

**AUGUST
2025**

KSG

An Institute For **IAS** Exam...

**CURRENT
CONNECT**

WITH LOADED FEATURES

- **PRE-SHOTS**
- **PHILOSOPHY OF THE MONTH**
- **THEMATIC ESSAYS**
- **CONTEMPORARY ETHICS CASE STUDIES**

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INDIAN POLITY

The 130th Amendment Bill: Can PMs and CMs Govern from Jail?

Why in News?

In August 2025, the Union Government introduced the Constitution (130th Amendment) Bill in the Lok Sabha. The Bill proposes that the Prime Minister, Chief Ministers, or Ministers would automatically lose office if detained for more than 30 consecutive days in a case carrying punishment of five years or more. The move sparked heated debate, with the Bill immediately referred to a Joint Parliamentary Committee (JPC).

Background

- **Current Position:**
 - A convicted legislator loses membership under RPA, 1951 (Section 8), but no explicit provision governs the continuance of PM/CM while merely under detention.
- **Government's Rationale:**
 - If government employees are suspended on arrest, constitutional offices should not enjoy immunity.
 - PM Modi termed it a question of public morality, stating "Governance from jail is unacceptable."
- **Opposition's Concerns:**
 - Fear of misuse of arrest powers by central agencies to topple state governments.
 - TMC and SP, calling it "political engineering."

Salient Features of the Bill

1. **Automatic Removal:**
 - PM, CM, or Minister to vacate office after 30 days in custody (pre-trial or trial stage).
2. **Reappointment Possible:**
 - They may return to office upon release if acquitted or charges dropped.
3. **Scope Expanded:**
 - Applies to Union (Art. 75), States (Art. 164), and Delhi (Art. 239AA).

Concerns & Criticism

- **Presumption of Innocence:** Violates principle of "innocent until proven guilty" by punishing before conviction.
- **Federalism Question:** May disproportionately affect Opposition-ruled States if arrests are politically motivated.
- **Judicial-Legislative Balance:** Could be struck down if found to undermine basic structure rights of fair trial and equality.
- **Ethical Argument:** Critics say "ethics can't override due process"- disqualification must follow conviction, not suspicion.

Implications

Dimension	Implication
Democratic Morality	Boosts public trust by removing perception of "tainted leaders."
Rule of Law	Raises risks of politicisation of arrests; tests separation of powers.
Federal Relations	May widen Centre-State tensions, especially with opposition-ruled states.
Judicial Review	Likely to face SC scrutiny—does arrest equal incapacity under Constitution?

Way Forward

1. **Judicial Safeguard Clause** – Ensure removal only after judicial confirmation of serious charges.
2. **Threshold Revision** – Apply only for grave offences (10+ years punishment), not all 5-year crimes.
3. **Independent Oversight** – Establish a neutral High-Level Committee (CJI, Speaker, President's nominee) before removal.
4. **Speedy Trial Reforms** – Instead of pre-conviction removal, fast-track trials for public office holders.
5. **Sunset Clause** – Review the amendment's functioning after 5 years to prevent misuse.

X-Factor / Special Effects

- **PICTORIAL Flow:** Arrest → 30 Days Custody → Automatic Removal → Possible Reappointment → Political Fallout
- **TEXTUAL Anchors:**
 - Article 75, 164, 239AA (executive offices).
 - RPA, 1951 (disqualification after conviction).
- **INNOVATION Model:** C-L-E-A-N Politics → Constitutional Morality · Legitimacy · Ethical Accountability · Neutral Process.

Prelims Connect

- Q. The Constitution (130th Amendment) Bill, 2025 seeks to insert disqualification provisions into which Articles?
- (a) Articles 74, 162, 370
 - (b) Articles 75, 164, 239AA
 - (c) Articles 72, 163, 239A
 - (d) Articles 80, 170, 239AB

Answer: b) Articles 75, 164, 239AA

Mains Connect

"Ethics cannot replace due process." Critically examine whether the 130th Amendment Bill aligns with constitutional morality or risks undermining democratic federalism by disqualifying PMs and CMs on mere arrest.

"Court Order That Was Barking Up the Wrong Tree"

Why in News?

- On August 11, 2025, a two-judge bench (Justices J.B. Pardiwala & R. Mahadevan) ordered that all stray dogs in Delhi–NCR be removed and confined in shelters without release, citing public safety goals.
- Widespread backlash prompted the case's referral to a three-judge bench, which on August 22, 2025, modified the directive. Now, stray dogs are to be sterilised, vaccinated, dewormed, and returned to the same locality, except in cases of rabies or aggression. Dedicated feeding zones are to be established; street-feeding is banned. (Indian Express, 23 Aug, 22 Aug updates)

Core Legal–Policy Framework

- Animal Birth Control (ABC) Rules, 2023: Enshrine the humane "catch–sterilise–vaccinate–release to same locality" protocol.
- Prevention of Cruelty to Animals Act, 1960: The parent statute empowering ABC Rules.
- NAPRE 2030 (MoHFW): National rabies elimination initiative via One Health, supporting scientific, humane management.
- Constitutional Context: Balances Article 51A(g) (compassion for living beings) with Article 21.

What Shifted Between Aug 11 and Aug 22?

- Aug 11 Order: Blanket "no-release" confinement, aggressive timelines, and creation of shelters, prioritized "no sentiment" ideology.
- Aug 22 Modification: Reinstated ABC compliance release post-treatment to same area, with exception protocols for rabid/aggressive dogs. Feeding allowed only at designated feeding spots per ward, with legal action against violators.

Stakeholder Perspectives & Implementation Nuances

- Animal welfare groups:** Applauded the ABC focus, but urged clarity on the definition of "aggressive dogs" and stressed NGO–ULB collaboration rather than burdening already overstretched municipal bodies. (Animal welfare groups hail...)
- Societal voices:**
 - Hailed the verdict as "a progressive step balancing animal welfare with public safety."
 - Praised scientific basis of the order, emphasized formal recognition of "feeders", and warned against misuse of "aggressive dog" label by RWAs. Urged NGOs' involvement and structure via Public–Private Partnerships.

Analysis & Broader Implications

Dimension	Insight
Judicial Prudence	Aug 22 order aligns judicial intervention with existing law (ABC Rules), avoiding populist overreach.
Public Health	Scientific ABC strategy reduces rabies and bite incidents sustainably vs. mass sheltering.
Administrative Vision	Enforcement relies on ULB readiness—shelters, helplines, feeding spots, and clear SOPs.
Ethical Alignment	Restores constitutional ethos by combining compassion (51A(g)) with community safety.
Policy Coherence	Pushes for national-level coordination—transfers pending cases, integrates state action under uniform guidance.

Way Forward (KSG-ready Action Points)

- Ward-level ABC Microplans: Census → catch → treatment → tagging → release; metrics via KPIs and GIS tagging.
- Establish Feeding Zones: Identified, signposted, and mapped in consultation with feeders and RWAs.
- Define "Aggressive Dog" Protocols: Expert committee to draft behavioural criteria; avoid misuse.
- ULB–NGO Partnerships: PPP model for ABC execution, freeing municipal bodies for sanitation, waste, infrastructure.
- Transparency & Oversight: Public dashboards (helpline, infra, ABC status); quarterly affidavits to SC/HC.

X-Factors for Answer-Elevating Use

- Pictorial Flow:** Dog-bite hotspots → Wrong solution (mass rounding-up) → Negative outcomes → Scientific fix (ABC + Feeding zones → Safety + Compassion)
- Text Anchors:**
 - "Catch–Sterilise–Vaccinate–Release to same locality" (Rule 11, ABC Rules).
 - Feeding zones per ward, "no street feeding" directive.
- Innovation Model:** H–U–M–E — Humane · Unified · Measured · Evidence-based

Prelims Connect

- Q. The ABC Rules, 2023 prescribe which method for stray dog population control?
- Permanent confinement
 - Catch–Sterilise–Vaccinate–Release
 - Relocation to shelters only
 - Culling via municipal action

Answer: (b) Catch–Sterilise–Vaccinate–Release

Mains Connect

"Judicial decisions must harmonise with science and statutory intent." Critically analyse how the Supreme Court's two verdicts on stray dogs illustrate evolving judicial moderation in India's Polity.

Governor's Delay in Assenting to State Bills — Supreme Court Criticism

Why in News?

In mid-August 2025, the Supreme Court, led by Chief Justice B.R. Gavai, rebuked several Governors for persistently delaying assent to Bills passed by state legislatures specifically citing instances from Tamil Nadu, Punjab, and Kerala. The Court emphasised adherence to constitutional morality and warned against misuse of gubernatorial discretion.

Constitutional & Legal Background

- **Article 200:** Governor may assent, withhold, reserve, or return a Bill (for reconsideration, except Money Bills).
- **Article 163:** Governor acts on Council of Ministers' advice, except in judicial discretion cases.
- **Rajamannar and Sarkaria Commissions:** Both emphasised limited use of discretion and timely assent to Bills.
- **Convention & Morality:** Governorship is expected to reflect constitutional morality, not political bias or delay.



Key Highlights

1. Instances of Delay:

- **Tamil Nadu:** Governor sat on several welfare Bills for over two months without action.
- **Kerala & Punjab:** Similar delays noted, raising concerns of obstruction of legislative intent.

2. SC's Observations:

- Governors must act within a "reasonable time."
- Delays erode federal balance, disempower elected legislatures, and breach trust.

3. Court's Warning:

- Governors are constitutional dignitaries, not political ornamentations.
- "Raj Dharma" (constitutional obligation) must guide actions—not partisan strategy.

Implications

Dimension	Insight
Federalism Impact	Delays compromise state autonomy and flout the federal spirit.

Legislative Validity	Pending Bills disrupt governance, reassign timelines, and inflate uncertainty.
Constitutional Values	Breach of constitutional morality undermines public trust and decorum.
Precedent Danger	Unchecked delays could institutionalise misuse of gubernatorial power.

Way Forward

1. **Set Timelines:** A formal 45-day maximum for governors to act on Bills post-passage.
2. **Legislation:** Encourage the Parliament to pass a law fixing action timelines, with FAQ/Gazette rules for clarity.
3. **Parliamentary Oversight:** Parliament's Committee on Constitutional Affairs could monitor gubernatorial behavior and escalate anomalies.
4. **State Protocols:** State governments may submit timely reminders/statements if assent is delayed; raise in "When a Bill is pending" resolutions.
5. **Constitutional Education:** Training Governors via India Centre for Constitutional and Parliamentary Studies (ICPS), emphasizing Raj Dharma, restraint, and timely assent.

X-Factors for Answer-Elevating Use

- **PICTORIAL:** Flowchart — Bill passed by State Assembly → Governor's office → Timely assent or disapproval → Constitutional balance preserved or disturbed.
- **TEXTUAL Anchors:**
 - "Reasonable time" as standard for gubernatorial assent.
 - "Raj Dharma" as guiding principle.
- **INNOVATION Model:** T-RIP — Timeliness · Responsibility · Impartiality · Proceduralism.

Prelims Connect

- Q. Which Article provides the Governor the power to assent or return a state Bill?
- (a) Article 201
 - (b) Article 200
 - (c) Article 163
 - (d) Article 213

Answer: (b) Article 200

Mains Connect

"Governor must be a guardian of the Constitution, not a gatekeeper of political stalling." Critically examine the role of the Governor in legislative assent, drawing on the Supreme Court's recent remarks on gubernatorial delays in Tamil Nadu, Punjab, and Kerala.

Serving vs Ruling in a Democracy: Rethinking Attitudes to Governance

Why in News?

The debate on whether leaders in a democracy are meant to serve the people or rule over them resurfaced in August 2025. Commentaries stressed that despite 75+ years of democracy, remnants of a colonial ruling mindset persist in governance practices. This calls for a cultural and institutional shift towards seva (service) as the core ethos of Indian democracy.

Background

- **Colonial Legacy:** The British "Raj" institutionalised an authority-over-subjects style of governance. Even post-Independence, linguistic and institutional frameworks carried this forward.
- **Language Matters:** Words like rajya, sarkar evoke authority and command. In contrast, jana seva translates to service for the people, aligning with democratic ideals.
- **Democratic Ideal:** The Constitution envisions leaders as trustees of public will, not rulers.
- **Global Inspiration:** Democratic innovations worldwide stress that the state must be transparent to citizens a reversal from surveillance-driven models.

Key Highlights

1. From Ruling to Serving:

- Elected officials are not monarchs but custodians of public trust.
- Attitude shift is critical: people are not "subjects" but sovereign citizens.

2. Transparency vs Surveillance:

- Democracies succeed when institutions are visible and accountable.
- Risk: technologies like AI and big data can easily become tools of state control unless designed around citizen empowerment.

3. Relevance of Swaraj:

- Gandhi's idea of Swaraj meant self-rule, decentralisation, and moral leadership, not concentration of authority.
- "Real democracy cannot be worked by a few at the top, it has to be worked from below."

4. Ethics of Governance:

- The state should be guided by service, humility, and restraint, reflecting constitutional morality.
- Political arrogance and bureaucratic aloofness undermine this ethic.

5. Crisis of Trust:

- Public alienation, low faith in institutions, and cynicism towards politics stem from the perception of ruling rather than serving.

Implications

Dimension	Implication
Political Culture	Reinforces the need for humility in leadership; discourages ruler-centric behaviour.
Rule of Law	Without service ethos, laws risk becoming instruments of control, not empowerment.
Digital Governance	Citizen data must be safeguarded; otherwise, surveillance weakens democracy.
Federal Democracy	Strengthening local bodies ensures governance is closer to citizens, embodying service.
Citizen Participation	Service-oriented governance fosters trust, legitimacy, and active civic engagement.

Way Forward

1. Embed Service Ethos in Training:

- Civil services, political induction programmes, and judicial training should prioritise jana seva as a constitutional duty.

2. Proactive Transparency:

- Expand participatory budgeting, open data portals, RTI compliance, and citizen-friendly dashboards.

3. Democratic Technology:

- Design tech solutions for empowerment (e-participation, grievance redressal) rather than surveillance.

4. Decentralisation & Swaraj 2.0:

- Empower Panchayati Raj Institutions and urban local bodies to bring governance closer to the grassroots.

5. Constitutional Morality:

- Encourage leaders to act as trustees, guided by restraint, accountability, and ethical duty.

6. Citizen Engagement Platforms:

- Regular public dialogues, community consultations, and "people's report cards" to reinforce service orientation.

X-Factors / Special Effects

- **PICTORIAL Flow:** Colonial Raj → Ruling Attitude → Bureaucratic Control → Public Alienation → Seva Orientation → Democratic Empowerment.
- **TEXTUAL Anchors:**
 - Gandhi on Swaraj: "Each one is his own ruler."
 - Core Constitutional Idea: The people are sovereign, not the government.
 - Fundamental Duty: Promoting harmony and compassion reflects a service ethos.

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• INNOVATION Model: S-E-R-V-E

- Service Ethic
- Empowerment of citizens
- Responsive institutions
- Visibility (transparency)
- Ethics in governance

Prelims Connect

Q. The term Swaraj, central to India's democratic imagination, signifies:

- (a) Transfer of power from colonial rulers to Indian elites
- (b) Self-rule and decentralisation with moral authority
- (c) Military independence from foreign domination
- (d) Administrative autonomy for provinces

Answer: (b) Self-rule and decentralisation with moral authority

Mains Connect

"Democracy thrives when leaders see themselves as servants, not rulers." Discuss how India can shift from a colonial 'ruling' mindset to a citizen-centric 'service ethos' in governance, drawing upon constitutional morality and Gandhian Swaraj.

Setting the Guardrails for AI Use in Courtrooms
Why in News?

In August 2025, debates intensified over the use of Artificial Intelligence (AI) in Indian courtrooms. While AI-based tools promise efficiency in research, drafting, and case management, they also raise critical concerns around bias, transparency, accountability, and constitutional fairness. Judicial voices have called for clear regulatory guardrails before large-scale adoption.


Background

- Digital Push in Judiciary: E-Courts Mission Mode Project, virtual hearings, and AI pilots (e.g., SUPACE – Supreme Court Portal for Assistance in Court Efficiency) mark the shift towards tech-driven justice.
- Global Trends: Instances of AI is used in the US (predictive bail assessments), Estonia (AI judges for small disputes), and China (AI-powered sentencing guidelines).
- India's Context: With over 5 crore pending cases, AI is seen as a tool for speed, access, and consistency, but without guidelines, risks loom large.

Key Highlights & Concerns
1. Algorithmic Bias:

- AI models may inherit social prejudices from training data, reinforcing caste, gender, or class bias.

2. Transparency & Explainability:

- "Black box" AI decisions threaten due process unless explainability is guaranteed.

3. Accountability Gap:

- If AI-assisted judgments err, who is responsible — the judge, the coder, or the state?

4. Privacy & Data Security:

- Case records, testimonies, and personal data require strong safeguards from misuse.

5. Rule of Law vs Automation:

- Overreliance on AI risks undermining human judicial reasoning — a cornerstone of justice delivery.

Implications

Dimension	Implication
Judicial Integrity	Risks of machine-driven bias affecting constitutional rights.
Access to Justice	AI can bridge resource gaps and democratise legal information if used wisely.
Federalism	AI adoption must balance between Supreme Court standards and diverse state capacities.
Ethics & Legitimacy	Without guardrails, AI threatens public trust in fairness of courts.

Way Forward: Guardrails for AI in Courts
1. Human-in-the-Loop Principle

- AI should remain assistive, not decisive. Judges must retain ultimate decision-making power.

2. Transparency Mandates

- Courts must disclose when and how AI tools are used, and provide explainable outputs.

3. Bias Audits

- Independent committees to conduct regular audits of AI models for caste, gender, or communal biases.

4. Data Protection Framework

- Link AI in courts with the Digital Personal Data Protection Act, 2023 for security and consent safeguards.

5. Capacity Building

- Train judges, lawyers, and staff to use AI responsibly, avoiding "blind reliance."

6. Ethics Charter

- Draft a Judicial AI Code of Ethics anchored in constitutional morality, Article 14 (equality), and Article 21 (fair trial).

X-Factors / Special Effects

- **PICTORIAL Flow:** AI Tool → Data Processing → Judicial Assistance → Bias/Privacy Risks → Guardrails → Human-Centred Justice.
- **TEXTUAL Anchors:**
 - "AI must assist justice, not replace it."
 - Global best practices: EU's Ethics Guidelines for Trustworthy AI.
- **INNOVATION Model:** J-U-S-T-AI → Judicial Oversight · Unbiased · Secure · Transparent · Accountable · Inclusive.

Prelims Connect

- Q. Which pilot project launched by the Supreme Court of India uses AI to assist judges in research and case management?
- (a) eSakshya
(b) SUPACE
(c) Nyaya Setu
(d) DigiCourt

Answer: (b) SUPACE**Mains Connect**

"Technology must serve constitutional justice, not overshadow it." In light of rising AI integration, discuss the need for ethical guardrails in Indian courtrooms to balance efficiency with fairness and human oversight.

Poll Integrity and Self-Sabotage: Parties and the ECI**Why in News?**

The integrity of India's electoral process came under fresh scrutiny in July–August 2025, with opposition parties alleging erosion of a level playing field, misuse of central agencies, and weakening of the Election Commission of India (ECI). At the same time, instances of parties boycotting internal reforms and transparency mechanisms raised questions of self-sabotage, where political conduct itself undermines electoral credibility.

**Background**

- **Constitutional Mandate:** Article 324 vests the ECI with the responsibility to conduct free and fair elections.
- **Supreme Court Judgments:**
 - PUCL (2003) recognised the Right to Know as part of Article 19(1)(a).
 - Anup Baranwal (2023) directed collegium-like appointments of Election Commissioners (later changed via law in 2024).
- **Current Concerns:**
 - Funding opacity despite SC striking down Electoral Bonds in 2024.

- Increasing political interference in appointments and transfers of officials.
- Partisan campaigns and misinformation eroding public trust.

Key Issues Highlighted**1. Credibility of the Umpire (ECI):**

- Changes in appointment process diluted the SC's 2023 direction, restoring primacy of the Executive.
- Opposition claims this undermines neutrality of the Commission.

2. Political Party Conduct:

- Parties delay or resist internal democracy (intra-party elections, financial disclosures).
- Boycotts of reform committees (e.g., Joint Parliamentary Committees) expose contradictions between public demands and private practice.

3. Campaign Finance & Transparency:

- Despite judicial censure, opacity continues in political funding.
- Lack of real-time disclosure feeds suspicion of quid pro quo and cronyism.

4. Erosion of Electoral Level-Playing Field:

- Use of state machinery, selective raids by investigative agencies, and digital manipulation (deepfakes, misinformation).

5. Self-Sabotage by Parties:

- When political actors themselves weaken electoral rules and refuse reforms, it diminishes the moral authority of their criticism against the ECI.

Implications

Dimension	Implication
Democracy & Legitimacy	Poll integrity is the bedrock of democracy; perception of bias erodes citizen trust.
Federal Politics	Alleged misuse of central agencies deepens Centre–State tensions.
Party Systems	Weak intra-party democracy perpetuates dynastic control and funding opacity.
Rule of Law	If ECI is seen as partisan, judicial oversight may expand—risking institutional friction.

Way Forward**1. Independent Appointments**

- Revisit the Anup Baranwal spirit: an independent collegium with judiciary + opposition voice in appointments.

2. Transparent Funding

- Mandatory real-time disclosure of donations; strengthen IT audits of parties.

3. Strengthen ECI Powers

- Amend Representation of People Act to grant contempt powers to ECI for enforcing its directives.

4. Internal Party Democracy

- Incentivise compliance by linking state funding or tax benefits with transparent intra-party processes.

5. Digital Regulation

- Legal framework against AI deepfakes and online manipulation during campaigns.

X-Factors / Special Effects

- **PICTORIAL Flow:** Political Parties → Funding & Campaign Practices → Role of ECI → Poll Integrity → Public Trust in Democracy.
- **TEXTUAL Anchors:**
 - "Elections are the festival of democracy, but festivals lose meaning without fairness."
 - SC in PUCL: "The right to know is the essence of free and fair elections."
- **INNOVATION Model:** I-N-T-E-G-R-I-T-Y → Independent umpire · Neutral funding · Transparency · Ethical conduct · Ground-level reforms · Regulatory teeth · Institutional balance · Technology safeguards · Youth trust.

Prelims Connect

Q. Article 324 of the Constitution deals with:

- Right to Information
- Powers of the Election Commission
- Disqualification of MPs/MLAs
- Representation of the People Act

Answer: (b) Powers of the Election Commission

Mains Connect

"The credibility of elections rests not just on the neutrality of the ECI but also on the conduct of political parties themselves." Critically discuss the challenges of poll integrity in India, with reference to ECI reforms and party self-sabotage.

Justice is Not About 'Teaching Someone a Lesson'

Why in News?

In August 2025, several judicial pronouncements and public debates highlighted the rising trend of treating justice as a means of punishment or retaliation rather than a fair and restorative process. Concerns were raised that such attitudes weaken the constitutional promise of due process, equality, and humane treatment.



Background

- **Judicial Philosophy:** The Indian Constitution anchors justice in Articles 14 and 21, ensuring fairness, non-arbitrariness, and dignity.
- **Colonial Hangover:** The criminal justice system inherited a strong retributive streak from colonial codes, where the state sought to discipline rather than reform.
- **Recent Trends:**
 - Harsh bail denials framed as "sending a message."
 - Arrests celebrated as symbolic victories.
 - Populist pressures influencing sentencing in high-profile cases.

Key Highlights

1. Justice vs Retribution

- Justice is about restoring social order and fairness, not humiliating the accused.
- "Teaching someone a lesson" risks turning courts into instruments of vengeance.

2. Due Process Centrality

- Article 21 guarantees life and liberty except by procedure established by law.
- Shortcut justice undermines the rule of law and equal protection under Article 14.

3. Judicial Observations

- Past Supreme Court remarks stress that bail, not jail, is the rule; pre-trial detention cannot be punishment.
- Courts have warned against "public mood" replacing legal reasoning.

4. Ethical Dimension

- Justice must be humane, proportionate, and corrective, not coercive.
- Gandhi's ideal of justice leaned on ahimsa and reconciliation.

Implications

Dimension	Risk if Justice Becomes "Lesson-Teaching"
Rule of Law	Arbitrary punishments weaken predictability of law.

Civil Liberties	Erodes personal freedom and due process guarantees.
Judicial Legitimacy	Courts risk losing trust if seen as vindictive.
Democracy	Populism displaces constitutional morality.
Reformative Goals	Criminal law's aim of rehabilitation is lost.

Way Forward

1. Reinforce Constitutional Morality – Remind all actors that justice is about fairness, not punishment for its own sake.
2. Judicial Training in Sentencing – Build capacity for proportionate, restorative, and evidence-based sentencing.
3. Public Legal Education – Counter populist “tough justice” demands with awareness of due process values.
4. Institutional Safeguards – Fast-track bail hearings, improve access to legal aid, and strengthen judicial review of arrests.
5. Ethics Charter for Courts – Frame a principle-based guideline that justice must protect dignity, not inflict humiliation.

X-Factors / Special Effects

- **PICTORIAL Flow:** Crime → Court Process → Fair Trial & Due Process → Proportionate Sentencing → Social Healing.
- **TEXTUAL Anchors:**
 - “Bail is the rule, jail the exception.” – SC in Hussainara Khatoon.
 - Gandhi: “Justice that is rooted in revenge cannot build a humane society.”
- **INNOVATION Model:** F-A-I-R → Fairness · Accountability · Integrity · Reformative justice.

Prelims Connect

- Q. Which Articles of the Indian Constitution most directly ensure that justice remains a matter of fairness, not vengeance?
- (a) Articles 19 & 32
 - (b) Articles 14 & 21
 - (c) Articles 15 & 19
 - (d) Articles 20 & 39A

Answer: (b) Articles 14 & 21

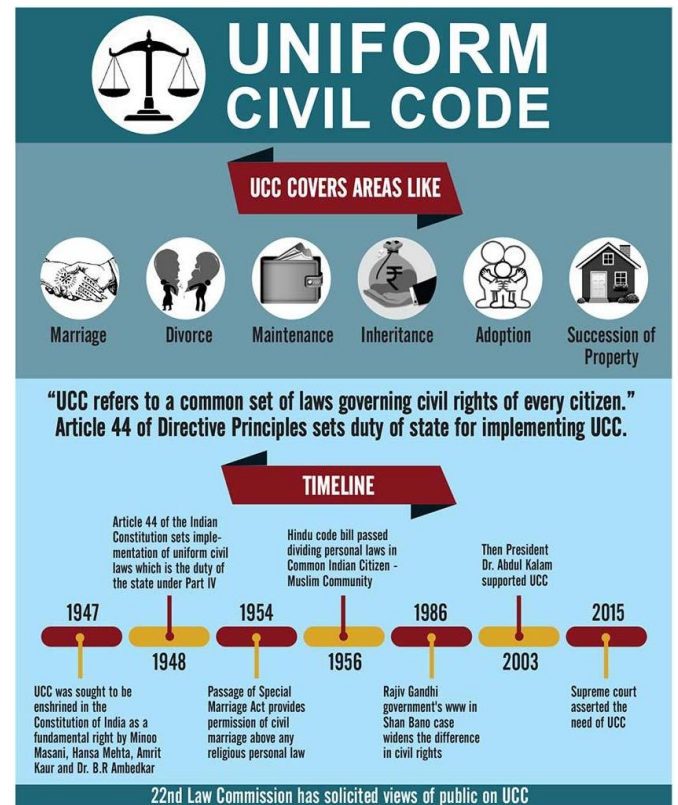
Mains Connect

“Justice in a constitutional democracy is about fairness and restoration, not about teaching a lesson.” Critically examine this statement in the light of recent debates on punitive trends in India’s legal system.

Uniform Civil Code: Between Gender Justice and Pluralism

Why in News?

In August 2025, the debate on a Uniform Civil Code (UCC) was reignited in Parliament and public discourse, following Uttarakhand’s pioneering UCC law earlier in the year. While proponents hailed it as a landmark step for gender equality and national integration, critics warned against ignoring India’s pluralist fabric and imposing uniformity without consensus.



Background

- **Constitutional Basis:**
 - Article 44 (Directive Principle): State shall endeavour to secure a UCC for all citizens.
 - Articles 25–28: Freedom of religion, creating potential tensions with UCC.
- **Judicial History:**
 - Shah Bano (1985) – SC urged Parliament to enact a UCC in the interest of gender justice.
 - Sarla Mudgal (1995) and John Vallamattom (2003) – reiterated the need for uniformity.
- **Law Commission 2018:** Held that UCC is “neither necessary nor desirable” at that time; instead pushed for reforms within personal laws.
- **Recent Context:** Uttarakhand became the first state to legislate a UCC, covering marriage, divorce, inheritance, and adoption.

Key Highlights of the Debate

1. Pro-UCC Arguments

- Gender Justice: UCC removes discriminatory practices (e.g., polygamy, unequal inheritance).
- Equality before Law: One law for all promotes unity and avoids contradictions in personal laws.
- Modernisation: Reflects evolving social realities, aligning personal law with constitutional morality.

2. Concerns Raised

- Cultural Diversity: Critics argue India's pluralism cannot be reduced to one uniform code.
- Minority Rights: Religious groups fear erosion of autonomy under Articles 25–28.
- Federal Question: Marriage, divorce, and adoption fall under the Concurrent List; States may resist central imposition.
- Implementation Gap: Without consensus, UCC risks being politically divisive rather than socially integrative.

3. Parliamentary Debate (Aug 2025)

- Treasury benches framed UCC as an unfinished constitutional promise.
- Opposition demanded wider consultations with Law Commission, minorities, and states before national rollout.

Implications

Dimension	Implication
Social Justice	Strengthens women's rights, but risks alienating minority communities if rushed.
Federalism	Sparks Centre–State friction if imposed uniformly without consensus.
Judicial Workload	Likely increase in litigation during transition phase.
Political Landscape	Polarising potential; could become an electoral issue shaping alignments.
Constitutional Morality	Balances gender justice with respect for cultural pluralism.

Way Forward

- Incremental Reform – Start with areas of consensus (inheritance, guardianship, adoption) before expanding scope.
- Consultative Federalism – Build consensus through state assemblies, minority councils, and women's groups.
- Model UCC Framework – Draft a "model code" allowing states to adopt voluntarily, as done with GST initially.
- Education & Dialogue – Conduct awareness campaigns on gender justice and constitutional values.

- Balancing Uniformity with Flexibility – Ensure UCC is not rigid, but adaptable to diverse practices within constitutional bounds.

X-Factors / Special Effects

- PICTORIAL Flow:** Article 44 (DPSP) → Judicial Push (Shah Bano, Sarla Mudgal) → Uttarakhand UCC → National Debate (2025).
- TEXTUAL Anchors:**
 - Article 44: "State shall endeavour to secure a UCC."
 - Article 25: Right to freedom of religion.
- INNOVATION Model:** E-Q-U-A-L → Equality · Quality of rights · Uniformity with flexibility · Awareness · Legitimacy through consensus.

Prelims Connect

- Q. Which Indian state currently has a Uniform Civil Code in practice through legislation?
- Nagaland
 - Goa
 - Uttarakhand
 - Sikkim

Answer: (c) Uttarakhand (Goa follows Portuguese-era civil code, but Uttarakhand legislated its own UCC in 2025).

Mains Connect

"Uniformity in law cannot come at the cost of diversity in society." Critically analyse the prospects and challenges of implementing a Uniform Civil Code in India in light of Uttarakhand's example.

Parliamentary Productivity in the Monsoon Session 2025: A Shrinking Space for Debate

Why in News?

The Monsoon Session of Parliament (July–August 2025) witnessed sharp political confrontations, frequent adjournments, and walkouts, resulting in poor legislative scrutiny and low productivity. While landmark Bills such as the 130th Constitutional Amendment (disqualification of PMs/CMs in jail) were introduced, the quality of deliberation raised serious concerns over the health of parliamentary democracy.

Background

- Parliamentary Productivity is measured in terms of time utilised for debates, discussions, and legislative business relative to scheduled hours.
- India's Constitution envisages Parliament as the supreme deliberative forum, ensuring executive accountability under Articles 75(3) and 118.
- In practice, rising disruptions, partisanship, and bypassing of committees have weakened the deliberative character of law-making.

Key Highlights of Monsoon Session 2025

1. Low Productivity

- Lok Sabha utilised barely 35–40% of scheduled time.
- Rajya Sabha fared worse, with productivity dipping below 30% in some weeks.

2. Frequent Disruptions

- Opposition stalled proceedings over ECI neutrality, 130th Amendment Bill, and ED/CBI raids.
- Treasury benches countered with accusations of political obstructionism.

3. Bypassing Committees

- Major Bills, including sweeping constitutional amendments, were introduced and pushed for passage with minimal committee scrutiny.
- Only a handful were referred to Departmental Standing Committees.

4. Decline of Question Hour

- Question Hour was repeatedly adjourned; only a fraction of listed questions were answered orally.

5. Symbolic Speeches vs Substantive Debate

- Long monologues replaced detailed clause-by-clause deliberations, reducing Parliament to a stage for political posturing rather than law-making scrutiny.

Implications

Dimension	Implication
Legislative Quality	Laws passed without proper debate risk constitutional challenges in courts.
Executive Accountability	Weakens Parliament's role as a check on government actions.
Democratic Legitimacy	Citizens perceive Parliament as partisan, eroding trust in institutions.
Federalism	Centralised law-making with minimal state input deepens Centre-State friction.
Political Culture	Normalises confrontation over cooperation, harming deliberative democracy.

Way Forward

1. Strengthen Committee System – Make referral of all non-finance Bills to Standing Committees mandatory.
2. Code of Conduct on Disruptions – Adopt clear rules with graded sanctions for repeated adjournments.
3. Minimum Working Days Law – Legislate at least 100 sitting days annually for Lok Sabha and 90 for Rajya Sabha.
4. Empower Question Hour & Zero Hour – Ensure fixed time slots immune from adjournments.

5. Reinforce Parliamentary Research – Expand PRS-like support systems and Legislative Research Cells for MPs.
6. Culture of Consensus – Institutionalise pre-session all-party dialogues to agree on agenda and prevent deadlock.

X-Factors / Special Effects

- **PICTORIAL Flow:** Session Calendar → Frequent Disruptions → Low Productivity → Poor Scrutiny → Weak Accountability.
- **TEXTUAL Anchors:**
 - "Parliament is not a theatre of protest but a temple of discussion." – Jawaharlal Nehru
 - Rule 331G: Standing Committees as "mini-Parliaments."
- **INNOVATION Model:** D-E-B-A-T-E → Deliberation · Efficiency · Bipartisanship · Accountability · Transparency · Empowerment.

Prelims Connect

Q. Which Article of the Constitution vests Parliament with the power to regulate its procedure and conduct of business?

- | | |
|-----------------|-----------------|
| (a) Article 107 | (b) Article 118 |
| (c) Article 120 | (d) Article 121 |

Answer: (b) Article 118

Mains Connect

"Parliamentary productivity is not about the number of laws passed but the quality of debate around them." Analyse the challenges faced during the Monsoon Session 2025 and suggest reforms to restore the deliberative character of India's legislature.

Live-in Relationships and Family Values: Supreme Court's Reflections

Why in News?

In August 2025, the Supreme Court made observations on the growing trend of live-in relationships, noting the tension between evolving family structures and traditional Indian values. The remarks sparked debate on whether law and policy should accommodate changing social realities or preserve conventional kinship systems.

Background

- **Legal Recognition:**
 - Lata Singh v. State of UP (2006) – upheld right of consenting adults to live together.
 - Khushboo case (2010) – SC observed live-in relationships fall within right to life under Article 21.
 - Indra Sarma v. V.K.V. Sarma (2013) – extended Protection of Women from Domestic Violence Act, 2005 to certain live-in relationships.

- Social Context: Urbanisation, education, and individual autonomy have led to rising instances of live-ins, though stigma remains strong, especially in rural India.
- Recent Trigger: Courts faced cases involving inheritance rights, domestic violence protection, and maintenance claims in live-ins, prompting broader reflections.

Key Highlights of SC's Observations

1. Changing Social Reality – Courts cannot ignore the reality that young Indians increasingly choose companionship without formal marriage.
2. Traditional Concerns – At the same time, marriage remains the cornerstone of Indian family structure; live-ins challenge established kinship norms.
3. Gendered Dimension – Women in live-ins face greater vulnerability in property rights, maintenance, and social security.
4. Children's Rights – Legitimacy, inheritance, and welfare of children born from live-ins require stronger clarity.
5. Legislative Gap – Absence of a dedicated law leaves piecemeal judicial responses, creating uncertainty.

Implications

Dimension	Implication
Constitutional	Balances Article 21 (personal liberty) with Article 19(2) restrictions and social order.
Social Justice	Women and children risk exploitation if live-ins remain legally under-protected.
Kinship Systems	Traditional joint-family values are challenged, raising generational tensions.
Policy Gap	Lack of codified rights fuels litigation and inconsistent judicial outcomes.
Democratic Culture	Reflects broader trend of individual autonomy clashing with community norms.

Way Forward

1. Legislative Clarification – Frame a Live-in Relationships Bill covering maintenance, inheritance, and child rights.
2. Gender Protection – Extend Domestic Violence Act safeguards explicitly to all long-term live-in partners.
3. Children's Rights – Guarantee equal rights for children born in live-ins, in line with Article 39(f).
4. Awareness Campaigns – Educate citizens to reduce stigma while reinforcing responsible companionship.
5. Cultural Sensitivity – Ensure reforms respect India's diverse cultural context and don't impose Western templates.

X-Factors / Special Effects

- **PICTORIAL Flow:** Consenting Adults → Live-in Arrangement → Social & Legal Challenges (Women, Children, Kinship) → Need for Clear Laws.
- **TEXTUAL Anchors:**

- Article 21: Right to life & liberty includes choice of partner.
- SC in Khushboo (2010): "Not every instance of adult cohabitation attracts criminality."

- **INNOVATION Model:** C-A-R-E → Consent · Autonomy · Rights · Equality.

Prelims Connect

Q. Which legislation has been interpreted by courts to extend protection to women in live-in relationships?

- (a) Hindu Marriage Act, 1955
- (b) Domestic Violence Act, 2005
- (c) Special Marriage Act, 1954
- (d) Maintenance and Welfare of Parents Act, 2007

Answer: (b) Domestic Violence Act, 2005

Mains Connect

"The judiciary walks a tightrope between protecting autonomy and safeguarding traditional values." Critically examine how India's legal system should address live-in relationships, with reference to women's rights, children's legitimacy, and social change.

ECONOMY

Retail Inflation Falls to 8-Year Low: A Boon or a Warning?

Why in News?

In July 2025, India's retail inflation (CPI-based) dropped to 1.55%, the lowest in eight years and the second-lowest ever recorded since the current series began in 2011–12. This unexpected fall has raised optimism for monetary easing by the RBI, while also triggering concerns about demand slowdown and rural distress.



Background

- CPI Inflation is India's benchmark measure of retail inflation, reflecting price changes faced by consumers.
- Historical Context:
 - Inflation averaged 6–7% in the last decade.
 - Lowest CPI recorded previously was 1.46% in June 2017, largely due to base effects.
- Drivers of July 2025 Low:

- Food inflation fell sharply on account of vegetables and cereals.
- Core inflation (non-food, non-fuel) remained subdued.
- Favourable monsoon helped stabilise food prices.

Key Highlights

1. Food Price Correction

- Vegetables saw deflation of over -10% YoY, easing household budgets.
- Cereal prices, a major driver in recent years, stabilised.

2. Fuel & Energy

- Global crude remained below \$70/barrel due to oversupply, lowering transport and energy costs.

3. Rural vs Urban Divergence

- Rural inflation stayed higher (~2.5%) than urban (~1.2%) due to lingering wage-price pressures.

4. Policy Room for RBI

- Inflation well below the 4% target gives RBI scope for a rate cut in its upcoming policy.

5. Concerns of Deflationary Spiral

- Too low inflation may indicate weak demand, signalling slowdown in private consumption and capex.

Implications

Dimension	Implication
Households	Relief in food budgets, especially urban households.
RBI Monetary Policy	Likely shift towards rate cuts to support growth.
Growth Outlook	Subdued inflation could reflect demand slowdown, threatening GDP growth.
Fiscal Policy	Government may need to support rural demand via higher MSPs and schemes.
Global Standing	Low inflation strengthens India's case as a stable investment destination.

Way Forward

1. Balanced Monetary Response – RBI should cut rates gradually while monitoring demand conditions.
2. Boost Rural Demand – Expand PM-KISAN, MNRGA outlays, and rural infrastructure spending.
3. Guard Against Deflation – Ensure prices don't collapse further, harming farmers' incomes.
4. Structural Supply Measures – Invest in cold chains, storage, and agri-logistics to smoothen food inflation volatility.
5. Global Coordination – Monitor global oil markets, as price shocks can quickly reverse the trend.

X-Factors / Special Effects

- **PICTORIAL Flow:** CPI Trend → Food/Fuel Drivers → 1.55% Record Low → Policy Options → Growth Trade-Offs.
- **TEXTUAL Anchors:**

- RBI inflation target band: 2–6%, with 4% as midpoint.
- Lowest CPI earlier: 1.46% (June 2017).

- **INNOVATION Model:** L-O-W → Low prices · Opportunities for easing · Warning signs for demand.

Prelims Connect

Q. India's inflation target under the RBI's Monetary Policy Framework is:

- (a) 2–8% (b) 2–6%
(c) 3–7% (d) 4–8%

Answer: (b) 2–6% (with 4% midpoint).

Mains Connect

"Very low inflation may be as concerning as high inflation." Analyse the economic implications of India's retail inflation hitting an 8-year low, and suggest balanced policy measures for monetary stability and growth.

IMF Upgrades India's Growth Outlook: FY26 GDP Forecast at 6.4%

Why in News?

The International Monetary Fund (IMF) in its World Economic Outlook Update revised India's FY26 growth forecast upward from 6.1% to 6.4%. The IMF cited resilient domestic demand, easing global trade tensions, and controlled inflation as the key drivers. India is projected to remain the fastest-growing major economy globally.

Background

- IMF Forecasts are closely tracked as they influence global investor confidence.
- India's growth trajectory:
 - FY23: 7.2% (post-Covid rebound).
 - FY24: 6.1% (moderation due to weak exports).
 - FY25: 6.3% (as per earlier IMF estimates).
- Current upward revision reflects stronger macroeconomic stability compared to other emerging economies.

Key Drivers Behind the Upgrade

1. Resilient Domestic Consumption

- Urban demand buoyed by rising services, housing, and digital economy.
- Rural demand showing recovery with improved monsoon.

2. Global Trade Easing

- Cooling of tariff tensions and revival in global shipping boosted exports outlook.

3. Controlled Inflation

- July 2025 retail inflation at 1.55%, easing input costs and improving corporate margins.

4. Investment Flows

- Foreign portfolio inflows surged due to India's stable macro fundamentals.

- Manufacturing push via PLI schemes showing traction.
5. Policy Stability
- Government's fiscal consolidation roadmap and RBI's cautious monetary stance reassured investors.

Implications

Dimension	Implication
Global Standing	India retains status as world's growth engine, attracting capital flows.
Monetary Policy	RBI may balance growth with inflation monitoring — scope for calibrated easing.
Fiscal Policy	Stronger growth aids revenue mobilisation, enabling more space for social spending.
Employment	Growth in services & manufacturing may boost jobs, but rural underemployment persists.
Geopolitical Economy	India gains leverage in G20/BRICS as a resilient emerging economy amid global volatility.

Way Forward

1. Deepen Domestic Investment – Incentivise private capex through credit support and stable policy frameworks.
2. Export Diversification – Reduce dependence on a few markets by tapping Africa, ASEAN, and Latin America.
3. Address Rural Distress – Strengthen farm support, rural infra, and social protection to sustain demand.
4. Focus on Jobs – Ensure growth translates into quality employment through skilling and labour reforms.
5. Maintain Policy Credibility – Stick to fiscal consolidation and inflation targeting to sustain investor trust.

X-Factors / Special Effects

- **PICTORIAL Flow:** Domestic Demand ↑ → Inflation ↓ → Global Trade Relief → IMF Upgrade (6.4%).
- **TEXTUAL Anchors:**
 - IMF: "India will remain the fastest-growing major economy in FY26."
 - Retail inflation: 1.55% in July 2025 – a key support for growth.
- **INNOVATION Model:** G-R-O-W → Global stability · Resilient demand · Opportunities in exports · Welfare-led inclusivity.

Prelims Connect

- Q. Which of the following institutions publishes the World Economic Outlook report?
- (a) World Bank (b) IMF
(c) WTO (d) OECD

Answer: (b) IMF**Mains Connect**

"India continues to be the world's growth engine despite global volatility." Examine the factors behind the IMF's upward revision of India's FY26 growth forecast and discuss the challenges in sustaining this momentum.

US Tariff Shock: Could India's Growth Slip Below 6%?**Why in News?**

In August 2025, economists warned that a proposed 25% tariff hike by the US on imports from major trade partners, including India, could trim India's GDP growth below 6%. With the US accounting for nearly 18% of India's merchandise exports and 60% of IT services exports, the risk of trade disruption raised alarm bells for policymakers.

Background

- **India-US Trade Ties:**
 - Bilateral trade ~ \$190 billion in 2024–25, making the US India's largest trading partner.
 - Key exports: textiles, gems & jewellery, pharma, IT services, auto components.
- **Global Context:**
 - The US administration is reimposing high tariffs amid domestic pressure to protect jobs.
 - WTO's dispute resolution system remains paralysed, limiting India's legal recourse.
- **Past Experience:**
 - 2018 US tariff hikes on steel & aluminium hurt Indian exports and worsened the trade deficit.

Key Concerns for India

1. **Export Slowdown**
 - 25% tariff makes Indian goods uncompetitive compared to Vietnam, Mexico, and ASEAN suppliers.
2. **IT Services Hit**
 - Visa curbs + tariff retaliation may squeeze India's \$150 bn IT export market in the US.
3. **GDP Impact**
 - Economists estimate 0.4–0.5 percentage point loss, pulling growth below 6% if tariffs persist.
4. **Job Losses in Export Sectors**
 - MSME-driven sectors (textiles, leather, handicrafts) most vulnerable.
5. **Retaliatory Risks**
 - India may be forced to raise duties on US goods, escalating trade tensions.

Implications

Dimension	Implication
Trade Balance	Widening current account deficit due to lower exports.

FDI & Investor Confidence	Uncertainty may dampen investor appetite in export-led manufacturing.
Rural Economy	Agro-exports (rice, spices, seafood) to US could face sharp declines.
Geopolitics	Strains India-US ties at a time of strategic convergence in defence & tech.
Domestic Industry	Push for diversification to EU, Africa, ASEAN gains urgency.

Way Forward

1. Diplomatic Channels – Intensify trade diplomacy through Indo-US Trade Policy Forum; seek exemptions.
2. Export Diversification – Expand to Africa, EU, West Asia to reduce over-reliance on US.
3. Strengthen Domestic Demand – Enhance rural purchasing power to absorb export shocks.
4. Promote 'China+1' Advantage – Position India as alternative supply hub for global firms shifting out of China.
5. WTO & Plurilateral Engagement – Lead coalition of affected nations to counter unilateral tariffs.

X-Factors / Special Effects

- **PICTORIAL Flow:** US Tariff Hike → Indian Exports Hit → GDP Growth <6% → Jobs & CAD Stress → Diversification Strategy.
- **TEXTUAL Anchors:**
 - India's GDP forecast: 6.4% (IMF July 2025) may drop if tariffs implemented.
 - US share in India's IT exports: ~60%.
- **INNOVATION Model:** T-A-R-I-F-F → Trade shock · Atmanirbhar push · Retaliation risk · Inflation control · Foreign policy leverage · Future diversification.

Prelims Connect

- Q. The US is India's largest trading partner. Which sector contributes the highest share of India's exports to the US?
- (a) Pharmaceuticals
 - (b) IT Services
 - (c) Gems and Jewellery
 - (d) Textiles

Answer: b) IT Services

Mains Connect

"Trade shocks test the resilience of India's growth story." Analyse the implications of a potential 25% US tariff on Indian exports, and suggest policy responses to safeguard growth and employment.

Cautious Optimism: Finance Ministry Flags Weak Private Capex and Credit Growth

Why in News?

In August 2025, the Ministry of Finance released its Monthly Economic Review, projecting India's growth outlook with a note of "cautious optimism." While inflation and fiscal indicators were under control, concerns emerged over sluggish private investment (capex) and muted bank credit growth, raising questions about the sustainability of India's growth momentum.



Background

- **Capex Trends:**
 - Government capital expenditure has been the primary driver in recent years (₹11.1 lakh crore in FY25).
 - Private sector investment remains subdued, despite PLI schemes and tax incentives.
- **Credit Growth:**
 - Non-food bank credit growth slowed to 9% in June 2025, compared to 13% a year earlier.
 - MSME credit uptake fell sharply, reflecting demand weakness.
- **Macroeconomic Stability:**
 - Retail inflation fell to 1.55% (July 2025).
 - Fiscal deficit projected at 5.1% of GDP for FY25, on track to consolidate.

Key Highlights from the Review

1. Investment Weakness

- Private capex largely confined to select sectors like semiconductors, renewables, and digital infra.
- Broader industrial investment remains stagnant due to global uncertainty.

2. Muted Credit Uptake

- Large corporates relied on internal accruals rather than bank borrowings.
- MSMEs faced rising NPAs and tighter lending standards.

3. Consumption Slowdown

- Rural demand fragile; wage growth lagging inflation in some states.
- Urban demand steady in housing and automobiles, but moderating in FMCG.

4. External Balance

- Exports under pressure due to tariff uncertainties (US trade war).
- Current account deficit expected to widen to 2.2% of GDP in FY26.

5. Overall Outlook

- Economy stable but dependent on government spending and services growth; private sector revival remains key.

Implications

Dimension	Implication
Growth Sustainability	Reliance on govt capex risks fiscal overreach; private investment is vital.
Banking Sector	Low credit growth slows financial deepening, limiting MSME growth.
Employment	Without private capex, job creation will lag demographic needs.
External Sector	Weak exports + low investment could widen CAD, straining rupee stability.
Fiscal Policy	Government faces trade-off between stimulus and deficit targets.

Way Forward

1. Revive Private Capex – Strengthen PLI schemes with demand-side incentives; reduce regulatory friction.
2. Ease MSME Credit – Expand credit guarantee schemes, fintech lending, and credit monitoring reforms.
3. Crowd-in Investment – Use public capex strategically to attract private investors in sunrise sectors.
4. Boost Rural Demand – Scale up MNREGA, PM-KISAN, and rural infra to stimulate consumption.
5. Monetary–Fiscal Coordination – RBI and govt must align to balance growth support with inflation control.

X-Factors / Special Effects

- **PICTORIAL Flow:** Govt Capex ↑ → Private Capex Flat → Credit Growth ↓ → Demand Weakness → Growth Risk.
- **TEXTUAL Anchors:**
 - Bank credit growth: 9% in June 2025 (vs 13% last year).
 - Retail inflation: 1.55% (July 2025) – record low.
- **INNOVATION Model:** C-A-P-E-X → Credit revival · Atmanirbhar investment · Public-private synergy · Employment push · Export resilience.

Prelims Connect

- Q. Which of the following has been the main driver of capital expenditure in India over the last three years?
- (a) Households
 - (b) Private corporates
 - (c) Government spending
 - (d) FDI inflows

Answer: (c) Government spending

Mains Connect

"India's growth story cannot rely indefinitely on government capex." Critically analyse the Finance Ministry's concerns about weak private investment and credit growth, and suggest measures to ensure balanced growth momentum.

India Slips to 41st in Global Competitiveness Index 2025

Why in News?

In July 2025, India slipped two spots to 41st rank in the IMD World Competitiveness Index 2025. The fall was attributed to weak infrastructure, governance bottlenecks, and uneven productivity growth, even as India maintained strong momentum in digital adoption and innovation.

Background

- IMD World Competitiveness Center (Switzerland) releases the index annually, assessing 64 economies on:
 - Economic Performance
 - Government Efficiency
 - Business Efficiency
 - Infrastructure
- India's Recent Trajectory:
 - 2024: Rank 39
 - 2025: Rank 41
- Regional Snapshot:
 - Singapore, Denmark, and Switzerland led the 2025 rankings.
 - China rose to 13th; Indonesia surged to 28th, overtaking India in some sub-pillars.

Key Findings for India (2025 Report)

1. Strengths

- High GDP growth (6%+), resilient domestic consumption.
- Digital public infrastructure (UPI, ONDC, Aadhaar-enabled services) praised.
- Expanding talent pool in IT, R&D, and start-up ecosystem.

2. Weaknesses

- Infrastructure gaps in logistics, ports, and power supply.
- Complex regulatory framework slowing business environment.
- Weak health and education outcomes relative to peers.
- Persistent inequality limiting inclusive competitiveness.

3. Governance Bottlenecks

- Concerns over ease of doing business at the state level.
- Judicial delays and contract enforcement remain key drags.

Implications

Dimension	Implication
Investment Climate	Lower ranking may dampen global investor sentiment.
Trade Competitiveness	Weak infrastructure and logistics increase export costs.

Policy Perception	Highlights gap between reform announcements and ground-level implementation.
Social Development	Human capital deficits hinder long-term competitiveness.
Geopolitical Position	Falling behind ASEAN peers affects India's regional leverage.

Way Forward

1. Infrastructure Push – Fast-track Gati Shakti, Bharatmala, Sagarmala to cut logistics costs.
2. Regulatory Simplification – Reduce compliance burden; digitise approvals at Centre and State levels.
3. Human Capital Investment – Scale up skilling, vocational training, and higher education reforms.
4. Judicial & Contract Reforms – Improve enforcement, arbitration mechanisms, and reduce pendency.
5. Inclusive Growth – Focus on health, education, and rural development to boost broad-based competitiveness.

X-Factors / Special Effects

- **PICTORIAL Flow:** Economic Performance + Govt Efficiency + Business Efficiency + Infra → India Rank 41.
- **TEXTUAL Anchors:**
 - IMD Index covers 64 economies.
 - India's 2025 rank: 41st (down from 39th in 2024).
- **INNOVATION Model:** C-O-M-P-E-T-E → Connectivity · Open economy · Modern infra · Policy reform · Education · Trade resilience · Efficiency.

Prelims Connect

- Q. The IMD World Competitiveness Index is released by:
- (a) World Bank
 - (b) International Monetary Fund
 - (c) Institute for Management Development, Switzerland
 - (d) World Economic Forum

Answer: c) Institute for Management Development, Switzerland

Mains Connect

"India's fall in the Global Competitiveness Index reflects structural bottlenecks rather than cyclical issues." Examine the reasons for India's slide in 2025 and suggest measures to strengthen competitiveness in line with global peers.

From Service Powerhouse to Product Nation: The Next Leap for India's Economy

hy in News?

In August 2025, industry leaders and academia renewed calls for India to transition from a service-dominated economy to a 'Product Nation', driven by manufacturing, R&D, and innovation-led exports. The debate gained traction in the backdrop of US tariff shocks, India's fall in competitiveness rankings, and the need for resilient supply chains in a volatile global economy.

Background

- **Service-led Growth:** India's GDP has long been dominated by IT, finance, and business process outsourcing. Services contribute over 55% of GDP but less than 35% of jobs.
- **Manufacturing Gap:**
 - Share in GDP stagnant at 15–17% for decades.
 - China at 27%+, Vietnam 24%.
- **Policy Push So Far:**
 - Make in India (2014) → infrastructure & investment push.
 - PLI Schemes (2020 onwards) → targeted incentives across 14 sectors.
 - Digital Public Infrastructure (UPI, ONDC, Aadhaar stack) → global reputation in scalable tech.

Key Concerns Driving the Debate

1. **Export Dependence**
 - Over-reliance on IT services leaves India vulnerable to global demand shocks.
2. **Jobless Growth**
 - Services generate high GDP but insufficient labour-intensive jobs, especially for youth.
3. **Innovation Deficit**
 - India lags in patent filings, R&D spending (0.7% of GDP) compared to China (2.4%) and South Korea (4.8%).
4. **Global Value Chains (GVCs)**
 - India remains a low-value participant, mostly in assembly, not product design or innovation.
5. **Tariff & Trade Risks**
 - US tariffs highlight fragility of service-heavy exports, underscoring need for product diversification.

Implications

Dimension	Implication
Growth Model	Balanced growth requires stronger manufacturing to complement services.
Employment	Labour-intensive sectors (textiles, electronics, food processing) can absorb youth workforce.
Innovation Economy	Transitioning to product-led innovation critical for Atmanirbhar Bharat.
Trade Balance	Higher manufacturing exports reduce dependency on imported goods.
Geopolitics	Product Nation status strengthens India's strategic role in global supply chains.

Way Forward

1. Boost R&D Spend – Ropaise public + private R&D to at least 2% of GDP by 2030.
2. PLI 2.0 – Expand to sunrise sectors: semiconductors, EV batteries, biotech, green hydrogen.
3. Cluster Development – Build regional hubs for textiles, electronics, and defence manufacturing.
4. Skilling Ecosystem – Align higher education & vocational training to manufacturing and innovation needs.
5. Export Diversification – Target Africa, Latin America, and Indo-Pacific markets for product exports.
6. Innovation Culture – Foster collaboration between industry-academia-start-ups for IP creation.

X-Factors / Special Effects

- **PICTORIAL Flow:** Service-led Growth → Weak Manufacturing → Tariff/Job Risks → Product Nation Vision → Innovation-led Economy.
- **TEXTUAL Anchors:**
 - Services share in GDP: 55%+.
 - R&D spend: 0.7% of GDP (India) vs 2.4% (China).
- **INNOVATION Model:** P-R-O-D-U-C-T → Patents · R&D · Open markets · Diversification · Upskilling · Clusters · Technology.

Prelims Connect

- Q. Which of the following is not a sector covered under India's Production Linked Incentive (PLI) scheme?
- (a) Mobile phones
 - (b) Solar PV modules
 - (c) Textiles & garments
 - (d) Agricultural fertilizers

Answer: (d) Agricultural fertilizers

Mains Connect

"India's demographic dividend cannot be fully realised without becoming a Product Nation." Discuss the challenges and opportunities for India in moving beyond a service-driven growth model.

Swadeshi Vision and the March to the World's 3rd Largest Economy

Why in News?

In August 2025, Prime Minister Narendra Modi reiterated his call for a "Swadeshi Economic Vision", urging citizens to prefer locally produced goods and services. This comes as India is projected to surpass Japan and Germany by 2027–28 to become the world's 3rd largest economy, with policymakers stressing the need for domestic self-reliance in a volatile global environment.

Background

- **Swadeshi Tradition:** Historically linked to the freedom struggle, where leaders like Tilak and Gandhi promoted local production to resist colonial imports.

- **Current Economic Context:**
 - India GDP (FY25): \$4.2 trillion (5th largest).
 - Expected to reach \$5 trillion by FY27.
 - Services drive GDP (~55%), but trade shocks (like US tariffs) expose vulnerabilities.
- **Government's Strategic Priorities:**
 - Atmanirbhar Bharat Abhiyan (2020) → self-reliance in key sectors.
 - PLI Schemes → incentivising domestic manufacturing.
 - Digital Public Infrastructure (UPI, ONDC) → homegrown platforms gaining global attention.

Key Highlights of Swadeshi Push

1. Consumer Responsibility
 - Citizens urged to "buy local, support local" as a tool of economic nationalism.
2. Manufacturing Emphasis
 - Focus on sunrise industries — semiconductors, green hydrogen, EVs, defence production.
3. Global Supply Chain Risks
 - Pandemic and tariff shocks highlight the importance of domestic resilience.
4. Export Competitiveness
 - Swadeshi doesn't imply isolationism — the vision is to produce locally but compete globally.
5. Political Economy Dimension
 - Ties economic policy with cultural pride and nationalist sentiment, strengthening popular support.

Implications

Dimension	Implication
Economic Growth	Domestic demand-driven model boosts resilience against global volatility.
Employment	Local production and MSME focus can generate jobs for India's youth bulge.
Innovation	Push for indigenous R&D in defence, space, and digital tech.
Trade Policy	Balancing protectionism with WTO obligations will be a challenge.
Global Image	Swadeshi vision positions India as a self-reliant yet outward-looking power.

Way Forward

1. Balance Swadeshi with Globalisation – Promote local production while integrating with global value chains.
2. Strengthen MSMEs – Credit, tech adoption, and market access for small businesses.
3. Consumer Awareness – Campaigns to shift middle-class preference towards Indian brands.
4. R&D and IP Creation – Expand incentives for indigenous patents and deep-tech start-ups.
5. Infrastructure & Logistics – Reduce cost of doing business to make Indian products globally competitive.

X-Factors / Special Effects

- **PICTORIAL Flow:** Swadeshi Vision → Local Production → Employment + Innovation → India 3rd Largest Economy.
- **TEXTUAL Anchors:**
 - India GDP: \$4.2 trillion (2025) → \$5 trillion by FY27.
 - Services share: 55%, Manufacturing: 15–17%.
- **INNOVATION Model:** S-W-A-D-E-S-H-I → Self-reliance · Workforce empowerment · Atmanirbhar reforms · Domestic demand · Exports competitiveness · Supply chain resilience · Homegrown innovation · Inclusivity.

Prelims Connect

Q. The Swadeshi Movement during India's freedom struggle was formally launched in response to which colonial measure?

- (a) Rowlatt Act
- (b) Partition of Bengal (1905)
- (c) Simon Commission (1927)
- (d) Montagu–Chelmsford Reforms (1919)

Answer: b) Partition of Bengal (1905)

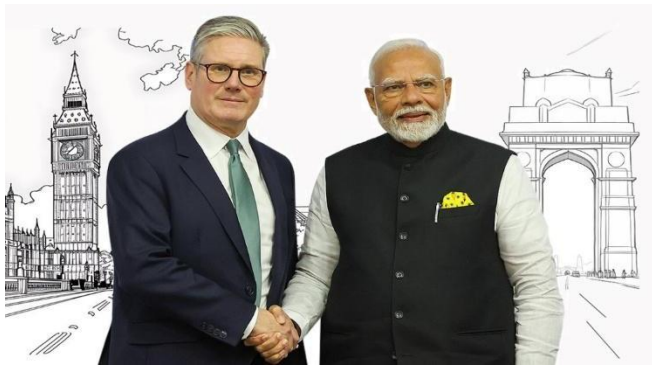
Mains Connect

"Swadeshi in the 21st century is less about isolation and more about strategic self-reliance." Critically examine the relevance of the Swadeshi vision in India's march to becoming the world's 3rd largest economy.

India–UK Comprehensive Economic and Trade Agreement (CETA): Unlocking New Horizons

Why in News?

India and the United Kingdom signed the long-awaited Comprehensive Economic and Trade Agreement (CETA). The pact is projected to double bilateral trade to \$100 billion by 2030, strengthen investment flows, and give Indian firms access to public procurement markets in the UK.

**Background**

- **Negotiation History:** Talks began in 2022, stalled over issues like mobility of professionals, tariff cuts on whisky and automobiles, and services liberalisation.
- **Trade Context:**

- Bilateral trade in 2024–25: ~\$40 billion.
- UK: India's 6th largest trading partner.
- India: UK's third largest services trade partner outside the EU.
- **Agreement Scope:** Covers goods, services, investment, IPR, e-commerce, labour mobility, and government procurement.

Key Features of CETA**1. Tariff Reductions**

- UK agreed to reduce tariffs on textiles, leather, marine products from India.
- India to lower duties on premium Scotch whisky, automobiles, and select chemicals.

2. Services Access

- Easier mobility of Indian IT, healthcare, and financial services professionals into the UK.
- Recognition of Indian educational and professional qualifications.

3. Public Procurement

- Indian firms can bid for select UK government contracts, boosting construction, IT, and pharma exports.

4. Investment Facilitation

- Bilateral investment protection provisions to encourage long-term FDI.

5. Labour & Sustainability Standards

- Includes cooperation on green technologies and labour rights, aligning with SDG goals.

Implications

Dimension	Implication
Trade	Boost for Indian labour-intensive exports like textiles, gems, seafood.
Services	IT, healthcare, and education services gain better market access.
Employment	Job creation in MSMEs linked to exports.
Investment	Expected surge in UK FDI in India's auto, renewable, and finance sectors.
Geopolitics	Strengthens India's ties with UK post-Brexit; elevates India's global trade profile.

Way Forward

1. Domestic Readiness – Enhance MSME competitiveness to seize UK market opportunities.
2. Skill Mobility – Align higher education & skill training with UK-recognised standards.
3. Safeguard Sensitive Sectors – Protect farmers and small distilleries from import surges.
4. Leverage Procurement Access – Build Indian firms' capacity to compete in UK government tenders.

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5. Inclusive Growth – Ensure small exporters benefit, not just large corporations.

X-Factors / Special Effects

- **PICTORIAL Flow:** India-UK Negotiations → Tariff Reductions → Services Mobility → Investment Boost → \$100 bn Trade Goal.
- **TEXTUAL Anchors:**
 - Bilateral trade: \$40 billion (2024–25) → target \$100 billion (2030).
 - UK as India's 6th largest trade partner.
- **INNOVATION Model:** T-R-A-D-E → Tariff relief · Regulatory cooperation · Access to services · Diversified exports · Employment creation.

Prelims Connect

Q. India-UK CETA gives Indian companies access to which new area for the first time?

- UK's domestic agricultural subsidies
- UK's public procurement markets
- UK's parliamentary financial grants
- UK's central banking sector

Answer: b) UK's public procurement markets

Mains Connect

"Trade agreements are no longer about tariffs alone; they are about shaping economic partnerships." Analyse the significance of the India-UK CETA for India's trade, services, and investment prospects.

The New Income Tax Bill, 2025: Overhauling India's Direct Tax Regime

Why in News?

In August 2025, Parliament passed the Income Tax Bill, 2025, replacing the Income Tax Act, 1961 after more than six decades. The new law, set to take effect from April 1, 2026, aims to simplify the tax system, widen the base, reduce litigation, and improve compliance, marking one of the biggest overhauls of India's direct tax framework.

**Background**

- **Old Regime:** The Income Tax Act, 1961 was enacted when India's economy was vastly different, with limited globalisation and formal sector participation.
- **Need for Reform:**
 - Outdated provisions created complexity and litigation.
 - Globalisation, digital economy, and new business models (gig, crypto, e-commerce) required modern tax laws.

- Revenue leakages and low tax-to-GDP ratio (~11%) highlighted inefficiencies.

- **Expert Input:** Recommendations from the Direct Tax Code (DTC) reports (2009, 2010, 2013) and ongoing stakeholder consultations shaped the bill.

Key Features of the New Bill

- Simplified Tax Structure**
 - Fewer slabs, rationalised rates, and reduced exemptions.
 - Broader shift towards a cleaner, exemption-light system.
- Digital Economy & New Assets**
 - Specific provisions for taxing crypto-assets, gig economy, digital transactions.
 - Introduction of "significant economic presence" norms for MNC taxation.
- Taxpayer Rights Charter**
 - Codified rights for taxpayers against harassment, including faster refunds and e-assessments.
- Dispute Resolution Mechanisms**
 - Expansion of faceless assessments and faceless appeals.
 - Mediation/conciliation introduced to reduce litigation backlog.
- Corporate Tax Framework**
 - Lower corporate tax rates continue for new manufacturing units.
 - Incentives linked to job creation and R&D investment.
- Personal Income Tax**
 - Default adoption of the new simplified regime (with fewer exemptions).
 - Higher standard deduction to benefit salaried classes.

Implications

Dimension	Implication
Taxpayers	Easier compliance, lower scope for harassment, quicker resolutions.
Government Revenue	Short-term revenue uncertainty due to fewer exemptions, but long-term gains via wider base.
Corporate Sector	Predictability in tax regime improves investment climate.
Ease of Doing Business	Simplified framework boosts India's attractiveness for FDI.
Judiciary	Reduced tax litigation lowers burden on ITAT and higher courts.

Way Forward

- Capacity Building** – Train officers in new law to avoid misinterpretation.
- Public Awareness** – Campaigns to educate taxpayers about new provisions.

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3. Tech Infrastructure – Strengthen IT portals for seamless e-filing and faceless assessments.
4. Balanced Revenue Mobilisation – Avoid excessive concessions that risk fiscal health.
5. Continuous Feedback – Monitor implementation challenges, especially for MSMEs and gig workers.

X-Factors / Special Effects

- **PICTORIAL Flow:** Old IT Act (1961) → Complex & Litigious → New IT Bill (2025) → Simplified, Modern, Digital-Ready.
- **TEXTUAL Anchors:**
 - Tax-to-GDP ratio: ~11% (India) vs OECD avg 34%.
 - Direct Tax Code attempts: 2009, 2010, 2013 → now realised in 2025 Bill.
- **INNOVATION Model:** S-I-M-P-L-E → Simplification · Inclusion · Modernisation · Predictability · Litigation-reduction · Equity.

Prelims Connect

- Q. The Income Tax Bill, 2025 replaces which legislation?
- (a) Direct Taxes Code, 2009
 - (b) Income Tax Act, 1961
 - (c) Finance Act, 1991
 - (d) Fiscal Responsibility and Budget Management Act, 2003

Answer: (b) Income Tax Act, 1961

Mains Connect

"Tax reform is not just about rates, but about trust and transparency." Critically examine the significance of the Income Tax Bill, 2025 in modernising India's direct tax framework.

Commercial Dispute Resolution Reforms: Making India Investor-Friendly

Why in News?

In August 2025, the government unveiled a new package of commercial dispute resolution reforms aimed at strengthening India's ease of doing business and investor confidence. The reforms include a stronger Mediation framework, modernised Arbitration rules, and a fresh approach to Bilateral Investment Treaties (BITs). Together, these are seen as critical to positioning India as a global hub for trade and investment.

Background

- **Arbitration:** India has long aspired to be an international arbitration hub, but faces delays and high costs.
- **Mediation:** The Mediation Act 2023, laid the groundwork, but implementation needed institutional strengthening.
- **BITs:** After facing multiple international arbitration claims in the 2010s (Vodafone, Cairn, White Industries),

India unilaterally terminated most of its BITs and adopted a restrictive 2016 BIT model, limiting investor protection.

- **Current Push:** With India attracting record FDI inflows (\$80 billion in FY25), predictable dispute resolution is seen as a strategic necessity.

Key Features of the Reforms**1. Arbitration Modernisation**

- Time-bound proceedings (12 months cap, extendable only with court approval).
- Greater use of digital hearings to cut costs.
- Institutional arbitration promoted through centres in Delhi, Mumbai, Hyderabad.

2. Mediation Boost

- "Mediation for Nation" campaign launched to promote voluntary settlements.
- Mandatory pre-litigation mediation for commercial disputes below ₹10 crore.
- Accreditation framework for mediators to ensure quality.

3. BIT Recalibration

- India drafting a balanced BIT model (2025) to replace restrictive 2016 framework.
- New approach: protect investors while preserving India's sovereign right to regulate in public interest.
- BITs linked with free trade agreements like India-UK CETA and Indo-EU FTA talks.

4. Judicial Support

- SC issued guidelines to High Courts to support arbitration awards and avoid excessive judicial interference.

Implications

Dimension	Implication
Ease of Doing Business	Speedy resolution improves India's investment climate.
FDI Flows	Predictability in dispute resolution reassures global investors.
Judicial Efficiency	Reduces burden on courts clogged with commercial cases.
Global Image	Strengthens India's claim to be a global arbitration hub.
Investor-State Balance	BIT reforms ensure fairness without compromising sovereign regulatory power.

Way Forward

1. Institutional Strengthening – Build capacity in arbitration centres comparable to Singapore & London.
2. Awareness Campaigns – Promote mediation culture among MSMEs and local businesses.
3. Training Ecosystem – Train lawyers, arbitrators, and mediators in global best practices.

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4. Balanced BITs – Ensure BITs protect investors but also allow India to regulate health, environment, and labour.
5. Digital Dispute Resolution – Scale AI-assisted case management and e-arbitration for faster disposal.

X-Factors / Special Effects

- **PICTORIAL Flow:** Dispute → Arbitration/Mediation → Faster Resolution → Investor Confidence → FDI Boost.
- **TEXTUAL Anchors:**
 - India FDI inflows FY25: \$80 bn+.
 - Commercial disputes backlog in India: ~4.5 lakh cases (as per Law Ministry 2025).
- **INNOVATION Model:** R-E-S-O-L-V-E → Rule-based · Efficient · Speedy · Open · Low-cost · Value-driven · Equitable.

Prelims Connect

- Q. Which of the following statements is correct about India's Bilateral Investment Treaties (BITs)?
- (a) India continues to follow its 1990s-era BITs without modification.
 - (b) India terminated most BITs after arbitration losses and adopted a restrictive 2016 model.
 - (c) India has no BITs currently in operation.
 - (d) India signed its first BIT only after 2010.

Answer: (b) India terminated most BITs after arbitration losses and adopted a restrictive 2016 model.

Mains Connect

"Predictable dispute resolution is as important as low tax rates in attracting global investment." Critically examine India's recent reforms in arbitration, mediation, and BITs in the context of improving ease of doing business.

Farm Exports Resilient Amid Merchandise Trade Slump

Why in News?

In August 2025, data from the Ministry of Commerce revealed a sharp slump in India's overall merchandise exports, while agricultural exports showed resilience, cushioning India's trade balance. This divergence has brought focus to the role of agriculture in stabilising India's external sector, especially at a time of global protectionism and tariff tensions.

Background

- **Merchandise Trade:**
 - Exports fell by ~8% year-on-year in July 2025, led by declines in textiles, engineering goods, and gems & jewellery.
 - Global slowdown, US tariffs, and weak demand in EU contributed to the slump.
- **Agricultural Exports:**

- Remained stable at ~\$50 billion annually; strong performance in rice, spices, sugar, marine products.
- India remains the world's largest rice exporter (40% share).
- **Policy Support:**
 - Export incentives under the Agriculture Export Policy (2018).
 - Promotion of GI-tagged products (e.g., Darjeeling tea, basmati rice).

Key Highlights**1. Farm Exports Stable**

- Rice exports robust despite global bans by competitors.
- Spices and marine products saw double-digit growth.

2. Merchandise Slump

- Engineering goods hit by falling global demand.
- Gems & jewellery exports down due to weak US/EU retail markets.

3. Global Food Demand

- Amid climate shocks, global demand for staples like rice and wheat increased, benefiting India.

4. Geopolitical Edge

- India supplying food grains to Africa and Middle East boosted soft power.

5. WTO Concerns

- Farm subsidies and MSP-linked exports face scrutiny from developed nations at WTO.

Implications

Dimension	Implication
External Stability	Agricultural exports cushioning CAD despite merchandise slump.
Farmers' Incomes	Export demand supports MSP procurement and rural livelihoods.
Policy Leverage	Food exports boost India's diplomatic influence in Global South.
Structural Weakness	Reliance on farm exports highlights lack of diversification in manufacturing.
WTO Challenges	Farm subsidies and export bans could invite disputes from trading partners.

Way Forward

1. Diversify Agri-Exports – Promote processed foods, organics, and GI-tagged items.
2. Boost Value Addition – Develop agro-processing hubs for higher export earnings.
3. Balanced Trade Strategy – Revive merchandise competitiveness via logistics reforms and FTA utilisation.
4. Sustainable Practices – Ensure export growth does not worsen water stress (e.g., in rice cultivation).
5. WTO Readiness – Defend MSP and food security concerns in global negotiations.

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X-Factors / Special Effects

- **PICTORIAL Flow:** Global Slowdown → Merchandise Slump → Farm Exports Resilient → Trade Balance Cushion.
- **TEXTUAL Anchors:**
 - India's farm exports: ~\$50 bn annually.
 - Share in world rice exports: ~40%.
- **INNOVATION Model:** A-G-R-I → Agro-diversification · Global leverage · Rural income · Inclusive growth.

Prelims Connect

Q. Which of the following is India's largest agricultural export item by value?

- (a) Tea (b) Spices
(c) Rice (d) Cotton

Answer: (c) Rice

Mains Connect

"Agriculture remains a stabiliser in India's external trade despite a manufacturing slowdown." Examine the resilience of India's farm exports in 2025 and analyse the challenges ahead in sustaining this trend.

Quick Commerce in India: Convenience or a Sustainability Challenge?

Why in News?

In August 2025, quick commerce platforms like Blinkit, Zepto, and Swiggy Instamart expanded aggressively in metros, promising 10–15 minute deliveries of groceries and daily-use items. However, rising concerns over profitability, labour practices, urban congestion, and environmental sustainability have sparked debate on whether this model is truly viable for India's economy.

Background

- What is Quick Commerce? Delivery of small-ticket, essential goods within 10–20 minutes, relying on dark stores (localised warehouses) and dense delivery networks.
- India's Market: Estimated at \$3 billion (2024), projected to grow 10x by 2030.
- Consumer Behaviour: Urban millennials and Gen-Z drive demand for instant gratification.
- Investor Backing: Platforms raised billions in funding but face pressure to achieve profitability.

Key Challenges**1. Profitability Concerns**

- Thin margins; high operational costs of dark stores, delivery fleet, and discounts.
- Industry reports suggest only 2–3% orders break even currently.

2. Labour Issues

- Delivery partners face unsafe working conditions, pressure for speed, and lack of social security.

3. Urban Infrastructure Stress

- Increased traffic congestion and carbon emissions in cities.

4. Consumer Dependency

- Risk of reinforcing wasteful consumption patterns (low-value, frequent orders).

5. Competition & Consolidation

- Fierce price wars may lead to consolidation, squeezing out smaller players.

Implications

Dimension	Implication
Employment	Gig work expansion, but with precarious conditions.
Urban Economy	Convenience-driven retail changes shopping habits; supermarkets under strain.
Investment Climate	Risk of a funding bubble if profitability is not achieved.
Sustainability	Increased carbon footprint from hyperlocal delivery fleets.
Regulatory Need	Urgency to frame gig-worker protections and urban mobility rules.

Way Forward

1. Gig Worker Protection – Implement Social Security Code, 2020 provisions for gig economy.
2. Rational Growth – Avoid unrealistic 10-min targets; shift to sustainable 30–45 min delivery models.
3. Green Logistics – Encourage use of EV fleets and shared dark-store infrastructure.
4. Consumer Awareness – Promote responsible consumption and bulk ordering incentives.
5. Policy Regulation – Define quick commerce norms under retail & e-commerce policy.

X-Factors / Special Effects

- **PICTORIAL Flow:** Dark Stores → Quick Deliveries → Convenience ↑ but Profitability & Sustainability ↓.
- **TEXTUAL Anchors:**
 - Market size: \$3 bn (2024) → projected \$30 bn by 2030.
 - Break-even rate: ~2–3% orders only.
- **INNOVATION Model:** Q-U-I-C-K → Quality jobs · Urban resilience · Inclusive growth · Consumer responsibility · Knowledge-driven regulation.

Prelims Connect

Q. Which of the following best describes "dark stores" in the context of quick commerce?

- (a) Offline stores offering late-night discounts
(b) Warehouses optimised for online orders, not walk-in customers

- (c) Retail shops without branding
(d) Government-regulated ration shops

Answer: (b) Warehouses optimised for online orders, not walk-in customers

Mains Connect

"Quick commerce reflects India's digital consumerism but raises sustainability dilemmas." Critically examine the challenges and opportunities of India's growing quick commerce sector.

GEOGRAPHY

Brahmaputra's Erosion Threat to Dibrugarh: A Fluvial Crisis in Assam

Why in News?

In August 2025, the Brahmaputra River eroded dangerously close within 30–35 meters to the Dibrugarh Town Protection Dyke at Majjan and Thakurbari. The river threatens to engulf parts of the tea city despite emergency measures like geo bags and porcupine structures.

Background

- The Brahmaputra, one of the world's largest braided rivers, is highly dynamic with frequent course shifts, bank erosion, and sediment deposition.
- The 1950 Assam earthquake (magnitude 8.6) altered river morphology, raising its bed and intensifying flood-erosion cycles.
- Dibrugarh, a hub for Assam tea and oil, has long battled riverbank erosion, which swallows croplands, settlements, and infrastructure.

Geographical Causes of Erosion

1. Perched-braided river system → shallow channels, unstable banks.
2. High sediment load from Himalayas → constant channel migration.
3. Seismic legacy of 1950 quake → altered gradient, increased erosive power.
4. Human interventions → embankments, sand mining, and deforestation exacerbate instability.
5. Climate variability → intense monsoons accelerate bank cutting.

Implications

Dimension	Implications
Economic	Tea industry, oil pipelines, transport infrastructure under threat.
Social	Displacement of riverine families → climate migrants in Assam.

Environmental	Loss of riparian biodiversity, destabilisation of wetland systems.
Strategic	Threat to Bogibeel Bridge and Dibrugarh Airport, crucial NE infrastructure.

Way Forward

1. Integrated River Basin Management (IRBM) with upstream–downstream coordination.
2. Soft engineering methods (bioengineering, afforestation, dredging) instead of only embankments.
3. Seismic-informed river planning acknowledging post-1950 morphology.
4. GIS-based monitoring of erosion hotspots.
5. Community engagement in flood-erosion preparedness.

X-Factors / Special Effects

- **PICTORIAL Flow:** 1950 Earthquake → Sediment load rise → Channel instability → Erosion threats → Urban risk.
- **TEXTUAL Anchors:**
 - Dyke erosion within 30–35 m.
 - Assam earthquake (1950, M 8.6).
- **INNOVATION Acronym:** E-R-O-D-E → Engineering + Resilience + Observation + Dredging + Engagement.

Prelims Connect

- Q. Which of the following factors contribute to the Brahmaputra's intense erosion?
1. High sediment load from young Himalayas
 2. Post-earthquake river bed uplift
 3. Perched-braided channel system
 4. Desilting by tidal action from the Bay of Bengal
- Choose the correct answer:
- (a) 1, 2 and 3 only
(b) 2 and 4 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4

Answer: a) 1, 2 and 3 only

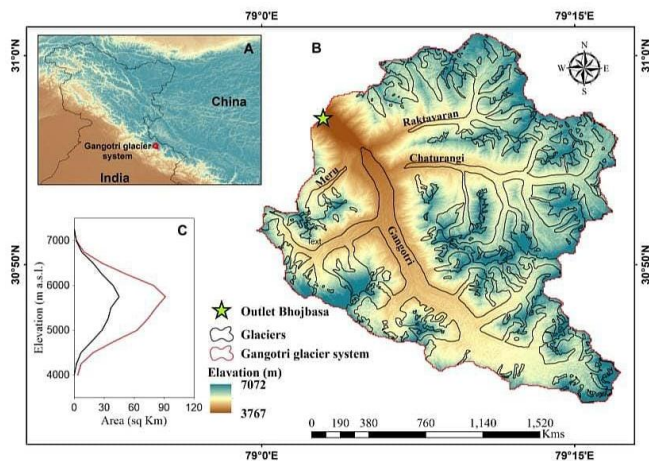
Mains Connect

"Riverbank erosion is as significant a hazard as flooding in Assam's Brahmaputra Valley." Discuss with reference to the case of Dibrugarh.

Gangotri Glacier's Changing Hydrology: Peak Discharge Shifts to July

Why in News?

A four-decade study by IIT-Indore, released in August 2025, shows that the Gangotri Glacier, the source of the Bhagirathi (a headstream of the Ganga), is witnessing a shift in peak discharge from August to July. This indicates significant changes in glacial hydrology due to climate variability.



Background

- The Gangotri Glacier, ~30 km long in Uttarakhand, is one of the largest Himalayan glaciers feeding the Ganga basin.
- Traditionally, peak discharge occurred in August, driven by combined snowmelt and monsoonal rainfall.
- The new study shows July now records the highest flows, due to altered snow-rain dynamics.

Key Findings

1. Reduced snowmelt contribution – Warmer winters, thinner snowpack.
2. Increased rainfall & groundwater inputs – More rainfall in early monsoon → July peak.
3. Hydrological variability – Erratic meltwater release, unpredictable discharge patterns.
4. Impact on downstream flows – Critical for irrigation, hydropower, and drinking water supply in the Ganga basin.

Implications

Dimension	Implications
Environmental	Alters river ecology, sediment flow, flood regimes.
Agricultural	Peak water availability shifts earlier, may misalign with crop water demand.
Hydropower	Dams designed for August flows may face operational mismatches.
Cultural	Ganga's symbolic continuity tied to Himalayan glaciers under threat.
Climate Change	Shows Himalayan glaciers are no longer reliable "water towers."

Way Forward

1. High-frequency monitoring of Himalayan glaciers using remote sensing + field stations.
2. Climate-adaptive irrigation planning in Ganga plains.
3. Hydropower redesign to account for seasonal shifts.

4. Water storage infra to capture July surpluses for August–September demand.
5. Strengthened glacier–climate research under National Mission on Himalayan Studies (NMHS).

X-Factors / Special Effects

- **PICTORIAL Flow:** Climate warming → Reduced snowpack → Early rains → July discharge peak → Downstream water stress.
- **TEXTUAL Anchors:**
 - Gangotri Glacier discharge studied over 4 decades.
 - Peak shifted from August to July.
- **INNOVATION Acronym:** M-E-L-T → Monitoring · Early rainfall · Long-term adaptation · Technology use.

Prelims Connect

Q. Which of the following rivers originate from the Gangotri Glacier?

- (a) Bhagirathi (b) Alaknanda
(c) Mandakini (d) Yamuna

Answer: a) Bhagirathi

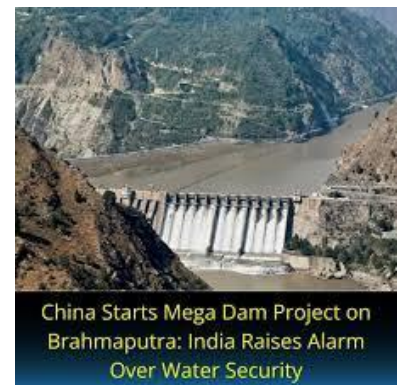
Mains Connect

"The shifting discharge patterns of Himalayan glaciers like Gangotri have profound implications for India's water security." Analyse.

China's Mega Dam on the Brahmaputra: Hydropolitics and India's Water Security

Why in News?

In August 2025, China began construction of a mega dam on the Yarlung Tsangpo (upper Brahmaputra) in Tibet, triggering concerns in India. Reports suggest that the project may reduce downstream dry-season flows by up to 85%, raising alarms about water security, ecology, and strategic stability in Northeast India. India, in response, is planning a storage dam on the Upper Siang in Arunachal Pradesh to offset potential shortages.



Background

- The Brahmaputra/Yarlung Tsangpo originates in Tibet, flows through Arunachal Pradesh as Siang, and joins Assam as the Brahmaputra.
- It is the lifeline of Northeast India, supporting agriculture, hydropower, transport, and ecology.
- India and China have no binding water-sharing treaty (only MoUs for hydrological data).

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- The Brahmaputra basin is seismically sensitive and ecologically fragile.

Geographical & Strategic Concerns

1. Hydrological impact – Upstream storage may reduce lean season flows in India.
2. Ecological risks – Altered sediment load → riverbank erosion, wetland loss, biodiversity threats.
3. Seismic vulnerability – Tibet and Arunachal are earthquake-prone; mega dams increase disaster risk.
4. Geopolitical angle – Water weaponisation potential in Indo-China rivalry.
5. India's counter-move – Proposal for Upper Siang Multipurpose Dam to assert riparian rights.

Implications for India

Dimension	Implication
Water Security	Threat to agriculture and fisheries in Assam and Arunachal.
Energy	Risks to hydropower potential in India's Northeast.
Social	Displacement, livelihood insecurity for riparian communities.
Diplomatic	Strains Sino-Indian relations, complicates border disputes.
Strategic	Water as a possible "pressure point" in regional geopolitics.

Way Forward

1. Strengthen bilateral mechanisms – Expand data-sharing MoUs into a water management treaty.
2. Diversify India's water storage – Accelerate Upper Siang, Subansiri, and Dibang projects.
3. Leverage multilateral forums – Raise issue in Mekong-Ganga Cooperation, G20, BRICS.
4. Geo-strategic preparedness – Integrate hydropolitics into Indo-Pacific strategy.
5. Climate-resilient diplomacy – Use climate negotiations as a platform for cooperative river management.

X-Factors / Special Effects

- **PICTORIAL Flow:** China's upstream dam → Reduced lean season flow → Assam agriculture + ecology stress → India's counter dam → Geopolitical water tension.
- **TEXTUAL Anchors:**
 - Dry-season flows may reduce by up to 85%.
 - India's counter: Upper Siang Dam.
- **INNOVATION Acronym:** D-A-M-S → Diplomacy · Adaptation · Monitoring · Storage infra.

Prelims Connect

Q. Consider the following rivers:

1. Yarlung Tsangpo
2. Siang

3. Lohit
4. Subansiri

Which of the above join to form the Brahmaputra in Assam?

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

Answer: b) 2, 3 and 4 only

Mains Connect

"The construction of mega dams on transboundary rivers is no longer an environmental issue alone but a matter of geopolitics and security." Discuss with reference to the Brahmaputra.

Monsoon 2025: Stable August, Surplus September**Why in News?**

The India Meteorological Department (IMD) in late July 2025 projected average rainfall for August and a surplus in September, following a July that recorded 5% above-normal rainfall. This marks a deviation from the traditional monsoon peak (July–August) and has direct consequences for agriculture, water management, and disaster preparedness.

Background

- The Southwest Monsoon (June–September) contributes 75% of India's annual rainfall.
- Historically, August is the peak rainfall month, but variability is increasing.
- September surpluses have become more frequent in recent decades, partly due to climate change and ENSO-neutral conditions.

Observed Trends 2025

1. Stable August – IMD predicts rainfall close to Long Period Average (LPA).
2. Surplus September – Expected rainfall above 50-year mean, supporting late Kharif crops.
3. Regional Variability – Deficit in eastern states, surplus in central and western regions.
4. Climate Link – Neutral ENSO + positive Indian Ocean Dipole (IOD) → favourable late-season rains.

Implications

Dimension	Implication
Agriculture	Boost for paddy, pulses, oilseeds in rain-fed areas; reduces risk of drought.
Water Resources	Surplus September → replenishes reservoirs before Rabi season.
Disaster Risk	Excess late-season rain may cause post-harvest flooding, crop losses.
Economic	Supports GDP growth, but localised flooding may hit supply chains.

Climate
StudiesSignals shifting monsoon dynamics under
global warming.

Way Forward

1. Adaptive crop planning → Encourage short-duration Kharif varieties in monsoon-uncertain regions.
2. Water harvesting & reservoir management → Store September surpluses for Rabi irrigation.
3. Disaster preparedness → Anticipate urban flooding due to late heavy rains.
4. Research on climate–monsoon linkages → Integrate monsoon variability into IMD's long-range forecasts.
5. Farmer awareness → Real-time advisories on crop insurance, sowing, and harvesting.

X-Factors / Special Effects

- **PICTORIAL Flow:** Neutral ENSO + Positive IOD → Stable August → Surplus September → Agri/water benefits + flood risks.
- **TEXTUAL Anchors:**
 - July 2025 rainfall +5% above normal.
 - September expected surplus vs 50-year mean.
- **INNOVATION Acronym:** R-A-I-N → Resilience · Agriculture adaptation · Infrastructure prep · Neutral ENSO use.

Prelims Connect

Q. Which of the following climate phenomena often influence India's monsoon?

1. El Niño–Southern Oscillation (ENSO)
2. Indian Ocean Dipole (IOD)
3. Madden-Julian Oscillation (MJO)
4. Atlantic Multidecadal Oscillation (AMO)

Select the correct answer:

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

Answer: (d) 1, 2, 3 and 4

Mains Connect

"The shifting rainfall peaks of the Indian monsoon reflect not just natural variability but also the fingerprints of climate change." Analyse with reference to IMD's 2025 forecast.

Changing Water Map of Gujarat: Satellite Study Reveals Uneven Gains and Losses

Why in News?

A satellite-based study (2020–2024), reported in August 2025, revealed significant shifts in Gujarat's water bodies. While Kutch district gained ~747 sq km of water spread due to better rainfall and conservation, several other regions —

Saurashtra, Tapi, Rajkot, and southern Gujarat districts — witnessed sharp declines in surface water availability.

Background

- Gujarat, a semi-arid state, relies heavily on monsoons, check dams, and canal irrigation (e.g., Sardar Sarovar Project).
- Uneven rainfall patterns, rapid urbanisation, and industrial extraction have altered the state's hydrological balance.
- Remote sensing helps map temporal water body changes, offering insights for planning.

Key Findings (2020–24)

1. Kutch Gains – Increase of ~747 sq km water spread due to above-normal rainfall + conservation efforts (check dams, Narmada canal linkages).
2. Saurashtra Losses – Decline due to groundwater over-extraction + deficit rainfall.
3. South Gujarat/Tapi Basin – Urbanisation and encroachment reduced water storage capacity.
4. Seasonal Shifts – Temporary waterlogging post-heavy rains, followed by rapid drying due to evaporation.
5. Policy Gap – Irrigation skewed towards canal-fed regions, neglecting groundwater-stressed belts.

Implications

Dimension	Implication
Agriculture	Uneven water spread → prosperity in Kutch, stress in Saurashtra and Tapi.
Urbanisation	Shrinking lakes → water scarcity in cities like Surat, Rajkot, Bhavnagar.
Ecology	Loss of wetlands → decline in migratory bird habitats in Saurashtra.
Disaster Risk	Flash floods in excess rainfall years; drought risk in deficit years.
Policy	Highlights inequities in intra-state water distribution.

Way Forward

1. Integrated Water Resource Management (IWRM) – balance canal, groundwater, and rainwater.
2. Check dam revival & desiltation in deficit areas.
3. Urban water-sensitive planning → protect urban lakes and wetlands.
4. Crop diversification → reduce water-intensive crops in Saurashtra.
5. Community water governance → strengthen Pani Samitis for equitable sharing.

X-Factors / Special Effects

- **PICTORIAL Flow:** Uneven monsoon + human activity → Kutch gains → Saurashtra/Tapi losses → ecological + agri impact.
- **TEXTUAL Anchors:**

- Kutch gained 747 sq km water spread (2020–24).
- Other regions saw sharp declines.

- **INNOVATION Acronym:** W-A-T-E-R → Wetland revival · Adaptive planning · Tech monitoring · Equity · Resilience.

Prelims Connect

Q. Which of the following districts of Gujarat recently showed major water spread gains due to better rainfall and conservation?

- (a) Tapi
- (b) Rajkot
- (c) Kutch
- (d) Surat

Answer: (c) Kutch

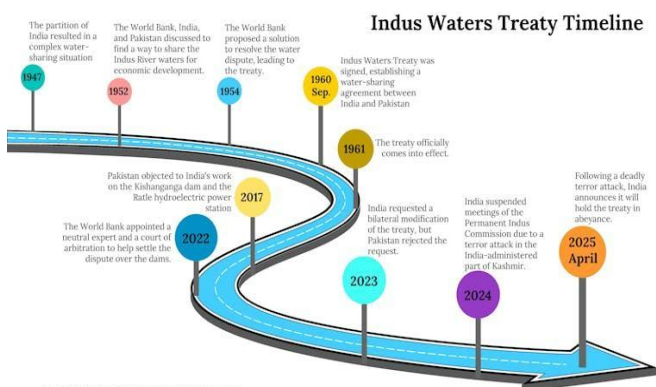
Mains Connect

"The changing water map of Gujarat reflects the combined effect of climate variability and human interventions." Examine the challenges and suggest solutions.

Indus Basin Flood Warning: India–Pakistan Hydropolitics and Geography

Why in News?

In August 2025, India issued a public flood warning to Pakistan during extreme monsoon-driven flows in the Indus Basin. This was notable because such warnings usually fall under the Indus Waters Treaty (IWT, 1960) framework, but the message came outside the treaty mechanism, highlighting the intertwining of geography, climate, and geopolitics.



Background

- The Indus Basin spans India, Pakistan, Afghanistan, and China, draining six major rivers: Indus, Jhelum, Chenab, Ravi, Beas, and Sutlej.
- The IWT (1960), brokered by the World Bank, allocates:
 - Eastern Rivers (Ravi, Beas, Sutlej) to India.
 - Western Rivers (Indus, Jhelum, Chenab) to Pakistan, with India retaining limited non-consumptive use.
- Climate change has intensified glacial melt + erratic monsoons, raising flood frequencies.

The August 2025 Event

1. Heavy rainfall + glacial melt → excess flows in Western Rivers.
2. India shared flood warning data, but outside IWT's structured channels.
3. Raised concerns in Pakistan that India may politicise flood warnings.
4. For India, it was a demonstration of technical capability and hydrological dominance.

Geographical Significance

1. Himalayan cryosphere → glaciers feeding Indus tributaries.
2. Monsoon anomalies → high-intensity rainfall causing flash floods.
3. River basin fragility → erosion, landslides, infrastructure risk.
4. Human vulnerability → millions dependent on Indus for food, energy, water.

Implications

Dimension	Implication
Hydrological	Shows climate-driven stress on Indus Basin hydrology.
Diplomatic	Raises suspicion over India bypassing IWT procedures.
Strategic	Water diplomacy as a pressure point in Indo-Pak relations.
Disaster Management	Flood alerts essential, but politicisation may reduce cooperation.
Regional Stability	Basin instability may spill into broader South Asian geopolitics.

Way Forward

1. Strengthen IWT mechanisms → expand scope to flood alerts and climate data.
2. Indo-Pak technical dialogue → depoliticise hydrological cooperation.
3. Regional framework → integrate SAARC / BIMSTEC climate resilience.
4. Climate adaptation → joint glacier research, basin modelling, flood mapping.
5. Disaster diplomacy → convert water warnings into confidence-building measures.

X-Factors / Special Effects

- **PICTORIAL Flow:** Himalayan melt + heavy rains → Indus floods → India's warning → hydropolitical tensions.
- **TEXTUAL Anchors:**
 - IWT 1960 allocates eastern vs western rivers.
 - India's public warning outside treaty channels (Aug 2025).

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- **INNOVATION Acronym:** F-L-O-W → Flood alerts · Legal treaties · Open data · Water diplomacy.

Prelims Connect

Q. Which of the following rivers are part of the Indus Waters Treaty (1960)?

1. Jhelum
2. Chenab
3. Sutlej
4. Brahmaputra

Select the correct answer:

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

Answer: (b) 1, 2 and 3 only

Mains Connect

"The Indus Basin illustrates how geography, climate change, and geopolitics intersect to redefine water security in South Asia." Discuss with reference to the August 2025 flood warnings.

Western Disturbances and Extreme Rainfall in North India

Why in News?

In August 2025, North India, especially Himachal Pradesh and Uttarakhand, witnessed extreme rainfall episodes triggered by the unusual interaction of Western Disturbances (WDs) with the monsoon trough. This caused flash floods, landslides, and infrastructure losses in the fragile Himalayan zone.

Background

- Western Disturbances are extra-tropical storms originating in the Mediterranean region, carried eastward by subtropical westerlies.
- Traditionally a winter phenomenon, WDs now increasingly interact with the monsoon system in summer, leading to extreme rainfall.
- Himalayan states are ecologically fragile — steep slopes, deforestation, and unplanned urbanisation amplify the impact.

Recent Observations

1. Increased frequency of WD–monsoon interaction since the 2013 Kedarnath floods.
2. August 2025 event → record-breaking rainfall in Himachal; Yamuna and Beas rivers swelled beyond danger levels.
3. Urban vulnerability → towns like Shimla and Dehradun reported road collapses, hotel damages, and loss of lives.
4. Climate link → Warming of the Arctic and changing jet stream behaviour linked to altered WD patterns.

Implications

Dimension	Implication
Hydrological	Intensified floods, river regime changes in Indo-Gangetic basin.
Ecological	Landslides, soil erosion, biodiversity loss in fragile Himalayas.
Economic	Damages to hydropower, roads, and tourism infrastructure.
Social	Displacement of hill communities, loss of livelihoods.
Climatologica	Illustrates climate change's role in monsoon-extreme linkages.

Way Forward

1. Strengthen IMD forecasts for WD–monsoon interactions.
2. Urban planning reforms → stop construction on floodplains and fragile slopes.
3. Landslide mapping and early warning systems in Himalayan towns.
4. Climate-adaptive hydropower → re-examine dam safety in high-rainfall zones.
5. Community resilience → training local bodies in disaster preparedness.

X-Factors / Special Effects

- **PICTORIAL Flow:** Mediterranean low → WD carried east → Meets monsoon trough → Extreme Himalayan rainfall.
- **TEXTUAL Anchors:**
 - August 2025 → Himachal/Uttarakhand extreme rain + flash floods.
 - WD–monsoon interaction no longer seasonal.
- **INNOVATION Acronym:** R-A-I-N-S → Resilience · Alerts · Infrastructure reform · Nature-based solutions · Safe zoning.

Prelims Connect

Q. Which of the following are true about Western Disturbances?

1. They originate in the Mediterranean region.
2. They are associated with winter rainfall in North India.
3. They are carried eastwards by subtropical westerlies.

Choose the correct answer:

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

Answer: (d) 1, 2 and 3

Mains Connect

"Extreme rainfall in the Himalayas increasingly results from the interaction between Western Disturbances and the monsoon system." Analyse with recent examples.

Glacial Lake Outburst Flood (GLOF) Risk in Sikkim and Arunachal

Why in News?

In August 2025, the National Remote Sensing Centre (NRSC) issued a warning about the expansion of glacial lakes in Sikkim and Arunachal Pradesh, especially South Lhonak Lake in Sikkim, which triggered a major GLOF in October 2023. Fresh satellite data shows rapid enlargement of moraine-dammed lakes, heightening the risk of new GLOF events.

Background

- GLOF = sudden release of water from a glacial lake when its natural dam (ice/moraine) fails.
- Triggers include glacial retreat, heavy rainfall, earthquakes, or avalanches.
- The Himalayas host >2,000 glacial lakes, of which 200 are considered potentially dangerous.
- Climate change is accelerating glacier melt, increasing lake volumes and risk.

Key Observations (2025)

1. South Lhonak Lake (Sikkim) has expanded by ~2.5 times since 2010.
2. Pare Chu & Subansiri basins (Arunachal) report new high-altitude lakes.
3. Monsoon cloudbursts in July–August 2025 have raised inflow into several lakes.
4. Downstream risk – Hydropower projects, bridges, and habitations are highly exposed.

Implications

Dimension	Implication
Environmental	Landscape instability; downstream floods devastate riverine ecosystems.
Social	High risk to Himalayan communities, roads, and military infrastructure.
Economic	Threat to hydropower projects in Sikkim, Arunachal, Bhutan.
Strategic	Army posts and border infrastructure vulnerable in Sino-Indian border zone.
Climate Change	Symbol of Himalayan cryosphere fragility under global warming.

Way Forward

1. Satellite-based early warning → expand NRSC monitoring.
2. Automatic lake-level sensors → connect to disaster control rooms.
3. Structural mitigation → controlled drainage, siphoning, check dams.
4. Zonation mapping → declare high-risk GLOF zones as “no-infrastructure” areas.
5. Community drills → preparedness at village and district levels.

X-Factors / Special Effects

- **PICTORIAL Flow:** Climate warming → Glacier retreat → Moraine-dammed lake expansion → Sudden breach → Downstream disaster.
- **TEXTUAL Anchors:**
 - South Lhonak Lake expanded 2.5× since 2010.
 - 200 Himalayan lakes classified “potentially dangerous.”
- **INNOVATION Acronym:** G-L-A-C-I-E-R → Glacial monitoring · Local drills · Alerts · Climate resilience · Infrastructure safety · Early warning · Risk governance.

Prelims Connect

Q. Consider the following about Glacial Lake Outburst Floods (GLOFs):

1. They occur when moraine- or ice-dammed lakes suddenly release water.
2. Climate change has increased their frequency in the Himalayas.
3. They pose risks to downstream infrastructure and communities.

Which are correct?

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

Answer: (d) 1, 2 and 3

Mains Connect

“Glacial lake outburst floods are no longer rare Himalayan hazards but recurring threats in the climate crisis era.” Examine with reference to Sikkim and Arunachal.

AGRICULTURE

Andhra Pradesh’s 100% Solarisation of Farm Power: A Green Energy Push for Agriculture

Why in News?

In August 2025, Andhra Pradesh announced an ambitious plan to fully solarise agricultural power supply within one year, targeting the conversion of 2.93 lakh farm pumps (1,163 MW capacity) under the PM-KUSUM scheme. If successful, it would make AP the first Indian state to achieve 100% solar farm power.

Background

- PM-KUSUM Scheme (2019): Promotes decentralised solar energy for agriculture through:
 - Solarisation of grid-connected pumps.
 - Installation of standalone solar pumps.
 - Decentralised solar plants near substations.
- AP’s Farm Power Challenge:
 - High subsidy burden on free farm electricity (~₹10,000 crore annually).

- Erratic grid supply and rising demand from paddy, sugarcane, and horticulture belts.
- **Climate Context:** Agriculture accounts for ~18% of India's CO₂ emissions, largely from energy use and fertilisers.

Key Features of the AP Solarisation Plan

1. Pump Solarisation
 - Conversion of all existing electric farm pumps to solar pumps within 12 months.
2. Decentralised Solar Plants
 - Establishment of 1,163 MW capacity solar plants near agricultural substations.
3. Financial Model
 - Mix of central subsidy (PM-KUSUM), state support, and farmer contribution.
4. Farmer Benefits
 - Assured daytime power (unlike erratic night supply).
 - Savings on input costs, with option to sell surplus to the grid.
5. Sustainability Element
 - Reduced dependence on thermal power.
 - Boosts India's renewable energy target (500 GW by 2030).

Implications

Dimension	Implication
Agricultural	Reliable daytime irrigation → better yields for paddy, groundnut, fruits.
Economic	Reduces subsidy burden; improves farmer income via surplus sale.
Environmental	Cuts carbon footprint of agriculture; supports climate commitments.
Governance	Model for other states in implementing PM-KUSUM effectively.
Social	Energy security reduces farmer distress and enhances rural stability.

Way Forward

1. Replicability – Other states (Rajasthan, Maharashtra, Karnataka) to adopt AP's model.
2. Battery Integration – Encourage storage to manage cloudy/rainy days.
3. Financial Innovations – Green bonds and farmer cooperatives for solar infra.
4. Agro-Solar Linkages – Combine solarisation with solar-based cold storages & food processing.
5. Skill Development – Train rural youth in solar pump installation and maintenance.

X-Factors / Special Effects

- **PICTORIAL Flow:** Farm Power Subsidy Burden → Solarisation Drive → Daytime Power + Grid Sale → Farmer Income + Climate Gains.
- **TEXTUAL Anchors:**
 - 2.93 lakh pumps (1,163 MW) to be solarised.

- First state to achieve 100% solar farm power (target: Aug 2026).

- **INNOVATION Model:** S-O-L-A-R → Sustainability · Output boost · Livelihood gains · Affordable energy · Resilient climate action.

Prelims Connect

Q. Which of the following is NOT a component of the PM-KUSUM scheme?

- (a) Solarisation of grid-connected pumps
- (b) Decentralised solar power plants
- (c) Construction of large hydro dams for irrigation
- (d) Standalone off-grid solar pumps

Answer: (c) Construction of large hydro dams for irrigation

Mains Connect

"Solarisation of agriculture is both an economic necessity and a climate imperative." Discuss with reference to Andhra Pradesh's plan to fully solarise farm power under PM-KUSUM.

Sharp Decline in Organic Farming Area in Haryana- Policy-Implementation Gap

Why in News?

In August 2025, Haryana reported a drastic fall in organic farming area—from ~50,000 acres a few years ago to just 1,357 acres in 2025-26, despite state and central incentives.

Background

- **Schemes in Place:** Paramparagat Krishi Vikas Yojana (PKVY), National Programme for Organic Production (NPOP).
- **Haryana's Push:** Earlier promoted organic clusters in Sirsa, Karnal, Kurukshetra.
- **Reason for Decline:** High conversion costs, poor market linkages, certification delays.

Key Issues

1. Farmers reverting to chemical farming for assured yields.
2. Certification process lengthy & costly.
3. Lack of MSP/premium pricing for organic produce.
4. Weak consumer awareness in domestic markets.

Implications

- **Economic:** Farmers unable to sustain losses during conversion.
- **Environmental:** Decline slows transition to sustainable agriculture.
- **Policy:** Highlights gap between subsidy distribution and ground outcomes.

Way Forward

1. Simplify certification (self-certification with digital tracking).
2. Provide MSP or premium support.
3. Strengthen organic markets & FPOs.

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4. Integrate organic farming with GI-tag branding.

X-Factor

Model: O-R-G-A-N-I-C → Outreach · Revenue support · GI branding · Awareness · Niche markets · Institutional aid · Consumer connect.

Mains Connect

"Organic farming in India faces more policy bottlenecks than ecological barriers." Analyse with reference to Haryana's recent decline.

Monsoon Crop Damage in Maharashtra - 5.5 Lakh Hectares Hit

Why in News?

In July–Aug 2025, heavy downpour damaged kharif crops across 5.5 lakh hectares in 17 districts of Maharashtra, affecting soybean, cotton, and maize.

Background

- **Monsoon Extremes:** IMD reported 30% excess rains in Marathwada & Vidarbha.
- **Schemes in Play:** Pradhan Mantri Fasal Bima Yojana (PMFBY), SDRF compensation.

Impact

1. Soybean (major kharif crop): lodged & destroyed.
2. **Cotton:** waterlogging → pest infestation risk.
3. **Maize & pulses:** rotting in low-lying areas.
4. **Livelihoods:** Small farmers hardest hit; debt concerns rise.

Implications

- **Food Security:** Reduced oilseed output may push edible oil imports.
- **Economy:** Insurance claims surge; fiscal burden on state.
- **Climate Resilience:** Re-emphasises need for climate-smart farming.

Way Forward

1. Strengthen crop insurance & timely payouts.
2. Promote flood-resilient crops (sorghum, millets).
3. Improve drainage infra in fields.
4. Scale up weather-based advisories for farmers.

X-Factor

Model: F-L-O-O-D → Forecasting · Land drainage · Organic soil health · Outlay for insurance · Diversification of crops.

Mains Connect

"Monsoon variability is the biggest risk to India's agricultural economy." Discuss in context of crop loss in Maharashtra 2025.

Farm Pond Safety in Karnataka - Governance for Rural Infrastructure

Why in News?

In August 2025, Karnataka mandated safety norms for farm ponds after reports of 45+ child deaths in accidental drownings. Subsidy eligibility for farm ponds will now depend on fencing, signage, and protective measures.

Background

- **Farm Ponds:** Key under watershed programmes for rainwater harvesting and irrigation support.
- **Issue:** Lack of safety features → accidents.

Key Measures Introduced

1. Compulsory fencing & warning boards.
2. Linking MGNREGA funding to compliance.
3. Panchayat-level monitoring of safety norms.

Implications

- **Social:** Protects rural children & cattle.
- **Agricultural:** Ensures ponds remain reliable irrigation assets.
- **Governance:** Shows agri-safety as policy frontier.

Way Forward

1. Standard safety design templates.
2. Training farmers on pond upkeep.
3. Insurance cover for accidents.

X-Factor

Model: S-A-F-E → Signage · Awareness · Fencing · Enforcement.

Mains Connect

"Infrastructure safety is as critical as productivity in agricultural schemes." Analyse with reference to Karnataka's farm pond policy.

Fertiliser Crisis in Uttar Pradesh - Supply Chain & Pricing Issues

Why in News?

Post-monsoon sowing in July–Aug 2025 led to a spike in fertiliser demand in UP, but dealers and farmers faced shortages, black-marketing, and inflated prices, triggering protests.

Background

- UP = largest consumer of urea in India.
- Government schemes: DBT in fertiliser subsidy, Nano urea push.

Key Issues

1. Black-marketing & hoarding in rural mandis.
2. Transport bottlenecks from warehouses to villages.
3. Price manipulation despite DBT subsidy.
4. Distrust in Nano-urea efficacy.

Implications

- **Economic:** Farmer costs rise → threatens sowing decisions.
- **Governance:** Weak enforcement of fertiliser control norms.
- **Social:** Rural unrest, farmer protests.

Way Forward

1. Strengthen fertiliser distribution via cooperatives.
2. GPS-based tracking of trucks.
3. Increase local Nano-urea trials before mandatory adoption.
4. Helpline/portal for farmer complaints.

X-Factor

Model: U-R-E-A → Uniform supply · Regulation · Efficiency monitoring · Affordability.

Mains Connect

"Fertiliser security is as critical as food security." Analyse in the context of the 2025 crisis in Uttar Pradesh.

Odisha Expands OUAT — Strengthening Agricultural Education & Research**Why in News?**

In August 2025, the Odisha government announced the expansion of the Odisha University of Agriculture & Technology (OUAT) with new campuses in Sambalpur, Mayurbhanj, Balangir, and Sonepur. The move aims to decentralise agri-education and promote research in fisheries, dairy, and allied sectors.

Background

- Established in 1962, OUAT is India's second oldest agri-university.
- Focus areas: crop improvement, animal husbandry, soil science, agro-forestry.
- Current push comes under NEP 2020 & ICAR Vision 2050 for integrating modern agri-tech with traditional knowledge.

Key Features of Expansion

1. **Regional Focus:** Campuses to specialise in paddy (Sambalpur), millets (Mayurbhanj), fisheries (Balangir), livestock (Sonepur).
2. **Skill Development:** Short-term courses for rural youth in agripreneurship, food processing, and climate-smart farming.
3. **Research-Extension Link:** Strengthen Krishi Vigyan Kendras (KVKs) for field-level transfer.
4. **Allied Sectors:** Special emphasis on blue economy & aquaculture.

Implications

- **Educational:** Expands outreach of scientific farming education.

- **Economic:** Creates agri-based jobs & rural entrepreneurship.
- **Policy:** Supports national millet mission & fisheries development.
- **Social:** Bridges rural skill gap in tribal belts.

Way Forward:

Enhance industry tie-ups, digital agriculture labs, and farmer-scientist connect.

X-Factor

Model: A-G-R-I → Allied focus · Green jobs · Regional hubs · Innovation.

Mains Connect

"Agri-education reforms are essential for doubling farmers' income and climate resilience." Discuss with reference to OUAT's 2025 expansion.

Uttar Pradesh's Bid for PM-Dhan Dhanne Krishi Yojana (PM-DDKY)**Why in News?**

In July 2025, Uttar Pradesh announced plans to secure the largest share in PM-DDKY, a ₹24,000 crore national scheme covering 1.7 crore farmers.

Background

- **PM-DDKY (2025):** Flagship scheme to boost irrigation, credit, crop insurance, and post-harvest infrastructure.
- **Focus:** Strengthen grain security + market reforms.
- **UP:** largest producer of wheat, sugarcane, milk, and potatoes.

Key Features of UP's Plan

1. Cluster Development – Special zones for sugarcane & paddy intensification.
2. Irrigation Expansion – Linking canals with groundwater recharge projects.
3. Digital Agri-Portals – E-mandis, farm credit apps, drone spraying facilities.
4. Infrastructure Push – Warehouses, cold storages, millet processing hubs.

Implications

- **Economic:** May raise state GSDP growth from agriculture by 2–3%.
- **Political:** Reinforces UP's role as India's food bowl.
- **Social:** Ensures income stability for small & marginal farmers.

Way Forward

Ensure transparency in fund allocation; address regional imbalances (Bundelkhand).

X-Factor

Model: D-H-A-N → Digital reforms · High-yield crops · Agri-infra · Nutrition security.

Mains Connect

"Mega agri-schemes often falter at implementation. Evaluate the potential and risks of PM-DDKY with special reference to Uttar Pradesh."

Farmers Protest Mandatory Nano-Urea in Rajasthan

Why in News?

In August 2025, farmers in Rajasthan staged protests against mandatory purchase of Nano-urea supplied by cooperative societies. They alleged the liquid fertiliser is being pushed despite poor yield results in arid conditions.

Background

- **Nano-Urea:** Developed by IFFCO, promoted as eco-friendly & efficient substitute for conventional urea.
- **Government Push:** Circulars mandated stocking/distribution; subsidies linked to adoption.
- **Farmer Concerns:** Reported crop stunting in wheat & bajra; lack of field trials in dry zones.

Key Issues

1. Policy Overreach – Farmers coerced into use.
2. Scientific Validity – Efficacy not uniformly tested across soil types.
3. Economic Impact – Higher cost per litre vs subsidised granular urea.
4. Trust Deficit – Weak extension support, farmers not convinced.

Implications

- **Agricultural:** Risk to food security if productivity falls.
- **Governance:** Highlights tension between innovation and farmer freedom.
- **Social:** Fuels rural unrest and erosion of trust in agri-reforms.

Way Forward

Independent trials in varied agro-climatic zones; farmer choice, not coercion; better extension services.

X-Factor

Model: N-A-N-O → Neutral trials · Awareness · Non-coercion · Opt-in adoption.

Mains Connect

"Agri-input innovations must balance environmental goals with farmer autonomy." Examine in context of Nano-urea protests in Rajasthan.

Agricultural Exports Surge - India's Expanding Global Footprint

Why in News?

India's agri exports touched USD 51.9 billion in 2024-25, growing by 5.8% in Q1 2025-26, with 24% increase in shipments to the US.

Background

- **Top Exports:** Rice, sugar, spices, marine products, cotton, oil meals.
- **Trade Policy Push:** Agri export policy 2018; new FTAs with Gulf, Africa, UK under negotiation.
- **Constraints:** WTO restrictions on subsidies; climate-related crop variability.

Key Trends

1. Diversification – Surge in processed food exports (ready-to-eat, frozen items).
2. Geographic Spread – Growth in US, UAE, ASEAN markets.
3. Value-Addition – Basmati rice + spices dominate high-value categories.
4. Sustainability Angle – Demand for organic & residue-free exports rising.

Implications

- **Economic:** Boosts forex, rural incomes, farmer FPOs.
- **Diplomatic:** Strengthens India's role as food security provider.
- **Policy:** Calls for balancing domestic inflation vs export earnings.

Way Forward

Focus on processed exports; invest in cold chains; expand GI branding globally.

X-Factor

Model: E-X-P-O-R-T → Earnings · X-markets diversification · Processing · Organic demand · Resilience · Trade diplomacy.

Mains Connect

"Agri-export growth must walk a tightrope between global ambition and domestic food security." Discuss with reference to India's 2025 export surge.

INTERNATIONAL RELATIONS

India-China Rapprochement: Resetting Ties Amid Border Tensions

Why in News?

In August 2025, Chinese Foreign Minister Wang Yi visited New Delhi, marking the highest-level engagement between India and China since the 2020 Galwan clashes. Both sides discussed LAC disengagement, trade revival, and multilateral cooperation, signalling cautious attempts at a diplomatic reset.

Background

- **Border Disputes:**
 - India-China share a 3,488 km long border, unresolved since 1962.
 - Multiple standoffs since Doklam (2017) and Galwan (2020) strained ties.

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Economic Context:

- China remains India's largest trading partner (~\$118 bn in FY25), despite political tensions.

Strategic Context:

- India wary of China's Belt & Road Initiative (BRI) and ties with Pakistan.
- China concerned about India's role in the Quad and Indo-Pacific security networks.

Key Outcomes of Wang Yi's Visit
1. Border Talks

- Agreement to accelerate Corps Commander-level dialogues for disengagement in remaining friction points.
- Commitment to maintain peace along the LAC.

2. Trade and Economy

- Discussions on reducing India's trade deficit (~\$83 bn).
- Exploring greater market access for Indian pharma and IT services in China.

3. Multilateral Cooperation

- Coordination within BRICS, SCO, and G20 forums on global governance, climate, and digital rules.

4. Security Sensitivities

- India raised concerns about Chinese naval activity in the Indian Ocean.
- China sought assurances on India's stance on Taiwan and the Quad.

Implications

Dimension	Implication
Strategic	A cautious thaw but no fundamental resolution of border dispute.
Economic	Potential for trade diversification, but deficit remains India's pressure point.
Regional Security	Dialogue prevents escalation, yet China-Pakistan nexus remains India's concern.
Diplomatic Balance	India's rapprochement seen as part of multi-alignment amid US tariff tensions.

Way Forward

- Border Confidence-Building – Expand hotlines, joint patrolling protocols, and troop disengagement.
- Trade Rebalancing – Push for Chinese imports of Indian pharma, IT, and agri-products.
- Regional Coordination – Engage via SCO/BRICS to moderate China's assertiveness.
- Strategic Preparedness – Maintain Quad and Indo-Pacific ties as balancing tools.
- Incremental Trust-Building – Use cultural and educational exchanges to ease hostility narratives.

X-Factors / Special Effects

- PICTORIAL Flow:** Border Tensions (2020) → Diplomatic Freeze → Wang Yi's Visit (2025) → Partial Reset → Strategic Uncertainty.
- TEXTUAL Anchors:**
 - India-China trade: \$118 bn (FY25), deficit \$83 bn.
 - LAC length: 3,488 km.
- INNOVATION Model:** R-E-S-E-T → Resolve border · Economic rebalancing · Strategic dialogue · Engagement in forums · Trust-building.

Prelims Connect

Q. India-China border disputes mainly involve which sectors?

- Arunachal Pradesh (Eastern), Ladakh (Western), Sikkim (Middle)
- Arunachal Pradesh & Nagaland only
- Jammu & Kashmir only
- Entire Northeast region

Answer: (a) Arunachal Pradesh (Eastern), Ladakh (Western), Sikkim (Middle)

Mains Connect

"India-China ties oscillate between cooperation and confrontation." Analyse the significance of Wang Yi's August 2025 visit in the broader context of border disputes, trade imbalance, and multilateral cooperation.

India's Strategic Pivot Amid US Tariff Tensions: Rebalancing with China, Russia, and Brazil
Why in News?

In August 2025, following the US administration's announcement of 25% tariffs on multiple imports, including from India, New Delhi began recalibrating its foreign policy. India intensified engagement with China, Russia, Brazil, and the Eurasian Economic Union (EAEU) to cushion the economic shock and preserve its strategic autonomy in global politics.

Background

- US-India Economic Ties:** US is India's largest trading partner (~\$190 bn, FY25). Tariff hikes threaten exports of IT services, textiles, gems & jewellery, and auto components.
- India's Multi-Alignment Policy:** Rooted in strategic autonomy, India has consistently avoided rigid alliances.
- Global Context:**
 - US protectionism → ripple effects on supply chains.
 - China seeking partners amid its own trade slowdown.
 - Russia-India oil and defence trade booming despite Western sanctions.
 - Brazil-India ties strengthening through BRICS+ on agriculture and climate.

Key Elements of India's Pivot**1. China Engagement**

- Wang Yi's visit (Aug 2025) → reopening trade and LAC dialogue.
- India eyeing access to Chinese markets for pharma and IT services.

2. Russia Factor

- NSA Doval confirmed President Putin's upcoming India visit.
- Oil imports from Russia crossed 2 mbpd, giving India energy security at discounted rates.

3. Brazil Connection

- PM Modi's Brazil visit during BRICS Summit advanced cooperation in biofuels, defence, and agriculture.

4. EAEU Trade Talks

- Formal negotiations launched for an India-EAEU FTA, covering energy, fertilizers, and connectivity corridors.

5. Global South Positioning

- India framing itself as a voice of the Global South, reducing dependence on Western markets and institutions.

Implications

Dimension	Implication
Economic	Diversifies trade partners, reducing vulnerability to US tariffs.
Strategic	Reinforces multi-alignment; prevents over-dependence on one bloc.
Geopolitical	Strengthens India's clout in BRICS+, SCO, and Global South platforms.
Risks	Over-engagement with Russia/China may strain India-US strategic trust.
Domestic	Exporters gain alternative markets but face transition costs.

Way Forward

1. Diversify Export Markets – Expand into Latin America, Africa, and ASEAN to reduce over-reliance on US/EU.
2. Deepen BRICS+ Cooperation – Build joint projects in energy, fintech, and digital governance.
3. Balance US Ties – Continue engagement with US in defence and tech, even amid trade frictions.
4. Energy Diplomacy – Secure long-term oil/gas contracts with Russia and EAEU.
5. Connectivity Push – Develop INSTC (International North-South Transport Corridor) for trade with Eurasia.

X-Factors / Special Effects

- **PICTORIAL Flow:** US Tariffs ↑ → India's Export Risk → Pivot to China, Russia, Brazil, EAEU → Global South Leadership.
- **TEXTUAL Anchors:**

- US-India trade: \$190 bn (FY25).
- Russian oil imports: 2 million barrels per day (2025).
- **INNOVATION Model:** P-I-V-O-T → Partnerships · Inclusive trade · Voice of Global South · Oil security · Technology cooperation.

Prelims Connect

Q. Which of the following countries are members of the Eurasian Economic Union (EAEU)?

- (a) Russia, Kazakhstan, Belarus, Armenia, Kyrgyzstan
- (b) Russia, Ukraine, Belarus, Georgia, Armenia
- (c) Russia, China, Mongolia, Kyrgyzstan, Kazakhstan
- (d) Russia, Tajikistan, Uzbekistan, Armenia, Kyrgyzstan

Answer: (a) Russia, Kazakhstan, Belarus, Armenia, Kyrgyzstan

Mains Connect

"Strategic autonomy in foreign policy means having multiple options, not dependence on one partner." Analyse India's pivot towards China, Russia, and Brazil in the wake of US tariff tensions.

India-Russia Strategic Renewal: Putin's Visit and the Next Chapter**Why in News?**

In August 2025, NSA Ajit Doval confirmed that Russian President Vladimir Putin will visit India later this year. The visit comes amid intensifying US-India trade tensions and signals a renewed push to strengthen the special and privileged strategic partnership between New Delhi and Moscow, focusing on energy, defence, and multipolarity.

Background

- **Historic Ties:** India-Russia relations date back to the Cold War, with Moscow as India's primary defence partner.
- **Post-Ukraine Dynamics:** Since 2022, Russia has pivoted towards Asia, while India increased oil imports from Russia despite Western sanctions.
- **Trade Surge:** Bilateral trade touched \$65 billion in FY25, dominated by energy flows.
- **Strategic Partnership:** Institutionalised in 2000, includes annual summits and cooperation in nuclear energy, defence, and space.

Key Themes of the Strategic Renewal**1. Energy Security**

- India importing 2 mbpd of Russian crude, making Russia India's top oil supplier.
- Talks on long-term LNG contracts and rupee-rouble trade mechanisms.

2. Defence Cooperation

- Focus on co-production and joint R&D (AK-203 rifles, BrahMos upgrades).

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- Discussions on reducing delays in spare parts supply.
- Potential new deals in submarines and fighter jet engines.

3. Nuclear & Space Collaboration

- Ongoing Kudankulam nuclear project expansion.
- Joint ventures in satellite launches under ISRO–Roscosmos cooperation.

4. Geopolitical Coordination

- Shared positions in BRICS, SCO, and UN reform debates.
- Support for a multipolar world order as counterweight to US–China rivalry.

5. Concerns

- India wary of Russia–China strategic closeness.
- Payment issues under sanctions complicating energy transactions.

Implications

Dimension	Implication
Energy	Russian crude secures affordable supply; reduces India's import bills.
Defence	Co-production reduces dependency and strengthens Atmanirbhar Bharat.
Geopolitics	Reinforces India's multi-alignment posture amid US tensions.
Risks	Over-reliance on Russian energy/defence may expose India to sanction risks.
Strategic Balance	Maintaining ties with Russia helps India hedge against China's rise.

Way Forward

1. Diversify Energy Ties – Secure LNG and renewables cooperation, not just oil.
2. Defence Modernisation – Push for technology transfer rather than just hardware imports.
3. Financial Innovation – Strengthen rupee-based trade settlements to bypass sanctions.
4. Strategic Autonomy – Balance Russia partnership with ties to US, EU, and Quad.
5. People-to-People Links – Expand educational, cultural, and tech exchanges beyond energy/defence.

X-Factors / Special Effects

- **PICTORIAL Flow:** Energy Imports ↑ → Defence Co-production → Nuclear & Space Projects → Multipolar Coordination.
- **TEXTUAL Anchors:**
 - Bilateral trade: \$65 bn in FY25.
 - Russian oil imports: 2 mbpd (2025).
- **INNOVATION Model:** R-U-S-S-I-A → Resources · Upgraded defence · Strategic balance · Space cooperation · Investment flows · Autonomy preservation.

Prelims Connect

Q. Kudankulam Nuclear Power Plant, built with Russian assistance, is located in which state?

- (a) Andhra Pradesh
- (b) Tamil Nadu
- (c) Gujarat
- (d) Maharashtra

Answer: (b) Tamil Nadu

Mains Connect

"Energy security and defence cooperation remain the bedrock of India–Russia relations, but new challenges demand recalibration." Discuss the significance of Putin's 2025 visit to India in the context of strategic renewal.

India–Brazil Bilateral at BRICS Summit: Expanding the South-South Partnership

Why in News?

During the August 2025 BRICS Summit in Brazil, Prime Minister Narendra Modi held bilateral talks with Brazilian President Luiz Inácio Lula da Silva, strengthening cooperation in trade, agriculture, defence, and renewable energy. The meeting reaffirmed India–Brazil ties as a key pillar of South–South cooperation and Global South leadership.

Background

- **Historical Ties:** India and Brazil established diplomatic relations in 1948. Both are part of BRICS, IBSA, and G20, sharing views on UN reform, climate justice, and multipolarity.
- **Trade Relations:**
 - Bilateral trade ~ \$15 billion (2024–25).
 - India exports: pharma, chemicals, engineering goods.
 - Brazil exports: crude oil, sugar, soybean, and aircraft.
- **Strategic Context:**
 - Brazil leads in biofuels and agriculture.
 - India strong in IT, pharma, and space cooperation.
 - Both nations coordinate within WTO and climate negotiations.

Key Highlights of the Bilateral Talks**1. Trade & Investment**

- Target to double bilateral trade to \$30 billion by 2030.
- Exploring preferential trade agreement (PTA) between India and Mercosur.

2. Agriculture & Food Security

- Brazil to share expertise in soybean, meat processing, and agri-technology.
- India to expand exports of spices, rice, and pharmaceuticals.

3. Defence & Aerospace

- Talks on joint production of aircraft components.

- India exploring procurement of Brazilian Embraer jets.

4. Energy & Climate Cooperation

- Collaboration on biofuels, ethanol blending, and renewable energy.
- Both countries stressed climate justice and fair carbon transition.

5. Multilateral Coordination

- Joint push for UN Security Council reforms to secure permanent seats for both.
- Coordination on Global South issues in BRICS, IBSA, and G20.

Implications

Dimension	Implication
Economic	Enhances South–South trade, diversifying beyond US/EU dependence.
Agriculture	Knowledge exchange boosts food security and sustainability.
Strategic	Expands defence ties, reducing over-reliance on traditional partners.
Climate Diplomacy	Strengthens joint bargaining power on climate finance and technology.
Global South	Positions India and Brazil as co-leaders of the developing world.

Way Forward

- Fast-Track Mercosur–India PTA – Reduce tariffs and expand trade in agri and pharma.
- Biofuel Alliance – Create an India–Brazil-led ethanol and biofuel initiative for Global South.
- Defence Technology – Explore Embraer–HAL collaboration for joint aircraft development.
- Cultural Diplomacy – Expand people-to-people ties through student and tourism exchanges.
- UNSC Reform Push – Coordinate lobbying for permanent membership in UN Security Council.

X-Factors / Special Effects

- PICTORIAL Flow:** Trade + Agriculture + Defence + Climate → Stronger India–Brazil Axis → Global South Leadership.
- TEXTUAL Anchors:**
 - Bilateral trade: \$15 bn (2024–25) → Target: \$30 bn (2030).
 - Shared platforms: BRICS, IBSA, G20.
- INNOVATION Model:** B-R-A-Z-I-L → Biofuels · Regional trade · Agriculture · Zero-carbon push · Investment flows · Leadership in Global South.

Prelims Connect

- Q. India, Brazil, and South Africa form part of which trilateral grouping aimed at South–South cooperation?
- (a) BASIC

- (b) IBSA
(c) BRICS
(d) SCO

Answer: (b) IBSA

Mains Connect

"India and Brazil are natural partners in leading the Global South." Analyse the significance of the Modi–Lula bilateral talks during the BRICS Summit 2025 in advancing trade, agriculture, defence, and climate cooperation.

Foreign Policy Drift Debate: India's Gaza Abstention and the Call for Parliamentary Oversight

Why in News?

In August 2025, the Congress party accused the government of a "foreign policy drift", citing India's recent abstention at the UN General Assembly on a Gaza ceasefire resolution. The opposition demanded a parliamentary debate on foreign policy, raising questions on transparency and accountability in India's global positioning.

Background

- India's Traditional Policy:** Rooted in non-alignment and strategic autonomy, balancing ties with West Asia, the US, and global multilateral institutions.
- Gaza Crisis:** Ongoing conflict has polarised international opinion.
 - Many Global South nations voted for the ceasefire.
 - India abstained, citing need for a balanced approach considering its ties with Israel, Palestine, and the US.
- Domestic Debate:** Opposition views abstention as eroding India's credibility as a moral voice in international peace diplomacy.

Key Issues Raised

1. Abstention at UN

- Critics argue abstention weakens India's legacy of supporting Palestine and peace in West Asia.
- Government defends decision as consistent with India's balanced Middle East policy.

2. Parliamentary Oversight

- Congress and other opposition parties demanded debate, arguing foreign policy decisions lack parliamentary scrutiny.
- India does not have a Parliamentary Committee on Foreign Affairs with binding oversight powers (unlike US/UK).

3. Policy Drift Allegation

- Opposition claimed India is increasingly reactive instead of proactive, particularly in Gaza, South Asia, and with major powers.

4. Government's Position

- MEA clarified abstention aligns with national interest, balancing ties with Israel (defence partner), Palestine (traditional support), and the US (strategic partner).

Implications

Dimension	Implication
Diplomatic	Abstention preserves flexibility but risks perception of inconsistency.
Domestic Politics	Raises demand for greater accountability in foreign policy decision-making.
Strategic	Reflects India's cautious stance amid volatile West Asia dynamics.
Global Image	India seen less as a peace champion, more as a strategic balancer.

Way Forward

1. Parliamentary Engagement – Establish structured discussions on foreign policy for transparency.
2. Middle East Balance – Maintain support for two-state solution while safeguarding Israel partnership.
3. Proactive Diplomacy – Revive India's image as a voice for peace in UN forums.
4. Institutional Reforms – Consider creation of a Parliamentary Foreign Affairs Committee.
5. Global South Leadership – Align actions with India's stated ambition of being a leader of the Global South.

X-Factors / Special Effects

- **PICTORIAL Flow:** UN Gaza Resolution → India Abstains → Opposition Criticism → Debate on Oversight → Policy Recalibration.
- **TEXTUAL Anchors:**
 - Bilateral trade: Israel (\$10 bn), Palestine (minimal), Gulf states (\$180 bn).
 - India's abstention contrasted with majority Global South vote in favour.
- **INNOVATION Model:** D-R-I-F-T → Diplomatic balancing · Reactive stance · Institutional gaps · Foreign policy recalibration · Transparency demand.

Prelims Connect

- Q. Which of the following West Asian countries is India's largest trading partner?
- (a) Israel
 - (b) Saudi Arabia
 - (c) UAE
 - (d) Qatar

Answer: (c) UAE

Mains Connect

"India's abstention at the UN on Gaza reflects strategic balancing but raises concerns about policy drift." Critically analyse the domestic and international implications of India's stance, and discuss whether foreign policy needs stronger parliamentary oversight.

India-US Relations at a Crossroads: Trade Frictions and Strategic Uncertainty

sWhy in News?

In August 2025, the US administration announced 25% tariffs on a wide range of imports, including Indian goods. This move, coupled with growing divergences on strategic issues, has placed the India-US partnership at a crossroads, raising questions on how New Delhi should balance economic frictions with security cooperation.

Background

● Economic Ties:

- US is India's largest trading partner (~\$190 bn in FY25).
- Major exports: IT services, textiles, gems, pharmaceuticals, auto components.

● Strategic Convergence:

- Cooperation in Quad, defence tech, counter-terrorism, and Indo-Pacific security.

● Recent Strains:

- US tariff hikes on Indian textiles, steel, and IT services.
- Frictions over data localisation, digital taxation, and visa rules.
- Divergences on Russia (oil imports) and Gaza abstention at UN.

Key Flashpoints

1. Tariff War Impact

- Exports to US (18% of India's merchandise exports) face competitiveness loss.
- MSMEs and IT sector hit hardest.

2. Strategic Mistrust

- US unease over India's oil imports from Russia despite sanctions.
- India wary of US inconsistency in trade and visa policies.

3. Tech & Defence Cooperation

- Ongoing GE-HAL jet engine deal, but US restrictions on high-tech transfers remain.
- Cybersecurity collaboration limited by trust deficits.

4. Geopolitical Balancing

- India balancing US ties with Russia, China, and BRICS+ as part of multi-alignment.

Implications

Dimension	Implication
Economic	Tariff hikes threaten India's export growth and job creation.
Strategic	Trust deficits risk slowing defence and tech cooperation.
Geopolitical	India's multi-alignment tested; over-dependence on US seen as risky.

Domestic Politics	Tariff shocks affect MSMEs, creating pressure on govt's trade policy.
Long-term	Partnership resilience depends on managing divergences constructively.

Way Forward

1. Trade Diplomacy – Engage US through WTO-compatible negotiations; explore mini trade deal.
2. Export Diversification – Expand into Latin America, EU, Africa to reduce dependence on US.
3. Strengthen Quad Pillars – Use climate, tech, and health security cooperation to build trust.
4. Tech Partnerships – Push for liberalised visa regimes and co-development in AI, space, semiconductors.
5. Strategic Patience – Continue cooperation in defence/Indo-Pacific while cushioning tariff shocks.

X-Factors / Special Effects

- **PICTORIAL Flow:** US Tariffs ↑ → Indian Exports ↓ → Strategic Trust Issues → Multi-alignment Response.
- **TEXTUAL Anchors:**
 - US share in India's merchandise exports: ~18%.
 - Bilateral trade: \$190 bn (FY25).
- **INNOVATION Model:** C-R-O-S-S → Cooperation in Quad · Resilient trade · Oil security · Strategic tech · Shared Indo-Pacific goals.

Prelims Connect

Q. The "Quad" grouping consists of which countries?

- (a) India, US, Japan, Australia
- (b) India, US, UK, France
- (c) India, US, Russia, Japan
- (d) India, US, ASEAN, Australia

Answer: (a) India, US, Japan, Australia

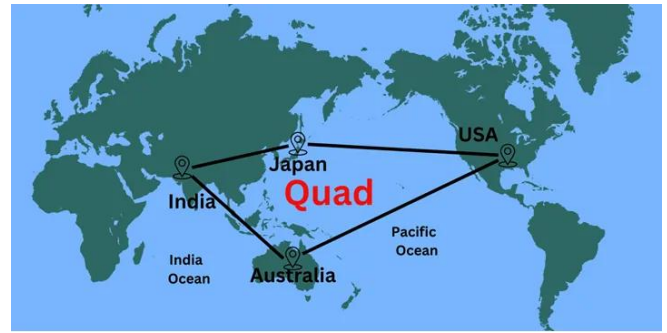
Mains Connect

"India-US ties represent both promise and paradox." Critically analyse the recent strains in the economic and strategic dimensions of India-US relations, and suggest a roadmap to strengthen this partnership.

The Quad's Evolution: Beyond Security to Trade and Climate Cooperation

Why in News?

In August 2025, Quad members — India, US, Japan, and Australia — agreed to expand their agenda beyond maritime security, focusing on trade facilitation, supply chain resilience, and climate cooperation. This shift reflects the Quad's attempt to establish itself as a comprehensive strategic partnership rather than a purely security-oriented grouping.



Background

- **Origins:** The Quad was first conceptualised in 2004 for tsunami relief coordination, and formally revived in 2017 as a security dialogue amid rising Chinese assertiveness.
- **Security Core:** Focus on Indo-Pacific maritime security, freedom of navigation, and counter-balancing China.
- **Evolving Mandate:** Expanded into infrastructure, tech, vaccines, and critical minerals post-Covid.
- **Present Context:** With US tariffs destabilising trade flows and climate challenges mounting, Quad seeks to broaden cooperation.

Key Highlights of the 2025 Shift

1. Trade and Supply Chains

- New framework for critical minerals trade (lithium, cobalt, rare earths).
- Plans to build resilient semiconductor and EV supply chains.

2. Climate Cooperation

- Launch of a Quad Green Transition Fund to invest in renewables and green hydrogen.
- Shared technology projects on offshore wind and solar energy grids.

3. Technology Collaboration

- Push for cooperation in AI governance, 6G research, and cybersecurity norms.
- Establishment of Quad Digital Taskforce.

4. Maritime Security Continuity

- Ongoing Malabar naval exercise to remain cornerstone of defence coordination.
- Quad continues to affirm free and open Indo-Pacific as its guiding vision.

Implications

Dimension	Implication
Strategic	Quad evolving into a multi-dimensional bloc beyond military lens.
Economic	Enhances India's role in supply chain diversification away from China.
Climate	Positions Quad as a leader in climate financing and green tech cooperation.
Geopolitical	Reinforces Quad as a soft-power counter to China's BRI.
Domestic	India gains access to green technologies, minerals, and investment flows.

Way Forward

1. Institutionalise Quad+ – Expand to include ASEAN and EU partners for wider legitimacy.
2. Balance Security & Economics – Ensure Quad doesn't lose its security edge while broadening agenda.
3. Boost India's Role – Use Quad to secure technology transfers and green financing.
4. Address Perceptions – Project Quad as inclusive and non-military, unlike NATO.
5. Synchronise with G20/BRICS – Avoid duplication; align Quad's economic agenda with multilateral forums.

X-Factors / Special Effects

- **PICTORIAL Flow:** Security Dialogue → Supply Chains → Climate Fund → Tech Cooperation → Comprehensive Quad.
- **TEXTUAL Anchors:**
 - Quad launched tsunami relief (2004) → revived (2017).
 - Quad Green Transition Fund announced (2025).
- **INNOVATION Model:** Q-U-A-D → Quality supply chains · Unified climate action · Advanced tech · Defence cooperation.

Prelims Connect

Q. The "Quad" grouping is primarily focused on which geographical region?

- (a) Atlantic (b) Indo-Pacific
(c) Arctic (d) Middle East

Answer: (b) Indo-Pacific

Mains Connect

"The Quad is no longer just a security dialogue; it is a comprehensive partnership shaping the Indo-Pacific order." Analyse the Quad's evolution and its significance for India in the current geopolitical landscape.

Neighbourhood First: India's Outreach to Sri Lanka, Afghanistan, and Bangladesh

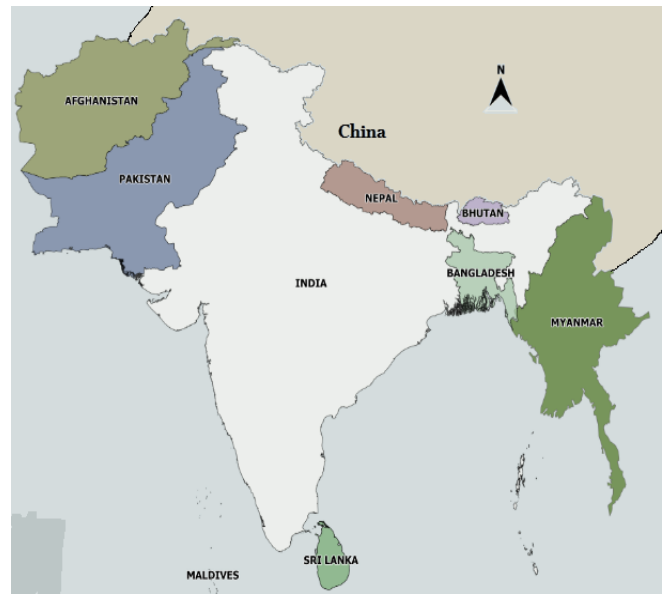
Why in News?

In July–August 2025, India stepped up its neighbourhood diplomacy, with high-level visits and aid initiatives in Sri Lanka, Afghanistan, and Bangladesh. The focus was on economic recovery, connectivity, and security cooperation, reaffirming India's "Neighbourhood First" policy as the cornerstone of its foreign relations.

Background

- **Sri Lanka:** Facing post-crisis recovery, Colombo seeks sustained financial and energy support from India.
- **Afghanistan:** India cautiously re-engages for humanitarian aid and regional security coordination after Taliban's continuing dominance.
- **Bangladesh:** Political transition and upcoming elections raise stakes in India's ties with Dhaka, especially on water and trade issues.

- **Policy Context:** Stability in the neighbourhood is vital for India's own security, connectivity, and regional leadership.

**Key Elements of India's Outreach****1. Sri Lanka**

- India extended a fresh \$1.2 bn credit line for fuel and essentials.
- Progress on Trincomalee energy hub and Colombo port infrastructure.
- Discussions on fishermen issue and cultural cooperation.

2. Afghanistan

- India announced additional humanitarian aid of 25,000 MT wheat through Chabahar.
- Quiet engagement with Taliban leadership on counter-terrorism guarantees.
- Security focus on preventing Afghan soil being used by anti-India terror groups.

3. Bangladesh

- Talks on Teesta water sharing resumed after long stalemate.
- Cross-border connectivity expanded through rail and power grid integration.
- Cooperation in blue economy and Bay of Bengal fisheries.

Implications

Country	Implication for India
Sri Lanka	Prevents Chinese dominance; ensures India's role in Colombo's recovery and ports.
Afghanistan	Maintains foothold in Central Asia; counters Pakistan's influence.
Bangladesh	Strengthens connectivity; secures partner in Bay of Bengal regional security.

Way Forward

1. Sustained Economic Support – Balance aid with long-term investments in infra and energy.
2. Security Vigilance – Ensure Taliban commitments translate into action against terror networks.
3. Regional Integration – Use BIMSTEC and BBIN frameworks for connectivity and trade.
4. Water Diplomacy – Resolve water-sharing disputes with Bangladesh in a mutually beneficial manner.
5. Countering China – Expand presence in infrastructure and digital connectivity to limit Chinese influence.

X-Factors / Special Effects

- **PICTORIAL Flow:** Neighbourhood Instability → India's Outreach → Economic Aid + Connectivity → Strategic Leverage.
- **TEXTUAL Anchors:**
 - Sri Lanka credit line: \$1.2 bn (2025).
 - Wheat aid to Afghanistan: 25,000 MT.
 - Bilateral trade with Bangladesh: \$18 bn (2024–25).
- **INNOVATION Model:** N-E-A-R → Neighbourhood First · Economic aid · Anti-terror coordination · Regional integration.

Prelims Connect

- Q. The BBIN initiative is a sub-regional grouping comprising:
- (a) Bangladesh, Bhutan, India, Nepal
 - (b) Bangladesh, Burma, India, Nepal
 - (c) Bhutan, Burma, India, Nepal
 - (d) Bangladesh, Bhutan, India, Sri Lanka

Answer: (a) Bangladesh, Bhutan, India, Nepal

Mains Connect

"India's security and prosperity are linked to neighbourhood stability." Discuss the significance of India's recent outreach to Sri Lanka, Afghanistan, and Bangladesh under the Neighbourhood First policy.

India-EAEU Trade Talks: Expanding the Eurasian Pivot

Why in News?

In August 2025, India formally launched Free Trade Agreement (FTA) negotiations with the Eurasian Economic Union (EAEU), aiming to deepen connectivity, energy cooperation, and market access. This move is part of India's broader strategy to diversify trade partners amid US tariff tensions and enhance its presence in the Eurasian heartland.

Background

- **EAEU Composition:** Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan.
- **India's Engagement:** Talks began in 2017 but stalled due to sanctions on Russia and pandemic disruptions.

Strategic Context:

- Eurasia holds vast reserves of oil, gas, fertilizers, and rare earths.
- India seeks to strengthen the International North-South Transport Corridor (INSTC) for access to Central Asia.
- Pivot comes at a time when India is facing uncertainties in Western markets due to protectionism.

Key Features of the FTA Negotiations

1. Energy & Resources

- Long-term supply agreements in crude oil, LNG, coal, and fertilizers.
- Cooperation in nuclear energy and renewables.

2. Market Access

- Indian pharma, IT services, textiles, and auto sectors to gain access to EAEU markets.
- Reduction in tariffs on agricultural products.

3. Connectivity Corridors

- INSTC and Chabahar Port integration into EAEU logistics.
- Discussion on digital corridors for fintech and e-commerce.

4. Geopolitical Balancing

- Strengthens India–Russia strategic bond.
- Positions India as a player in Central Asia, countering Chinese BRI influence.

5. Challenges

- Western sanctions on Russia may complicate trade payments.
- Weak institutional capacity of EAEU compared to EU or ASEAN.

Implications

Dimension	Implication
Energy Security	Secures reliable and discounted fuel and fertilizer supply.
Trade Diversification	Reduces India's over-reliance on US/EU markets.
Connectivity	Strengthens INSTC as an alternative to China's BRI.
Strategic	Reinforces India's Eurasian footprint amid shifting geopolitics.
Risks	Exposure to sanction regimes and Russia–West rivalry.

Way Forward

1. Sanction-Resilient Mechanisms – Strengthen rupee-rouble and local currency settlements.
2. Private Sector Involvement – Encourage Indian industry to explore untapped Central Asian markets.
3. Synchronise with INSTC – Speed up infrastructure development for seamless transport.

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4. Balanced Strategy – Avoid over-dependence on Russia, diversify within EAEU.
5. Institutional Strengthening – Push for dispute resolution and transparency frameworks in FTA.

X-Factors / Special Effects

- **PICTORIAL Flow:** US Tariffs → India Diversifies → EAEU FTA Talks → Energy + Connectivity Gains → Eurasian Pivot.
- **TEXTUAL Anchors:**
 - EAEU membership: Russia, Belarus, Kazakhstan, Armenia, Kyrgyzstan.
 - Bilateral trade India-EAEU: ~\$45 bn in 2024-25, mostly energy.
- **INNOVATION Model:** E-A-S-T → Energy security · Access to markets · Strategic balance · Transport corridors.

Prelims Connect

Q. Which of the following countries are members of the Eurasian Economic Union (EAEU)?

1. Russia
2. Kazakhstan
3. Belarus
4. Armenia
5. Uzbekistan

Select the correct answer:

- (a) 1, 2, 3, 4 (b) 1, 2, 3, 5
(c) 1, 3, 4, 5 (d) 2, 4, 5 only

Answer: a) 1, 2, 3, 4

Mains Connect

"Eurasia offers India both opportunities and challenges." Analyse the significance of India's FTA negotiations with the EAEU in the context of energy security, connectivity, and strategic autonomy.

India's Oil Diplomacy: Balancing Energy Security and Strategic Pressures

Why in News?

In August 2025, India intensified its oil diplomacy by expanding imports from Russia, Brazil, and OPEC+ members, even as the US increased pressure to reduce Russian crude purchases. This reflects India's pragmatic approach of securing affordable energy while maintaining strategic autonomy in a turbulent global oil market.

Background

- **India's Energy Dependence:**
 - Imports 85% of its crude oil and 55% of its natural gas requirements.
 - Oil import bill: \$120 billion in FY25.
- **Russia Factor:** Post-Ukraine sanctions, India became the largest buyer of Russian crude at discounted prices (2 mbpd in 2025).

- **Brazil Factor:** Expanding cooperation in biofuels and deep-sea crude exploration.
- **OPEC+ Dynamics:** India coordinating with Saudi Arabia, UAE, and Iraq to ensure stable supply despite production cuts.

Key Elements of India's Oil Diplomacy**1. Russia Partnership**

- Continued imports despite Western sanctions.
- Discussions on long-term contracts and rupee-rouble settlement systems.

2. Brazil Collaboration

- Agreements on ethanol blending, renewable energy, and deep-water exploration.
- Brazil emerging as a partner in India's biofuel alliance.

3. OPEC+ Engagement

- India pressing for stable pricing to safeguard energy security.
- High-level talks with Saudi Arabia & UAE on expanding strategic oil reserves in India.

4. Balancing US Pressure

- US criticises India's Russian oil purchases but continues strategic defence and tech ties with New Delhi.
- India positions purchases as purely economic, not political.

5. Green Energy Parallel

- While securing crude, India simultaneously pushes for energy transition — biofuels, EVs, and hydrogen.

Implications

Dimension	Implication
Energy Security	Russian & OPEC+ supplies ensure affordability and stability.
Strategic Autonomy	India demonstrates independence in foreign policy despite Western pressure.
Economic	Lower crude costs ease inflation and fiscal burden.
Climate Diplomacy	Brazil partnership strengthens India's leadership in biofuel alliance.
Geopolitics	Balancing act between US ties and Russia-Brazil-OPEC partnerships.

Way Forward

1. Diversify Import Sources – Increase purchases from Latin America (Brazil, Guyana) and Africa.
2. Strengthen Strategic Reserves – Expand SPR capacity to buffer against shocks.
3. Local Currency Trade – Develop rupee-based oil settlement systems to bypass sanctions.
4. Accelerate Energy Transition – Scale up investments in renewables, biofuels, and hydrogen.
5. Diplomatic Balancing – Engage US diplomatically while safeguarding national energy interests.

X-Factors / Special Effects

- **PICTORIAL Flow:** High Oil Dependence → Russian Discounts + Brazil Biofuels + OPEC+ Coordination → Strategic Autonomy.
- **TEXTUAL Anchors:**
 - Import dependence: 85% crude, 55% gas.
 - Russian imports: 2 mbpd (2025).
- **INNOVATION Model:** O-I-L → Options diversification · Independence in strategy · Long-term transition.

Prelims Connect

- Q. Which of the following countries are members of OPEC+ but not of OPEC?
- Russia and Mexico
 - Saudi Arabia and UAE
 - Iraq and Kuwait
 - Iran and Venezuela

Mains Connect

"Energy security lies at the intersection of diplomacy and economics." Analyse India's oil diplomacy with Russia, Brazil, and OPEC+ in 2025, and discuss how it balances strategic autonomy with external pressures.

India and the Gaza Conflict: Balancing Strategic Partnerships with Humanitarian Diplomacy

Why in News?

In August 2025, India abstained from voting on a UN General Assembly resolution calling for a Gaza ceasefire, triggering domestic and global debate. While India cited the need for a balanced approach, critics argue this undermines India's traditional support for Palestinian statehood. Simultaneously, India stepped up humanitarian aid to Gaza, reaffirming its dual-track diplomacy in West Asia.

**Background**

- **India's Traditional Stance:** Historically, India supported Palestinian self-determination while maintaining ties with Israel.
- **Shift Since 1992:** Normalisation of ties with Israel, leading to deep defence and tech partnerships.
- **Present Dilemma:**
 - Israel = key defence & innovation partner (\$10 bn trade).
 - Palestine = long-standing diplomatic legacy.
 - Gulf = vital energy and diaspora ties (\$180 bn trade; 9 million Indians).
- **UN Abstention (2025):** India abstained citing "need for direct negotiations between parties" while continuing humanitarian support.

Key Elements of India's Position**1. Abstention at UN**

- India avoided taking sides, aiming to safeguard ties with both Israel and Arab world.

2. Humanitarian Aid

- Announced \$25 million aid package for Gaza, including medical supplies and food relief.

3. Diaspora Diplomacy

- Balanced approach also reflects need to ensure safety of Indians in Gulf and Israel.

4. Strategic Balancing

- Maintains defence and technology cooperation with Israel.
- Upholds long-standing advocacy for a two-state solution.

5. Global South Perception

- India's abstention contrasted with many Global South nations voting in favour of ceasefire.

Implications

Dimension	Implication
Diplomatic	Balancing Israel & Palestine while protecting Gulf ties.
Strategic	Ensures defence partnership with Israel continues unhindered.
Humanitarian	Aid to Gaza projects India's soft power and moral voice.
Geopolitical	Abstention risks perception of inconsistency in Global South leadership.
Domestic	Sparked parliamentary debate, opposition accusing govt of "policy drift."

Way Forward

1. Reaffirm Two-State Commitment – Publicly reiterate India's stance on Palestine.
2. Strengthen Humanitarian Role – Scale up aid via UNRWA and Indian NGOs.

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3. Strategic Depth with Gulf – Deepen ties with Saudi, UAE, and Qatar for energy and diaspora security.
4. Quiet Diplomacy with Israel – Use backchannels to nudge restraint in Gaza conflict.
5. Global South Positioning – Align humanitarian efforts with South–South solidarity narratives.

X-Factors / Special Effects

- **PICTORIAL Flow:** UN Abstention → Humanitarian Aid → Balancing Israel & Palestine → Safeguarding Gulf Ties.
- **TEXTUAL Anchors:**
 - Indian diaspora in Gulf: 9 million.
 - India's aid to Gaza: \$25 million (Aug 2025).
- **INNOVATION Model:** B-A-L-A-N-C-E → Bilateralism · Aid diplomacy · Link with diaspora · Alliance with Gulf · Neutral posture · Ceasefire advocacy · Energy security.

Prelims Connect

Q. India is a member of which UN body dealing with Palestinian refugee relief?

- (a) UNRWA (b) UNICEF
(c) UNEP (d) UNHCR

Mains Connect

"India's West Asia policy is a balancing act between realism and idealism." Analyse India's abstention on the Gaza resolution alongside its humanitarian aid, and discuss its implications for strategic ties with Israel, Palestine, and the Gulf.

ENVIRONMENT**Fencing Tiger Reserves: Conservation Solution or Ecological Risk?****Why in News?**

In August 2025, the Uttar Pradesh Forest Department proposed amending the Tiger Conservation Plan to allow fencing of tiger reserves and wildlife corridors. While the move is intended to reduce human–wildlife conflict, it has triggered debate among ecologists and conservationists about its ecological consequences and legality.

Background

- **India's Tiger Strength:** As per the 2022 census, India hosts **3,167-3,925** tigers (showcasing a growth rate of **6.1%** per year) ~75% of the global population.
- **Wildlife Corridors:** Essential for ensuring genetic diversity, dispersal, and prey-predator balance.
- **Conservation Framework:**
 - Wildlife Protection Act, 1972
 - National Tiger Conservation Authority (NTCA) guidelines prohibit permanent barriers that fragment habitats.

- **Recent Trigger:** Rising cases of tiger straying into villages in UP's Pilibhit, Dudhwa, and Katarniaghat reserves, causing human casualties and livestock losses.

Key Features of the Proposal**1. Fencing Reserves**

- Proposal to install solar-powered electric fencing in sensitive zones.
- Aim: restrict tiger movement into human settlements.

2. Corridor Control

- Wildlife corridors (Pilibhit–Dudhwa–Nepal Terai) may also see selective fencing.

3. Safety Measures

- Prevent retaliatory killings of tigers by villagers.
- Protect farmers from economic losses due to cattle predation.

4. Legal Complications

- Requires clearance from NTCA and MoEFCC.
- May face judicial review if it violates principles of free-ranging wildlife ecology.

Concerns Raised by Ecologists

- **Habitat Fragmentation:** Fences disrupt tiger dispersal, leading to inbreeding and genetic weakness.
- **Ecological Imbalance:** Prey species trapped in smaller zones may face over-predation.
- **Conflict Relocation:** Instead of solving, fencing may push conflict to unfenced zones.
- **Legal Precedent:** Could open floodgates for fencing in other reserves, undermining Project Tiger philosophy.

Implications

Dimension	Implication
Conservation	Fencing risks undermining India's success story of tiger recovery.
Human Security	May temporarily reduce conflict but risks displacement of conflict elsewhere.
Ecological	Breaks gene flow and reduces long-term resilience of tiger populations.
Governance	Tests the balance between conservation and rural livelihoods.
International	India's global image as a leader in tiger conservation could be dented.

Way Forward

1. Science-led Conflict Management – Use camera traps, GPS collars, and early warning systems.
2. Compensation Schemes – Speedy payouts for livestock and crop damage.
3. Eco-Sensitive Planning – Promote buffer-zone livelihoods (eco-tourism, solar fencing of farmlands, not reserves).
4. Corridor Protection – Secure wildlife corridors through land-use regulation, not fencing.

5. Community Involvement – Involve locals in joint forest management and conservation benefits.

X-Factors / Special Effects

- **PICTORIAL Flow:** Tiger Conservation Success → Rising Conflict → Fencing Proposal → Risk of Fragmentation → Alternative Solutions.
- **TEXTUAL Anchors:**
 - Tiger population: 3,167 (2022).
 - India hosts 75% of global tigers.
- **INNOVATION Model:** F-E-N-C-E → Fragmentation risk · Ecological imbalance · Negotiation with communities · Corridor protection · Eco-sensitive solutions.

Prelims Connect

- Q. Which body is empowered under the Wildlife (Protection) Act, 1972 to oversee tiger reserves in India?
- Central Zoo Authority
 - National Tiger Conservation Authority (NTCA)
 - Indian Board for Wildlife
 - Ministry of Tribal Affairs

Answer: b) National Tiger Conservation Authority (NTCA)

Mains Connect

"Fencing tiger reserves may reduce conflict, but risks undermining ecological integrity." Critically analyse the recent Uttar Pradesh proposal in light of India's tiger conservation strategy.

Cloud Seeding in Delhi: Can Artificial Rain Solve Air Pollution?

Why in News?

In August 2025, Delhi received approval from the DGCA and Ministry of Environment to conduct India's first large-scale cloud seeding trials during the upcoming winter pollution season. The initiative aims to test whether artificial rain can disperse toxic smog particles, offering temporary relief from Delhi's notorious air pollution.

How does artificial rain work?

- 1 Clouds are injected with salts like silver or potassium iodide through air or generators on ground
- 2 The salts acts as catalyst to combine water droplets in clouds
- 3 Water droplets convert into snowflakes and while falling, reaches the melting point
- 4 Causing rainfall



Background

• What is Cloud Seeding?

- A form of weather modification where silver iodide, sodium chloride, or dry ice particles are sprayed into clouds to stimulate rainfall.
- Requires sufficient cloud cover (ideally >70% humidity).

• Delhi's Air Crisis:

- Every winter, Delhi's AQI touches "severe" (400+) levels due to stubble burning, vehicular emissions, and meteorological inversion.
- In 2023 and 2018, limited experimental trials were attempted but with minimal results.

• Global Examples:

- China (Beijing Olympics 2008), UAE, and US states (Colorado, Nevada) use cloud seeding primarily for water augmentation, not pollution.

Key Features of the 2025 Delhi Trials

1. Scale & Timing

- Planned between November–December 2025, coinciding with peak smog period.

2. Technology

- Collaboration with IIT Kanpur and international experts.
- Use of aircraft fitted with flare-based seeding systems.

3. Expected Impact

- Temporary washout of PM2.5 and PM10 particles from the atmosphere.
- Relief expected to last 24–48 hours, depending on meteorological conditions.

4. Concerns Raised

- Limited cloud cover during peak smog season may make seeding ineffective.
- Environmental risks from chemicals (esp. silver iodide) debated.
- High cost (₹8–10 crore per trial round).

Implications

Dimension	Implication
Short-term Relief	May temporarily lower AQI, benefitting public health.
Long-term Limits	Cannot substitute structural reforms (stubble mgmt, clean energy, EVs).
Technological Leap	Positions India in climate-modification research domain.
Environmental Risks	Possible soil/water contamination from chemical agents.
Governance	Raises ethical and legal questions on artificial weather modification.

Way Forward

1. Science-led Monitoring – Conduct rigorous studies on effectiveness and environmental impacts.
2. Integrated Strategy – Use cloud seeding as a last-mile emergency tool, not a primary solution.
3. Pollution Control First – Prioritise biomass burning alternatives, EV adoption, and industrial emission norms.
4. Regional Cooperation – Coordinate with Punjab, Haryana, and UP to reduce crop burning.
5. Public Awareness – Ensure citizens understand seeding is a temporary relief measure only.

X-Factors / Special Effects

- **PICTORIAL Flow:** Smog Crisis → Cloud Seeding Aircraft → Artificial Rain → Temporary AQI Relief → Long-term Solutions Needed.
- **TEXTUAL Anchors:**
 - Delhi AQI in winter: 400–500 (Severe).
 - Trial cost: ₹8–10 crore per round.
- **INNOVATION Model:** R-A-I-N → Research-based · Artificially induced · Interim relief · Not a substitute.

Prelims Connect

- Q. Which of the following chemicals is most commonly used in cloud seeding operations?
- (a) Potassium permanganate
 - (b) Silver iodide
 - (c) Calcium carbonate
 - (d) Magnesium oxide

Answer: (b) Silver iodide**Mains Connect**

“Artificial rain can offer temporary relief but not structural solutions to air pollution.” Examine the potential and limitations of Delhi’s cloud seeding trials in tackling its winter smog crisis.

Mumbai’s Record Rainfall: Urban Floods and the Resilience Challenge**Why in News?**

In August 2025, Mumbai recorded nearly 900 mm of rainfall within 36 hours, among the heaviest downpours in the city’s history. The deluge caused transport paralysis, flight cancellations, power cuts, and waterlogging, once again exposing the fragile state of urban flood management in India’s financial capital.

Background

- **Climate Trends:** IMD reports indicate a 40% increase in extreme rainfall events over the Konkan belt in the last two decades, linked to climate change and Arabian Sea warming.
- **Urban Context:**
 - Mumbai’s natural drainage (Mithi River, creeks, mangroves) heavily encroached.

- Built-up areas + concretisation reduce percolation.
- Outdated stormwater system designed for 25 mm/hour capacity, inadequate for current extremes.
- **Past Disasters:**
 - 2005 floods killed ~1,000 people.
 - Recurrent incidents in 2017, 2019, 2021, and now 2025 show systemic vulnerability.

Key Issues Exposed**1. Drainage Infrastructure Gaps**

- Brihanmumbai Storm Water Drain (BRIMSTOWAD) project still incomplete after two decades.

2. Encroachment on Blue-Green Spaces

- Mangrove destruction, wetland filling, and real estate expansion reducing water absorption zones.

3. Transport Paralysis

- Suburban rail (lifeline of 8 million commuters daily) disrupted.
- Airport and metro services suspended for hours.

4. Public Health Risks

- Outbreak threats of leptospirosis, dengue, cholera due to stagnant water.

5. Governance Challenges

- Poor inter-agency coordination between municipal, state, and central disaster agencies.

Implications

Dimension	Implication
Urban Planning	Calls for reimagining city resilience beyond outdated infrastructure.
Climate Adaptation	Highlights urgency of city-level climate resilience strategies.
Public Health	Flood-borne diseases raise healthcare burdens.
Economic	Business losses in financial capital ripple nationally.
Governance	Accountability issues in delayed infrastructure projects.

Way Forward

1. Blue-Green Infrastructure – Restore mangroves, wetlands, and urban lakes as natural sponges.
2. Stormwater System Upgrade – Complete BRIMSTOWAD with capacity for 100 mm/hour rainfall.
3. Smart Early Warning Systems – Deploy AI-enabled flood prediction and SMS-based alerts.
4. Resilient Urban Design – Promote permeable pavements, rain gardens, and rooftop harvesting.
5. Integrated Governance – Create a Mumbai Flood Resilience Authority for coordinated action.

X-Factors / Special Effects

- **PICTORIAL Flow:** Climate Change → Extreme Rainfall ↑ → Urban Floods → Infrastructure Stress → Resilience Reforms Needed.

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TEXTUAL Anchors:

- Rainfall: 900 mm in 36 hours (Aug 2025).
- BRIMSTOWAD project pending since 1990s.

- **INNOVATION Model:** F-L-O-O-D → Forecasting · Land-use planning · Outfall upgrade · Open space restoration · Disaster governance.

Prelims Connect

Q. Which of the following is NOT a natural drainage feature of Mumbai?

- (a) Mithi River
- (b) Ulhas River
- (c) Powai Lake
- (d) Mahim Creek

Answer: (b) Ulhas River

Mains Connect

"Urban floods are less about excess rainfall and more about governance failures." Discuss in the context of Mumbai's August 2025 floods and suggest pathways for building climate-resilient cities.

Uttarakhand Flash Floods 2025: A Climate Warning from the Himalayas
Why in News?

In August 2025, devastating flash floods struck Uttarakhand, triggered by a sudden cloudburst and glacial melt in the upper reaches of Chamoli and Rudrapur districts. The floods caused dozens of casualties, large-scale displacement, and infrastructure damage, once again highlighting the fragility of the Himalayan ecosystem in the face of climate change.

Background
Climatic Vulnerability:

- The Himalayas are warming at twice the global average, accelerating glacial retreat and snowmelt.
- Increase in extreme rainfall events due to climate change-induced monsoon variability.

Past Precedents:

- 2013 Kedarnath floods (~5,000 deaths).
- 2021 Chamoli GLOF (Glacial Lake Outburst Flood).
- Repeated incidents underscore systemic unpreparedness.

Anthropogenic Stress:

- Hydropower projects, road widening, and unregulated tourism amplify disaster risks.

Key Drivers of the 2025 Floods
1. Cloudburst

- IMD recorded 150 mm+ rain within 2 hours, overwhelming local rivers.

2. Glacial Melt Contribution

- Melting snow and unstable moraine-dammed lakes contributed to surge.

3. Deforestation & Land Use Change

- Loss of forest cover and slope destabilisation worsened runoff.

4. Infrastructure Stress

- Hydropower dams and Char Dham road widening sites suffered structural damage.

5. Disaster Preparedness Gaps

- Early warning systems failed to alert villages in time.

Implications

Dimension	Implication
Humanitarian	Loss of lives, displacement, and livelihood destruction.
Ecological	Fragile alpine ecosystems further destabilised.
Economic	Heavy damage to roads, power projects, and tourism infra.
Governance	Exposed gaps in disaster preparedness and environmental regulation.
Strategic	Questions on sustainability of infra projects in border Himalayan states.

Way Forward

1. Glacial Lake Mapping – Use remote sensing to monitor 2,000 Himalayan glacial lakes for breach risk.
2. Climate-Smart Infrastructure – Halt or redesign high-risk hydropower and road projects.
3. Early Warning Systems – Integrate AI-based forecasting and satellite-triggered alarms.
4. Eco-Sensitive Tourism – Limit carrying capacity in pilgrimage and trekking circuits.
5. Community-Based Preparedness – Train local panchayats and NGOs in disaster drills.

X-Factors / Special Effects

- **PICTORIAL Flow:** Cloudburst + Glacial Melt → Flash Flood → Human & Infra Losses → Policy Lessons.

TEXTUAL Anchors:

- Himalayan warming: 2× global average.
- Rainfall: 150 mm+ in 2 hours.

- **INNOVATION Model:** F-L-A-S-H → Forecasting · Local capacity · Adaptive infra · Sustainable tourism · Himalayan resilience.

Prelims Connect

Q. A Glacial Lake Outburst Flood (GLOF) is most likely to occur when:

- (a) Ice sheets expand in winter.
- (b) Moraine-dammed lakes fail suddenly.
- (c) Monsoon winds weaken.
- (d) Permafrost areas freeze.

Answer: (b) Moraine-dammed lakes fail suddenly.

Mains Connect

"The 2025 Uttarakhand floods highlight the ecological fragility of the Himalayas." Examine the role of climate change and human activity in exacerbating disasters, and suggest a sustainable Himalayan development framework.

Dadumajra Dumpsite: A Case Study in Urban Waste Governance Failure

Why in News?

In August 2025, the National Green Tribunal (NGT) issued notices to the Chandigarh Municipal Corporation and the Chandigarh Pollution Control Committee over the ecological and public health crisis caused by the Dadumajra dumpsite. The site, overflowing with over 8 lakh tonnes of legacy waste, has become a symbol of India's wider challenges in solid waste management (SWM).

Background

- **The Dumpsite:** Spread over 45 acres, Dadumajra was originally designed for engineered sanitary landfill, but has been functioning as an open dump for decades.
- **Health Hazards:** Local residents report skin infections, respiratory issues, and groundwater contamination.
- **Legal Framework:**
 - Solid Waste Management Rules, 2016 mandate segregation, processing, and scientific landfill disposal.
 - Swachh Bharat Mission–Urban 2.0 emphasises 100% waste processing.
- Trigger for NGT Action: Media reports on rising leachate seepage, methane fires, and failure of bio-mining operations.

Key Issues Identified

1. **Legacy Waste Crisis**
 - Nearly 8 lakh tonnes of untreated waste piled up.
 - Methane emissions causing underground fires and explosion risk.
2. **Segregation Failure**
 - Only ~30% of city waste is segregated at source, violating SWM Rules.
3. **Health–Ecology Nexus**
 - Leachate polluting groundwater and wetlands.
 - Vector-borne disease spread (dengue, malaria).
4. **Governance Deficit**
 - Poor coordination between municipal bodies and contractors.
 - Inadequate budget allocation for waste-to-energy plants.
5. **Judicial Push**
 - NGT has asked for time-bound remediation plans, including biomining and landfill capping.

Implications

Dimension	Implication
Public Health	Exposure to toxic leachate and methane increases disease burden.
Environmental	Soil, water, and air pollution degrade Chandigarh's urban ecology.
Governance	Highlights failures in compliance with SWM Rules 2016.
Judicial	Reinforces NGT's role as an environmental watchdog.
Replicability	Dadumajra crisis mirrors urban dumpsites in Delhi, Mumbai, Patna, Lucknow.

Way Forward

1. Accelerated Bio-mining – Use mechanical segregation & composting to clear legacy waste.
2. Decentralised SWM – Ward-level compost pits and Material Recovery Facilities (MRFs).
3. Segregation at Source – Strict penalties for non-compliance by households & institutions.
4. Waste-to-Energy Plants – But only with strict emission standards (avoid dioxin/furan release).
5. Citizen Participation – Behavioural campaigns to ensure household segregation and recycling.

X-Factors / Special Effects

- **PICTORIAL Flow:** Urban Waste Generation → Dumpsite Overflow → Methane + Leachate → Health & Ecology Crisis → NGT Intervention.
- **TEXTUAL Anchors:**
 - Legacy waste: 8 lakh tonnes at Dadumajra.
 - Segregation compliance: ~30% only.
- **INNOVATION Model:** W-A-S-T-E → Waste reduction · Accountability · Segregation · Technology · Environmental justice.

Prelims Connect

- Q. Which of the following rules govern solid waste management in India?
- (a) Solid Waste Management Rules, 2016
 - (b) Bio-Medical Waste Rules, 2018
 - (c) E-Waste Rules, 2022
 - (d) Hazardous Waste Rules, 2019

Answer: (a) Solid Waste Management Rules, 2016

Mains Connect

"Urban dumpsites are not just an eyesore but an ecological time bomb." Discuss in the context of the Dadumajra landfill crisis and India's broader challenges in solid waste management.

Jojari River Pollution: Toxic Waters Threatening Rajasthan's Agro-Ecology

Why in News?

In August 2025, environmental activists and local farmers in Pali and Jodhpur districts of Rajasthan intensified protests against the rising industrial pollution of the Jojari River, a tributary of the Luni. The river, once a lifeline for agriculture and livestock, has turned into a toxic stream of chemical effluents, raising concerns about ecological health, food safety, and rural livelihoods.

Background

- **The River:** Jojari originates in the Pali district and merges into the Luni River, flowing through semi-arid Rajasthan.
- **Industries:** Pali is a hub of textile dyeing, printing, and chemical units, many of which release untreated effluents.
- **Pollution Profile:**
 - High levels of chromium, azo dyes, heavy metals.
 - Severe BOD (Biochemical Oxygen Demand) and COD (Chemical Oxygen Demand) values, indicating toxic load.
- **Past Interventions:**
 - Multiple NGT directives for effluent treatment plants.
 - Establishment of CETPs (Common Effluent Treatment Plants) — but plagued by inefficiency.

Key Issues

1. Agricultural Impact

- Irrigation with polluted water has degraded soil quality.
- Crop yields of wheat, mustard, and pulses drastically reduced.
- Toxic residues entering food chain.

2. Livestock & Human Health

- Cattle deaths reported due to contaminated water.
- Villagers facing skin ailments, cancers, and gastrointestinal disorders.

3. Aquatic Ecology

- Complete collapse of fish population in Jojari.
- Downstream wetlands affected.

4. Regulatory Failure

- CETPs underfunded and non-compliant with discharge standards.
- Weak enforcement by Rajasthan State Pollution Control Board.

5. Judicial Oversight

- NGT and Rajasthan High Court repeatedly pulled up authorities, but implementation remains weak.

Implications

Dimension	Implication
Agriculture	Soil fertility and agro-economy under severe stress.

Health	Rising cases of chronic diseases in villages along Jojari.
Ecological	Collapse of aquatic life and biodiversity loss in semi-arid ecosystem.
Governance	Highlights industrial lobbying vs regulatory enforcement gap.
Socio-economic	Threatens rural livelihoods in already water-scarce Rajasthan.

Way Forward

1. Strict CETP Compliance – Upgrade and monitor CETPs with real-time data.
2. Zero Liquid Discharge (ZLD) – Mandate ZLD technology in textile clusters.
3. Farmer Compensation – Relief package for crop and cattle losses.
4. Community Monitoring – Involve panchayats in water quality surveillance.
5. River Restoration Plan – Bioremediation, constructed wetlands, and revival of riverine ecology.

X-Factors / Special Effects

- **PICTORIAL Flow:** Industrial Effluents → Jojari Toxic Stream → Soil & Crop Loss → Health Crisis → Need for Restoration.
- **TEXTUAL Anchors:**
 - Pollutants: Chromium, azo dyes, heavy metals.
 - CETPs often operate at <50% efficiency.
- **INNOVATION Model:** C-L-E-A-N → Compliance · Livelihood security · Ecological restoration · Accountability · Nutrient-safe farming.

Prelims Connect

Q. The Luni River, into which Jojari drains, flows through which Indian state?

- (a) Gujarat (b) Rajasthan
(c) Madhya Pradesh (d) Haryana

Answer: (b) Rajasthan

Mains Connect

"Industrial prosperity without ecological responsibility leads to irreversible damage." Discuss in the context of Jojari River pollution and its impact on Rajasthan's agro-ecological health.

EU's Carbon Border Adjustment Mechanism: India's Trade Challenge and Climate Diplomacy

Why in News?

In August 2025, India raised concerns at the EU-India Trade and Technology Council (TTC) about the Carbon Border Adjustment Mechanism (CBAM), which imposes a carbon tax

on imports into the EU. India argued that such measures are protectionist in nature and could severely impact its exports, particularly steel, cement, aluminium, and fertilizers, while undermining the principle of climate justice.

Background

• What is CBAM?

- An EU regulation effective from 2026, imposing tariffs on imports based on their embedded carbon emissions.
- Covers high-carbon sectors: iron & steel, cement, fertilizers, aluminium, electricity, hydrogen.

• India–EU Trade Context:

- EU = India's 3rd largest trading partner (\$130 bn, FY25).
- 27% of India's steel exports go to the EU.

• India's Concerns:

- Violates UNFCCC principle of Common But Differentiated Responsibilities (CBDR).
- Risks \$8–10 bn export loss annually.

Key Issues for India

1. Economic Impact

- Exporters may lose competitiveness in EU markets.
- MSMEs in supply chains face indirect compliance costs.

2. Climate Justice Debate

- India argues developed nations, having historically emitted more, cannot shift burden onto developing economies.

3. Technology Barrier

- Indian industry still dependent on coal-based energy, though transitioning to renewables.

4. Diplomatic Pushback

- India exploring WTO challenge, arguing CBAM = disguised protectionism.

5. Domestic Readiness

- Need to decarbonise steel, cement, and fertilizer sectors through hydrogen, renewables, and carbon capture.

Implications

Dimension	Implication
Economic	Risk of \$8–10 bn export loss; could accelerate domestic green transition.
Diplomatic	Strengthens India's case for climate justice in global negotiations.
Environmental	May push India towards low-carbon manufacturing.
Geopolitical	Raises Global South vs EU/West divide on climate responsibility.
Governance	Necessitates inter-ministerial coordination (Commerce + MoEFCC + Power).

Way Forward

1. Green Transition in Industry – Invest in green hydrogen, CCUS, and renewable energy integration.
2. WTO Challenge – Use trade law to argue CBAM violates non-discrimination principles.
3. South–South Coalition – Align with BRICS & G77 to push back against unilateral carbon tariffs.
4. Domestic Carbon Market – Operationalise India's Carbon Credit Trading Scheme (CCTS) for credibility.
5. Just Transition Financing – Demand climate finance & technology transfer from developed countries.

X-Factors / Special Effects

- **PICTORIAL Flow:** EU CBAM → Carbon Tax on Imports → India's Export Risk → WTO & Climate Justice Push → Domestic Green Transition.
- **TEXTUAL Anchors:**
 - EU = India's 3rd largest trading partner (~\$130 bn).
 - CBAM sectors: steel, cement, aluminium, fertilizers, hydrogen, electricity.
- **INNOVATION Model:** C-A-R-B-O-N → Climate justice · Adjustment costs · Resilience in exports · Border tax dispute · Opportunity for transition · Net-zero pathways.

Prelims Connect

- Q. The Carbon Border Adjustment Mechanism (CBAM), recently in the news, is an initiative of which organisation?
- (a) WTO (b) UNFCCC
(c) EU (d) OECD

Answer: (c) EU

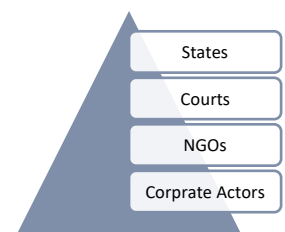
Mains Connect

"The EU's Carbon Border Adjustment Mechanism is both a trade challenge and an opportunity for India's green transition." Discuss in light of India's export competitiveness, climate justice arguments, and domestic decarbonisation strategy.

ICJ on Climate Change: Recognising Biodiversity as a Legal Actor

Why in News?

In August 2025, the International Court of Justice (ICJ) issued an advisory opinion on climate change, where it recognised biodiversity and ecosystems as legal actors with intrinsic rights. This landmark opinion has major implications for global environmental governance and could reshape India's environmental jurisprudence.



Background

- **Trigger:** The UN General Assembly requested ICJ's advisory opinion on states' obligations for climate change mitigation and protection of biodiversity.
- **Core Opinion:**
 - States must treat biodiversity as an active legal entity — not merely as a resource.
 - Failure to prevent ecological harm may constitute violation of international law.
- **Indian Context:**
 - India's Constitution (Art. 48A & 51A(g)) already provides for environmental protection.
 - Supreme Court has expanded Right to Life (Art. 21) to include clean environment (MC Mehta cases).
 - Recent Uttarakhand High Court judgments recognised Ganga & Yamuna as legal persons (though later stayed).

Key Elements of ICJ's Opinion**1. Ecosystem Personhood**

- Forests, rivers, wetlands can be considered rights-bearing actors in international law.

2. State Responsibility

- Countries must adopt precautionary principles and prevent transboundary ecological harm.

3. Climate Justice Lens

- Burden of responsibility higher for historical emitters.

Biodiversity protection framed as part of human rights obligations.**4. Legal Consequences**

- Opens door for international litigation by affected states/communities.
- Strengthens case for ecocide as an international crime.

Implications

Dimension	Implication
Global Governance	Sets new precedent for legal personhood of nature in international law.
India's Jurisprudence	Supports expansion of Article 21 & environmental PILs in Indian courts.
Climate Diplomacy	Reinforces India's stance on climate justice and ecological responsibility.
Socio-Economic	Could affect infrastructure, mining, and industrial projects in eco-zones.
Civil Society	Empowers NGOs and local communities to litigate for ecosystems' rights.

Way Forward for India

1. Legal Recognition – Consider a framework for recognising ecosystem rights nationally.

2. Biodiversity Laws Upgrade – Strengthen Wildlife Protection Act & Biological Diversity Act in line with ICJ principles.
3. Institutional Innovation – Create "Guardians of Nature" councils at state level.
4. Integrate in Diplomacy – Use ICJ opinion to bolster India's voice in CBD, COP, and G20 climate platforms.
5. Judicial Activism – Indian courts may increasingly cite ICJ's opinion in environmental PILs.

X-Factors / Special Effects

- **PICTORIAL Flow:** ICJ Opinion → Nature as Legal Actor → State Responsibility → India's Legal Evolution.
- **TEXTUAL Anchors:**
 - ICJ = highest UN judicial body.
 - Art. 48A: "State shall protect and improve environment."
 - Art. 21: SC interpretation → Right to life = right to healthy environment.
- **INNOVATION Model:** N-A-T-U-R-E → Nature personhood · Accountability of states · Transboundary duty · Universal rights · Responsibility of emitters · Environmental justice.

Prelims Connect

- Q. The concept of "legal personhood" for rivers was first recognised in India by which High Court?
- (a) Allahabad HC (b) Uttarakhand HC
(c) Delhi HC (d) Bombay HC

Answer: (b) Uttarakhand HC**Mains Connect**

"The ICJ's advisory opinion recognising biodiversity as a legal actor represents a paradigm shift in global environmental law." Critically evaluate its implications for India's environmental governance and climate diplomacy.

Banmahotsav 2025: Mass Plantation Drive for Ecological Restoration in West Bengal**Why in News?**

West Bengal launched its annual Banmahotsav campaign, planting over 2 crore saplings across districts. This year's focus was on mangrove restoration in the Sundarbans, urban greening in Kolkata, and agroforestry in tribal belts, reinforcing India's ecological restoration goals under the UN Decade on Ecosystem Restoration (2021–2030).



Background

- **Banmahotsav:** Initiated in 1950 by K.M. Munshi, then Union Agriculture Minister, to encourage mass tree planting.
- **Present Context:** India has pledged to restore 26 million hectares of degraded land by 2030 (Bonn Challenge).
- **West Bengal's Strategy:** Combines plantation drives with livelihood generation for local communities.

Key Features of Banmahotsav 2025**1. Mangrove Plantations**

- 40 lakh saplings planted in Sundarbans delta to counter cyclones & rising sea levels.

2. Urban Greening

- Roadside and rooftop plantations in Kolkata and Howrah to reduce heat-island effect.

3. Agroforestry Push

- Distribution of fruit-bearing plants to tribal and small farmers for dual ecological-economic benefit.

4. Community Participation

- Self-help groups and schools involved in plantation drives.
- Digital app launched for geo-tagging saplings to monitor survival rates.

Implications

Dimension	Implication
Ecological	Restores degraded land, strengthens Sundarbans' resilience.
Climate	Enhances carbon sinks, aiding India's net-zero 2070 target.
Economic	Agroforestry improves farm income and food security.
Urban Governance	Urban greening reduces air pollution and heat stress.
Social	Citizen engagement builds eco-consciousness.

Way Forward

1. **Post-Plantation Care** – Ensure survival through watering, fencing, and local monitoring.
2. **Link with MNREGA** – Employ rural labour in plantation and maintenance work.
3. **Climate Finance** – Access Green Climate Fund (GCF) for large-scale mangrove restoration.
4. **Urban Policy Integration** – Include urban forest patches in city master plans.
5. **Scientific Selection** – Use native species adapted to local ecosystems.

X-Factors / Special Effects

- **PICTORIAL Flow:** Sapling Plantation → Mangrove Revival + Urban Greening + Agroforestry → Climate & Livelihood Benefits.
- **TEXTUAL Anchors:**
 - India's target: 26 million ha restoration by 2030.
 - Saplings in WB (2025): 2 crore.

- **INNOVATION Model:** P-L-A-N-T → Participation · Livelihoods · Adaptation · Native species · Tracking survival.

Prelims Connect

Q. The Banmahotsav initiative in India was first launched in:

- (a) 1947 (b) 1950
(c) 1952 (d) 1960

Answer: (b) 1950

Mains Connect

"Mass plantation drives are necessary but insufficient unless linked to ecological restoration and community livelihood models." Analyse with reference to West Bengal's Banmahotsav 2025.

Nilgiriscape 2025: Reviving Grasslands and Indigenous Knowledge in the Nilgiris

Why in News?

In August 2025, ecologists and local communities in Tamil Nadu launched Nilgiriscape 2025, a project aimed at restoring native grasslands in the Nilgiri Biosphere Reserve (NBR). The initiative seeks to reverse decades of degradation caused by exotic plantations (wattle, eucalyptus, tea) and promote indigenous conservation practices for long-term ecological balance.

**Background**

- **Nilgiri Biosphere Reserve:** India's first biosphere reserve (1986), part of the Western Ghats UNESCO World Heritage Site.
- **Ecological Degradation:**
 - Conversion of grasslands into commercial tea/coffee plantations.
 - Invasion by exotic species like eucalyptus and wattle.
- **Biodiversity Significance:**
 - Home to Nilgiri tahr (state animal of TN), lion-tailed macaque, and numerous endemic orchids.
 - Grasslands critical for water recharge of rivers like Bhavani, Moyar, Kabini.

Key Features of Nilgiriscape 2025**1. Grassland Restoration**

- Removal of exotic plantations and reintroduction of native grasses (Chrysopogon, Arundinella).

2. Indigenous Knowledge Integration

C.C. AUGUST '25

- Involvement of Toda, Irula, and Kurumba tribes in ecological monitoring.

3. Water Security

- Grassland revival to enhance spring recharge and perennial river flows.

4. Wildlife Habitat Protection

- Focus on corridors for Nilgiri tahr, elephants, and gaur.

5. Community Livelihoods

- Eco-tourism and grassland-based crafts to support local communities.

Implications

Dimension	Implication
Ecological	Grassland revival restores biodiversity and prevents invasive spread.
Hydrological	Enhances water security for Tamil Nadu, Kerala, Karnataka river systems.
Cultural	Revives indigenous tribal role in ecosystem stewardship.
Climate	Grasslands act as carbon sinks and reduce wildfire risk.
Governance	Model for community-scientist partnership in ecological restoration.

Way Forward

1. Policy Support – Integrate Nilgiriscape into National Mission on Himalayan & Western Ghats Ecosystems.
2. Scientific Monitoring – Use drones, GIS, and biodiversity indices to track progress.
3. Invasive Control – Regular uprooting of eucalyptus/wattle and bio-control measures.
4. Eco-Tourism Regulation – Prevent over-commercialisation of fragile ecosystems.
5. Replication – Extend model to Shola-grassland mosaics across Western Ghats.

X-Factors / Special Effects

- **PICTORIAL Flow:** Exotic Plantations → Grassland Loss → Nilgiriscape Intervention → Water & Biodiversity Gains.
- **TEXTUAL Anchors:**
 - Nilgiri Biosphere Reserve = first biosphere reserve in India (1986).
 - Key species: Nilgiri tahr, lion-tailed macaque.
- **INNOVATION Model:** G-R-A-S-S → Grassland revival · River recharge · Adaptive governance · Species protection · Sustainable livelihoods.

Prelims Connect

- Q. The Nilgiri Biosphere Reserve is part of which global conservation programme?
- (a) Man and Biosphere (MAB) Programme
 - (b) REDD+ Mechanism
 - (c) Ramsar Convention
 - (d) UNCCD

Answer: (a) Man and Biosphere (MAB) Programme



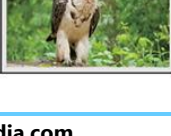
Mains Connect

"Grasslands are as critical as forests for ecological stability." Analyse this statement in the context of Nilgiriscape 2025 and the conservation challenges of the Nilgiri Biosphere Reserve.

Vulture Tagging in Thar Desert: Tracking Raptors to Save Ecosystems

Why in News?

In August 2025, the Wildlife Institute of India (WII) and Rajasthan Forest Department began a two-year GPS-tagging study on vultures in the Desert National Park (DNP), Thar Desert. The project aims to track vulture movement, breeding, and mortality patterns to aid raptor conservation in one of India's most fragile arid ecosystems.

Sr. No.	Name of the Vulture Species	IUCN status	Pictorial Representation
1.	Oriental White-backed Vulture (Gyps Bengalensis)	Critically Endangered	
2.	Slender-billed Vulture (Gyps Tenuirostris)	Critically Endangered	
3.	Long-billed Vulture (Gyps Indicus)	Critically Endangered	
4.	Egyptian Vulture (Neophron Percnopterus)	Endangered	
5.	Red-Headed Vulture (Sarcogyps Calvus)	Critically Endangered	
6.	Indian Griffon Vulture (Gyps Fulvus)	Least Concerned	
7.	Himalayan Griffon (Gyps Himalayensis)	Near Threatened	
8.	Cinereous Vulture (Aegypius Monachus)	Near Threatened	
9.	Bearded Vulture or Lammergeier (Gypaetus Barbatus)	Near Threatened	

Background

• Vulture Crisis in India:

- Between the 1990s and 2007, India lost >95% of its vulture population due to diclofenac poisoning.
- Four critically endangered species in India: White-rumped Vulture, Slender-billed Vulture, Indian Vulture, Red-headed Vulture.

• Desert National Park (DNP):

- Known for Great Indian Bustard (GIB), harriers, eagles, and vultures.
- Arid climate makes vultures vital for carrion disposal and disease control.

• Previous Efforts:

- Vulture Safe Zones in Uttarakhand, Assam.
- Ban on veterinary diclofenac (2006).

Key Features of the 2025 Study

1. GPS Tagging

- Lightweight solar-powered transmitters fitted on vultures.
- Tracks daily flight paths, foraging ranges, and roosting sites.

2. Mortality Monitoring

- Identifies causes of death (poisoning, electrocution, habitat loss).

3. Breeding Ecology

- Records nesting success rates in cliffs and arid scrublands.

4. Community Engagement

- Awareness drives in villages to prevent carcass poisoning.

5. Policy Relevance

- Data will feed into India's Action Plan for Vulture Conservation (2020–2025).

Implications

Dimension	Implication
Ecological	Vultures ensure ecosystem health by preventing disease spread.
Scientific	GPS data will fill critical gaps in raptor ecology in arid zones.
Conservation	Supports creation of Rajasthan Vulture Safe Zone.
Socio-cultural	Helps change perception of vultures as "pests" to ecological guardians.
Policy	Strengthens evidence-based wildlife conservation planning.

Way Forward

- Expand Tagging – Scale up to multiple states beyond Rajasthan.
- Strengthen Vulture Safe Zones – Ban toxic NSAIDs like ketoprofen & aceclofenac.

- Powerline Mitigation – Insulate high-tension wires in vulture hotspots.
- Carcass Management – Promote vulture restaurants (safe feeding stations).
- Global Collaboration – Align with IUCN Vulture Specialist Group for transboundary studies.

X-Factors / Special Effects

- PICTORIAL Flow:** Vulture Decline → Diclofenac Ban → GPS Tagging → Data Collection → Conservation Policy.
- TEXTUAL Anchors:**
 - Population crash: >95% decline (1990s–2007).
 - Critically endangered species: 4 in India.
- INNOVATION Model:** W-I-N-G-S → Wildlife tracking · Information science · Nest monitoring · Governance reform · Safe food systems.

Prelims Connect

Q. Which of the following drugs, banned for veterinary use, was primarily responsible for vulture population decline in India?

- Ibuprofen
- Diclofenac
- Paracetamol
- Naproxen

Answer: (b) Diclofenac

Mains Connect

"Vultures are nature's sanitation workers." Discuss the significance of the Thar Desert vulture-tagging project for raptor conservation and ecosystem resilience in India.

Aravalli Green Development Project: Restoring a Fragile Shield Against Desertification

Why in News?

Ministry of Environment, Forest and Climate Change (MoEFCC) launched the ₹250-crore Aravalli Green Development Project, aimed at restoring 3,700 hectares of degraded Aravalli landscape across Rajasthan, Haryana, and Delhi. The project seeks to revive native forests, groundwater recharge, and biodiversity corridors, strengthening India's fight against desertification under UNCCD commitments.

Background

- The Aravallis:** One of the oldest fold mountain ranges in the world, stretching ~700 km across Gujarat, Rajasthan, Haryana, and Delhi.
- Ecological Role:**
 - Act as a green shield against the Thar Desert's expansion.
 - Recharge groundwater aquifers critical for Delhi NCR.

- Support unique biodiversity including Indian leopard, striped hyena, and Indian pangolin.
- **Threats:**
 - Illegal mining and encroachment.
 - Deforestation and invasive species spread.
 - Urbanisation pressures from Delhi and Gurgaon.
- **Global Context:** India has pledged to restore 26 million hectares of degraded land by 2030 under the Bonn Challenge.

Key Features of the Project

1. Afforestation with Native Species

- Use of drought-resistant trees (Dhauk, Babool, Neem, Peepal).
- Removal of invasive Prosopis juliflora.

2. Water Conservation

- Revival of traditional johads and check-dams for rainwater harvesting.

3. Biodiversity Corridors

- Linking fragmented habitats for wildlife movement across states.

4. Community Engagement

- Involving local panchayats and NGOs in plantation and monitoring.

5. Monitoring & Tech Use

- Satellite imagery and GIS to track forest cover improvement.

Implications

Dimension	Implication
Ecological	Slows desertification, restores Aravalli's role as a climate buffer.
Hydrological	Enhances groundwater recharge for NCR and Rajasthan villages.
Biodiversity	Secures habitats of threatened species.
Climate	Strengthens India's carbon sink capacity.
Socio-economic	Generates green jobs and eco-tourism opportunities.

Way Forward

1. Strict Mining Regulation – Enforce SC bans on illegal mining in Aravallis.
2. Urban Planning Integration – Include Aravalli eco-zones in NCR master plans.
3. Community Stewardship – Train local youth as "Aravalli Eco-Guards."
4. Policy Convergence – Align with CAMPA funds, Jal Jeevan Mission, and Desertification Action Plan.
5. Long-Term Monitoring – Independent ecological audits every 3–5 years.

X-Factors / Special Effects

- **PICTORIAL Flow:** Degradation → Green Development Project → Native Forests + Water Recharge + Wildlife Corridors → Climate Buffer.
- **TEXTUAL Anchors:**
 - Project coverage: 3,700 hectares.
 - Budget: ₹250 crore.
- **INNOVATION Model:** A-R-A-V-A-L-L-I → Afforestation · Restoration · Aquifer recharge · Vigilance on mining · Awareness · Livelihoods · Linkage corridors · Integrated monitoring.

Prelims Connect

Q. The Aravalli Range is spread across which of the following states?

1. Gujarat
2. Rajasthan
3. Haryana
4. Delhi

Select the correct answer:

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

Answer: (c) 1, 2, 3, and 4

Mains Connect

"The Aravallis are India's ecological shield, yet one of its most degraded ecosystems." Examine the significance of the Aravalli Green Development Project 2025 in combating desertification and restoring ecological security.

SCIENCE & TECHNOLOGY

NISAR Satellite: India-US Joint Radar Eye on Earth's Climate Future

Why in News?

In July 2025, India and NASA launched the NISAR (NASA-ISRO Synthetic Aperture Radar) satellite, the world's most advanced Earth-observation mission. With its bus-sized dual-frequency radar, NISAR can detect minute changes in land, vegetation, glaciers, and tectonic plates, strengthening global monitoring of climate change and natural disasters.

INDIA-US NISAR MISSION FOR EARTH OBSERVATION



Background

- **NISAR Mission:** Jointly developed by ISRO and NASA's JPL, costing \$1.5 billion, the most expensive Earth-observing satellite ever built.
- **Dual Frequency Radar:** Uses L-band (NASA) and S-band (ISRO) radars for high-precision mapping.
- **Launch Vehicle:** GSLV Mk-II from Sriharikota.
- **Mission Life:** 3 years, covering the entire Earth every 12 days.

Key Features**1. Land & Ice Monitoring**

- Detects glacial retreat, sea-ice thinning, and polar ice-melt crucial for climate models.

2. Tectonic Activity

- Tracks land shifts as small as a few millimeters, enabling earthquake & landslide prediction.

3. Water & Agriculture

- Monitors groundwater depletion, soil moisture, and crop growth.

4. Disaster Management

- Provides near-real-time data on floods, forest fires, and cyclones for rescue ops.

5. Global Collaboration

- Data to be shared freely with scientists worldwide, boosting climate diplomacy.

Implications

Dimension	Implication
Environmental	Improves tracking of climate change impacts on glaciers, coasts, forests.
Agricultural	Helps monitor crop stress → better yield forecasting.
Disaster Management	Enhances preparedness for earthquakes, floods, and landslides.
Diplomatic	Symbolises India-US space collaboration under QUAD climate agenda.
Scientific	Creates unprecedented database for Earth system science.

Way Forward

1. Integrate with IMD & NDMA for climate early-warning systems.
2. Policy Use – Data-driven support for river basin planning & crop insurance.
3. Capacity Building – Train Indian agencies in advanced radar data interpretation.
4. Expand Collaborations – Extend learnings to BRICS, G20 climate action groups.
5. Public Outreach – Simplify outputs for farmers, urban planners, disaster agencies.

X-Factors / Special Effects

- **PICTORIAL Flow:** NISAR Launch → Dual Radar → Land/Water/Glacier Tracking → Climate/Disaster Solutions.
- **TEXTUAL Anchors:**
 - Launched: 30 July 2025 (Sriharikota).
 - Joint mission: ISRO–NASA (cost \$1.5 bn).
- **INNOVATION Model:** R-A-D-A-R → Resilience · Agriculture · Disaster readiness · Analysis · Research diplomacy.

Prelims Connect

Q. The NISAR satellite jointly developed by ISRO and NASA uses which radar frequencies?

- (a) L-band and S-band
- (b) X-band and Ku-band
- (c) Ka-band and C-band
- (d) UHF and VHF

Answer: (a) L-band and S-band

Mains Connect

"Space collaboration is emerging as the frontline of climate diplomacy." Analyse this statement with reference to the India–NASA NISAR mission.

AI-Powered Wildlife Protection: Saving Animals from Train Collisions in Madhya Pradesh

Why in News?

In August 2025, Madhya Pradesh introduced an AI-enabled wildlife protection system along critical railway tracks passing through forest corridors. The system uses solar-powered sensors and AI algorithms to detect the presence of animals like tigers, leopards, and elephants, sending real-time alerts to train drivers and control rooms.

**Background**

- **Wildlife Mortality on Tracks:** India records ~2,500 wildlife deaths annually due to rail/road collisions. Elephant and leopard deaths on railway tracks in MP, Odisha, and Assam have triggered urgent conservation measures.
- **Conservation–Infrastructure Conflict:** India's expanding railway and highway network often cuts across tiger reserves and elephant corridors.

- Tech Intervention: IIT-Indore, in collaboration with the MP Forest Department and Indian Railways, developed the AI system.

How the System Works

1. Infrared & Motion Sensors detect animal movement within 200–500 meters of the track.
2. AI Algorithm identifies species based on gait, size, and heat signatures.
3. Real-Time Alerts sent to loco-pilots and railway stations via IoT devices.
4. Solar Power ensures uninterrupted operation in remote forest areas.
5. Data Collection creates a database for long-term wildlife movement studies.

Implications

Dimension	Implication
Conservation	Reduces wildlife mortality, especially for tigers and elephants.
Technological	Showcases use of AI, IoT, and renewable energy in conservation.
Governance	Builds synergy between railways, forest departments, and tech institutes.
Economic	Prevents train delays and accidents caused by collisions.
Global Relevance	India emerges as a leader in AI-driven biodiversity protection.

Way Forward

1. Scale-Up – Deploy across elephant corridors in Assam, Odisha, Kerala.
2. Integration – Link AI alerts with centralised wildlife monitoring apps.
3. Public-Private Partnership – Involve CSR funds for nationwide rollout.
4. Multi-Species Coverage – Expand beyond large mammals to include deer, nilgai, etc.
5. Global Collaboration – Share tech with countries like Kenya, Sri Lanka facing similar issues.

X-Factors / Special Effects

- **PICTORIAL Flow:** Railway Tracks → AI Sensor Detection → Real-Time Alert → Wildlife Saved.
- **TEXTUAL Anchors:**
 - Wildlife deaths annually: 2,500 (India).
 - Developed by: IIT-Indore + MP Forest Dept + Railways.
- **INNOVATION Model:** S-A-F-E → Sensors · AI · Forest-Rail collaboration · Eco-conservation.

Prelims Connect

- Q. Consider the following:
1. Eco-bridges for animal crossings
 2. AI-enabled detection sensors
 3. Speed regulation in forest stretches

Which of the above are measures to reduce railway-wildlife collisions?

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

Answer: (d) 1, 2, and 3

Mains Connect

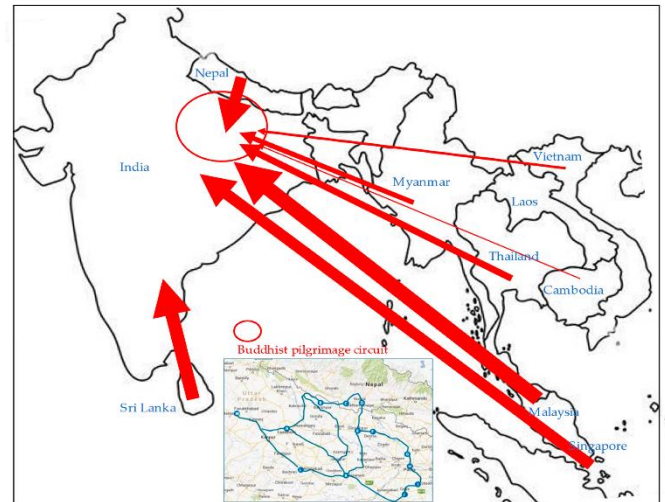
"Technological interventions are redefining conservation in the Anthropocene." Examine with reference to India's AI-powered wildlife protection system in Madhya Pradesh.

ART AND CULTURE

Buddha Sasanam Ciram Tisthatu: Showcasing Buddhism's Cultural Footprints Across Asia

Why in News?

In August 2025, the Indira Gandhi National Centre for the Arts (IGNCA), New Delhi, hosted the exhibition "Buddha Sasanam Ciram Tisthatu" (May the Teachings of the Buddha Last Long) under the Brihattar Bharat Project. The event brought together manuscripts, sculptures, paintings, and digital installations to highlight how Buddhism acted as a cultural bridge between India and Asia.



Background

- **Buddhism's Global Spread:** Originating in India in the 6th century BCE, Buddhism spread to Sri Lanka, Myanmar, China, Korea, Japan, Thailand, Mongolia, and Central Asia.
- **Cultural Exchange:** Carried not just religious ideas but also art forms, scripts, architecture, and philosophy.
- **India's Soft Power:** Events like this reinforce India's role as the cradle of Buddhist heritage, strengthening ties with Southeast and East Asian countries.

Exhibition Highlights

1. **Manuscripts & Texts**
 - Palm-leaf manuscripts of Pali Canon and Sanskrit Buddhist texts like Lalitavistara.

2. Sculptural Heritage

- Gandhara and Mathura school statues of Buddha.
- Replicas from Ajanta, Sanchi, Amaravati.

3. Pan-Asian Connections

- Murals from Dunhuang caves (China).
- Japanese Zen calligraphy and Sri Lankan Ola-leaf manuscripts.

4. Digital & Interactive Displays

- 3D holograms of Nalanda and Bodhi Gaya monasteries.
- VR walkthrough of Ajanta caves.

5. Brihattar Bharat Link

- Project launched by IGNCA to trace India's cultural continuum beyond borders.

Implications

Dimension	Implication
Cultural Diplomacy	Strengthens India's Buddhist connect with ASEAN and East Asia.
Tourism	Promotes Buddhist circuit (Sarnath, Bodhi Gaya, Kushinagar).
Academic	Revives study of Buddhist texts and philosophy.
Geopolitical	Counters China's narrative on Buddhist heritage ownership.
Civilisational	Projects India as a spiritual and cultural leader in Asia.

Way Forward

1. Expand Buddhist Diplomacy – Enhance cultural exchanges with Nepal, Sri Lanka, Myanmar, and Japan.
2. Heritage Protection – Conserve sites like Nalanda (UNESCO World Heritage) and Sarnath.
3. Digital Heritage Mapping – Scale VR/AR projects for global access.
4. Tourism Boost – Integrate Buddhist circuit into Gati Shakti corridors.
5. Scholarship & Outreach – Fund Buddhist studies chairs in Indian and foreign universities.

X-Factors / Special Effects

- **PICTORIAL Flow:** Buddha's Teachings → Spread Across Asia → Cultural Exchange → Exhibition Showcase → India's Soft Power.
- **TEXTUAL Anchors:**
 - Exhibition title = "Buddha Sasanam Ciram Tisthatu".
 - Hosted at IGNCA, Delhi (Aug 2025).
- **INNOVATION Model:** B-U-D-D-H-A → Bharat's heritage · Unity across Asia · Diplomacy · Dialogue · Heritage protection · Academic revival.

Prelims Connect

- Q. The Gandhara School of Art is particularly known for depicting the Buddha in which artistic style?
- (a) Indigenous Indian symbolism

- (b) Hellenistic (Greco-Roman) influence
- (c) Persian miniature style
- (d) Persian-Arabic calligraphy

Answer: (b) Hellenistic (Greco-Roman) influence

Mains Connect

"Buddhism was not just a religion but a vehicle of cultural globalization." Discuss with reference to the exhibition 'Buddha Sasanam Ciram Tisthatu' and India's civilisational diplomacy.

Durga Puja 2025: IIT-Kharagpur's SOP for Accessibility in the World's Biggest Art Festival

Why in News?

In August 2025, IIT-Kharagpur, in collaboration with UNESCO and West Bengal government, released a Standard Operating Procedure (SOP) to make Durga Puja—India's largest art and cultural festival—accessible, safe, and inclusive for all sections of society. This initiative follows Durga Puja's recognition as an Intangible Cultural Heritage of Humanity (UNESCO, 2021).

Background

- **Durga Puja:** An annual festival in West Bengal, now celebrated globally, blending religion, community art, theatre, and craftsmanship.
- **Global Status:** In 2021, UNESCO inscribed "Durga Puja in Kolkata" on its Representative List of Intangible Cultural Heritage of Humanity.
- **Why SOP?**
 - Unregulated crowding = safety risks.
 - Accessibility challenges for persons with disabilities, elderly, women, and children.
 - Aim is to standardise safety, inclusivity, and cultural preservation practices.

Key Features of the SOP**1. Accessibility Measures**

- Ramps, tactile paths, Braille signages, and audio-guided tours for the visually impaired.

2. Safety Protocols

- Crowd management guidelines, CCTV monitoring, fire safety norms.

3. Cultural Integrity

- Emphasis on eco-friendly idols (clay, natural colours) and reduced plastic use.

4. Community Involvement

- Training of puja committees and volunteers in inclusivity norms.

5. Documentation & Preservation

- Digital archiving of themes, art installations, and performances for posterity.

Implications

Dimension	Implication
Cultural	Strengthens recognition of Durga Puja as a living cultural heritage.
Social	Promotes inclusivity for marginalised groups.
Environmental	Pushes for sustainable practices in idol-making and pandal design.
Governance	Sets a template for managing large-scale public festivals in India.
Global	Enhances India's cultural diplomacy under UNESCO frameworks.

Way Forward

1. Replication – Extend accessibility SOPs to other major festivals (Kumbh Mela, Ganesh Chaturthi, Ratha Yatra).
2. Digital Integration – AR/VR-enabled virtual tours for global audiences.
3. Capacity Building – Regular training of police, volunteers, and artisans.
4. Policy Linkages – Align SOP with Accessible India Campaign & Smart Cities Mission.
5. Community Awareness – Campaigns for citizens to adopt eco-friendly and inclusive practices.

X-Factors / Special Effects

- **PICTORIAL Flow:** UNESCO Heritage → Festival Scale ↑ → Accessibility SOP → Inclusive Participation → Cultural Diplomacy.
- **TEXTUAL Anchors:**
 - UNESCO ICH recognition: 2021.
 - SOP released by IIT-Kharagpur & UNESCO (2025).
- **INNOVATION Model:** P-U-J-A → Participation · Universal access · Joyful inclusivity · Artistic sustainability.

Prelims Connect

- Q. Durga Puja of Kolkata was inscribed in UNESCO's Intangible Cultural Heritage list in which year?
- (a) 2017 (b) 2019
(c) 2021 (d) 2023

Answer: (c) 2021

Mains Connect

"Durga Puja is more than a religious celebration; it is a cultural ecosystem." Examine how initiatives like the IIT-Kharagpur SOP reinforce its sustainability, accessibility, and heritage value.

Italian Cultural Centre Halts Courses in Delhi: A Pause in Soft Power Diplomacy

Why in News?

In August 2025, the Italian Cultural Centre (ICC) in New Delhi suspended its cultural and language courses, citing compliance with new Ministry of External Affairs (MEA)

guidelines under the Vienna Convention (1961). The move has raised debates about the role of foreign cultural institutions in India's public diplomacy space.

Background

- **Foreign Cultural Centres:** Operate under bilateral cultural agreements; promote language, literature, films, and academic exchanges.
- **Examples in India:** Alliance Française (France), Goethe-Institut (Germany), Instituto Cervantes (Spain), Russian Centre for Science and Culture.
- **Vienna Convention on Diplomatic Relations (1961):** Governs activities of foreign missions; requires host-country approval for educational and cultural outreach.
- **Recent Trigger:** India tightened compliance norms, requiring centres to obtain periodic MEA clearance.

Key Issues at Stake

1. Soft Power Diplomacy

- Centres serve as cultural bridges, strengthening people-to-people ties.

2. Regulatory Compliance

- India emphasises sovereignty and oversight over foreign institutions.

3. Impact on Students

- Courses in Italian language, art history, and cuisine disrupted mid-term.

4. Diplomatic Sensitivity

- Italy expressed concern but assured it will adapt to India's regulatory framework.

5. Wider Context

- Similar scrutiny may extend to other cultural centres, signalling a policy shift in India's cultural diplomacy space.

Implications

Dimension	Implication
Cultural	Limits availability of foreign cultural exposure for Indian students.
Diplomatic	Reflects India's assertion of sovereignty in regulating foreign entities.
Educational	Affects academic collaborations in arts, music, and languages.
Soft Power	Pause in Italy's cultural influence in India.
Governance	Sets precedent for regulating international cultural outreach.

Way Forward

1. Balanced Approach – Allow cultural centres to operate freely but with transparency and reporting obligations.
2. Bilateral Cultural Agreements – Revise MoUs with clear clauses on courses, funding, and outreach.
3. Reciprocity Principle – Ensure Indian cultural centres abroad (ICCR, Indian Missions) enjoy similar space.

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4. Digital Cultural Diplomacy – Encourage online language/culture courses to reduce dependency on physical centres.
5. Collaboration Models – Jointly run courses with Indian universities to blend compliance with outreach.

X-Factors / Special Effects

- **PICTORIAL Flow:** Foreign Cultural Centre → MEA Guidelines → Suspension of Courses → Diplomatic Sensitivity → Policy Reset.
- **TEXTUAL Anchors:**
 - Vienna Convention on Diplomatic Relations: 1961.
 - Italian Cultural Centre suspended courses: Aug 2025.
- **INNOVATION Model:** C-U-L-T-U-R-E → Compliance · Understanding · Language exchange · Ties · Universities · Reciprocity · Engagement.

Prelims Connect

- Q. Which international treaty governs the functioning of cultural and diplomatic missions abroad?
- (a) Hague Convention
 - (b) Geneva Convention
 - (c) Vienna Convention (1961)
 - (d) Paris Agreement

Answer: (c) Vienna Convention (1961)

Mains Connect

"Cultural diplomacy is as critical as economic or strategic diplomacy." Analyse the implications of the suspension of courses at the Italian Cultural Centre in Delhi for India's foreign policy and cultural exchange ecosystem.

Google Doodle 2025: Showcasing India's Heritage in Traditional Art

Why in News?

On 15 August 2025, Google marked India's 79th Independence Day with a special Google Doodle, designed in the style of Jaipur blue pottery and Bengal terracotta tiles. The artwork celebrated India's cultural diversity and artistic heritage, drawing attention to craft traditions that blend history, utility, and aesthetics.

Background

- **Google Doodles:** Commemorative digital art created for global events, often highlighting local culture and traditions.
- Independence Day Doodles in the past have featured the Red Fort, tricolour motifs, and Indian landscapes.
- **2025 Design Theme:** Use of traditional Indian decorative arts (tile motifs, pottery styles) to symbolise resilience, unity, and continuity of heritage.

Key Cultural Elements in the Doodle**1. Jaipur Blue Pottery**

- A 14th-century craft with Persian-Mughal origins.
- Uses cobalt blue glaze on white clay tiles.
- Geometric and floral designs reflect Indo-Persian fusion.

2. Bengal Terracotta Tiles

- Popular in Bishnupur temples (West Bengal).
- Terracotta art depicts epics, folk tales, and everyday life.

3. Symbolism for Independence

- Fusion of regional crafts highlights India's unity in diversity.
- Tiles = resilience and strength, echoing India's democratic journey.

Implications

Dimension	Implication
Cultural	Spotlights India's traditional crafts in a global digital space.
Historical	Reminds of continuity of craft heritage from medieval to modern times.
Economic	Revives attention to crafts linked to GI tags and rural livelihoods.
Global	Projects Indian heritage to millions worldwide through tech platforms.
Educational	Encourages younger generations to learn about indigenous art forms.

Way Forward

1. Craft Revitalisation – Link doodle spotlight to artisan livelihood schemes (ODOP, GI tagging).
2. Digital Heritage Campaigns – Use AI/AR platforms to showcase craft stories globally.
3. Tourism Boost – Promote Jaipur and Bishnupur as part of cultural tourism circuits.
4. Craft in Education – Integrate heritage crafts into school curricula and cultural fests.
5. Soft Power Diplomacy – India can use crafts as cultural diplomacy tools in bilateral forums.

X-Factors / Special Effects

- **PICTORIAL Flow:** Tile Craft (Jaipur + Bengal) → Google Doodle → Global Showcase → Heritage Revival.
- **TEXTUAL Anchors:**
 - 79th Independence Day Doodle (Aug 15, 2025).
 - Crafts: Jaipur Blue Pottery + Bengal Terracotta Tiles.
- **INNOVATION Model:** T-I-L-E → Tradition · Innovation · Livelihood · Exchange.

Prelims Connect

- Q. Which of the following crafts has been awarded a Geographical Indication (GI) tag in India?
1. Jaipur Blue Pottery
 2. Bishnupur Terracotta

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3. Madhubani Painting
4. Pattachitra

Select the correct answer:

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

Answer: (d) 1, 2, 3, and 4

Mains Connect

"Traditional crafts are not relics of the past but living carriers of India's identity." Discuss with reference to the Google Doodle 2025 showcasing Jaipur blue pottery and Bengal terracotta heritage.

Indian Knowledge Systems Conference at JNU: Reclaiming Indigenous Narratives

Why in News?

In August 2025, Jawaharlal Nehru University (JNU), New Delhi, hosted an international Conference on Indian Knowledge Systems (IKS) in partnership with the Ministry of Education and IKS Division of AICTE. Scholars, scientists, and cultural practitioners discussed how India's ancient traditions of knowledge can be integrated into modern education, sustainable development, and global discourse.

Background

- **Indian Knowledge Systems (IKS):** Encompass India's intellectual, cultural, and scientific heritage across philosophy, astronomy, medicine (Ayurveda), linguistics, mathematics, arts, architecture, ecology, and governance traditions.
- **Policy Push:** The National Education Policy (NEP 2020) calls for mainstreaming IKS into curricula.
- **Global Relevance:** Indigenous systems are increasingly recognised for offering holistic, sustainable, and ethical frameworks in the age of climate change and AI.

Conference Highlights

- Philosophy & Ethics
 - Dialogues on Vedanta, Buddhist logic, and Jain epistemology in framing ethics for modern governance.
- Mathematics & Astronomy
 - Revisiting contributions of Āryabhaṭa, Varāhamihira, and Bhaskaracharya in planetary science and numerals.
- Medicine & Ecology
 - Papers on Ayurveda, Siddha, and traditional ecological knowledge for health and climate resilience.
- Linguistics & Knowledge Preservation
 - Focus on Panini's grammar, oral traditions, and manuscripts digitisation.
- Contemporary Applications

- Using IKS for AI ethics, climate adaptation, and community-centric governance models.

Implications

Dimension	Implication
Educational	Integration of IKS in higher education as per NEP 2020.
Cultural	Revives pride in India's intellectual traditions.
Scientific	Encourages dialogue between modern science & traditional knowledge.
Diplomatic	Positions India as a knowledge civilisation in global forums.
Socio-economic	Opens new pathways for innovation in health, agriculture, and tech.

Way Forward

1. Curriculum Integration – Introduce IKS modules in schools & universities.
2. Research Grants – Fund interdisciplinary research linking IKS with modern sciences.
3. Global Showcasing – Promote Indian epistemologies in UNESCO and academic exchanges.
4. Digital Preservation – Expand digitisation of manuscripts and oral archives.
5. Youth Engagement – Create IKS hackathons and innovation labs.

X-Factors / Special Effects

- **PICTORIAL Flow:** Ancient Knowledge → Modern Application → Global Discourse → Educational Integration.
- **TEXTUAL Anchors:**
 - NEP 2020 = calls for IKS integration.
 - Key fields: Philosophy, Medicine, Astronomy, Linguistics, Ecology.
- **INNOVATION Model:** I-K-S → Integration · Knowledge pride · Sustainability.

Prelims Connect

- Q. Which of the following is NOT a component of Indian Knowledge Systems (IKS)?
- (a) Ayurveda
 - (b) Paninian Grammar
 - (c) Varna System
 - (d) Vedanta Philosophy

Answer: (c) Varna System

Mains Connect

"India is not only an economy but a knowledge civilisation." Discuss the role of Indian Knowledge Systems in shaping contemporary education, ethics, and sustainable development.

Padma Shri to Harchandan Singh Bhatti: Reviving India's Tribal Narratives

Why in News?

In August 2025, noted museologist Harchandan Singh Bhatti was awarded the Padma Shri for his pioneering contribution in curating the Madhya Pradesh Tribal Museum, Bhopal, and developing immersive storytelling techniques that bring India's diverse tribal cultures alive for global audiences.

Background

- Tribal Museum, Bhopal: Established in 2013, showcases the heritage of Bhils, Gonds, Sahariyas, Baigas, and other tribes of Madhya Pradesh.
- Curatorial Philosophy: Bhatti moved away from colonial-style static displays to interactive, experiential storytelling using art, installations, and performance.
- Recognition: The museum is regarded as a model of new museology in India, linking tribal identity with contemporary cultural discourse.

Key Contributions of H.S. Bhatti

1. Immersive Storytelling

- Exhibits designed as walkthrough experiences blending myth, ritual, and daily life.

2. Community Participation

- Involved tribal artisans in designing and narrating exhibits.

3. Use of Technology

- Multimedia, holograms, and digital installations to narrate folk epics and creation myths.

4. Preservation of Oral Traditions

- Documented songs, dances, and rituals as intangible heritage.

5. Global Showcasing

- Collaborated with UNESCO and international museums to represent Indian tribal art abroad.

Implications

Dimension	Implication
Cultural	Revives pride in tribal heritage as a living cultural system.
Educational	Provides resource base for students of anthropology, history, and art.
Social	Empowers tribal artisans by integrating them into heritage economy.
Diplomatic	Projects India's indigenous heritage as part of cultural diplomacy.
Museology	Sets a benchmark for community-driven museum models.

Way Forward

1. Replication – Extend Bhatti's immersive museum model to other tribal belts (Northeast, Odisha, Chhattisgarh).

2. Digital Tribal Archives – Build open-access platforms for tribal songs, rituals, and artifacts.
3. Tourism Linkages – Integrate museums into eco-tourism and tribal circuits.
4. Policy Integration – Support through Ministry of Tribal Affairs & Ministry of Culture funds.
5. Youth Engagement – Encourage tribal youth to document and present their culture.

X-Factors / Special Effects

- **PICTORIAL Flow:** Colonial Static Museums → Tribal Storytelling → Immersive Experiences → Community Empowerment.
- **TEXTUAL Anchors:**
 - Padma Shri 2025 for museology.
 - Museum: Madhya Pradesh Tribal Museum, Bhopal.
- **INNOVATION Model:** T-R-I-B-E → Tradition · Representation · Immersion · Belonging · Empowerment.

Prelims Connect

Q. The Madhya Pradesh Tribal Museum in Bhopal primarily showcases the heritage of which communities?

- (a) Bhils, Gonds, Sahariyas, Baigas
- (b) Todas, Khasis, Nagas, Mizos
- (c) Bhutias, Lepchas, Sherpas, Monpas
- (d) Santals, Hos, Mundas, Oraons

Answer: (a) Bhils, Gonds, Sahariyas, Baigas

Mains Connect

"Museums are not static repositories but living spaces of cultural negotiation." Discuss with reference to Harchandan Singh Bhatti's contribution to tribal heritage representation in India.

Commemorative Stamps 2025: Heritage, Statehood, and Diplomacy in Miniature Art

Why in News?

Between July and August 2025, the Department of Posts, Government of India, released a series of commemorative postage stamps highlighting India's heritage landmarks, statehood anniversaries, and diplomatic ties. These stamps, beyond their functional role, act as cultural messengers and soft power tools.

Background

- **Commemorative Stamps:** Issued to mark special events, personalities, and heritage, distinct from definitive stamps.
- **Philately & Culture:** Each stamp is a piece of miniature art, often reflecting architecture, festivals, biodiversity, and diplomacy.

Highlights of the 2025 Stamp Series

1. Heritage Focus

- Raj Bhavan, Nainital — a blend of Victorian-Gothic architecture with Kumaoni landscape.

2. Statehood Anniversaries

- Stamps commemorating milestones of Goa's statehood and Northeast state formations.

3. Cultural Diplomacy

- Stamps celebrating India–Maldives friendship (1965–2025) and India–Philippines ties.

4. Biodiversity & Ecology

- Mini-series featuring Western Ghats species under conservation theme.

5. Artistic Value

- Designs incorporate traditional miniature motifs and digital engraving.

Implications

Dimension	Implication
Cultural	Preserves heritage in miniature form accessible to the public.
Historical	Marks key milestones of India's political history (statehood journeys).
Diplomatic	Projects India's friendship and shared heritage with partner nations.
Educational	Useful for philatelists, historians, and school curriculums.
Soft Power	Reinforces India's global image through cultural symbolism.

Way Forward

1. Digital Philately – Launch AR/VR-enabled digital stamps for youth engagement.
2. Tourism Integration – Link stamps with QR codes leading to tourism portals of heritage sites.
3. Cultural Exchange – Issue more joint stamps with partner nations.
4. Local Heritage Promotion – State postal circles to promote regional festivals and crafts.
5. Philately Education – Introduce stamp-based heritage modules in schools.

X-Factors / Special Effects

- **PICTORIAL Flow:** Heritage → Statehood → Diplomacy → Biodiversity → Cultural Memory.
- **TEXTUAL Anchors:**
 - Raj Bhavan Nainital stamp (Aug 2025).
 - India–Maldives 60 years (1965–2025).
- **INNOVATION Model:** S-T-A-M-P → Statehood · Tradition · Art · Memory · Partnerships.

Prelims Connect

- Q. The Raj Bhavan of Nainital, featured on a 2025 commemorative stamp, was originally built in which architectural style?
- (a) Indo-Saracenic
 - (b) Victorian Gothic
 - (c) Mughal Revival
 - (d) Deccan Sultanate

Answer: (b) Victorian Gothic

Mains Connect

"Postage stamps are miniature ambassadors of culture and diplomacy." Discuss with reference to India's commemorative stamps released between July and August 2025.

Polyandry in Himachal's Hatti Tribes: Cultural Continuity or Social Revivalism?

Why in News?

In August 2025, reports from Himachal Pradesh indicated a revival of the practice of polyandry (locally called Jodidaran) among the Hatti tribes in parts of Sirmaur district. While largely declined due to modernisation and legal reforms, some sections of the community are reclaiming it as a marker of cultural identity amidst rapid socio-economic change.

Background

- **Hatti Tribes:** Recognised as Scheduled Tribes in 2022; inhabit the trans-Giri region of Himachal Pradesh.
- **Polyandry Tradition:**
 - A form of fraternal polyandry, where brothers share a wife.
 - Practiced for economic reasons — avoiding division of small landholdings in hilly terrains.
 - Similar customs historically existed among Kinnauris, Jaunsaris (Uttarakhand), and Tibetans.
- **Decline:** Legal reforms (Hindu Marriage Act 1955), modern education, and exposure to urban values led to its near disappearance.

Current Developments

1. Cultural Assertion

- Sections of Hatti youth and elders view polyandry as part of tribal heritage and identity.

2. Economic Rationale

- Land fragmentation in hill agriculture continues to revive interest in shared household structures.

3. Community Councils

- Local khumlis (clan councils) have debated re-legitimising polyandry as a customary practice.

4. Legal Tensions

- Polyandry has no recognition under Indian law; may conflict with constitutional rights of women.

5. Sociological Debate

- Raises questions of gender justice vs cultural rights.

Implications

Dimension	Implication
Anthropological	Offers insights into adaptive practices of hill societies.
Cultural	Revival reflects search for identity among newly recognised ST groups.

Economic	Seen as solution to land fragmentation in mountain agro-economy.
Legal	Challenges constitutional framework of equality and women's rights.
Political	Assertion linked to demands for greater tribal autonomy and recognition.

Way Forward

1. Anthropological Documentation – Academic studies to record the transformation of tribal customs.
2. Dialogue with Communities – Balance cultural rights and gender equality through participatory governance.
3. Women-Centric Approach – Safeguard women's rights while respecting tribal heritage.
4. Policy Sensitivity – Frame development policies that address land pressures in hill regions.
5. Comparative Learning – Study how similar practices faded in Tibet, Ladakh, and Jaunsar-Bawar.

X-Factors / Special Effects

- **PICTORIAL Flow:** Land Scarcity → Polyandry Tradition → Decline → Revival Debate → Cultural vs Legal Clash.
- **TEXTUAL Anchors:**
 - Hatti ST recognition: 2022.
 - Local name for polyandry: Jodidaran.
- **INNOVATION Model:** H-A-T-T-I → Heritage · Agrarian adaptation · Tribal identity · Tensions (legal/social) · Integration with modernity.

Prelims Connect

Q. The practice of fraternal polyandry historically existed among which of the following Indian communities?

1. Kinnauris (Himachal Pradesh)
2. Jaunsaris (Uttarakhand)
3. Todas (Tamil Nadu)
4. Hattis (Himachal Pradesh)

Select the correct answer:

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

Answer: (b) 1, 2, and 4 only

Mains Connect

"Tribal customs often reflect ecological adaptations but may challenge modern legal frameworks." Examine with reference to the revival of polyandry traditions among Himachal's Hatti tribes.

Kala Utsav 2025: Celebrating India's Tribal and Folk Art Traditions

Why in News?

Ministry of Education organised Kala Utsav 2025, a nationwide festival of school-level art and culture, where tribal and folk arts like Sohrai (Jharkhand), Pattachitra (Odisha), and Patua scroll painting (West Bengal) were showcased. The event highlighted how folk traditions remain living carriers of India's intangible heritage.

Background

- **Kala Utsav:** Annual cultural initiative of the Ministry of Education to promote artistic skills among students while preserving regional art forms.
- **Tribal & Folk Arts in Focus:**
 - Sohrai Art (Jharkhand, Chhattisgarh, Bihar): Ritual wall paintings made during harvest and Diwali, linked to fertility and livestock worship.
 - Pattachitra (Odisha): Cloth-based scroll painting with intricate depictions of Jagannath cult, Vaishnava themes, and folk tales.
 - Patua Art (West Bengal): Narrative scroll painting sung through Pat-er Gaan (songs of the scroll), blending art with performance.

Highlights of Kala Utsav 2025

1. **School Participation**
 - Over 500 schools from 28 states & UTs presented regional art.
2. **Workshops & Demonstrations**
 - Live painting sessions by master artists training students.
3. **Digital Archiving**
 - Performances and artworks digitally documented for a National Folk Art Repository.
4. **Integration with NEP 2020**
 - Links to art-integrated learning and Indian Knowledge Systems (IKS).
5. **Women's Role**
 - Many of these traditions (like Sohrai) are female-led art practices sustaining community identity.

Implications

Dimension	Implication
Cultural	Revives endangered folk art forms by engaging youth.
Educational	Promotes art-integrated pedagogy in line with NEP 2020.
Social	Recognises women's role in sustaining community art traditions.
Economic	Creates livelihood opportunities for artisans through visibility.
National Identity	Reinforces cultural pluralism in India's heritage imagination.

Way Forward

1. Institutional Support – Establish folk art hubs in schools linked with local artisans.
2. Market Linkages – Connect student–artisan collaborations to GI-tagged art markets.
3. Digital Platforms – Use AR/VR to globalise exposure of Sohrai, Pattachitra, and Patua.
4. Teacher Training – Include art pedagogy modules in B.Ed and teacher training.
5. Global Showcasing – Take Kala Utsav performances to ICCR cultural festivals abroad.

X-Factors / Special Effects

- **PICTORIAL Flow:** Students + Folk Artists → Kala Utsav → Revival of Endangered Traditions → National Integration.
- **TEXTUAL Anchors:**
 - Sohrai (Jharkhand) = harvest & ritual wall art.
 - Pattachitra (Odisha) = scroll art of Jagannath.
 - Patua (Bengal) = painted scroll + oral song.
- **INNOVATION Model:** A-R-T-S → Awareness · Revival · Training · Sustainability.

Prelims Connect

Q. Match the following folk art forms with their states:

1. Sohrai – Jharkhand
2. Pattachitra – Odisha
3. Patua – West Bengal
4. Madhubani – Assam

Which of the above are correctly matched?

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

Mains Connect

"India's folk and tribal arts are not static relics but dynamic living traditions." Discuss with reference to the showcase of Sohrai, Pattachitra, and Patua art forms in Kala Utsav 2025.

PHILOSOPHY OF THE MONTH**Sarvodaya: The Philosophy of Universal Welfare****Outline (for flow and readability)**

1. Introduction – The Timeless Quest for Collective Welfare
2. Etymology and Historical Origins
3. Philosophical Foundations
 - Ahimsa
 - Aparigraha
 - Trusteeship
 - Antyodaya
 - Decentralisation (Gram Swaraj)
4. Sarvodaya in Contrast with Western Thought

- Liberalism
 - Marxism
 - Utilitarianism
 - Existentialism/Individualism
5. Sarvodaya in Practice
 - Gandhian Movements
 - Bhoodan and Gramdan
 - Cooperative models (Amul, SEWA)
 - Grassroots case studies
 6. Critiques and Limitations
 - Ambedkarite critique
 - Utopian charge
 - Trusteeship challenges
 - Village-centrism debate
 7. Reinterpretations in Independent India
 - Planning Commission debates
 - Community development programmes
 - Decentralisation (73rd/74th Amendments)
 - Sarvodaya and Green Revolution critiques
 8. Sarvodaya and Contemporary Relevance (2025)
 - Social justice and SDGs
 - Climate change and sustainability
 - Inclusive governance (Antyodaya Anna Yojana, LiFE Mission)
 - Global South diplomacy (Vasudhaiva Kutumbakam, G20 2023)
 9. Sarvodaya in Ethical Governance (GS4 lens)
 - Public service values
 - Integrity and trusteeship
 - Ethical minimalism
 10. Case Studies & Applications
 - Amul, Kudumbashree, Bhutan's GNH, NREGA
 11. Sarvodaya and the Global Context
 - UN Sustainable Development Goals
 - Climate justice debates
 - Human rights discourse
 12. Philosophy to Policy Convergence Table
 13. Conclusion – Sarvodaya for Viksit Bharat @2047

Introduction – The Timeless Quest for Collective Welfare

History of humanity is essentially the history of its moral experiments. From ancient Vedic seers who declared "Loka Samastha Sukhino Bhavantu" (May all beings be happy) to modern declarations of human rights, the central philosophical concern has been whether progress should be measured by the wealth of the few or by the welfare of all. In this context, the Gandhian vision of Sarvodaya – literally, "the rise or welfare of all" – emerges as one of the most profound ethical responses to the crises of modernity.

Sarvodaya is not merely a political slogan or a socio-economic model. It is a civilisational ethic rooted in Indian spirituality, filtered through modern experiences, and

projected as a universal philosophy. For Gandhi, Sarvodaya was the bridge between individual salvation and collective progress. For Vinoba Bhave and Jayaprakash Narayan, it was the blueprint for post-colonial reconstruction. For India in 2025, facing inequality, climate challenges, and digital disruption, Sarvodaya offers a moral compass.

The relevance of Sarvodaya cannot be overstated. In a world polarised between the super-rich elite and marginalised billions, where climate crisis threatens planetary survival, the idea that development must serve “all, without exception” is not a utopian dream but a practical necessity.

Etymology and Historical Origins

The word Sarvodaya is derived from two Sanskrit roots: Sarva (all) and Udaya (uplift or rise). Thus, it means universal uplift, progress, or welfare of all beings.

The concept gained philosophical currency when Gandhi translated John Ruskin's “Unto This Last” into Gujarati as Sarvodaya (1908). Ruskin had argued that:

1. The good of the individual is inseparable from the good of all.
2. The dignity of labour should be equally respected.
3. The life of service to others is the most fulfilling life.

Gandhi absorbed these lessons, but he Indianised and spiritualised them: integrating ahimsa, satyagraha, and swaraj into a larger vision of collective emancipation.

Later, post-Independence, Vinoba Bhave's Bhoodan Movement (1951) and Jayaprakash Narayan's Total Revolution (1970s) re-anchored Sarvodaya in the struggle against inequality and authoritarianism.

Philosophical Foundations

a) Ahimsa (Non-violence)

The moral bedrock of Sarvodaya is ahimsa. It extends beyond refraining from physical violence to non-exploitation in economics, non-domination in politics, and non-hatred in social relations. Gandhi held that real progress could not be built on the suffering of others.

b) Aparigraha (Non-possession)

Sarvodaya critiques consumerist greed. For Gandhi, “the Earth provides enough for every man's need but not for every man's greed.” This ethic of sufficiency for all, extravagance for none remains strikingly modern in the age of climate crisis.

c) Trusteeship

The philosophy of trusteeship held that wealth is not private property but a social trust. The rich are merely custodians of resources, morally bound to use them for the welfare of all. This vision seeks to humanise capitalism without embracing state socialism.

d) Antyodaya (Uplift of the last person)

Sarvodaya cannot be realised until the weakest and poorest benefit. Gandhi's famous talisman instructed policymakers to always recall the face of the poorest person before taking

decisions. This anticipates today's “pro-poor orientation” of welfare policies.

e) Decentralisation (Gram Swaraj)

Sarvodaya imagines a society of self-reliant villages practising direct democracy, sustainable agriculture, and cooperative economies. This decentralisation reflects deep suspicion of centralised state power and industrial monopolies.

Sarvodaya in Contrast with Western Thought

- **Liberalism:** Focuses on individual rights; Sarvodaya insists on duties for collective good.
- **Marxism:** Advocates class struggle; Sarvodaya preaches class harmony through trusteeship.
- **Utilitarianism:** Aims for greatest good of the greatest number; Sarvodaya insists on good of all, no one excluded.
- **Existentialism:** Emphasises individual freedom; Sarvodaya anchors freedom in social responsibility.

Thus, Sarvodaya is both a critique of Western modernity and a synthesis of global ethical currents.

Sarvodaya in Practice

During the Freedom Struggle

- Champaran (1917) and Kheda (1918) movements were experiments in Sarvodaya through collective empowerment.
- Salt March (1930) embodied mass non-violent mobilisation against unjust economic structures.

Post-Independence Movements

- **Bhoodan (1951):** Vinoba Bhave persuaded landlords to donate land to the landless.
- **Gramdan:** Entire villages pooled land ownership into collective trusteeship.
- **Jayaprakash Narayan's Total Revolution:** Called for Sarvodaya-based transformation of polity, economy, and society.

Institutional Expressions

- Cooperatives like Amul (milk revolution), SEWA (women empowerment).
- Panchayati Raj reforms reflecting decentralisation.
- Grassroots environmental movements (Chipko, Narmada Bachao Andolan).

Critiques and Limitations

1. Idealism vs Pragmatism: Critics argue Sarvodaya is utopian in industrial economies.
2. Trusteeship's Weakness: Relies on goodwill of elites, not enforceable legally.
3. Village-centrism: Ambedkar warned villages perpetuate caste oppression; idealising them risks romanticising inequality.
4. Global Capitalism: Sarvodaya economics struggles against multinational corporate dominance.

Reinterpretations in Independent India

- Community Development Programme (1952) drew inspiration from Sarvodaya ideals.
- 73rd/74th Constitutional Amendments (1992) institutionalised decentralisation.
- Antyodaya Anna Yojana (2000) explicitly echoed Gandhian Antyodaya.
- CSR Law (2013) reflects trusteeship.
- Mission LiFE (2022) channels Gandhian environmental ethic.

Sarvodaya and Contemporary Relevance (2025)

1. Social Justice: Basis for inclusion of Dalits, tribals, women, disabled, LGBTQ+ in development.
2. Climate Change: Advocates sufficiency and minimalism against overconsumption.
3. Economic Models: Cooperatives, circular economy, gig worker protection resonate with Sarvodaya.
4. Global Diplomacy: India's G20 motto "Vasudhaiva Kutumbakam" is Sarvodaya at planetary scale.

Sarvodaya in Ethical Governance (GS4 Lens)

- Integrity: Wealth and power as social trusts.
- Empathy: Policy guided by poorest.
- Non-violence: Negotiation, not coercion.
- Sustainability: Long-term stewardship.

Case Studies

- Amul Cooperative: Farmers collectively owning production chain.
- Kudumbashree (Kerala): Women's SHGs lifting millions out of poverty.
- MGNREGA: Right to work as dignity of labour.
- Bhutan's Gross National Happiness: Sarvodaya's cousin philosophy.

Sarvodaya in the Global Context

- UN SDGs: "Leave no one behind" = Antyodaya.
- Climate Justice: Rich nations as "trustees" of global resources.
- Human Rights: Universal dignity = Sarvodaya ethics.

Philosophy → Policy Convergence Table

Sarvodaya Principle	Modern Policy Reflection
Antyodaya	Antyodaya Anna Yojana, PMGKAY
Trusteeship	CSR law, ESG compliance
Decentralisation	Panchayati Raj, urban local bodies
Aparigraha	Mission LiFE, circular economy
Sarvodaya Vision	India@2047 inclusive growth

Conclusion – Sarvodaya for Viksit Bharat @2047

Sarvodaya is not an archaic Gandhian relic. It is a timeless compass reminding societies that true progress is indivisible; it cannot leave behind the poor, exploit nature, or divide humanity. In a digital, globalised, climate-stressed 21st century, the welfare of all is not idealism but the prerequisite of survival.

For India's journey towards Viksit Bharat @2047, Sarvodaya offers both ethical foundations and policy inspiration: welfare state rooted in justice, sustainable development rooted in restraint, diplomacy rooted in universal brotherhood.

As Gandhi said, "The good of the individual is contained in the good of all." Sarvodaya is thus the soul of Indian civilisation speaking to the conscience of the modern world.

CASE STUDY**AI Surveillance in Schools: Innovation vs Privacy**

In August 2025, the government of a large Indian state launched a flagship project called Surakshit Vidyalaya Abhiyan. The scheme aimed to introduce AI-powered facial recognition cameras in government schools. The official rationale was threefold:

1. To enhance safety of children and prevent the entry of outsiders into school premises.
2. To streamline attendance records through real-time facial recognition.
3. To provide parents with mobile alerts whenever children entered or exited the school.

The project was hailed by politicians and sections of the media as a "digital leap" in education governance. A private technology company, TechVision Pvt. Ltd., was contracted to implement the system in over 2,000 schools.

When Priya, a young IAS officer posted as District Education Officer, was asked to oversee implementation in her district, she initially welcomed the innovation. But as she studied the contract, concerns emerged. The agreement with TechVision contained vague clauses on data protection. Facial recognition data of minors would be stored on company servers, without clarity on duration, consent, or deletion. Teachers reported that children were becoming anxious under continuous surveillance. Parents from poor families feared that their children's data could be misused for profiling.

Civil society groups wrote letters highlighting that the Personal Data Protection Act, 2023 mandates explicit consent and safeguards for processing sensitive biometric data, especially of minors. They also pointed out global cases where school surveillance data had been hacked or misused. On the other hand, senior bureaucrats and political

leaders pushed for rapid rollout, as the project was politically significant and widely publicised. Priya's dilemma grew deeper when she received calls from the Minister's office warning against "unnecessary delays."

Priya now faces competing ethical pulls:

- **Child safety vs privacy:** cameras may protect children, but at the cost of their long-term digital rights.
- **Innovation vs caution:** the government wants India to be seen as a digital pioneer, but without adequate safeguards, innovation can become exploitation.
- **Duty to superiors vs duty to law and conscience:** Priya is bound to implement orders, but also to uphold constitutional principles of dignity and privacy.

Stakeholders include children, parents, teachers, the private company, civil society, the political leadership, and Priya herself as custodian of governance.

Questions

- Identify the ethical issues involved in this case. (150 words)
- As Priya, what immediate steps can you take to balance governance objectives with ethical responsibility? (250 words)
- How can principles of accountability, transparency, and responsibility be applied here? (250 words)
- Suggest long-term reforms to ensure ethical use of AI in public governance. (250 words)

Flood Relief and Allocation Dilemma: Political Pressure vs Justice

In August 2025, unprecedented floods ravaged two districts of an Indian state — District A and District B. Both suffered heavy damage, but the circumstances were different.

District A is economically backward, largely inhabited by tribal communities, with poor connectivity and weak media presence. Villagers lost homes, cattle, and farmlands, and local health centres collapsed. However, their plight received little media attention.

District B is urbanised, politically influential, and economically prosperous. It houses industries and is a stronghold of ruling party leaders. Local TV channels broadcast visuals of urban flooding, stranded cars, and middle-class families trapped in high-rise apartments. Political leaders from the state capital rushed to District B for photo-ops, promising massive relief packages.

When state funds for disaster relief were announced, over 70% was directed to District B, despite government reports showing District A suffered higher proportional losses. Ravi, a young IAS officer serving as Relief Commissioner, was tasked with coordinating distribution. As he studied the reports, he realised that the allocation was skewed by political influence and media pressure. District A's tribal

population was at risk of starvation and disease, but had little political voice.

When Ravi proposed reallocation, he faced pushback from senior officials and ministers. They reminded him of the "political realities" and warned of consequences if he "created trouble." Media continued to amplify District B's suffering, while District A remained invisible. Ravi felt torn between obedience to superiors and his moral duty to fairness. His conscience told him that justice demanded prioritising the most vulnerable. Yet he knew that disobeying orders could damage his career.

This case presents multiple dilemmas:

- **Justice vs expediency:** should fairness to the vulnerable override political and administrative expediency?
- **Rule-following vs ethical courage:** should Ravi obey official allocations or risk consequences by reallocating?
- **Equality vs equity:** is giving the same resources to both districts fair, or should more be given to the weaker?
- **Personal ethics vs systemic inertia:** can an individual officer change a politically biased system?

Stakeholders include the flood victims in both districts, political leaders, media, the bureaucracy, and Ravi himself as Relief Commissioner.

Questions

- What values and ethical principles should guide Ravi in this case? (150 words)
- If you were Ravi, what concrete actions would you take to ensure fairness while managing political pressures? (250 words)
- Discuss the larger issue of equity versus equality in disaster management. (250 words)
- Suggest systemic reforms that could minimise political bias in relief allocation. (250 words)

ESSAY OF THE MONTH

Justice is the First Condition of Humanity

Justice is not an ornament to society; it is the invisible condition that allows humanity to call itself human. To live without justice is to live in a jungle where might is right and fear replaces dignity. Justice is therefore not an optional virtue but the foundational requirement of civilisation. Humanity may build cities, empires, technologies, and economies, but unless its weakest members can stand up and say that they are treated fairly, the claim to civilisation remains hollow.

From the ancient world to our own times, philosophers and reformers have placed justice at the centre of their visions. Plato defined it as harmony among the classes, Aristotle saw it as distributive and corrective fairness, Kautilya in the Arthashastra linked the legitimacy of the ruler to the delivery of justice, and John Rawls in the twentieth century called it the "first virtue of social institutions." Gandhi, with

characteristic simplicity, reminded us through his talisman that every decision must be judged by its impact on the poorest and weakest. Across traditions, the message is the same: justice is the first condition of humanity.

History confirms this truth. The French Revolution erupted not only because of bread shortages but because the people perceived injustice. The Indian freedom struggle was a rebellion against the denial of fairness and dignity under colonialism. The Civil Rights Movement in America was not merely a legal campaign but a demand for justice in daily life. Again and again, injustice has sparked revolutions, while justice has been the foundation of lasting peace.

This essay will explore the idea of justice through its philosophical roots, its social and psychological dimensions, its role in governance and democracy, its relevance in global affairs, its expression in the Indian Constitution, and the challenges it faces in the contemporary world. The tone of the essay is philosophical yet constructive, affirming that justice is not a utopian dream but a practical compass for guiding humanity towards dignity, harmony, and sustainable progress.

Justice, before it became the language of constitutions and courts, was always the language of philosophy. Human beings from the earliest civilisations reflected upon what it meant to live together fairly. In the Indian context, the Rig Veda invoked Rita, the cosmic order that held both nature and society in balance. From Rita flowed Dharma, the guiding principle of righteous conduct, and justice was its human expression. The Upanishads further stressed that every individual has obligations to others and that only when these obligations are fulfilled does social harmony prevail. Centuries later, the Nyaya philosophers would argue that justice must not be confined to procedures but must translate into lived experiences of fairness. If a legal verdict followed the letter of law but violated the spirit of compassion, it could not be called Nyaya. In this sense, India's philosophical tradition insisted that justice is not technical but ethical.

In the Greco-Roman world, Plato considered justice to be the foundation of the ideal republic. His vision of justice was not punitive but harmonious, a condition where each part of society performed its rightful role without interfering with the others. Aristotle added nuance by distinguishing distributive justice, where resources are shared based on merit and need, and corrective justice, which remedies wrongs. For Cicero, justice was the reason why laws had any meaning at all. Without justice, law is nothing but coercion. Christianity later tied justice with charity, while Islam treated Adl as a central pillar of governance. Buddhist traditions linked justice to compassion and the middle path. These diverse philosophies converge on the same principle: societies collapse without fairness.

Yet justice is not merely philosophical; it is also psychological and sociological. Human beings are social animals, and

fairness seems embedded in our evolutionary instincts. Experiments with children across cultures show that they are quick to notice unfair distribution of toys or rewards and often reject even their own advantage if they see others deprived. Such experiments reveal that the demand for justice is not only a product of culture but an inner moral compass. Societies where justice is absent suffer alienation and unrest. The French Revolution was triggered by hunger, but it turned into a cry for justice when peasants and workers realised that nobles dined in extravagance while they starved. The Russian Revolution, too, was born from the perception that inequality had become unbearable. The Civil Rights Movement in the United States succeeded because it resonated with the universal sense of fairness: that skin colour could not justify humiliation. Thus justice functions as the glue of society, holding groups together in a common belief that their dignity will not be violated.

Governance without justice is a body without a heart. Democracies derive their legitimacy not from the ritual of voting but from the assurance that institutions are fair. An election is meaningful only if it is free and fair. A legislature deserves respect only if it deliberates without prejudice. An executive is legitimate only if it acts without arbitrariness. And a judiciary is respected only if it judges without fear or favour. That is why the framers of the Indian Constitution placed justice at the very beginning of the Preamble. It precedes liberty, equality, and fraternity, for it ensures that each of these principles is real. Social justice ensures equality of status and dignity. Economic justice ensures equitable opportunity and fair distribution. Political justice ensures that each citizen has a voice in decision-making. Without justice, liberty benefits only the strong, equality remains a promise on paper, and fraternity is reduced to rhetoric.

Institutions exist to protect justice, not the other way round. The Supreme Court of India in *Kesavananda Bharati* (1973) asserted that the basic structure of the Constitution, including justice, cannot be destroyed by parliamentary majorities. In *Maneka Gandhi* (1978), it expanded the meaning of liberty, linking it inseparably with fairness. In *Puttaswamy* (2017), it recognised privacy as part of dignity, which itself is integral to justice. Internationally, institutions such as the International Court of Justice or WTO dispute panels also exist to moderate power through fairness. When they succeed, they prevent conflict. When they fail, wars and trade disputes erupt. Power without justice is tyranny; law without justice is violence in disguise.

Globalisation has made justice even more complex. Climate change is the most obvious example: rich nations have emitted the bulk of greenhouse gases, but poor countries bear the harshest impacts in the form of floods, droughts, and displacement. Demands for climate finance are therefore not charity but justice. Vaccine distribution during the Covid-19 pandemic revealed vaccine apartheid, where rich countries stockpiled doses while poorer nations suffered. Trade regimes are criticised for favouring the

developed world, making developing countries struggle to protect farmers and workers. Refugee crises in Syria, Afghanistan, and Ukraine highlight the conflict between national sovereignty and human rights. International relations, often described as a game of power, are also inescapably a field of justice. The cry of the Global South for fairness in climate finance, technology transfer, and trade rules is a cry for justice in the global order.

India's national journey is deeply tied to justice. The freedom struggle was fundamentally against injustice. Gandhi's non-violent movements were moral campaigns for fairness, not merely political negotiations. After independence, social justice was pursued through reservations and affirmative action to undo centuries of caste discrimination. Economic justice was sought through land reforms, the Green Revolution, and later through welfare schemes such as MGNREGA or Antyodaya Anna Yojana. Political justice was ensured through universal adult franchise, empowering millions who were once voiceless. Yet India also shows the challenges of justice. Farmers continue to demand fair prices. Women seek safety and equality in workplaces. Tribals resist displacement without rehabilitation. Minorities seek security against prejudice. These are not demands for favours but for justice.

Critics warn against romanticising justice. Ambedkar himself cautioned that villages, often glorified in Gandhian thought, were sites of caste oppression, and to speak of village swaraj without addressing structural inequalities was dangerous. Realists argue that absolute justice is impossible; societies must compromise between competing claims. In economics, equity may conflict with efficiency. In international politics, fairness may be sacrificed for power. These critiques remind us that justice must be both aspirational and practical. A utopian notion of justice, without workable mechanisms, risks being dismissed as rhetoric. But abandoning justice in the name of realism produces alienation and conflict. The challenge is to operationalise justice within constraints, to strike a balance between ideals and realities.

The contemporary world throws up new challenges. The digital age brings questions of data privacy, algorithmic bias, and digital monopolies. If artificial intelligence discriminates based on biased data, it violates justice. If social media spreads misinformation unchecked, it undermines fair deliberation in democracies. Economic globalisation has deepened inequality, with the richest one percent owning more wealth than the bottom half of humanity. Climate change threatens intergenerational justice, depriving future generations of a liveable planet. In all these areas, justice remains the first condition of humanity.

Alternative frameworks of justice are emerging. Restorative justice focuses not on punishment but on healing, emphasising reconciliation between offender and victim.

Environmental justice links ecology to equity, demanding that marginalised communities are not sacrificed for industrial progress. Global justice movements call for recognition of universal human dignity across borders. The United Nations' Sustainable Development Goals, framed as "leaving no one behind," reflect the spirit of Sarvodaya, Gandhi's idea of welfare for all, and Antyodaya, uplift of the weakest. Justice is therefore not static but evolving, responding to new challenges with old principles of fairness and dignity.

The way forward requires justice to be integrated into all domains. Philosophically, it means balancing rights with duties, reminding citizens that liberty without responsibility cannot produce fairness. Psychologically, it requires cultivating empathy and tolerance, for justice is not only about institutions but also about attitudes. Institutionally, it means strengthening the independence of the judiciary, accountability of legislatures, and transparency of executives. Socially, it means ensuring representation and dignity for marginalised groups. Economically, it means reducing inequality and ensuring opportunities for all. Globally, it means reforming multilateral institutions, ensuring climate finance, and promoting humane migration policies. Technologically, it means building ethical AI and protecting data as a human right. Justice must be the guiding star of each of these efforts.

Justice, in the end, is not a luxury but the very foundation upon which humanity rests. It is the condition that transforms survival into civilisation and power into legitimacy. Without justice, liberty becomes hollow, equality becomes illusory, and fraternity remains a mere slogan. Justice alone binds these ideals into lived reality.

The wisdom of ages reminds us of this truth. The Mahabharata declares, "Yato Dharma Tato Jaya" where there is Dharma, there is victory. Gandhi's talisman asked us to recall the weakest face before making any decision. Martin Luther King Jr. warned that injustice anywhere is a threat to justice everywhere. These voices, across cultures and centuries, converge to affirm justice as humanity's common heritage.

Justice is not a distant utopia that societies can only dream of; it is a living, workable guide that can shape institutions, inspire citizens, and anchor nations. If fairness informs our laws, empathy tempers our governance, and compassion guides our economics, justice ceases to be a slogan and becomes a lived practice.

The call before us, therefore, is simple yet profound: to keep justice as the guiding star of humanity. In our policies, in our technologies, in our communities, and in our conduct, it must breathe as the first condition of our existence. For only then will liberty be secure, equality be real, and fraternity be genuine — and only then will humanity remain truly human.

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