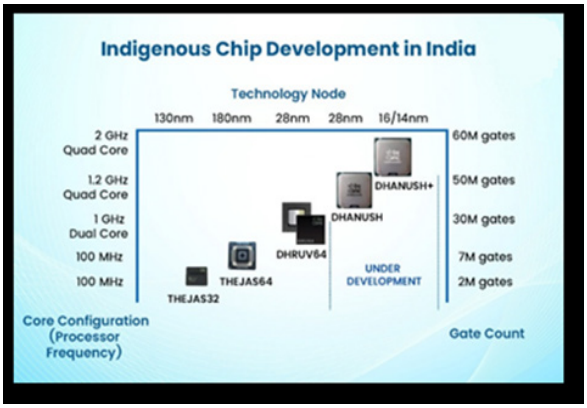
The launch of DHRUV64 marks a significant step in strengthening India's self-reliant microprocessor ecosystem. Built on an open-source instruction set architecture, DHRUV64 eliminates recurring licence

costs, enhances design flexibility, and enables long-term, scalable deployment across diverse platforms, including strategic, industrial and digital infrastructure applications.

DHRUV64 is the third chip fabricated under the DIR-V (Digital India RISC-V) Programme, which aims to enable the creation of future-ready indigenous microprocessors and reduce India's dependence on imported chips.

Progress under the DIR-V Programme includes:

1. **THEJAS32:** the first chip, fabricated at the Silterra facility, Malaysia, marking India's initial step in indigenous RISC-V processor realisation.
2. **THEJAS64:** the second chip, manufactured domestically at Semiconductor Laboratory (SCL), Mohali, reflecting growing in-country fabrication capability.
3. **DHRUV64:** the latest addition, showcasing advances in design maturity, performance and ecosystem readiness.
4. **DHANUSH64 and DHANUSH64+ (SoC variants):** currently under development, aimed at deeper system-level integration.



The rollout of DHRUV64 highlights India's increasing capability across the semiconductor value chain—from design to fabrication and system integration. Continued progress under the DIR-V initiative reinforces India's commitment to building a robust, trusted and globally competitive microprocessor ecosystem, aligned with Atmanirbhar Bharat and the India Semiconductor Mission.

INSTITUTIONAL ECOSYSTEM DRIVING PROCESSOR DEVELOPMENT

India's efforts to build a strong semiconductor ecosystem are supported by a coordinated institutional framework led by key national agencies. These institutions provide policy direction and programme support that enable the design, and development of indigenous processors.

- **Ministry of Electronics and Information Technology (MeitY):** MeitY plays a central role in advancing India's processor and semiconductor initiatives. It guides national programmes through policy support, funding and long-term planning under schemes; such as the Microprocessor Development Programme, DIR-V, C2S and the India Semiconductor Mission. These measures have strengthened the country's design ecosystem and enabled steady progress in indigenous processor development.
- **C-DAC:** C-DAC leads the design of India's indigenous processors. It creates processor Intellectual Properties (IPs), System-on-Chips (SoCs), development boards and related tools under MeitY's flagship programmes, supporting the growth of a complete domestic processor ecosystem. The organisation is now advancing work on the next processors in the RISC-V roadmap, Dhanush and Dhanush+. These upcoming processors are expected to strengthen India's homegrown RISC-V ecosystem. It expands the range of indigenous options available for strategic, and commercial use.

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KEY NATIONAL PROGRAMMES SUPPORTING INDIGENOUS CHIP DESIGN

Programme	Launch Year	Nodal Ministry / Agency	Key Objectives	Key Achievements / Features
India Semiconductor Mission (ISM)	2021	MeitY	Attract large-scale semiconductor investments; build fab, ATMP and design ecosystem	10 projects approved across 6 states; investment commitment of ₹1.60 lakh crore (as of 2025); global industry partnerships
Digital India RISC-V (DIR-V) Programme	2022	MeitY	Develop indigenous processors using open-source RISC-V architecture; promote collaborative design ecosystem	Enabled THEJAS, DHRUV and DHANUSH series; reduced licensing costs; strengthened indigenous processor roadmap
Chips to Startup (C2S) Programme	2022	MeitY	Build skilled manpower and fabless chip design ecosystem	Implemented across 113 institutions; ₹250 crore outlay (5 years); target of 85,000 industry-ready professionals
Design Linked Incentive (DLI) Scheme	2021	MeitY	Provide financial and infrastructure support for semiconductor design	Incentives for ICs, Chipsets, SoCs, IP cores and systems; supports design-to-deployment cycle over 5 years
Indian Nanoelectronics Users Programme – Idea to Innovation (INUP-i2i)	—	MeitY	Provide access to national nanofabrication facilities; hands-on training	49 familiarisation workshops; 42 hands-on trainings; 36 industrial trainings; 10 hackathons; 8,000+ trained; 348 short-term & 220 mid-term R&D projects

CONCLUSION

India's progress in indigenous processor development reflects a strong commitment to Aatmanirbhar Bharat in the semiconductor sector. DHRUV 64 powered and supported by national programmes such as DIR-V, C2S, ISM, DLI and INUP-i2i, the processor showcases the country's growing capability to design, develop and prototype advanced processors. With coordinated efforts across MeitY, C-DAC, academic institutions and industry, India is building the talent, research strength and infrastructure needed for long-term leadership in advanced technologies. The progress from THEJAS32 to DHRUV64, and the ongoing development of Dhanush and Dhanush+, illustrates a confident national pathway toward indigenous processor innovation and technological self-reliance.

Prelims question:

Q. With reference to DHRUV64 microprocessor and India's indigenous chip development initiatives, consider the following statements:

1. DHRUV64 is a fully indigenous 64-bit micro-processor developed by C-DAC under the Microprocessor Development Programme.
2. DHRUV64 is built on a proprietary architec-ture that requires recurring licence fees.

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3. The Digital India RISC-V (DIR-V) Programme aims to develop a complete portfolio of indigenous RISC-V–based processors.
4. THEJAS64 was fabricated domestically at the Semiconductor Laboratory (SCL), Mohali.

Which of the statements given above are correct?

(a) 1, 3 and 4 only (b) 1 and 2 only
(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. Discuss the strategic significance of the DHRUV64 microprocessor in strengthening India's indigenous semiconductor ecosystem. How do national programmes such as DIR-V and the India Semiconductor Mission support this objective? (250 words)





INDIA–NEW ZEALAND FTA: EXPANDING TRADE HORIZONS WITH STRATEGIC CAUTION

WHY IN THE NEWS?



India and New Zealand are in the news after concluding a Free Trade Agreement (FTA) following fast-paced negotiations. The announcement was made at the Prime Ministerial level, signalling strong political backing. The deal is significant as it is one of India's quickest FTAs with a developed country and forms part of India's broader strategy of selective, balanced trade agreements after exiting RCEP. The FTA has also attracted attention due to domestic political debate in New Zealand, especially over limited market access for its dairy sector.

BACKGROUND OF INDIA–NEW ZEALAND ECONOMIC RELATIONS

Complementary Economies: India's strengths in services, skilled manpower and manufacturing complement New Zealand's agricultural exports, food processing and natural resource-based sectors.

Limited Trade Volume: Despite long-standing diplomatic ties, bilateral trade has remained relatively low, highlighting under-utilised economic potential.

Earlier Negotiation Attempts: Previous FTA talks stalled mainly due to India's concerns over dairy imports and farmer livelihoods, which continue to shape negotiations.

Strategic Indo-Pacific Context: Both countries share an interest in a free, open and rules-based Indo-Pacific, making economic cooperation strategically relevant beyond trade.

Diaspora and Education Links: Indian students and professionals form a significant presence in New Zealand, strengthening people-to-people ties and services trade.

KEY FEATURES OF THE INDIA–NEW ZEALAND FTA

Feature	Expanded Explanation (UPSC-Oriented)
Tariff Liberalisation	New Zealand has committed to providing zero-duty access to a majority of Indian exports, enhancing India's competitiveness in the Pacific market. India, in return, has agreed to phased tariff reductions on selected industrial and agricultural products, ensuring a calibrated opening of markets while allowing domestic industries time to adjust. This reflects India's strategy of asymmetric liberalisation in FTAs.

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Protection of Sensitive Sectors	India has excluded sensitive sectors, particularly dairy and select agricultural commodities, from tariff concessions. This safeguards the interests of small and marginal farmers, protects rural livelihoods, and prevents market distortions arising from New Zealand's highly subsidised and efficient dairy sector. The approach aligns with India's food security and socio-economic priorities.
Boost to Labour-Intensive Exports	The FTA is expected to significantly benefit labour-intensive sectors such as textiles, apparel, leather goods, engineering products and marine exports. Improved market access can lead to employment generation, especially for MSMEs, women workers and coastal communities, supporting India's objectives of inclusive growth and export-led development.
Services and Mobility Provisions	Enhanced market access for services, including IT, education, healthcare and professional services, strengthens India's comparative advantage. Provisions facilitating movement of professionals and skilled workers improve opportunities for Indian talent abroad while deepening people-to-people ties. This complements India's emphasis on Mode-4 (movement of natural persons) in trade negotiations.
Investment Cooperation	The agreement promotes bilateral investment flows, encouraging collaboration in infrastructure, renewable energy, agri-technology and manufacturing. It facilitates technology transfer, skill development and innovation, supporting initiatives like Make in India, Digital India, and supply chain diversification in the Indo-Pacific region.

SIGNIFICANCE FOR INDIA

- **Export Diversification:** The FTA enables Indian exporters to reduce over-reliance on traditional markets such as the US and EU by accessing New Zealand, a high-income and rules-based economy. According to the Commerce Ministry's Foreign Trade Policy 2023, diversification into developed markets enhances export resilience against global demand shocks. Sectors like pharmaceuticals, engineering goods and textiles can use New Zealand as a gateway to the wider Pacific region.
- **Employment Generation:** Labour-intensive sectors such as textiles, apparel, leather and marine products are expected to benefit from improved market access. The NITI Aayog and ILO reports on employment highlight that export-oriented growth has a strong employment multiplier in India, especially for semi-skilled workers. Increased exports under the FTA can thus translate into job creation, particularly in MSME-dominated clusters.
- **Strengthening MSMEs:** Simplified tariff schedules, transparent rules of origin and trade facilitation provisions can reduce compliance costs for MSMEs. As noted in the MSME Ministry Annual Report, limited access to foreign markets is a key constraint for small firms. The FTA can help MSMEs integrate into cross-border trade by providing predictable market access and encouraging participation in e-commerce-enabled exports.
- **Supply Chain Integration:** The agreement aligns with India's strategy to integrate into resilient global value chains, as emphasised in the Economic Survey. New Zealand's strengths in agri-technology, food processing and logistics can complement India's manufacturing and services base. Such integration supports India's "China-plus-one" opportunity by offering trusted supply chain partnerships in the Indo-Pacific.
- **Strategic Economic Diplomacy:** Beyond trade, the FTA enhances India's image as a predictable and pragmatic economic partner. It complements initiatives like the Indo-Pacific

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Economic Framework (IPEF) and reinforces India's Act East and Indo-Pacific strategies. By engaging constructively with a developed economy, India strengthens its negotiating credibility in future FTAs with larger partners such as the EU and UK.

CHALLENGES AND CONCERNS

- Agricultural Sensitivities: Agriculture remains a politically sensitive sector in India, as highlighted in the National Commission on Farmers, with fears that import competition could affect small and marginal farmers, food security, and rural livelihoods.
- Domestic Political Opposition in New Zealand: In New Zealand, farmer lobbies and domestic political groups have expressed concerns over market access concessions, which could delay ratification or dilute commitments, as seen in past trade negotiations involving agricultural exports.
- Asymmetric Gains Debate: Past assessments such as the NITI Aayog review of FTAs indicate that benefits often accrue disproportionately to services and import-intensive sectors, raising concerns that manufacturing and MSMEs may gain unevenly.
- Implementation Capacity: The CAG and Economic Survey have noted India's low FTA utilisation rates, largely due to limited awareness among exporters, complex rules of origin, and inadequate institutional support at the ground level.
- Non-Tariff Barriers: Stringent sanitary, phytosanitary and technical standards in developed economies like New Zealand can act as de facto trade barriers, particularly affecting India's agri-products and MSME exports despite tariff concessions.

STRATEGIC AND GEOPOLITICAL IMPLICATIONS

Dimension	Expanded Explanation (One-liners)
Indo-Pacific Economic Engagement	The FTA deepens India's economic footprint in the Indo-Pacific, complementing its Act East Policy and aligning with the region's emphasis on resilient, rules-based economic order.
Alternative to Mega Trade Blocs	By opting for a bilateral FTA instead of joining large blocs like RCEP, India reinforces its strategy of selective integration that safeguards domestic interests while expanding market access.
Trust-Based Partnerships	The agreement underscores India's preference for economically open, politically stable, and like-minded democracies, strengthening long-term strategic trust beyond transactional trade ties.
Soft Power Expansion	Improved access in services, education, and professional mobility enhances India's people-to-people linkages, reinforcing its image as a knowledge-driven and service-oriented economy.
Balancing Openness and Protection	The FTA reflects India's calibrated globalisation model—opening up competitive sectors while protecting sensitive areas like agriculture and dairy to maintain socio-economic stability.

CONCLUSION

The India–New Zealand FTA marks a significant step in India's evolving trade strategy, balancing openness with domestic safeguards. By promoting exports, investment and strategic partnerships while protecting sensitive sectors, the agreement reflects pragmatic economic diplomacy. Its success will ultimately depend on effective implementation, stakeholder awareness and sustained political commitment.

Prelims question:

Q. Why has the India–New Zealand Free Trade Agreement (FTA) been in the news recently?

(a) It was suspended due to trade disputes

(b) It was concluded after fast-paced negotiations

(c) It replaced India's participation in RCEP

(d) It focuses only on services trade

Answer: B

Mains Question:

Q. Why has the India–New Zealand Free Trade Agreement gained significance in India's recent trade diplomacy?

INDIA–JORDAN RELATIONS: 75 YEARS OF TRUST, COOPERATION AND STRATEGIC CONVERGENCE

WHY IN THE NEWS?

India and the Hashemite Kingdom of Jordan are commemorating 75 years of diplomatic relations (1950–2025), reflecting a mature, stable and multi-dimensional bilateral partnership. Anchored in mutual trust, political understanding and shared regional concerns, India–Jordan relations have steadily expanded across political, strategic, economic, developmental and people-centric dimensions.



BACKGROUND: INDIA–JORDAN RELATIONS

India and Jordan established diplomatic relations in 1950. Over the decades, the relationship has evolved into a stable, trust-based partnership, anchored in shared values of moderation, dialogue and respect for international law. Jordan occupies a strategically significant position in West Asia, making it an important partner for India's regional outreach.

POLITICAL & DIPLOMATIC DIMENSION

Aspect	Details
Establishment of Relations	India and Jordan established diplomatic relations in 1950, laying the foundation for long-term political engagement.
Nature of Relationship	Characterised by consistent political dialogue, mutual trust, and convergence on regional and global issues, especially in West Asia.
Shared Diplomatic Principles	Both countries advocate dialogue and moderation, peaceful resolution of conflicts, and respect for international law.
Regional Convergence	Strong alignment on regional stability in West Asia and countering extremism through political solutions.
Israel–Palestine Issue	India and Jordan support a negotiated two-state solution, with Israel and Palestine coexisting peacefully.
High-Level Exchanges	Regular high-level visits and diplomatic consultations have imparted momentum to bilateral ties.
King Abdullah II's Visits	King Abdullah II has visited India multiple times, including a State Visit in 2018, which revitalised cooperation across sectors.
Prime Ministerial Visit (2025)	PM Narendra Modi's visit to Jordan (15–16 December 2025) will be the first full bilateral visit by an Indian PM in nearly 40 years.

75th Anniversary Significance	The 2025 visit coincides with 75 years of diplomatic relations (1950–2025), marking a historic milestone.
Future Outlook	The visit is expected to chart a future roadmap for deepened political, strategic, and economic cooperation.

STRATEGIC & SECURITY DIMENSION

1. **Centrality of Strategic Cooperation:** Strategic and security cooperation forms a core pillar of India–Jordan relations. It has gained importance amid regional instability, conflicts, and security volatility in West Asia.
2. **Shared Threat Perception:** Both countries face concerns related to terrorism, radicalisation, and extremism. There is a common understanding of the spillover effects of regional conflicts on internal security.
3. **Jordan's Stand on Terrorism:** Jordan has unequivocally condemned terrorism in all its forms and manifestations.It has consistently expressed strong diplomatic and moral support for India's counter-terrorism efforts.
4. **Counter-Terrorism Cooperation:** India and Jordan emphasise information sharing, capacity building, and coordinated responses to security threats. Cooperation focuses on preventing radicalisation and violent extremism, especially in the regional context.
5. **Multilateral and International Coordination:** Both countries coordinate within multilateral, regional, and international security forums. They support collective action to address terrorism and transnational security challenges.
6. **Strategic Significance of Convergence:** This security convergence strengthens India's strategic outreach in the Arab world. It reinforces Jordan's role as a moderate, stabilising force and credible security partner in West Asia.

ECONOMIC AND TRADE RELATIONS (INDIA–JORDAN)

1. **Major Trading Partnership:** India is Jordan's third-largest trading partner, with bilateral trade valued at ~USD 2.8 billion, reflecting a stable and diversified commercial relationship.
2. **Strategic Fertiliser Linkages:** Jordan is a critical supplier of phosphates and potash to India, strengthening India's fertiliser security and supporting its food security and agricultural sustainability.
3. **Flagship Industrial Cooperation – JIFCO:** The Jordan India Fertilizer Company (JIFCO), operational since 2015, represents a successful joint venture between IFFCO and Jordan Phosphates Mines Company, symbolising long-term resource-based cooperation.
4. **Supply Chain Resilience:** Jordan's mineral exports help India reduce dependence on a few global suppliers, enhancing resilience amid global fertiliser price volatility and geopolitical disruptions.
5. **Scope for Trade Facilitation Reforms:** Ongoing discussions to review the Double Taxation Avoidance Agreement (DTAA) aim to improve investor confidence, ease taxation barriers, and stimulate two-way trade and capital flows.
6. **Gateway to West Asia:** Jordan serves as a stable economic partner in a volatile region, complementing India's broader West Asia engagement beyond hydrocarbons.

INVESTMENT AND INDUSTRIAL COOPERATION

1. **Strong Indian Investment Presence:** Indian companies have made significant investments in Jordan's manufacturing sector, particularly in export-oriented industries.
2. **Garment Manufacturing Hub:** Over 15 garment manufacturing units, owned by non-resident Indians, operate in Jordan's Qualified Industrial Zones (QIZs).
3. **Export-Led Industrial Growth:** These units primarily export to the United States, leveraging QIZ trade preferences and contributing to Jordan's export-driven industrialisation.
4. **Substantial Capital Commitment:** Indian garment investments amount to nearly USD

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500 million, highlighting India's growing role as a source of productive capital in West Asia.

5. **Employment and Skill Generation:** Indian-owned units generate large-scale employment, supporting Jordan's socio-economic stability while fostering skill development in manufacturing.

6. **Diversification of India's West Asia Engagement:** Reflects India's expanding economic footprint beyond energy, strengthening people-centric, industrial and value-chain-based cooperation in the region.

DEVELOPMENT PARTNERSHIP, EDUCATION AND CULTURE

1. **Focus on Capacity Building:** India's development partnership with Jordan prioritises human resource development, skill enhancement and institutional capacity building, reflecting India's soft-power approach.

2. **ITEC Training Support:** During 2024–25, Jordan benefited from 37 civilian ITEC slots, covering governance, IT, public administration and technical skills.

3. **Executive Capacity Enhancement:** An additional 4 Executive ITEC programme slots were allocated, aimed at senior officials to strengthen policy formulation and administrative efficiency.

4. **Educational Scholarships under ICCR:** 5 ICCR scholarships facilitate Jordanian students' access to Indian higher education, promoting long-term academic and cultural engagement.

5. **Cultural Diplomacy and Exchanges:** Cultural and educational exchanges enhance mutual understanding, civilisational dialogue and institutional linkages, reinforcing people-centric diplomacy.

6. **Sustainable Partnership Model:** Emphasis on knowledge sharing rather than aid reflects India's development partnership model based on mutual respect and demand-driven cooperation.

PEOPLE-TO-PEOPLE TIES AND DIASPORA

1. **Vibrant Indian Diaspora Presence:** Jordan hosts a sizeable Indian diaspora, employed across garments, construction, manufacturing and service sectors.

2. **Economic Contribution:** Indian workers contribute significantly to Jordan's industrial productivity, particularly in export-oriented garment manufacturing.

3. **Bridge Between Societies:** The diaspora acts as a cultural, economic and social bridge, strengthening trust and familiarity between the two nations.

4. **Growing Mobility and Connectivity:** Improved air connectivity has facilitated greater movement of tourists, professionals, students and business delegations.

5. **Visa Facilitation Measures:** Streamlined visa procedures have boosted tourism, academic collaboration and commercial engagement.

6. **People-Centric Bilateral Relations:** Strong people-to-people ties lend depth, resilience and continuity to India–Jordan relations beyond formal diplomacy.

STRATEGIC SIGNIFICANCE FOR INDIA

1. **Diversification of West Asia Policy:** India–Jordan ties strengthen India's West Asia engagement beyond energy security, encompassing trade, development and security cooperation.

2. **Counter - Terrorism Convergence:** Jordan's consistent opposition to extremism supports India's counter-terrorism narrative in the Arab world.

3. **Fertiliser and Food Security:** Stable access to phosphates and potash ensures India's fertiliser supply chains and reinforces national food security.

4. **Regional Stability Partner:** Jordan's role as a moderate and stabilising force enhances India's

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strategic outreach in a volatile geopolitical landscape.

5. **Strategic Depth in West Asia:** Strengthens India's presence in a geopolitically sensitive region at the crossroads of Asia, Africa and Europe.

6. **Support for India's Global Aspirations:** Deepening ties with Jordan complements India's vision of being a reliable development partner and net security contributor.

WAY FORWARD FOR INDIA–JORDAN RELATIONS

1. **Deepen Strategic and Security Dialogue:** Institutionalise regular consultations on regional security, counter-terrorism, radicalisation and intelligence cooperation, leveraging Jordan's role as a stabilising force in West Asia.

2. **Diversify Economic Engagement:** Expand cooperation beyond fertilisers into renewable energy (solar, green hydrogen), digital technologies, fintech and startups, aligning with Jordan's economic diversification goals and India's digital strengths.

3. **Fast-Track Trade Facilitation Reforms:** Expedite the review of the Double Taxation Avoidance Agreement (DTAA) and strengthen regulatory cooperation to enhance investor confidence and ease of doing business.

4. **Strengthen Health and Education Partnerships:** Scale up collaboration in affordable healthcare, pharmaceuticals, telemedicine and medical training, along with higher education and skill development using India's cost-effective models.

5. **Enhance People-to-People Connectivity:** Promote tourism, academic exchanges, skill mobility and cultural interactions, supported by improved air connectivity and visa facilitation.

6. **Institutionalise Development Cooperation:** Deepen ITEC, ICCR and capacity-building programmes to ensure sustainable, demand-driven development partnerships aligned with Jordan's national priorities.

CONCLUSION

As India and Jordan commemorate 75 years of diplomatic relations, their partnership stands out as one of quiet consistency and strategic trust in West Asia. With the upcoming visit of Prime Minister Modi, bilateral relations are poised to enter a new phase of strategic, economic and people-centric cooperation, aligned with shared goals of peace, stability and sustainable development in the region.

Prelims question:

Q. With reference to India–Jordan relations, consider the following statements:

1. India and Jordan established diplomatic relations in 1950.
2. Jordan is India's largest trading partner in West Asia.
3. The Jordan India Fertilizer Company (JIFCO) is a joint venture involving IFFCO.
4. Jordan is a key supplier of phosphates and potash to India.

Which of the statements given above are correct?

(a) 1, 3 and 4 only (b) 1 and 2 only

(c) 2, 3 and 4 only

(d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. India–Jordan relations have evolved into a stable, multi-dimensional partnership over the last seven decades. Examine the political, strategic, economic and people-to-people dimensions of India–Jordan relations and highlight their significance for India's West Asia policy. (250 words)

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US MILITARY ACTION IN SYRIA: OPERATION HAWKEYE AND ITS IMPLICATIONS

WHY IN THE NEWS?

Strategic Objective	Explanation
Counter-Terrorism Goals	Operation Hawkeye aims to disrupt ISIS leadership, training bases, and logistical routes to prevent future attacks. It reflects a strategy of pre-emptive strikes against emerging terrorist threats.
Preventing ISIS Resurgence	The operation seeks to deny ISIS the space and resources required to reorganise and expand, highlighting the belief that sustained military pressure is essential to prevent revival.
Strategic Deterrence	Through targeted strikes, the US signals its willingness to act against non-state actors threatening regional security, while also reassuring regional allies of its commitment.
Assertion of US Influence	The operation reinforces continued US relevance in West Asia amid shifting regional alignments and the growing influence of rival powers.

IMPLICATIONS FOR REGIONAL STABILITY

- **Short-Term Security Impact:** In the immediate term, the operation may weaken ISIS operational capacity and disrupt planned attacks. However, such gains are often temporary in the absence of political solutions.
- **Risk of Retaliation:** Military actions increase the likelihood of retaliatory attacks by extremist groups, potentially destabilising neighbouring regions and escalating violence.
- **Impact on Regional Peace Efforts:** Unilateral strikes complicate diplomatic negotiations aimed at conflict resolution and post-war reconstruction in Syria.
- **Spillover Effects:** Prolonged instability contributes to refugee flows, arms proliferation and cross-border terrorism, affecting regional and global security.

INTERNATIONAL LAW AND ETHICAL DIMENSIONS

- **Violation of Sovereignty:** Military intervention without the consent of the Syrian government raises concerns regarding violation of state sovereignty under international law.
- **Legality under UN Charter:** Such actions challenge the principles of non-intervention and collective security enshrined in the UN Charter, raising questions about global governance norms.
- **Civilian Safety Concerns:** Airstrikes risk civilian casualties and damage to infrastructure, intensifying humanitarian crises in conflict-affected areas.
- **Ethical Dilemmas in Counter-Terrorism:** The operation highlights the ethical tension between national security imperatives and the responsibility to protect civilian lives and human rights.

WAY FORWARD

- **Strengthening Multilateral Cooperation:** Counter-terrorism efforts should be anchored in multilateral frameworks to enhance legitimacy, accountability and effectiveness.
- **Political Resolution of the Syrian Conflict:** Lasting peace requires inclusive political dialogue and reconciliation among Syrian stakeholders to address the root causes of instability.
- **Addressing Root Causes of Extremism:** Socio-economic deprivation, political exclusion and governance failures must be addressed to prevent radicalisation and extremist recruitment.
- **Emphasis on International Norms:** Respect for sovereignty, international law and humanitarian principles is essential for maintaining a rule-based global order.

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CONCLUSION

Operation Hawkeye underscores the continuing threat of terrorism in conflict-ridden regions like Syria despite earlier military victories. While targeted strikes may deliver immediate tactical benefits, sustainable peace in West Asia depends on political reconciliation, multilateral engagement and adherence to international norms, making the issue highly significant for UPSC GS-II and GS-III analysis.

Prelims question:

Q. Operation Hawkeye, seen recently in the news, is associated with which of the following objectives?

1. Countering ISIS operations in Syria
2. Supporting regime change in Syria
3. Protecting US allies in West Asia
4. Enforcing United Nations peacekeeping mandates

Select the correct answer using the code below:

(a) 1 only (b) 1 and 3 only
(c) 2 and 4 only (d) 1, 2 and 4

Answer: B

Mains Question:

Q. "Despite the territorial defeat of ISIS, counter-terrorism operations continue in Syria." In this context, critically examine the implications of Operation Hawkeye for regional stability and international law.

YEMEN CIVIL WAR ENTERS NEW PHASE AS SOUTHERN FORCES ADVANCE

WHY IN THE NEWS?

Yemen's long-running civil war has entered a new and more dangerous phase as rival factions intensify military clashes and shift territorial control. Recently, the UAE-backed Southern Transitional Council (STC) has made significant gains in southern Yemen, capturing key provinces and oil-rich areas, raising the possibility of a southern bid for independence and further fragmenting the country's political landscape. Meanwhile, the internationally recognised government faces diminishing authority and Saudi–UAE disagreements over Yemen policy have complicated efforts at a unified counter-insurgency strategy. The conflict's escalation has renewed humanitarian concerns, disrupted regional security, and attracted international condemnation, including from the United Nations, making Yemen a prominent current affairs issue.

YEMEN CIVIL WAR ENTERS NEW PHASE AS SOUTHERN FORCES ADVANCE



Yemen has been engulfed in civil war since 2014–15, when the Houthi movement seized the capital Sanaa and displaced the internationally recognised government. What began as a political power struggle has expanded into a multi-layered conflict involving regional powers, separatist factions, tribal interests, and humanitarian crises. As of 2025, the conflict has entered a new and dangerous phase, with the rise of the UAE-backed Southern Transitional Council (STC) and renewed factional clashes.

BACKGROUND OF THE CONFLICT

- **2014:** Houthis capture Sanaa.
- **2015:** Saudi-led coalition intervenes to restore government.
- **2018–22:** Stalemate persists; humanitarian situation worsens.
- **2022–24:** Fragile ceasefires fail to produce a political settlement.
- **2025:** STC's renewed offensive in southern Yemen reignites tensions.

KEY ACTORS IN THE CONFLICT

Actor	Territorial Control / Role	External Support	Objectives / Notes
Houthis (Ansar Allah)	Control northern Yemen including Sanaa	Iran	Seek political dominance and recognition as the legitimate government
Internationally Recognised Government / Presidential Leadership Council (PLC)	Limited control in southern & eastern Yemen	Saudi Arabia	Restore authority; weakened by internal divisions
Southern Transitional Council (STC)	Major presence in southern Yemen; expanded control in 2025	UAE	Advocates revival of independent South Yemen
Saudi Arabia (External Actor)	Supports PLC; secures Yemen–Saudi border	—	Contain Houthi influence; ensure regional stability
UAE (External Actor)	Supports STC militarily and politically	—	Secure ports, trade routes; influence southern Yemen politics
Iran (External Actor)	Backs the Houthis	—	Expand regional influence; counter Saudi–UAE bloc
UN & International NGOs	Mediation and humanitarian operations	Global community	Facilitate ceasefires; provide aid and conflict resolution mechanisms

CAUSES AND DRIVERS OF THE CURRENT ESCALATION

- **Power Fragmentation:** Competing authorities in the north (Houthis), south (STC), and internationally recognised government create a vacuum of unified leadership.
- **Regional Rivalries:** Saudi–UAE tensions have resurfaced as they back rival factions, weakening prospects for peace.
- **Quest for Economic Control:** Oil-rich provinces in the south and east have become strategic targets for both the government and the STC.
- **Ceasefire Failures:** Repeated inability to secure lasting ceasefires has allowed each faction to consolidate militarily.

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RECENT DEVELOPMENTS (2024–25)

a) STC Territorial Gains

- Captured major parts of Hadramaut and Mahra.
- Aimed at controlling ports, borders, and oil fields.
- Government forces retreat from several areas.

b) Rising Gulf Friction

- Saudi and UAE tensions deepen over control of Yemen's south.
- This undermines the unity of the anti-Houthi coalition.

c) Houthi Assertiveness

- Continued missile and drone capabilities.
- Clashes with government forces persist around Marib and Taiz.

d) UN Concerns

- Humanitarian agencies face operational restrictions.
- Protection of civilians remains a key issue.

HUMANITARIAN CRISIS (WORLD'S WORST)

- **Human Suffering:** Over 23 million in need of aid. Mass displacement, malnutrition, and disease outbreaks.
- **Economic Collapse:** Currency decline, salary arrears, and disrupted public services.
- **Food Insecurity:** Dependence on imports disrupted due to conflict. Risk of famine remains high.

REGIONAL AND GLOBAL IMPLICATIONS

- **Red Sea Security:** Proximity to the Bab-el-Mandeb Strait threatens global shipping routes.
- **Geopolitical Rivalries:** Iran–Saudi competition plays out through proxies. UAE's assertiveness reshapes Gulf politics.
- Terrorism Risks: Fragmentation allows AQAP and ISIS affiliates to exploit vacuums.
- Global Energy Markets: Instability threatens regional oil transit and production.

IMPACT ON INDIA

- **Diaspora and Evacuation Risks:** Large Indian community has been evacuated previously (Operation Raahat, 2015). Renewed violence keeps evacuation concerns alive.
- **Energy Security:** Red Sea instability affects India's trade routes and oil shipments.
- **Strategic Balancing:** India maintains ties with Saudi Arabia, UAE, and Iran — all engaged indirectly in Yemen.
- **Humanitarian Role:** India consistently supports UN aid and diplomatic initiatives.

CHALLENGES TO PEACE

1. **Deep Ideological and Political Divisions:** The major factions – Houthis, PLC, and STC – hold opposing ideological positions and competing claims to legitimacy, making consensus difficult.
2. **Conflicting Visions for Yemen's Future:** Different groups disagree on whether Yemen should remain unified or be partitioned into North and South, as demanded by the STC.
3. **Regional Power Rivalries:** Saudi Arabia, Iran, and the UAE back rival factions, turning Yemen into a battleground for regional influence and limiting chances of a unified peace effort.
4. **Weak State Institutions:** Years of conflict have eroded Yemen's governance structures, judiciary, and security forces, preventing effective implementation of peace agreements.
5. **Fragmentation of Armed Groups:** Multiple militias, tribal forces, and local commanders operate independently, making ceasefire enforcement extremely challenging.
6. **Lack of Inclusive Political Dialogue:** There is no credible, broad-based negotiation platform

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that includes all stakeholders, including women, youth, and tribal groups, limiting the scope for sustainable peace.

WAY FORWARD

1. **Inclusive Political Negotiations:** Dialogue must involve Houthis, government, STC, tribal factions, and women/youth representatives.
2. **Regional Consensus:** Saudi Arabia, UAE, and Iran must align minimally on de-escalation.
3. **Strengthening UN Mediation:** Enhanced mandate and pressure mechanisms for ceasefire enforcement.
4. **Humanitarian Corridors:** Guarantee safe passage for food, medicine, and UN personnel.
5. **Rebuilding Institutions:** Support for governance, judiciary, and local administrations to reduce power vacuums.
6. **International Support for Reconstruction:** Long-term assistance needed for infrastructure, economy, and social stabilisation.

CONCLUSION

Yemen's civil war has evolved from a two-party conflict into a fragmented power struggle with deep regional dimensions. The recent rise of the STC and worsening Saudi-UAE tensions threaten a new phase of instability. A durable peace requires inclusive negotiations, regional cooperation, and strong humanitarian commitments. Without coordinated international and regional effort, Yemen's crisis may deepen into permanent state fragmentation.

Prelims question:

Q. Consider the following pairs:

Actor	Supporting Country
1. Houthis	Iran
2. Southern Transitional Council (STC)	UAE
3. Presidential Leadership Council (PLC)	Saudi Arabia

Which of the pairs given above are correctly matched?

a) 1 and 2 only b) 2 and 3 only
c) 1, 2 and 3 d) None of the above

Answer: C

Mains Question

Q. Discuss the key actors involved in the Yemen Civil War and explain how their interests shape the conflict ? (250 words)

EXERCISE HARIMAU SHAKTI 2024–25: A STRATEGIC BOOST TO INDIA–MALAYSIA MILITARY PARTNERSHIP

WHY IN THE NEWS?

The joint military exercise Harimau Shakti 2024–25 between the Indian Army and the Malaysian Army has commenced at Bentong Camp, Malaysia (2–15 December 2024). A parallel engagement, the 5th edition of the drill, is also underway at the Mahajan Field Firing Range, Rajasthan (5–18 December 2024). Together, these exercises mark a significant broadening of defence cooperation between the two countries and signal an expanding horizon of operational readiness in sub-conventional and jungle warfare domains.



BACKGROUND AND EVOLUTION OF HARIMAU SHAKTI

1. Launched in 2012, Harimau Shakti is an annual bilateral military exercise.
2. Conducted alternately in India and Malaysia.
3. Focuses on enhancing counter-terrorism, jungle warfare, UN Peacekeeping (Chapter VII) operations, and tactical synergy.
4. The 2023 edition took place in Umroi Cantonment, Meghalaya.

The exercise forms a key pillar of the growing India–Malaysia defence relationship, supporting India's Act East Policy and Malaysia's commitment to regional stability under ASEAN frameworks.

HARIMAU SHAKTI 2024 – MALAYSIA EDITION (BENTONG CAMP)

Category	Details
Dates	2–15 December 2024
Location	Bentong Camp, Malaysia
Indian Contingent	Battalion of the Mahar Regiment
Terrain Focus	Dense tropical jungle operations

TWO-PHASE STRUCTURE

Phase	Focus Areas	Key Activities
Phase I – Cross-Training & Familiarisation	Interoperability, basic jungle skills, communication	• Joint lessons, demonstrations and tactical exchanges • Survival techniques in dense jungle • Movement, stealth, camouflage, terrain reading • Communication drills and small-team coordination
Phase II – Tactical Field Exercise	Full-scale scenario-based operations, counter-terror & stabilisation tasks	• Anti-MT ambush • Port/harbour capture drills • Reconnaissance & surveillance patrols • Ambush, area domination & area assault • Neutralising terrorists in fortified areas • Simulated UN Chapter VII operations (humanitarian + peace enforcement)

HARIMAU SHAKTI 2024 – INDIA EDITION (MAHAJAN FIELD FIRING RANGE)

Category	Details
Dates	5–18 December 2024
Location	Mahajan Field Firing Range, Rajasthan (India)
Indian Army Contingent	Troops from the Dogra Regiment
Malaysian Contingent	25th Battalion, Royal Malaysian Army
Terrain Focus	Semi-desert terrain suitable for high-intensity sub-conventional operations

CORE TRAINING COMPONENTS

Training Component	Description / Objective
Cordon-and-search missions	To isolate an area and systematically trace hostile elements
Search-and-destroy operations	Neutralisation of identified threats with precision drills

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Heliborne insertion & landing	Rapid deployment of troops behind enemy lines or critical zones
Casualty evacuation (CASEVAC)	Extraction of injured personnel in hostile and semi-desert conditions
Securing landing zones/helipads	Establishing safe helicopter access points under threat conditions
Yoga & combat reflex shooting	Enhancing mental resilience, agility, and quick-response firing
AMAR (Army Martial Arts Routine)	Close combat training for high-risk engagements

STRATEGIC AND OPERATIONAL IMPORTANCE OF HARIMAU SHAKTI 2024

Dimension	Key Elements	Impact / Significance
a. Building Interoperability	• Understanding each other's TTPs • Communication protocols • Command-and-control mechanisms • Planning & execution styles	• Smooth coordination in joint missions • Faster decision-making • Effective combined operations in real deployments
b. Enhancing Counter-Terrorism Capabilities	• Anti-insurgency operations • CQB drills • Tracking terror cells • Rapid stabilisation missions	• Better preparedness for modern terror threats in forests, hills & wetlands • Improved precision and mobility in sub-conventional warfare
c. UN Peacekeeping Relevance (Chapter VII)	• Peace enforcement • Neutralisation of armed non-state actors • Use of force to restore order • Civilian protection & humanitarian corridors	• Alignment with UN protocols for high-risk missions • Increased readiness for deployments in Africa and Asia • Improves professionalism in multinational operations
d. Strengthening India's Act East & Indo-Pacific Vision	• Malaysia's strategic location near Strait of Malacca & South China Sea • Maritime security cooperation • HADR coordination	• Supports freedom of navigation & regional stability • Enhances Indo-Pacific security network • Improves coordination on transnational crime & maritime challenges
e. Boost to Bilateral Relations	• Trust building • Strategic alignment • Defence technology cooperation • Military-diplomatic dialogue	• Strengthens India–Malaysia partnership • Expands defence, trade, maritime and diaspora links • Reinforces long-term strategic cooperation

MALAYSIA: QUICK FACTS

Region: Southeast Asia

Geography:

- **Peninsular Malaysia –** connected to mainland Asia (border with Thailand)
- **East Malaysia –** on Borneo island (borders with Indonesia & Brunei)
- **Capital:** Kuala Lumpur
- **Currency:** Malaysian Ringgit (MYR)
- **Groupings:** ASEAN, EAS, APEC

Malaysia's strategic geography amplifies the importance of defence exercises with India.

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SIGNIFICANCE FOR INDIA

Category	Key Points	Why It Matters
A. Military Preparedness	1. Exposure to diverse terrains – tropical jungles (Malaysia) & semi-desert (Rajasthan). 2. Strengthens India's counter-terrorism doctrine for sub-conventional threats. 3. Enhances small-team operations, CQB and precision coordination. 4. Improves troop adaptability to multi-terrain & high-stress warfare. 5. Enables exchange of TTPs for modern conflict zones.	• Improves operational readiness across terrains. • Builds tactical flexibility and better mission execution. • Enhances capability for asymmetric warfare.
B. Diplomacy Through Defence	1. Acts as a force multiplier of India's defence diplomacy. 2. Projects India as a reliable Indo-Pacific security provider. 3. Deepens strategic trust with Malaysia, a key ASEAN nation. 4. Supports Act East Policy by expanding regional defence partnerships.	• Strengthens geopolitical influence. • Improves strategic depth in Southeast Asia. • Enhances deterrence and regional cooperation.
C. Capacity Building	1. Improves preparedness for overseas deployments. 2. Enhances standards for UN Peacekeeping under Chapter VII. 3. Builds capability for HADR missions. 4. Boosts interoperability for multinational operations. 5. Provides realistic training for global conflict/civil crisis scenarios.	• Aligns India with global operational norms. • Expands India's role in peacekeeping & crisis response. • Strengthens international cooperation capabilities.

CONCLUSION

Exercise Harimau Shakti 2024–25 reflects the maturity, depth and expanding scope of India–Malaysia defence cooperation. By combining high-intensity jungle warfare, UN peacekeeping drills and sub-conventional operations across two terrains, the exercise enhances operational readiness, strengthens interoperability, and contributes to broader regional stability in the Indo-Pacific. Its steady evolution into a sophisticated joint training platform underlines both nations' shared commitment to combating terrorism, maintaining peace, and deepening defence partnership under a cooperative strategic framework.

Prelims question:

Q. Consider the following statements regarding Exercise Harimau Shakti:

1. It is a bilateral military exercise between India and Malaysia focusing primarily on jungle warfare and UN Chapter VII operations.
2. The 2024–25 edition is being conducted simultaneously in Malaysia and India.
3. The Dogra Regiment represented India in the Malaysia phase of the exercise.
4. Harimau Shakti is conducted annually and alternately in India and Malaysia.

How many of the above statements are correct?

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(a) Only one (b) Only two

(c) Only three (d) All four

Answer: C

Mains Question:

Q. Exercise Harimau Shakti has emerged as a significant pillar of India–Malaysia defence cooperation. Discuss its evolution, key components of the 2024–25 edition, and its strategic importance for India, especially in the context of the Indo-Pacific and UN peacekeeping obligations. (250 words)

INDIA–ETHIOPIA RELATIONS: A STRATEGIC GLOBAL SOUTH PARTNERSHIP

WHY IN THE NEWS?

Prime Minister Narendra Modi visited Ethiopia on 16–17 December 2025 as part of his three-nation tour to Jordan, Ethiopia, and Oman. This was his first bilateral visit to Ethiopia, during which he held comprehensive talks with Prime Minister Abiy Ahmed Ali on bilateral cooperation and issues of regional and global importance. The visit is significant as Ethiopia is a key African partner for India, a BRICS member, and an important voice of the Global South. It also reflects India's emphasis on strengthening

INDIA–ETHIOPIA BILATERAL RELATIONS

Background & Strategic Significance

1. India–Ethiopia relations are rooted in over 2,000 years of historical ties, ancient trade links, and shared anti-colonial experiences.
2. Ethiopia is a key African partner for India, a BRICS member, an influential voice of the Global South, and host to the African Union Headquarters.
3. India considers Ethiopia a long-term development partner and a gateway to East Africa.

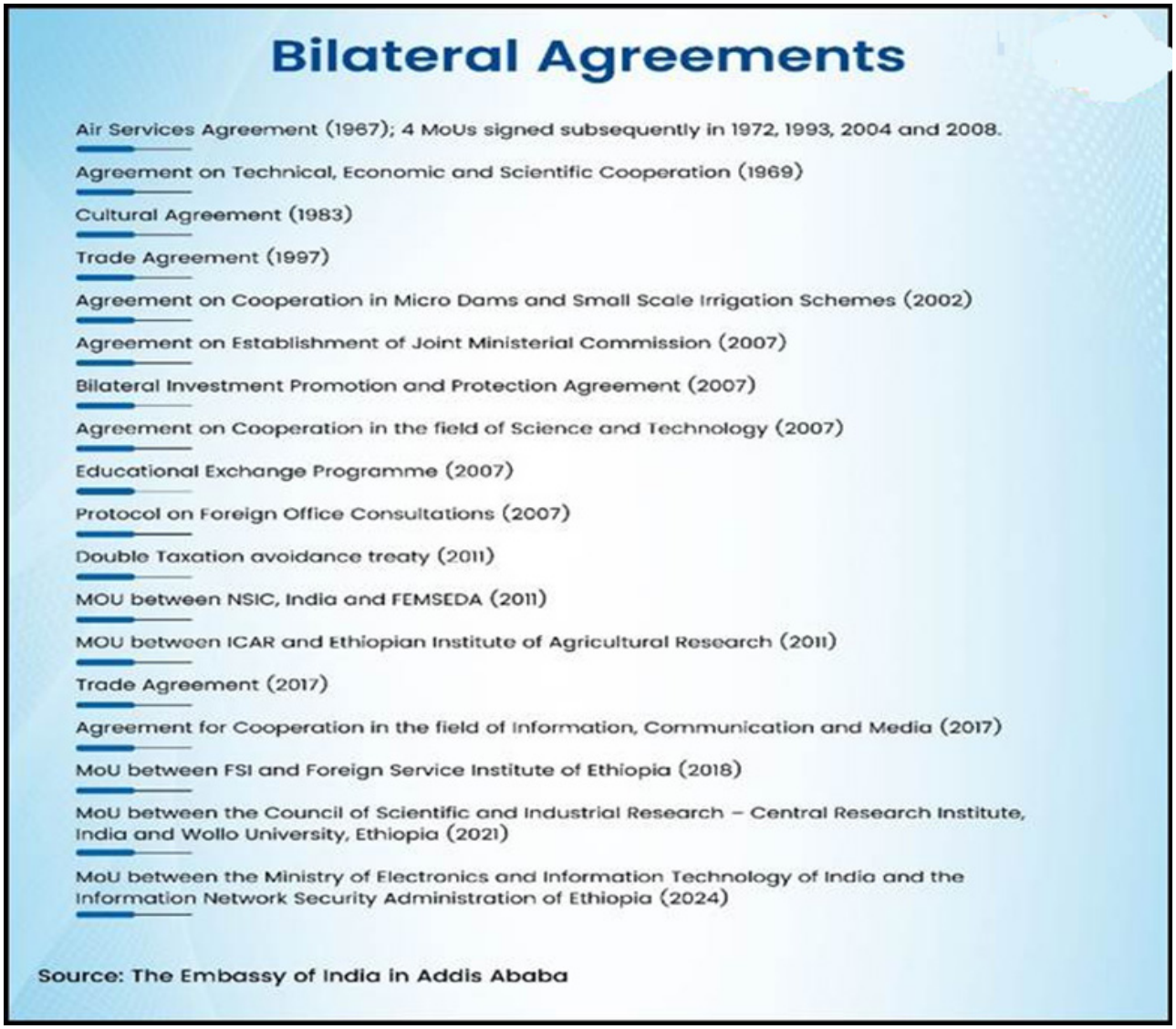
POLITICAL AND DIPLOMATIC ENGAGEMENTS: INDIA–ETHIOPIA

Dimension	Details
High-Level Political Contacts	• Prime Minister Narendra Modi and Ethiopian Prime Minister Dr. Abiy Ahmed met on the sidelines of the G20 Summit, Johannesburg (Nov 2025) and the BRICS Summit, Johannesburg (Aug 2023).
	• Ethiopian Prime Minister participated in the 2nd and 3rd Voice of the Global South Summits chaired by India in 2023 and 2024.
	• Regular telephonic and summit-level interactions, including during the COVID-19 pandemic, reflecting continuity in political dialogue.
Ministerial-Level Engagementss	• India's External Affairs Minister met Ethiopian counterparts during the G20 Foreign Ministers' Meeting (Feb 2025).
	• Bilateral meetings held on the sidelines of the UN General Assembly (2021, 2022, 2024).
	• EAM visits to Addis Ababa (2023) focused on cooperation in education, health, development partnership, and coordination at the African Union (AU) and United Nations (UN).
Key Focus Areas	• Strengthening political trust and institutional mechanisms.
	• Cooperation on regional security issues, multilateral coordination, and South–South cooperation.

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INSTITUTIONAL & SECTORAL ENGAGEMENTS

1. Joint Trade Committee (6th meeting held in Addis Ababa, Nov 2023)
2. Defence cooperation institutionalised through:
3. First Joint Defence Cooperation Meeting (Oct 2025)
4. Parliamentary exchanges and capacity-building under ITEC and PRIDE



RECENT VISITS & DELEGATIONS: INDIA–ETHIOPIA

Delegation	Date/Year	Purpose / Focus Areas
Indian Delegations to Ethiopia		
Multi-party Parliamentary delegation	May–June 2025	Focused on counter-terrorism and global solidarity post-Pahalgam attack; engaged with Ethiopian officials, media, academia, and diaspora
Indian Delegation led by Additional DG (Project Tiger & Elephant)	Jan 28–31, 2024	Participation in Global Cheetah Summit

Director General, International Solar Alliance (ISA)	Aug 11–15, 2025	Discussed Ethiopia's solar energy development plans
Indian Delegation led by Economic Advisor, Ministry of Finance	July 21–27, 2024	Participation in Preparatory Committee (PrepCom) of FfD4
Ethiopian Delegations to India		
Defence Minister	Feb 11, 2025	Signed Defence Cooperation MoU at Aero India 2025
State Minister of Health	Nov 08–16, 2025	Health & pharmaceutical collaboration, study tour with World Bank
Chairperson, National Election Board of Ethiopia (NEBE)	Aug 26–30, 2025	Engagement on elections & governance
Parliamentary delegation	Feb 20–24, 2023	Training at PRIDE, New Delhi, including govt whips and regional parliament representatives
Minister of Industry	Feb 2024	Participation in Bharat Tex 2024, industrial cooperation

ECONOMIC AND COMMERCIAL RELATIONS

Economic ties form the backbone of bilateral relations. In FY 2024–25, bilateral trade stood at US$ 550.19 million, with India enjoying a trade surplus. Ethiopia is a beneficiary under India's Duty-Free Tariff Preference (DFTP) scheme for Least Developed Countries. Indian companies rank among the top three foreign investors in Ethiopia, with over 675 registered firms and investments exceeding US$ 6.5 billion, particularly in manufacturing, textiles, pharmaceuticals, ICT and agriculture. Indian investments have generated significant local employment, strengthening Ethiopia's industrial base.

INDIAN DIASPORA IN ETHIOPIA

Indian presence since late 19th century

Major contribution in:

Education (teachers, faculty)

Industry and services

Indian community size: ~2,500

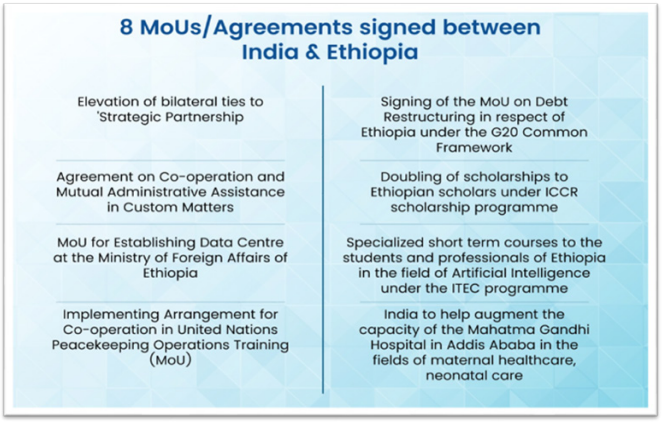
Around 150 Indian faculty currently teaching in Ethiopian institutions

OUTCOME OF PM MODI'S VISIT (DEC 2025)

Category	Details / Highlights
Civilian Honour	PM Modi conferred Ethiopia's highest civilian award: 'Great Honor Nishan of Ethiopia'
Bilateral Status	India–Ethiopia ties elevated to Strategic Partnership
Acknowledgements by Ethiopia	• Support in counter-terrorism • Leadership in Global South initiatives • AU's inclusion in G20 (2023)
Areas of Enhanced Cooperation	• Trade, investment, defence, innovation • Health security, digital health, pharmaceuticals • Agriculture, food security, agri-tech • Digital Public Infrastructure (DPI) • Mining, critical minerals, clean energy

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Multilateral Cooperation	• BRICS • United Nations • Global South platforms
Climate & Sustainability Cooperation	• Climate change mitigation • Renewable energy • Disaster resilience
Cooperation through International Platforms	• International Solar Alliance (ISA) • Coalition for Disaster Resilient Infrastructure (CDRI) • Global Biofuel Alliance (GBA) • International Big Cat Alliance (IBCA)
Parliamentary Engagement	PM Modi addressed the Joint Session of Ethiopian Parliament on 17 December 2025



CONCLUSION

India–Ethiopia relations are characterised by political continuity, expanding economic engagement, and strategic convergence. Ethiopia's role in Africa, BRICS, and the Global South enhances its importance for India's Africa policy. The elevation of ties to a Strategic Partnership marks a new phase of cooperation rooted in development, security, and multilateral collaboration, reinforcing India's long-term engagement with Africa.

Prelims question:

Q. Which of the following statements about India–Ethiopia relations is correct?

a) Ethiopia is a member of the African Union but not BRICS.

b) India–Ethiopia ties are rooted in over 2,000 years of historical and trade links.

c) India has no defence cooperation agreement with Ethiopia.

d) India–Ethiopia trade is limited to agricultural products.

Answer: B

Mains Question:

Q. Examine the strategic, economic, and multilateral dimensions of India–Ethiopia bilateral relations. Highlight the significance of PM Modi's 2025 visit in enhancing cooperation. (250 words)



PUNJAB'S DECLARATION OF THREE HOLY CITIES: A MILESTONE IN SIKH HISTORY

WHY IN THE NEWS?



In a landmark decision reflecting India's commitment to preserving its religious and cultural heritage, the Punjab Legislative Assembly unanimously declared three cities—Amritsar, Sri Anandpur Sahib, and Talwandi Sabo—as Holy Cities of Sikhism. This move recognizes their unparalleled role in the evolution of Sikh religious, spiritual, and socio-political traditions.

HISTORICAL SIGNIFICANCE OF THE THREE HOLY CITIES

Holy City	Founder / Associated Guru	Key Significance
Amritsar (Walled City)	Guru Ram Das	Spiritual centre of Sikhism; home to Golden Temple and Akal Takht symbolising Miri–Piri
Sri Anandpur Sahib	Guru Tegh Bahadur; Guru Gobind Singh	Site of Khalsa Panth's foundation (1699); birthplace of Sikh martial tradition
Talwandi Sabo (Takht Sri Damdama Sahib)	Guru Gobind Singh	Final compilation of Guru Granth Sahib; centre of doctrinal consolidation

RELIGIOUS AND CULTURAL IMPORTANCE IN SIKHISM

- **Seats of Supreme Sikh Authority (Takht Tradition):** These cities collectively house three of the five Takhts, the highest institutional authorities in Sikhism. Takhts function as centres of both spiritual guidance and temporal decision-making, embodying the Sikh doctrine of Miri–Piri. They play a decisive role in maintaining religious discipline, issuing collective resolutions, and preserving Sikh unity across regions.
- **Association with Sikh Gurus and Sacred Lineage:** The cities are directly linked with the lives and teachings of Sikh Gurus, who shaped Sikh theology, social values, and institutions here. Several formative developments—ranging from doctrinal articulation to community organisation—took place at these locations, lending them enduring sanctity and historical significance within Sikh tradition.
- **Sites of Transformative Historical Events:** These cities witnessed landmark events such as resistance to political oppression, martyrdoms,

and the strengthening of Sikh collective identity. Such episodes transformed Sikhism from a purely spiritual movement into a socio-religious force committed to justice, equality, and self-respect, reinforcing their importance in Sikh historical consciousness.

- **Global Centres of Pilgrimage and Faith:** Serving as major pilgrimage destinations, these cities attract Sikhs from across the world. Pilgrimage (yatra) to these sites deepens spiritual commitment, reinforces shared heritage, and sustains transnational connections among the Sikh diaspora, making them focal points of global Sikh religious life.
- **Living Hubs of Sikh Culture and Identity:** Beyond religious worship, these cities function as vibrant centres of Sikh culture, preserving traditions such as langar, kirtan, festivals, and community service (seva). They act as custodians of Sikh values and collective memory, ensuring the transmission of Sikh identity, ethics, and cultural practices to future generations.

LEGAL AND ADMINISTRATIVE IMPLICATIONS OF "HOLY CITY" STATUS

- **Statutory Prohibitions on Intoxicants and Non-Vegetarian Items:** The declaration of a "Holy City" entails legal restrictions on the sale and consumption of alcohol, tobacco, meat, and other intoxicants within notified municipal or heritage zones. Such prohibitions are enforced through state excise laws, municipal bye-laws, and special government notifications. The objective is to maintain religious sanctity and moral decorum, particularly in areas surrounding major shrines, pilgrimage routes, and sacred water bodies.
- **Creation of Special Regulatory and Heritage Zones:** Holy City status often leads to the demarcation of special religious or heritage zones where construction activities, commercial establishments, signage, and land use are strictly regulated. Urban planning norms are modified to protect the architectural, cultural, and spiritual character of the city. This may include height restrictions on buildings, conservation of heritage structures, and regulation of tourism-related infrastructure.
- **Enhanced Role of Urban Local Bodies and District Administration:** Local governments—municipal corporations, development authorities, and district administrations—are entrusted with expanded administrative responsibilities. They must ensure compliance with religious regulations, manage pilgrim inflows, oversee sanitation, and coordinate law enforcement. This necessitates capacity building of local bodies and closer coordination between civil administration, police, and religious institutions.
- **Balancing Development with Religious Sensitivities:** A key administrative challenge lies in reconciling urban development needs—such as infrastructure expansion, employment generation, and tourism promotion—with spiritual and cultural sensitivities. Authorities must adopt a calibrated approach that allows economic activity without undermining the sacred character of the city. This often involves stakeholder consultations with religious leaders, residents, traders, and civil society.
- **Legal Challenges and Rights-Based Considerations:** The imposition of restrictions in Holy Cities can raise constitutional and legal questions, particularly related to the right to trade, personal liberty, and equality under Articles 14 and 19 of the Constitution. Administrations must ensure that regulations are reasonable, proportionate, and non-discriminatory, backed by clear legal mandates to withstand judicial scrutiny.

SIGNIFICANCE FROM A GOVERNANCE AND FEDERAL PERSPECTIVE

- **Assertion of State Autonomy in Cultural and Religious Domains:** The decision to accord special status to cities on religious or cultural grounds reflects the autonomy of states under India's federal structure. Culture, public order, and local governance fall primarily within the State List and Concurrent List, allowing states to frame policies that align with regional religious sentiments and historical contexts. Such measures demonstrate how states can

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operate within the constitutional framework to protect and promote their distinctive cultural heritage.

- **Federal Flexibility within the Constitutional Framework:** India's federal system is characterised by asymmetry and flexibility, enabling states to adopt differentiated governance models based on local needs. Granting special status to holy cities illustrates the adaptive nature of Indian federalism, where uniformity is not imposed at the cost of cultural diversity. At the same time, these actions remain subject to constitutional principles such as secularism, rule of law, and judicial review.
- **Role of Legislative Consensus and Democratic Process:** The use of legislative consensus—often through state assembly resolutions or special laws—highlights the democratic legitimacy of such decisions. Broad political agreement signals social acceptance and reduces the risk of conflict in sensitive cultural matters. It also underscores the importance of legislatures as forums for negotiating identity, heritage preservation, and public interest within a plural society.
- **Interface between Religious Regulations and Fundamental Rights:** Special religious regulations inevitably raise questions about their compatibility with Fundamental Rights, particularly Articles 14 (equality before law), 19 (freedoms), and 25 (freedom of religion). Governments must ensure that restrictions are reasonable, proportionate, and non-arbitrary, serving legitimate public purposes such as heritage conservation or public morality, while avoiding excessive intrusion into individual liberties.
- **Governance Challenges in Urban Administration:** From an administrative standpoint, integrating religious regulations into urban governance presents practical challenges. Urban local bodies must reconcile zoning laws, economic activity, tourism management, and service delivery with spiritual sensitivities. This requires innovative governance mechanisms, inter-departmental coordination, and stakeholder engagement to ensure that religious considerations enhance, rather than hinder, inclusive and sustainable urban development.

SOCIO-ECONOMIC AND TOURISM IMPLICATIONS

- **Expansion of Religious Tourism:** Holy City status is likely to attract a larger number of pilgrims and heritage tourists, strengthening the city's position on national and international religious tourism circuits.
- **Growth of the Heritage Economy:** Increased footfall can stimulate demand for heritage-linked activities such as guided tours, cultural performances, museums, and interpretation centres, contributing to a diversified local economy.
- **Employment Generation:** Tourism-led growth can create jobs in hospitality, transport, tour services, sanitation, security, and pilgrim management, benefiting both skilled and semi-skilled workers.
- **Boost to Traditional Handicrafts and Local Enterprises:** Greater tourist inflow provides markets for local artisans, craftsmen, souvenir producers, and small traders, helping preserve traditional skills while enhancing incomes.
- **Development of Sustainable Pilgrimage Infrastructure:** The status offers an opportunity to invest in eco-friendly accommodation, pedestrian corridors, waste management, and water conservation, aligning tourism growth with sustainability goals.
- **Improvement in Urban Amenities:** Enhanced tourism revenues can justify better roads, public transport, sanitation, healthcare, and digital services, improving quality of life for residents alongside pilgrims.
- **Regional Economic Spillover Effects:** Tourism growth can generate multiplier effects in surrounding areas by encouraging ancillary businesses, regional travel circuits, and rural linkages, promoting balanced regional development.

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CONTEMPORARY RELEVANCE AND POSITIVE ASPECTS

- **Strengthening Cultural Identity:** Holy City recognition deepens collective cultural consciousness and reinforces the historical continuity of faith-based traditions.
- **Inter-generational Heritage Transmission:** Institutional support helps transmit religious values, rituals, and collective memory to younger generations in a rapidly modernising society.
- **Promotion of Pluralism:** It reinforces India's image as a pluralistic civilisation that respects and protects diverse faith traditions within a constitutional framework.
- **Soft Power and Cultural Diplomacy:** Such initiatives enhance India's cultural soft power by projecting tolerance, spiritual heritage, and civilisational depth globally.
- **Community Cohesion:** Shared reverence for sacred spaces can strengthen social bonds and collective responsibility among community members.
- **Heritage Conservation:** Formal recognition often leads to better protection of historical structures, manuscripts, and intangible cultural heritage.
- **Revival of Traditional Practices:** Encourages revival of traditional arts, music, festivals, and rituals associated with the sacred geography.
- **Educational and Research Value:** Holy Cities can emerge as centres for religious studies, history, philosophy, and cultural research.

CHALLENGES

- **Ensuring Inclusive Governance:** Administrations must safeguard the rights and interests of residents from diverse religious and socio-economic backgrounds.
- **Risk of Over-Commercialisation:** Excessive tourism-driven development can commodify sacred spaces, undermining their spiritual essence.
- **Balancing Urban Needs with Religious Norms:** Integrating modern urban requirements—housing, mobility, employment—with religious regulations remains complex.
- **Economic Exclusion:** Regulatory restrictions may disproportionately affect small traders, informal workers, and marginalised groups.
- **Administrative Capacity Constraints:** Local bodies may lack resources and expertise to manage increased responsibilities effectively.
- **Legal and Constitutional Challenges:** Regulations may face judicial scrutiny on grounds of equality, freedom of trade, and personal liberty.
- **Environmental Stress:** Large pilgrim inflows can strain water resources, waste management systems, and local ecosystems.
- **Political Sensitivities:** Decisions linked to religion can become politically contentious, affecting social harmony and governance neutrality.

WAY FORWARD

- **Inclusive and Participatory Governance:** Administrations should adopt consultative mechanisms involving residents, religious bodies, traders, minorities, and civil society to ensure policies are inclusive and socially acceptable.
- **Regulated and Responsible Tourism Development:** A clear framework for heritage-sensitive and low-impact tourism should be enforced to prevent over-commercialisation while preserving the spiritual sanctity of sacred spaces.
- **Integrated Urban Planning Approach:** Urban development plans must harmonise housing, mobility, livelihoods, and public services with religious norms through zoning regulations, mixed-use planning, and smart city principles.
- **Protection of Livelihoods and Economic Inclusion:** Special provisions should be made for small traders, informal workers, and local entrepreneurs, including alternative livelihood options, skill training, and financial support.

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- **Strengthening Administrative Capacity:** Capacity building of urban local bodies through financial devolution, technical expertise, and digital governance tools is essential for effective implementation.
- **Constitutionally Sound Legal Frameworks:** Regulations must be clearly codified, proportionate, and rights-compliant to withstand judicial scrutiny and uphold constitutional values.
- **Environmentally Sustainable Pilgrimage Management:** Adoption of green infrastructure, waste-to-energy systems, water conservation, and crowd management technologies can mitigate environmental stress.
- **Depoliticisation and Consensus-Based Decision Making:** Policy decisions should be guided by institutional neutrality, inter-party consensus, and constitutional morality to maintain social harmony and public trust.

CONCLUSION

The declaration of Amritsar, Sri Anandpur Sahib, and Talwandi Sabo as Holy Cities is not merely a symbolic gesture but a significant civilisational assertion. It reinforces Sikhism's historical legacy while posing new governance challenges. If managed sensitively, the initiative can become a model for heritage-led development rooted in constitutional values.

Prelims question:

Q. With reference to the "Holy Cities" recently declared by Punjab, consider the following statements:

1. All the declared holy cities are associated with the founding of Sikh Takht institutions.
2. Anandpur Sahib is associated with the formation of the Khalsa Panth.
3. Talwandi Sabo is one of the five Sikh Takhts.
4. Amritsar houses both the spiritual and temporal seats of Sikh authority.

Which of the statements given above are correct?

(a) 2, 3 and 4 only (b) 1, 2 and 4 only
(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. How does the declaration of holy cities reflect the balance between cultural autonomy of states and constitutional secularism in India?

UNESCO'S 20TH ICH SESSION IN INDIA: STRENGTHENING THE FUTURE OF LIVING HERITAGE

WHY IN THE NEWS?

The Government of India will host the 20th Session of the UNESCO Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage (ICH) from 8–13 December 2025 in New Delhi. This is significant because India is hosting the ICH Committee session for the first time, marking a major milestone in its cultural diplomacy. The venue—Red Fort, a UNESCO World Heritage Site—symbolises the coming together of India's rich tangible and intangible heritage. The event also aligns with the 20th anniversary of India's ratification (2005) of the UNESCO 2003 Convention, highlighting the country's long-term commitment to preserving diverse cultural practices, traditions, and expressions that form the core of its civilisational identity.



HISTORICAL BACKGROUND

The UNESCO Convention for the Safeguarding of Intangible Cultural Heritage was adopted on 17 October 2003 during UNESCO's 32nd General Conference in Paris. It emerged as a global response to increasing concerns that living cultural traditions—oral expressions, performing arts, social customs, rituals, traditional knowledge systems, and craftsmanship—were becoming vulnerable due to globalisation, rapid social transformation, and resource constraints.

The Convention placed communities, especially indigenous groups and practitioners, at the centre of safeguarding efforts, recognising their primary role in creating, maintaining, and transmitting intangible heritage. It emphasized the interdependence between tangible and intangible heritage, the importance of international cooperation, and the need to raise awareness among younger generations.

PURPOSES OF THE CONVENTION

The key objectives of the 2003 Convention are:

1. To safeguard intangible cultural heritage (ICH) in all its expressions.
2. To ensure respect for the ICH of concerned communities, groups, and individuals.
3. To raise awareness at local, national, and international levels about the importance of ICH and to ensure mutual appreciation of cultural diversity.
4. To promote international cooperation and assistance to support the preservation and transmission of living heritage worldwide.

FUNCTIONS OF THE INTERGOVERNMENTAL COMMITTEE

1. Promoting and monitoring the implementation of the 2003 Convention across all Member States.
2. Providing guidance on best safeguarding practices and recommending measures for the protection of ICH.
3. Preparing and submitting to the General Assembly the draft plan for the use of the Intangible Cultural Heritage Fund.
4. Mobilising additional resources for the Fund as per Convention guidelines.
5. Drafting and proposing operational directives for the practical implementation of the Convention.
6. Examining periodic reports submitted by States Parties and preparing their summaries for the General Assembly.
7. Evaluating requests from Member States and taking decisions on:

Inscription of heritage elements on UNESCO's ICH Lists (Articles 16, 17 and 18).

Granting of international assistance to support safeguarding measures.



20TH SESSION OF INTERGOVERNMENTAL COMMITTEE

The Ministry of Culture (MoC), Government of India and its autonomous body, the Sangeet Natak Akademi (SNA) are the nodal agencies to host the 20th Session of the Intergovernmental Committee at the Red Fort (Lal Qila) in New Delhi. This magnificent 17th-century fort in Delhi, known for its stunning red sandstone walls and grand architecture, palaces, gardens, and museums, is itself on the UNESCO World Heritage list.

KEY AGENDAS OF INDIA AT THE 20TH SESSION OF THE ICH COMMITTEE

1. **Showcase India's ICH Safeguarding Model:** Present India's comprehensive safeguarding framework—combining institutional

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mechanisms, community participation, documentation, research, and national inventories—as a global best practice for other countries to adopt.

2. **Strengthen International Cooperation:** Promote collaborative efforts such as joint nominations, cross-border safeguarding initiatives, knowledge-sharing, technical exchange, and capacity-building programmes, especially among Global South nations.
3. **Enhance Global Visibility for India's ICH:** Highlight both well-known and lesser-known Indian traditions—regional festivals, tribal rituals, crafts, folk arts—thereby expanding opportunities for global research, tourism, funding, and partnerships.
4. **Stimulate Domestic Preservation Efforts:** Use the global spotlight to encourage documentation, inventory preparation, digitisation, community engagement, youth participation, and preparation of future nomination dossiers.
5. **Strengthen India's Cultural Diplomacy:** Leverage the event to project India's soft power, civilisational richness, cultural diversity, and leadership in heritage governance at the international stage.
6. **Link Heritage with Sustainable Development:** Emphasise the role of ICH in livelihood generation, community identity, social cohesion, cultural tourism, and eco-friendly practices, aligning with SDGs and national development agendas.

INDIA'S INTANGIBLE CULTURAL HERITAGE: A NATIONAL & GLOBAL ASSET

1. **Social and Cultural Value:** ICH sustains multiple identities—linguistic, ethnic, tribal, regional, and religious—strengthening pluralism, unity, and social cohesion in a diverse nation.
2. **Livelihood and Economic Value:** Traditional arts, crafts, performances, and cultural tourism support livelihoods of artisans, performers, craftspeople, and tribal communities. State-backed schemes prevent skill erosion and support inclusive rural development.
3. **Educational and Knowledge Value:** ICH carries traditional ecological knowledge, oral histories, craftsmanship techniques, medicinal practices, folklore, and rituals. When documented and taught, these strengthen cultural literacy and ensure intergenerational transmission.
4. **Diplomatic and Soft-Power Value:** India's vibrant festivals, dances, crafts, and oral traditions project its civilisational depth globally. Hosting the session boosts India's soft power, global cultural leadership, and diplomatic outreach.
5. **Global Heritage Governance Value:** India's active UNESCO engagement positions it as a key advocate for developing countries, ensuring global heritage frameworks remain inclusive, community-centred, and culturally balanced.

INDIA'S CONTRIBUTIONS TO INTANGIBLE CULTURAL HERITAGE (ICH)

India's intangible cultural heritage—spanning living traditions, oral expressions, performing arts, rituals, crafts, and community-based practices—is one of the richest in the world. Because these traditions are dynamic and transmitted across generations, they require systematic institutional support to ensure preservation, continuity, and global recognition.

To address this need, the Ministry of Culture launched the Scheme for Safeguarding the Intangible Heritage and Diverse Cultural Traditions of India as a centralised mechanism to coordinate and strengthen previously scattered preservation efforts. Complementing this, the Sangeet Natak Akademi (SNA) has been actively involved in capacity building, conducting workshops, training programmes, and awareness initiatives to strengthen community and practitioner participation in ICH safeguarding.

The Scheme aims to revitalise institutions, practitioners, scholars, communities, and organisations engaged in preserving intangible heritage. It enhances national and international recognition of Indian cultural traditions—especially through UNESCO nominations—while supporting a diverse set of stakeholders including state governments, universities, NGOs, cultural bodies, research institutions, and individual practitioners.

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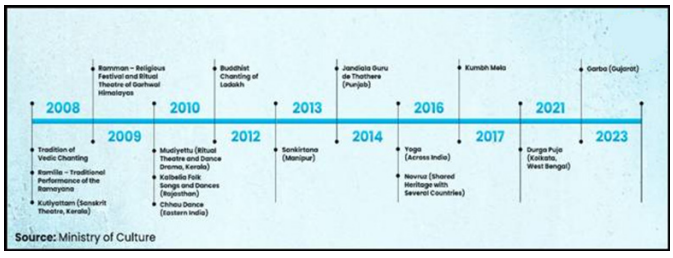
Key Activities Under the Scheme

1. Documentation and development of national ICH inventories
2. Preservation and promotion of cultural expressions and endangered traditions
3. Preparation of UNESCO nomination dossiers
4. Capacity building and training for artists and practitioners
5. Workshops, festivals, and performances to promote cultural awareness
6. Dissemination initiatives through publications and digital platforms
7. Integration of culture with education, especially for youth engagement
8. Skill development support through Sector Skill Councils under NVEQF

INDIA'S INTANGIBLE CULTURAL HERITAGE INSCRIBED BY UNESCO

India is an active State Party to the UNESCO 2003 Convention and has played a significant role in global heritage governance. Through institutions such as the Ministry of Culture and the Sangeet Natak Akademi, India has consistently worked to advance recognition of its cultural traditions at the international level.

So far, 15 Indian elements have been inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity. These inscriptions testify to India's civilisational depth, cultural diversity, and living heritage continuity.



These inscriptions also reflect India's commitment to safeguarding diverse cultural expression through community participation, documentation, training, and transmission, principles central to the 2003 convention. These inscriptions range from ancient performing arts like Kutiyattam and Chhau, to sacred traditions such as Vedic chanting, Buddhist chanting in Ladakh, and community-based practices like Ramlila, Ramman, and Sankirtana. Everyday cultural knowledge systems are equally represented through the metalcraft of the Thatheras of Jandiala Guru, the Kalbelia community's dynamic music and dance, and large-scale social-spiritual gatherings like the Kumbh Mela. Elements such as Yoga, Durga Puja, and Garba showcase India's vibrant contemporary cultural identity, while Novruz, celebrated across several countries including India, highlights regional cultural interconnectedness.

CONCLUSION

India's hosting of the 20th UNESCO Intergovernmental Committee session marks a milestone, blending symbolic significance with a real chance to lead. With a strong heritage infrastructure and history of cultural diversity, India is ready to showcase and share its safeguarding model. This event offers India an opportunity to highlight its living heritage, foster global cooperation, and shape a renewed approach to preserving intangible cultural heritage for current and future generations.

The success of the 20th session of the Intergovernmental Committee in New Delhi will reflect positively on UNESCO, the Government of India, and the vitality of India's cultural traditions. India's heritage lives through its people, expressed in its languages, arts, rituals, festivals, and belief systems. Hosting this year's session shows India's enduring commitment to safeguarding its cultural legacy for future generations.

Prelims question:

Q. Consider the following statements about the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003):

1. It places communities and practitioners at the centre of safeguarding intangible cultural heritage.
2. It deals exclusively with the preservation of ancient historical monuments.

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3. It aims to promote international cooperation and assistance for safeguarding living heritage.

Which of the statements given above is/are correct?

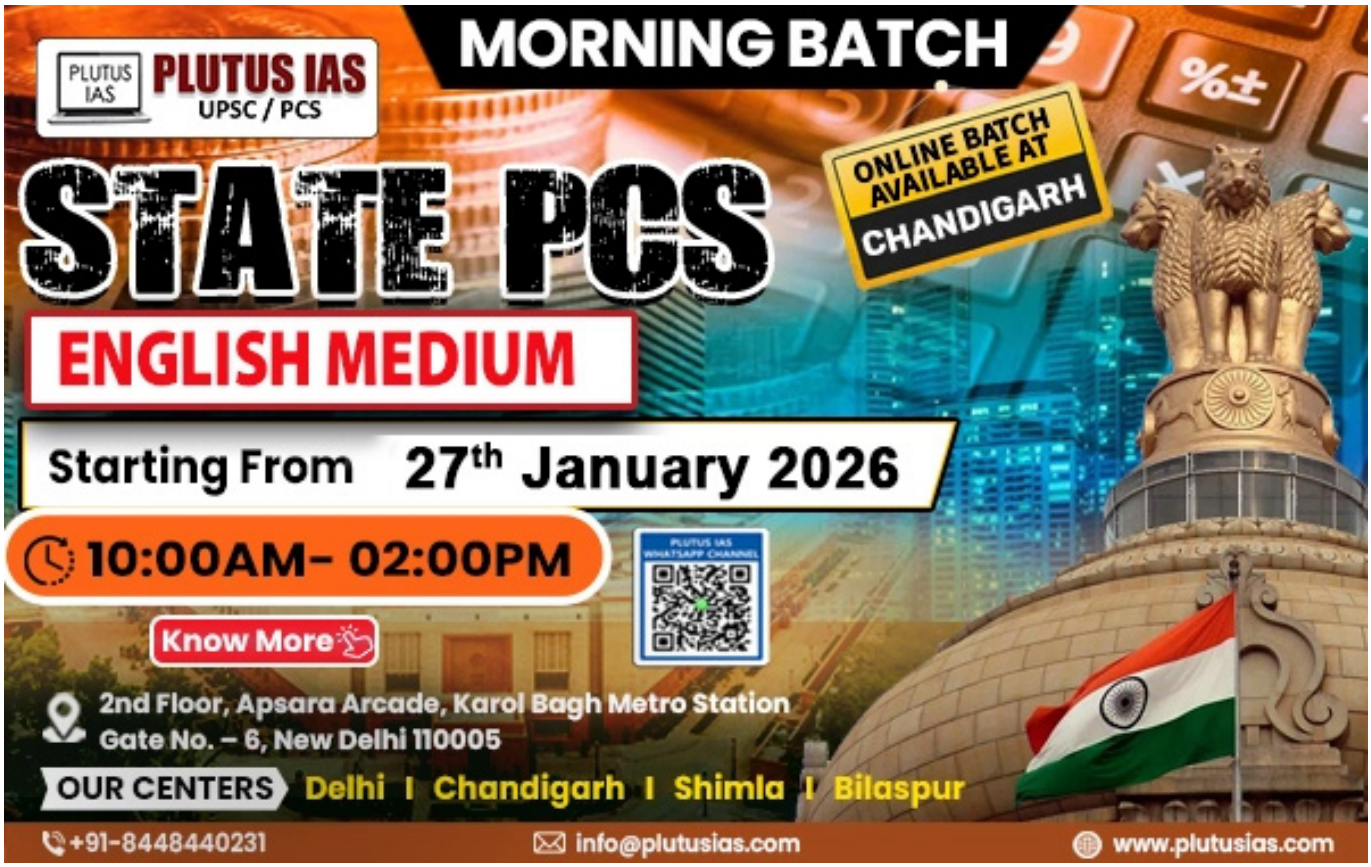
(a) 1 and 2 only (b) 2 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: C

Mains Question:

Q. India is hosting the 20th Session of the UNESCO Intergovernmental Committee for Safeguarding of the Intangible Cultural Heritage in 2025. Discuss its significance for India's cultural diplomacy, the safeguarding of (250 words)





POLLUTION CONTROL VESSEL 'SAMUDRA PRATAP': STRENGTHENING INDIA'S MARITIME ENVIRONMENTAL PROTECTION

WHY IN THE NEWS?



The Indian Coast Guard (ICG) has commissioned Samudra Pratap, India's first indigenously designed and built Pollution Control Vessel (PCV), marking a significant milestone in maritime environmental protection and self-reliance in defence shipbuilding.

ABOUT SAMUDRA PRATAP

Samudra Pratap is a specialised Pollution Control Vessel (PCV) inducted into the Indian Coast Guard to undertake marine pollution response, oil-spill mitigation, and firefighting operations. It is the largest vessel in the ICG fleet and the first PCV fully designed and constructed in India. The vessel has been built by Goa Shipyard Limited (GSL) under the two-ship PCV project, aligning with the objectives of Atmanirbhar Bharat in defence manufacturing.

KEY TECHNICAL FEATURES

Aspect	Technical Details	UPSC Relevance / Significance
Size & Endurance	Length: 114.5 m; Breadth: 16.5 m; Displacement: 4,170 tonnes	Enables long-duration, high-seas deployment for large-scale marine pollution response
Navigation & Station-Keeping	First ICG vessel with Dynamic Positioning (DP-1) capability	Crucial for precise oil spill containment and operations in rough sea conditions
Pollution Detection & Analysis	• Oil fingerprinting machine • Oil spill detection systems • Onboard pollution control laboratory	Helps identify pollution sources, enforce polluter pays principle, and ensure legal accountability
Pollution Mitigation Equipment	• Viscous oil recovery systems • Containment and cleanup equipment	Enables rapid containment, recovery, and mitigation of marine oil spills
Firefighting Capability	FiFi-2 / FFV-2 notation with high-capacity external firefighting system	Supports response to ship fires, offshore installations, and port emergencies
Combat & Self-Defence Systems	• 30 mm CRN-91 gun • Two 12.7 mm remote-controlled guns • Modern fire-control systems	Ensures operational security during pollution response missions

Indigenous Ship Systems	• Integrated Bridge System (IBS) • Integrated Platform Management System (IPMS) • Automated Power Management System (APMS)	Reflects Atmanirbhar Bharat, indigenisation of maritime technology

STRATEGIC AND ENVIRONMENTAL SIGNIFICANCE

- **Maritime Environmental Security:** Samudra Pratap significantly enhances India's capacity to respond to oil spills, chemical pollution, and maritime ecological disasters within the Exclusive Economic Zone (EEZ) and beyond.
- **Disaster Management and Offshore Safety:** The vessel strengthens preparedness against offshore industrial accidents, including incidents involving oil rigs, ports, and shipping lanes—critical given India's expanding blue economy.
- **Self-Reliance in Defence Manufacturing:** As the first indigenously designed PCV, the project showcases India's growing capability to design and build complex, mission-specific vessels, reinforcing Atmanirbhar Bharat and reducing dependence on foreign platforms.
- **International Obligations:** The induction supports India's commitments under international maritime conventions related to marine pollution prevention and response, including MARPOL obligations.

DISASTER MANAGEMENT AND OFFSHORE SAFETY

- **Oil Spill Response and Containment:** The Pollution Control Vessel strengthens India's capability to detect, contain, and recover oil spills through advanced sensing, viscous oil recovery systems, and onboard analysis, minimising ecological damage and economic losses.
- **Chemical Pollution and Hazardous Spill Management:** With specialised equipment and pollution laboratories, the PCV enables identification and neutralisation of chemical pollutants from industrial accidents, tanker leaks, and offshore platforms, ensuring rapid mitigation of toxic marine contamination.
- **Maritime Firefighting and Emergency Response:** Equipped with FiFi-2/FFV-2 systems, the vessel can tackle large-scale fires on ships and offshore installations, preventing escalation into multi-hazard disasters affecting ports, energy assets, and coastal populations.
- **Offshore Infrastructure and Energy Security:** The PCV enhances safety around offshore oil rigs, pipelines, and renewable energy installations, reducing disaster risks that could disrupt energy supplies and damage critical maritime infrastructure.
- **Integration with National Disaster Management Framework:** Samudra Pratap operates within India's National Oil Spill Disaster Contingency Plan and complements NDMA-led disaster response mechanisms, ensuring coordinated action among maritime, port, and coastal authorities.
- **Rapid Deployment and High-Seas Endurance:** Its long endurance, dynamic positioning, and high-seas capability allow swift deployment across India's EEZ, enabling timely intervention during emergencies beyond coastal waters.
- **Environmental Disaster Risk Reduction:** By enabling early detection and rapid response, the PCV contributes to disaster risk reduction, shifting India's approach from reactive damage control to proactive maritime environmental resilience.

REGIONAL COOPERATION IN THE INDIAN OCEAN REGION (IOR)

- **First Responder and Humanitarian Assistance Role:** Samudra Pratap enhances India's credibility as a first responder by enabling rapid assistance during oil spills, maritime accidents, and environmental emergencies affecting neighbouring Indian Ocean littoral states.
- **Environmental Diplomacy and Blue Economy Protection:** By supporting pollution response beyond national waters, the vessel advances

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India's environmental diplomacy, safeguarding shared marine ecosystems crucial for fisheries, tourism, and sustainable Blue Economy initiatives.

- **Support to Regional Capacity Building:** The PCV can assist smaller IOR nations through joint exercises, training, and technology sharing in oil spill response and maritime safety, strengthening regional institutional capacities.
- **Multilateral Maritime Cooperation Frameworks:** Samudra Pratap complements platforms such as IORA, BIMSTEC, and the Colombo Security Conclave by operationalising collective commitments to maritime safety, disaster response, and environmental protection.
- **Confidence Building and Cooperative Security:** Non-military humanitarian operations by the PCV build trust among regional partners, reinforcing India's image as a net security provider through cooperative and rules-based maritime engagement.
- **Support to Freedom of Navigation and Safe Sea Lanes:** By mitigating pollution and accident risks along critical sea lanes, the vessel indirectly supports freedom of navigation and uninterrupted maritime trade across the Indian Ocean.
- **Projection of Responsible Maritime Leadership:** Through proactive environmental stewardship, Samudra Pratap projects India as a responsible maritime power balancing strategic presence with regional welfare and ecological sustainability.

WAY FORWARD

- **Induction of Additional Pollution Control Vessels:** Expanding the PCV fleet will ensure wider geographic coverage, faster response times, and redundancy for large-scale or simultaneous maritime pollution incidents.
- **Integration with Satellite and AI-Based Monitoring:** Linking PCVs with satellite imagery, AIS data, and AI-driven analytics can enable early detection, tracking, and prediction of oil spills and chemical pollution.
- **Strengthening Port-Level Pollution Response Infrastructure:** Upgrading port reception facilities, containment booms, and trained response teams will complement offshore PCVs and ensure swift near-shore pollution control.
- **Inter-Agency Coordination and SOP Harmonisation:** Clear standard operating procedures among ICG, ports, NDMA, and state agencies will improve coordination during multi-agency maritime environmental emergencies.
- **Capacity Building and Regional Cooperation:** Regular training, joint exercises, and knowledge sharing with IOR partners can enhance collective preparedness and reinforce India's leadership in maritime environmental governance.
- **Legal and Regulatory Strengthening:** Updating maritime pollution laws, liability regimes, and enforcement mechanisms will deter violations and align India with international environmental conventions.

CONCLUSION

The commissioning of Samudra Pratap represents a decisive step in strengthening India's maritime environmental governance, disaster response capability, and indigenous defence manufacturing. By integrating advanced pollution-control technology with long-endurance operational capability, the vessel reinforces India's preparedness to protect its marine ecosystem amid growing offshore economic activity.

Prelims question:

Q. With reference to the Pollution Control Vessel Samudra Pratap, consider the following statements:

1. It is the first indigenously designed and built Pollution Control Vessel inducted into the Indian Coast Guard.
2. It is equipped with Dynamic Positioning capability for precise station-keeping during pollution response operations.
3. It has been built under the Sagarmala Programme of the Ministry of Ports, Shipping and Waterways.

Which of the statements given above is/are correct?

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(a) 1 and 2 only (b) 2 and 3 only
(c) 1 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. "Maritime environmental protection is emerging as a core dimension of India's disaster management framework." Examine this statement with reference to the induction of Pollution Control Vessel Samudra Pratap.

REDEFINING THE ARAVALLIS: DEVELOPMENT VS ECOLOGY IN INDIA'S OLDEST MOUNTAIN RANGE

WHY IN THE NEWS?

The Aravalli Hills have come into national focus following a recent legal and policy debate around their redefinition, particularly a height-based criterion (around 100 metres) used to determine what constitutes the Aravalli range for regulatory purposes. Environmental groups argue that this may dilute protection for large parts of the ancient hill system, while the government maintains that safeguards remain intact. The issue has triggered protests, political contestation, and concerns over mining, construction, and ecological degradation.



ECOLOGICAL SIGNIFICANCE OF THE ARAVALLI RANGE

Dimension	Ecological Role	Key Data / Evidence	Relevance for India
Ancient Geological System	Among the oldest fold mountain systems globally, influencing landforms and soil profiles	Estimated age: 3.2–2.5 billion years (older than Himalayas)	Provides stable geological base, mineral-rich formations, and long-term ecological continuity
Barrier Against Desertification	Acts as a climatic and physical barrier against Thar Desert expansion	Arrests desert spread towards Delhi, Haryana, and western UP	Prevents land degradation, sustains agriculture and habitability in semi-arid regions
Groundwater Recharge	Facilitates infiltration through fractured quartzite rocks	Feeds major river basins like Sahibi, Luni, Banas; recharge zone for Delhi-NCR aquifers	Critical for water security in Rajasthan, Haryana, and NCR
Biodiversity Support	Hosts forests, wildlife corridors, and endemic flora-fauna	Part of Aravalli Biodiversity Park, habitat for 300+ bird species, leopards, hyenas	Maintains ecological connectivity between Western India and Gangetic plains
Forest Cover & Carbon Sink	Natural forests act as carbon sinks and climate buffers	Dry deciduous & thorn forests; sequestration capacity aiding India's climate goals	Supports India's Net-Zero 2070 and NDC commitments
Air Quality Regulation	Reduces dust storms and particulate matter transport	Natural dust barrier for Delhi-NCR, reduces PM10 influx from Thar	Improves urban air quality and public health

Climate Moderation	Moderates temperature extremes and heat waves	Lowers heat stress in western India; influences micro-climates	Important for climate resilience amid rising heatwaves
Soil Conservation	Prevents soil erosion and land degradation	Reduces wind erosion in arid Rajasthan	Sustains agriculture and prevents desertification
Waterbody Preservation	Origin of seasonal rivers and wetlands	Supports lakes like Badkhal, Surajkund, Siliserh	Enhances regional water ecology and livelihoods
Human–Nature Interface	Supports pastoralism and traditional livelihoods	Home to indigenous communities and agro-pastoral systems	Promotes sustainable living models and eco-restoration

LEGAL AND POLICY DIMENSIONS OF THE ARAVALLI ISSUE

- **Supreme Court Interventions:** The Supreme Court has repeatedly intervened to protect the Aravalli range, particularly in cases concerning illegal mining and environmental degradation. Landmark judgments, such as M.C. Mehta vs Union of India, recognised the Aravallis as an ecologically sensitive zone critical for preventing desertification and maintaining groundwater regimes in north-west India. The Court imposed bans and restrictions on mining in notified forest areas and emphasised the application of sustainable development and intergenerational equity. These interventions underscore the judiciary's role as a guardian of environmental commons in the absence of consistent executive action.

- **Height-Based Classification Debate:** The proposal to classify the Aravallis based on a rigid height threshold has generated legal and ecological concerns. Critics argue that ecological systems do not function according to administrative or altitudinal boundaries; low-lying hillocks, valleys, and outcrops are integral to the continuity of the Aravalli landscape. Excluding areas solely because they fall below a specified elevation risks fragmenting habitats, disrupting wildlife corridors, and legitimising mining and construction in ecologically critical zones, thereby undermining the intent of conservation laws.

- **Environmental Jurisprudence Principles:** Recent policy shifts have raised apprehensions about the dilution of core principles of Indian environmental jurisprudence. The precautionary principle, which mandates preventive action in the face of scientific uncertainty, may be compromised if protection is withdrawn without comprehensive ecological assessments. Similarly, the public trust doctrine, which holds the state as a trustee of natural resources for present and future generations, comes under strain when ecologically sensitive land is opened for commercial exploitation. Such dilution risks setting adverse precedents for environmental governance nationwide.

- **Multiplicity of Laws and Regulatory Overlap:** The governance of the Aravallis is shaped by a complex web of legal instruments, including the Forest Conservation Act, Wildlife Protection Act, Environment (Protection) Act, mining regulations, and state-specific notifications. Overlapping jurisdictions and inconsistent definitions of "forest" and "protected land" create regulatory ambiguity. This multiplicity often leads to selective interpretation by authorities, litigation by affected stakeholders, and enforcement gaps that weaken environmental protection on the ground.

- **Governance Challenge:** The core policy dilemma lies in reconciling legal clarity with ecological comprehensiveness. While governments seek clear, enforceable criteria to reduce disputes and facilitate development, ecological systems demand a landscape-level approach that transcends narrow legal classifications. Effective governance of the Aravallis requires harmonising laws, adopting science-based definitions, strengthening institutional coordination, and ensuring that conservation imperatives are

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not subordinated to short-term economic considerations.

DEVELOPMENT, MINING AND ECONOMIC CONCERNS

- **Mineral and Construction Demand:** The region is rich in minerals and lies near fast-growing urban centres.A drone survey in Bhilwara, Rajasthan recently flagged massive illegal mining activities in the Aravalli hills well beyond authorised limits, showing the intense pressure on the landscape to feed construction demand.
- **Urban Expansion Pressure:** Real estate and infrastructure projects exert continuous pressure on hill ecosystems.In rapid urban expansion zones like Gurugram and Faridabad, encroachment and construction continue unabated despite ecological safeguards. A specific area near Bandhwari village has seen illegal tree cutting, walls and land grabs — even though it's a Natural Conservation Zone under Supreme Court orders.
- **Economic Justifications:** Supporters argue that redefinition reduces uncertainty and facilitates planned development.Government and industry proponents have argued that redefining the Aravalli boundary (e.g., via height criteria) will clarify where economic activities like mining, infrastructure and real estate can occur — reducing legal conflicts and "uncertainty" for investors and builders. Recent public debates around the Supreme Court's 2025 definition change reflect this economic rationale, though it's also controversial.
- **Hidden Economic Costs:** Ecological degradation leads to water scarcity, health costs, and disaster vulnerability. Accidental tragedies like the rain-filled mining crater in Sohna near Gurugram, where three youths drowned, underline the public safety and disaster risks from abandoned and unmanaged mining scars on the landscape.
- **Sustainability Trade-off:** Short-term economic gains risk long-term environmental and social losses. Environmentalists highlight that desertification and land degradation (e.g., documented by ISRO for Haryana) are already underway because of mining and deforestation, with economic losses in farming productivity and water availability compounding long-term risks.

FEDERALISM AND ADMINISTRATIVE DIMENSIONS

- **Shared Jurisdiction:** Environment is a concurrent subject, requiring coordination between Centre and states. Vellore Citizens' Welfare Forum (1996) affirmed that environmental protection is a joint Centre–State responsibility.
- **Divergent State Priorities:** States differ in land-use policies, mining interests, and conservation approaches. M.C. Mehta (Aravalli cases) showed how differing state mining policies harm shared ecosystems.
- **Centre–State Tensions:** Uniform definitions may clash with region-specific ecological realities. T.N. Godavarman imposed a uniform forest definition, triggering Centre–State friction.
- **Role of Local Governments:** Panchayats and urban local bodies often lack capacity in environmental decision-making. Punjab & Haryana High Court noted weak environmental capacity of Panchayats.
- **Need for Cooperative Federalism:** Effective conservation demands harmonised and participatory governance. State of Meghalaya (2019) emphasised coordinated Centre–State–local action for sustainability.

CLIMATE CHANGE AND DISASTER RISK PERSPECTIVE

- **Climate Buffer Function:** The Aravallis mitigate heatwaves and regulate local climate patterns. Studies on Delhi-NCR show that intact Aravalli stretches around Gurugram and Faridabad help moderate extreme heat and act as a natural barrier against the westward spread of the Thar Desert.
- **Carbon Sink Potential:** Forest cover in the hills contributes to carbon sequestration.ISRO and Forest Survey of India reports note that forested Aravalli patches in Rajasthan and Haryana

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contribute to carbon sequestration, supporting India's land-based climate mitigation efforts.

- **Disaster Risk Amplification:** Hill degradation increases flood risk, dust storms, and land degradation. Frequent flooding in Gurugram and dust storms affecting Delhi have been linked by environmental assessments to Aravalli degradation, mining scars, and loss of natural drainage.
- **National Climate Commitments:** Weakening natural ecosystems undermines India's climate adaptation goals. India's Nationally Determined Contributions (NDCs) emphasise enhancing forest and tree cover, a goal weakened by continued degradation of ecosystems like the Aravallis.
- **Long-term Resilience:** Protecting the Aravallis is central to regional climate resilience. Climate experts and policy reports identify Aravalli conservation as critical for long-term water security, heat resilience, and climate adaptation in north-western India.

SOCIAL IMPACT AND ENVIRONMENTAL JUSTICE

- **Livelihood Dependence:** Pastoralists, farmers and forest-dependent communities rely on the Aravallis.
- **Water and Resource Security:** Ecological decline directly affects drinking water and agriculture.
- **Disproportionate Impact:** Environmental damage affects marginalised communities the most.
- **Civil Society Engagement:** Protests reflect demand for inclusive and transparent decision-making.
- **Inter-generational Equity:** Conservation is essential to protect the rights of future generations.

WAY FORWARD

1. **Ecological-based Definition:** Adopt a scientific, landscape-level definition that includes hills, ridges, slopes and associated ecosystems.
2. **Strengthening Legal Safeguards:** Harmonise Supreme Court directives, forest laws and state regulations to avoid loopholes.
3. **Sustainable Development Zoning:** Clearly demarcate no-go ecological zones while allowing regulated development elsewhere.
4. **Community Participation:** Involve local communities and experts in conservation planning and monitoring.
5. **Long-term Climate Integration:** Integrate Aravalli conservation into national climate adaptation and air-quality strategies.

CONCLUSION

The Aravalli controversy is not merely about a technical definition but about India's broader development philosophy. Protecting one of the planet's oldest mountain systems is integral to ecological security, climate resilience, and intergenerational equity. A balanced approach that prioritises scientific understanding, legal robustness, and sustainable development is essential to ensure that economic growth does not come at the cost of irreversible environmental loss.

Prelims question:

Q. The Aravalli Range is considered one of the oldest mountain systems in the world. It extends across which of the following Indian states?

1. Gujarat
2. Rajasthan
3. Haryana
4. Uttar Pradesh

Select the correct answer using the code below:

(a) 1, 2 and 3 only (b) 2 and 3 only
(c) 1, 2, 3 and 4 (d) 1 and 2 only

Answer: A

Mains Question:

Q. "The Aravalli range is not merely a geological structure but an ecological lifeline for north-western India." Examine the statement with reference to desertification control, climate regulation and human settlements.

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VULTURE REINTRODUCTION INKAZIRANGA:AMILESTONE IN INDIA'S CONSERVATION EFFORTS

WHY IN THE NEWS?

The Central Zoo Authority (CZA), Ministry of Environment, Forest & Climate Change (MoEFCC), has approved the transfer of 30 White-rumped Vultures (Gyps bengalensis) and 5 Slender-billed Vultures (Gyps tenuirostris) from the Vulture Conservation and Breeding Centre (VCBC), Rani (Guwahati) to the 6th Addition of Kaziranga National Park & Tiger Reserve under Bishwanath Wildlife Division.

This marks a significant step toward reintroducing critically endangered vultures into the wild in Northeast India.



STATUS OF VULTURES IN ASSAM

1. Assam is the stronghold of Slender-billed vultures, hosting the largest breeding population in India, especially around the Kaziranga landscape.
2. White-rumped vultures occur widely across the state but have suffered massive crashes.
3. VCBC Rani holds one of the largest captive populations of Gyps vultures in South Asia and leads conservation in collaboration with BNHS.

SOCIO-CULTURAL SIGNIFICANCE

1. Vultures are traditionally associated with environmental balance in rural India.
2. Seen near riverbank cremation grounds, they symbolize the natural cycle of decay and purification.
3. Hindu mythology venerates vultures through Jatayu and Sampati from the Ramayana, symbolising courage and sharp vision.

CAUSES OF VULTURE DECLINE

Category	Details
Catastrophic Diclofenac Poisoning	• Diclofenac (veterinary NSAID) caused kidney failure and visceral gout in vultures feeding on treated livestock carcasses. • Even 0.8–1% carcass contamination triggered nationwide population collapse. • Resulted in >97% decline in White-rumped and Slender-billed vultures (1990s–2000s). • White-rumped vulture population: fell to ~11,000 by 2007. • Slender-billed vulture population: dropped to ~1,000 by 2007. • Current population (2023–25): only 750–1,000 Slender-billed vultures remain.
Secondary Threats	• Habitat loss and fragmentation. • Poison-baiting for carnivore control. • Unsafe NSAIDs such as aceclofenac and nimesulide are still in use. • Poisoning from pesticide-laced carcasses. • Infrastructure threats such as electrocution and collisions (in some areas).
Ecological Fallout of Decline	• Increase in feral dog populations due to the absence of vultures. • Rise in human–animal conflict and scavenger competition. • Surge in rabies cases, contributing to an estimated ~500,000 human deaths (2000–2005). • Collapse of natural scavenging services, leading to sanitation issues and slower carcass decomposition.

CONSERVATION AND REINTRODUCTION EFFORTS IN ASSAM

Why Kaziranga's 6th Addition Was Chosen

1. Large, undisturbed forested landscape
2. Abundant carrion from wild herbivores
3. Strong anti-poaching presence
4. Reduced NSAID contamination due to awareness among nearby communities
5. Low human interference

A scientifically designed release aviary has been constructed at Tewaripal Forest Camp, supervised by BNHS, to conduct a stepwise soft release that allows vultures to acclimatize before full dispersal.

ROLE OF THE VULTURE CONSERVATION BREEDING CENTRE (VCBC), RANI

VCBC-Rani, jointly run by the Assam Forest Department and the Bombay Natural History Society (BNHS), is South Asia's leading vulture conservation institution.

Key contributions:

1. More than 15 years of scientific breeding
2. Over 800 vultures bred nationwide under BNHS-led programmes
3. Development of advanced rearing, tagging, monitoring, and soft-release protocols
4. Creation of a genetically and demographically stable captive population of both species

SIGNIFICANCE OF THE INITIATIVE

1. **Strengthens India's Largest Vulture Recovery Programme:** The release of captive-bred vultures reinforces the country's long-term conservation strategy, integrating breeding, scientific monitoring, and safe release protocols.
2. **Boosts Survival Prospects of Critically Endangered Gyps Vultures:** By introducing genetically diverse, captive-bred individuals into secure habitats, the programme improves chances of population revival for species like the White-rumped and Slender-billed vultures.
3. **Restores Ecological Scavenging Services:** Vultures play a vital role in carcass disposal. Their return helps reduce feral dog numbers, prevent disease outbreaks, and improve overall ecosystem health in Northeast India.
4. **Improves Forest and Wildlife Health in Kaziranga Landscape:** The initiative supports natural carrion processing, reduces pathogen loads, and contributes to a more balanced predator–scavenger food web within the extended Kaziranga ecosystem.
5. **Promotes Community Awareness and Safe Veterinary Practices:** The programme involves local communities and veterinarians, encouraging a shift toward vulture-safe NSAIDs and reducing poisoning incidents—essential for long-term survival.
6. **Establishes a National Model for Landscape-Level Reintroductions:** This scientifically guided effort serves as a replicable model for species recovery under Indian field conditions, combining habitat suitability, anti-poaching, soft-release protocols, and community engagement.

CONCLUSION

The CZA's approval to release captive-bred White-rumped and Slender-billed vultures into the 6th Addition of Kaziranga marks a pivotal moment in India's vulture recovery journey. Assam—already a biological stronghold for these critically endangered species—has demonstrated leadership through scientific conservation, community engagement, and long-term planning. While diclofenac-era losses cannot be reversed overnight, sustained interventions, safe veterinary practices, and careful habitat management offer a realistic path toward restoring stable, wild vulture populations in the Northeast.

If implemented with continued vigilance and community support, this initiative could become a model for global raptor reintroduction efforts and reaffirm India's commitment to ecological balance and biodiversity conservation.

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Prelims question:

Q. Consider the following statements about Vulture Conservation in India:

1. Diclofenac poisoning was the primary cause of the >95% vulture decline in India during the 1990s–2000s.
2. Kaziranga's 6th Addition has been selected for vulture reintroduction due to low NSAID contamination and high carrion availability.
3. The Vulture Conservation and Breeding Centre (VCBC), Rani, is jointly operated by the Ministry of Environment and BNHS
4. Slender-billed Vulture is currently listed as Endangered on the IUCN Red List.

How many of the statements given above are correct?

(a) Only one (b) Only two

(c) Only three (d) All four

Answer: C

Mains Question:

Q. India's vulture populations have experienced one of the world's fastest recorded declines. Discuss the key threats facing vultures, and analyse the significance of the recent initiative to reintroduce White-rumped and Slender-billed vultures in Kaziranga National Park. (250 words)

RETURN OF THE CHEETAH: INDIA'S SCIENCE-LED GRASSLAND RESTORATION MISSION

WHY IN THE NEWS?

In the golden hues of a September dawn in 2022, eight majestic cheetahs from the Namibian savannas touched down on Indian soil, their paws marking the first steps of a species long absent from the subcontinent. This historic moment, presided over by Prime Minister Shri Narendra Modi at Kuno National Park in Madhya Pradesh, heralded Project Cheetah, the world's first inter-continental translocation of a large carnivore. Fast-forward to November 2025: Mukhi, the first cheetah cub born on Indian soil, has herself become a mother to five healthy cubs, symbolizing not just biological resurgence but a profound testament to human stewardship over nature's delicate balance. Launched on September 17, 2022, under the aegis of the Ministry of Environment, Forest and Climate Change (MoEFCC) and spearheaded by the National Tiger Conservation Authority (NTCA), Project Cheetah embodies India's unwavering commitment to biodiversity restoration. Drawing from the 2013 Action Plan and Supreme Court directives, it seeks to reintroduce the Asiatic cheetah (Acinonyx jubatus, declared extinct in India in 1952) as a flagship species, fostering ecosystem health across vast landscapes.



HISTORICAL CONTEXT: FROM EXTINCTION TO RENAISSANCE OF THE CHEETAH IN INDIA

The cheetah occupies a unique place in India's ecological and cultural memory. Once celebrated in royal courts as a swift and graceful hunting companion, the Asiatic cheetah (Acinonyx jubatus venaticus) historically roamed across a vast portion of the subcontinent—from Punjab in the north to Tirunelveli in Tamil Nadu, and from Gujarat and

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Rajasthan in the west to Bengal in the east. Its natural habitats included scrub forests, dry grasslands, savannas, and open arid–semi-arid ecosystems, forming the apex species of India's grassland biome.

Extinction in Independent India

1. Excessive hunting and sport-killing, including widespread coursing with trained cheetahs
2. Poaching of both adults and prey species
3. Large-scale habitat conversion for agriculture and human settlements
4. Collapse of natural prey base, especially blackbuck and chinkara
5. Low genetic diversity and slow reproductive rate, making populations less resilient to disturbances

The last confirmed sighting of wild cheetahs in India occurred in 1947, when three individuals were shot in the Sal forests of Koriya district (present-day Chhattisgarh). In 1952, the Government of India officially declared the species extinct—marking a profound loss for India's grassland-savanna ecosystems.

LAYING THE GROUNDWORK: CHOOSING KUNO NATIONAL PARK

- Efforts to revive the cheetah population took shape over several decades, culminating in expert recommendations that identified Kuno National Park (Madhya Pradesh) as the most suitable reintroduction site. The choice was supported by:
- Relocation of 24 villages (1,545 families) through incentivised voluntary rehabilitation
- Creation of 6,258 hectares of inviolate grassland and open scrub habitat
- A landscape with low human density, compatible prey diversity, and ecological contiguity with other protected areas
- Kuno thus emerged as the most viable landscape for establishing a free-ranging cheetah population.

A BIODIVERSITY RENAISSANCE: PROJECT CHEETAH AND GLOBAL ALIGNMENT

By 2022, India operationalised the long-delayed dream of bringing back the cheetah. The initiative was aligned with:

1. Convention on Biological Diversity (CBD) commitments
2. Global best practices in species recovery and reintroduction science
3. UN Sustainable Development Goal 15 (Life on Land)

India became the first country in the world to attempt a transcontinental wild cheetah introduction, sourcing individuals from genetically diverse southern African populations.

LEADERSHIP AND DIPLOMACY: THE ROLE OF PRIME MINISTER NARENDRA MODI

Prime Minister Narendra Modi's sustained commitment played a decisive role in transforming the project from a vision into a lived reality. His contributions included:

1. Directing the formulation of the 2022 Action Plan for cheetah reintroduction
2. Facilitating pioneering MoUs with Namibia (July 2022) and South Africa (January 2023)
3. Personally releasing the first eight Namibian cheetahs on 17 September 2022 at Kuno National Park
4. Using public platforms like Mann Ki Baat to deepen national awareness and engage citizens
5. Highlighting conservation milestones, including the first cheetah births in 2023 and the historic second-generation litter born in November 2025

His continued oversight ensured technical coordination among forest departments, global experts, and conservation biologists.

PROJECT STATUS AS OF DECEMBER 2025: A NEW BEGINNING

India's cheetah population now comprises 30 individuals:

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- 12 adults
- 9 sub-adults
- 9 cubs

This includes:

- 11 founder stock (imported cheetahs)
- 19 India-born cheetahs, signalling the beginning of an ecologically stable, breeding population.

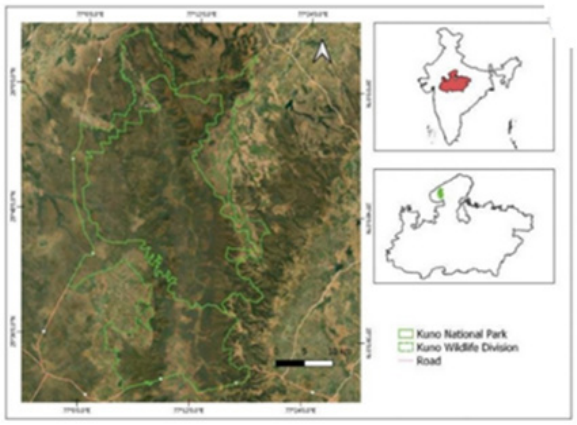
The successful birth of second-generation cubs marks a significant step toward establishing a self-sustaining cheetah metapopulation, fulfilling India's long-term vision of restoring grassland ecosystems and reversing historical biodiversity loss.

PROJECT CHEETAH: INDIA'S GLOBAL MODEL OF SCIENCE-LED, COMMUNITY-DRIVEN REWILDING

By linking Project Cheetah with Mission LiFE and India's G20 vision of "One Earth, One Family, One Future," Prime Minister Narendra Modi has elevated the initiative from a national conservation programme to a global symbol of ecological restoration and climate-aligned rewilding. Personally monitoring its progress, he has ensured that the roar of the cheetah—silent in India for more than 70 years—resounds once again across its ancient grasslands.

TIMELINE OF KEY EVENTS (2022–2025)

Date	Event / Milestone
17 Sep 2022	First batch of 8 African cheetahs (5 females, 3 males) flown from Namibia to India; released into quarantine enclosures at Kuno National Park (KNP), Madhya Pradesh.
Feb 2023	Second batch of 12 cheetahs translocated from South Africa under a bilateral MoU.
2023 (First 6 months)	First cheetah births in India in 70 years—cubs born to imported females.
2024 onwards	Phase-wise soft releases into open wilderness as per international protocols.
2024–25	Expansion plans to additional habitats; November 2025: Botswana gifts 8 cheetahs to India.



Location of Kuno National Park within the state of Madhya Pradesh, India.

OBJECTIVES & STRATEGIC FRAMEWORK OF PROJECT CHEETAH

Category	Details
Primary Objective	Establish a viable metapopulation of 60–70 cheetahs across 17,000 km² (Kuno–Gandhi Sagar landscape). Restore degraded grassland and open forest ecosystems.
Core Principles	Ecological Restoration: Rebuild grasslands/open forests. Climate Benefits: Enhanced carbon sequestration. Flagship Approach: Cheetah as umbrella species supporting wider biodiversity.
Founder Stock Introduction (Phase 1)	Introduce 12–14 reproductively capable, genetically diverse, predator-wary cheetahs. Sourced from Namibia & South Africa (and later other African countries). Initial release in 748 km² core area → expansion to 3,200 km² landscape.

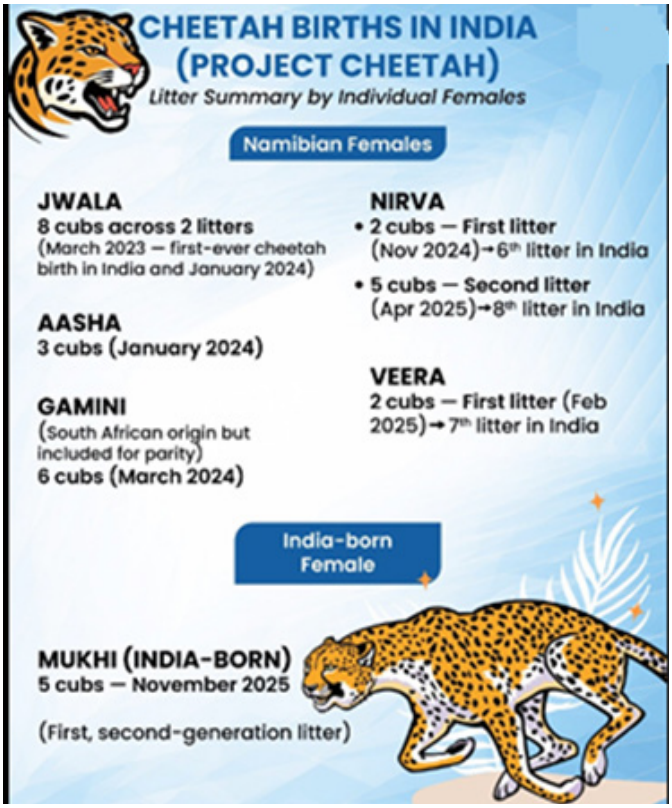
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Metapopulation Linkage (Phase 2)	Link Kuno National Park with Gandhi Sagar Wildlife Sanctuary (368 km² sanctuary + 2,500 km² habitat). Long-term target: 60–70 cheetahs across the connected landscape.
Self-Sustaining Growth	Aim for 5% annual net population growth. Expected to reach carrying capacity in 15 years, considering mortality and supplementation.
Budget	₹39 crore allocated for Phase I under Centrally Sponsored Scheme – Project Tiger.
Monitoring Framework	Follows IUCN Guidelines (2013). Uses GPS collars, camera traps, and 734–816 km prey transects for population & habitat monitoring.

MILESTONES AND ACHIEVEMENTS: SCIENCE-DRIVEN PROGRESS

1. Translocation Milestones

Parameter	Details
Total Cheetahs Translocated	20
Source Countries	Namibia and South Africa
Transport	Indian Air Force C-17 Globemaster
Distance Covered	7,900 km
Morbidity During Transit	Zero
Significance	World's longest and most complex live-predator translocation completed successfully



2. Early Breeding Success Indicators

Indicator	Explanation
Early reproduction observed	Yes — indicates rapid ecological adaptation
Habitat compatibility	Grassland–savanna structure suitable
Prey base	Adequate for sustainable population
Stress levels	Low, showing good adjustment to environment
Biological inference	Kuno landscape capable of sustaining long-term cheetah population

3. Litter Records (2023–2025)

Cheetah (Origin)	Litter Details	Number of Cubs	Notes
Jwala (Namibia)	2 litters (Mar 2023 & Jan 2024)	8	First two successful litters in India
Aasha (Namibia)	Jan 2024	3	Healthy cub survival

Gamini (South Africa)	Mar 2024	6	Strong reproductive success
Nirva (Namibia)	Nov 2024 (6th litter in India)	2	Continued successful breeding
	Apr 2025 (8th litter in India)	5	High litter size
Veera (Namibia)	Feb 2025 (7th litter in India)	2	Consistent reproduction
Mukhi (India-born)	Nov 2025	5	First second-generation breeding milestone



4. Spatial Ecology (Home-Range Studies)

Individual / Group	Home Range (km²)	Ecological Significance
Aasha (female)	121 km²	Stable female range
Aasha's sub-adult males	1,508 km²	Natural dispersal behaviour
Male coalition Agni–Vayu	1,819 km²	Strong territorial establishment
Gamini + 4 cubs	6,160 km²	Large movement, healthy habitat use
Jwala + 4 cubs	3,139 km²	Good spatial expansion

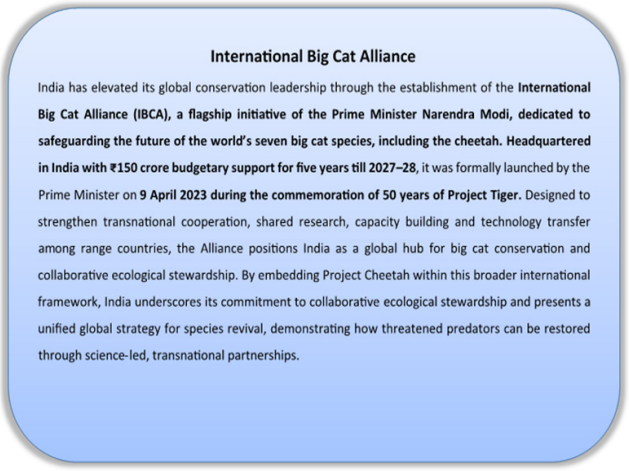
INTERNATIONAL COLLABORATION FOR PROJECT CHEETAH

1. International Big Cat Alliance (IBCA)

Component	Details
Launch Date	9 April 2023
Financial Support	₹150 crore till 2027–28
Focus	Conservation of seven big cat species globally
Key Functions	Research cooperation, capacity building, global conservation coordination
Relevance to Project Cheetah	Provides international scientific exchange, strengthens global big cat conservation frameworks

2. India–Africa Conservation Diplomacy

Partner Country	Year	Key Agreements/ Actions	Significance for Project Cheetah
South Africa	Jan 2023	MoU on long-term cheetah translocation, monitoring, veterinary training	Builds sustained cheetah source population; ensures scientific transfer and capacity building
Namibia	2022	World's first intercontine-ntal wild-to-wild cheetah transloca-tion	Historic global precedent in carnivore conservation; foundational to Project Cheetah
Botswana	2025	Gift of 8 cheetahs to India	Enhances genetic diversity; deepens conservation diplomacy
Joint Initiatives (All African partners)	Ongo-ing	Field operations, airlifts, research, training, genetic planning	Creates an international cheetah metapopulation model and global conservation alliance



International Big Cat Alliance

India has elevated its global conservation leadership through the establishment of the **International Big Cat Alliance (IBCA), a flagship initiative of the Prime Minister Narendra Modi, dedicated to safeguarding the future of the world's seven big cat species, including the cheetah. Headquartered in India with ₹150 crore budgetary support for five years till 2027–28**, it was formally launched by the Prime Minister on **9 April 2023 during the commemoration of 50 years of Project Tiger.** Designed to strengthen transnational cooperation, shared research, capacity building and technology transfer among range countries, the Alliance positions India as a global hub for big cat conservation and collaborative ecological stewardship. By embedding Project Cheetah within this broader international framework, India underscores its commitment to collaborative ecological stewardship and presents a unified global strategy for species revival, demonstrating how threatened predators can be restored through science-led, transnational partnerships.

3. Overall International Impact

Aspect	Explanation
Global ecological mission	Project Cheetah shows that threatened species can be revived through coordinated global efforts
Transnational collaboration	Demonstrates pioneering India–Africa conservation partnership
Science-led approach	Use of global expertise in genetics, ecology, veterinary science
Model for future reintroductions	Sets precedent for future large carnivore rewilding worldwide

CONCLUSION

Project Cheetah symbolizes the rebirth of an ecological legacy. With thriving breeding, expanding ranges, and strong community stewardship, India has shown that extinct species can return—when science, diplomacy, and public participation converge.

As cheetahs sprint again across India's grasslands, the world witnesses a powerful message: Rewilding is possible. Restoration is achievable. Hope can be engineered.

Prelims question:

Q. With reference to Project Cheetah, consider the following statements:

1. It is the world's first inter-continental wild-to-wild translocation of a large carnivore.
2. The first batch of cheetahs under the project was brought to India from South Africa in September 2022.
3. Kuno National Park was chosen as the primary release site because it had already undergone village relocation and grassland restoration.
4. Project Cheetah is being implemented by the National Tiger Conservation Authority (NTCA).

How many of the above statements are correct?

(a) One only (b) Two only

(c) Three only (d) All four

Answer: C

Mains Question:

Q. Project Cheetah is often described as India's most ambitious ecological rewilding initiative. Discuss how its scientific strategy, international collaborations, and community-driven conservation efforts together make it a global model for species restoration.

(250 words)

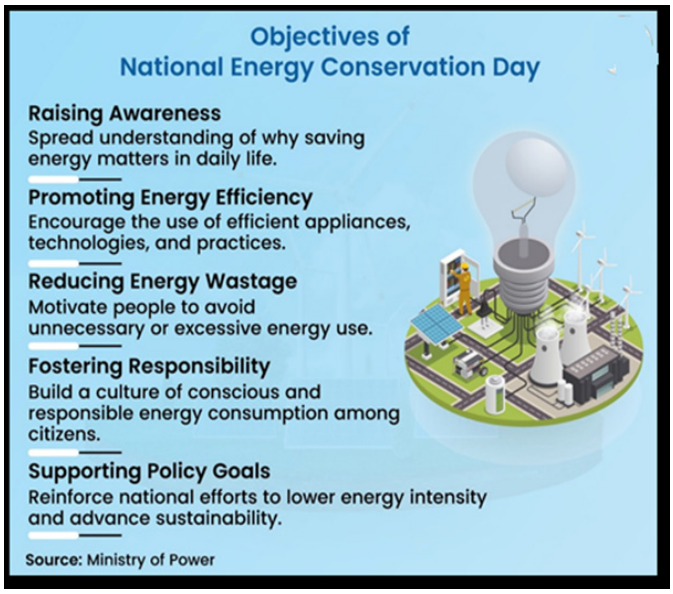
ENVIRONMENT & SUSTAINABLE DEVELOPMENT- ENERGY CONSERVATION IN INDIA: BALANCING GROWTH, SECURITY AND SUSTAINABILITY

WHY IN THE NEWS?

India observes National Energy Conservation Day on 14 December every year to highlight the critical role of energy efficiency and conservation in sustaining economic growth, ensuring energy security, and promoting environmentally responsible development. The day underscores the need to meet rising energy demand through efficient use of resources and reduced wastage, rather than mere expansion of supply, as energy remains the

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backbone of modern life, industry, infrastructure, and social services.



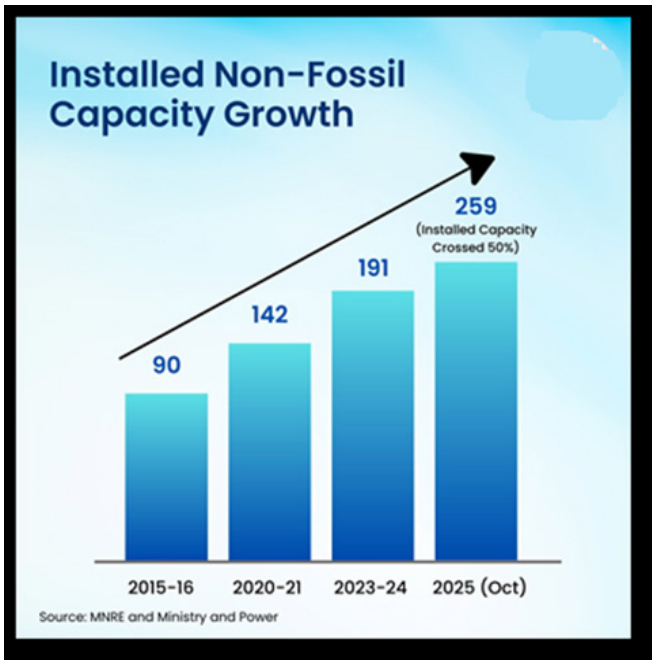
INDIA'S CURRENT ENERGY LANDSCAPE



India is among the world's top three energy consumers, and electricity demand continues to grow every year. The total electricity generation increased from 1,739.09 Billion Units (BU) in 2023–24 to 1,829.69 BU in 2024–25, a growth of 5.21%. For 2025–26, the generation target has been set at 2,000.4 BU.

At the same time, the power system has become more reliable. In June 2025, the energy-shortage levels were reported to be as low as 0.1 %. India's meta peak demand of 241 GW with zero shortage highlights improved system resilience and better demand-supply management.

India's energy mix is rapidly shifting toward cleaner sources. As of 31 October 2025, the country's total installed generation capacity stands at 505 GW, of which non-fossil sources account for over 259 GW. This means that more than 50% of installed electricity capacity now comes from non-fossil sources such as solar, wind, hydro, and nuclear power. This evolving landscape shows that India is not only expanding access to energy but also moving toward a cleaner and more sustainable energy future.



MAJOR ENERGY CONSERVATION INITIATIVES IN INDIA

Sector / Area	Initiative / Scheme	Key Features	Significance / Impact
Industrial Energy Efficiency	Carbon Credit Trading Scheme (CCTS)	Market-based decarbonisation mechanism; assigns GEI targets to energy-intensive sectors; tradable Carbon Credit Certificates	Promotes cost-effective emission reduction; links efficiency with climate goals; replaces PAT for major sectors (Dec 2025)

	Perform, Achieve and Trade (PAT)	Mandatory energy-reduction targets for designated consumers; tradable ESCerts for over-achievement	Laid foundation for industrial energy efficiency; enabled market-linked efficiency improvements
Household & MSME Efficiency	Standards & Labelling (S&L) Programme	Covers 28 appliances (17 mandatory); star-labelling informs consumers; promotes efficient manufacturing	Reduces household energy demand; drives market transformation
	UJALA LED Programme (2015)	Affordable LED distribution nationwide	36.87 crore LEDs; major energy, cost, peak-load and CO_2 savings
Renewables & Distribution	PM Surya Ghar Muft Bijli Yojana (2024)	Rooftop solar for 1 crore households; up to 300 free units/ month; outlay ₹75,021 crore	Lowers household bills; promotes decentralised clean energy
	Revamped Distribution Sector Scheme (RDSS)	DISCOM reforms; smart metering; loss reduction	4.76 crore smart meters installed; improves efficiency of power distribution
Buildings	ECBC / ECSBC	Minimum energy-efficiency standards for commercial buildings; sustainability focus	Reduces long-term electricity demand; improves building performance
	Eco Niwas Samhita (2018)	Residential building code; efficient design, insulation and ventilation	Enhances thermal comfort; lowers residential energy use
Digital & Institutional Frameworks	National Mission on Enhanced Energy Efficiency (NMEEE)	Umbrella mission covering PAT, MTEE, EEFP, FEEED	Strengthens institutional architecture for energy efficiency
	Urja Dakshata Information Tool (UDIT)	Digital platform for energy-use and savings data	Enables data-driven policy and monitoring
	LiFE (Lifestyle for Environment)	Behavioural change for responsible consumption	Complements technological efficiency with public participation
Public Participation & Awareness	National Energy Conservation Awards (NECA)	Annual awards since 1991 on 14 December	Incentivises best practices across sectors
	National Energy Efficiency Innovation Awards (NEEIA)	Recognises innovative efficiency solutions (since 2021)	Encourages R&D and innovation
	National Painting Competition on Energy Conservation	Nationwide student outreach at school, state and national levels	Builds early awareness and energy-saving culture

INDIA'S GLOBAL ENGAGEMENT ON ENERGY EFFICIENCY AND CLIMATE ACTION

In 2024, India formally joined the International Energy Efficiency Hub, a global platform that brings together governments, international organisations, and private stakeholders to promote energy-efficient technologies and best practices. This move reflects India's intent to align its domestic energy-efficiency

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initiatives with global standards while sharing its own experiences with developing countries.

Under the United Nations Framework Convention on Climate Change (UNFCCC), countries are required to design nationally appropriate energy-transition pathways. India has articulated a balanced approach that reconciles rapid economic growth with long-term climate responsibility. It has committed to achieving net-zero emissions by 2070 and, under its 2030 Nationally Determined Contributions (NDCs), has pledged to reduce the emissions intensity of GDP by 45%, ensure 50% of installed power capacity from non-fossil sources, create an additional carbon sink of 2.5–3 billion tonnes of CO_2 equivalent, promote sustainable lifestyles through the LiFE movement, and strengthen resilience in climate-vulnerable sectors.

Through these commitments, India has emerged as a leading voice of the Global South, consistently advocating affordable clean energy, equitable climate finance, and access to technology in line with the principles of equity and common but differentiated responsibilities. During its G20 Presidency, India advanced global cooperation on clean fuels and energy transitions, including the launch of the Global Biofuels Alliance (GBA). The alliance has since expanded to 25 countries and 12 international organisations, bringing together major producers, consumers, and multilateral institutions to accelerate the adoption of affordable, low-carbon biofuels.

ISA 2025: EXPANDING GLOBAL SOLAR LEADERSHIP

In 2025, India hosted the 8th ISA Assembly in New Delhi, attended by over 125 Member and Signatory countries, 550 delegates, and 30+ ministers, underscoring the alliance's growing global relevance. Several new initiatives were launched, including SUNRISE for solar recycling and circularity, One Sun One World One Grid (OSOWOG) to promote cross-border solar grid integration, a Solar Procurement Platform for Small Island Developing States (SIDS) developed with the World Bank, and a Global Capability Centre (GCC) to strengthen innovation, training, and capacity-building. ISA also advanced its "Towards 1000" strategy, aiming to mobilise USD 1 trillion in solar investments by 2030 and support the deployment of 1,000 GW of solar capacity across member countries.

Beyond ISA, India actively participates in global platforms such as the Coalition for Disaster Resilient Infrastructure (CDRI), Mission Innovation, and partnerships with the International Renewable Energy Agency (IRENA) to support clean-energy innovation and resilience building. According to the IRENA Renewable Energy Statistics 2025, India ranks third globally in solar energy, fourth in wind energy, and fourth in total installed renewable energy capacity, reflecting its rapid progress in renewable deployment.

THE ROAD AHEAD: ENERGY CONSERVATION, NET ZERO AND VIKSIT BHARAT

Energy conservation remains a cornerstone of India's climate and development strategy, with the Bureau of Energy Efficiency (BEE) playing a central role. Through initiatives such as Standards & Labelling, PAT/CCTS, building energy codes, NECA and NEEIA awards, energy audits, state partnerships, and mass public campaigns, BEE is embedding efficiency into everyday decision-making. Its awareness efforts—from school-level painting competitions to national-level recognition programmes—reinforce the message that every unit of energy saved contributes to national progress.

As India observes National Energy Conservation Day, the way forward is clear: energy conservation is not merely a technical requirement but a shared civic responsibility. Coordinated action by the government, industry, institutions, and citizens is essential to build an efficiency-driven culture that supports India's 2030 climate commitments, its net-zero 2070 goal, and the long-term vision of Viksit Bharat.

CONCLUSION

India's observance of National Energy Conservation Day highlights that energy efficiency and conservation are no longer optional policy choices but essential pillars of sustainable development. As electricity demand rises alongside economic growth, conserving energy offers the most cost-

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effective and environmentally responsible pathway to ensure energy security, reduce emissions, and enhance system resilience. India's progress—reflected in a cleaner energy mix, declining shortages, and strong institutional mechanisms—demonstrates that efficiency-led growth is both feasible and impactful. Going forward, the combined efforts of the government, BEE, industry, states, and citizens must deepen this efficiency culture through technology adoption, behavioural change, and global cooperation.

Prelims question:

Q. With reference to energy conservation initiatives in India, consider the following statements:

1. National Energy Conservation Day is observed on 14 December to promote awareness about efficient use of energy resources.
2. The Carbon Credit Trading Scheme (CCTS) assigns Greenhouse Gas Emission Intensity (GEI) targets to energy-intensive industries.
3. The UJALA LED programme is implemented by the Ministry of New and Renewable Energy.
4. Eco Niwas Samhita focuses on improving energy efficiency in residential buildings.

Which of the statements given above are correct?

(a) 1, 2 and 4 only (b) 1, 3 and 4 only
(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. Energy conservation is emerging as a key pillar of India's energy security and climate strategy.

Discuss India's current energy landscape and evaluate the role of energy-efficiency initiatives in achieving the country's climate commitments and long-term vision of Viksit Bharat. (250 words)

GREEN MARITIME TRANSITION IN INDIA: ALIGNING PORT-LED GROWTH WITH CLIMATE COMMITMENTS

WHY IN THE NEWS?

India's ports are in the news due to record cargo handling of 855 million tonnes in FY 2024–25 and their expanding role under Sagarmala and PM Gati Shakti in supporting Atmanirbhar Bharat. However, rapid port expansion has intensified concerns over air and water pollution, GHG emissions, and damage to fragile coastal ecosystems such as mangroves and coral reefs. At the same time, India is aligning its maritime sector with its climate commitments under the NDCs and global targets set by the International Maritime Organization, including a 40% reduction in CO_2 emissions by 2030. This dual push for port-led growth and environmental sustainability has brought India's ports sector into policy and public focus.



GREEN MARITIME POLICY FRAMEWORK IN INDIA

Background and Rationale

The Green Maritime approach in India has evolved to align maritime development with national sustainability priorities, global climate

commitments, and Health, Safety and Environment (HSE) standards. With ports emerging as critical economic gateways, there is a growing emphasis on making port operations safer, cleaner, energy-efficient, and environmentally sustainable.

GREEN MARITIME POLICY FRAMEWORK IN INDIA

Policy / Initiative	Year	Purpose / Role	Key Features / Targets
Indian Ports Act, 2025	2025	Legal foundation for green and sustainable port governance	• Replaces colonial Indian Ports Act, 1908 • Mandates compliance with global green maritime norms • Strengthens environmental safeguards, pollution control & disaster preparedness • Institutionalises eco-friendly port operations • Aligns with international conventions like MARPOL and Ballast Water Management Convention
Maritime India Vision (MIV) 2030	2021	Medium-term strategic blueprint for maritime sector growth	• Identifies 150 initiatives for coordinated development • Focus on Safe, Sustainable & Green Maritime Sector • Renewable energy adoption • Reduction of air emissions • Water optimisation & wastewater reuse • Solid waste management • Zero-accident safety programmes • Centralised digital monitoring system
Maritime Amrit Kaal Vision 2047	2023	Long-term roadmap aligned with India@100	• Investment of nearly ₹80 lakh crore • Covers ports, coastal shipping, inland waterways, shipbuilding & green shipping • Over 300 actionable initiatives • Targets India as a global maritime & shipbuilding hub • Sustainability as the core pillar of maritime expansion
Harit Sagar: Green Port Guidelines	2023	Operational framework for green port implementation	• Emission Reduction (per ton cargo): • 30% by 2030 • 70% by 2047Renewable Energy Share: • 60% by 2030 • 90% by 2047 (New Mangalore Port achieved 100% solar by 2025) **Electrification of Port Equipment:** • 50% by 2030 • 90% by 2047 **Green Cover:** • 20% by 2030 • 33% by 2047 **Shore-to-Ship Power:** • Phased rollout; EXIM vessels by 2025 **Water Management:** • 100% wastewater reuse • 20% reduction in freshwater consumption by 2030

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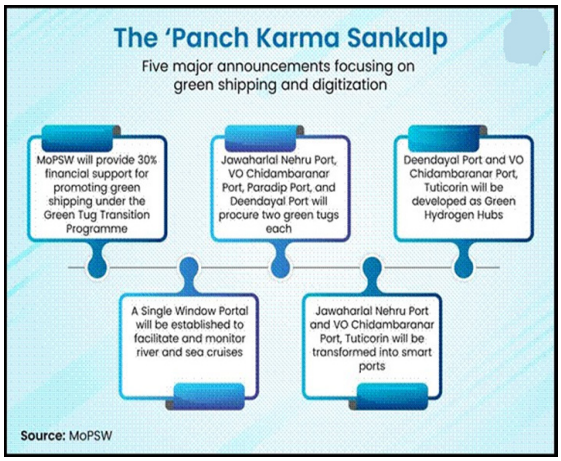
STATUS OF IMPLEMENTATION: KEY GREEN INTERVENTIONS UNDER MARITIME INDIA VISION (MIV) 2030

Intervention Area	Key Measures / Actions	Implementation Status & Best Practices
1. Renewable Energy Adoption	• Rooftop & floating solar PV • Onshore & offshore wind via PPP • Tidal energy pilots (Gulf of Cambay & Kutch: 8,000–12,000 MW potential)	• Steady progress at Kandla, Tuticorin, Mormugao, JNPA • Best Practice: Mormugao Port's 'Harit Shrey' scheme (2023) offering Green Ship Incentives through Environmental Ship Index (ESI)
2. Air Quality Improvement	• Electrification of cranes, forklifts & cargo equipment • LNG bunkering for cleaner fuel • Shore-to-ship power supply • Dust suppression systems & green buffers	• Mumbai Port: Shore power installations • Paradip Port: Dust suppression, LED lighting, oil spill response systems & large-scale plantation
3. Optimising Water Use & Green Cover	• Sewage & wastewater treatment plants • Recycling of oily waste • Strengthening oil spill monitoring • Use of atomisers & mist cannons	• Reduced freshwater consumption • Expansion of mangroves & green belts through CSR initiatives
4. Solid Waste Management	• Waste segregation, recycling & scientific disposal • Alignment with Swachh Bharat Mission • Compliance with National Action Plan for Green Shipping	• Infrastructure upgrades such as roads, sheds, sanitation facilities & dustbins • Improved port cleanliness & hygiene
5. Dredged Material Recycling	Reuse for land reclamation, construction, beach nourishment & habitat creation	• Initial target of 30% recycling, scalable via PPP • Best Practices: Mundra, Paradip & Visakhapatnam ports
6. Zero Accident Safety Programme	• Risk assessment • Equipment safety & hazardous material handling • Safety culture, training & process re-engineering	Case Study: V.O. Chidambaranar Port declared Zero Fatal Accident Zone (2019–21) through PPE enforcement, mock drills, inspections & training
7. Occupational Health at Ports	• Address physical, chemical, ergonomic & psychosocial risks • Periodic medical monitoring • 24×7 emergency services	Mumbai Port Trust: Operates a 200-bed hospital; developing a 600-bed super-specialty hospital under PPP
8. Real-Time Centralised Monitoring	• National digital dashboard • Uniform HSE indicators across ports • Real-time tracking of emissions, safety & health data	Enhances transparency, regulatory compliance & evidence-based policymaking

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In this context, examine the Green Maritime Policy Framework in India. Discuss its key initiatives, achievements, and challenges in transforming Indian ports into sustainable and climate-resilient infrastructure.

Initiatives like Sagarmala Programme, Harit Sagar, Harit Nauka, and Green Tug Transition Programme (GTTP)etc provides practical roadmap for decarbonising shipping through green finance, regulations, technology, and collaboration, balancing sustainability with economic growth.



MAJOR GOVERNMENT-LED GREEN INITIATIVES FOR SUSTAINABLE MARITIME GROWTH

1. Flagship & Sectoral Green Initiatives

Initiative	Objective	Key Features / Targets
Sagarmala Programme	Transform India into a global maritime leader with green logistics	• Core pillar of MIV 2030 & Maritime Amrit Kaal Vision 2047 • Focus on lowering logistics cost, faster trade & job creation • 840 projects worth ₹5.8 lakh crore by 2035 • 272 projects (₹1.41 lakh crore) completed • 217 projects (₹1.65 lakh crore) under implementation
Vadhavan Greenfield Major Port (Maharashtra)	Develop next-generation green mega port	• Approved June 2024 • Developed by VPPL (JNPA + MMB) • Total cost ₹76,220 crore • Core infra: ₹38,976 cr (incl. dredging & reclamation via PPP) • Terminals & commercial infra: ₹37,244 cr (PPP)
Green Tug Transition Programme (GTTP)	Replace fossil-fuel harbour tugs with green alternatives	• Part of 'Panch Karma Sankalp' • Promotes Green Hybrid Tugs • Adoption of Methanol, Ammonia, Hydrogen • Strong alignment with Make in India & indigenous shipbuilding
Harit Nauka (Green Vessel) Initiative	Decarbonise inland waterway transport	• Launched for inland vessels • Target: 100% Green Vessels by 2047 • Standardised green vessel designs • Financial assistance & ecosystem creation • Promotes safe, affordable, green passenger transport • Boosts indigenous shipbuilding
National Green Hydrogen Mission (2023)	Make India a global green hydrogen hub	• Target: 5 MTPA green hydrogen by 2030 • Investment: ₹8 lakh crore • Jobs: 6 lakh • Import savings: ₹1 lakh crore • Focus: production, pilots, electrolysers, R&D, skills • Kandla, Paradip, Tuticorin to be developed as Green Hydrogen hubs

Green Shipping by SCI	Decarbonise shipping fleet	• 2 SCI vessels identified for retrofit • To run on green methanol / hydrogen-based fuels by 2027

2. Sustainable MoUs Driving Green Maritime Growth (2025)

Area	Key MoUs / Developments
Overall Framework	• MoU Exchange Ceremony "Samudra Se Samriddhi" at Bhavnagar (19 Sept 2025) • 27 MoUs, investments ₹66,000+ crore • Focus on ports, green mobility, tourism, energy, shipbuilding, finance
Green Urban Water Transport	• IWAI–Bihar Govt MoU for ₹908 crore Patna Water Metro • Electric ferries & modern terminals
Green Shipbuilding Infrastructure	• Mazagaon Dock–Guidance Tamil Nadu: Greenfield shipyard at Thoothukudi • Green shipbuilding clusters in AP, Odisha, Gujarat, Maharashtra, TN
Eastern Maritime Capacity	• GRSE MoUs with IPRCL, SCI, SMPK, Modest Shipyard • Focus on greenfield yards, tug development & ship repair
Green Maritime Finance	• Sagarmala Finance Corporation Ltd MoUs with NaBFID, IIFCL, Neo Fund, Climate Fund Managers • Mobilisation of equity, debt & climate finance for green shipping & logistics

3. India's International Green Maritime Pacts

Country	Green Maritime Cooperation Areas
Denmark	• Joint work plan on green & digital maritime • Centre of Excellence in Green Shipping • Cooperation on green fuels, ship recycling, energy efficiency
Norway	• Green shipping • Ship recycling • Maritime training & security
Russia	• Cooperation on Northern Sea Route • Efficient, lower-emission Arctic shipping
Malta	• Green shipping • Cruise & port infrastructure • IMO initiatives & shipping registry best practices
Singapore	• Green & Digital Shipping Corridor • Low-emission technologies & digitalisation
Netherlands	• Maritime cooperation • Green Digital Sea Corridor for sustainable port growth

CONCLUSION

India stands poised at the threshold of a transformative maritime era - one that harnesses its vast coastline, growing industrial capacity and strategic position to not only advance trade and connectivity but also cement a legacy of sustainability and resilience. Through visionary programmes, legislative reforms and green-shipping initiatives, the country is rewiring its maritime ecosystem for the future: cleaner ports, low-emission fleets, smart infrastructure and inclusive opportunity. As India charts its course toward 2047, it is doing so not just as a rising maritime power, but as a responsible steward of the seas, a globally

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competitive economy and a partner committed to the well-being of the planet.

Prelims question:

Q. With reference to the Harit Sagar: Green Port Guidelines (2023), consider the following statements:

1. They align with India's Nationally Determined Contributions (NDCs) and COP26 commitments.
2. They mandate ports to achieve more than 60% renewable energy usage by 2030.
3. They aim to provide shore-to-ship power supply to all EXIM vessels by 2025.
4. They seek 100% reuse of wastewater and reduction in freshwater consumption.

Which of the statements given above are correct?

(a) 1, 2 and 3 only (b) 1, 2 and 4 only
(c) 1, 2, 3 and 4 (d) 2 and 4 only

Answer: C

Mains Question:

Q. In this context, examine the Green Maritime Policy Framework in India. Discuss its key initiatives, achievements, and challenges in transforming Indian ports into sustainable and climate-resilient infrastructure.

(250 words)





STRENGTHENING ETHICAL GOVERNANCE IN FINANCIAL REGULATION: THE CASE OF SEBI'S ENHANCED

WHY IN THE NEWS?



Ethical governance is the cornerstone of trust in public institutions, particularly regulatory bodies that oversee complex and high-stakes domains like financial markets. In this context, the government's proposal to strengthen the powers of the Securities and Exchange Board of India (SEBI), coupled with mandatory conflict-of-interest disclosures for its board members, represents a significant step towards reinforcing integrity, transparency, and accountability in regulatory governance.

ETHICAL ISSUES IN FINANCIAL REGULATION

- **Conflict of Interest and Institutional Integrity:** Financial regulators operate in close proximity to powerful market players, increasing the risk of conflicts of interest. Past professional associations, revolving-door appointments and inadequate disclosure norms can compromise decision-making. Such conflicts weaken institutional integrity and may result in regulatory capture, where private interests overshadow public welfare. Ethically, this violates the principles of integrity and impartiality essential for credible public institutions.
- **Objectivity, Bias and Erosion of Public Trust:** Even when actual misconduct is absent, the perception of bias can seriously undermine public confidence in regulatory bodies. Selective leniency or favourable treatment towards certain entities raises doubts about objectivity and fairness. Ethical governance demands not only unbiased action but also visible neutrality to sustain public trust and legitimacy of financial regulation.
- **Discretionary Powers and Risk of Moral Hazard:** Regulators like SEBI possess wide discretionary powers in investigation, enforcement and penalty imposition. Without adequate ethical safeguards, such discretion can lead to arbitrariness, selective enforcement and moral hazard among officials. This challenges the ethical principles of fairness, accountability and rule of law, which are central to democratic governance.
- **Accountability and Ethical Use of Regulatory Authority:** Effective financial regulation requires aligning authority with responsibility. Transparent procedures, reasoned orders and oversight mechanisms help ensure ethical exercise of power. Reforms aimed at enhancing disclosures and checks on discretion reinforce accountability and probity, thereby strengthening ethical foundations of public administration.

ETHICAL SIGNIFICANCE OF CONFLICT-OF-INTEREST DISCLOSURES

- **Transparency as a Preventive Ethical Value:** Mandatory conflict-of-interest disclosures institutionalise transparency by making regulatory decision-making open to scrutiny. When personal, financial or professional interests are declared in advance, potential ethical lapses can be identified and mitigated early. Transparency thus functions not merely as a corrective mechanism after misconduct but as a preventive ethical safeguard, reinforcing openness and ethical foresight in governance.
- **Accountability and Public Answerability:** Disclosure norms strengthen accountability by making regulators answerable to Parliament and responsible to the public they serve. By subjecting officials to ethical scrutiny beyond mere legal compliance, disclosures reinforce the principle that public office is a public trust. This aligns with GS-IV values of answerability, responsibility and democratic oversight in public administration.
- **Institutional Integrity and Impartial Decision-Making:** Integrity implies consistency between ethical values, decisions and actions. Mandatory disclosures help ensure that regulatory decisions are impartial and free from undue influence. By preventing personal interests from overriding public duty, such reforms protect institutional credibility and reinforce probity, which is essential for maintaining trust in financial regulators.
- **Trust-Building and Ethical Legitimacy of Institutions:** Institutions that demonstrate ethical conduct through transparent disclosures command higher public trust and voluntary compliance. When stakeholders perceive fairness and impartiality, enforcement costs decline and regulatory effectiveness improves. Ethical legitimacy thus becomes a governance asset, strengthening both institutional authority and societal confidence.

ETHICAL THEORIES AND PRINCIPLES INVOLVED IN CONFLICT-OF-INTEREST DISCLOSURES

Ethical Theory / Principle	Core Idea	Application in Financial Regulation
Deontological Ethics (Duty-Based – Kant)	Moral actions are based on duty and adherence to rules, irrespective of outcomes	Regulators have a moral duty to act impartially; disclosure norms reinforce commitment to duty over personal or institutional gain
Utilitarianism (Bentham & Mill)	Actions are ethical if they maximize overall welfare or happiness	Transparent regulation enhances market stability and public trust, benefiting the greatest number of stakeholders
Virtue Ethics (Aristotle)	Focuses on character and moral virtues rather than rules alone	Disclosure practices cultivate virtues like honesty, integrity, impartiality and responsibility among regulators
Principle of Probity in Governance	Ethical governance requires uprightness, transparency and ethical conduct	Mandatory disclosures strengthen probity by preventing misuse of office and promoting ethical public service
Public Trust Doctrine	Public office is held in trust for the benefit of citizens	Regulators must disclose interests to uphold citizens' trust and ensure decisions serve public welfare, not private interests
Accountability and Responsibility Principle	Power must be accompanied by answerability	Disclosure norms ensure regulators remain accountable to Parliament, judiciary and the public

BROADER ETHICAL IMPLICATIONS FOR GOVERNANCE

- **Safeguarding Institutional Integrity:** Ethical safeguards such as mandatory disclosures and transparency norms protect regulatory institutions from undue influence. By preventing conflicts of interest, regulators remain aligned with constitutional values rather than private gains, ensuring integrity, neutrality and independence in decision-making.
- **Preventing Regulatory Capture:** Strong ethical frameworks reduce the risk of regulators being co-opted by vested interests over time. Clear ethical boundaries act as moral constraints, ensuring that public authority is exercised in the larger public interest and not distorted by corporate or political pressure.
- **Enhancing Democratic Trust:** Public confidence in governance depends on the perceived fairness and accountability of institutions. Ethical reforms demonstrate that regulators are answerable and principled, thereby reinforcing citizens' trust and strengthening the democratic social contract between the State and the people.
- **Creating Normative Standards for Other Regulators:** Ethical reforms undertaken by one institution can set precedents for others. SEBI's approach can serve as a model for environmental, telecom and competition regulators, encouraging a uniform culture of ethical governance across the regulatory ecosystem.

CHALLENGES FROM AN ETHICAL PERSPECTIVE

- **Symbolic Compliance Risk:** Disclosure norms without strong enforcement mechanisms may degenerate into ritualistic compliance, undermining the ethical objective of transparency and allowing conflicts of interest to persist informally.
- **Legalism over Moral Commitment:** Ethical behaviour cannot be sustained through legal mandates alone. When compliance is driven only by fear of punishment rather than internalised values, ethics becomes procedural rather than principled.
- **Normalisation of Ethical Deviance:** Repeated tolerance of minor ethical breaches can lead to their gradual acceptance, weakening organisational moral culture and blurring the distinction between right and wrong conduct.
- **Information Asymmetry and Opaque Disclosures:** Disclosures that are vague, complex or inaccessible to the public dilute transparency. Ethical governance requires disclosures that are meaningful, intelligible and open to scrutiny.
- **Influence of Power and Elite Networks:** Regulators often operate within elite professional and social circles, increasing the risk of unconscious bias. Ethical challenges arise when informal relationships influence formal decision-making.
- **Inadequate Ethical Capacity Building:** Without continuous ethics training, regulators may lack the ethical reasoning skills needed to address emerging dilemmas in complex and dynamic markets.
- **Weak Oversight and Accountability Mechanisms:** Absence of independent oversight bodies or ethical audits can reduce answerability, allowing ethical lapses to go unchecked.
- **Resistance to Ethical Reforms:** Institutional inertia and fear of reduced discretionary power may lead to resistance, limiting the effective implementation of ethical safeguards.

WAY FORWARD

- **Institutionalise Comprehensive Codes of Ethics:** All regulatory bodies should adopt well-defined codes of ethics that clearly articulate values such as integrity, impartiality and accountability, moving ethical conduct from personal discretion to institutional obligation.
- **Establish Independent Ethics Committees:** Dedicated ethics committees with functional autonomy can provide continuous oversight, examine ethical violations and offer advisory

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opinions, thereby strengthening internal accountability mechanisms.

- **Mandate Regular Ethics Audits:** Periodic ethics audits can assess compliance, identify ethical risks and evaluate organisational culture, ensuring that ethical standards are not merely formal but operational.
- **Continuous Ethics Training and Capacity Building:** Regular training programmes should focus on ethical reasoning, conflict-of-interest management and value-based decision-making, enabling regulators to handle complex moral dilemmas proactively.
- **Strengthen Whistleblower Protection Frameworks:** Robust legal and institutional safeguards must protect whistleblowers from retaliation, encouraging ethical courage and early detection of misconduct within regulatory institutions.
- **Enhance Transparency and Public Accountability:** Proactive disclosure of decisions, reasoning and ethical safeguards fosters public scrutiny and trust, reinforcing democratic accountability and ethical governance.

CONCLUSION

The proposal to enhance SEBI's powers along with mandatory conflict-of-interest disclosures represents a crucial step towards embedding ethics into regulatory governance. By emphasizing transparency, accountability, and integrity, the reform upholds the ethical principle that authority must always be exercised in the public interest.

Prelims question:

Q. With reference to the recent proposal to strengthen the powers of the Securities and Exchange Board of India (SEBI), consider the following statements:

1. The proposal seeks to enhance SEBI's authority to investigate market misconduct.
2. It mandates conflict-of-interest disclosures by members of SEBI's Board.
3. It places SEBI under the administrative control of the Ministry of Finance.

Which of the statements given above is/are correct?

(a) 1 and 2 only (b) 2 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question:

Q. "Conflict of interest undermines not only individual integrity but also institutional credibility." Discuss this statement in the context of regulatory bodies like SEBI.

OZEMPIC IN THE SPOTLIGHT: MEDICAL BREAKTHROUGH OR ETHICAL DILEMMA

WHY IN THE NEWS?

Ozempic has recently been in the news due to its rapid rise in popularity as a weight-loss drug, driven largely by off-label prescriptions, celebrity endorsements, and social media influence. This surge in demand has led to global supply shortages, affecting diabetic patients who rely on the drug for essential treatment. At the same time, concerns have emerged regarding its long-term safety for non-diabetic use, ethical issues surrounding the diversion of life-saving medication for cosmetic purposes, and regulatory challenges in controlling misuse. Together, these factors have brought Ozempic under intense public health, ethical, and policy scrutiny.



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OZEMPIC IN THE SPOTLIGHT: MEDICAL BREAKTHROUGH OR ETHICAL DILEMMA?

Recent debates surrounding the drug Ozempic (Semaglutide) highlight a classic ethical conflict between medical innovation and social responsibility. While originally developed as a life-saving drug for Type-2 diabetes, its growing off-label use for weight loss has raised serious ethical concerns related to equity, medical ethics, public health, and commercial influence.

OZEMPIC AS A MEDICAL BREAKTHROUGH

From a utilitarian and beneficence-based perspective, Ozempic represents significant progress in metabolic disease management. It improves glycaemic control and reduces cardiovascular risks for diabetic patients. Its appetite-suppressing effects offer therapeutic benefits for clinically obese patients at high health risk. It reflects the ethical principle of beneficence, where medical science aims to maximise patient welfare. Thus, denying its medical value would be ethically unjustified.

ETHICAL DILEMMAS ASSOCIATED WITH ITS MISUSE

1. **Equity and Justice:** Scarcity caused by lifestyle and cosmetic use of Ozempic deprives diabetic patients of an essential medication, violating the principle of distributive justice that demands fair allocation of limited healthcare resources. In countries like India, where affordability and access to advanced medicines are already constrained, such diversion further deepens existing health inequities and marginalises vulnerable populations.

2. **Medical Ethics and Professional Responsibility:** Prescribing Ozempic for non-medical weight loss without robust long-term evidence raises serious concerns related to the principle of non-maleficence. Physicians may face conflicts of interest between patient demand, financial incentives, and their ethical duty of care, thereby compromising the foundational medical principle of "do no harm" when potential risks outweigh proven therapeutic benefits.

3. **Autonomy vs Informed Consent:** While individuals possess the right to bodily autonomy, ethical autonomy is meaningful only when supported by informed consent. The promotion of Ozempic by social media influencers often downplays health risks and side effects, leading to misinformed decision-making and creating ethical tension between personal freedom and the professional responsibility of healthcare providers.

4. **Commercialisation and Corporate Ethics:** Aggressive marketing strategies and profit-driven expansion of Ozempic underscore the conflict between market forces and patient welfare. Pharmaceutical ethics demand social responsibility, particularly when dealing with essential medicines, necessitating a balance between innovation, profitability, and the broader public health interest.

SOCIAL AND PSYCHOLOGICAL ETHICAL CONCERNS

The promotion of Ozempic as a "quick-fix" solution for weight loss reinforces unrealistic and narrow body standards, intensifying social pressure to conform to idealised notions of thinness and potentially worsening body image issues, anxiety, and eating disorders, especially among youth. By framing complex lifestyle and metabolic conditions as problems solvable primarily through medication, it contributes to the medicalisation of lifestyle issues, thereby undermining the values of self-discipline, behavioural change, preventive healthcare, and holistic well-being rooted in diet, exercise, and mental health. Such a narrative risks shifting public health focus away from long-term structural interventions—such as nutrition education, urban design promoting physical activity, and mental health support—towards pharmaceutical dependency, raising concerns of broader social harm that extend beyond individual health outcomes to societal attitudes towards health, responsibility, and resilience.

ETHICAL ANALYSIS USING MORAL FRAMEWORKS

- **Utilitarianism:** From a utilitarian perspective, actions are judged by their consequences and

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the maximisation of overall well-being. While Ozempic's weight-loss benefits may improve quality of life for many, these gains cannot justify the disproportionate harm caused to diabetic patients who depend on the drug for survival, especially when shortages deny them effective treatment. Net social utility declines when essential medical needs are sacrificed for non-essential or cosmetic benefits.

- **Deontological Ethics:** Deontological ethics emphasises duty and moral rules over outcomes. There exists a clear moral obligation to prioritise life-saving and clinically essential uses of Ozempic over discretionary or cosmetic preferences. Prescribing the drug for off-label weight loss violates the duty of care, fairness, and respect for persons, particularly when it infringes upon the rights of vulnerable patients who medically require it.

- **Virtue Ethics:** Virtue ethics focuses on moral character rather than rules or consequences. Medical professionals are expected to act with compassion, integrity, prudence, and restraint, ensuring that clinical judgment is guided by patient welfare rather than market trends or social pressure. Indiscriminate prescribing reflects a deficit of professional virtues and undermines trust in the medical profession.

- **Justice-Based Ethics:** From the standpoint of distributive justice, limited healthcare resources must be allocated fairly and according to need. The diversion of Ozempic towards lifestyle use in the presence of scarcity violates principles of equity and prioritisation, disproportionately disadvantaging those with chronic illnesses and limited access to alternatives.

- **Care Ethics:** Care ethics stresses relational responsibility and attentiveness to vulnerability. Diabetic patients constitute a dependent and at-risk group whose needs warrant greater moral consideration. Ignoring their dependence in favour of consumer demand reflects ethical insensitivity and erosion of the moral commitment to care for the most vulnerable.

- **Public Health Ethics:** Public health ethics prioritises population-level well-being over individual preferences. Encouraging or tolerating widespread misuse of Ozempic undermines preventive health strategies and weakens collective efforts to address obesity through sustainable, non-pharmacological interventions, thereby posing long-term ethical and societal risks.

WAY FORWARD: AN ETHICAL GOVERNANCE APPROACH

- **Regulatory Ethics:** There is a need for stronger regulatory oversight to restrict non-essential off-label prescriptions of Ozempic, particularly for cosmetic weight loss, to ensure that limited supplies are reserved for patients with genuine medical need. Regulatory authorities must also strengthen pharmacovigilance mechanisms to monitor long-term side effects and misuse, while enhancing digital advertising oversight to curb misleading promotions and unverified claims on social media and online platforms.

- **Ethical Medical Practice:** Medical professionals should adhere strictly to evidence-based prescribing practices and established clinical guidelines, ensuring that patient safety and medical necessity remain paramount. Ethical prioritisation frameworks must be adopted to give precedence to high-risk groups, especially diabetic patients who rely on Ozempic for disease management, thereby reinforcing professional integrity and public trust in healthcare systems.

- **Public Health Ethics:** Public health policy should emphasise lifestyle-based interventions over pharmaceutical shortcuts by promoting balanced diets, physical activity, mental well-being, and preventive healthcare. Addressing obesity requires structural and long-term solutions such as healthier urban design, supportive nutrition policies, regulation of ultra-processed foods, and sustained public awareness campaigns that empower individuals to make informed health choices.

- **Corporate and Media Responsibility:** Pharmaceutical companies must adopt ethical marketing practices that align commercial objectives with social responsibility, particularly when dealing with essential medicines. Media

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platforms and influencers should be held accountable for spreading misinformation, ensuring that health-related content is accurate, balanced, and evidence-based to prevent public harm and unethical consumer manipulation.

CONCLUSION

The Ozempic debate underscores that ethical governance in healthcare must balance innovation with justice, autonomy with responsibility, and profit with public welfare. Medical breakthroughs lose their moral legitimacy when access becomes inequitable and harm outweighs benefit. For a society committed to ethical public service, the Ozempic case serves as a reminder that healthcare is not merely a market commodity, but a moral obligation.

Prelims question:

Q. Ozempic, recently seen in the news, is used primarily for the treatment of which of the following conditions?

1. Type-1 Diabetes Mellitus
2. Type-2 Diabetes Mellitus
3. Obesity due to hormonal imbalance
4. Polycystic Ovarian Syndrome

Select the correct answer using the code below:

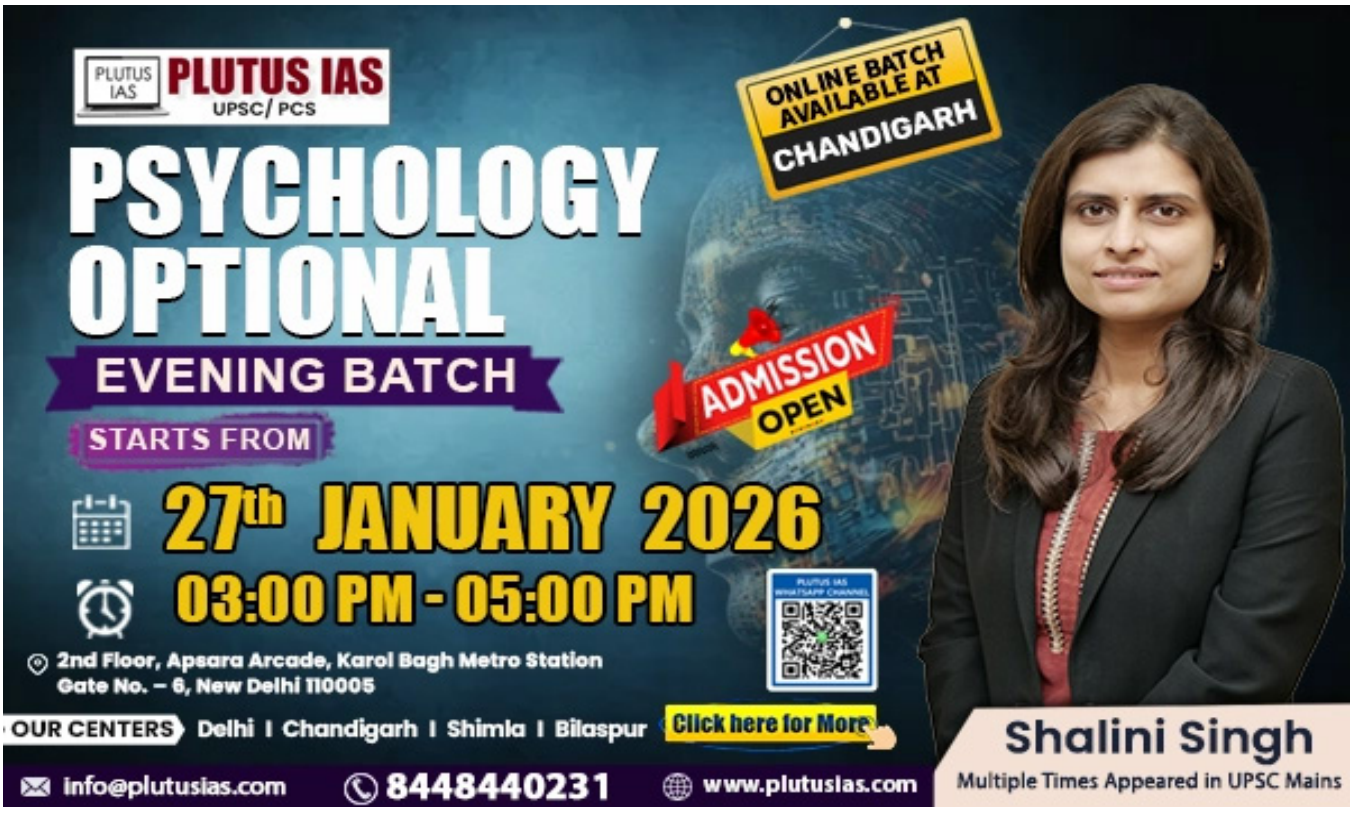
(a) 2 only (b) 1 and 2

(c) 2 and 3 (d) 1, 2 and 4

Answer: A

Mains Question

Q. How would John Rawls' theory of justice apply to the allocation of Ozempic during shortages? (250 words)





NATIONAL LOK ADALAT IN FOCUS AFTER MASS DISPOSAL OF CASES ACROSS INDIA

WHY IN THE NEWS?



The issue of Lok Adalats is in the news due to the recent conduct of a National Lok Adalat across the country, where a large number of pre-litigation and pending cases were settled in a single day. Media reports highlighted the massive disposal of cases involving traffic challans, cheque bounce disputes, accident claims and public utility services, drawing public attention to their practical benefits. The event was widely publicised by legal services authorities to encourage citizen participation and reduce judicial pendency. Additionally, human-interest stories showcasing amicable settlements, including family and service-related disputes, further brought Lok Adalats into focus. The scale of settlements and their role in decongesting courts reaffirmed their importance in India's alternative dispute resolution framework.

LEGAL AND INSTITUTIONAL FRAMEWORK

Lok Adalats operate under the Legal Services Authorities Act, 1987, which gives statutory backing to amicable dispute resolution. Awards passed by Lok Adalats have the status of civil court decrees, are final and binding, and are non-appealable, ensuring certainty and closure. Importantly, disputes are resolved without court fees, and any fee already paid is refunded, reinforcing affordability.

Institutionally, Lok Adalats function through a four-tier structure:

1. National Legal Services Authority (NALSA)

2. State Legal Services Authorities

3. District Legal Services Authorities

4. Taluk Legal Services Committees

This decentralised framework enables justice delivery from metropolitan courts to the grassroots, particularly benefiting rural and marginalised populations.

NATIONAL AND E-LOK ADALATS: TACKLING PENDENCY

Reducing Judicial Backlog : National Lok Adalats are organised periodically across the country on pre-notified dates and conducted simultaneously at the Supreme Court, High Courts, district courts and taluk levels. They function as an effective tool to tackle judicial pendency by disposing of a large number of cases in a single day. These forums deal with both pre-litigation disputes and cases pending before courts, with emphasis on high-volume and compromise-oriented matters such as motor accident claims, cheque bounce cases, family and

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matrimonial disputes, labour and service matters, and public utility disputes. By promoting amicable settlements, National Lok Adalats ease the burden on regular courts while ensuring speedy, affordable and accessible justice.

E-Lok Adalats: Ensuring Continuity Through Technology

The introduction of E-Lok Adalats during the COVID-19 pandemic marked a significant innovation in India's alternative dispute resolution framework. Conducted through virtual platforms, E-Lok Adalats ensured continuity of justice when physical court proceedings were disrupted. They reduced logistical constraints, travel costs and time delays, particularly benefiting litigants from remote and marginalised areas. The successful use of technology demonstrated the adaptability and resilience of the justice system, and even in the post-pandemic phase, E-Lok Adalats have strengthened digital justice delivery by enhancing efficiency, inclusiveness and institutional capacity.

PERMANENT LOK ADALATS AND PUBLIC UTILITY SERVICES

1. Permanent Lok Adalats (PLAs) are a distinctive feature of India's alternative dispute resolution framework, established under the Legal Services Authorities Act, 1987 to deal sspecifically with disputes involving public utility services.
2. They cover essential services such as transport, electricity, water supply, sanitation, postal services and telecommunications, which have a direct bearing on everyday life of citizens.
3. PLAs have jurisdiction over cases involving claims up to ₹1 crore, allowing them to address a wide range of consumer and service-related disputes.
4. A key feature is their two-stage mechanism: first, an attempt at conciliation to encourage amicable settlement between parties in a non-adversarial manner.
5. If conciliation fails, PLAs have the statutory power to adjudicate the dispute and pass a binding award, unlike ordinary Lok Adalats which rely solely on consent.
6. This hybrid conciliation-cum-adjudication model ensures timely resolution of disputes and prevents cases from being trapped in prolonged litigation.
7. By providing final and enforceable outcomes without complex procedures or high costs, PLAs enhance access to justice, promote accountability of service providers and reduce the burden on regular courts.

SOCIAL IMPACT AND DEMOCRATIC SIGNIFICANCE OF LOK ADALATS

Dimension	Expanded Impact with Illustrative Data
Access to Justice for Vulnerable Groups	Lok Adalats have provided swift relief to accident victims, small traders, farmers, workers and service consumers who are often discouraged by high litigation costs and long delays. Over the years, crores of cases have been settled through Lok Adalats, many involving low-income litigants and petty disputes where formal courts would be disproportionate. The absence of court fees and simplified procedures lowers economic and procedural barriers.
Speedy and Cost-Effective Justice	Cases that may otherwise take years in regular courts are resolved in a single sitting. Settlement through Lok Adalats leads to refund of court fees already paid, significantly reducing litigation costs. This has made justice more affordable and efficient, especially in motor accident claims, cheque bounce cases and service-related disputes.
Social Harmony and Conflict Resolution	By prioritising dialogue, compromise and consensus, Lok Adalats reduce adversarial hostility between parties. This approach helps preserve social and family relationships, particularly in matrimonial, labour and community disputes, and reduces the psychological stress associated with prolonged litigation.

Constitutional Mandate (Article 39A)	Lok Adalats give practical effect to Article 39A of the Constitution, which mandates equal access to justice and free legal aid. Through legal services authorities and para-legal volunteers, they ensure that justice is not denied due to economic or social disadvantage.
Judicial Efficiency and Pendency Reduction	National Lok Adalats held on single days have disposed of millions of pending and pre-litigation cases, easing the burden on subordinate courts and High Courts. This decongestion allows regular courts to devote more time to complex constitutional, criminal and contested civil matters.
Democratic and Participatory Justice	Lok Adalats reflect a people-centric and participatory model of justice, where litigants actively shape outcomes rather than being passive recipients of judgments. This strengthens public trust in institutions and reinforces the democratic ideal of justice as accessible, humane and responsive.

WAY FORWARD

1. **Expanding Institutional Reach and Last-Mile Access:** Lok Adalats should be strengthened across rural, semi-urban and urban areas to ensure that citizens, especially those in remote regions, can access justice without geographical or financial constraints. Wider institutional presence helps bridge regional disparities and brings dispute resolution closer to the people.

2. **Strengthening Human Resources and Capacity Building:** The effectiveness of Lok Adalats depends on the quality of stakeholders involved. Greater participation of experienced judicial officers, trained conciliators and empowered para-legal volunteers can enhance credibility, fairness and efficiency in settlements.

3. **Enhancing Quality and Standards of Conciliation:** Standardised training modules, ethical guidelines and regular sharing of best practices can improve the quality of conciliation. This ensures that settlements are voluntary, informed and equitable, rather than rushed or coercive.

4. **Promoting Legal Awareness and Citizen Outreach:** Targeted awareness campaigns are required to inform citizens, particularly vulnerable sections, about the cost-free nature, procedural simplicity and binding legal status of Lok Adalat awards. Greater awareness will encourage voluntary participation and early dispute resolution.

5. **Leveraging Technology and Digital Integration:** Expansion of e-Lok Adalats, digital case management systems and virtual hearings can improve efficiency and inclusiveness. Technology reduces logistical barriers, enhances transparency and allows wider participation, especially for litigants from remote areas.

6. **Ensuring Monitoring, Evaluation and Accountability:** Regular monitoring and evaluation mechanisms are essential to maintain fairness, transparency and consistency in settlements. Performance audits and feedback systems can help identify gaps and improve institutional credibility.

7. **Strengthening Institutional Coordination and Partnerships:** Effective coordination among courts, legal services authorities and civil society organisations is crucial for sustaining people-centric justice delivery. Such collaboration ensures smoother case referrals, better outreach and long-term institutional effectiveness.

CONCLUSION

By blending legal finality with empathy, speed and accessibility, Lok Adalats have transformed dispute resolution in India. They stand as a practical expression of democratic justice—not merely adjudicating disputes, but healing social fractures. As India strives for judicial reforms, Lok Adalats remain a cornerstone in building a justice system that is efficient, inclusive and humane.

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Prelims question

Q. With reference to Lok Adalats, consider the following statements:

1. Lok Adalats are established under the Legal Services Authorities Act, 1987.
2. The award passed by a Lok Adalat is appealable before a higher court.
3. Lok Adalats can take up both pending cases and pre-litigation matters.

Which of the statements given above is/are correct?

(a) 1 and 3 only (b) 1 only

(c) 2 and 3 only (d) 1, 2 and 3

Answer: A

Mains Question

Q. Evaluate the effectiveness of Lok Adalats in reducing judicial pendency. What challenges limit their potential as an alternative dispute resolution mechanism? (250 words)

MGNREGA AT THE CROSSROADS: TRANSITION TO VB-G RAM G, RIGHTS-BASED WELFARE AND THE POLITICS OF REFORM

WHY IN THE NEWS?



The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005 has returned to the centre of public debate following the Union Government's proposal to repeal and replace it with a new legislation, tentatively titled the Viksit Bharat–Guarantee for Rozgar and Ajeevika Mission (Gramin) Bill, 2025. Beyond administrative reforms, this move raises important constitutional, legislative, and federal questions

MGNREGA AS A STATUTORY RIGHTS-BASED LAW

MGNREGA occupies a unique position in India's welfare architecture because it is anchored in statute, not executive policy. Unlike most social schemes that operate through budgetary allocations and government guidelines, MGNREGA creates legally enforceable obligations on the State.

1. **Legal Right to Work:** Under the Act, any rural household can demand employment as a matter of right, not charity. Once a job card holder applies for work, the State is legally bound to provide employment within 15 days. This demand-driven design shifts the power balance from the administration to citizens, strengthening democratic accountability.

2. **Justiciability and Unemployment Allowance:** If employment is not provided within the stipulated time, the law mandates payment of an unemployment allowance by the State government. This provision is crucial because it introduces legal consequences for administrative failure, making the right enforceable through grievance redressal mechanisms and, ultimately, courts. In effect, MGNREGA transforms welfare delivery into a rights-claim framework.

3. **Constitutional Linkages (Article 21):** Judicial interpretation has expanded Article 21 (Right to Life) to include the right to livelihood and dignified existence. MGNREGA operationalises this constitutional vision by ensuring minimum income security through guaranteed work. It thus acts as a statutory instrument giving concrete expression to substantive social justice embedded in the Constitution's Directive Principles, particularly Articles 39 and 41.

4. **Polity Significance of Repeal and Replacement:** The proposed repeal of MGNREGA and its

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replacement with a new law raises critical governance concerns:

- Whether the right to work will remain justiciable, or be converted into a policy-based entitlement subject to annual budgetary priorities
- Whether administrative discretion will replace citizen enforceability, weakening accountability
- Whether unemployment allowance and grievance mechanisms will continue with the same legal force
- A shift from a rights-based statute to a more flexible, programme-oriented framework risks diluting the legal certainty and entitlement security that MGNREGA provided, especially for vulnerable rural households.

5. **Broader Governance Implications:** At stake is not merely a change in scheme design, but a constitutional question of how welfare is delivered—as enforceable rights or discretionary benefits. This debate reflects a larger tension in Indian governance between social rights protection and fiscal-administrative flexibility.

PARLIAMENTARY SUPREMACY AND LEGISLATIVE COMPETENCE

The proposed replacement of MGNREGA raises important issues related to parliamentary supremacy and legislative competence. Under Article 245 of the Constitution, Parliament is fully empowered to enact, amend, or repeal any law, including welfare legislations such as MGNREGA. Therefore, from a constitutional standpoint, the repeal of the existing Act and the introduction of a new law with altered objectives, structure, and nomenclature fall well within Parliament's legislative authority. However, in polity terms, the core issue is not Parliament's competence but the legislative intent and the continuity of rights. MGNREGA is not merely a scheme but a statute that confers a justiciable right to work. Replacing it with a new law raises concerns about whether this legally enforceable entitlement will be preserved or diluted into a policy-based benefit dependent on executive discretion and budgetary priorities. Parliamentary supremacy thus also entails democratic responsibility—any legislative change must ensure that previously guaranteed socio-economic rights are not weakened, especially when they operationalise the constitutional vision of social justice under Article 21.

FEDERALISM AND CENTRE–STATE RELATIONS

Dimension	MGNREGA Framework	Proposed VB-G RAM G Framework	Federalism Concerns & Polity Significance
Constitutional Basis	Falls under Concurrent List entries relating to Labour and Social Security, with rural development as a shared responsibility	Continues to operate in the same constitutional space but with altered fiscal and institutional design	Concurrent subjects require consultation, coordination and consensus; unilateral changes can weaken cooperative federalism
Legislative Role	Central legislation with uniform national standards and statutory guarantees	Central legislation with revised objectives and implementation architecture	Parliament can legislate, but federal norms demand state buy-in for effective implementation
Funding Pattern	Predominantly Centre-funded, especially wages; states bore limited material and administrative costs	Increased cost-sharing by states (e.g., 60:40), raising state financial obligations	Poorer and fiscally constrained states may struggle, leading to regional disparities
Fiscal Capacity of States	Limited impact on states' fiscal health due to high central support	Greater dependence on states' own revenues and borrowing	Undermines horizontal equity and disadvantages BIMARU and special category states

Implementation Uniformity	Relatively uniform access to guaranteed employment across states	Implementation quality may vary based on state finances	Risks creating uneven realisation of a national entitlement
Cooperative Federalism	Reflected shared responsibility with Centre as principal financier	Shifts financial burden without commensurate revenue support	Raises concerns about consultative deficit and trust erosion
Centre–State Trust	MGNREGA acted as a confidence-building welfare instrument	Fiscal rebalancing may be perceived as cost-shifting	Reinforces long-standing Centre–State tensions over unfunded mandates
Governance Implication	Strong central backing ensured continuity during crises (e.g., droughts, pandemics)	States may cut back employment due to fiscal stress	Weakens the scheme's role as a counter-cyclical safety net

RIGHTS VS DISCRETION: SHIFT IN WELFARE PHILOSOPHY

1. **Evolution towards Rights-Based Welfare:** Since the 2000s, India has increasingly moved towards rights-based welfare legislation, where entitlements are backed by law. Schemes like MGNREGA, RTI Act, NFSA and RTE Act converted welfare benefits from discretionary government support into justiciable rights, strengthening citizen–state accountability.

2. **Emerging Fears of Rights Dilution:** Critics point out that recent policy shifts may weaken this framework. There are concerns about erosion of legal enforceability, greater executive discretion in deciding work availability and funding, and a narrowing of grievance-redress mechanisms, including judicial oversight.

3. **The Constitutional Dilemma in Welfare Design:** At its core, this debate raises a key polity question: Should socio-economic welfare be constitutionally protected as enforceable rights, or treated as policy commitments subject to executive discretion? The answer has implications for democratic accountability, federal balance, and the realization of social justice in India.

DEMOCRATIC ACCOUNTABILITY AND RULE OF LAW

1. **Statutory Foundations of Accountability under MGNREGA:** MGNREGA is not merely a welfare scheme but a statutory framework rooted in democratic accountability. It clearly defines the duties and obligations of the state, such as providing employment on demand, timely payment of wages, and compensation for delays. The Act also mandates transparency tools like social audits, public disclosure of records, and participatory monitoring, which empower rural citizens to hold authorities accountable.

2. **Legal Safeguards and Grievance Redressal Mechanisms:** A key strength of MGNREGA lies in its legal clarity and enforceability. Citizens have access to grievance redressal mechanisms, including complaints to authorities, ombudsman oversight, and judicial remedies. These mechanisms ensure that violations of rights are not treated as administrative lapses but as breaches of legal duty, reinforcing the rule of law at the grassroots level.

3. **Implications for Rule of Law and Democratic Governance:** From a polity perspective, any new law or reform must be evaluated on whether it preserves clear legal obligations, effective grievance redressal, and continuity of accountability mechanisms. Weakening these aspects may shift welfare delivery from a rights-based model to discretionary governance, undermining the rule of law, particularly for vulnerable rural citizens who rely on legal protections to secure their entitlements.

WAYFORWARD

1. **Retain statutory right to work:** Ensure that the new legislation explicitly preserves the

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justiciable right to employment, including time-bound work provision and legally enforceable unemployment allowance.

2. **Parliamentary scrutiny and debate:** Refer the proposed Bill to a Standing Committee of Parliament to assess constitutional implications, continuity of rights, and impact on federal balance.
3. **Continuity of legal protections:** Incorporate saving and transitional clauses so that existing beneficiaries do not lose accrued rights during repeal and replacement of MGNREGA.
4. **Respect cooperative federalism:** Maintain a balanced Centre–State funding structure, with flexibility for fiscally weaker states, to uphold the spirit of cooperative federalism.
5. **Clear legislative drafting:** Avoid excessive executive discretion by defining rights, duties, and liabilities clearly in the statute rather than in subordinate legislation.
6. **Preserve accountability mechanisms in law:** Statutorily mandate grievance redressal, social audit, and transparency provisions, ensuring rule of law and democratic accountability.
7. **Align with constitutional values:** Reflect Gandhian principles of dignity of labour, decentralisation, and social justice, irrespective of nomenclature, to reinforce constitutional morality.
8. **Judicial safeguards:** Provide scope for judicial review and remedies to protect citizens' socio-economic rights under Articles 14 and 21.
9. **Phased implementation:** Adopt a gradual transition rather than abrupt repeal to avoid legal uncertainty and disruption of livelihoods.
10. **Outcome-neutral political consensus:** Build cross-party consensus to ensure that reforms focus on rights protection and constitutional propriety, not political symbolism.

CONCLUSION

The debate surrounding the replacement of MGNREGA is not merely about rural employment, but about Parliament's role in shaping socio-economic rights, the nature of Indian federalism, and the constitutional balance between rights and executive discretion. For UPSC aspirants, the issue should be analysed through the lens of statutory rights, legislative continuity, federal equity, and constitutional values, making it a significant contemporary development in Indian Polity.

Prelims question

Q. With reference to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), consider the following statements:

1. It provides a statutory guarantee of wage employment to rural households.
2. The right to employment under the Act is justiciable in nature.
3. Unemployment allowance is payable if employment is not provided within a stipulated time.

Which of the statements given above are correct?

(a) 1 and 2 only (b) 1 and 3 only

(c) 1, 2 and 3 (d) 2 and 3 only

Answer: C

Mains Question

Q. MGNREGA represents a shift from welfare schemes to rights-based legislation. In light of the proposed replacement of MGNREGA, examine the constitutional significance of statutory socio-economic rights in India.

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PESA ACT, 1996: RECLAIMING TRIBAL SELF-GOVERNANCE THROUGH GRAM SABHA EMPOWERMENT

WHY IN THE NEWS?

The Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA) has returned to national focus amid renewed policy attention on tribal self-governance and grassroots democracy, especially in the context of the implementation review of the PESA Act, increasing demands for effective empowerment of Gram Sabhas in Scheduled Areas, and recent government initiatives such as PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and Dharti Aaba Abhiyan, which seek to strengthen tribal rights over land, forests, and livelihoods.

PANCHAYATI RAJ SYSTEM: CONSTITUTIONAL FRAMEWORK

The 73rd Constitutional Amendment (1993) added Part IX and the Eleventh Schedule to the Constitution, laying the foundation for decentralised democracy.

Key Features:

Three-tier structure:

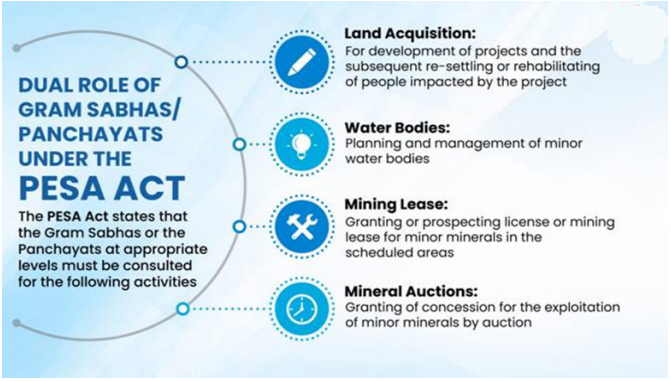
1. Gram Panchayat (village level)
2. Panchayat Samiti (block/intermediate level)
3. Zilla Parishad (district level)

29 subjects under the Eleventh Schedule for local governance.

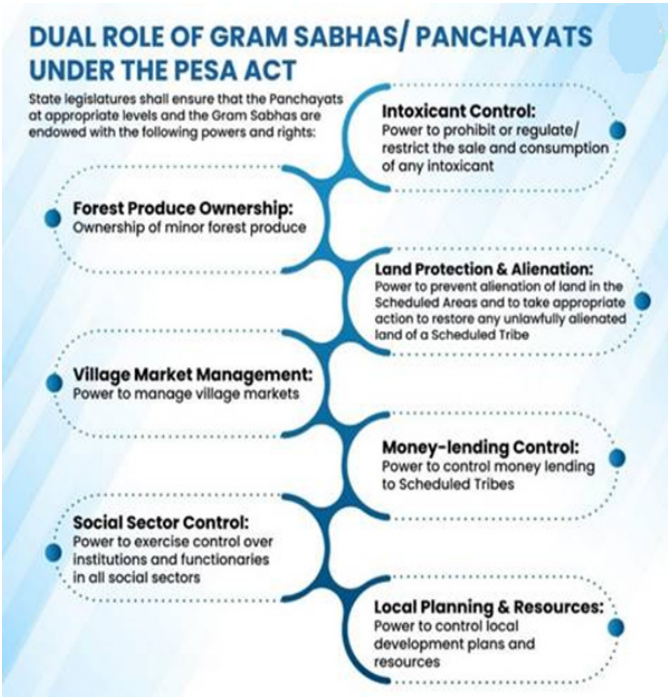
Direct elections at all three levels.

Reservation of seats for SCs, STs, and women.

Gram Sabha as the basic unit of democracy, comprising all registered voters of a village.







PESA ACT, 1996: EXTENDING DEMOCRACY TO SCHEDULED AREAS

Aspect	PESA Act, 1996 – Key Provisions
Objective	Extend the Panchayati Raj system to Fifth Schedule (Scheduled) Areas while respecting tribal customs, traditions, and social practices

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Core Principle	Gram Sabha as the pivot of governance, with primacy over Panchayats and administrative bodies
Legal Status of Gram Sabha	Powers of Gram Sabha override inconsistent State Panchayat laws
Land Acquisition & Rehabilitation	Mandatory consultation/ consent of Gram Sabha for land acquisition, resettlement, and rehabilitation
Minor Forest Produce (MFP)	Gram Sabha empowered to manage, own, and safeguard minor forest produce
Minor Minerals	Gram Sabha consultation required before granting minor mineral concessions
Development Projects	Prior approval/consultation of Gram Sabha mandatory for developmental and welfare projects
Customary Laws	Protection of customary laws, cultural identity, and traditional dispute-resolution mechanisms
State Legislature's Role	State laws must be in consonance with PESA; dilution of core provisions not permitted
Governance Model	Community-led, participatory, and bottom-up governance
Significance	Makes PESA a unique constitutional experiment in tribal self-rule and decentralised democracy

SCHEDULED AREAS UNDER THE FIFTH SCHEDULE (INDIA)

Aspect	Details
Total States with Fifth Schedule Areas	10 States
States Covered	Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Telangana

ADMINISTRATIVE COVERAGE OF FIFTH SCHEDULE AREAS

Indicator	Coverage
Villages	77,564
Panchayats	22,040
Blocks	664
Districts (Fully Covered)	45
Districts (Partially Covered)	63

STATUS OF PESA RULES NOTIFICATION

Category	States
States with PESA Rules Notified	8 States
States with Draft PESA Rules	Odisha, Jharkhand

PESA MAHOTSAV 2025: CELEBRATING TRIBAL SELF-GOVERNANCE

The Ministry of Panchayati Raj (MoPR) will organise PESA Mahotsav 2025 in Visakhapatnam, Andhra Pradesh (23–24 December 2025), commemorating the enactment of the PESA Act.

Objectives:

1. Celebrate tribal culture, sports, and cuisine
2. Showcase traditional games such as Chakki Khel, Puli Meka, Mallakhamba, Gedi Doud
3. Promote awareness about tribal rights and self-governance
4. Provide a national platform for tribal communities to preserve and promote their heritage

GOVERNMENT INITIATIVES FOR EFFECTIVE IMPLEMENTATION OF PESA ACT

Area of Intervention	Key Initiatives & Measures
Capacity Building	• National and regional PESA conferences conducted • Two rounds of Master Trainer programmes (2024–25) in 7 anchor states • Over 1 lakh elected representatives and officials trained

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Digital Governance	• Launch of PESA–Gram Panchayat Development Plan (GPDP) Portal (September 2024) • Enables hamlet-wise planning and bottom-up governance • Facilitates convergence of Central & State Finance Commission grants, Centrally Sponsored Schemes, State schemes, and other funds
Institutional Support	• Establishment of a dedicated PESA Cell in the Ministry of Panchayati Raj (MoPR) • PESA manuals translated into regional and tribal languages (Santhali, Gondi, Bhili, Mundari) • Creation of Centres of Excellence (CoEs) in central universities • First CoE set up at Indira Gandhi National Tribal University, Amarkantak
Awareness Building	• 24 December declared as 'PESA Day' • National-level PESA event organised in Ranchi (2024)

PESA IN ACTION: SUCCESS STORIES AND BEST PRACTICES

1. Empowered Gram Sabha and Livelihood Generation – Khamdhogi, Chhattisgarh

- Formation of Gram Sabha under Chhattisgarh PESA Rules, 2022
- Mandatory participation of one man and one woman from each household
- Initiatives in forest produce, fisheries, bamboo rafting
- **Result:** Increased incomes, collective action, and sustainable livelihoods

2. Integrating Customary Practices – Rarang, Himachal Pradesh

- Community-led Chilgoza pine nut harvesting
- Equal benefit-sharing among households
- Forest department consultation made mandatory
- **Result:** Preservation of traditions with economic equity

3. Minor Minerals Management – Vadagudem, Telangana

- Tribal Sand Mining Cooperative Society
- Rs. 40 lakh annual revenue
- Funds invested in education, health, and infrastructure
- Result: Economic empowerment and local development

4. Resisting Displacement – Bhim Talai, Rajasthan

- Gram Sabha resolution against eviction from wildlife sanctuary
- Legal backing under PESA and Panchayati Raj Act
- **Result:** Protection of land rights and cultural continuity

CONCLUSION

The PESA Act represents a transformative shift from top-down development to community-led governance in India's Scheduled Areas. Through initiatives such as PESA Mahotsav, capacity-building, digital planning tools, and institutional support, the Government of India particularly the Ministry of Panchayati Raj, is reinforcing the constitutional promise of tribal self-rule. By empowering Gram Sabhas, preserving traditional institutions, and promoting sustainable resource management, PESA strengthens inclusive development, social justice, and democratic deepening, ensuring that tribal communities remain active architects of their own future.

Prelims question:

Q. With reference to the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA), consider the following statements:

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1. PESA extends the provisions of the 73rd Constitutional Amendment to Fifth Schedule Areas with suitable modifications.
2. Under PESA, the Gram Sabha has primacy over Panchayats in matters related to land acquisition and minor forest produce.
3. State legislatures are free to dilute PESA provisions to suit local administrative requirements.
4. Consultation with Gram Sabha is mandatory before granting concessions for minor minerals in Scheduled Areas.

Which of the statements given above are correct?

(a) 1, 2 and 4 only (b) 1 and 3 only

(c) 2 and 3 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. The Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA) is considered a landmark in tribal self-governance. Discuss its significance, key provisions, and the challenges in its effective implementation.

(250 words)

18TH AIPP CONFERENCE REKINDLES PUSH FOR EMPOWERED PANCHAYATS AND GRASSROOTS DEMOCRACY

WHY IN THE NEWS?

The 18th National Conference of the All India Panchayat Parishad renewed focus on strengthening Panchayati Raj Institutions in line with the 73rd Constitutional Amendment. The conference highlighted the need for self-reliant villages, deeper decentralisation, and empowered Gram Sabhas, while flagging gaps in devolution of functions, finances and functionaries (3Fs). It also underscored the role of PRIs in effective implementation of welfare schemes, rural development, and grassroots democracy, making it relevant in the current governance discourse.



RENEWED NATIONAL ATTENTION ON PANCHAYATI RAJ

The recent 18th National Conference of the All India Panchayat Parishad has brought Panchayati Raj Institutions (PRIs) back into the policy spotlight. The conference stressed that self-reliant villages are the foundation of Atmanirbhar Bharat, especially at a time when rural India faces challenges of livelihood insecurity, climate vulnerability, and uneven development. The deliberations highlighted that effective decentralisation is not just desirable but necessary for responsive governance and sustainable development.

CONSTITUTIONAL MANDATE AND DEMOCRATIC DEEPENING

- **Constitutional Recognition of Local Self-Government:** The 73rd Constitutional Amendment Act, 1992 marked a watershed in India's democratic evolution by granting constitutional status to Panchayati Raj Institutions under Articles 243 to 243(O). It sought to institutionalise Panchayats as the third tier of governance, moving beyond mere administrative decentralisation to genuine political decentralisation. By clearly defining their tenure, structure, and powers, the Constitution aimed to ensure stability, continuity, and legitimacy of grassroots institutions.
- **Institutional Framework for Democratic Participation:** The amendment mandated regular five-year elections supervised by independent State Election Commissions,

ensuring democratic continuity at the local level. Provisions for reservation of seats for women (not less than one-third) and Scheduled Castes and Scheduled Tribes significantly broadened political participation, enabling inclusion of historically marginalised groups and fostering leadership from the grassroots.

- **Gram Sabha as the Foundation of Participatory Democracy:** The constitutional recognition of the Gram Sabha as the basic unit of the Panchayati Raj system was a critical step towards direct democracy. Gram Sabhas were envisaged as forums for collective decision-making, approval of development plans, social audits, and accountability of elected representatives. In principle, this empowered citizens to shape local development priorities and monitor governance outcomes.

- **Vision of Self-Governance and Decentralised Planning:** Through the Eleventh Schedule, the Constitution listed 29 subjects to be devolved to Panchayats, covering sectors such as agriculture, health, education, and rural development. This reflected the vision of localised planning and implementation, where development decisions are taken closest to the people, ensuring efficiency, responsiveness, and contextual relevance.

- **Constraints on Democratic Deepening:** Despite this strong constitutional mandate, state-level dominance over administration and finances has constrained the autonomy of Panchayats. Partial devolution of powers, weak implementation of State Finance Commission recommendations, and continued control of line departments have reduced many PRIs to implementing agencies rather than institutions of self-governance. This gap between constitutional intent and operational reality has limited the depth of democratic decentralisation.

- **Need for Renewed Commitment to Constitutional Spirit:** The limited autonomy of Panchayats underscores the need to move from formal constitutional compliance to substantive empowerment. Realising the democratic potential of the 73rd Amendment requires genuine transfer of authority, revitalisation of Gram Sabhas, and respect for local decision-making, thereby deepening democracy from the grassroots upwards.

ROLE OF PANCHAYATS IN RURAL DEVELOPMENT AND SELF-RELIANCE

- **Grassroots Planning and Participatory Governance:** Panchayats serve as the foundation of bottom-up development by institutionalising people's participation through Gram Sabhas and Gram Panchayat Development Plans (GPDPs). These platforms enable identification of local needs, prioritisation of development works, and community ownership of outcomes. Such participatory planning ensures that rural development is demand-driven, context-specific, and socially inclusive.

- **Implementation of Rural Development Schemes:** Panchayats play a pivotal role in implementing flagship schemes related to employment generation, housing, sanitation, drinking water, agriculture, and poverty alleviation. By acting as the last-mile delivery institutions, PRIs ensure better targeting, reduced leakages, and improved service delivery, thereby enhancing the effectiveness of public expenditure in rural areas.

- **Promotion of Local Livelihoods and Economic Self-Reliance:** Through convergence of schemes and support to SHGs, FPOs, cooperatives, and rural enterprises, Panchayats promote livelihood diversification and local economic planning. Creation of durable assets under programmes like MGNREGA and emphasis on agriculture, allied activities, and micro-enterprises help strengthen income security and foster village-level self-reliance.

- **Sustainable Resource Management and Infrastructure Development:** Panchayats contribute to sustainable development by managing land, water, forests, and common property resources. Initiatives such as watershed development, water conservation, rural roads, and sanitation infrastructure enhance productivity while ensuring ecological sustainability, which is crucial for long-term rural resilience.

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- Social Inclusion and Accountable Governance: By enabling representation of women, Scheduled Castes, and Scheduled Tribes, Panchayats promote social justice and inclusive growth. Mechanisms like social audits, transparency portals, and digital governance tools strengthen accountability and trust. When empowered with adequate functions, finances, and functionaries, Panchayats emerge as key drivers of inclusive rural development and grassroots self-reliance.

WAY FORWARD: STRENGTHENING GRASSROOTS GOVERNANCE

- **Ensuring Full Devolution of the 3Fs:** A genuine system of local self-governance requires complete and uniform devolution of functions, finances, and functionaries to Panchayats in accordance with the 73rd Constitutional Amendment. States must transfer real decision-making authority over subjects in the Eleventh Schedule and align administrative control with elected local bodies to strengthen autonomy and accountability.

- **Revitalising Gram Sabhas and Participatory Democracy:** Gram Sabhas should be strengthened as effective deliberative and oversight institutions rather than symbolic forums. Regular meetings, wider participation of women and marginalised groups, and empowerment in planning, social audits, and beneficiary selection can deepen grassroots democracy and ensure responsiveness to local needs.

- **Strengthening Fiscal Architecture and Finance Commissions:** Timely constitution of State Finance Commissions and effective implementation of their recommendations are critical for fiscal sustainability of PRIs. Enhancing untied grants, expanding local revenue sources, and ensuring predictable fund flows will reduce Panchayats' dependence on higher governments and improve development outcomes.

- **Capacity Building and Professional Support:** Systematic training of elected representatives and officials under programmes like the Rashtriya Gram Swaraj Abhiyan (RGSA) must be complemented with access to technical expertise in planning, finance, and project management. Dedicated local cadres and institutional support systems can significantly enhance governance capacity.

- **Leveraging Digital Governance for Transparency and Efficiency:** Digital initiatives such as e-Gram Swaraj, SVAMITVA, and GIS-based planning tools should be scaled up to improve financial management, asset ownership, and transparency. Technology-driven governance can reduce leakages, strengthen accountability, and empower Panchayats with data-driven decision-making.

- **Shifting from Control to Empowerment:** Ultimately, strengthening Panchayati Raj demands a paradigm shift from top-down administrative control to genuine local empowerment. Recognising Panchayats as institutions of self-government rather than implementing agencies is essential to realise inclusive development, democratic decentralisation, and rural self-reliance.

CONCLUSION

Panchayati Raj Institutions are the bedrock of India's democratic and developmental framework. The renewed focus on rural governance underscores that true decentralisation is key to inclusive growth, social justice, and democratic deepening. Strengthening PRIs is not merely an administrative reform but a constitutional and developmental imperative for India's future.

Prelims question:

Q. With reference to Panchayati Raj Institutions in India, consider the following statements:

1. The 73rd Constitutional Amendment gave constitutional status to Panchayati Raj Institutions.
2. The Eleventh Schedule contains 29 subjects related to rural development.
3. State Finance Commissions are constituted under Article 280.

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Which of the statements given above are correct?

A. 1 and 2 only B. 2 and 3 only

C. 1 and 3 only D. 1, 2 and 3

Answer: A

Mains Question

Q. Despite constitutional recognition, Panchayati Raj Institutions have not fully evolved as institutions of self-governance." Examine the reasons and suggest measures to strengthen grassroots democracy.

(250 words)

MAHACRIMEOS AI: AI-DRIVEN POLICING AND THE FUTURE OF CRIMINAL JUSTICE IN INDIA

WHY IN THE NEWS?



Microsoft CEO Satya Nadella, along with Maharashtra Chief Minister Devendra Fadnavis , launched the statewide rollout of MahaCrimeOS AI, an AI-powered cybercrime investigation platform, across all 1,100 police stations in Maharashtra. The tool was earlier piloted in Nagpur Rural and is now being scaled up following successful results.

WHAT IS MAHACRIMEOS AI?

MahaCrimeOS AI is an AI-based crime investigation and case management platform developed jointly by Microsoft and the Maharashtra Government under the state's AI policing initiative MARVEL (Maharashtra Research and Vigilance for Enhanced Law Enforcement).

Aspect	Details
Platform Name	MahaCrimeOS AI
Developed By	Microsoft in collaboration with the Government of Maharashtra
Parent Initiative	MARVEL (Maharashtra Research and Vigilance for Enhanced Law Enforcement)
Purpose	AI-based crime investigation and case management platform
Data Ingestion	Accepts complaints in multiple formats – PDFs, audio files, images, handwritten notes
AI Capabilities	Uses multimodal AI to extract critical information from text, audio, and images
Language Support	Works across multiple languages with a Marathi-language interface
Investigation Planning	Automatically generates investigation plans based on Maharashtra Police protocols and High Court & Supreme Court guidelines
Data Analysis	Analyses telecom data, Call Detail Records (CDRs), and open-source intelligence (OSINT)
Case Documentation	Prepares time-stamped case diaries suitable for court submission
Technology Stack	Built using Azure OpenAI Service
Security Features	Deployed with cloud security safeguards to ensure data protection

GOVERNANCE AND POLICING REFORMS

- **Technology-Driven Transformation in Policing:** The deployment of MahaCrimeOS AI signifies a shift from traditional, personality-centric policing to technology-enabled and protocol-based governance. By embedding legal procedures and investigation protocols into digital systems, it marks a move towards smart policing aligned with contemporary governance needs.
- **Enhancing Efficiency and Operational Effectiveness:** MahaCrimeOS AI automates key investigative processes such as complaint analysis, evidence organisation, and case documentation. This reduces delays, lowers administrative burden, and enables police personnel to focus more on field investigation and crime prevention, thereby improving overall efficiency.
- **Promoting Transparency and Accountability:** Standardised digital workflows create audit trails that limit discretionary arbitrariness. This enhances institutional accountability, facilitates judicial scrutiny, and ensures responsibility can be fixed for procedural lapses or delays, strengthening public confidence in law enforcement.
- **Reducing Hierarchical Dependence and Democratizing Policing:** The platform reduces routine dependence on senior officers by offering decision-support tools at the station level. By making advanced investigative capabilities available across all ranks and regions, including rural police stations, it democratises policing capacity and flattens rigid hierarchies.
- **Strengthening Rule of Law and Due Process:** By aligning investigations with High Court and Supreme Court guidelines, MahaCrimeOS AI ensures uniform, legally compliant procedures. This reduces custodial excesses, evidence manipulation, and procedural violations, reinforcing the rule of law and rights-based policing.
- **Alignment with Broader Governance Objectives:** The initiative complements police modernisation efforts, advances digital governance under Digital India, and contributes to ease of justice delivery by improving investigation quality and reducing case pendency.

CRIMINAL JUSTICE SYSTEM AND LEGAL ALIGNMENT

The tool is particularly relevant in the context of India's new criminal laws, especially the Bharatiya Nyaya Sanhita (BNS).

Legal Relevance

1. BNS mandates strict timelines (60–90 days) for filing charge sheets
2. AI-generated workflows help officers manage multiple cases efficiently
3. Ensures investigations are legally compliant and time-bound
4. Improves quality of evidence presented in courts

Thus, MahaCrimeOS AI supports procedural justice and judicial efficiency.

TECHNOLOGY, INTERNAL SECURITY AND CYBERCRIME

Cybercrime, financial fraud, narcotics networks, and crimes against women are increasingly complex and data-intensive.

Role of AI in Internal Security

1. Rapid analysis of large datasets (telecom, financial, digital footprints)
2. Detection of interlinkages between accused and crime networks
3. Faster suspect identification across states
4. Enhanced crime prediction and intelligence gathering

Currently deployed for four crime categories, the platform is being expanded to cover other serious crimes.

IMPACT ON CITIZENS AND VICTIM-CENTRIC JUSTICE

AI-enabled investigation platforms like MahaCrimeOS AI strengthen victim-centric justice

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by enabling faster, standardised, and legally compliant investigations, leading to quicker relief for complainants. Automation of documentation and procedural workflows reduces delays, discretion, and the need for repeated visits to police stations, easing the burden on citizens—especially vulnerable groups. By ensuring uniform quality of investigations across urban and rural areas, such systems reduce arbitrariness and regional disparities in policing. Overall, timely and transparent case handling enhances public trust in police and justice institutions, reinforcing good governance and citizen-centric administration.

WAY FORWARD

- **Establishing Robust AI Governance Frameworks:** Clear and legally backed AI governance frameworks are essential to ensure responsible use of artificial intelligence in law enforcement. This should include guidelines on data privacy, algorithmic transparency, accountability, and human oversight to prevent misuse, bias, or rights violations. Aligning AI deployment with constitutional values and judicial safeguards will strengthen public legitimacy.
- **Continuous Capacity Building of Police Personnel:** AI systems can be effective only when police personnel are adequately trained to use, interpret, and supervise them. Regular training programmes should focus not only on technical skills but also on ethical use, legal implications, and data protection. This will ensure that AI acts as a decision-support tool rather than replacing human judgment.
- **Independent Audits and Oversight Mechanisms:** Periodic independent audits of AI tools are necessary to assess accuracy, bias, data security, and compliance with legal standards. Oversight by judicial, technical, or civil society bodies can enhance transparency and build public trust, while allowing course correction in case of systemic flaws.
- **Replication and Scaling Across States:** Successful AI-driven policing models like MahaCrimeOS AI should be documented and adapted by other states based on local needs. Inter-state knowledge sharing and best-practice dissemination can accelerate police modernisation and reduce disparities in law enforcement capacity across the country.
- **Integration with National Crime Databases:** Seamless integration of state-level AI platforms with national crime databases such as CCTNS, ICJS, and NCRB will enable real-time data sharing, better crime pattern analysis, and coordinated responses. This will strengthen cooperative federalism in policing and enhance the overall effectiveness of the criminal justice system.

CONCLUSION

MahaCrimeOS AI represents a transformational leap in policing, blending artificial intelligence with constitutional values of justice, efficiency, and accountability. If implemented with ethical safeguards, such initiatives can redefine India's criminal justice system for the digital age.

Prelims question

Q. With reference to MahaCrimeOS AI, consider the following statements:

1. It is an AI-powered crime investigation platform developed for the Maharashtra Police.
2. It can process complaints only in text-based digital formats.
3. It is designed to generate investigation plans in accordance with judicial guidelines.

Which of the statements given above is/are correct?

A. 1 only B. 1 and 3 only
C. 2 and 3 only D. 1, 2 and 3

Answer: B

Mains Question

Q. "Technology is increasingly reshaping the functioning of law enforcement agencies in

India." Discuss the role of Artificial Intelligence in improving police investigations, with reference to recent initiatives. (250 words)

SHANTI BILL, 2025: A PARADIGM SHIFT IN INDIA'S NUCLEAR ENERGY POLICY

WHY IN THE NEWS?

India has taken a historic step towards restructuring its nuclear energy ecosystem with the introduction of the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India Bill, 2025 (SHANTI Bill) in Parliament. Introduced by the Minister of State for Science & Technology, Dr. Jitendra Singh, the Bill seeks to repeal the Atomic Energy Act, 1962 and the Civil Liability for Nuclear Damage Act, 2010, thereby opening India's highly restricted nuclear power sector to private participation. The Bill marks a paradigm shift in India's energy policy, aligning nuclear power with India's clean energy transition, energy security needs, and net-zero ambitions.



WHY SHANTI BILL?

India's nuclear sector has historically been state-dominated, with generation, fuel fabrication, and reactor operations restricted to government entities like NPCIL. Two major challenges persisted:

1. Limited nuclear capacity growth despite rising energy demand
2. Deterrence to foreign and private investment due to stringent supplier liability provisions under the CLND Act, 2010

At a time when India aims to achieve net zero emissions by 2070, nuclear energy is increasingly seen as a reliable, clean and base-load power source complementing intermittent renewables.

KEY FEATURES OF THE SHANTI BILL, 2025

Aspect	Provisions under SHANTI Bill, 2025	Significance
1. Opening Nuclear Sector to Private Participation	• Allows private companies, JVs, PPPs and permitted entities to build, own, operate and decommission nuclear power plants • Permits import, export, possession and transportation of nuclear fuel • Enables fabrication of nuclear fuel including conversion, refining and enrichment of Uranium-235 (within prescribed thresholds)	Ends state monopoly; attracts private & foreign investment; expands nuclear capacity
2. Repeal of Supplier Liability Clause	• Introduces a pragmatic civil liability regime • Removes Section 46 of the Civil Liability for Nuclear Damage Act, 2010 • Aligns India's liability framework with international nuclear conventions	Removes major deterrent for US, French and global nuclear firms; boosts investor confidence
3. Promotion of Small Modular Reactors (SMRs)	• Encourages large-scale deployment of SMRs • Focus on reactors with lower capital costs and enhanced safety • Suitable for remote areas, data centres and industrial clusters	Enables distributed and flexible energy systems; supports 24×7 clean power

4. Robust Regulatory Framework	• Establishes a strong and independent nuclear regulatory architecture • Centralised licensing and oversight • Clear norms on safety, security, and radiation protection	Balances liberalisation with safety; improves public trust and regulatory clarity
5. Nuclear Liability & Insurance Mechanism	• Operators must arrange insurance or financial security • Liability capped at ₹300 million per nuclear incident • Central Government installations exempted	Ensures predictability, risk management and victim compensation
6. Specialised Nuclear Tribunal	• Creation of a dedicated nuclear energy tribunal • Excludes civil courts' jurisdiction • Faster resolution of disputes	Improves governance efficiency; strengthens investor confidence

MULTI-DIMENSIONAL SIGNIFICANCE OF THE SHANTI BILL, 2025

Dimension	Key Significance	Relevance for India
1. Energy Security	• Provides 24×7 base-load power • Reduces dependence on fossil fuel imports • Supports energy-intensive sectors such as data centres, AI hubs and manufacturing	Ensures round-the-clock clean electricity; strengthens national energy security (as highlighted by Commerce Minister Piyush Goyal)
2. Clean Energy & Climate Commitments	• Low-carbon and non-intermittent energy source • Complements solar and wind to stabilise the grid • Essential for clean and reliable power mix	Helps achieve India's climate goals and net-zero pathway; Solar + Wind + Nuclear = 24×7 clean power
3. Economic & Investment	• Attracts private and foreign investment • Boosts high-technology manufacturing • Generates skilled employment • Reduces government's capital burden	Signals India's readiness for next-generation energy investments; strengthens industrial growth
4. Strategic & Geopolitical	• Reinforces India's image as a responsible nuclear power • Enables deeper cooperation with US, France, Russia and Japan • Enhances global clean-energy leadership	Improves strategic partnerships and global standing in nuclear governance
5. Technological & Innovation	• Encourages indigenous reactor design and nuclear R&D • Promotes innovation in SMRs, fuel cycle and safety technologies • Expands nuclear applications in healthcare, agriculture, water and industry	Strengthens self-reliance in advanced technologies and peaceful nuclear applications
6. Governance & Regulatory Reform	• Modernises outdated 1960s-era nuclear laws • Enhances clarity, transparency and accountability • Demonstrates reform-oriented governance in strategic sectors	Improves ease of doing business in nuclear sector while ensuring safety and regulation

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CHALLENGES & CONCERNS OF THE SHANTI BILL

1. **Nuclear Safety and Environmental Risks:** Expansion of nuclear facilities increases risks of radiation leaks, waste management issues, and ecological damage. Long-term disposal of radioactive waste remains a major environmental challenge.
2. **Public Perception and Local Resistance:** Fear of nuclear accidents and displacement leads to opposition from local communities. Inadequate public consultation and awareness aggravate trust deficits.
3. **Regulatory and Institutional Capacity Constraints:** Effective implementation requires a strong, independent nuclear regulator. Existing institutions may face limitations in oversight, monitoring, and enforcement.
4. **Skilled Manpower and Technical Expertise Gap:** Nuclear expansion demands highly trained scientists, engineers, and safety professionals. Shortage of specialised human resources can affect safety and operational efficiency.
5. **Non-Proliferation and Strategic Concerns:** Safeguarding nuclear materials is critical to prevent diversion for non-peaceful purposes. Compliance with international non-proliferation commitments must be ensured.
6. **Cyber-Security and Critical Infrastructure Protection:** Increasing digitalisation exposes nuclear systems to cyber-attacks. Robust cyber-security frameworks are essential to protect sensitive data and operations.

WAY FORWARD FOR THE SHANTI BILL

1. **Strengthen Independent Nuclear Regulation:** Establish a fully autonomous and empowered nuclear regulatory authority with adequate technical expertise to ensure strict safety oversight and compliance.
2. **Invest in Human Resource and Skill Development:** Expand specialised education and training in nuclear science, safety engineering and cyber-security through universities, research institutions and international cooperation.
3. **Ensure Transparent Public Communication and Participation:** Build public confidence through regular disclosure of safety standards, impact assessments and meaningful engagement with local communities.
4. **Integrate Nuclear Power into National Energy Planning:** Align nuclear expansion with India's clean energy transition, grid modernisation and long-term energy security goals.
5. **Strengthen Security, Safeguards and Cyber Resilience:** Enhance physical security, non-proliferation safeguards and cyber-defence mechanisms to protect critical nuclear infrastructure.

CONCLUSION

The SHANTI Bill, 2025 represents a watershed moment in India's nuclear energy journey, shifting from a closed, state-centric model to a modern, investment-friendly and innovation-driven framework. By enabling private participation, promoting SMRs, reforming liability norms and strengthening regulation, the Bill aligns nuclear energy with India's energy security, climate goals and economic aspirations. If implemented prudently, SHANTI could become a cornerstone of India's clean, reliable and resilient energy future.

Prelims question:

Q. With reference to the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India Bill, 2025 (SHANTI Bill), consider the following statements:

1. The SHANTI Bill proposes to repeal both the Atomic Energy Act, 1962 and the Civil Liability for Nuclear Damage Act, 2010.
2. The Bill allows private sector entities to build, own and operate nuclear power plants in India.
3. It removes the supplier liability provision under Section 46 of the CLND Act to align

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India's nuclear liability regime with international conventions.

4. The Bill completely abolishes the requirement of insurance or financial security for nuclear operators.

` **Which of the statements given above are correct?**

(a) 1, 2 and 3 only (b) 1, 2 and 4 only

(c) 2, 3 and 4 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. The SHANTI Bill, 2025 marks a paradigm shift in India's nuclear energy policy. Discuss its key features and examine its multi-dimensional significance for India's energy security, clean energy transition and economic growth. Also highlight the challenges associated with its implementation.





LINKING NATGRID WITH NPR: IMPLICATIONS FOR INTERNAL SECURITY AND PRIVACY

WHY IN THE NEWS?



The Union Ministry of Home Affairs has linked the National Intelligence Grid (NATGRID) with the National Population Register (NPR), enabling authorised security and police agencies to access family-wise demographic data of nearly 119 crore residents, marking a significant shift in India's internal security architecture.

BACKGROUND

- **Origin and Rationale of NATGRID:** The National Intelligence Grid (NATGRID) was conceptualised in the aftermath of the 26/11 Mumbai terrorist attacks, which exposed critical coordination failures and information silos among India's intelligence and law-enforcement agencies. The attackers had left digital, financial and travel trails, but the absence of an integrated data-sharing mechanism prevented timely threat detection. NATGRID was therefore designed as a technology-driven intelligence backbone to enable real-time collation and analysis of dispersed datasets for counter-terrorism, organised crime control and national security.
- **Architecture and Data Ecosystem of NATGRID:** NATGRID functions as a secured federated platform, not a standalone database, that allows authorised agencies to query multiple datasets through a single interface. It integrates data from telecom service providers, internet logs, banking and financial institutions, airline and railway passenger records, immigration databases, vehicle registration (VAHAN), driving licences (SARATHI), and identity-linked repositories. The emphasis is on pattern recognition, network mapping and behavioural profiling, enabling investigators to track suspects across domains while reducing dependence on manual inter-agency requests.
- **Expansion of Access and Intelligence-Led Policing:** Initially restricted to select central agencies such as the IB, RAW, NIA and ED, NATGRID access has now been extended to State police forces, particularly officers of Superintendent of Police (SP) rank and above. This marks a shift towards intelligence-led policing, empowering States to detect terror financing, radicalisation networks, cybercrime syndicates and interstate criminal operations in real time. The move also reflects the growing decentralisation of internal security challenges, where States are often the first responders.
- **National Population Register (NPR):** Scope and Data Coverage: The National Population Register (NPR) is a comprehensive identity database of usual residents of India, irrespective of citizenship status. First compiled during the 2011 Census and updated in 2015, it captures demographic, socio-economic and family-wise information such as name, age, gender, address, marital status, place of birth and parentage. Unlike Aadhaar, which is biometric and individual-centric, NPR focuses on household

and kinship structures, making it one of the most granular population datasets in the country.

- **NPR, NRC Linkages and Privacy Concerns:** Although the government has stated that no decision has been taken to update the NPR alongside the forthcoming Census, it continues to be perceived as a precursor to the National Register of Citizens (NRC) due to overlapping data fields. Civil society concerns revolve around data security, consent, surveillance and exclusion risks, especially in the absence of a fully operational personal data protection regime. When linked with platforms like NATGRID, NPR data enhances state capacity for security and governance, but also raises critical questions about privacy, proportionality and constitutional safeguards under Article 21.

NATGRID–NPR INTEGRATION: MEANING AND IMPLICATIONS

- **Access to Family and Household Linkages:** The integration enables authorised agencies to access family-wise and household-level data from the NPR through NATGRID. This allows investigators to understand the social and relational context of a suspect, including relatives, dependents and residential networks. Such linkages are crucial in terrorism, radicalisation and organised crime cases, where family members may provide logistical support, financial assistance or safe shelter. Household mapping also helps trace absconders who avoid digital footprints but remain connected through kinship ties.

- **Entity Resolution through Advanced Analytics:** A key benefit of the integration is entity resolution, i.e., identifying whether records across multiple databases belong to the same individual. Using analytical tools like Gandiva, NATGRID correlates demographic details, addresses, phone numbers, family relationships and travel records. This reduces errors caused by aliases, spelling variations or forged identities, and helps build a single, accurate intelligence profile of suspects involved in complex or transnational crimes.

- **Cross-Database Identity and Image Matching:** The linkage allows cross-verification of identity attributes and images across telecom KYC databases, travel and immigration records, vehicle registration systems and driving licence repositories. This capability strengthens the detection of identity fraud, impersonation and document manipulation. In terror and organised crime investigations, rapid image and identity matching enhances surveillance accuracy and enables quicker confirmation of suspects.

- **Acceleration of Investigations and Intelligence Response:** By providing real-time, integrated access to multiple datasets, the NATGRID–NPR linkage significantly reduces investigation time. Agencies no longer need to approach different departments sequentially for data, enabling faster reconstruction of movement patterns, financial trails and social networks. This supports a shift from reactive law enforcement to predictive and preventive intelligence-led policing, especially in terror financing, cybercrime and financial fraud cases.

- **Graded Query System and Institutional Safeguards:** To prevent misuse, NATGRID operates a three-tier query classification system—non-sensitive, sensitive and highly sensitive. While basic identity queries require minimal clearance, access to financial and tax-related data demands higher authorisation levels. Every query must specify its purpose, receive senior-level approval, and is digitally logged for audit and accountability. These safeguards aim to balance national security objectives with privacy and proportionality concerns.

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SIGNIFICANCE OF NATGRID–NPR INTEGRATION FOR INTERNAL SECURITY

Aspect	What the Integration Enables	Internal Security Significance
Access to demographic data	Real-time access to verified demographic details (name, age, address) from NPR	Reduces identity ambiguity and speeds up suspect verification
Family & household linkages	Mapping of family members and household structures of suspects	Helps identify sleeper cells, support networks and safe houses
Entity resolution	Correlation of multiple records using analytics tools like Gandiva	Prevents misuse of aliases, fake IDs and duplicate identities
Cross-database identity matching	Matching identities and images across telecom KYC, travel, vehicle and licence databases	Detects impersonation, forged documents and cross-border movement
Terror module identification	Integration of relational, travel and communication data	Early detection of terror modules and radicalisation networks
Organised crime tracking	Network mapping of syndicates involved in narcotics, trafficking and smuggling	Enables dismantling of criminal supply chains
Financial crime detection	Access to banking and transaction data under higher authorisation	Identifies terror financing and money laundering channels
Investigation speed	Elimination of sequential, manual data requests	Faster case resolution and real-time intelligence response
Centre–State coordination	Direct access to State police (SP rank and above)	Strengthens cooperative federalism in internal security
Inter-state crime control	Seamless intelligence sharing across jurisdictions	Effective handling of inter-state and transnational crimes
Policing model	Use of analytics and big data tools	Shift from reactive to intelligence-led policing
Predictive capability	Pattern recognition and behavioural analysis	Prevention of crimes before execution
Evidence quality	Data-backed linkages across domains	Stronger cases and higher conviction rates
Oversight mechanisms	Graded queries (non-sensitive, sensitive, highly sensitive)	Prevents arbitrary access and misuse of data
Authorisation process	Senior-level approval and purpose specification	Ensures accountability and proportionality
Audit trail	Mandatory digital logging of all queries	Enables post-facto review and institutional checks
Governance impact	Integration of security and population databases	Enhanced state capacity with governance implications
Privacy dimension	Use of personal and relational data	Raises need for strong data protection safeguards

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CONCERNS RELATED TO PRIVACY AND CIVIL LIBERTIES

- **Risk of Surveillance Overreach:** Access to vast personal and relational data without mandatory FIR registration may dilute procedural safeguards, enabling unchecked surveillance and weakening the principle of due process.
- **Absence of a Robust Data Protection Regime:** The lack of a fully operational and independent data protection framework raises concerns regarding informed consent, proportionality in data usage, purpose limitation, and effective grievance redressal.
- **Potential for Misuse and Function Creep:** Family-wise and relational data, if inadequately safeguarded, may facilitate profiling, targeting of communities, or expansion of data use beyond original security objectives.
- **Chilling Effect on Fundamental Rights:** Perceived constant monitoring may deter citizens from exercising freedoms of speech, association, and movement, undermining democratic values and civil liberties guaranteed under Article 19.

CONSTITUTIONAL AND LEGAL PERSPECTIVE

The Supreme Court's Puttaswamy judgment (2017) recognised privacy as a fundamental right, subject to:

- Legality
- Necessity
- Proportionality
- Procedural safeguards

The NATGRID–NPR linkage must therefore operate within these constitutional boundaries to avoid infringement of civil liberties.

WAY FORWARD

- **Enact a Comprehensive Data Protection Law:** Operationalise a strong legal framework clearly defining data access limits, safeguards, penalties, and institutional accountability.
- **Independent Oversight and Parliamentary Scrutiny:** Establish autonomous oversight bodies and ensure regular parliamentary review to prevent misuse and executive overreach.
- **Purpose Limitation and Proportionality:** Restrict data access strictly to defined national security objectives, ensuring proportional and necessity-based usage.
- **Transparency, Audits, and Time-Bound Access:** Mandate regular third-party audits, access logs, and clearly defined retention periods to enhance accountability.
- **Public Trust and Citizen Awareness:** Build trust through transparent communication on legal safeguards, rights of citizens, and lawful use of personal data.

CONCLUSION

While the integration of advanced data systems can significantly strengthen internal security and intelligence coordination, it must be anchored in constitutional values of privacy, proportionality, and accountability. A balanced approach—combining robust legal safeguards, independent oversight, and transparent governance—is essential to ensure that national security objectives are achieved without eroding civil liberties or public trust.

Prelims question:

Q. With reference to the National Intelligence Grid (NATGRID), consider the following statements:

1. NATGRID was conceptualised after the 26/11 Mumbai terror attacks to integrate intelligence databases.
2. It provides real-time access to information for authorised law-enforcement agencies.
3. Recently, NATGRID has been linked with the National Population Register (NPR) to strengthen internal security.

Which of the statements given above are correct?

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A. 1 and 2 only B. 2 and 3 only

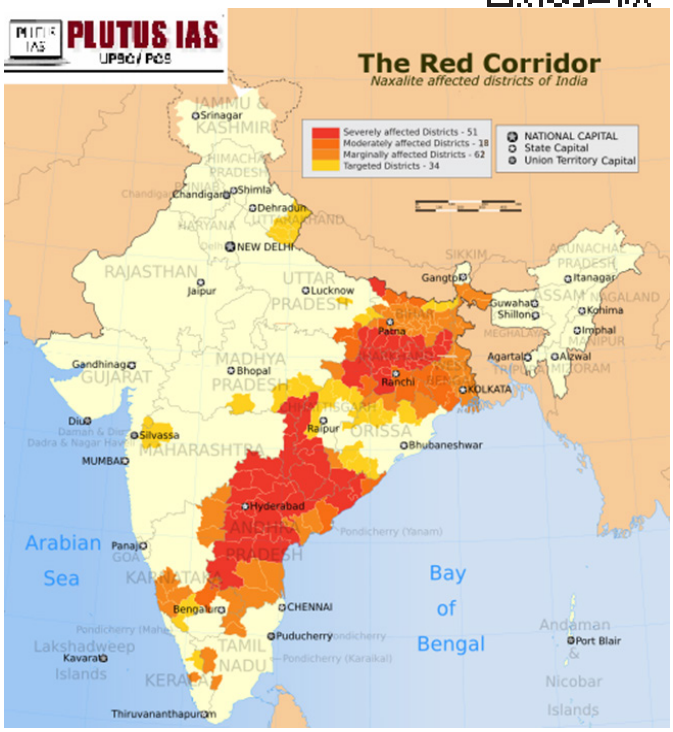
C. 1 and 3 only D. 1, 2 and 3

Answer: D

Mains Question:

Q. "The integration of NATGRID with the National Population Register marks a shift from reactive to intelligence-led policing in India." Examine the statement in the context of internal security challenges.

THE RED CORRIDOR: INDIA'S MARCH TOWARDS A NAXAL-FREE FUTURE (2014–2025)



WHY IN THE NEWS?

The issue is in the news due to recent official statements and data highlighting significant progress in curbing Left-Wing Extremism (LWE) in India over the last decade, with Naxal-affected districts declining sharply and violence reaching historic lows. Reports of mass surrenders of Naxal cadres, successful security operations in former strongholds like Bastar, and the government's renewed push to transform "Red Corridors into growth corridors" have reinforced the narrative of a near-collapse of the insurgency. This convergence of security gains, development outreach and governance expansion has brought the vision of a Naxal-Free Bharat back into national focus.

BACKGROUND: DECLINE OF THE RED CORRIDOR

- **Origins and Spread of the Red Corridor:** Left Wing Extremism (LWE), driven by Maoist ideology, took root in regions marked by chronic underdevelopment, land alienation, tribal marginalisation and weak state presence. Dense forests, difficult terrain and poor connectivity across central and eastern India enabled Naxal groups to expand their influence, eventually affecting 126 districts and forming the infamous Red Corridor.
- **Parallel Authority and Security Challenges:** In the absence of effective governance, Naxal groups established parallel systems of taxation, justice and administration, intimidating civilians, targeting security forces and sabotaging infrastructure. Persistent violence disrupted development, deterred investment and posed a serious challenge to India's internal security architecture.
- **Strategic Shift Since 2014:** From 2014 onwards, the government adopted a clear, coordinated and multi-pronged strategy, combining intelligence-led security operations, enhanced inter-state coordination, modernisation of forces and targeted leadership decapitation with a renewed focus on development and governance.
- **Development and Governance Push:** Alongside security measures, emphasis was placed on road and telecom connectivity, financial inclusion, education, healthcare and welfare delivery in LWE-affected areas. Surrender-cum-rehabilitation policies and community outreach weakened local support for extremism.
- **Outcome:** Shrinking of the Red Corridor: These sustained efforts resulted in a dramatic decline of LWE influence. By 2025, the number of

LWE-affected districts fell to 11, with only 3 classified as most-affected, signalling the near-collapse of the Red Corridor and restoration of state authority in once-insurgency-dominated regions.

SECURITY OFFENSIVE AND OPERATIONAL SUCCESS

A decisive factor in weakening Left Wing Extremism has been the shift towards sustained, intelligence-led counter-insurgency operations combined with permanent area domination. Unlike earlier reactive approaches, security forces focused on denying Maoists safe havens by expanding their physical presence deep inside forested and hilly interiors. The number of fortified police stations rose sharply from 66 (pre-2014) to 586, complemented by 361 forward operating camps and 68 night-landing helipads, allowing rapid troop movement, casualty evacuation and round-the-clock operations. This persistent pressure dismantled Maoist logistics, recruitment and command structures, reflected in a 53% decline in violent incidents, 73% reduction in security force fatalities, and 70% fall in civilian deaths compared to the 2004–2014 period. In 2024–25 alone, coordinated operations by central and state forces neutralised over 600 Naxal cadres, including senior PLGA leaders. Crucially, long-standing Maoist bastions such as Abujhmad (Chhattisgarh) and Budha Pahad (Jharkhand)—which had remained outside effective state control for nearly three decades—were reclaimed, symbolising the collapse of insurgent territorial dominance and operational depth.

Major Real-Life Counter-Naxal Operations and Outcomes

Operation / Area	Location	Key Forces Involved	Significance and Outcome
Operation Green Hunt (ongoing legacy)	Multiple LWE states	CRPF, CoBRA, State Police	Marked the shift towards coordinated central–state operations and intelligence sharing against Maoist networks.
Abujhmad Operations (2023–25)	Bastar region, Chhattisgarh	CRPF, CoBRA, Chhattisgarh Police	Penetration of a long-inaccessible Maoist core zone; destruction of training camps and leadership hideouts.
Budha Pahad Clearance Drive	Jharkhand	Jharkhand Police, CRPF	Ended nearly 30 years of Maoist dominance; restored civilian movement and administration.
CoBRA-led Deep Forest Operations	Sukma, Bijapur, Dantewada	CoBRA Battalions	Precision jungle warfare leading to elimination of senior PLGA commanders.
Area Domination through Forward Camps	Chhattisgarh, Odisha, Maharashtra	CRPF, State Police	Permanent security presence prevented Maoist regrouping and enabled development works.
Leadership Decapitation Drives (2024–25)	LWE core districts	Central & State Forces	Neutralisation of top Maoist leaders weakened PLGA's command and morale.

FINANCIAL CHOKING AND INSTITUTIONAL STRENGTHENING

Alongside kinetic operations, the Government systematically dismantled the financial and organisational networks of Naxals. A dedicated anti-Naxal vertical in the National Investigation Agency (NIA) accelerated prosecutions, while coordinated action by NIA, ED and states led to seizure and attachment of assets worth over ₹92 crore. Capacity-building of states through enhanced funding under SRE, SIS, SCA and ACALWEMS schemes strengthened local forces, intelligence units and infrastructure, ensuring that security gains became durable rather than episodic.

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DEVELOPMENT SATURATION AND GOVERNANCE OUTREACH

Recognising that kinetic operations alone cannot dismantle insurgency, the Government complemented security measures with intensive development saturation in Left-Wing Extremism (LWE) affected regions. The construction of over 12,000 km of roads and installation of more than 8,500 mobile towers significantly enhanced physical connectivity, administrative reach, and real-time intelligence, reducing the isolation that sustained insurgent influence.

Financial inclusion deepened through the expansion of bank branches, ATMs, post offices and banking correspondents, integrating remote populations into the formal economy and eroding the parallel financial control exercised by Naxal networks. Simultaneously, targeted skill development initiatives—through ITIs and Skill Development Centres across 48 districts—created legitimate livelihood opportunities for local youth, directly disrupting extremist recruitment pipelines and strengthening state legitimacy at the grassroots.

SURRENDER AND REHABILITATION

- **Effective Surrender–Rehabilitation Policy:** An attractive surrender-cum-rehabilitation framework, combining financial incentives, stipends and assured livelihood support, significantly weakened Maoist cadre strength. Sharp Rise in Voluntary Surrenders: Nearly 2,000 Naxals surrendered in 2025 alone, indicating erosion of ideological commitment and growing confidence in state institutions.
- **Psychological and Organisational Impact:** Large-scale surrenders disrupted leadership structures, demoralised remaining cadres and reduced recruitment potential.Integrated Counter-Insurgency Strategy: Calibrated security operations, financial choking of networks, governance outreach and rehabilitation worked in tandem to dismantle the insurgent ecosystem.
- **Transformation of the Threat Landscape:** Naxalism has shifted from a geographically widespread insurgency to a residual, localised security challenge.
- **Road Ahead:** Sustained vigilance, last-mile development and continued rehabilitation remain essential to prevent relapse.
- **Strategic Outcome:** India is firmly on track to achieve its goal of a Naxal-free Bharat by March 2026, replacing decades of conflict with peace, development and inclusive governance.

WAY FORWARD: SUSTAINING GAINS TOWARDS A NAXAL-FREE BHARAT

- **Last-Mile Security Consolidation:** While the Red Corridor has largely collapsed, residual pockets require focused intelligence-led operations and sustained area domination. Strengthening coordination among central forces, state police and local intelligence units is essential to prevent regrouping, splinter factions or cross-border movement across districts.
- **Development Saturation in Remaining Hotspots:** The remaining affected districts must witness time-bound saturation of roads, telecom, health, education and livelihoods. Converting security gains into visible welfare delivery will ensure that liberated areas do not relapse into alienation or insurgent influence.
- **Deepening Tribal Inclusion and Rights Protection:** Long-term peace demands empowerment of tribal communities through effective implementation of the Forest Rights Act, land rights security, participatory governance and culturally sensitive development models. Trust-building with local communities remains critical to deny ideological space to extremism.
- **Strengthening Rehabilitation and Post-Surrender Support:** Rehabilitation should move beyond financial incentives to include psychological counselling, community acceptance, skill certification and long-term employment. Successful reintegration of surrendered cadres is key to discouraging fresh recruitment and ensuring social stability.
- **Preventing Urban and Ideological Revival:** With rural strongholds weakened, focus must shift to urban networks, funding channels and digital propaganda. Continuous monitoring

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of information warfare, front organisations and legal ecosystems will prevent ideological regeneration in new forms.

- **Institutionalising Peace and Governance:** To make gains irreversible, the state must institutionalise peace through responsive administration, grievance redressal mechanisms, local leadership development and youth engagement. Naxal eradication should culminate not just in security success, but in democratic deepening and inclusive growth.

CONCLUSION

India's experience over the past decade demonstrates that Left Wing Extremism can be decisively rolled back through a balanced strategy of firm security action and inclusive development. With the Red Corridor reduced to a few residual pockets, the challenge ahead is no longer one of containment but of consolidation and prevention of relapse. Sustained vigilance, last-mile governance delivery, tribal empowerment and effective rehabilitation will be crucial to making these gains irreversible. If security success is matched with justice, opportunity and participation, India is well positioned to achieve the goal of a Naxal-free Bharat by March 2026, transforming former conflict zones into engines of peace and development.

Prelims question

Q. With reference to Left Wing Extremism (LWE) in India, consider the following statements:

1. The number of Naxal-affected districts has reduced significantly since 2014.
2. Fortified Police Stations have been constructed in LWE-affected areas as part of the security strategy.
3. The National Investigation Agency has a dedicated vertical to deal with Naxal-related cases.
4. Mobile connectivity expansion in LWE areas is unrelated to counter-insurgency strategy.

Which of the statements given above are correct?

A. 1, 2 and 3 only B. 1 and 3 only
C. 2 and 4 only D. 1, 2, 3 and 4

Answer: A

Mains Question

Q. "India's approach to Left Wing Extremism has shifted from containment to decisive rollback." Critically examine the factors behind the sharp decline of Naxalism since 2014 and discuss the challenges that remain for achieving a Naxal-free India. (250 words)

SUDARSHAN CHAKRA: INDIA'S INDIGENOUS NEXT-GENERATION INTEGRATED AIR DEFENCE SYSTEM

WHY IN THE NEWS?

The announcement of Sudarshan Chakra—India's indigenous next-generation air defence system—by Prime Minister Narendra Modi during the Independence Day address in 2025 marks a watershed moment in India's national security trajectory. Conceived as a comprehensive, network-centric air defence framework rather than a single weapons platform, Sudarshan Chakra reflects India's transition from reactive defence preparedness to proactive, anticipatory security. In an era where air and space domains increasingly determine the outcome of conflicts, the system seeks to provide India with an invisible yet resilient shield over its critical assets, population centres, and strategic infrastructure.



CONCEPTUAL AND TECHNOLOGICAL DIMENSIONS

At its core, Sudarshan Chakra is a layered, integrated air defence system (IADS) designed to counter a wide spectrum of aerial threats—ranging from fighter aircraft and cruise missiles to drones, loitering munitions, and potentially hypersonic weapons. It brings together three critical components:

1. **Advanced Sensors:** Long-range radars, airborne early warning systems, electro-optical sensors, and space-based inputs for early detection and tracking.
2. **Weapon Platforms:** A mix of surface-to-air missile systems, point defence weapons, and electronic warfare tools to neutralise threats at varying altitudes and ranges.
3. **Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR):** Real-time data fusion, AI-enabled decision support, and secure communication networks to ensure swift and coordinated responses.

STRATEGIC AND MILITARY DIMENSIONS

Defence Minister Rajnath Singh has highlighted that air power has evolved from a tactical enabler to a strategic determinant. Contemporary conflicts such as the Russia-Ukraine war and the Israel-Hamas conflict demonstrate how air superiority, precision strikes, and information dominance shape battlefield outcomes. Sudarshan Chakra is designed to function in this environment of speed, surprise, and shock, ensuring that India retains escalation control while deterring adversaries. Strategically, the system strengthens India's credible deterrence posture, particularly against asymmetric threats such as drone swarms and missile saturation attacks. By protecting high-value assets, it expands India's strategic options during crises and enhances the political leadership's confidence in military preparedness

OPERATIONAL AND INSTITUTIONAL DIMENSIONS

The operational philosophy of Sudarshan Chakra is informed by recent Indian military experiences, including Operation Sindoor, where the Indian Air Force demonstrated high-impact, short-duration, and precision-oriented capabilities. These operations underline the importance of jointness and tri-service synergy, a principle strongly emphasised by the government. Sudarshan Chakra is expected to integrate seamlessly with existing command structures and inter-service networks, promoting coordinated air defence across the Army, Navy, and Air Force. This aligns with broader reforms such as integrated theatre commands and net-centric warfare doctrines.

INDIGENISATION AND INDUSTRIAL DIMENSIONS

The system is a flagship example of Atmanirbhar Bharat in defence. Its development coincides with:

1. The declaration of indigenous jet engine development as a national mission.
2. Active participation of start-ups and MSMEs through iDEX and ADITI.
3. Measurable outcomes, with 672 iDEX winners by November 2025, including 96 projects for the IAF.

Economically, Sudarshan Chakra contributes to India's goal of achieving ₹3 lakh crore in defence production by 2029, while reducing import dependence and strengthening domestic supply chains.

GEOPOLITICAL DIMENSIONS

In a volatile Indo-Pacific and contested continental environment, Sudarshan Chakra enhances India's strategic autonomy. It reduces vulnerability to coercive air power and missile threats, strengthens India's position in regional deterrence equations, and complements partnerships under frameworks such as the Quad and Indo-Pacific security architecture, without compromising sovereign decision-making.

TECHNOLOGICAL AND CYBER DIMENSIONS

Modern air defence is inseparable from cyber and data warfare. Sudarshan Chakra is envisioned as a digitally hardened system, incorporating:

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- AI-driven threat prioritisation,
- Cyber-resilient networks,
- Secure data fusion across domains.

SOCIETAL AND ETHICAL DIMENSIONS

Beyond military utility, the system plays a vital role in civil defence and public confidence. By protecting urban centres and critical infrastructure, Sudarshan Chakra reassures citizens and reinforces the state's responsibility to safeguard lives. Ethically, its emphasis on precision and early interception reduces collateral damage and civilian harm, aligning with humanitarian norms of warfare.

CHALLENGES AND LIMITATIONS

1. **High Deployment and Maintenance Costs:** Large-scale coverage of cities, bases, and strategic assets requires heavy capital investment, while long-term maintenance and upgrades add to fiscal pressure.
2. **Integration with Legacy Systems:** Seamless interoperability with existing air defence platforms, radars, and command networks remains technically complex and time-consuming.
3. **Threat of Saturation Attacks:** Swarm drones, cruise missiles, and coordinated salvos can overwhelm interception capacity, creating cost and sustainability challenges.
4. **Emerging Hypersonic and Stealth Threats:** Hypersonic weapons reduce reaction time and evade conventional radar detection, demanding constant technological adaptation.
5. **Cyber and Electronic Warfare Vulnerabilities:** Network-centric architecture is exposed to cyber intrusions, jamming, spoofing, and electronic attacks in grey-zone warfare.
6. **Human Resource and Skill Gaps:** Operating AI-enabled C4ISR systems requires specialised manpower, continuous training, and joint operational expertise.

WAY FORWARD

1. **Deepening Tri-Service Jointness:** Integrated command structures, joint doctrines, and regular exercises are essential for coordinated air defence operations.
2. **AI and Automation Integration:** AI-driven threat prioritisation and decision-support systems can reduce response time and operator overload.
3. **Expansion of Space-Based Surveillance:** Satellite-based early warning systems can enhance detection range and resilience against stealth threats.
4. **Strengthening Cyber and EW Resilience:** Hardened networks, redundancy, and electronic counter-countermeasures must be embedded in system design.
5. **Boosting Indigenous R&D and Industry Participation:** Greater involvement of start-ups, MSMEs, and academia will accelerate innovation and reduce import dependence.
6. **Multi-Domain Defence Alignment:** Air defence planning should be integrated with missile and space defence strategies for a holistic security posture.

CONCLUSION

The Sudarshan Chakra represents a decisive shift in India's defence posture from platform-centric protection to a networked, anticipatory, and multi-domain security architecture. By integrating advanced sensors, weapon systems, AI-enabled C4ISR, and cyber resilience, it strengthens India's ability to deter, deny, and defeat emerging aerial threats in an increasingly contested air and space environment. Beyond its military utility, the system reinforces strategic autonomy, boosts indigenous defence manufacturing, and enhances public confidence in national security. While challenges related to cost, integration, and evolving threat technologies persist, sustained investment, institutional reforms, and joint operational doctrines can unlock its full potential.

Prelims question:

Q. With reference to the Sudarshan Chakra air defence system, consider the following statements:

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1. Sudarshan Chakra is a single surface-to-air missile system developed for point defence of military bases.
2. It is envisaged as a network-centric, layered air defence framework integrating sensors, weapon platforms, and C4ISR systems.
3. The system is designed to counter threats such as drones, cruise missiles, and hypersonic weapons.
4. Its development is aligned with India's Atmanirbhar Bharat initiative in defence manufacturing.

Which of the statements given above are correct?

(a) 2, 3 and 4 only (b) 1 and 3 only

(c) 2 and 4 only (d) 1, 2, 3 and 4

Answer: A

Mains Question:

Q. Discuss the significance of Sudarshan Chakra by examining its technological, strategic, operational, and indigenisation dimensions. Also analyse the challenges associated with its deployment and suggest a suitable way forward. (250 words)

AI, EXTREMISM AND INTERNAL SECURITY: A NEW FRONTIER OF ASYMMETRIC THREATS

WHY IN THE NEWS?

Recent reports have highlighted the growing concern over the use of Artificial Intelligence (AI) by non-state actors, including terrorist and extremist groups such as ISIS and Al-Qaida. These groups are reportedly experimenting with AI to enhance operational capabilities, spread propaganda, recruit followers, and potentially carry out cyber and bio-chemical attacks. The rapid proliferation and accessibility of AI technologies make even small extremist groups capable of amplifying their reach and impact. This trend underscores the urgent need for national and international policy frameworks to address the security risks posed by AI while balancing its potential for technological and socio-economic advancement.



CONTEXT: AI ADOPTION BY EXTREMIST GROUPS

1. AI programs such as ChatGPT, MidJourney, and other generative AI platforms have made sophisticated technology available to a wide audience, including poorly funded extremist organizations.
2. Militant groups are leveraging AI to overcome resource constraints, automating tasks previously requiring substantial manpower or technical expertise.
3. Social media has historically been a potent tool for extremist recruitment and propaganda, and AI now magnifies its effectiveness, enabling misinformation campaigns at unprecedented scale.

APPLICATIONS OF AI BY MILITANT GROUPS

Application Area	How AI is Used by Militant Groups	Illustrative Examples / Implications
Propaganda & Recruitment	AI enables creation of highly realistic deepfake images, videos, and audio, making extremist messaging more persuasive and emotionally manipulative.	Example: ISIS circulated AI-generated propaganda after the Russia concert attack to instil fear and attract recruits.
Disinformation & Psychological Operations	AI-generated visuals and narratives fabricate or exaggerate war atrocities, distort facts, and inflame communal or political tensions.	Example: Fake AI images during the Israel–Hamas conflict misrepresented events and fuelled outrage globally.
Multilingual Outreach	AI-powered translation tools rapidly convert extremist content into multiple languages, allowing wider global dissemination.	Enhances cross-border radicalisation, especially targeting vulnerable populations across regions.
Cyber Operations	AI automates phishing attacks, malware generation, reconnaissance, and cyber intrusion techniques.	Enables even low-skilled actors to conduct sophisticated cyberattacks on critical infrastructure.
Emerging Bio-Chemical Threats	AI can assist in simulating chemical compounds or biological processes, lowering technical entry barriers.	Experts warn of AI aiding bio-chemical weapon design, posing serious global security risks.

DRIVERS OF AI ADOPTION BY MILITANTS

1. **Accessibility and Cost-Effectiveness:** Even small groups with minimal resources can exploit AI tools.
2. **Ease of Use:** Modern AI programs are user-friendly, requiring limited technical knowledge.
3. **Amplification Through Social Media:** AI content spreads rapidly via algorithms, enhancing visibility and influence.
4. **Strategic Advantage:** AI allows militants to innovate in propaganda, cyber warfare, and recruitment, staying ahead of conventional countermeasures.

CURRENT LIMITATIONS

1. While AI adoption is growing, extremist groups still lag behind state actors (China, Russia, Iran) in sophisticated applications.
2. Advanced AI uses, such as autonomous weapons or complex bioengineering, remain largely "aspirational."
3. Technical and operational limitations prevent large-scale deployment of AI in high-risk areas, though the threat is expected to grow with technological democratization.

IMPACTS AND SECURITY RISKS

1. **National Security Threats:** AI enables small groups to cause disproportionate impact, spreading fear, misinformation, and cyber attacks.
2. **Social and Political Polarization:** Deepfakes and AI-generated content exacerbate societal divisions and manipulate public sentiment.
3. **Global Reach:** AI allows extremist content to transcend national boundaries, affecting communities worldwide.
4. **Potential for Mass Casualty Threats:** The misuse of AI in chemical or biological weapons, though currently limited, represents a future security challenge.

POLICY AND LEGISLATIVE RESPONSES

United States Initiatives:

Lawmakers propose frameworks for sharing AI usage data to identify misuse by extremists, hackers, or foreign actors.

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Annual assessments of AI risks by the Department of Homeland Security are being mandated.

Training workshops by extremist groups on AI usage have raised alarm in Congress.

EXPERT RECOMMENDATIONS:

1. **John Laliberte (Ex-NSA):** Even small groups can make a significant impact using AI.
2. **Marcus Fowler (Ex-CIA):** AI adoption is aspirational for now but will grow, requiring proactive monitoring.
3. **Sen. Mark Warner:** Cooperation between AI developers and government agencies is essential to prevent misuse.
4. **Rep. August Pfluger:** Policy frameworks must evolve alongside emerging AI threats.
5. **Global Policy Perspective:** Preparing for AI misuse is analogous to conventional security preparedness, highlighting the need for international cooperation, intelligence sharing, and preventive strategies.

WAY FORWARD

1. **Strengthening Cybersecurity:** Governments must enhance cyber defenses against AI-enabled attacks.
2. **Regulation and Governance:** Clear AI policies, responsible innovation, and regulatory oversight are necessary to limit misuse.
3. **Public Awareness and Counter-Propaganda:** Educating citizens and deploying AI tools for detecting deepfakes and misinformation can mitigate social impacts.
4. **International Cooperation:** Cross-border collaboration is critical to monitor and counter extremist exploitation of AI technologies.

CONCLUSION

AI is a double-edged sword: while it promises transformative progress, it also amplifies the capabilities of militant groups, making them more dangerous and harder to detect. The rapid democratization of AI increases risks for national and global security, requiring an urgent, multidimensional response involving legislation, technology safeguards, international cooperation, and proactive countermeasures. For policymakers and security agencies, anticipating AI-driven threats is no longer optional—it is a strategic imperative.

Prelims question:

Q. Consider the following statements regarding the use of Artificial Intelligence (AI) by extremist and militant groups:

1. Generative AI tools can enable extremist groups to produce propaganda and deep-fake content at low cost and large scale.
2. AI-powered translation tools help extremist groups expand their outreach across linguistic and national boundaries.
3. The use of AI by non-state actors has already surpassed the capabilities of major state actors in cyber and autonomous warfare.
4. Concerns have been raised that AI could lower technical barriers for cyber and bio-chemical threats.

Which of the statements given above are correct?

(a) 1, 2 and 3 only (b) 1, 2 and 4 only
(c) 2 and 3 only (d) 1, 3 and 4 only

Answer: B

Mains Question:

Q. Artificial Intelligence has emerged as a double-edged sword in the context of internal security. Discuss how militant and extremist groups are exploiting AI technologies and examine the challenges this poses for national and global security. Suggest suitable policy and governance measures to counter the misuse of AI by non-state actors.

(250 words)

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UNDER STRAIN: BANGLADESH'S HINDU MINORITY AMID RISING VIOLENCE, POLITICAL FLUX AND REGIONAL SCRUTINY

WHY IN THE NEWS?



Hindus in Bangladesh are in news due to a recent spike in communal violence amid political instability following the 2024 transition of power. Reports of lynching, arson, and temple vandalism have triggered diplomatic concern from India and renewed international scrutiny over minority rights and security.

HINDUS IN BANGLADESH

Hindus constitute the largest religious minority in Bangladesh, historically rooted in the region's composite culture. According to the 2022 census, Hindus accounted for about 7.96% of the population, down from over 13% in the 1970s, reflecting long-term demographic shifts and migration patterns. Despite constitutional guarantees of secularism and equality, the community has faced periodic challenges ranging from social discrimination to violence. Recent developments indicate a worsening security environment, raising concerns domestically and internationally.

HISTORICAL AND DEMOGRAPHIC CONTEXT

- **Post-Partition & Post-1971 Patterns:** After the Partition of India (1947) and later the Bangladesh Liberation War (1971), many Hindus migrated due to communal violences and socio-economic pressures.The decline in Hindu population share over decades reflects both outmigration and differential fertility rates
- **Legal and Constitutional Safeguards:** Bangladesh's Constitution proclaims equal rights, freedom of religion, and non-discrimination. However, implementation gaps continue to persist, especially in rural and politically unstable contexts.
- **Rising Incidents of Violence:** Recent reporting highlights an alarming increase in attacks on Hindus and other minorities: allegations include mob lynching, arson of homes, threatening notes, and targeted killings. Independent monitoring and civil society data for 2025 show hundreds of communal incidents involving Hindus, including vandalism of temples and violent clashes linked to political upheaval and social tensions.

POLITICAL INSTABILITY AND MINORITY VULNERABILITY

- **Leadership Transition and Governance Vacuum:** The political transition after the end of Sheikh Hasina's government in 2024 created periods of administrative uncertainty. Such transitions often weaken institutional authority, slow

decision-making, and reduce the effectiveness of law enforcement. In this vacuum, minority communities, particularly Hindus, become easy targets due to their limited political leverage and numerical disadvantage.

- **Weakening of Law and Order Machinery:** During phases of political flux, policing and local administration tend to become reactive rather than preventive. Reports suggest delayed police response, selective enforcement, and inadequate protection of minority localities. This emboldens perpetrators, fostering a perception that communal crimes may go unpunished, thereby increasing the frequency and intensity of attacks.
- **Politicisation of Religious Identity:** Political actors and interest groups often instrumentalise religious identity to mobilise support or delegitimise opponents. In such narratives, minorities are portrayed as aligned with rival political forces or external actors. This politicisation deepens societal polarisation and normalises hostility against minority groups.
- **Culture of Impunity and Normalisation of Violence:** Repeated incidents without swift accountability contribute to a culture of impunity. When investigations are delayed or diluted, communal violence risks becoming normalised. This erodes trust in state institutions among minorities and discourages victims from reporting crimes, further masking the true scale of insecurity.
- **Impact on Social Cohesion and Minority Confidence:** Persistent instability and targeted violence weaken inter-community relations and undermine social cohesion. For Hindu minorities, this results in heightened fear, social withdrawal, and in some cases, renewed migration pressures. Over time, such insecurity challenges Bangladesh's constitutional commitment to secularism and inclusive governance.
- **Regional and Diplomatic Implications:** Minority vulnerability during political instability has spillover effects beyond national borders. It strains India–Bangladesh relations, invites international scrutiny, and raises concerns about regional stability. Thus, protecting minorities becomes not only a domestic governance issue but also a critical factor in sustaining Bangladesh's international credibility.

DOMESTIC AND INTERNATIONAL RESPONSES

Stakeholder	Position / Response	Key Features	Implications
Bangladesh Government	Denial of systematic persecution	Incidents often described as isolated, politically motivated, or law-and-order problems rather than communal targeting	Limits acknowledgment of structural issues; risks underestimating minority insecurity
	Law enforcement action	Arrests announced in select cases; deployment of police in sensitive areas	Inconsistent enforcement fuels perception of selective justice
	Official narrative	Emphasis on secular constitutional framework	Gap between constitutional ideals and ground realities
Bangladesh Civil Society & Activists	Demand impartial investigations	Calls for independent probes, victim protection, and judicial accountability	Highlights credibility deficit in state responses
	Documentation of incidents	Fact-finding reports, media outreach	Counters official minimisation of violence

India (Government)	Diplomatic condemnation	MEA statements condemning violence against Hindus and minorities	Elevates minority protection to bilateral diplomatic agenda
	Bilateral engagement	Issue raised in diplomatic channels with Dhaka	Signals India's concern without direct intervention
	Normative stance	Emphasis on protection of minorities as essential to bilateral trust	Links human rights with regional cooperation
Indian Political & Public Discourse	Parliamentary debates and media focus	Issue framed as humanitarian and civilisational concern	Shapes domestic opinion and foreign policy pressure
United States	Public statements urging protection	Calls for safeguarding religious freedom and minority rights	Reflects rights-based foreign policy approach
	Human rights monitoring	Reference to minority issues in human rights reports	Increases international visibility and scrutiny
International Human Rights Bodies	Advocacy and reporting	Monitoring communal violence and minority rights	Reinforces global norms on religious freedom
Global Media & Academia	Analytical critiques	Link political instability with minority vulnerability	Influences global perception of Bangladesh's governance
Regional Stability Stakeholders	Concern over spillover effects	Fear of refugee flows and communal polarisation	Connects minority protection to regional security

SOCIO-ECONOMIC DIMENSIONS OF CHALLENGES FACED BY HINDU COMMUNITIES IN BANGLADESH

- **Land Dispossession and Property Insecurity:** Land remains the most critical economic asset for rural Hindu households. Historical legacies such as the Vested Property Act and its uneven implementation have resulted in large-scale dispossession. Even today, bureaucratic delays, weak land records, and local power asymmetries enable encroachment and coercive transfers, eroding long-term economic security.
- **Livelihood Vulnerability and Occupational Shifts:** Hindu communities are disproportionately represented in traditional occupations such as agriculture, fishing, pottery, and small-scale trading. Land loss and communal insecurity force many families to abandon these livelihoods, pushing them into informal, low-paying urban work. This transition often leads to job precarity and intergenerational poverty.
- **Economic Marginalization and Limited Access to Credit:** Structural discrimination and lack of collateral restrict access to institutional credit for Hindu households. Dependence on informal moneylenders increases indebtedness, limiting entrepreneurship and upward mobility. Limited inclusion in government welfare schemes further compounds economic exclusion.
- **Social Exclusion and Reduced Political Voice:** Socio-economic vulnerability intersects with minority status to reduce political representation at local levels. Fear of backlash and weak grievance redressal mechanisms discourage communities from asserting rights, perpetuating a cycle of marginalization and underdevelopment.
- **Migration and Demographic Impact:** Persistent economic insecurity and social discrimination have driven gradual cross-border and internal migration. While migration acts as a coping mechanism, it results in demographic decline,

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fragmentation of communities, and loss of social capital in traditional settlements.

- **Intergenerational Impact on Education and Human Capital:** Economic stress leads to higher dropout rates among children, especially in rural areas. Limited access to quality education reduces human capital formation, reinforcing socio-economic disadvantages across generations.

POLICY IMPLICATIONS

Stakeholder	Policy Area	Key Measures	Intended Outcomes
Bangladesh	Strengthening Rule of Law	Ensure swift investigation, prosecution, and accountability for communal crimes; provide impartial police protection to minorities	Restoration of trust in state institutions; deterrence against communal violence
	Community Engagement	Promote interfaith dialogue, local peace committees, and community confidence-building initiatives	Social cohesion; reduction in communal mistrust and polarization
	Institutional Reform	Capacity building of police, judiciary, and local administration to handle hate crimes sensitively and impartially	Professionalized law enforcement; improved minority rights protection
India & Neighbouring States	Diplomatic Engagement	Sustain bilateral dialogue with Bangladesh through official and track-II channels on minority protection	Regional stability; constructive resolution of minority concerns
	Human Rights Advocacy	Support multilateral monitoring mechanisms; encourage civil society exchanges and people-to-people contacts	Norm diffusion; strengthening democratic and human rights practices
International Community	Monitoring Mechanisms	Encourage independent reporting, fact-finding, and analysis by international human rights bodies	Evidence-based assessment; global accountability
	Aid & Development Policies	Align development cooperation with human rights benchmarks while respecting national sovereignty	Inclusive development; incentives for rights-based governance

WAY FORWARD

- **Strengthening Rule of Law:** Ensure swift investigation and strict punishment for communal crimes to end impunity.
- **Proactive Policing & Early Warning Mechanisms:** Use intelligence-based policing and local monitoring to prevent mob violence and targeted attacks.
- **Protection of Religious, Cultural & Property Rights:** Safeguard temples, cremation grounds, and land ownership through legal and administrative measures.
- **Political & Administrative Accountability:** Act firmly against hate speech, communal mobilization, and political patronage of violence.
- **Community-Level Confidence Building:** Promote interfaith dialogue, peace committees, and grassroots reconciliation to rebuild trust.
- **Diplomatic & International Engagement:** Sustain constructive India–Bangladesh dialogue and allow independent human rights monitoring to ensure accountability.

CONCLUSION

The situation of Hindus in Bangladesh is complex, shaped by demographic changes, political instability, socio-economic disadvantage, and security challenges. Recent upsurges in violence and international diplomatic friction reflect broader regional concerns about minority rights and communal harmony.Addressing these issues

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demands multi-layered policy action, rooted in constitutional guarantees, international norms, and inclusive governance – essential not only for minority protection but for long-term stability and regional cooperation in South Asia.

Prelims question:

Q. Which of the following factors have contributed to the decline of the Hindu population in Bangladesh?

1. Migration after Partition and 1971 Liberation War
2. Differential fertility rates
3. Communal violence and discrimination

(a) 1 and 2 only (b) 2 and 3 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: D

Mains Question:

Q. Discuss the historical and political factors responsible for the declining Hindu population in Bangladesh. How does this trend impact social cohesion and regional stability?

COMMUNAL TENSION AND RELIGIOUS FREEDOM DURING CHRISTMAS

WHY IN THE NEWS?



The issue is in news due to reported disruptions of Christmas prayers, allegations of forced conversions, and administrative restrictions in some regions, raising concerns about religious freedom, communal harmony, constitutional secularism, and the state's role in ensuring equal protection of fundamental rights.

CONSTITUTIONAL AND LEGAL FOUNDATIONS OF RELIGIOUS FREEDOM

- **Freedom of Conscience and Practice:** Article 25 guarantees freedom to profess, practice, and propagate religion, forming the core of religious liberty in India.
- **Institutional and Denominational Rights:** Articles 26–28 protect religious institutions, prevent state-sponsored religion, and ensure neutrality in public education.
- **Reasonable Restrictions:** Religious freedom is subject to public order, morality, and health, requiring a careful constitutional balance.
- **Judicial Interpretation:** The Supreme Court has upheld secularism as a basic feature, mandating equal respect for all faiths.

NATURE AND PATTERNS OF COMMUNAL TENSIONS DURING CHRISTMAS

- **Allegations of Forced Conversions:** Christmas gatherings are sometimes linked to unverified claims of coercive conversions, heightening mistrust.
- **Disruption of Religious Activities:** Incidents include interference in prayer meetings, carol singing, and church gatherings.
- **Role of Misinformation:** Social media amplifies rumours, contributing to fear, polarisation, and mobilisation.
- **Preventive Restrictions:** Pre-emptive administrative actions sometimes disproportionately affect Christian religious practices.

ROLE OF THE STATE AND LAW ENFORCEMENT

- **Constitutional Obligation of Neutrality:** The state must act as a neutral guarantor of fundamental rights without religious bias.
- **Policing and Public Order:** Law enforcement must protect lawful religious gatherings and prevent intimidation or violence.
- **Accountability and Rule of Law:** Selective enforcement or inaction undermines trust in democratic institutions.
- **Judicial Oversight:** Courts have emphasised that maintaining public order cannot justify arbitrary restrictions on fundamental rights.

SOCIO-POLITICAL AND ETHICAL DIMENSIONS

- **Identity Politics and Majoritarian Narratives:** Political mobilisation around religious identity can deepen social divisions.
- **Shrinking Civic Space:** Fear and intimidation discourage minority communities from exercising constitutional freedoms.
- **Ethical Principles at Stake:** Values of dignity, tolerance, fraternity, and respect for diversity are compromised during communal tensions.

IMPLICATIONS FOR INDIA'S GLOBAL IMAGE AND INTERNAL COHESION

Dimension	Nature of Impact	Expanded Explanation	UPSC Relevance / Keywords
International Perception	Global scrutiny of human rights record	Incidents occurring during Christmas—when global attention is heightened—are often highlighted by international media, foreign governments, and human rights organisations. Such narratives can frame India as struggling with religious freedom and minority protection, affecting its soft power credentials as the "world's largest democracy."	Soft power, Human Rights Diplomacy, Liberal democratic values, Global governance
	Diplomatic and reputational costs	Persistent reports of communal tensions may influence India's image in multilateral forums (UNHRC, EU dialogues) and bilateral engagements, especially with Western democracies where religious freedom is a core concern.	Strategic partnerships, Norm-based order
Social Trust and Unity	Erosion of inter-community trust	Recurrent communal tensions create fear, suspicion, and social distancing between communities. This undermines everyday cooperation, weakens shared civic identity, and damages the idea of "unity in diversity."	Social capital, Pluralism, Indian society
	Impact on grassroots harmony	Localised incidents have cascading effects—rumours, misinformation, and politicisation spread rapidly through social media, magnifying social fault lines beyond the immediate area of conflict.	Digital misinformation, Social fragmentation
Developmental Distraction	Governance bandwidth diverted	Administrative machinery and political leadership are forced to focus on law-and-order management rather than long-term policy planning, reforms, and welfare delivery.	Governance efficiency, State capacity

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	Hindrance to inclusive development	Communal discord disproportionately affects vulnerable groups, discourages investment, tourism, and community participation in development programmes, thereby slowing inclusive growth.	Inclusive growth, Sustainable development
Internal Security and Stability	Risk of radicalisation and polarisation	Prolonged communal stress can push fringe elements towards radical ideologies, increasing the risk of local unrest and undermining internal security.	Internal security, Radicalisation
Constitutional Morality	Stress on secular ethos	Repeated religious tensions challenge constitutional values of secularism, fraternity, and equality, raising concerns about the lived reality of constitutional guarantees.	Constitutional morality, Secularism, Fraternity

WAY FORWARD

- **Strengthening Constitutional Literacy:** Widespread awareness of constitutional provisions on religious freedom (Articles 25–28) and fraternity is essential. Educating citizens and officials reduces misinterpretation of rights and prevents reactionary responses driven by fear or misinformation.
- **Impartial and Proactive Policing:** Neutral enforcement of law, early intelligence gathering, and swift action against hate speech help contain tensions at the incipient stage. Visible fairness enhances public trust in state institutions.
- **Police Reforms and Institutional Accountability:** Professional autonomy, clear standard operating procedures, and independent oversight mechanisms reduce political or communal bias in policing, ensuring rule-based governance.
- **Interfaith Dialogue and Community Engagement:** Sustained grassroots interaction among religious groups, civil society, and local administration promotes empathy, reduces stereotypes, and revives traditions of coexistence.
- **Role of Religious and Community Leadership:** Responsible conduct by faith leaders can prevent mobilisation based on fear, reinforce peaceful narratives, and guide communities towards dialogue rather than confrontation.
- **Countering Misinformation and Rumour-Mongering:** Transparent official communication, fact-checking mechanisms, and digital literacy programmes are crucial to prevent rumours from triggering panic or violence.
- **Responsible Use of Social Media and Digital Platforms:** Monitoring inflammatory content and enforcing cyber laws against deliberate provocation can reduce digital polarisation and offline spillover.
- **Judicial Safeguards and Rule of Law:** Timely judicial intervention reinforces constitutional guarantees, balances religious freedom with public order, and deters unlawful executive action.
- **Political Responsibility and Ethical Governance:** Avoiding polarising rhetoric and respecting constitutional boundaries strengthens democratic culture and reduces communal mobilisation for short-term gains.
- **Promoting Fraternity and Shared Civic Identity:** Policies and public discourse should emphasise fraternity, shared citizenship, and common national goals to counter identity-based fragmentation.
- **Inclusive Development and Social Equity:** Addressing socio-economic grievances through inclusive growth reduces vulnerability to communal narratives rooted in exclusion and marginalisation.
- **Education and Value-Based Socialisation :** Integrating constitutional values, tolerance, and critical thinking into education systems builds long-term societal resilience.

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CONCLUSION

Religious festivals like Christmas should reaffirm India's plural ethos, not expose its fault lines. Upholding religious freedom while maintaining public order requires constitutional fidelity, ethical governance, and social maturity—essential for India's democratic resilience.

Prelims question:

Q. With reference to religious freedom in India, consider the following statements:

1. Article 25 guarantees freedom of conscience and the right to freely profess, practice, and propagate religion.
2. The freedom under Article 25 is absolute and cannot be restricted by the State.
3. The Constitution of India prohibits discrimination on religious grounds in access to public places.

Which of the statements given above are correct?

A. 1 and 2 only B. 1 and 3 only

C. 2 and 3 only D. 1, 2 and 3

Answer: B

Mains Question:

Q. Religious festivals often become sites of social tension in contemporary India. Examine how communalisation of festivals affects social cohesion and pluralism.

'VIKSIT BHARAT' SEMINAR EMPHASISES SOCIAL TRANSFORMATION AND INCLUSIVE GROWTH

WHY IN THE NEWS?

A national seminar on Viksit Bharat was held in Ranchi, focusing on India's long-term development vision with emphasis on education, innovation, infrastructure, youth empowerment, and inclusive growth. The discussions highlighted the social dimensions of development



HUMAN CAPITAL AND EDUCATION

- **Universal Access to Education:** Universal and inclusive access to education forms the foundation of human capital development. Quality schooling for all, especially for girls, marginalised communities, and rural populations, reduces inter-generational poverty and social inequalities. It strengthens democratic participation by enabling informed citizenship and equal life chances.
- **Learning Outcomes and Equity:** Access alone is insufficient without meaningful learning outcomes. Persistent gaps in foundational literacy, numeracy, and critical thinking disproportionately affect disadvantaged groups. Improving classroom quality, teacher training, and assessment systems ensures that education functions as an equaliser rather than reproducing social hierarchies.
- **Skill-Oriented Education:** Aligning education with market-relevant skills enhances employability and productivity. Vocational education, apprenticeships, and industry-

academia collaboration facilitate school-to-work transitions. Skill-based learning empowers youth, reduces unemployment, and promotes upward social mobility in a transforming economy.

- **Digital Education Expansion:** Technology-enabled education expands reach beyond physical classrooms, particularly in remote and underserved regions. Digital platforms, online courses, and blended learning models help democratise access to knowledge. However, bridging the digital divide through infrastructure, affordability, and digital literacy remains essential to ensure inclusiveness.
- **Lifelong Learning and Adaptability:** In an era of rapid technological change, education must extend beyond formal schooling. Lifelong learning enables individuals to reskill and upskill across their careers, enhancing adaptability and resilience. Continuous learning systems support innovation, labour market flexibility, and long-term economic competitiveness.

YOUTH AND SOCIAL EMPOWERMENT

- **Demographic Dividend:** India's large youth population offers a unique opportunity to accelerate social and economic transformation if supported by education, health, and skill development.
- **Employment Opportunities:** Access to productive and decent employment provides dignity, economic stability, and helps prevent social unrest among young populations.
- **Youth Participation in Governance:** Engaging youth in democratic and civic processes strengthens institutions through innovation, accountability, and informed participation.
- **Entrepreneurship and Startups:** Youth-led entrepreneurship promotes self-reliance, job creation, and socially relevant innovation at local and national levels.
- **Social Mobility:** Empowered youth enable upward mobility by breaking intergenerational barriers of poverty, exclusion, and inequality.

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INCLUSIVE GROWTH AND SOCIAL JUSTICE

- **Bridging Regional Disparities:** Balanced regional development is essential to prevent spatial inequalities from hardening into structural exclusion. Disparities in infrastructure, employment opportunities, and public services between regions often fuel migration, social unrest, and uneven growth. Targeted investments in backward areas, aspirational districts, and border regions promote territorial equity and national cohesion.
- **Women Empowerment:** Gender equality lies at the heart of inclusive social development. Empowering women through education, health, economic participation, and political representation improves household welfare and societal outcomes. Addressing barriers such as unpaid care work, gender-based violence, and limited access to assets is critical for achieving substantive equality.
- **Upliftment of Marginalised Groups:** Social justice requires focused interventions for

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Scheduled Castes, Scheduled Tribes, minorities, persons with disabilities, and other vulnerable groups. Affirmative action, legal safeguards, and targeted welfare schemes help correct historical disadvantages. Inclusion of marginalised communities strengthens democratic legitimacy and social harmony.

- **Access to Basic Services:** Universal access to health, education, drinking water, sanitation, and housing forms the minimum threshold of dignified living. Inequitable access to basic services perpetuates poverty and exclusion. Strengthening public service delivery ensures that development outcomes translate into real improvements in human well-being.
- **Reducing Income Inequality:** Inclusive growth aims to ensure that the benefits of economic expansion are equitably distributed. Rising income inequality undermines social cohesion and economic stability. Progressive taxation, employment generation, social security, and targeted transfers help bridge income gaps and promote shared prosperity.

INFRASTRUCTURE AND SOCIAL TRANSFORMATION

- **Infrastructure as Social Capital:** Roads, housing, and connectivity improve quality of life.
- **Rural Development:** Infrastructure strengthens rural livelihoods and reduces migration pressures.
- **Urbanisation and Social Change:** Planned urban infrastructure supports sustainable social transitions.
- **Connectivity and Integration:** Transport and digital networks integrate markets and communities.
- **Disaster-Resilient Infrastructure:** Resilient infrastructure safeguards vulnerable populations.

INNOVATION AND CULTURAL ADAPTATION

- **Technology for Social Good:** Innovation improves access to public services and welfare delivery.
- **Indigenous Knowledge Systems:** Local knowledge enhances sustainable development practices.
- **Balancing Tradition and Modernity:** Development must respect India's cultural diversity.
- **Digital Inclusion:** Inclusive digital access prevents new forms of social exclusion.
- **Innovation in Social Policy:** Evidence-based innovation strengthens policy outcomes.

WAY FORWARD

- **Investing in Human Capital:** Strengthening education, healthcare, and skill development is essential for building a productive and empowered society.
- **Youth-Centric Development:** Creating employment, entrepreneurship, and leadership opportunities will harness India's demographic dividend.
- **Promoting Inclusive Growth:** Targeted interventions are required to ensure marginalised and vulnerable groups benefit from development.
- **Addressing Regional Inequalities:** Balanced regional development can reduce socio-economic disparities across states and districts.
- **Integrating Innovation with Social Justice:** Technology and innovation must be aligned with equity to ensure development remains people-centric and inclusive.

CONCLUSION

The Viksit Bharat seminar underscores that India's journey towards development is fundamentally a social transformation. By prioritising education, youth empowerment, inclusive growth, infrastructure, and innovation while respecting cultural diversity, the vision aligns economic progress with social justice. Such a people-centric approach is essential for building a cohesive, resilient, and equitable Indian society in the long run.

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Prelims question:

Q. The Viksit Bharat vision primarily emphasises which of the following aspects?

1. Human capital development
2. Inclusive growth
3. Youth empowerment
4. Sustainable infrastructure

Select the correct answer using the code below:

(a) 1 and 2 only (b) 1, 2 and 3 only
(c) 1, 2, 3 and 4 (d) 2 and 4 only

Answer: C

Mains Question:

Q. Discuss the role of human capital development in achieving the vision of Viksit Bharat, with special reference to education and skills.

PM SVANIDHI: FROM PANDEMIC RELIEF TO SUSTAINABLE URBAN LIVELIHOOD TRANSFORMATION

WHY IN THE NEWS?

The Prime Minister Street Vendor's Atma Nirbhar Nidhi (PM SVANidhi) Scheme has come into focus following the Union Cabinet's approval on 27 August 2025 to restructure and extend the scheme's lending period till 31 March 2030, with an enhanced outlay of ₹7,332 crore. The decision expands the scheme's ambit to 1.15 crore beneficiaries, including 50 lakh new street vendors, and introduces key reforms such as higher loan tranches, UPI-linked RuPay credit cards, expanded digital incentives, and wider coverage to census and peri-urban areas.

BACKGROUND AND RATIONALE

Street vendors, being largely self-employed and unorganised, often depend on informal moneylenders, making them vulnerable to debt traps. The COVID-19 pandemic exposed these structural vulnerabilities, as lockdowns wiped out livelihoods overnight. PM SVANidhi was introduced to provide collateral-free working capital loans, enabling vendors to restart businesses while simultaneously integrating them into the formal financial ecosystem. Over time, the scheme has transcended its original relief-oriented character, offering identity, dignity, and institutional recognition to street vendors, aligned with the spirit of Atmanirbhar Bharat.

RESTRUCTURING AND EXTENSION: FROM RELIEF TO GROWTH

On 27 August 2025, the Union Cabinet approved the restructuring and extension of PM SVANidhi beyond 31 December 2024, extending the lending period up to 31 March 2030 with a total outlay of ₹7,332 crore. The restructured scheme aims to benefit 1.15 crore street vendors, including 50 lakh new beneficiaries, reflecting the government's long-term commitment to inclusive urban development.

Key Enhancements under the Restructured Scheme

1. Enhanced Credit Support

- The revised loan structure strengthens vendors' capacity for business expansion:
- First tranche: up to ₹15,000 (earlier ₹10,000)
- Second tranche: up to ₹25,000 (earlier ₹20,000)
- Third tranche: ₹50,000
- These progressive tranches incentivise timely repayment and enable scaling of micro-enterprises.

2. UPI-Linked RuPay Credit Card

- A major innovation is the introduction of a UPI-linked RuPay Credit Card for vendors who repay the second tranche on time. This ensures instant access to formal credit for both business and personal contingencies, reducing dependence on informal lenders.

3. Digital Incentives for Financial Inclusion

- To promote cashless transactions, the scheme provides:
- Cashback up to ₹1,200 on retail digital sales (₹100 per month)
- Cashback up to ₹400 on wholesale digital purchases
- This strengthens India's digital payments ecosystem while improving vendors' transaction visibility and creditworthiness.

4. Expanded Coverage

- The scheme is being extended beyond statutory towns to census towns, peri-urban, and transitioning rural-urban areas, ensuring equitable access amid rapid urbanisation.

WELFARE CONVERGENCE: SVANIDHI SE SAMRIDDHI

Recognising that credit alone cannot address structural vulnerabilities, PM SVANidhi integrates welfare convergence through the 'SVANidhi se Samriddhi' component.

1. Profiling of over 47 lakh street vendors and their families
2. Linkage with 8 central welfare schemes, including insurance, pensions, health, and social security
3. 1.46 crore welfare benefits sanctioned as of December 9, 2025

This approach moves beyond livelihood restoration to human development and social protection.

CAPACITY BUILDING AND SKILL DEVELOPMENT

1. Entrepreneurship and financial literacy training
2. Digital skills and marketing support
3. Hygiene and food safety training for street food vendors in partnership with FSSAI

INSTITUTIONAL ARCHITECTURE AND COOPERATIVE FEDERALISM

1. Ministry of Housing & Urban Affairs (MoHUA): Policy design and coordination
2. Department of Financial Services (DFS): Credit facilitation through banks
3. State Governments and ULBs: Vendor identification, mobilisation, and welfare linkage
4. Banks and Financial Institutions: Loan disbursal, interest subsidy, digital onboarding

OUTREACH INNOVATIONS: LOK KALYAN MELA & SVANIDHI SANKALP ABHIYAAN

Saturation-based outreach model ensured that no eligible street vendor is left out.

Lok Kalyan Melas (17 Sept–15 Oct 2025) conducted across all Urban Local Bodies, strengthening last-mile delivery.

Acted as single-window platforms for:

- Vendor identification and mobilisation
- On-the-spot loan application and faster disbursement
- Digital onboarding (UPI, RuPay credit cards)
- Convergence with welfare and social security schemes

Dedicated Lok Kalyan Portal enabled:

- Real-time monitoring and data-driven decision-making
- Improved transparency and accountability
- Reduced leakages and administrative delays

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RECOGNITION & GOVERNANCE BEST PRACTICES OF PM SVANIDHI

Recognition / Award	Year	Key Significance	Governance Best Practices Reflected
Prime Minister's Award for Excellence in Public Administration (Innovation)	2023	National recognition for innovative public service delivery	• Creative policy design for informal sector inclusion • Citizen-centric and scalable governance model • Integration of credit, welfare, and digital empowerment
Silver Award for Excellence in Government Process Re-engineering (Digital Transformation)	2022	Acknowledgement of digital governance reforms	• Effective use of digital platforms for end-to-end service delivery • Reduction in transaction costs and leakages • Faster, transparent, and paperless processes
Overall Governance Value	—	Establishes PM SVANidhi as a best-practice model	• Replicable national framework for inclusive and responsive governance • Outcome-oriented and technology-enabled policy execution

BROADER SIGNIFICANCE – MULTI-DIMENSIONAL IMPACT OF PM SVANIDHI

Dimension	Key Impacts	Relevance for Governance & Development
Economic Impact	• Catalyses micro-entrepreneurship and business expansion • Strengthens urban supply chains and local consumption • Reduces dependence on informal moneylenders	Promotes self-employment, financial stability, and urban economic resilience
Social Impact	• Enhances dignity, identity, and livelihood security • Improves household resilience against income shocks • Promotes inclusive urban growth	Addresses vulnerability of informal workers and supports social justice
Digital Impact	• Accelerates shift towards a cashless economy • Creates digital footprints for credit assessment • Bridges digital divide for informal workers	Advances Digital India and financial inclusion objectives
Governance Impact	• Mainstreams informal workers into formal policy frameworks • Strengthens cooperative federalism (Centre–State–ULBs–Banks) • Enables data-driven and outcome-oriented governance	Demonstrates responsive, inclusive, and collaborative governance
Urban Development Impact	• Supports vibrant, inclusive, and self-sustaining urban ecosystems • Aligns livelihood protection with orderly urban planning • Reinforces people-centric urbanisation	Integrates economic livelihoods with sustainable urban governance

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CONCLUSION

The extension and restructuring of PM SVANidhi marks a transition from pandemic relief to sustainable urban livelihood transformation. By combining collateral-free credit, digital inclusion, welfare convergence, and capacity building, the scheme empowers street vendors to evolve from informal survival-based livelihoods into resilient micro-entrepreneurs. In doing so, PM SVANidhi not only secures incomes but also restores dignity, builds resilience, and deepens trust between the state and informal workers. It reaffirms India's commitment to inclusive growth, self-reliant cities, and people-centric urban governance, ensuring that those who sustain the everyday life of cities are no longer left at the margins but are recognised as partners in national development.

Prelims question:

Q. With reference to the Prime Minister Street Vendor's Atma Nirbhar Nidhi (PM SVANidhi) Scheme, consider the following statements:

1. The scheme provides collateral-free working capital loans to street vendors and aims at their integration into the formal financial system.
2. Under the restructured scheme, a UPI-linked RuPay Credit Card is provided to vendors after repayment of the first loan tranche.
3. The scheme has been extended up to 31 March 2030 with an enhanced outlay approved by the Union Cabinet.
4. The 'SVANidhi se Samriddhi' component focuses on linking street vendors and their families with multiple central welfare schemes.

Which of the statements given above are correct?

(a) 1, 2 and 3 only (b) 1, 3 and 4 only

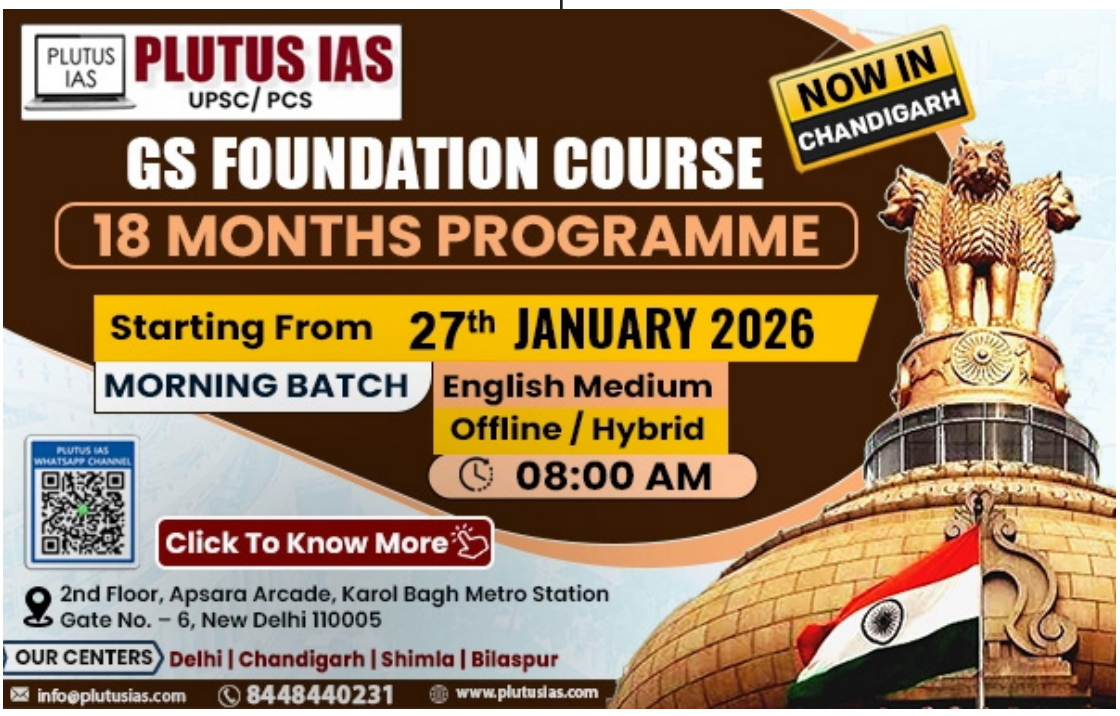
(c) 2 and 4 only (d) 1, 2, 3 and 4

Answer: B

Mains Question:

Q. Discuss the key features of the restructured PM SVANidhi Scheme and analyse its multi-dimensional impact on urban informal workers and inclusive urban governance.

(250 words)



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