7 PM COMPILATION

November, 2025

Features of 7 PM compilation

- **Comprehensive coverage of a given current topic**
- **Provide you all the information you need to frame a good answer**
- **Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world**
- **Written in lucid language and point format**
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- **Best cost-benefit ratio according to successful aspirants**

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UN Reforms – Need & Challenges – Explained Pointwise

The United Nations celebrated its 80th anniversary this week. Reforming the United Nations (UN) is one of the most critical and complex challenges in global governance today. While the UN remains indispensable, its structure, particularly its most powerful bodies, often fails to reflect the realities of the 21st century.

Introduction:

- UN reforms refer to proposed and ongoing changes meant to make the United Nations more effective, representative, transparent, and responsive to current global realities.
- The calls for reform span core UN organs, especially the Security Council, as well as the organization's operational and financial structures.

Key Issues Driving the Need for UN Reforms:

1. Outdated Power Structure: The UN Security Council (UNSC) is dominated by five permanent members (P5: US, UK, France, Russia, China) with veto powers—a structure set in 1945 that now fails to reflect shifts in global power, the rise of developing nations, and the interests of the Global South.
2. Veto Deadlock: The ability of one P5 member to block action causes paralysis in response to major conflicts (Syria, Ukraine), humanitarian crises, and genocide, undermining the Council's credibility and effectiveness.
3. Under-representation: Countries like India, Brazil, Germany, and Japan, and regions such as Africa and Latin America, have long called for permanent representation to reflect modern realities and give a greater voice to developing nations.
4. Bureaucratic Inefficiency: The sprawling UN bureaucracy often slows emergency response and suffers from corruption, misuse of funds, or poor accountability.
5. Financial Dependence: Reliance on a few donors, especially the US, leads to budgetary crises, delays in humanitarian aid, and concerns about undue influence in UN affairs.

6. Erosion of Legitimacy and Emergence of Competitors: Failures to act on major crises push member states toward regional or ad hoc coalitions (G20, BRICS, African Union), bypassing the UN and weakening its global leadership.
7. Defining the Role in Emerging Challenges: The UN needs a clearer mandate and framework to govern 21st-century threats like climate change & global warming, global health security, artificial intelligence etc.

Major Reform Proposals & Ongoing Initiatives:

1. UNSC Expansion and Veto Reform:
    - New Permanent Members (P6-P11): The current permanent five (P5: China, France, Russia, UK, US) do not include major modern economic, demographic, or political powers. Leading candidates for new permanent seats include:
        - India: The world's most populous country and a major global economy.
        - Brazil: The leading voice in Latin America.
        - Germany and Japan: Major financial contributors to the UN and global powers.
        - An African Seat: A consensus candidate or rotation among key African nations (e.g., Nigeria, South Africa) to represent the entire continent.
    - Limit or Reform Veto: Restrict veto use (especially in cases of genocide, war crimes, crimes against humanity) with proposals for supermajority or General Assembly referral for overrides.
    - Increase Non-Permanent Seats: More seats for underrepresented regions to distribute influence and reflect global demographics.
2. Streamlining Bureaucracy & Decision Making:
    - Cut Costs and Jobs: Secretary-General's UN80 initiative includes a 15% budget cut for 2026, reducing staff by over 2,600 posts and streamlining mandates, meetings, and reporting requirements.
    - Increase Transparency and Accountability: Stricter auditing, performance reviews, and publication of program assessments; better mechanisms to address fraud, misconduct, and resource misuse.
3. Financial Reform:
    - Equitable Assessment & Burden Sharing: Update member contribution formulas based on GDP, population, and development indicators; build in accountability for arrears and fiscal discipline.
    - Link Membership to Contributions: Greater privileges or representation for consistent contributors to peacekeeping, aid, or development.
4. Inclusive Voice and Representation:
    - Institutionalize Global South Forums: Permanent coalitions (e.g., G4, African Union blocks) within UN organs to negotiate as regional blocs and ensure developing country priorities are addressed.
    - Text-Based Negotiations: Adopt clear deadlines and rounds for reform discussions, preventing procedural delays.
5. Periodic Review Mechanisms: Institutionalize a process for periodic assessment and adjustment of governance structures and policies (such as a standing UN Reform Commission).

Challenges to UN Reforms:

1. Veto Power and Security Council Dynamics: The UN Security Council's five permanent members (P5) hold veto power, which allows any one of them to block substantive reforms, including changes to the Council itself—even reforms that enjoy broad international support.

2. Geopolitical Rivalries and National Interests: Competing national interests and regional rivalries between major powers and emerging economies complicate negotiations on reforms. Countries like India, Brazil, Germany, Japan, and African nations demand permanent Security Council seats, but this is contested by others with divergent interests.
3. Constitutional and Legal Barriers: UN Charter amendments require approval by two-thirds of the General Assembly members and all P5 countries. This high threshold makes reform legally and procedurally difficult. Existing procedures are cumbersome, and there is no standing mechanism to expedite or enforce reforms.
4. Institutional Inertia and Bureaucratic Resistance: UN's bureaucratic structure is large and complex, with entrenched interests and resistance to change. Budgetary, administrative, and mandate reforms are often resisted by internal UN agencies and member states benefitting from the status quo.
5. Fragmentation and Lack of Political Will: Divisions among member states, shifting alliances, and the rise of alternative multilateral platforms (G20, BRICS, regional organizations) lead to fragmented global governance, diverting momentum away from comprehensive UN reform. The absence of unified leadership and hesitation from powerful states creates a political vacuum, limiting sustained reform efforts.
6. Funding and Financial Dependence: UN's operational effectiveness depends on contributions from a few major donors, primarily Western countries like the U.S. Member states reluctant to increase funding or subject their contributions to reform conditions create financial constraints that undermine reform implementation.
7. Representation and Inclusivity Conflicts: Diverse views on how to democratize or broaden representation create further disagreements, especially between developed and developing countries. Differing visions on representation of the Global South, small states, and non-state actors complicate the design of an inclusive governance model.

Conclusion: UN reform faces formidable roadblocks from entrenched power structures, competing national interests, high legal thresholds, organizational inertia, and lack of unified political will. Overcoming these challenges requires sustained global diplomacy, balancing realism and idealism to adapt the UN for contemporary global governance.

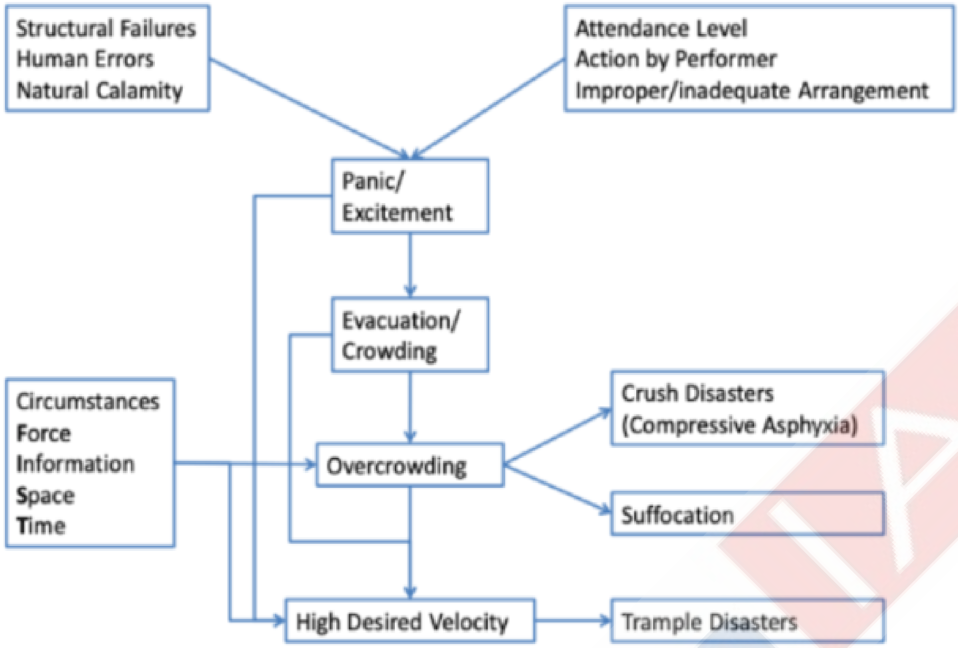
UPSC GS-2: International relations
Read More: The Indian Express

Stampede Disaster Management in India – Explained Pointwise

Recently, a stampede occurred on November 1, 2025, at the privately managed Sri Venkateswara Swamy Temple in Kasibugga, Srikakulam district, Andhra Pradesh. The tragic incident claimed at least nine lives, mostly women and left more than 25 people injured—some critically. According to the NCRB's report titled 'Accidental Deaths and Suicides in India', between 2001 and 2022, a total of 3,074 lives have been lost due to stampedes in India. Of these, 2,169 (70%) were men and 900 (30%) were women.

What is a Stampede?

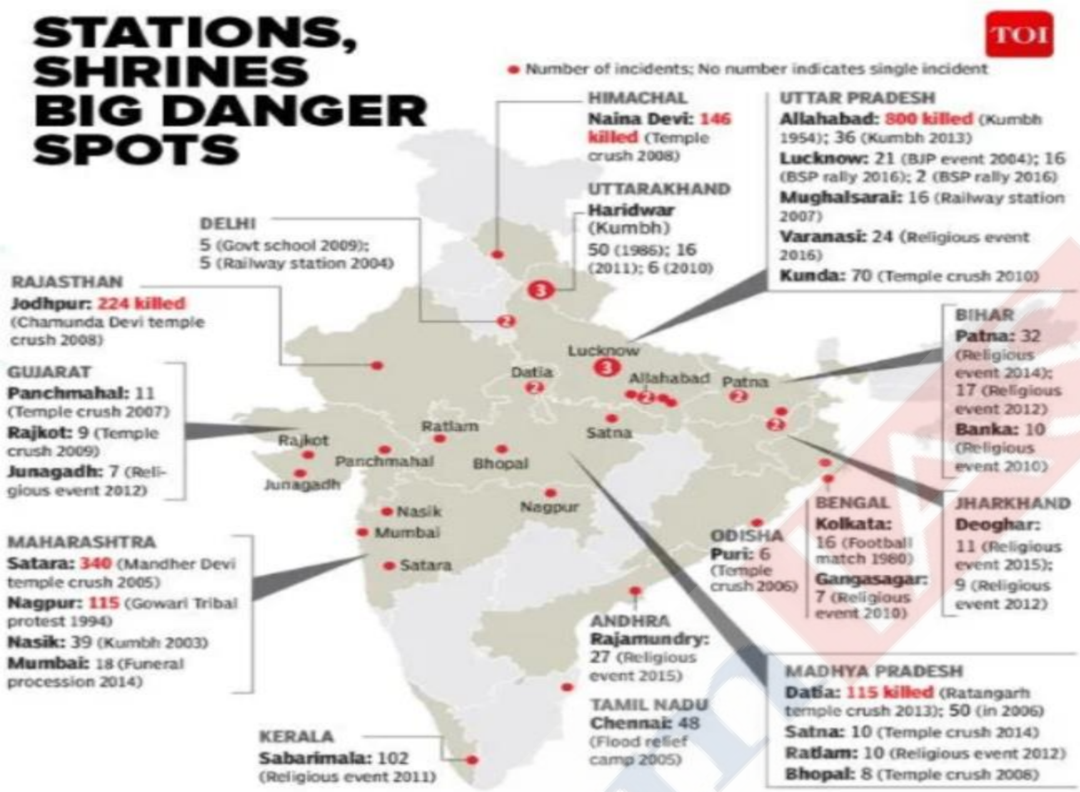
- **As per NDMA's "Managing Crowd at Events and Venues of Mass Gathering" Stampede is a sudden, uncontrolled rush or surge of a crowd, often leading to crushing, suffocation, or trampling, resulting in injuries or fatalities.**
- **Stampedes are characterized by high crowd density or accelerated movements triggered by panic or excitement. They are man-made disasters typically occurring at places of mass gathering, such as religious sites, railway stations, or events, due to inadequate crowd management.**
- **Process of a Stampede:**



Source- NDMA Disaster Guidelines

What are Some Notable Deadly Stampede Disasters in India?

Allahabad Railway Stampede (2013)	**Last-minute change in the platform for the pilgrims who had gathered for the Khumbh Mela, created panic and resulted in a stampede. It led to the loss of around 36 lives.**
Mumbai pedestrian bridge Stampede (2017)	**The stampede at the crowded Pedestrian Bridge connecting the two Mumbai railway stations resulted in the death of 22 people and injured 32.**
Mata Vaishnav Devi shrine (2022)	**The Stampede at the Mata Vaishno Devi Shrine resulted in the death of 22 people and injured 32.**
Hathras Stampede (2024)	**During a religious gathering in Uttar Pradesh's Hathras district on July 2, 2024, at least 121 people (almost all women) lost their lives.**



<u>What are the major causes of Stampedes in India?</u>

1. Human Factors: These are behavioral and psychological triggers that contribute to crowd mismanagement and chaos:

Cause	Explanation
Panic or Fear	Sudden fear (e.g., of fire, explosion, or perceived threat) causes uncontrollable crowd movement. Example, Dabwali Fire Tragedy (1995).
Excitement or Euphoria	Intense enthusiasm (as during concerts, sports wins) may lead to irrational rushing. Example, Bengaluru RCB Parade (2025).
Impatience or Aggression	Frustration due to delays or lack of access leads to pushing and violence. Example, Sabarimala Stampede (1999)
Wild Rush Behavior	Inward/outward crowd clashes, often to grab freebies or exit quickly. Example, Elphinstone Footbridge Stampede (2017).
Panic from Rumors	Rumors like fire, earthquake, or landslide induce fear and uncontrolled stampedes. Example, Kumbh Mela Stampede (2003).

2. Infrastructure Factors: These involve the physical design, condition, and capacity of the venue:

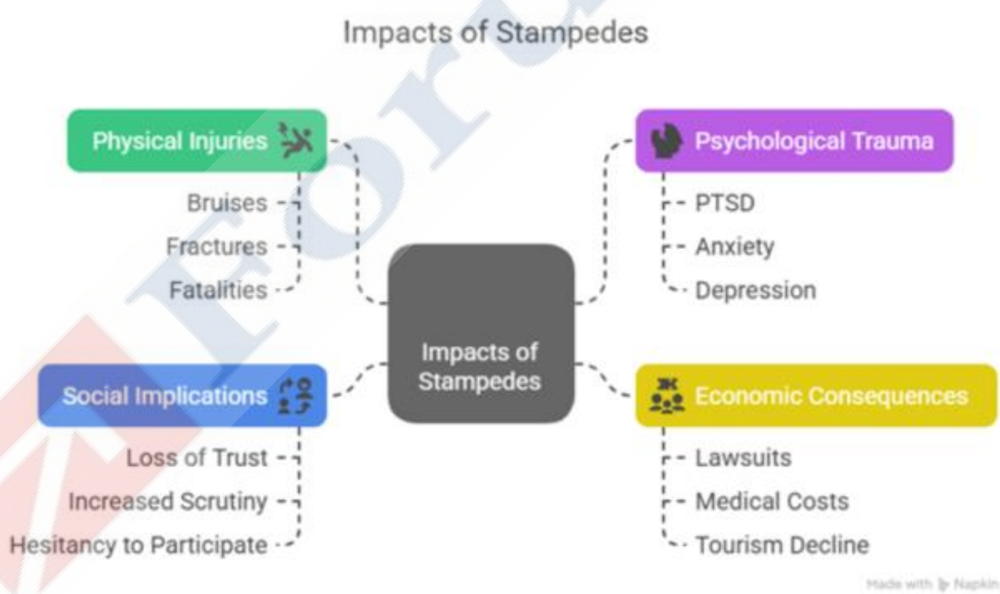
Cause	Explanation
Overcrowding	Inadequate space relative to crowd size increases risk of trampling. Example, Uphaar Cinema Tragedy (1997).
Insufficient Facilities	Narrow walkways, blocked exits, or lack of barricades cause bottlenecks. Example, Sabarimala Tragedy (1999).
Adverse Conditions	Slippery floors, poor lighting, uneven or muddy terrain increase fall risk. Example, Sabarimala Tragedy (1999).
Structural Failures	Collapse of barricades, temporary bridges, or railings escalate crowd panic. Example, Sabarimala Tragedy (1999).
Fire/Electrical Failures	Short circuits, fires in enclosed spaces, or failure of extinguishers. Example, Sabarimala Tragedy (1999).
Unauthorized Constructions	Encroachments or illegal stalls reduce escape space and visibility. Example, Sabarimala Tragedy (1999).

3. Organizational Factors: These relate to poor planning, management, and coordination between responsible agencies:

Cause	Explanation
Inadequate Crowd Management	Lack of trained staff to regulate, guide, or intervene in real-time. Example, Hillsborough Disaster (1989).
Insufficient Planning	Poor venue design, no clear exit strategy, or failure to anticipate crowd. Example, Bengaluru RCB Parade (2025).
Failure in Communication	No real-time alerts, unclear instructions, or failed PA systems. Example, Kumbh Mela (2003).

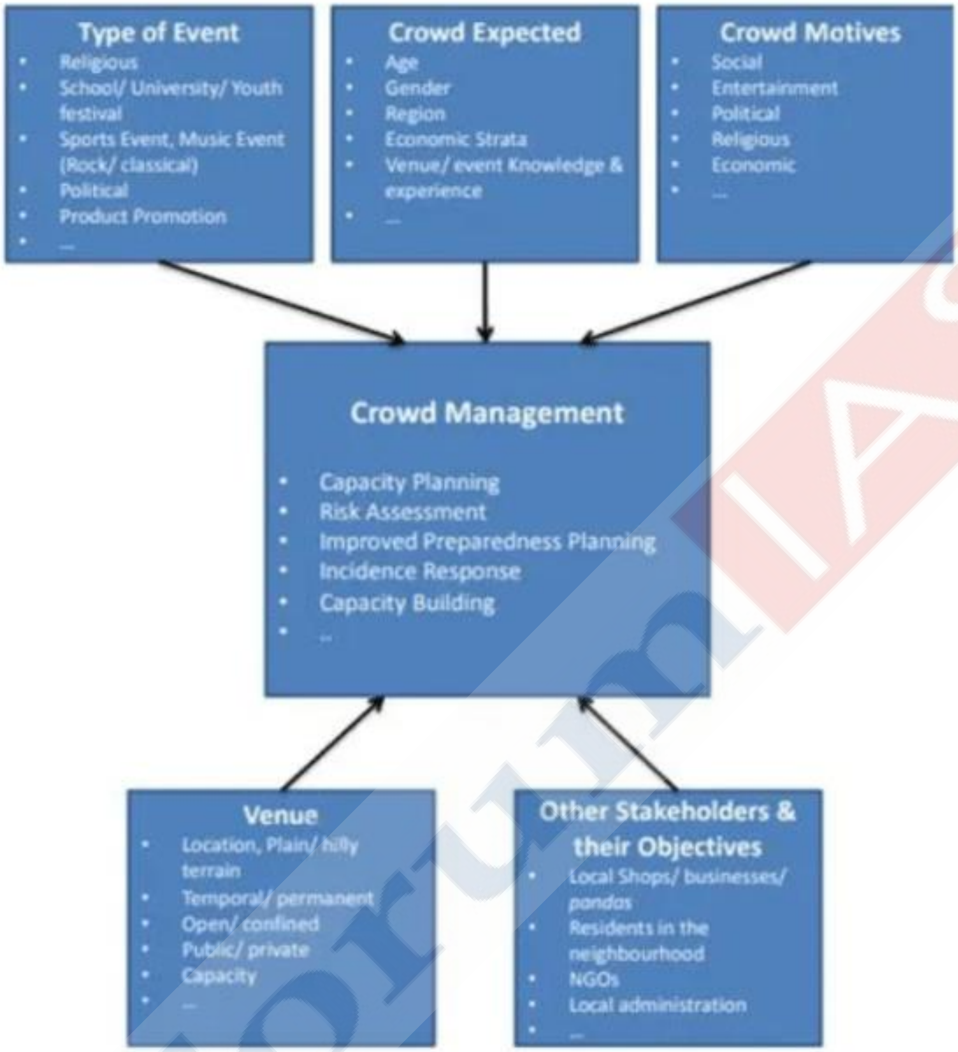
Overestimation or Ticket Overselling	More attendees than capacity, creating dangerous densities. Example, Love Parade Stampede, Germany (2010).
Locked/Closed Exits	Exits inaccessible in emergencies or used as storage. Example, Uphaar Cinema Tragedy (1997).
Lack of Surveillance or Tech	Absence of CCTV, drones, or walkie-talkies to monitor crowd dynamics. Example, Hillsborough Disaster (1989)
Poor Inter-Agency Coordination	Miscommunication or delay between police, administration, and event organizers. Example, Kumbh Mela Stampede (2003).
Fatigued or Understaffed Police	Prior deployment or inadequate briefing leaves venues unguarded. Example, Bengaluru Parade (2025).
Use of Force or Panic Response	Misuse of lathis or tear gas may provoke chaos instead of control. Example, Jallianwala Bagh (Historical).

What are the Impact of these Stampedes?



What are the NDMA Guidelines for the prevention of Stampedes in India?

NDMA has prepared 'Suggestive Framework for Preparation of Crowd Management Plan for Events/Venues of Mass Gathering'. It provides a proactive, holistic approach to prevent and manage stampedes, emphasizing planning, preparedness, and response.



Source- NDMA Document

Before Stampede (Prevention and Preparedness):

1. **Planning and Capacity Building**
   - **Understand Visitors and Stakeholders: Assess expected crowd (age, gender, motives) and stakeholder roles (e.g., police, NGOs) to tailor plans.**
   - **Capacity Planning: Develop long-term infrastructure for religious sites, including staging points, multiple routes, and facilities (e.g., rest, water).**
   - **Crowd Control Strategies: Manage demand-supply gaps by controlling inflow/outflow, using advance registration, and promoting off-peak visits.**
   - **Stakeholder Coordination: Establish a Unified Control System for seamless agency collaboration.**
2. **Risk Analysis and Preparedness:**
   - **Identify Threats: Use historical data and local knowledge to pinpoint risks (e.g., structural failures, overcrowding).**

   - Risk Assessment: Conduct Failure Mode and Effect Analysis (FMEA) to prioritize hazards based on severity, frequency, and detection difficulty.
   - Rapid Venue Assessment (RVA): Perform quick audits using 20 yes/no questions to evaluate crowd management practices.
   - Develop Action Plans: Define actions, responsibilities, timelines, and resources for each threat, considering vulnerable groups.
3. Information Management: Provide clear signage, public address systems, and media campaigns to inform visitors about routes, rules, and emergency procedures. Disseminate real-time crowd strength and wait times to manage expectations.
4. Safety and Security Measures: Ensure structural safety (e.g., stable barricades, emergency exits) and fire/electrical compliance. Deploy adequate, trained security personnel with CCTV, observation towers, and communication systems. Use barriers strategically to regulate crowd flow.
5. Facilities and Emergency Medical Services: Provide accessible medical facilities, ambulances, and trained staff. Plan for water, sanitation, and food to reduce crowd agitation.
6. Transportation and Traffic Management: Regulate vehicle access, parking, and shuttle services to prevent congestion. Develop emergency transportation plans for evacuation.
7. Capacity Building: Train stakeholders (organizers, police, volunteers) on crowd management, first aid, and Incident Response System (IRS). Conduct regular drills, tabletop exercises, and full-scale simulations (Section 8.2).
8. Legal Compliance: Adhere to laws like the Disaster Management Act (2005) and local regulations (e.g., UP Melas Act, 1938). Obtain necessary licenses and approvals for events.

After Stampede (Response and Recovery):

1. Incident Response System (IRS): Activate IRS with a control room and Incident Commander (IC) to coordinate response. Establish Emergency Operations Centres (EOCs) and Incident Command Posts (ICPs) for real-time management. Deploy police, medical teams, and volunteers for rescue and relief.
2. Emergency Medical Services: Provide immediate first aid and triage at the venue. Transport victims to hospitals using pre-planned ambulance routes.
3. Media Management: Disseminate factual, timely information to prevent rumors. Avoid sensationalism and respect victim privacy.
4. Relief and Rehabilitation: Distribute relief supplies (food, shelter) equitably, avoiding rushes. Support psychological recovery through counseling, as implied by addressing societal agony.
5. Post-Incident Review: Conduct inquiries to identify causes, as seen in past tragedies. Revise crowd management plans based on lessons learned, updating after major incidents or annually.
6. Legal Action: Hold negligent parties accountable, as in Uphaar and Dabwali cases, where courts imposed joint liability.

<u>What are the Challenges in Managing Stampede?</u>

NDMA's Managing Crowd at Events and Venues of Mass Gathering highlighted following:

1. Structural Limitations: Religious sites in difficult terrains with narrow, slippery paths and encroachments by vendors exacerbate crowd risks. Inadequate infrastructure like weak barricades multiplies dangers during mass gatherings. Example: Wai Satara stampede due to terrain bottlenecks.
2. Overcrowding and Demand-Supply Gap: Attendance exceeding venue capacity, especially during peak times, creates chaos. Cultural or religious sensitivities make restricting entries

challenging, worsening crowd management efforts. Example: Bengaluru Stampede 2025 exceeded stadium capacity.

3. Crowd Behavior: Unruly actions like pushing or rushing for freebies, combined with rumors, escalate chaos. Individuals often follow miscreants, amplifying disorder in crowded environments. Example: Kumbh Mela crowd panic triggered stampede.
4. Inadequate Security and Coordination: Insufficient deployment of poorly briefed security personnel and coordination gaps between police and local authorities hinder swift responses and crowd control. Example: Kumbh Mela lacked police-administration coordination.
5. Fire and Electrical Hazards: Non-compliance with fire safety norms in makeshift venues and illegal electrical setups spark panic. Dysfunctional extinguishers worsen rescue operations during emergencies.
   Example: Dabwali tragedy caused panic by fire.
6. Poor Planning and Implementation: Inadequate infrastructure development for high-traffic sites and underestimating crowd sizes lead to failed management and unregulated entry at peak times. Example: Wai, Satara mishap due to weak planning.
7. Communication Failures: Ineffective public address systems and delayed or inaccurate information dissemination amplify panic. Rumors spread faster than official responses, intensifying crises. Example: Panic spread rumors worsened Kumbh stampede.
8. Resource Constraints: Limited funding for infrastructure upgrades, inadequate medical facilities, and untrained emergency personnel reduce response efficiency and escalate fatalities during stampedes. Example: Lack of ambulances worsened Dabwali response.
9. Legal and Regulatory Gaps: Temporary permits issued without thorough checks and lax enforcement of safety regulations delay accountability and breed conditions for disasters. Example: Non-compliance cited in Uphaar cinema tragedy.
10. Lack of Public Awareness: Visitors unfamiliar with emergency protocols or safety measures are more vulnerable during crises, leading to increased casualties and chaos. Example: Public unaware of exits in Uphaar tragedy.

<u>What Should be the Way Forward?</u>

1. CrowdSense Analytics: Deploy AI-driven crowd behavior analytics that use heat maps, sensors, and drone surveillance to detect dangerous crowd densities, bottlenecks, or abnormal movement patterns in real time, allowing early interventions before panic escalates. Example: Kumbh Mela 2024 drone surveillance success.
2. GeoAlert Systems: Integrate geo-fencing with mobile alert systems to send instant updates, entry instructions, or emergency evacuation messages to people within a specific area, preventing chaos through timely digital communication. Example: Delhi protests 2020 geo-fencing effectiveness.
3. Timed Access Protocol: Implement digital passes with time-slot allocation to regulate entry into venues, especially religious or sports events. QR codes, face recognition, and real-time scanning reduce gate congestion. Example: Jagannath Yatra used timed entry passes.
4. Simulation Crowd Modelling: Use computer simulations to predict crowd dynamics in different layouts, scenarios, or terrain conditions. This helps event planners create safer infrastructure and escape routes. Example: London Olympics 2012 crowd simulations used.
5. Festive Zoning: Encourage decentralized celebrations across multiple zones instead of concentrating crowds in one location. Parallel sites reduce pressure and improve crowd dispersion management. Example: Mumbai Ganesh Visarjan created immersion zones.

6. **Civil Marshal Force:** Train citizen volunteers as crowd marshals for high-attendance events. These local guides assist with directing foot traffic, calming panic, and providing first-level response. Example: Tokyo Marathon uses 10,000+ volunteers.
7. **InfraSafe Audits:** Mandate safety audits of all venues before public gatherings, checking exits, signage, lighting, terrain, and encroachments. Structural compliance reduces physical risk factors. Example: IIT-Bombay audited Mumbai railway stations.
8. **Event Licensing Reform:** Link event approvals to safety protocols like police clearance, emergency response plans, and crowd control training. Penalise unlicensed or unsafe mass events. Example: Madurai Chithirai festival requires prior NOC.

Conclusion:

The Kasibugga Stampede exposed serious gaps in event planning, safety, and official coordination at religious gatherings—highlighting the urgent need for strict crowd management protocols and regular oversight, particularly for privately managed venues hosting large public events. As former NDMA Vice-Chairman M. Shashidhar Reddy once remarked, "Disasters don't just happen; they are allowed to happen." Until accountability is enforced and systemic corrections made, such "celebration catastrophes" will continue to repeat.

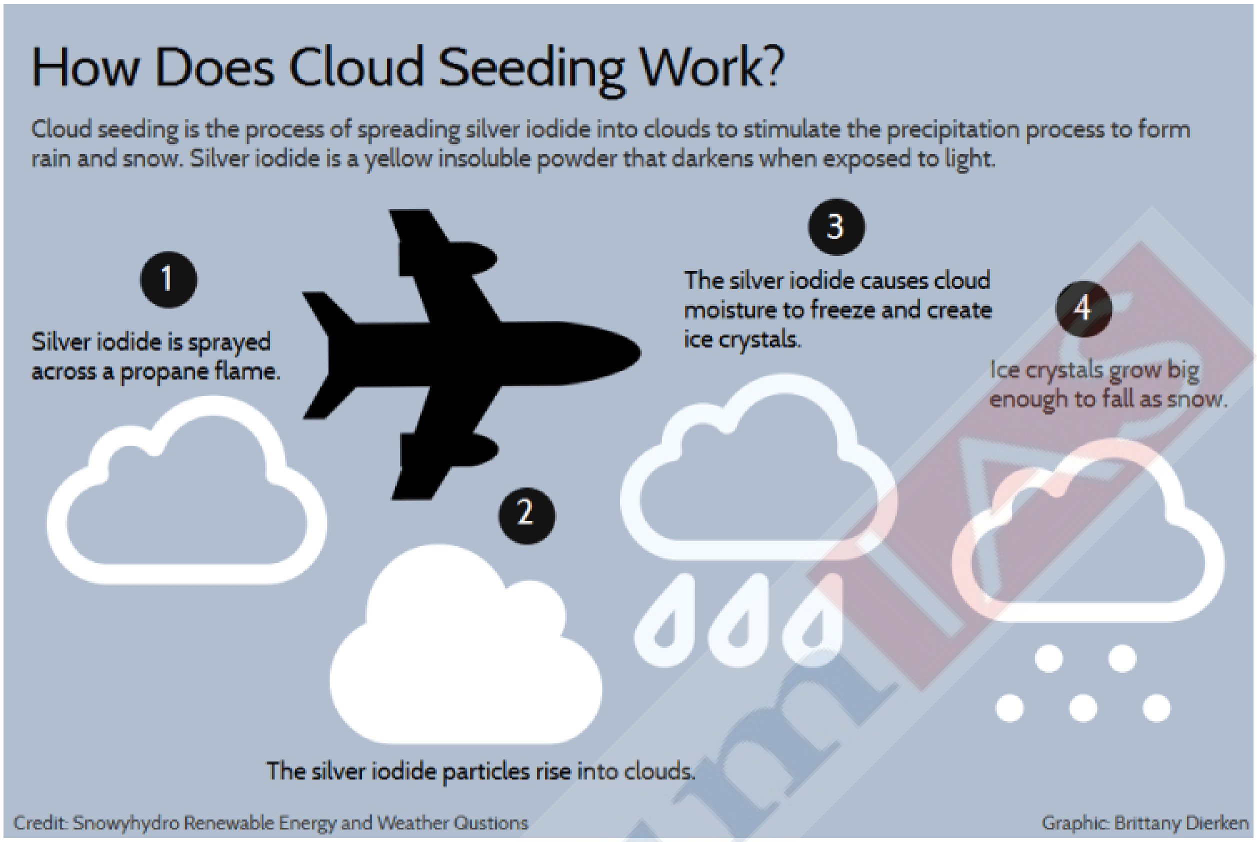
Read More: [The Hindu]
UPSC GS-3: Disaster Management

Cloud Seeding & Its Effectiveness – Explained Pointwise

Recently, the Delhi government, in partnership with IIT Kanpur, has recently implemented artificial rain experiments (cloud seeding) as an emergency measure to combat its chronic air pollution crisis.

What is Cloud Seeding?

- Cloud seeding is a form of weather modification aimed at enhancing precipitation (rain or snow) from naturally forming clouds by dispersing specific chemical agents into the atmosphere.
- This process is employed to increase rainfall in drought-prone regions, suppress hail, clear fog, and—more recently—attempt to mitigate airborne pollution by "washing out" particulates.
- **Chemical Agents Used:** The most common chemicals are silver iodide, potassium iodide, dry ice (solid CO_2), and sometimes table salt. These agents act as cloud condensation nuclei or ice nuclei, enabling water vapor in clouds to coalesce and form larger droplets or ice crystals.
- **Mechanism:** The introduced particles mimic natural nuclei, prompting supercooled water droplets to freeze and aggregate, ultimately becoming heavy enough to fall as rain or snow.



Key Cloud Seeding Methods:

Cold Cloud Seeding	• **Cold cloud seeding targets supercooled clouds—those containing liquid water droplets at temperatures below freezing (0oC).** • **Agent: Silver Iodide (AgI)** • **Mechanism: Silver iodide crystals have a structure very similar to that of ice. When dispersed into the supercooled part of a cloud, the liquid water freezes onto the AgI particle, forming an ice crystal. These crystals then rapidly grow by collecting surrounding water vapor.** • **Delivery: It's typically dispersed from aircraft (in flares or generators dropped into the cloud) or from ground-based generators that rely on rising air currents (updrafts) to carry the particles into the cloud.**
Warm Cloud Seeding	• **Warm cloud seeding targets clouds that are entirely above the freezing point, often found in tropical or coastal areas.** • **Agent: Hygroscopic Salts (e.g., Sodium Chloride or Calcium Chloride)** • **Mechanism: These salts are highly hygroscopic (water-attracting). When tiny salt powder particles are introduced, they immediately start attracting water molecules, forming large water droplets very quickly. These large droplets then collide with smaller ones, growing rapidly until they fall as rain.**

	• **Delivery: Usually dispersed from aircraft flying directly into the base of the clouds.**

Effectiveness of Cloud Seeding:

1. **Precipitation Augmentation: When suitable clouds are present, seeding can typically increase rainfall or snowfall by 10% to 15% in the targeted area. In some specific, ideal scenarios, increases have been reported to be as high as 20% to 30%.**
2. **Snowpack Enhancement: It is highly effective in increasing mountain snowpack, which acts as a natural water reservoir. This is critical for hydropower generation and downstream irrigation in the spring. Regions like the Rocky Mountains in the US and mountainous regions in Australia have used this successfully for decades.**
3. **Hail Suppression: By introducing numerous condensation nuclei, the process can cause the water droplets to freeze into many small ice particles rather than a few large ones. These small particles melt before hitting the ground, thus reducing the size and damage potential of hail.**
4. **Fog Dispersal: In cold conditions, seeding can clear supercooled fog at airports, improving visibility and flight safety.**

Challenges related to Cloud Seeding:

1. **Requires Clouds, Not Creation: Cloud seeding cannot create clouds from clear skies. It is 100% dependent on the presence of existing clouds that contain enough liquid water and are at the right temperature (often supercooled water). If the atmosphere is too dry or stable, seeding has no effect.**
2. **Atmospheric "Thirst": Even if rain is generated, if the air mass below the cloud is very dry, the falling precipitation may evaporate before reaching the ground—a phenomenon known as virga.**
3. **High Cost: Running a sustained cloud seeding program is expensive. It requires specialized aircraft, ground stations, radar monitoring, and a team of meteorologists and pilots. This makes it an impractical or non-sustainable solution for long-term water management.**
4. **The "Rain Stealing" Controversy: This is the most significant political challenge. The downwind regions often accuse seeded areas of "stealing" their water, claiming that forcing clouds to precipitate early depletes the moisture that would have naturally fallen elsewhere. While evidence for this is inconclusive, the perception creates interstate or international political friction.**
5. **Chemical Dispersion (Minimal Risk): While Silver Iodide is the most common agent, some public concern remains about dispersing chemicals into the environment. However, the amounts are minute (parts per trillion), and scientific studies have generally concluded that silver iodide is not environmentally hazardous at the concentration levels used in cloud seeding.**

Reasons for underperformance of cloud seeding in Delhi:

1. **Insufficient Cloud Moisture: Successful cloud seeding requires clouds with high moisture content (usually above 50%) to allow chemical nuclei to facilitate droplet formation. During Delhi's trials, moisture levels were only about 15-20%, too low for effective rainfall induction.**
2. **Unfavourable Weather Conditions: Cloud seeding is highly dependent on specific meteorological conditions, which were not met during the trial periods.**

3. **Expectations v/s Reality:** Cloud seeding is not guaranteed to produce rain—its success rate is variable, and it is better seen as a supplementary, emergency intervention, not a primary solution.

Conclusion: Cloud seeding is a promising tool for weather modification, drought management, and air quality control, but its success depends on cloud properties, timing, and atmospheric conditions. While potential is high, scientific debate continues over its practical effectiveness and long-term impact.

UPSC GS-3: Environment **Read More: The Indian Express**

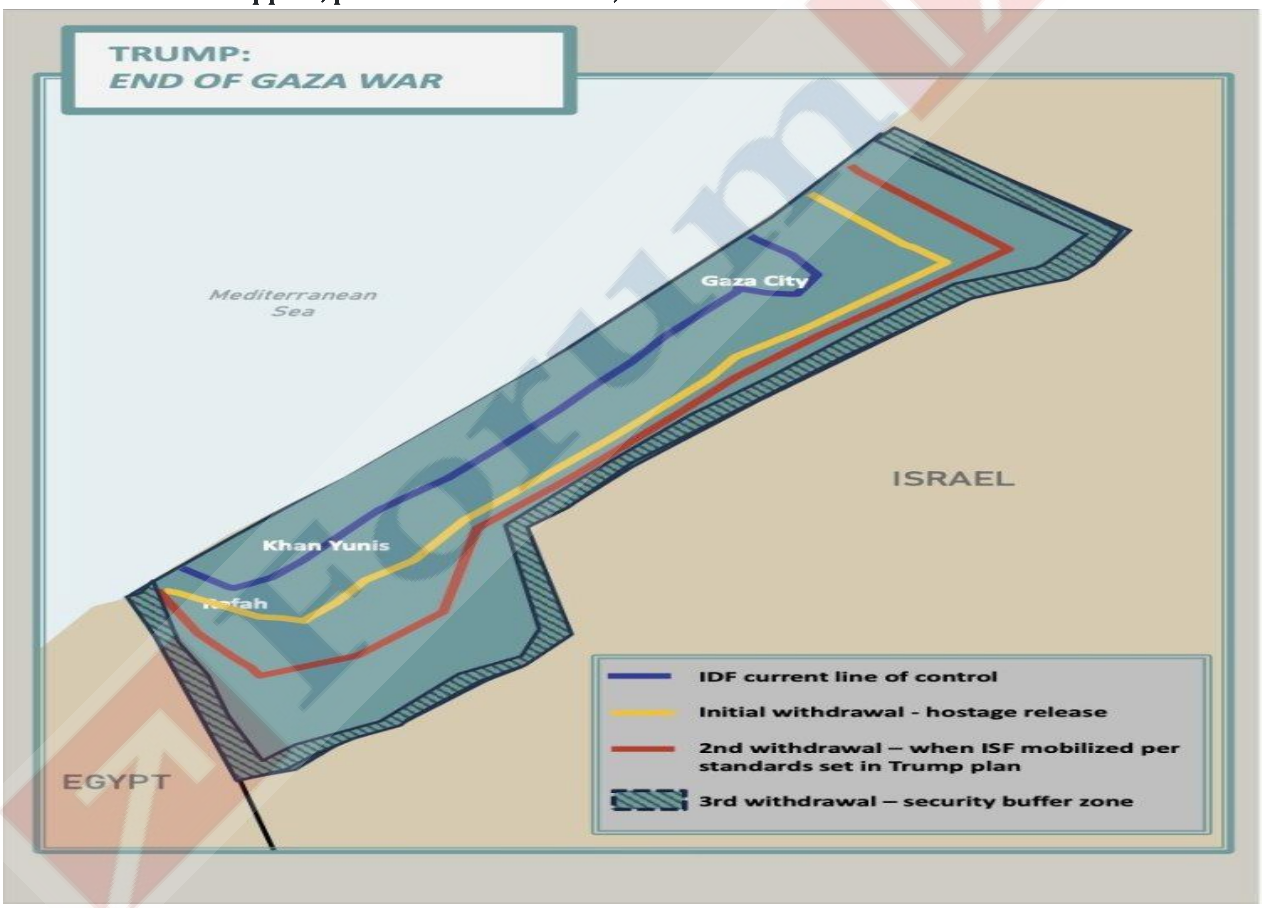
Trump's 20-Point Framework to End Israel-Hamas Conflict – Explained pointwise

Donald Trump's 20-Point Framework to end the Israel-Hamas Conflict that has resulted in over 66,000 Palestinian deaths since October 7, 2023 — unveiled in September 2025 and partly accepted in initial negotiations—was designed to secure an immediate ceasefire in Gaza, resolve hostage and prisoner issues, and establish a durable peace with international oversight.

Key Elements of Trump's 20-Point Plan:

1. **Immediate Ceasefire:** Both parties must agree to halt all hostilities, including bombing, rocket fire, and cross-border attacks.
2. **Return of Hostages:** Hamas would release all living and deceased Israeli hostages held in Gaza upon the ceasefire's implementation.
3. **Prisoner Exchange:** Israel would release Palestinian prisoners, including those from Gaza, in a comprehensive exchange with the hostages released by Hamas.
4. **Withdrawal from Gaza:** Israel to progressively withdraw its military to an agreed line after the ceasefire, monitored by international oversight.
5. **Demilitarization of Gaza:** Gradual disarmament of Hamas and other armed groups, turning Gaza into a "terror-free" zone, as a precondition for broader peace.
6. **International Stabilization Force (ISF):** Deployment of a UN-mandated, multinational security force (involving the US, Qatar, Egypt, Turkey, etc.) to stabilize Gaza, support local police, and monitor compliance.
7. **Transitional Governance:** Transfer governance of Gaza to an interim Palestinian technocratic committee, under the supervision of a "Board of Peace" led by Trump and supported by figures like Tony Blair.
8. **No Forced Displacement:** Palestinians would not be forcibly expelled or relocated from Gaza. Israel would pledge not to occupy or annex the enclave.
9. **Humanitarian Access:** Unrestricted and large-scale humanitarian aid for Gaza, including medical supplies, food, water, and international reconstruction funds.
10. **Reconstruction:** Commitment from multiple wealthy countries for the redevelopment of Gaza's infrastructure, homes, schools, and hospitals.
11. **Pathway to Statehood:** Gaza would be governed in a way that could eventually lead to Palestinian self-determination and recognition of statehood, subject to deradicalization and disarmament.
12. **Reform of Palestinian Authority (PA):** Simultaneous reforms in the PA to prepare for responsible, nonviolent governance, creating conditions for eventual unity with Gaza.

13. **Monitoring and Compliance: International observers to monitor and verify compliance with ceasefire, withdrawal, and disarmament commitments.**
14. **Security Guarantees for Israel: The US and Arab partners to offer guarantees for Israel's security, deterring future attacks from Gaza.**
15. **Regional Diplomatic Normalization: The plan encourages further normalization of ties between Israel and Arab/Muslim countries to cement lasting regional peace.**
16. **Timeline and Deadlines: Specific deadlines for each phase, with Trump explicitly warning Hamas to accept or face harsh military consequences ("complete obliteration" if rejected).**
17. **Accountability for Violations: Clear consequences for non-compliance, including renewed sanctions, military action, and international condemnation.**
18. **No Political Control for Hamas: Hamas must forgo political control—only independent, apolitical technocrats can govern Gaza during the transition.**
19. **Inclusive Mediation: Ongoing mediation by the US, Egypt, Qatar, and Turkey, with input from international organizations like the UN and EU.**
20. **Long-Term "Everlasting Peace": The plan envisions a durable, region-wide peace sustained by economic support, political normalization, and a demilitarized Gaza.**



Key Responses to Framework:

ISRAEL	**Status: Accepted.**

	Prime Minister Benjamin Netanyahu publicly stated that he fully supported the framework, claiming it aligns with Israel's stated war aims, particularly the dismantling and demilitarization of Hamas.
HAMAS	**Status: Partially Accepted / Core Demands Rejected.** **Hamas agreed to and carried out the requirements for the hostage and prisoner exchange that defined Phase 1. However, the group has been clear that it refuses the plan's central Phase 2 demands to disarm, decommission its weapons, and relinquish control of Gaza. This rejection of demilitarization is the biggest roadblock to achieving the plan's long-term goals.**
REGIONAL ARAB STATES	**Status: Widespread Initial Support.** **The plan garnered significant support from several critical Arab and Muslim-majority nations, including Saudi Arabia, Egypt, Qatar, the UAE, Jordan, and Turkey.** **Their support was driven by:** 1. **The immediate end to the conflict and the humanitarian crisis.** 2. **The commitment to reconstruction and economic opportunity in Gaza.** 3. **The plan's explicit statement that Israel would not annex any territory in the West Bank.** 4. **Their willingness to potentially contribute to the proposed International Stabilization Force (ISF), provided it receives a mandate from the UN Security Council.**
INTERNATIONAL COMMUNITY	**Status: Broad Support for Framework.** **Leaders from countries like France, India, and Italy welcomed the framework as a much-needed step toward securing the release of hostages and preventing further bloodshed, praising the ambitious vision for post-conflict governance and reconstruction.**
INDIA	• **India officially endorsed the Gaza Peace Plan, emphasizing the importance of immediate ceasefire, humanitarian aid, and the release of hostages.** • **India welcomed the enhanced humanitarian assistance for the people of Gaza, highlighting the need for aid to reach civilians without interference.**

Challenges to the Framework:

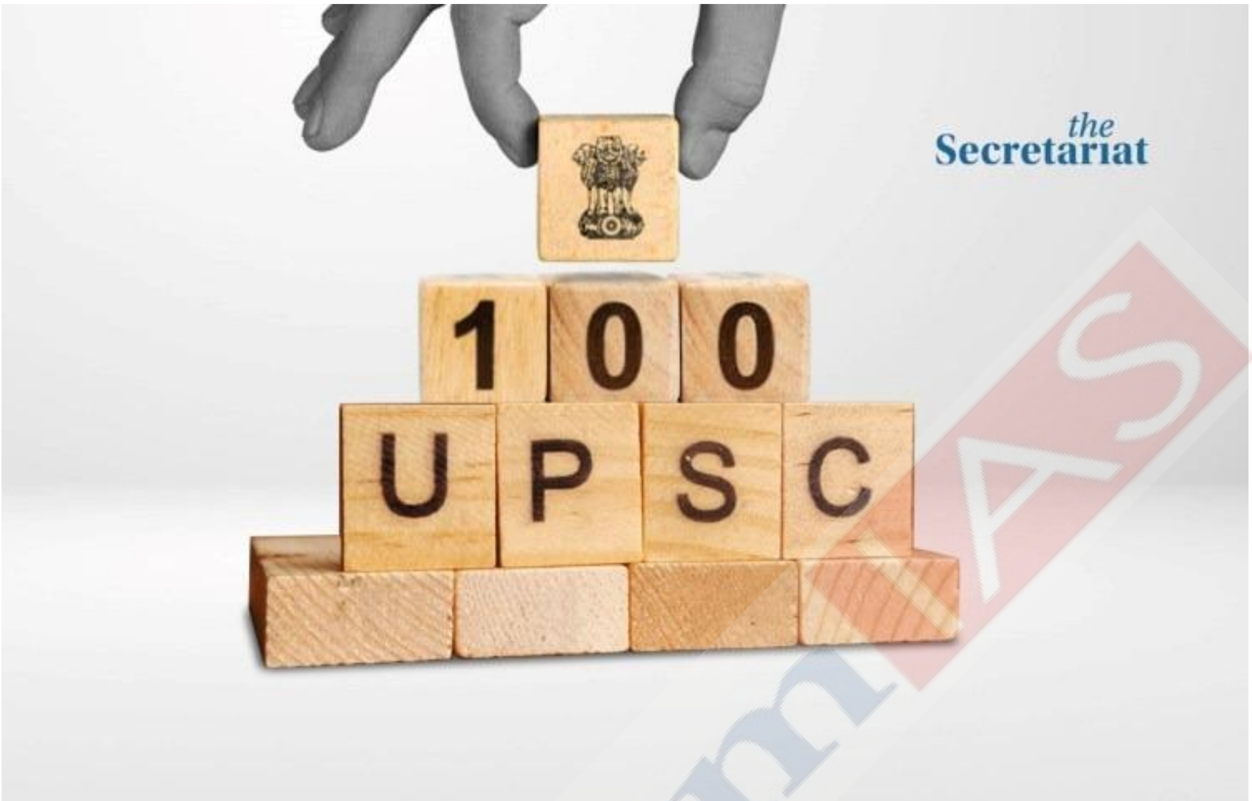
1. **Hamas' Reluctance to Fully Disarm and Relinquish Political Control:** Hamas remains hesitant to fully disarm or cede political power in Gaza to an interim technocratic government, fearing loss of influence and ideological defeat. Resistance to demilitarization threatens the framework's core premise of a "terror-free" Gaza.
2. **Trust Deficit Between Parties:** Deep mistrust between Israel and Hamas, built over decades of conflict and failed peace efforts, limits willingness for compromise and compliance. Allegations of violations or bad faith could derail ceasefire and prisoner exchange agreements.
3. **Implementation of International Stabilization Force (ISF):** Deploying a multinational force with adequate mandate, resources, and cooperation from all regional powers (Egypt, Qatar, Turkey, US) is politically and logistically complex. Ensuring neutrality, effectiveness, and long-term commitment from troop-contributing countries is a major hurdle.
4. **Regional and International Political Dynamics:** Divergent interests of Arab states, Iran's influence on proxy groups, US political transitions, and Russia-China stances complicate consensus and sustained pressure for Assad. Normalization efforts by some Arab states with Israel have not allayed tensions, and pockets of opposition persist.
5. **Humanitarian and Infrastructure Challenges:** Rebuilding Gaza's war-torn infrastructure requires massive funding, coordination, and time, with risks of corruption or diversion of resources. Delivering continuous humanitarian aid under volatile security conditions presents logistical and political challenges.
6. **Security Guarantees and Enforcement:** Ensuring lasting security guarantees for Israel while addressing Palestinian rights and aspirations is delicate; enforcement of disarmament to prevent rearmament remains uncertain.

Conclusion: The 20-point framework faces serious challenges including Hamas's resistance to disarmament, entrenched mistrust, difficulties in deploying and maintaining an international stabilization force. Overcoming these requires sustained diplomatic effort, broad-based political will, and robust enforcement mechanisms.

UPSC GS-2: International Relations
Read More: [The Indian Express]

UPSC@100 – Functions & Challenges – Explained Pointwise

The Union Public Service Commission (UPSC) marks a century of its establishment on October 1. Envisioned by the nation's founders as a guardian of meritocracy, the UPSC has played a pivotal role in the recruitment, the promotion and the disciplining of officials of the Central Civil Services. Its journey over the past 100 years is not just an institutional history but also a testament to India's enduring faith in fairness, trust and integrity in governance.



Source: The Secretariat

Introduction:

- **The Union Public Service Commission (UPSC) is the central recruiting agency responsible for appointments to the All India Services and Group 'A' and Group 'B' central services. It is regarded as the "watch-dog of the merit system" in India.**

- **It is a constitutional body established under Part XIV (Articles 315 to 323) of the Indian Constitution.**

Functions of UPSC:

1. **Conducting Examinations: The UPSC is responsible for holding examinations for appointments to the All India Services (IAS, IPS, IFS), the Central Services (Group 'A' and 'B' services), and various technical posts.**
2. **Direct Recruitment and Selection: Recommends candidates for direct recruitment through interviews or examinations to Group A and B posts in central government services and some Union Territories.**
3. **Appointments on Promotion and Deputation: Advises the government on appointments, promotions, transfers, and absorption into central services.**
4. **Framing and Amending Recruitment Rules: Consulted for framing or amending recruitment and service rules for various services to ensure fair and transparent procedures.**
5. **Disciplinary Cases: Advises on disciplinary matters affecting civil servants, including inquiries and penalties.**

6. **Annual Reporting: Submits an annual report on its work to the President of India, who presents it to the Parliament with explanations where the government did not accept the Commission's advice.**
7. **Assistance to States: Assists state public service commissions upon request in framing and operating recruitment schemes, especially for joint recruitments requiring special qualifications.**

Independence of UPSC:

The Constitution has made the following provisions to safeguard and ensure the independent and impartial functioning of the UPSC:

1. **The Chairman or a member of the UPSC can be removed from office by the President only in the manner and on the grounds mentioned in the Constitution. Thus, they enjoy security of tenure.**
2. **The conditions of service of the chairman or a member, though determined by the President, cannot be varied to his disadvantage after his appointment.**
3. **The entire expenses including the salaries, allowances, and pensions of the Chairman and members of the UPSC are charged on the Consolidated Fund of India and are not subject to the vote of Parliament.**
4. **The chairman of the UPSC on ceasing to hold office is not eligible for further employment in the Government of India or any state.**
5. **A member of the UPSC is eligible for appointment as the Chairman of UPSC or a State Public Service Commission but not for any other employment in the Government of India or any state**
6. **The chairman or a member of UPSC is not eligible for reappointment to that office for a second term.**

Limitations of UPSC:

1. **Advisory Nature of Recommendations: The UPSC's advice on recruitment rules, promotions, and disciplinary matters is not binding on the government. When the government chooses to override its advice, it can undermine the institution's credibility and the merit principle it upholds. The UPSC's only power here is to report the dissent to Parliament.**
2. **Political and External Pressure: While constitutionally independent, the Commission members can face pressure regarding specific appointments, promotions, or disciplinary recommendations, testing their impartiality, especially given that the appointment process for members is controlled by the Executive.**
3. **Exclusion of Posts (Article 320(3)): The President can issue regulations specifying the matters in which the Commission does not need to be consulted. Historically, this has been used to exclude posts related to:**
   - **Lower-Level Posts: Group 'C' and Group 'D' services.**
   - **Temporary Appointments: Appointments for less than one year.**
4. **Discretion in Promotions: While consulted for promotions, the final decision-making power rests with the appointing authority (the concerned ministry or department). The UPSC's role is typically confined to ensuring fairness in the selection procedure.**
5. **Reservation Policy: The UPSC is not consulted on matters relating to the provision of reservations (such as for SCs, STs, and OBCs) in appointments. This policy matter rests entirely with the government.**
6. **Service Rules: While consulted on recruitment rules, the UPSC is often excluded from being consulted on rules related to the classification of services, tenure, or pay and allowances.**

7. **Staff and Budget: The Commission relies on the Executive for its staffing (Secretariat) and financial resources. Its conditions of service, staff size, and budget are determined by rules framed by the President, limiting its administrative autonomy.**
8. **No Training or Development Role: The UPSC has no role in the post-selection training, posting, transfer, or career management of the appointed officers. These functions are handled by the Department of Personnel and Training (DoPT) and the respective administrative ministries.**
9. **Limited Disciplinary Implementation: In disciplinary cases, the UPSC only provides an independent inquiry and recommendation. It does not have the authority to impose penalties like suspension or dismissal; that power rests solely with the competent disciplinary authority within the government.**

Reforms Needed:

1. **Binding Disciplinary Advice: The government should make the UPSC's advice binding in all major penalty disciplinary cases. Allowing the Executive to frequently overturn advice concerning the conduct of senior officers erodes the principle of impartial accountability.**
2. **Standardized Rules Vetting: UPSC advice on the creation or amendment of Recruitment Rules (RRs) should be deemed accepted within a fixed period (e.g., 60 days) unless the reasons for rejection are approved by a high-level, constitutionally mandated committee.**
3. **Separation of Wings: Establish a clear separation between the Recruitment Wing (for CSE) and the Advisory Wing (for disciplinary/promotions), each with dedicated full-time staff and resources to prevent backlogs in one area from affecting the other.**
4. **Delegating Lower Recruitment: Completely delegate recruitment for lower posts (Group C and D) to specialized, state-level or departmental recruitment bodies, allowing UPSC to focus solely on Group A and B services.**
5. **Greater Transparency in Evaluation:**
   - **Standardized Model Answers: Publish an indicative model answer structure or key themes for essay and general studies papers shortly after the results are declared. This provides candidates with necessary feedback on the expected standard.**
   - **Audit of Scaling: Subject the scaling or moderation process used for optional subjects (to ensure parity across different subjects) to external, independent audit, and publish the statistical methodology used.**
6. **Improved Selection of Commission Members: The quality and integrity of the UPSC depend on its members and Chairman:**
   - **Broadening the Selection Committee: The selection committee for UPSC members and the Chairman should be expanded to include the Leader of the Opposition and the Chief Justice of India (or their nominee), making the appointment process more non-partisan and credible.**
   - **Defining Eligibility Criteria: Clearly define non-political, merit-based criteria (e.g., experience in education, administration, law, or public management) for appointment to prevent it from becoming a post-retirement sinecure for political appointees.**

Conclusion: UPSC is at the heart of the recruitment journey of lakhs of aspiring candidates who are driven by dedication, perseverance & a dream to serve the nation. Thus, as it enters its centenary year, it should not only celebrate but also bring reforms to make the recruitment process more transparent & equal playing, as well as, it should continue to uphold its gold standard of integrity, fairness & excellence to serve the nation with the same trust & distinction in the years to come.

UPSC GS-2: Polity – Constitutional Bodies
Read More: [The Hindu]

Cyber Frauds and Safeguarding India's Digital Economy – Explained Pointwise

India's cyberspace has expanded rapidly with over 86% of households now connected to the internet, reflecting the transformative progress under the *Digital India* initiative. However, the rise in digital penetration has also led to an unprecedented increase in cyber frauds such as phishing, unauthorized access, data theft, and online scams targeting individuals and institutions. The number of cybersecurity incidents has surged from 10.29 lakh in 2022 to 22.68 lakh in 2024, highlighting both increased reporting and growing vulnerability in the digital ecosystem.

Emerging Trends in Cyber Frauds:

1. **The pattern of frauds has become more sophisticated, with the rise of AI-driven deepfakes and social engineering scams.**
2. **Fraudsters exploit Unified Payments Interface (UPI) by cloning or misusing virtual numbers, leading to unauthorized fund transfers.**

3. **Phishing, pig-butchering, phantom hacking, and instant loan app scams are among the fastest-growing digital crimes.**
4. **The financial losses from online betting apps alone are estimated to exceed ₹400 crore, illustrating the economic dimension of cyber threats.**
5. **Organised crime networks, often based in Southeast Asian "fraud factories," are increasingly involved in transnational cyber-fraud operations.**

Need for Safeguarding India's Digital Economy from Cyber Frauds:

1. **Protecting Financial Inclusion & UPI Adoption: The digital economy's greatest strength is also its biggest vulnerability: its penetration into rural and lower-income segments:**
    - **Erosion of Trust: Millions of citizens have entered the formal financial system solely through mobile apps and UPI. If these users—who may have lower digital literacy—become victims of phishing or impersonation scams, their trust in digital payments collapses. This setback could reverse years of hard-won financial inclusion progress.**
    - **Scale of Transactions: India processes billions of UPI transactions monthly. Even a small fraction of successful frauds translates into astronomical financial losses, often impacting small merchants and everyday users most severely.**
    - **Vulnerability of Endpoints: The weakest link is often the user's endpoint (mobile phone). Frauds rely heavily on social engineering, phishing links, and remote access apps rather than just technical network breaches, making user education and strong fraud-detection algorithms essential.**
2. **Mitigating Economic Losses & Investment Risks: Unchecked cyber fraud directly impacts capital, discourages investment, and strains enforcement agencies:**
    - **Direct Capital Loss: Fraud results in the immediate loss of capital, both for individuals and the financial institutions that absorb or reimburse certain losses. This drains liquidity from the formal banking sector.**
    - **Discouraging FDI: Foreign Direct Investment (FDI) depends on confidence in the security and regulatory environment. High-profile cyber breaches or rampant fraud signal a weak defense perimeter, making international investors hesitant to commit capital to digital enterprises.**
    - **Cost of Compliance and Security: Businesses must divert increasing amounts of resources—time, money, and skilled personnel—from innovation into compliance and security patches, slowing down organic economic growth.**
3. **Securing Critical Infrastructure & Data Sovereignty: As banking, energy, telecom, and transportation are now interconnected through digital systems, the scope of a cyber attack extends far beyond financial loss:**
    - **Attacks on Critical Infrastructure: Malicious actors targeting the systems that underpin the digital economy (e.g., banking cores, power grids, or telecom networks) could lead to systemic paralysis, crippling national services and posing a direct threat to national security.**
    - **Data Exploitation: Fraudulent activities often serve as precursors for large-scale data theft and identity compromise. Protecting user data—which underpins the success of the Digital India stack—is crucial for maintaining individual sovereignty and preventing misuse by foreign or adversarial entities.**

Challenges in Curbing Cyber Frauds:

1. **Rapid Technological Evolution: The fast pace of artificial intelligence, deepfakes, and quantum technologies outpaces the capability of enforcement and regulation.**
2. **Low Cyber Awareness: A large segment of citizens lacks digital literacy and are unaware of basic cyber hygiene practices.**
3. **Jurisdictional and Cross-Border Barriers: Many frauds originate overseas, complicating investigation and extradition.**
4. **Under-Reporting of Cases: Victims often refrain from reporting due to fear of embarrassment or lack of faith in grievance systems.**
5. **Limited Skilled Workforce: Shortage of trained digital forensic professionals in small towns and districts delays timely response.**
6. **Fragmented Institutional Coordination: Overlaps between agencies like CERT-In, I4C, and NCIIPC can hinder real-time information exchange.**
7. **Implementation Gaps: Enforcement of the *Digital Personal Data Protection Act, 2023* and related frameworks remains nascent.**
8. **Financial Inclusion Risks: First-time digital users and senior citizens remain the most vulnerable to UPI and SMS-based scams.**

Cyber Laws and Legal Safeguards:

1. **The Information Technology Act, 2000 forms the legal backbone of India's cyber law framework, covering offences like identity theft, impersonation, and cyber fraud.**
2. **The Intermediary Guidelines and Digital Media Ethics Code, 2021 ensures accountability of digital intermediaries and curbs the dissemination of harmful content.**
3. **The Digital Personal Data Protection Act, 2023 mandates lawful, consent-based processing of personal data, protecting citizens from misuse and unauthorized access.**
4. **These frameworks collectively enabled the blocking of 94.28 lakh SIM cards and 26,348 IMEIs linked to fraudulent activities.**
5. **Over 1.08 lakh police officers have been trained in cyber investigation, and 82,704 certificates have been issued to strengthen cyber forensic capacity.**

Key Measures and Institutional Framework:

1. **The Union Budget 2025–26 has allocated ₹782 crore for cybersecurity projects, emphasizing the government's commitment to digital resilience.**
2. **The National Cyber Crime Reporting Portal (www.cybercrime.gov.in) enables citizens to lodge online complaints and facilitates fund freezing in financial frauds.**
3. **A dedicated helpline (1930) provides immediate support to victims of online financial crimes.**
4. **The Indian Computer Emergency Response Team (CERT-In) acts as the national nodal agency for cyber incident response. It has conducted 109 mock drills and engaged 1,438 organizations to assess cyber preparedness.**
5. **The National Critical Information Infrastructure Protection Centre (NCIIPC) safeguards critical sectors such as banking, telecom, and power through sector-specific security audits.**
6. **The Indian Cybercrime Coordination Centre (I4C) under the Ministry of Home Affairs coordinates law-enforcement efforts and has successfully blocked 3,962 Skype IDs and 83,668 WhatsApp accounts linked to cyber fraud.**
7. **To regulate emerging threats, the Promotion and Regulation of Online Gaming Bill, 2025 was enacted to govern online money gaming and its associated financial transactions.**
8. **The Citizen Financial Cyber Fraud Reporting and Management System (CFCFRMS) has strengthened the grievance-redressal mechanism for online financial crimes.**

9. Through the Cybercrime Prevention against Women and Children (CCPWC) scheme with an outlay of ₹132.93 crore, cyber forensic labs have been set up across 33 States and Union Territories, and over 24,600 personnel have been trained in cyber investigation.
10. The Manthan Platform and over 205 workshops have enhanced inter-agency collaboration, awareness, and training on cyber governance.

Way Forward:

1. Strengthen Legal Architecture: Amend and modernize the *IT Act, 2000* to include AI-related, blockchain-based, and cross-border cyber offences.
2. Integrated Cyber Defence: Establish a unified *National Cyber Defence Architecture* to synergize CERT-In, I4C, and NCIIPC operations.
3. Capacity Building: Incorporate cyber law, digital forensics, and ethical hacking modules in police and judicial academies.
4. Public Awareness Campaigns: Launch a nationwide *Cyber Suraksha Abhiyan* focusing on rural areas and vulnerable populations.
5. Technological Innovation: Employ AI-driven fraud detection, blockchain for transaction traceability, and predictive analytics for threat forecasting.
6. International Collaboration: Strengthen partnerships with INTERPOL, ASEAN, and the *Budapest Convention on Cybercrime* for intelligence sharing and extradition mechanisms.
7. Gender and Child-Sensitive Approach: Expand the CCPWC programme and create safe online environments through parental control tools and awareness education.
8. Regular Cyber Audits: Mandate annual cybersecurity audits for all government departments and financial institutions.

CONCLUSION: India's Prime Minister envisions *"a Digital India where cybersecurity becomes an integral part of national security."* With comprehensive frameworks like CERT-In, I4C, and the Data Protection Act, India is building robust digital defence mechanisms.
The convergence of strong laws, institutional coordination, public awareness, and technological innovation will help India emerge as a digitally secure and resilient nation, ensuring that the benefits of digitalization are not undermined by the perils of cyber fraud.

Read More: The Hindu
UPSC GS-3: Cybersecurity

Alternative Dispute Resolution in India – Significance and Challenges – Explained Pointwise

The Minister of Law and Justice recently reaffirmed the government's commitment to legal reforms rooted in India's civilizational ethos. Citing the doctrine of Panch Parmeshwar, which embodies the principle of collective consensus in dispute resolution, the Minister emphasised the need for global cooperation to strengthen Alternative Dispute Resolution (ADR) mechanisms.
The India Justice Report 2025 highlights significant challenges in India's justice system, particularly including access, delays, and accountability. According to the National Judicial Data Grid (NJDG), the total number of pending cases in India is 4,57,96,239. In the Supreme Court, the number of pending cases is 81,768, and in the High Courts, it is approximately 62.9 lakh. These delays often result in injustice, increasing the focus on ADR as a faster, cost-effective, and socially inclusive way to deliver justice.

Introduction:

- **Alternative Dispute Resolution (ADR) refers to non-judicial mechanisms such as arbitration, mediation, conciliation, negotiation, and Lok Adalats, which are used to resolve disputes outside traditional courts.**
- **ADR is vital for promoting access to affordable, timely, and amicable justice and helps ease the burden on the formal judiciary.**

Types of ADR Mechanisms:

Arbitration	• **Arbitration is the most formal type of ADR and results in a binding decision.** • **Process: Parties voluntarily refer their dispute to one or more independent third parties (Arbitrators).** • **Outcome: The arbitrator, acting like a private judge, delivers an Arbitral Award.** • **Enforcement: This award is legally binding and is enforceable in court, making it a powerful alternative to litigation, especially for commercial contracts.**

Mediation	• **Conciliation is a non-binding process where a neutral third party (the Conciliator) assists the parties in reaching a negotiated settlement.** • **Role of Conciliator: The conciliator is highly proactive. They may suggest terms of settlement, assess legal merits, and even draft proposals to help the parties bridge their differences.** • **Outcome: If successful, the parties sign a Settlement Agreement, which holds the same status as an Arbitral Award and is enforceable under law.**
Conciliation	• **Mediation is a flexible, non-binding process where the third party (the Mediator) facilitates dialogue between the parties.** • **Role of Mediator: The mediator acts as a neutral communication expert. They do not give legal advice or suggest solutions but help the parties understand each other's interests and explore creative, mutually acceptable solutions.** • **Focus: It is party-centric and often used in family, labour, and community disputes where preserving the relationship is important.**
Negotiation	• **Negotiation is the most common and least formal method where parties directly communicate to reach a voluntary settlement without the intervention of a third party. While not typically included in formal ADR definitions, it is the bedrock upon which most ADR successes are built.**
Lok Adalat	• **The Lok Adalat system, established under the Legal Services Authorities Act, 1987, is a unique Indian contribution to ADR.** • **Purpose: To provide a forum for speedy and inexpensive justice, particularly to the weaker sections of society.** • **Functioning: They are presided over by a judicial officer, social workers, and lawyers. They mainly deal with pre-litigation cases or cases pending in regular courts.** • **Outcome: The awards passed by Lok Adalats are deemed to be a decree of a civil court and are final and binding on the parties, with no provision for appeal. This finality makes them highly effective for mass dispute resolution, such as in motor accident claims or petty civil matters.**

Legal & Statutory Foundations of ADR mechanisms in India:

1. **Constitutional Provisions:**

- **Article 39A: Mandates the state to provide free legal aid and ensure justice is accessible, which supports the growth of ADR as an affordable justice mechanism.**
- **Articles 14 and 21: Guarantee equality before the law and protection of life and personal liberty, underpinning the right to access alternative dispute resolutions.**

2. **The Arbitration and Conciliation Act, 1996: This is the foundational law for Arbitration and Conciliation. It is based on the UNCITRAL Model Law and rules, making Indian awards easily enforceable internationally. The Act has been amended several times (notably in 2015 and 2019) to improve efficiency and reduce judicial interference.**
3. **The Code of Civil Procedure (CPC), 1908: Section 89 of the CPC explicitly mandates courts to refer disputes to ADR mechanisms (Arbitration, Conciliation, Judicial Settlement, Lok Adalat, or Mediation) where potential for settlement exists.**
4. **Legal Services Authorities Act, 1987:**
    - **Establishes Lok Adalats (People's Courts) to facilitate amicable resolution of disputes.**
    - **Ensures legal aid and organizes Lok Adalats at various levels.**
    - **Awards passed by Lok Adalats are binding and final without appeal.**
5. **Mediation Act., 2023:**
    - **A recent legal development focused on strengthening mediation as an ADR tool.**
    - **Provides the regulatory framework, accreditation of mediators, confidentiality protections, and enforcement mechanisms for mediated settlements.**

Significance of ADR:

1. **Relief to Overburdened Judiciary: India faces a massive backlog of cases in courts; ADR helps in reducing the pressure by resolving disputes quickly through arbitration, mediation, and Lok Adalats.**
2. **Affordable and Accessible Justice: ADR mechanisms are generally less expensive than litigation, making justice more accessible to economically weaker sections and promoting social equity.**
3. **Speedy Dispute Resolution: ADR resolves disputes faster than traditional court processes, which can drag on for years.**
4. **Confidentiality: Unlike public court trials, ADR processes are private, protecting the parties' business secrets and personal dignity.**
5. **Flexibility and Party Autonomy: Parties have more control over procedures and outcomes, increasing satisfaction and compliance.**
6. **Preservation of Relationships: Especially crucial in family, commercial, and community disputes, ADR encourages collaboration, understanding, and long-term coexistence.**
7. **Supports Legal Framework: ADR aligns with constitutional mandates for justice (Article 39A) and is backed by various statutes, strengthening the justice delivery system.**
8. **Promotes Specialised Resolution: Arbitration and mediation offer expert resolutions in commercial and technical disputes, enhancing efficiency.**
9. **Empowers Marginalised Groups: Through Lok Adalats and legal aid services, ADR empowers marginalized and rural populations in India.**

Challenges of ADR Mechanisms:

1. **Lack of Awareness and Education: Many litigants, especially in rural and less literate populations, are unaware of ADR options. Legal professionals and judges also sometimes lack adequate training or understanding of ADR processes.**

2. **Trust Deficit and Perception Issues: ADR is often perceived as less authoritative or impartial than courts. Some parties distrust mediators or arbitrators, fearing unfair bias or inadequate transparency.**
3. **Inconsistent Quality and Standards: There is a lack of uniform standards for mediators, arbitrators, and conciliators, leading to variability in the quality and fairness of ADR outcomes.**
4. **Limited Institutional Support: ADR infrastructure, such as mediation centers and arbitration institutions, remains underdeveloped or unevenly distributed across regions.**
5. **Enforceability and Compliance Issues: While arbitration awards are legally binding, other ADR outcomes (especially mediation and conciliation agreements) may face enforcement challenges if parties renege.**
6. **Power Imbalances and Coercion Risks: ADR processes often occur without sufficient safeguards to protect weaker parties from coercion or unequal bargaining power.**
7. **Judicial Interference and Delays: Courts sometimes interfere in ADR processes or delay enforcement, undermining ADR's efficiency benefits.**
8. **Cultural and Social Barriers: In certain disputes, societal norms and traditions may hinder open communication or acceptance of ADR outcomes.**
9. **Limited Scope for Complex Cases: ADR may not be suitable for all types of disputes, especially those involving serious criminal matters or complex multi-party litigation.**

Conclusion: Alternative Dispute Resolution forms a vital part of India's justice system, and this is timely and cost-effective for disputes outside the courtroom. ADR can become the answer for India's judicial challenges, crowding the courtrooms and lack of access to courtrooms. ADR, therefore, is not only a relief mechanism for courts but a pathway to a harmonious, efficient, and accessible justice system in India.

UPSC GS-2: Polity
Read More: The Hindu

Soil Nutrition Management – Need & Challenges – Explained Pointwise

A detailed study conducted by ICAR has found that the unscientific use of fertilisers & climate change are contributing to degradation of organic carbon in arable areas of the country. The study has found that if the organic carbon is low, then the deficiency of micronutrients in the soil is high, and if the organic carbon is high, the deficiency is low. In this regard, we need to understand the significance & challenges of soil nutrition management.

Soil Nutrition Management

What is Soil Nutrition & Soil Nutrition Management?

- **Soil nutrition refers to the availability and balance of essential nutrients within the soil that are necessary for healthy plant growth and development. It's a critical aspect of soil health and fertility, directly impacting the productivity of ecosystems and agriculture.**
- **Soil nutrients can broadly be categorized into:**

Macro-Nutrients	**<u>Primary Macronutrients (NPK)</u>:** **1. Nitrogen (N): Crucial for leafy growth, chlorophyll production (photosynthesis), & protein synthesis.** **2. Phosphorus (P): Essential for energy transfer, root and flower development, and hastening maturity.** **3. Potassium (K): Improves plant vigor, disease resistance, and helps in the formation and movement of sugars, starches, and oils, enhancing fruit quality.<u>Secondary Macronutrients</u>:** **1. Calcium (Ca): Important for cell wall structure, root health, and nutrient absorption.** **2. Magnesium (Mg): A key component of chlorophyll, vital for photosynthesis.** **3. Sulfur (S): Involved in protein synthesis and enzyme activity, contributing to flavor and odor in many plants.**
Micro-Nutrients	**Needed in smaller quantities, but equally vital for plant health and various metabolic processes.** **These include Iron (Fe), Manganese (Mn), Zinc (Zn), Copper (Cu), Boron (B), Molybdenum (Mo), Chlorine (Cl), and Nickel (Ni).**
Non-Mineral Nutrients	**Soil Organic Carbon (SOC), Hydrogen (H), and Oxygen (O) are obtained by plants from the atmosphere and water, not directly from the soil minerals.**

- **Soil nutrition management is the strategic and sustainable approach to managing the availability and balance of nutrients in the soil to optimize plant growth, enhance crop productivity, and maintain soil health, all while minimizing environmental impacts and ensuring economic viability.**
- **It's a dynamic process that goes beyond simply adding fertilizers; it involves understanding the complex interactions within the soil ecosystem and making informed decisions to meet the specific nutrient needs of crops throughout their life cycle.**
- **It works on key principles like:**
    1. **Right Source i.e. selecting the appropriate type of nutrient.**
    2. **Right Rate i.e. applying the correct amount of nutrients.**
    3. **Right Time i.e. timing of nutrient applications to match crop growth stages.**
    4. **Right Place i.e. placing nutrients where crops can absorb them effectively.**

<u>Status of Indian Soils:</u>

- **Out of the 8.8 million soil samples tested under Soil Health Card Scheme in 2024, <5% have high or sufficient N, only 40% have sufficient P, 32% have sufficient K & only 20% are sufficient in SOC (Soil Organic Carbon).**
- **Soils in India also suffer from a deficiency of sulphur, as well as micronutrients like iron, zinc & boron.**
- **Imbalanced use of N, P & K:**
    - **In Punjab – Nitrogen is overused (in excess of recommendations by 61%), while potassium & phosphorus are under-used by 89% & 8% respectively.**
    - **In Telangana – Nitrogen is overused (in excess of recommendations by 54%), while potassium & phosphorus are under-used by 82% & 13% respectively.**

- Nationwide, the fertiliser-to-grain ratio has declined significantly from 1:10 in 1970s to 1:2.7 in 2015. That means, more & more fertilisers are being used to produce same quantity of grains.
- Soils in several parts of India are severely deficient in nutrition & need to be immediately taken to ICU to restore them to normal health so that they can produce nutritious food on a sustainable basis.

Why do we need Soil Nutrition Management?

1. To Optimize Crop Yield and Quality: Plants need a balanced supply of 17 essential nutrients (macronutrients and micronutrients) to grow optimally. If even one nutrient is deficient, it can limit growth and yield, regardless of how abundant other nutrients are. Soil nutrition management ensures crops receive the right nutrients in the right amounts at the right time.
2. To Maintain and Enhance Soil Health and Fertility: Intensive farming practices, especially without proper replenishment, can "mine" nutrients from the soil, leading to widespread deficiencies over time. Management practices aim to replenish these nutrients and build up soil fertility.
3. Reducing Nutrient Pollution: Improper nutrient management (e.g., over-application, incorrect timing/placement) can lead to nutrient losses through leaching, runoff etc which can cause environmental problems like eutrophication, contamination of surface water as well as groundwater resources.
4. Mitigating Climate Change: Healthy soils, rich in organic matter, act as significant carbon sinks, sequestering carbon dioxide from the atmosphere. Sustainable soil nutrition management practices contribute to reducing greenhouse gas emissions.
5. Optimizing Input Costs: By applying the right amount of nutrients at the right time and place, farmers can avoid wasteful over-application of fertilizers, leading to significant cost savings.

What are the challenges to Soil Nutrition Management?

1. Nutrient Deficiencies and Imbalances in Soil: Soils in India suffer from deficiencies in multiple macro and micronutrients (e.g., nitrogen, phosphorus, potassium, zinc, boron, sulfur). Compounding this is the imbalanced use of fertilizers, often favoring nitrogen due to subsidies, leading to an skewed NPK ratio and further nutrient imbalances.
2. Low Soil Organic Carbon (SOC): Depleting SOC levels are a major concern. Low SOC reduces the soil's ability to retain nutrients and water, impairs soil structure, and diminishes microbial activity, making nutrient management more difficult.
3. High Cost of Inputs: Lack of proper soil nutrition management practices leads to more use of fertilisers. Fertilizers, especially those containing micronutrients or organic amendments, can be expensive for small and marginal farmers, who constitute a large portion of the agricultural sector.
4. Subsidy Distortions: Government subsidies, particularly on nitrogenous fertilizers (like urea), can create perverse incentives, encouraging overuse of certain nutrients while discouraging the balanced application of others. This leads to nutrient imbalances and inefficient resource allocation.
5. Nutritional Deficiency in Crops: Soil nutrient deficiency not only impair agriculture productivity but also degrade the nutritional quality of crops. Crops grown on nutrient deficient soils often mirror those deficiencies, leading to a silent but pervasive form of malnutrition in humans for e.g. Zinc deficiency in Indian soils translates into low Zn content in cereals like wheat & rice, which in turn is linked to childhood stunting.

What have been various government initiatives for SNM?

1. **Soil Health Card (SHC) Scheme: Launched in 2015. The scheme aims to inform the farmers about the nutrient status of their soil and provides recommendations on the appropriate dosage of fertilizers and soil amendments needed to maintain soil health and fertility. The SHC includes information on 12 parameters: Macronutrients (Nitrogen, Phosphorus, Potassium), Secondary nutrient (Sulphur), Micronutrients (Zinc, Iron, Copper, Manganese, Boron), and Physical parameters (pH, Electrical Conductivity, Organic Carbon).**
2. **Paramparagat Krishi Vikas Yojana (PKVY): Also launched in 2015. The scheme aims to promote organic farming in India, aiming to improve soil health and organic matter content, and increase farmers' net income by realizing premium prices for organic produce.**
3. **Neem Coated Urea (NCU): Urea is coated with neem oil, which slows down the nitrification process (conversion of urea into forms that can be lost through leaching or volatilization). This ensures a slower, more sustained release of nitrogen, making it more available to the crop over a longer period.**
4. **PM Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother-Earth (PM-PRANAM): Launched in 2023. The scheme aims to incentivize States and Union Territories to promote the sustainable and balanced use of fertilizers, adopt alternative fertilizers, and encourage organic farming.**
5. **Integrated Watershed Management Programme (IWMP) and National Policy for Management of Crop Residues (NPMCR): Focus on soil moisture conservation, prevention of nutrient loss, and promotion of in-situ conservation practices to protect and enrich soil.**

What can be the way forward?

1. **Integrated Nutrient Management (INM): INM is a holistic and sustainable approach to managing soil fertility and plant nutrient supply. It involves the judicious combination of various sources of plant nutrients, including organic, inorganic, and biological components, to achieve optimal crop productivity while enhancing soil health and minimizing environmental degradation.**
2. **Reform Fertilizer Subsidies: Gradually reorient subsidies from product-based (especially urea) to nutrient-based (NBS) for all fertilizers, including urea, to encourage balanced fertilization (the ideal NPK ratio of 4:2:1). This could involve linking subsidies more directly to Soil Health Card recommendations.**
3. **Promoting Sustainable Agricultural Practices:**
    a. **Crop Residue Management: Strictly discourage crop residue burning and promote in-situ management (e.g., using Pusa Decomposer, happy seeder technology) and ex-situ utilization (e.g., for biochar production).**
    b. **Conservation Agriculture (CA): Actively promote reduced tillage, no-tillage, and direct seeding practices to minimize soil disturbance, improve soil structure, and conserve moisture and organic matter.**
    c. **Diversify Cropping Systems: Encourage crop rotation and intercropping to break pest cycles, improve nutrient cycling, and reduce the depletion of specific nutrients. Promote millets and other nutri-cereals for dietary diversity and climate resilience.**
4. **Nano-Fertilizers and Smart Delivery Systems: Accelerate research and development of nano-fertilizers and other precision agriculture technologies (e.g., sensor-based nutrient application, variable rate technology) for efficient nutrient delivery and reduced environmental impact.**
5. **National Soil Policy: Implement a comprehensive National Soil Policy to integrate efforts across sectors, streamline incentives, and set clear targets for soil conservation, restoration, and**

sustainable management. This would address erosion, nutrient loss, and carbon sequestration, and align actions with land degradation neutrality goals by 2030.

Conclusion:
Soil nutrition management is no longer only an agriculture issue, it has become a public health imperative because only when the soils receive the nutrients do they produce food that nourishes rather than merely fills the stomach. Thus, a science-based soil nutrition management is the urgent need of the hour for India.

Read More: [The Hindu]
UPSC GS-3: Agriculture

India-Bhutan Relationship – Significance & Challenges – Explained Pointwise

PM Narendra Modi is on a visit to Bhutan. India-Bhutan relations are marked by exemplary friendship, trust, and multi-sectoral cooperation, but also face complexities arising from strategic, economic, and geopolitical challenges. The relationship is India's one of the most successful partnerships – that thrives despite vast asymmetry in size & significant changes in the regional environment.

Introduction:

- **Relationship with Bhutan is cornerstone of India's Neighbourhood First Policy.**
- **The relationship is characterized by deep trust, shared security interests, and extensive developmental cooperation. It is often described as a special relationship that has withstood geopolitical challenges.**
- **The relationship is built on a legacy of mutual respect and is underpinned by key treaties:**
    - **Treaty of Peace and Friendship (1949): This was the original foundation, establishing close ties.**
    - **Revised Treaty of Peace and Friendship (2007): The treaty was revised to reflect Bhutan's sovereignty and transition to a constitutional monarchy. While preserving the spirit of close cooperation, the revised treaty grants Bhutan full authority over its foreign policy, while New Delhi remains committed to assisting Bhutan's security and development.**

Significance of India-Bhutan Bilateral Relations:

For India	1. **Buffer Against China: Bhutan's location as a buffer state between India and China is critical for Indian national security, especially in the sensitive Chumbi Valley and Doklam region, which are close to India's Siliguri Corridor. Thus, Bhutan is important for India to secure its 'Chicken's neck' corridor.** 2. **Regional Diplomacy: Bhutan aligns with India on global and regional platforms like SAARC, BIMSTEC, and BBIN, reinforcing India's leadership and countering external influences.**

	3. **Countering Internal Threats: Cooperation with Bhutan is vital for border management and checking the movement of insurgents and extremist groups operating in India's North-Eastern states.**
For Bhutan	1. **Trade and Investment: India is Bhutan's largest trading partner, accounting for over 75% of its imports and nearly 60% of its exports. Duty-free trading and free movement of goods bolster Bhutan's economic stability.** 2. **Hydropower Cooperation: Indian investment in Bhutan's hydel projects (Tala, Chukha, Kuricchu, Mangdechhu) provides Bhutan with a steady and sustainable revenue stream. The revenue generated from selling hydropower to India often accounts for over 25% of Bhutan's national revenue, making it the single largest source of foreign exchange.** 3. **Development Aid: India is the largest provider of development assistance to Bhutan, contributing thousands of crores for Five Year Plans, education, health, infrastructure, and High Impact Community Development Projects.** 4. **Indian Diaspora: About 50,000 Indians are presently working in Bhutan in the sectors such as infrastructure development, hydropower, education, trade and commerce signifying close people to people ties between the two countries.**

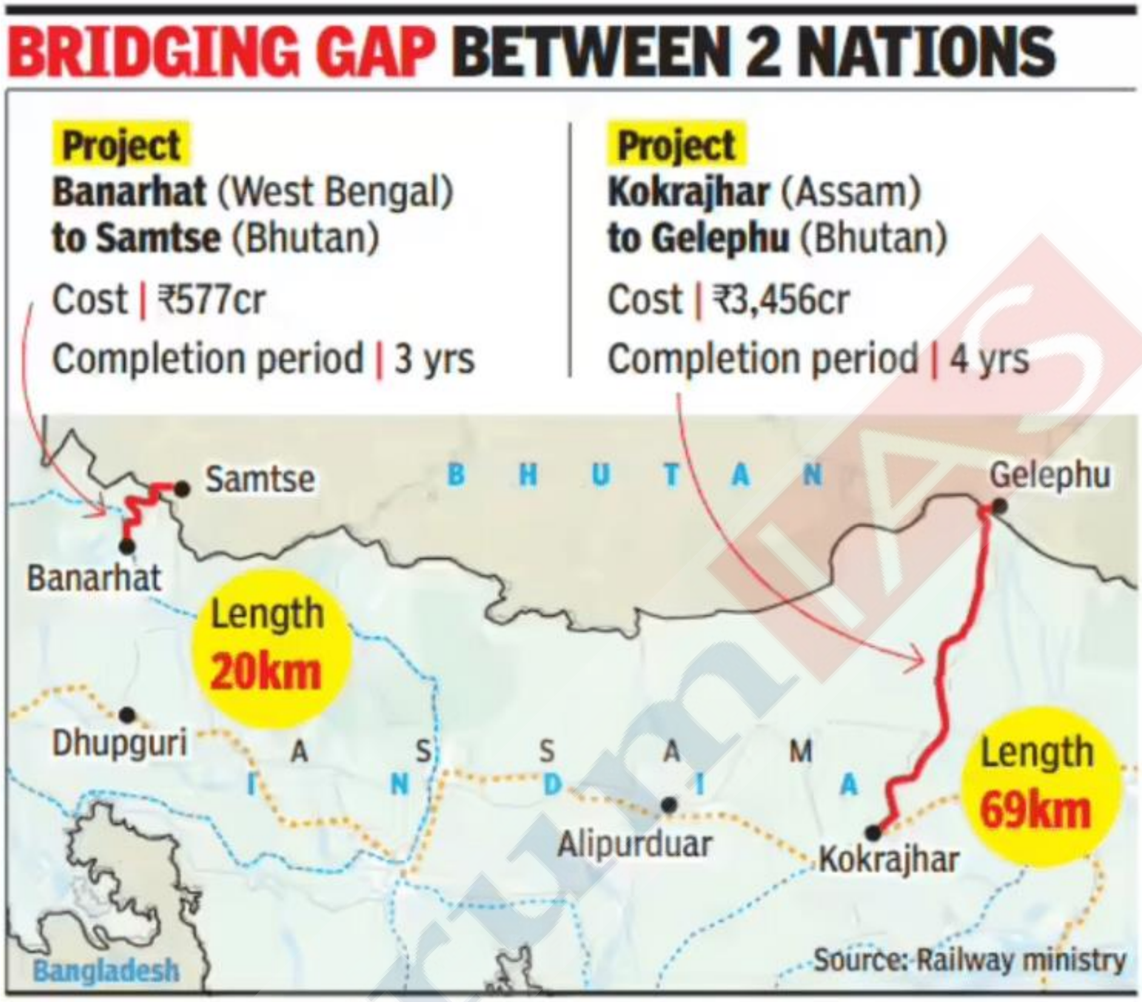
Challenges in India-Bhutan Bilateral Relations:

1. **Bhutan-China Border Talks: Bhutan is actively engaged in border negotiations with China, particularly concerning the disputed areas in the north and the crucial Doklam Plateau in the west. Any settlement reached between Bhutan and China has profound implications for India, especially for the security of its Siliguri Corridor (the "Chicken's Neck").**
2. **Hydropower Concerns: While hydropower is a cornerstone of bilateral cooperation, Bhutanese critics sometimes see project terms as too favorable to India, leading to public dissent and questions around equity and sustainability. Delays and cost overruns in hydropower projects contribute to discontent in Bhutan.**
3. **Trade Diversification & Economic Diversification:**
    - **Bhutan faces a persistent trade deficit, importing much more from India than it exports, despite preferential trade agreements.**
    - **Bhutan is keen to diversify its economy into non-hydro sectors like high-end tourism, IT, and sustainable industries.**
    - **Despite the free trade agreement, Bhutanese businesses sometimes face non-tariff barriers or bureaucratic hurdles when trying to access the Indian market.**
4. **Connectivity & Infrastructure Gaps:**
    - **Road, rail, and transport links between India and Bhutan remain limited, hampering further economic and strategic integration.**
    - **Bhutan's reservations about joining the BBIN Motor Vehicles Agreement due to sustainability and environmental concerns have slowed regional connectivity initiatives.**

5. **The "Big Brother" Syndrome: Due to India's overwhelming size and historical role as protector, there is a persistent public sentiment (though small) in Bhutan that views India as overly dominant or a "Big Brother."**
6. **Environmental & Social Sensitivities: Bhutan's focus on Gross National Happiness and environmental preservation sometimes clashes with India's infrastructure-led approach (e.g., highways, hydropower, BBIN MVA). There are concerns about the potential social impacts of rapid integration, such as migration and cultural change.**
7. **Border Management & Security: While the 699 km India-Bhutan border is largely peaceful, incidents of illegal crossings, militant hideouts, and smuggling necessitate close security cooperation.**

<u>Various areas of Cooperation between India & Bhutan:</u>

1. **Hydropower Cooperation (Economic Engine): This is the single most important economic aspect of the relationship and a key driver of Bhutan's national revenue.**
   - **"Win-Win" Model: India funds, constructs, and operates major hydroelectric projects in Bhutan. India then purchases the surplus electricity at preferential rates. This arrangement provides Bhutan with massive revenue (accounting for over 25% of its GDP) and provides India with clean, renewable energy.**
   - **Projects: Key projects include Chukha, Tala, Kurichhu, and the large Punatsangchhu Hydroelectric Projects (I and II), which are the result of deep technical and financial collaboration.**
2. **Trade & Economic Cooperation:**
   - **Duty-Free Access: Bhutan enjoys free trade access to the Indian market for most of its exports.**
   - **Development Assistance: India is Bhutan's largest development partner. The Government of India provides significant financial grants and support for Bhutan's Five-Year Plans, funding critical sectors like education, health, and infrastructure development.**
   - **Currency Stability: The Indian Rupee (INR) is fully convertible with the Bhutanese Ngultrum (BTN), and India extends currency swap arrangements to Bhutan, ensuring financial stability during economic fluctuations.**
3. **Security & Strategic Cooperation:**
   - **Border Security: India is responsible for training the Royal Bhutan Army (RBA). The RBA and Indian forces cooperate closely on border management.**
   - **Doklam Standoff (2017): When the Chinese military attempted to build a road on the disputed Doklam plateau (claimed by Bhutan), Indian forces intervened based on the strategic implications for India's own security (Siliguri Corridor or 'Chicken's Neck'). India's intervention demonstrated its commitment to Bhutan's territorial integrity.**
4. **Connectivity & Infrastructure: India funds and constructs cross-border roads, border infrastructure (BRO Project DANTAK), bridges, and new cross-border railway lines (Gelephu/Kokrajhar, Samtse/Banarhat).**



Source: Times of India

5. **Environmental & Climate Cooperation: Joint conservation projects, such as the Transboundary Manas Conservation Area (TraMCA), and collaboration to keep Bhutan carbon-negative and promote eco-tourism.**
6. **Health Cooperation: Medical aid, initiatives like Indira Gandhi Memorial Hospital, COVID-19 assistance, and support with vaccines/essential medicines highlight the health partnership.**

Way Forward:

1. **Make Economic Partnership More Equitable & Diversified:**
    - **Ensure hydropower and trade agreements address Bhutan's concerns on dependency, revenue sharing, and sector diversification (tourism, digital economy, agriculture).**
    - **Foster Indian investments into Bhutan's non-hydro sectors—IT, services, manufacturing, health, education—to create jobs and build resilience.**
    - **Offer Bhutan full access to India's Digital Public Infrastructure (DPI), such as the UPI payment mechanism, to modernize their financial sector.**
2. **Upgrade Connectivity & Infrastructure:**
    - **Accelerate new cross-border railway links (e.g., Gelephu-Kokrajhar, Samtse-Banarhat), border checkposts, and digital integration for seamless trade and transit.**

    - **Enhance road, air, and digital connectivity for North-East India, Bhutan, and regional integration.**
3. **Strengthen Security & Strategic Coordination:**
    - **Maintain regular security dialogues and border consultations to monitor regional threats, especially China's moves near the Doklam plateau.**
    - **Intensify cooperation in border management, anti-terrorism, intelligence sharing, and disaster response.**
4. **Promote Sustainable Development & Environmental Harmony: Joint efforts on green energy (hydro, solar, hydrogen), eco-tourism, disaster resilience, and climate adaptation in line with Bhutan's Gross National Happiness approach.**

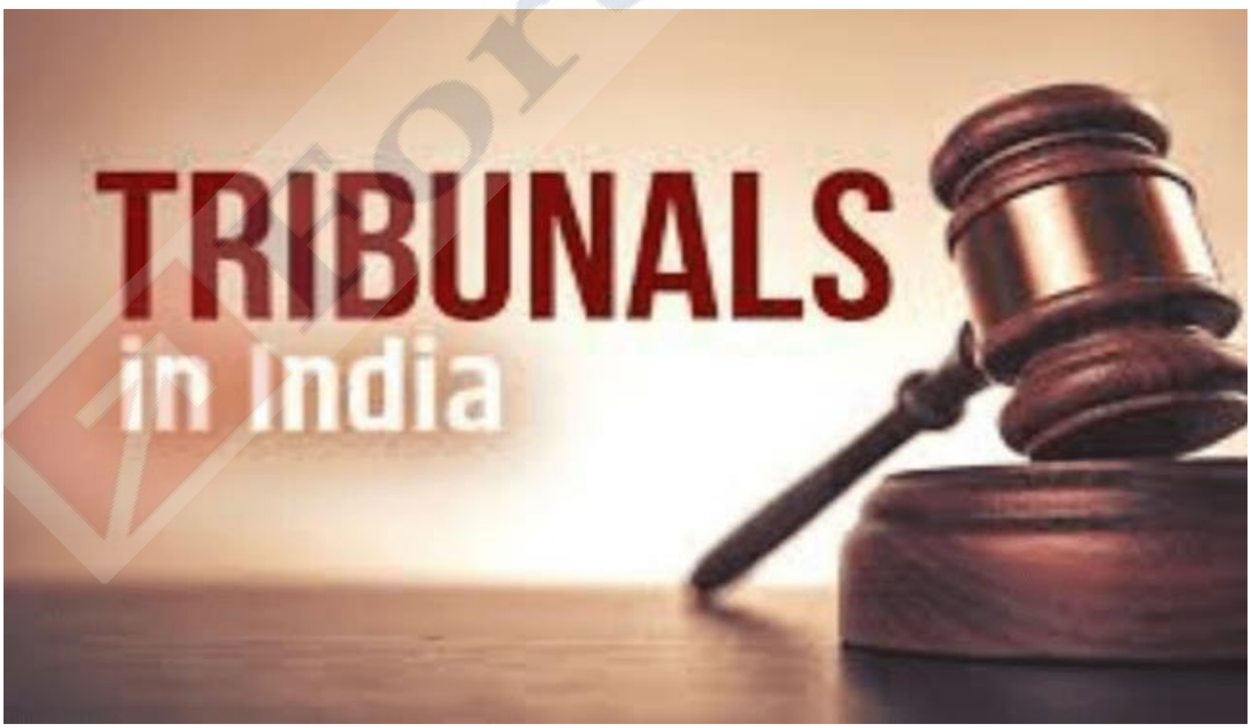
Conclusion: India-Bhutan relations are a model for good-neighbourly partnerships built on mutual respect, trust, and extensive cross-sectoral cooperation. Continued strategic sensitivity, transparency, and mutual benefit are key to sustaining and strengthening the relationship in the face of evolving regional dynamics.

UPSC GS-2: International Relations
Read More: [The Indian Express]

Tribunals in India- Explained Pointwise

The Supreme Court is hearing petitions challenging the Tribunals Reforms Act, 2021, bringing into focus the long running confrontation between the judiciary & the executive over the control of tribunals.

Tribunals in India:



What are the tribunals?

- Tribunal is a specialized, quasi-judicial body established to resolve specific disputes, such as administrative or tax-related issues. It adjudicates disputes, determines rights, and reviews administrative decisions.
- They serve as alternatives to traditional courts and specialize in providing faster, cost-effective, and expert resolutions for particular kinds of cases.
- Objective: Tribunals reduce the burden on regular courts and provide specialized dispute resolution that is swift, efficient, and accessible.
- The number of pending cases in India exceeds 4.5 crore (as per the National Judicial Data Grid, 2024), highlighting the dire need for an efficient system. According to the Tribunals Reforms Act, 2021, the Government has merged and rationalized several tribunals, aiming to improve efficiency.

Key Characteristics:

- Specialization: They deal exclusively with matters requiring specific, domain-based expertise (e.g., tax, telecom, or electricity).
- Faster Disposal: They aim to offer a quicker and more efficient resolution mechanism than the regular civil courts.
- Less Formal: Procedures are generally simpler and less rigid than those followed by civil courts, though principles of natural justice must always be adhered to.
- Composition: They typically include both judicial members (retired judges or lawyers) and administrative/technical members who possess specialized knowledge in the relevant field.

What are the constitutional and legal provisions related to Tribunals in India?

The original Constitution did not include provisions related to tribunals. However, the 42nd Amendment Act of 1976 introduced Part XIV-A, titled "Tribunals," which consists of two articles:

- Article 323A – Pertains to administrative tribunals.
- Article 323B – Covers tribunals for other specific matters

Provisions	Description
Article 323A	Grants Parliament the power to establish administrative tribunals for resolving disputes related to recruitment and service conditions of individuals employed in the Central and state governments, local bodies, public corporations, and other public authorities
Article 323B	Authorizes both Parliament and state legislatures to create tribunals for various matters, including industrial and labor disputes, foreign exchange, land reforms, elections, rent and tenancy rights, and more.

Administrative Tribunals Act, 1985
To implement Article 323A, Parliament enacted the Administrative Tribunals Act, 1985, empowering the Central Government to establish:

- **Central Administrative Tribunal (CAT) for central government employees.**
- **State Administrative Tribunals (SATs) for state government employees.**

What are the landmark judgement's related to tribunals in India?

S.P. Sampath Kumar v. Union of India (1987)	**Recognized tribunals as substitutes for High Courts and upheld their constitutional validity.**
L. Chandra Kumar v. Union of India (1997)	**Declared that tribunals cannot act as substitutes for High Courts and must be subject to judicial review under Article 226 and 227.**
Madras Bar Association v. Union of India 2014	**Administrative support for all tribunals should come under the Ministry of Law and Justice.**
Rojer Mathew versus South Indian Bank Limited & ors, 2019	**The impact of amalgamation of tribunals should be analysed with judicial impact assessment.**
Madras Bar Association versus Union of India, 2020	**National Tribunals Commission should be set up to supervise appointments, as well as functioning and administration of tribunals.**
Madras Bar Association versus Union of India, 2021	**Struck down various provisions in tribunal reforms that undermined judicial independence.**

What are the key developments in the Indian tribunal system?

Pre-Independence Era (Before 1947)	**The Income Tax Appellate Tribunal was established as India's first tribunal to reduce court workload and expedite tax dispute resolution**

Post-Independence Era (1947–1980)	1950: Industrial Disputes (Appellate Tribunal) Act provided for an appellate tribunal to handle industrial disputes. 1969: The First Administrative Reforms Commission recommended Civil Services Tribunals at national and state levels for service-related disputes. 1974: The Sixth Law Commission suggested high-powered tribunals to reduce High Court case backlogs. 1976: The Swaran Singh Committee recommended setting up: a. Administrative Tribunals ((both at national level and state level) for service-related cases. b. All-India Appellate Tribunal for labor disputes. c. Sector-specific tribunals for revenue, land reforms, and essential commodities. d. Supreme Court oversight for tribunal decisions.
Golden Era of Tribunalization (1980–2000)	Establishment of several tribunals, including: a. Central Administrative Tribunal (CAT) – for administrative matters. b. Securities Appellate Tribunal (SAT) – for financial sector disputes. c. Film Certification Appellate Tribunal – for film certification disputes. d. Appellate Tribunal for Electricity – for tariff-related cases.
2000–2016: Expansion of Tribunals	2000: Debt Recovery Tribunal (DRT) – for resolving disputes between banks and borrowers. 2002: Competition Commission of India (CCI) and Competition Appellate Tribunal (COMPAT) – to regulate fair competition. 2010: National Green Tribunal (NGT) – for environmental disputes. 2016: National Company Law Tribunal (NCLT) & National Company Law Appellate Tribunal (NCLAT) – for corporate and insolvency matters.
2017- Merger of COMPAT with NCLAT	The Finance Act, 2017 reduced the number of tribunals from 26 to 19 based on functional similarity. It gave the central government authority to define qualifications, appointments, and service conditions for tribunal members.
Tribunal Reforms Act, 2021	The Tribunals Reforms (Rationalization and Conditions of Service) Bill, 2021 aimed to streamline the tribunal system. Nine tribunals were abolished, transferring their functions to existing judicial bodies, mainly High Courts.

Why are tribunals important, and what is their significance?

1. Speedy Justice: Tribunals are designed to offer faster dispute resolution compared to traditional courts. E.g. The Consumer Disputes Redressal Commissions resolve cases within 3-6 months, NCLT expedited cases under the Insolvency and Bankruptcy Code (IBC), 2016, ensuring faster debt recovery.

2. Specialized Expertise: Tribunals were designed to handle complex, sector-specific disputes requiring technical expertise. E.g. Power sector (APTEL), taxation (ITAT), corporate law (NCLAT), copyright (IPAB).
3. Reducing Court Burden: By handling specialized cases, tribunals reduce the workload of high courts and the Supreme Court. E.g. The Central Administrative Tribunal (CAT) has significantly reduced litigation burden in service-related disputes.
4. Economic Governance: Tribunals like the NCLT and DRT play a critical role in ensuring economic stability and ease of doing business. E.g. Creditors have recovered approximately Rs 3.55 lakh crore by resolving 1,068 insolvency cases under the IBC, 2016, as of September 2024 since 2016.
5. Environmental Protection & Protecting Fundamental Rights: The National Green Tribunal (NGT) has played a pivotal role in environmental protection cases like the Vizag Gas Leak (2020). It is also instrumental in addressing environmental issues, such as the Yamuna pollution case and illegal mining in Aravalli Hills.
6. Access to Justice: Tribunals provide a cost-effective and accessible forum for resolving disputes, especially for marginalized groups.
7. Alternative Dispute Resolution (ADR): Tribunals provide an alternative dispute resolution mechanism, which can be less adversarial and more conducive to finding mutually agreeable solutions.

What are various challenges faced by Tribunals in India?

1. Case Backlogs Rising: As of 2023, the Debt Recovery Tribunal (DRT) has over 215,431 pending cases, with an asset recovery rate of just 9.2% in 2022-23, far below the desired efficiency.
2. Mergers and Abolitions Causing Hindrance: The merger of tribunals like COMPAT with NCLAT has led to overburdened benches and loss of specialization.
3. Lower Vacancies and Poor Infrastructure: Tribunals like APTEL face chronic vacancies and lack adequate infrastructure, leading to delays. NCLT operated at 50% capacity in 2023, delaying crucial insolvency resolutions. Many tribunals lack digital case management systems, affecting efficiency.
4. Judicial Overreach: The Supreme Court's intervention in the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) ruling on the Adjusted Gross Revenue (AGR) dispute has raised questions about the legal standing of tribunals.
5. Appointment Concerns: The trend of appointing retired judges and bureaucrats raises questions about post-retirement placements and expertise. E.g. The Ministry of Law and Justice controls appointments and budgets which reduces the administrative independence.
6. Lack of Uniformity: Different tribunals follow varying procedures, leading to inconsistency. For instance, the Armed Forces Tribunal (AFT) and Central Administrative Tribunal (CAT) have different rules for evidence submission.
7. Ineffective Implementation: The appointment process for tribunal members is slow and opaque, leading to prolonged vacancies. E.g. The Law Commission's 272nd Report (2017) recommended a central nodal agency, but no progress has been made.
8. Economic Impact: Delays in tribunal decisions have significant economic consequences. E.g. unresolved tax disputes worth ₹12 lakh crore are pending before various tribunals, affecting government revenue and investor confidence.

What is the Way Forward?

1. Establish an Independent Tribunal Oversight Body: Inspired by the National Judicial Appointments Commission (NJAC), a Tribunal Commission should oversee appointments, funding, and administration. E.g. The Law Commission's 162nd Report suggested a National Administrative Appellate Tribunal above High Courts—an idea that needs revisiting.
2. Structured Tribunal Management System: A Central Tribunal Division within the Ministry of Law and Justice should be implemented to streamline operations. Case management technology and AI-based analytics should be deployed to track tribunal performance.

3. Implement a Double-Shift System to Expedite Disposal: To clear the backlog, tribunals should operate in two shifts, a proposal discussed in 2011 but never implemented. This would increase case disposals without increasing infrastructure costs.
4. Strengthen the Specialization and Independence of Tribunals: Instead of appointing retired bureaucrats, tribunals must have domain-specific technical panels to ensure subject matter expertise. Reduce judicial interventions by strengthening tribunal autonomy under the Tribunals Reforms Act.
5. Digital Transformation of Tribunals: Fully digitalize tribunal processes through an e-Tribunals initiative, ensuring real-time case tracking. Integrate online dispute resolution (ODR) mechanisms to reduce case inflow into traditional tribunals. E.g. The UK's HM Courts & Tribunals Service.
6. Minimizing Executive Control: The legislature should reduce bureaucratic control over tribunal functioning, as recommended in Rojer Mathew (2019) case.
7. Enhancing Judicial Autonomy: Ensure tribunals operate with minimal interference from higher courts, as emphasized in the L. Chandra Kumar vs Union of India (1997) case.
Conclusion: Tribunals thus play a critical role in India's legal system by combining judicial powers with technical expertise to resolve disputes efficiently in domains requiring specialized knowledge. The decisions of these tribunals are generally subject to judicial review by the relevant High Court, and ultimately the Supreme Court. They serve as essential pillars of an effective governance system that requires specialized mechanisms for complex regulatory issues.

Read more: The Indian Express
UPSC Syllabus- GS 2– Quasi-judicial bodies

Cooperative and Competitive Federalism – Explained Pointwise

The States in India are no longer looking only at the Centre for supporting them, but are also competing with each other for attracting investors & pitching their case with confidence & data. Thus, the federalism in India is believed to be moving towards maturity.
Federalism in India operates on two key principles: cooperative federalism and competitive federalism, both of which influence governance, economic growth, and fiscal discipline. However, the growing trend of freebies-based competitive federalism has raised concerns about sustainability, fiscal responsibility, and the long-term economic impact.
While competitive federalism fosters economic efficiency and innovation, an unchecked race to provide freebies threatens financial stability. This article explores the dynamics of cooperative and competitive federalism & their impact on governance, and their challenges.

Source- Big Buzz

What is the concept of Competitive and Cooperative Federalism?

Cooperative Federalism

Cooperative federalism emphasizes collaboration between the Union and state governments. Both levels of government share responsibilities and work together for the larger public interest. It ensures coordination and alignment of policies across the Centre and states. Examples include:

1. Goods and Services Tax (GST) Council, where the Centre and states jointly decide tax rates and structures.

2. Ayushman Bharat and PM-KISAN, which require Centre-state collaboration for effective implementation.

3. Zonal Councils, established by the States Reorganization Act, 1956, to resolve inter-state disputes.

Competitive Federalism

Competitive federalism fosters horizontal competition among states and vertical competition between the Centre and states to attract investment, enhance governance, and improve public services. The NITI Aayog promotes competition through rankings in ease of doing business, education, and health. Examples include:

1. Gujarat and Maharashtra's economic rivalry in the 2000s, offering tax breaks and subsidies to attract manufacturers.

2. State-specific welfare schemes, such as Telangana's Rythu Bandhu and Odisha's KALIA, complementing central schemes like PM-KISAN.

3. Vibrant Gujarat Summit, attracting global investments.

Constitutional provisions supporting Cooperative & Competitive Federalism

1. Seventh schedule: It classifies legislative subjects into the Union List, State List, and Concurrent List, ensuring a balance of power and cooperation between different levels of government.

2. Article 261 (Full Faith and Credit Clause): Mandates that public acts, records, and judicial proceedings of one state be recognized and upheld across all states, promoting legal uniformity.

3. Article 263 (Inter-State Council – ISC): Provides for the establishment of the Inter-State Council (ISC) to investigate and discuss subjects of common interest among states and the Union, fostering cooperation.

4. All India Services (Article 312): Provides for centrally-recruited officers serving in both the Centre and states, ensuring administrative cooperation.

5. Goods and Services Tax (GST) (Article 279A): Establishes the GST Council, where states negotiate and compete over taxation policies, striving for a favorable business environment.

NITI Aayog (Executive Initiative, Replacing Planning Commission): Encourages a competitive approach through performance-based rankings, incentives, and best governance practices among states.

What is the present status of freebies Competitive Federalism?

1. Shift from Cooperative to Competitive Freebies- Instead of competing on efficiency and governance, states now engage in populist policies that include reckless subsidies and fiscal imprudence. This has turned competitive federalism into a fiscal bidding war, where states offer increasingly larger cash transfers and free services to gain political mileage.

Examples include: Monthly cash transfers to women announced by Karnataka and Rajasthan, despite fiscal constraints.

2. Unsustainable Fiscal Health:

- **States like Punjab and Delhi struggle with debt due to excessive freebies.**
- **Karnataka and Rajasthan's policies of monthly cash transfers raise concerns about long-term sustainability.**
- **Ease of doing business (BRAP rankings) reflect a wide variation in competitiveness, with some states lagging due to fiscal mismanagement.**

What is the significance of Competitive and Cooperative Federalism?

Competitive federalism:

1. Enhancing economic efficiency: Encourages states to align policies with local needs, leading to investment and job creation.

2. Encouraging policy innovation: States experiment with new governance models and regulatory frameworks.

3. Strengthening fiscal discipline: Competitive federalism, when linked to financial prudence, ensures that states balance spending and revenue generation.

4. Improving public service quality: To attract businesses and skilled workers, states invest in infrastructure, education, and healthcare.

Cooperative Federalism

1. Balanced Regional Development: Promotes equitable growth by reducing regional disparities through collaboration between the central and state governments.

2. Facilitates Resource Sharing: Encourages joint initiatives in infrastructure, disaster management, and environmental protection, ensuring optimal resource utilization and avoiding duplication of efforts.

What are the key initiatives undertaken to enhance both Competitive and Cooperative Federalism?

Competitive Federalism

State-Level Policy Initiatives	1. TS-iPASS (Telangana) a single-window clearance for businesses 2. Global Investors Meet (Tamil Nadu) attracts FDI and domestic investment 3. GIFT City (Gujarat) turned into a global financial hub.
Investment Friendliness Index (IFI)	To be launched in 2025, the IFI will rank states based on investment attractiveness. It will be built on the Business Reform Action Plan (BRAP) by DPIIT, which has driven regulatory reforms since 2014-15.
PPP Project Pipelines	States mandated to develop public-private partnerships (PPP) for infrastructure projects.

Cooperative Federalism

National Manufacturing Mission (NMM):	Aims to foster cooperative federalism by aligning central and state efforts to strengthen manufacturing ecosystems. Encourages States to compete on efficiency while collaborating on systemic improvements.
India Infrastructure Project Development Fund (IIPDF):	The IIPDF fosters cooperative federalism by providing financial and technical assistance, enabling states—regardless of their fiscal capacity—to actively participate in national infrastructure development.
Economic Survey 2022-23	Highlights the importance of cooperative federalism in achieving sustainable development goals.

What are the challenges in Competitive and Cooperative Federalism?

Challenges in Competitive Federalism:

1. Quasi-Federalism & Central Dominance: The Union government holds superior powers through the residuary list and precedence in the concurrent list, often overriding state authority and limiting competition.

2. Unchecked competition & Race to the Bottom: States engage in reckless subsidies and tax breaks to attract investment, often leading to fiscal mismanagement. Bureaucratic inefficiencies negate the benefits of competition, preventing real structural reforms.

3. Conflict Between Finance Commission (FC) and GST Council: Article 269A(1) empowers the GST Council to recommend tax-sharing for inter-state trade, while Articles 270(1A) and 270(2) state that GST revenues must be distributed as per Finance Commission (FC) recommendations. This imbalances both cooperative federalism (GST) and competitive federalism (FC).

Challenges in Cooperative Federalism:

1. Inequitable Distribution of Central Tax Revenue:

- **States like Bihar, Odisha, and Assam argue that uniform funding ignores economic disparities, putting them at a disadvantage.**
- **Richer states feel burdened by having to contribute more tax revenue while receiving fewer central grants.**

2. Implementation Gaps in Centrally Sponsored Schemes:

- **Many schemes (e.g., Smart Cities Mission, National Health Mission) suffer from bureaucratic inefficiency, leading to delays and poor execution.**
- **States lack flexibility in implementation, leading to inefficient spending.**

What are the recommendations for Reform?

1. Conditional Grants Framework: The Finance Commission should link central grants to performance-based criteria to curb fiscal imprudence.

2. Policy Innovation: The National Manufacturing Commission should drive real policy shifts rather than duplicating existing schemes.

3. Yardstick Competition: Public rankings create reputational incentives for states to improve performance relative to peers. For ex– Scandinavian countries use competitive federalism while maintaining strict fiscal rules.

4. Accountability Mechanisms: Establish clear frameworks to prevent states from prioritizing populism over fiscal prudence.

5. Market-Preserving Federalism: Subnational competition drives efficiency and innovation, while a structured national framework prevents coordination failures. For ex– Germany's federal financial system ensures competition while maintaining equal development.

6. Balanced Competitive & Cooperative Federalism: Ensure responsible competition while collaborating on systemic improvements.

Read more: The Hindu
UPSC Syllabus- GS 2– Issues and challenges pertaining to the federal structure

Air Pollution In Delhi- Reasons and Solutions- Explained Pointwise

The air pollution in Delhi is again in the news, with the worsening of Delhi's air quality. The AQI in certain areas of Delhi has been recorded at its worst in the last 3 years. The choking air pollution has led to the invocation of Graded Response Action Plan (GRAP) in Delhi-NCR region. In fact, the Delhi government, in partnership with IIT Kanpur, has recently implemented artificial rain experiments (cloud seeding) as an emergency measure to combat its chronic air pollution crisis.

In this article we will look into the reasons for air pollution in Delhi. We will also look at the possible solutions to combat this climate health emergency.

Source- The Indian Express

What is air Pollution and how is it measured in India?

Air Pollution: Air pollution is the introduction of chemicals, particulates or biological materials into the atmosphere that cause discomfort, disease, or death to humans.

Measurement of Air Pollution In India:

- **In India, air pollution is measured according to the National Air Quality Index developed by Central Pollution Control Board (CPCB) in 2014.**
- **The measurement of air quality in the NAQI framework is based on eight pollutants, namely- Particulate Matter (PM10), Particulate Matter (PM2.5), Nitrogen Dioxide (NO2), Sulphur Dioxide (SO2), Carbon Monoxide (CO), Ozone (O3), Ammonia (NH3) and Lead (Pb).**

Categorization of Air Quality under AQI:

AQI	Remark	Colour Code	Possible Health Impacts
0-50	Good		Minimal Impact
51-100	Satisfactory		Minor breathing discomfort in sensitive people
101-200	Moderate		Breathing discomfort to people with asthma and heart disease.
201-300	Poor		Breathing discomfort to most people on prolonged exposure.
301-400	Very Poor		Respiratory illness on prolonged exposure
401-500	Severe		Affects healthy people and seriously impacts those with existing diseases.

Source- CPCB

Read More- Air Quality Standard of India

What are the reasons for the rise in air pollution in Delhi?

1. **Stubble Burning: Stubble burning in Punjab, Rajasthan, and Haryana emits large amounts of toxic pollutants in the atmosphere. These pollutants contain harmful gases like methane (CH_4), carbon monoxide (CO), volatile organic compounds (VOC) and carcinogenic polycyclic aromatic hydrocarbons. The IIT consortium report have estimated that stubble burning contributed up to 35% of Delhi's PM 2.5 levels during the peak October-November season.**

2. Reduced Wind Speed: Low-speed winds in winters are unable to disperse these pollutants effectively. Further, Delhi lies in a landlocked region and does not have the geographical advantage of sea breeze to disperse the suspended pollutants.
3. Effect of Northwesterly winds: After the withdrawal of monsoons, the predominant direction of winds in northern India is northwesterly. These northwesterly winds bring the dust from the gulf region, northern Pakistan and Afghanistan.
4. Dip in Temperatures lowers the inversion height: With the decrease in temperature, inversion height lowers down, leading to concentration of pollutants in the lower atmosphere. (Inversion height is the layer beyond which pollutants cannot disperse into the upper layer of the atmosphere).
5. Vehicular Pollution: Delhi has one of the highest number of registered private vehicles in India. Official emissions inventories of 2018 show that vehicles emit about 40 per cent of the particulate load in the city of Delhi.
6. Construction Activities and Open Waste Burning: Pollution due to landfill burning and construction debris enhances the pollution levels in the Delhi NCR region.
7. Firecrackers: Firecrackers burning during Diwali further adds to the increase in air pollution levels.
8. Urban development strategy in India: The current strategy focuses on real estate development, a widening of roads and allowing large fuel guzzling vehicles which are major reasons for increased pollution.
9. Expansion of 'Grey' infrastructure: Water bodies, urban forests, green cover, and urban agriculture have all reported shrinkage, and "grey" infrastructure has seen rapid expansion.
10. Land use change: The handing over of open spaces to real estate developers and lack of any meaningful afforestation affects the city's ecology.
11. Promotion of car sales: Widening roads induces people to buy more cars, thus leading to more pollution levels.
12. Construction activities: It contributes roughly 10% of air pollution in Delhi-NCR. There are hardly any steps being taken to monitor construction activities.

<u>What are the harmful effects of air pollution?</u>

The harmful effects of air pollution have been tabulated below:

Economic effects	(1) Leads to loss of labour productivity, GDP and per capita income levels. (The Confederation of Indian Industry estimates that air pollution costs Indian businesses $95 billion, or 3 per cent of India's GDP every year). (Poor air amounts to about Rs 7 lakh crore of annual economic loss, which is more than a third of our annual GST collection) (2) Air pollution reduces agricultural crop yields and commercial forest yields.
Human Health Effects	(1) Air pollution leads to multiple health conditions including respiratory infections, heart disease and lung cancer. (2) As per the Global Burden of Disease comparative risk assessment for 2015, air pollution exposure contributes to approximately 1.8 million premature deaths and loss of 49 million disability adjusted life-years (DALYs) in India.

Environment	(1) Acid Rain: Damages crops, natural vegetation, soil chemistry and leads to damage to ancient monuments (Taj Mahal Yellowing). (2) Eutrophication of water bodies: Increases nitrogen intake of freshwater bodies leading to Eutrophication.

What Govt initiatives have been taken to reduce air pollution in Delhi?

1. Cloud Seeding (Artificial Rain): Piloted with IIT Kanpur, three rounds were conducted in 2025 to temporarily reduce airborne particulate matter, although results were mixed due to weather constraints. The key reason for limited results was insufficient cloud moisture (only 15–20%), while successful cloud seeding typically requires 50% or more. High cloud bases (near 10,000 feet) also reduced effectiveness.
2. Crop Residue Management Scheme: Crop Residue Management (CRM) scheme which provides subsidy to farmers for buying 'Turbo Happy Seeder', 'Super SMS attachment', 'rotavators' and 'superseeder'.
3. Commission for Air Quality Management (CAQM): CAQM is a statutory body formed under the Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act 2021. CAQM has provided a framework to tackle the problem of air pollution due to stubble burning.
4. Initiatives to reduce Vehicular Pollution: The shift from BS-IV to BS-VI, push for Electric Vehicles (EVs), Odd-even Policy have all been implemented to reduce Vehicular pollution.
5. Graded Response Action Plan (GRAP): GRAP measures like shutting down thermal power plants and a ban on construction activities are implemented to curb air pollution.
6. Dust and construction controls: Mandatory deployment of anti-smog guns and water sprinklers at large buildings, construction sites, and hotspots; mist sprayers installed on electric poles at 13 major air pollution hotspots.a

What should be the way ahead?

A start has been made to recognise the severity of air pollution on the health of the population and the economy. Delhi and Mumbai are the two financial backbones of our country. The following measures need to be undertaken to curb air pollution in Delhi and Mumbai:

1. Increase the AQI monitoring stations: The adequate numbers of AQI monitoring stations as mandated by the National Clean Air Programme (NCAP) must be installed. Also, sensor based AQI monitoring units that give hyperlocal data must be set up.
2. Enhanced powers to the authorities to take action according to the hyperlocal data: It will help the authorities take pre-emptive actions and allow denser monitoring. For example, if it is found that construction is taking place in a certain pocket without following norms, the authorities can identify the location and immediately penalise the violators.
3. National Nodal Authority for Air pollution: India needs a nodal authority with constitutional powers to ensure collaborative pre-emptive action on air pollution with timelines for all stakeholders.
4. Setting up Independent commissions for management of AQI: Independent commissions like the Commission for Air Quality Management (CAQM) for NCR and adjoining regions, should be set up in other major cities like Mumbai and Chennai. It will help in taking actions against the violators irrespective of the geographical region. Regional or airshed approach must be used to counter the geographical challenge to air pollution management as done in Los Angeles, Mexico City and many mega-urban regions in China.

5. **Stricter guidelines for industrial emissions: SEBI's Business Responsibility and Sustainability Report (BRSR) framework can lay down tighter guidelines to ensure uniformity in the unit of reporting pollutant emissions, declaration of air pollution mitigation targets (like companies do for carbon emissions), and reporting of disaggregated emissions data. We must reduce exposure across the value chain from production to consumption to recycling of goods and delivery of services.**
6. **Making 'Clean air' an investment sector: The push for substitution of fossil fuels will increase investment opportunities in clean energy transition sector like green mobility, clean cooking. This will open up a new sector for investment and will help in reducing the air pollution simultaneously.**
7. **Funds and Manpower Training to combat pollution: The Sixteenth Finance commission should provide finance to urban local bodies for climate change and air pollution reduction interventions. The urban local bodies manpower must be properly trained and the dysfunctional State pollution Control Boards must be empowered to take punitive actions.**
8. **Increased awareness and incentive for civil society: Different stakeholders need to know why cleaning the air will benefit their livelihoods and businesses. For instance, farmers will not curb stubble burning until a viable circular economy for alternative uses of biomass emerges. We must adopt sustainable lifestyles which are in line with government's LiFE initiative.**
9. **Increased use of Public transport and reduced dependence on private vehicles: The Delhi Master Plan target of 80 per cent of motorised trips by public transport by 2020 has not been met yet. The deadline has been shifted to 2041. This deadline needs to be met by augmenting the public transport system. The private vehicles use must be disincentivized by introducing ward-wise parking management area plans and parking tax.**
10. **Limit crop residue burning: We must implement known solutions like shifting to less water-intensive crops, altering irrigation arrangements, timing, harvesting, baling practices and building a wider year-round market for straw.**
11. **End-to-end construction and waste management: It is pivotal to reducing tonnes of dust and waste released in the air and water bodies.**
12. **Learnings from London, China, Singapore, Hong Kong must be incorporated: London does not allow private vehicles in areas well-connected by public transport. China uses 'fixed number of car sales per year' in Beijing. We must improve the public transport like London, China, Singapore and Hong-Kong.**

Conclusion: Air pollution in Delhi is not caused by one single source — it is a result of vehicles, industries, construction dust, stubble burning, and weather conditions. Solving the crisis requires a coordinated effort from the central government, state governments, industries, and the public. Sustainable policies, technological solutions, and behavioral changes are essential to ensure cleaner air for the future.

Read More- [The Indian Express]()
UPSC Syllabus- GS 3- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Digital Personal Data Protection Rules 2025- Explained Pointwise

The Union Government has recently notified the Digital Personal Data Protection Rules 2025 to provide necessary details and implementation framework of the Digital Personal Data Protection Act, 2023 (DPDP Act) 2023. The DPDP Act, 2023 (DPDP Act) had received the assent of the Hon'ble President on 11th August 2023.

Features of the Digital Personal Data Protection Act, 2023
1. Fairness- Organizations must use personal data in a way that is fair and transparent to the individuals involved.
2. Consent- Personal data can only be processed for a lawful purpose after the individual's consent is obtained.
3. Data protection- Individuals have the right to obtain information about how their data is processed, and request corrections or erasure.

Framework/Components of Digital Data Protection
1. Data principal- The individual whose personal data is being handled. For children, their parents or legal guardians are the data principals. For people with disabilities, their legal guardians are the data principals.
2. Data fiduciaries- The entity that determines how and why personal data is processed. It is also responsible for ensuring the data is accurate, secure, and is erased when it is no longer needed.
3. Data Protection Board (Board)- It functions as a digital office to oversee compliance and address grievances. The Act empowers Chairperson and Members to act on matters, with decisions made by majority vote.

Read More- [Digital Personal Data Protection Bill, 2023: Explained, pointwise]

What are the salient features of Draft Digital Personal Data Protection Rules 2025?

Notice to be given by Data Fiduciary to Data Principal	**Data Fiduciaries must provide Data Principals with clear and understandable notices for informed consent.** **The Notices must include- a description of personal data being processed, the purpose and services associated with the processing, and details for withdrawing consent, exercising rights, or filing complaints.**
Consent Management	**Consent Requirements- Data processing requires prior, clear, and informed consent from Data Principals, which may be withdrawn at any time.** **Consent Manager Role- Consent Managers to facilitate granting, tracking, and withdrawal of consent.**

Obligations of Data Fiduciaries	Significant Data Fiduciaries (SDF): Additional obligations include- a. Annual Data Protection Impact Assessments and audits. b. Ensuring algorithms do not harm Data Principals' rights. c. Restricting specific personal data transfers outside India. General Obligations: Maintain transparency in processing activities. Publish terms of service and grievance redressal mechanisms.
Rights of Data Principals	Access and Erasure: Right to access personal data or request its erasure via mechanisms published by Data Fiduciaries. Grievance Redressal: Data Fiduciaries must respond to grievances within specified timeframes. Nomination: Data Principals can nominate individuals for exercising their rights in case of incapacity or death. Transparency: Fiduciaries must provide clear information about data collection, processing, and sharing practices.
Processing of Personal Data Outside India	Condition for Transfer a. Transfers to foreign entities are subject to government-specified requirements. b. Restrictions apply to data critical for national interests, as determined by the government.
Processing by State for Subsidies and Benefits	The State may process personal data under specific conditions for issuing subsidies, benefits, or services and must be linked to laws, policies, or public funds.
Reasonable Security Safeguards	Data Fiduciaries must take adequate security measures, including: a. Encryption, obfuscation, and access control. b. Logs and monitoring to detect unauthorized access. c. Retention of logs and personal data for at least one year unless otherwise specified by law. d. Contractual safeguards when engaging Data Processors.
Personal Data Breach Intimation	Data Fiduciaries must promptly inform affected Data Principals of breaches, detailing: a. The nature, extent, and consequences of the breach. b. Steps taken to mitigate risks. c. Contact information for queries. Breaches must also be reported to the Board within 72 hours or a longer period allowed.

Erasure of Personal Data	a. Data Fiduciaries must erase personal data if the specified purpose is deemed no longer valid. b. Principals must be notified 48 hours before such erasure, allowing them to log in or otherwise interact to retain the data.
Consent for Data of Children or Persons with Disabilities	a. Fiduciaries must obtain verifiable consent from parents or lawful guardians before processing a child's data. b. Verification may involve identity checks through reliable details or tokens issued by authorized entities like Digital Locker service providers.
Government Powers	a. Information Requests- The government may request data from Fiduciaries for purposes listed in the Seventh Schedule. b. Restrictions on Disclosure- Fiduciaries must seek prior written approval before disclosing sensitive data in cases affecting sovereignty, security, or public order.

What are the advantages of the Digital Personal Data Protection Rules 2025?

The Digital Personal Data Protection Rules 2025 provide for a *"LIGHT BUT TIGHT"* framework.

L: Legal Certainty- Provides clear legal guidelines for businesses and individuals, reducing ambiguity and legal risks.

I: Increased Trust and Consumer Confidence- Builds trust between individuals and organizations by demonstrating a commitment to data privacy and security.

G: Global Competitiveness- Aligns with international data protection standards, facilitating cross-border data flows and fostering a competitive digital economy.

H: Harmonized Approach- Promotes consistency and predictability in data protection practices across different sectors and jurisdictions.

T: Technological Innovation- Drives innovation in privacy-enhancing technologies, such as data anonymization, differential privacy, and secure multi-party computation.

B: Business Benefits- Improves organizational security, reduces the risk of data breaches and their associated costs, and enhances brand reputation.

U: User Empowerment- Empowers individuals with control over their personal data, fostering a sense of agency and trust in the digital world.

T: Trustworthy Data Ecosystems- Fosters the development of trustworthy data ecosystems where data can be used responsibly and ethically for innovation and societal benefit.

T: Technological Advancement- Encourages the development of privacy-preserving technologies that enable innovation while respecting individual rights.

I: Improved International Relations- Facilitates smoother data flows and cooperation on data protection issues between countries.

G: Greater Global Interoperability- Enables seamless data flows across borders while ensuring adequate protection for individuals.

H: Harmonized Global Standards- Contributes to the development of harmonized global standards for data protection, reducing complexity for businesses operating internationally.

T: Thriving Digital Economy- Creates a level playing field for businesses, fostering innovation and competition in a data-driven economy.

What are the Challenges associated with this framework?
The rules does not provide for a *"NOT SO LIGHT"* framework.
N: New Technologies
a. Emergence of AI, IoT, and other disruptive technologies- These technologies present unique challenges for data protection, such as algorithmic bias, lack of transparency, and the potential for misuse.
b. Difficulty in keeping up with rapid technological advancements and agile and adaptable legal and regulatory framework.
T: Technological Limitations
a. Limitations of existing technologies- Challenges in implementing robust security measures to protect data from cyber threats like hacking, ransomware, and data breaches.
b. Difficulty in ensuring data privacy in decentralized environments like blockchain.
S: Social Impact
a. Digital Divide- Exacerbation of existing digital divides, impacting marginalized communities and limiting their access to digital services and opportunities.
b. Social Surveillance- Potential for misuse of data for mass surveillance and social control.
c. Impact on Human Rights- Potential for data protection measures to inadvertently restrict freedom of expression, association, and other fundamental rights.
O: Operational Challenges
a. Difficulties in implementing and enforcing data protection regulations within organizations.
b. Lack of awareness and training among employees on data protection best practices.
c. Challenges in identifying and mitigating data breaches effectively.
T: Transparency and Accountability
a. Lack of transparency in data processing practices, making it difficult for individuals to understand how their data is being used.
b. Difficulty in holding organizations accountable for data breaches and other violations of data protection laws.
I: International Cooperation
a. Challenges in coordinating data protection policies and enforcement across borders.
b. Navigating the complexities of international data transfers and compliance with foreign data protection laws.
G: Global Trends
a. Keeping pace with evolving global trends in data protection and adapting to international best practices.
b. Addressing the challenges posed by the increasing globalization of data flows.
H: Human Rights Considerations
Ensuring that data protection measures respect and protect fundamental human rights, including privacy, freedom of expression, and equality.
T: Trust and Confidence
Building and maintaining public trust in the data protection framework and the institutions responsible for its enforcement.
What Should be the Way Forward?
1. Awareness & Education- Continuously educate the public, businesses, and government officials on data protection rights, responsibilities, and best practices.
2. Data Protection Impact Assessments (DPIAs)- Promote the proactive use of DPIAs by organizations to identify and mitigate potential risks to privacy and data security.

3. Enforcement & Compliance- Robust enforcement mechanisms to ensure compliance with the DPDP Act. Strengthen the investigative and enforcement powers of the Data Protection Board, including the ability to impose meaningful penalties.
4. Quality Assurance- Ensure the quality and effectiveness of data protection measures through regular audits, inspections, and certifications. Develop and implement robust certification schemes for organizations that demonstrate compliance with data protection standards.
5. User-Centric Approach- Prioritize the needs and interests of individuals by empowering them with control over their personal data.
6. Adaptive Framework- The framework should be flexible and adaptable to the rapidly evolving digital landscape. Regularly review and update the DPDP Act and its implementing rules to address emerging challenges and technologies.
7. Technological Advancements- Leverage technology to enhance data protection, such as through the use of privacy-enhancing technologies like differential privacy and federated learning.
8. Evaluation & Continuous Improvement- Regularly evaluate the effectiveness of the DPDP Act and its implementation.

Read More- The Hindu
UPSC Syllabus- GS 2- Governance

Crypto as a Money Laundering Tool- Explained Pointwise

Cryptocurrency, once seen as a symbol of financial innovation, has increasingly emerged as a tool for global money laundering. Indian agencies now report large-scale frauds and rapid cross-border fund transfers, posing serious regulatory, financial and national-security challenges. Between January 2024 and September 2025, the Indian Cyber Crime Coordination Centre (I4C) flagged 27 crypto exchanges involved in laundering Rs. 623.63 crore from nearly 2,872 victims.

What is Cryptocurrency and What are Crypto Exchanges?

Cryptocurrencies are digital assets created and exchanged using blockchain — a secure, decentralised public ledger. Unlike regular money, they are not backed by any government or central bank. Their value depends on market demand, supply and speculation. Popular examples include Bitcoin, Ethereum and stablecoins.

Key features of cryptocurrencies

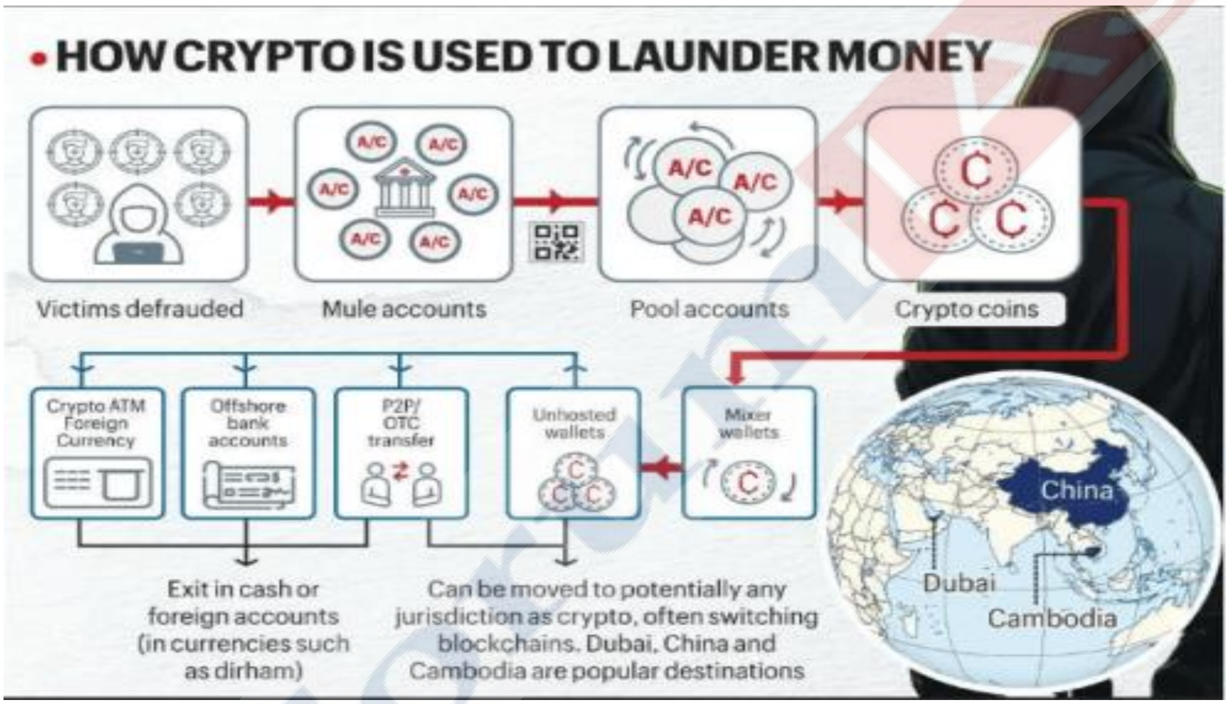
- Decentralisation: No central authority controls cryptocurrency, which gives users freedom but also makes it easier for criminals to hide.
- Pseudo-anonymity: Transactions use wallet addresses instead of real names, making it difficult to identify people behind them.
- Borderless transferability: Crypto can move across countries instantly, avoiding the checks of regular banking systems.
- Irreversibility: Once a blockchain transaction is made, it cannot be undone, making recovery of stolen or laundered money very hard.

Crypto Exchanges– Crypto exchanges are digital marketplaces where users can buy, sell, trade, or convert cryptocurrencies. They work somewhat like stock exchanges but operate with significantly fewer regulations, making them faster but also more vulnerable to misuse.

Types of exchanges:

- Centralised Exchanges (CEXs): Platforms such as Binance, Coinbase and WazirX. They typically require KYC verification, though compliance standards vary widely.
- Decentralised Exchanges (DEXs): Peer-to-peer platforms like Uniswap that operate without any central authority. Users trade directly from their wallets, ensuring privacy but offering limited oversight.
- Hybrid Exchanges:These platforms combine features of both CEXs and DEXs — offering faster transactions and user-friendly interfaces while trying to maintain greater transparency and security

How do Crypto scams happen?



Source- IE

1. Fake Exchanges and Websites– Fraudsters set up websites that look almost identical to genuine crypto platforms. Victims deposit money believing they are trading safely, only for the site to disappear along with their funds.

2. Pump-and-Dump Schemes– Scammers artificially boost the price of low-value tokens through coordinated buying and aggressive social-media promotion. When unsuspecting investors join in, the scammers cash out, causing the token price to collapse.

3. Phishing and Hacking Attacks– Users are tricked into revealing private keys or seed phrases through fake emails, apps or customer-support messages. Once accessed, wallets are emptied within minutes.

4. Rug Pulls– Developers launch a flashy new token or decentralized Finance (DeFi) project, attract investor money, and suddenly shut it down—vanishing with the funds and leaving investors with worthless assets.

5. Romance and Task-Based Scams (Pig Butchering)– Criminal networks build emotional connections or offer "high-income tasks" online, slowly convincing victims to invest in fake crypto platforms that show fabricated profits before ultimately wiping out their savings.

Across all these methods, stolen funds are quickly moved through multiple wallets, mixers and loosely regulated exchanges, making the money trail opaque and helping criminals evade traditional anti-money-laundering systems.

What is the size of India's crypto market?

India's Crypto Market Size

India today ranks among the world's biggest crypto markets, reflecting both rising digital adoption and growing appetite for alternative assets.

Key Statistics:

- An estimated 119 million Indians use or hold cryptocurrency — one of the largest user bases globally.
- The domestic crypto market was valued at USD 2.6 billion in 2024 (IMARC Group).
- By 2035, it is projected to reach USD 15 billion, growing at a 17% CAGR (HDFCTru).

Who is investing?
Younger Indians dominate the crypto ecosystem:

- Gen Z (18–25): 37.6%
- Millennials (26–35): 37.3%
- Adults (36–45): 17.8%

Where is adoption growing?
Metro cities such as Delhi, Bengaluru and Mumbai continue to lead. But Tier-2 and Tier-3 cities — Jaipur, Lucknow and Patna — are emerging as surprising new hubs of crypto activity.

What are the key challenges posed by Crypto in India?

1. Anonymity and Multi-Layered Laundering– Crypto transactions use wallet IDs instead of real names, allowing criminals to move money through hundreds of wallets, DEXs and mixers, making tracing extremely difficult.

2. Cross-Border Movement of Illicit Funds– Cryptocurrencies enable quick transfers to countries like Dubai, China and Cambodia, where weak regulations and lack of uniform reporting make international coordination very challenging.

3. Use by Cyber-Criminal and Scam Networks– Cyber-fraud groups increasingly use crypto for ransomware, extortion and global scam operations because it offers fast, borderless and hard-to-track payments.

4. Key Role in Online Fraud Schemes– Crypto is now central to job scams, sextortion, investment frauds and app-loan scams, with victim money quickly converted into crypto and dispersed worldwide, reducing recovery chances.

5. Regulatory Arbitrage and Exchange Opacity– Many exchanges operate across multiple jurisdictions with different compliance rules, and some Indian platforms have foreign ownership layers, creating opacity and opportunities for regulatory evasion.

6. Enforcement and Forensic Difficulties– Agencies like ED, CBI, and I4C face challenges such as weak KYC standards, complex wallet tracing, lack of protocols for storing seized crypto, jurisdictional limits abroad, and

a shortage of trained investigators. These challenges have even led one agency to store seized crypto with a private firm.

7. Macroeconomic and Financial Stability Risks– The RBI fears that widespread crypto use could undermine financial stability, weaken monetary-policy control, and disrupt capital-flow management, while high volatility and terror-financing risks deepen concerns. Additionally, high taxes have pushed users offshore, shrinking domestic activity by 97%.

What is Crypto Governance in India?

1. There is no central legislation, which means crypto has no defined rights, liabilities or consumer protection, and it is not recognised as legal tender.

2. The Supreme Court–RBI conflict has created regulatory ambiguity: the RBI banned banking services for crypto in 2018, the Supreme Court overturned it in 2020, and the government later introduced taxes without creating a regulatory framework.

3. The government remains hesitant to regulate crypto because doing so may be seen as granting legitimacy, so only a discussion paper is currently being drafted.

4. There is no investor protection, as crypto holdings do not have insurance, RBI ombudsman support or SEBI grievance mechanisms, unlike traditional financial products.

5. Offshore platforms operate outside Indian jurisdiction, serving Indian users without taxation compliance or regulatory oversight.

6. Inter-agency coordination is fragmented, with bodies like the RBI, ED, Income Tax Department, MeitY, state police and FIU-IND following different approaches, creating enforcement gaps.

What should be the way forward?

1. India must enact a comprehensive Crypto Assets and Digital Transactions Act to define asset classifications, licensing rules, consumer protections, Anti-Money Laundering (AML)/KYC standards and penalties for violations, while clearly distinguishing cryptocurrencies, stablecoins, utility tokens and security tokens.

2. Exchanges should be brought under a mandatory licensing regime, similar to the EU's MiCA framework, requiring strict KYC norms, AML checks, travel-rule compliance, long-term data storage and mandatory proof-of-reserves audits.

3. A regulated system for custody of seized crypto assets is needed, with national standards for secure storage, recovery procedures and liquidation, supported by a government-approved digital asset custodian.

4. Blockchain forensics capability must be strengthened, with specialised labs, AI-based tracing tools, global analytics partnerships and systematic training for agencies like ED, I4C, FIU-IND and state cyber cells.

5. Cross-border cooperation should be expanded, using Interpol task forces, FATF networks and bilateral agreements with hubs such as Singapore, the UAE and Europe, given the global movement of illicit funds.

6. A balanced taxation framework is necessary, including reducing TDS rates, rationalising capital gains taxes and offering compliance incentives to prevent users from shifting to offshore platforms.

7. A robust consumer protection architecture must be built, with a crypto grievance portal, mandatory insurance for exchange-held assets, transparent risk disclosures and compensation systems for fraud victims.

8. Stablecoins and DeFi need targeted regulation, including licensing for issuers, reserve audits, transaction reporting and KYC-linked safeguards for high-value DeFi transactions.

9. Public awareness and digital literacy should be improved, especially for young investors, through campaigns highlighting common scams, safe wallet practices and the risks of unverified investment schemes.

Conclusion

Cryptocurrencies bring useful innovation but also significant risks. In India, rising usage and unclear regulations have increased threats like cyber fraud, financial crime and monetary instability. India now needs a clear, balanced regulatory framework—aligned with global norms—to protect consumers, maintain financial stability and support the safe growth of digital assets.

Read more- IE
UPSC Syllabus- GS 3– Issues relating to money laundering, financial frauds, and digital payments

India-Africa Relationship- Explained Pointwise

India's engagement with Africa has grown significantly over the past decade. The 2015 India–Africa Forum Summit, which brought together all 54 African nations, marked a major diplomatic milestone. Since then, India has opened new missions, expanded trade beyond $100 billion, increased investments, and supported Africa's stronger global role, including its entry into the G20. It is now important to review not just the promises made but the solid foundations built for a deeper India–Africa partnership.

Source- ORF

Historical Evolution of India-Africa Relations

Cultural and Trade Links	• India-Africa relations date back millennia, with trade between the Indus Valley Civilization and African civilizations.

	● During colonial times, Indian indentured laborers (girmitiyas) in Africa strengthened socio-cultural connections.
Political Ties and Anti-Colonial Solidarity	● India and Africa shared struggles against colonialism, exemplified by Gandhi's civil disobedience work in South Africa. ● After independence, India backed African decolonization at the UN and worked with Africa at the 1955 Bandung Conference, helping form the Non-Aligned Movement to advance Global South interests
Technical and Economic Cooperation	● The Indian Technical and Economic Cooperation (ITEC) program, launched in 1964, provided technical assistance to African nations. ● ITEC strengthened people-to-people ties and laid the foundation for long-term India-Africa partnerships.

Areas of Cooperation Between India and Africa

1. Political Cooperation

- Regional and Global Engagements: Collaborations through the Asia-Africa Growth Corridor (AAGC), Build Back Better World (B3W), Blue Dot Network, African Development Bank (ADB), and other platforms strengthen South-South cooperation.
- UNSC Reform and Multilateral Advocacy: India has actively supported the Ezulwini Consensus for African representation at the UN Security Council. Both India and African nations frequently align in BRICS, OIC, and New Development Bank (NDB) forums.
- Regional Organizations: Engagement with ECOWAS (Economic Community of West African States) and the African Continental Free Trade Area (AfCFTA) highlights India's commitment to African integration and regional stability.

2. Economic Cooperation

- Trade and Investment: India-Africa bilateral trade reached approximately $100 billion in 2024-25, with India as Africa's third-largest trading partner. India's investments in Africa, approximately $75 billion, span energy, mining, telecommunications, and pharmaceuticals.
- Financial Initiatives: EXIM Bank's Focus Africa Programme, India-Africa Partnership projects, and preferential trade agreements with the Southern African Customs Union illustrate India's commitment to African development.
- FDI and Lines of Credit: Around 22.5% of India's outward FDI flows target Africa, complemented by concessional Lines of Credit worth $12.26 billion, enabling infrastructure projects such as irrigation development in Senegal.

3. Security Cooperation

- India collaborates with African countries on maritime security, anti-piracy operations, and humanitarian and disaster relief (HADR).
- Key platforms include the Indian Ocean Rim Association (IORA) and multinational exercises like MILAN, Cutlass Express, and Africa-India Key Maritime Engagement (AIKEYME).

4. Climate Change and Technology Cooperation

- India and Africa work jointly to tackle climate change through the International Solar Alliance (ISA) and the Coalition for Disaster Resilient Infrastructure (CDRI).
- Technology initiatives such as the Pan-African e-Network and India Stack technologies (UPI, RuPay) support digital infrastructure, capacity-building, and sustainable development in Africa.

5. People-to-People (P2P) Cooperation- India has extended its human resource expertise to Africa through

- Technical training and scholarships via Indian Council for Cultural Relations and ITEC programs.
- Deployment of Indian engineers, healthcare workers, and digital infrastructure specialists.
- Tele-education and telemedicine initiatives like e-VidyaBharti and e-ArogyaBharti.

Strategic Significance of Africa for India

- Economic and Resource Security: Africa supplies critical minerals essential for India's industrial and green energy transition: 48.1% of global cobalt and 47.7% of global manganese come from Africa.
- Trade and Investment Opportunities: Africa offers vast markets and resources; the African Continental Free Trade Area (AfCFTA) provides the world's largest free trade area, boosting India-Africa trade and investment.
- Young and Growing Consumer Base: Africa's rapidly urbanising population presents a large market for Indian IT, banking, financial services, and mobile payment solutions.
- Geopolitical and Diplomatic Importance: Africa is a strategic partner in advocating Global South priorities, reforming multilateral institutions (UN, WTO), and promoting international peace. India's support for the African Union's G20 membership highlights this collaboration.
- Defence and Security Cooperation: Engagements through the Indian Ocean Rim Association (IORA), Indian Ocean Commission (IOC), and maritime exercises like MILAN, Cutlass Express, and Africa-India Key Maritime Engagement (AIKEYME) strengthen regional security and protect vital sea lanes.
- Soft Power, Technology, and Climate Initiatives: India extends ICCR/ITEC scholarships, e-VidyaBharti/e-ArogyaBharti, and India Stack technologies (UPI/RuPay). It also collaborates on renewable energy through the International Solar Alliance (ISA), Global Solar Facility, and Virtual Green Hydrogen Innovation Centre.

Challenges in India-Africa Relations

- Geopolitical Contestation: Africa has become a stage for strategic competition among China, the U.S., EU, Russia, Japan, Türkiye, and UAE, which limits India's influence and bargaining power.
- Chinese Assertiveness: China's massive investments, diplomatic outreach, and infrastructure projects often overshadow India's contributions. Between 2007–2023, China hosted 251 African leaders, demonstrating its deep influence.
- Lack of Clear Strategy: India's development cooperation model in Africa often lacks the scale, speed, and financial depth that China brings, reducing its competitiveness.

- Focus Diversion: India's strategic focus on the Indo-Pacific and strengthening ties with Western powers sometimes diverts attention from Africa.
- Social and Perception Concerns: Incidents of racial attacks on African nationals in India have negatively impacted India's image and soft power in the continent.
- Operational and Security Challenges: Procedural delays, funding bottlenecks, and logistical issues slow down India-funded projects. Additionally, terrorism, conflicts, and political unrest in regions like the Sahel and Horn of Africa pose risks to Indian personnel and investments.

Way Forward

- Political and Diplomatic Cooperation: Revive regular India-Africa Forum Summits and establish a dedicated Secretary for African Affairs in the Ministry of External Affairs to ensure consistent engagement.
- Defence and Security Collaboration: Increase the number of defence attachés in African capitals, strengthen maritime security partnerships, and expand Lines of Credit for defence exports to enhance strategic ties.
- Economic and Development Initiatives: Create an Africa Growth Fund (AGF) to boost trade and investment, promote project exports, and strengthen cooperation in the shipping sector.
- Socio-Cultural Engagement: Expand academic, cultural, and people-to-people exchanges, rename ITEC and ICCR scholarships after notable African figures, and set up a National Centre for African Studies in India.
- Roadmap Implementation and Strategic Vision: Implement Roadmap 2030 through collaboration between the MEA and the National Security Council Secretariat, and operationalize PM Modi's 10 guiding principles (Kampala Principles) for India-Africa engagement.

Read more– TH

UPSC Syllabus- GS 2– Bilateral Relations

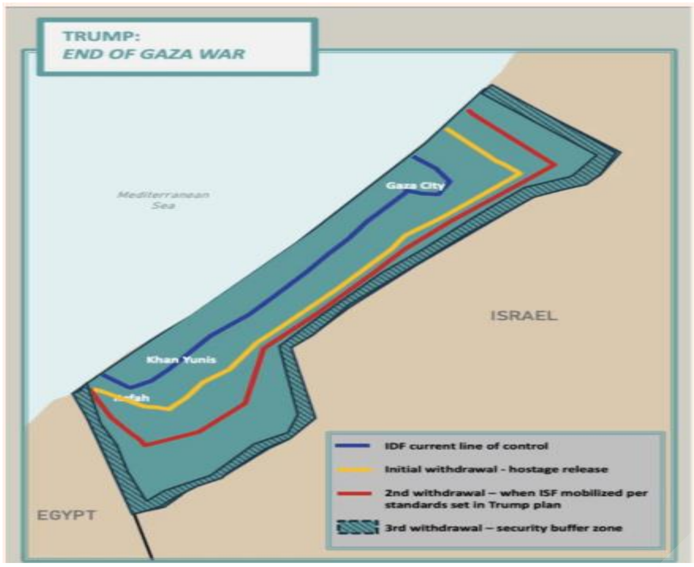
Trump's 20-Point Gaza Peace Plan- Explained Pointwise

The UN Security Council approved US President Donald Trump's 20-point peace plan for Gaza on November 17. The plan aims to stop the ongoing Israel–Hamas conflict that has killed over 66,000 Palestinians since October 7, 2023. It calls for an immediate ceasefire, the release of hostages and prisoners, and a long-term peace agreement under international supervision.

What are the key elements of Trump's 20-Point Plan?

- Immediate Ceasefire: Both parties must agree to halt all hostilities, including bombing, rocket fire, and cross-border attacks.
- Return of Hostages: Hamas would release all living and deceased Israeli hostages held in Gaza upon the ceasefire's implementation.
- Prisoner Exchange: Israel would release Palestinian prisoners, including those from Gaza, in a comprehensive exchange with the hostages released by Hamas.

- Withdrawal from Gaza: Israel to progressively withdraw its military to an agreed line after the ceasefire, monitored by international oversight.
- Demilitarization of Gaza: Gradual disarmament of Hamas and other armed groups, turning Gaza into a "terror-free" zone, as a precondition for broader peace.
- International Stabilization Force (ISF): Deployment of a UN-mandated, multinational security force (involving the US, Qatar, Egypt, Turkey, etc.) to stabilize Gaza, support local police, and monitor compliance.
- Transitional Governance: Transfer governance of Gaza to an interim Palestinian technocratic committee, under the supervision of a "Board of Peace" led by Trump and supported by figures like Tony Blair.
- No Forced Displacement: Palestinians would not be forcibly expelled or relocated from Gaza. Israel would pledge not to occupy or annex the enclave.
- Humanitarian Access: Unrestricted and large-scale humanitarian aid for Gaza, including medical supplies, food, water, and international reconstruction funds.
- Reconstruction: Commitment from multiple wealthy countries for the redevelopment of Gaza's infrastructure, homes, schools, and hospitals.
- Pathway to Statehood: Gaza would be governed in a way that could eventually lead to Palestinian self-determination and recognition of statehood, subject to deradicalization and disarmament.
- Reform of Palestinian Authority (PA): Simultaneous reforms in the PA to prepare for responsible, nonviolent governance, creating conditions for eventual unity with Gaza.
- Monitoring and Compliance: International observers to monitor and verify compliance with ceasefire, withdrawal, and disarmament commitments.
- Security Guarantees for Israel: The US and Arab partners to offer guarantees for Israel's security, deterring future attacks from Gaza.
- Regional Diplomatic Normalization: The plan encourages further normalization of ties between Israel and Arab/Muslim countries to cement lasting regional peace.
- Timeline and Deadlines: Specific deadlines for each phase, with Trump explicitly warning Hamas to accept or face harsh military consequences ("complete obliteration" if rejected).
- Accountability for Violations: Clear consequences for non-compliance, including renewed sanctions, military action, and international condemnation.
- No Political Control for Hamas: Hamas must forgo political control—only independent, apolitical technocrats can govern Gaza during the transition.
- Inclusive Mediation: Ongoing mediation by the US, Egypt, Qatar, and Turkey, with input from international organizations like the UN and EU.
- Long-Term "Everlasting Peace": The plan envisions a durable, region-wide peace sustained by economic support, political normalization, and a demilitarized Gaza.



Source- Financial Times

What have been the key responses to the framework?

Israel	Status: Accepted. Prime Minister Benjamin Netanyahu publicly stated that he fully supported the framework, claiming it aligns with Israel's stated war aims, particularly the dismantling and demilitarization of Hamas.
Hamas	Status: Partially Accepted / Core Demands Rejected. Hamas agreed to and carried out the requirements for the hostage and prisoner exchange that defined Phase 1. However, the group has been clear that it refuses the plan's central Phase 2 demands to disarm, decommission its weapons, and relinquish control of Gaza. This rejection of demilitarization is the biggest roadblock to achieving the plan's long-term goals.

Regional Arab States	Status: Widespread Initial Support. The plan garnered significant support from several critical Arab and Muslim-majority nations, including Saudi Arabia, Egypt, Qatar, the UAE, Jordan, and Turkey. Their support was driven by: 1. The immediate end to the conflict and the humanitarian crisis. 2. The commitment to reconstruction and economic opportunity in Gaza. 3. The plan's explicit statement that Israel would not annex any territory in the West Bank. 4. Their willingness to potentially contribute to the proposed International Stabilization Force (ISF), provided it receives a mandate from the UN Security Council.
International Community	Status: Broad Support for Framework. Leaders from countries like France, India, and Italy welcomed the framework as a much-needed step toward securing the release of hostages and preventing further bloodshed, praising the ambitious vision for post-conflict governance and reconstruction.
India	● India officially endorsed the Gaza Peace Plan, emphasizing the importance of immediate ceasefire, humanitarian aid, and the release of hostages. ● India welcomed the enhanced humanitarian assistance for the people of Gaza, highlighting the need for aid to reach civilians without interference.

What are the Challenges to the Framework?

- Hamas' Reluctance to Fully Disarm and Relinquish Political Control: Hamas remains hesitant to fully disarm or cede political power in Gaza to an interim technocratic government, fearing loss of influence and ideological defeat.
    - Resistance to demilitarization threatens the framework's core premise of a "terror-free" Gaza.
- Trust Deficit Between Parties: Deep mistrust between Israel and Hamas, built over decades of conflict and failed peace efforts, limits willingness for compromise and compliance. Allegations of violations or bad faith could derail ceasefire and prisoner exchange agreements.
- Implementation of International Stabilization Force (ISF): Deploying a multinational force with adequate mandate, resources, and cooperation from all regional powers (Egypt, Qatar, Turkey, US) is politically and logistically complex. Ensuring neutrality, effectiveness, and long-term commitment from troop-contributing countries is a major hurdle.

- Regional and International Political Dynamics: Divergent interests of Arab states, Iran's influence on proxy groups, US political transitions, and Russia-China stances complicate consensus . Normalization efforts by some Arab states with Israel have not allayed tensions, and pockets of opposition persist.
- Humanitarian and Infrastructure Challenges: Rebuilding Gaza's war-torn infrastructure requires massive funding, coordination, and time, with risks of corruption or diversion of resources.
    - Delivering continuous humanitarian aid under volatile security conditions presents logistical and political challenges.
- Security Guarantees and Enforcement: Ensuring lasting security guarantees for Israel while addressing Palestinian rights and aspirations is a delicate task.

Conclusion

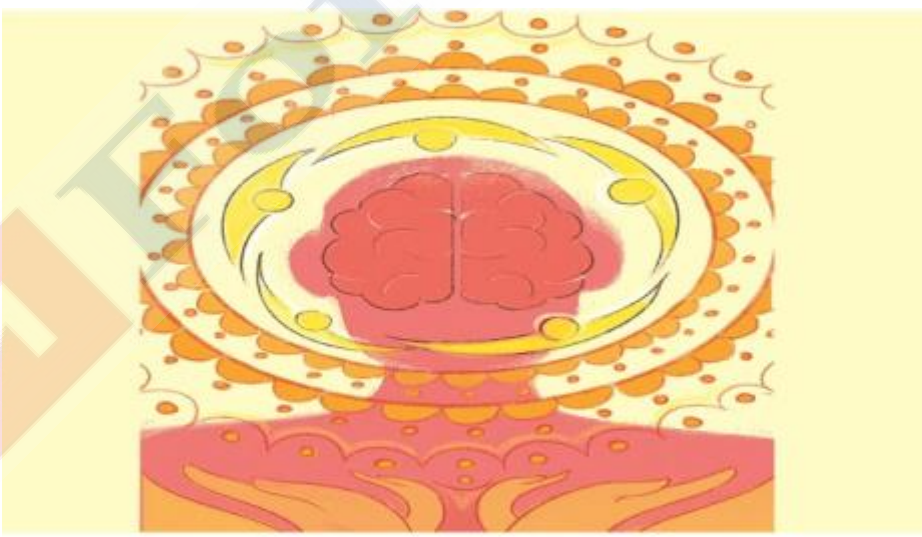
The 20-point framework faces serious challenges including Hamas's resistance to disarmament, entrenched mistrust, difficulties in deploying and maintaining an international stabilization force. Overcoming these requires sustained diplomatic effort, broad-based political will, and robust enforcement mechanisms.

Read more– IE

UPSC Syllabus- GS 2– Effect of policies and politics of developed and developing countries on India's interests

Mental Health Crisis in India- Explained Pointwise

Rising suicides among students, farmers, and homemakers across India underline a silent yet deepening mental health crisis. Despite progressive legislation and growing awareness, mental healthcare remains underfunded, understaffed, and stigmatized.



Source- IE

What is Mental Health?

Mental health is about how we think, feel, and connect with the world around us. It shapes our emotions, decisions, and relationships — guiding how we handle stress, face challenges, and find meaning in daily life. In essence, good mental health helps us live with balance, purpose, and resilience.

According to the World Health Organization (WHO), mental health is a state of well-being in which individuals can cope with life's stresses, realize their potential, work productively, learn effectively, and contribute meaningfully to their communities.

Current Status of the Mental Health Scenario in India

Prevalence and Burden	• Nearly 230 million Indians live with mental health disorders. • Lifetime prevalence stands at 13.7%, while WHO estimates 16.3 suicide deaths per 1,00,000 people. • 15% of adults experience mental health issues, with higher prevalence in urban areas (13.5%) compared to rural areas (6.9%). • India's mental health burden equals 2,443 Disability-Adjusted Life Years (DALYs) per 10,000 population.
Suicide Statistics (NCRB 2023)	• 1,71,418 suicides were recorded, with men comprising 72.8% of victims. • Family problems (31.9%), illness (19%), and marital issues (10%) were leading causes. • Farmer suicides stood at 10,786, or 6.3% of total suicides. • Andaman & Nicobar Islands, Sikkim, and Kerala reported the highest suicide rates
Treatment Gap and Workforce Shortage	• 70–92% treatment gap, with 85% gap in common disorders like depression. • Only 0.75 psychiatrists and 0.12 psychologists per 1 lakh population, far below the WHO norm of 3. • Rehabilitation services meet less than 15% of national needs
Economic and Social Costs	• Untreated mental illnesses may cost India over USD 1 trillion by 2030. • Employers lose ₹1.1 lakh crore annually due to absenteeism and burnout. • Suicide remains the leading cause of death among youth (15–29 years).

Key Drivers of India's Mental Health Crisis

1. Socio-Economic and Financial Stress: High unemployment (7.3% in 2024), rising debt, and job insecurity have triggered widespread anxiety. As per NCRB (2023), 31.9% of suicides stemmed from family and financial distress, with farmers and informal workers most affected.
2. Educational and Professional Pressure: Exam stress and fear of failure have made students vulnerable — over 25 suicides in Kota (2023) alone. Long working hours and workplace burnout add to adult psychological strain.
3. Urbanisation and Social Isolation: Migration, nuclear families, and digital lifestyles have eroded traditional support systems, making urban residents twice as likely to report loneliness as rural populations.
4. Gendered and Domestic Challenges: Nearly 29% of women (NFHS-5) have faced domestic violence, leading to high rates of depression and anxiety linked to emotional neglect and unpaid care work.
5. Digital Overload: Excessive screen time and social media exposure heighten anxiety, low self-esteem, and body-image issues. National Institute of Mental Health and Neurosciences (NIMHANS), 2022 found adolescents online for 4+ hours daily more prone to such disorders.
6. Stigma and Cultural Misconceptions: Over half of Indians still view mental illness as weakness, causing delayed diagnosis and low treatment-seeking, especially in rural areas.
7. Systemic Deficiencies: With just 1.05% of the health budget for mental health and 0.75 psychiatrists per lakh people, India faces a 70–92% treatment gap, reflecting weak infrastructure and policy execution.

Key Government Initiatives Related to Mental Health in India

Mental Healthcare Act, 2017	• Recognises mental health as a legal right under Article 21. • Decriminalises suicide, mandates insurance coverage, and guarantees affordable, dignified care. • Empowers individuals to make advance directives for treatment.
National Mental Health Programme (1982) and District Mental Health Programme (DMHP) (1996)	• Aims to integrate mental healthcare into primary health systems. • Now expanded to 767 districts, though many face staff and funding shortages
Tele MANAS (2022)	• A 24×7 tele-counselling helpline for psychological support. • Has conducted over 20 lakh tele-counselling sessions, improving access in underserved areas

National Suicide Prevention Strategy (2022)	• Aims to reduce suicide rates by 10% by 2030 through early detection, awareness campaigns, and responsible media reporting.
Manodarpan Initiative	• Provides psychosocial support to students, teachers, and families under the Atmanirbhar Bharat Abhiyan. • Reached over 11 crore students through school-based awareness programmes
Judicial Backing	• In Sukdeb Saha vs State of Andhra Pradesh, the Supreme Court affirmed mental health as part of the Right to Life (Article 21), binding the state to ensure accessible and quality care

Way Forward to improve mental healthcare in India

- Increase Budgetary Allocation: Raise spending to at least 5% of total health expenditure to improve infrastructure, medicine supply, and service delivery in mental healthcare.
- Expand and Train Workforce: Build a stronger pool of mental health professionals by training mid-level providers, counsellors, and community nurses, with incentives for rural postings.
- Integrate Mental Health into Primary Care: Embed mental health services within Ayushman Bharat Health and Wellness Centres (HWCs) and ensure basic counselling at every Primary Health Centre (PHC).
- Promote Community-Based Interventions: Strengthen peer support networks and village-level counselling through trained ASHA and Anganwadi workers to enhance accessibility at the grassroots level.
- Address Stigma and Raise Awareness: Launch nationwide campaigns, introduce mental health education in schools, and encourage open discussions to normalise help-seeking behaviour.
- Ensure Digital and Regulatory Safeguards: Regulate mental health apps and AI tools to ensure privacy, ethical standards, and professional oversight, preventing misinformation and misuse.
- Enhance Governance and Coordination: Establish a National Mental Health Observatory for monitoring outcomes and align inter-ministerial efforts across Health, Education, Women & Child Development, Labour, and Agriculture for an integrated approach.

Conclusion

Mental health is vital for individual well-being and national progress. India's crisis is not just medical but also moral—each suicide or silent struggle reflects a gap in empathy and policy. With better access, funding, and awareness, mental health can become a key pillar of inclusive and humane development.

Read more– IE

UPSC Syllabus- GS 2- Issues related to health

Presidential Reference: SC Clarifies Governor's Powers on State Bills

In a major decision clarifying how Governors and state legislatures must interact, the Supreme Court's five-judge Constitution Bench issued its opinion on a presidential reference related to the Governor's assent to state Bills.

The Court held that Governors cannot indefinitely delay Bills passed by state legislatures and must work cooperatively with elected governments, upholding the principle of cooperative federalism. At the same time, it stated that courts cannot mandate a fixed timeframe for the Governor or the President to grant assent, nor can they create a concept like "deemed assent" in cases where no action is taken.

Source- IE

Why the Presidential Reference was submitted to the Supreme Court?

- President Droupadi Murmu approached the Supreme Court under Article 143(1) to seek its advisory opinion after disputes arose over delays by Governors and the President in granting assent to state Bills.
- The immediate trigger was an April 8 judgment from Tamil Nadu, where a two-judge Bench had set strict timelines for Governors and the President to act on Bills.
- In a highly unusual step, the court invoked Article 142 and declared 10 Tamil Nadu Bills as having received "deemed assent" because the Governor had not taken action for extended periods. This unprecedented move raised questions about constitutional boundaries.
- To clear the confusion, the President submitted a five-page reference containing 14 specific questions, seeking guidance on:
    - Whether courts can set deadlines for constitutional authorities.
    - The validity of the concept of "deemed assent."
    - The scope and limits of gubernatorial and presidential powers under Articles 200 and 201.

Read more:

1. Presidential Reference

2. Role of Governor

What is the Supreme Court's position on the 14 key questions regarding the powers of Governors and the President?

1. What are the constitutional options before a Governor under Article 200?
Article 200 outlines the process for a Governor to give assent to a Bill passed by the state legislature. The Court held that the Governor has three options:

- Grant assent
- Reserve the Bill for the President's consideration
- Withhold assent and return the Bill to the legislature with comments for reconsideration

Crucially, the Court ruled that there is no option to "withhold assent simpliciter." The Governor cannot simply refuse to sign a Bill and keep it pending; if they withhold assent, they must return it to the House.

2. Is the Governor bound by the aid and advice of the Council of Ministers under Article 200?
No. Article 163 states that the Governor must act on the aid and advice of the Council of Ministers, except where the Constitution requires discretion. The Court ruled that when granting assent to Bills, the Governor enjoys discretion and is not bound by the Cabinet's advice. The Bench reasoned that if Governors were bound by the Cabinet, they could never return a Bill for reconsideration, as no government would advise against its own legislation.

3. Is the Governor's exercise of discretion under Article 200 justiciable?
The merits of the Governor's decision are not justiciable. However, "prolonged, unexplained, and indefinite inaction" is subject to judicial review. If a Governor sits on a Bill without acting, the Court can direct them to do so.

4. Is Article 361 an absolute bar to judicial review of the Governor's actions under Article 200?
No. Article 361 grants the President and Governors personal immunity, stating they are not "answerable to any court" for their duties. The Court held that while this protects the individual, it does not protect the office of the Governor from judicial scrutiny in cases of constitutional inaction. Immunity cannot shield indefinite delays.

5. Can timelines be imposed on the Governor under Article 200?
No. The Court overruled its April judgment that set one- to three-month timelines. Article 200 uses the phrase "as soon as possible," so rigid deadlines are inappropriate.

6. Is the President's discretion under Article 201 justiciable?
No. Article 201 deals with Bills reserved by the Governor for the President. Like the Governor, the President's decision to assent or withhold assent cannot be reviewed on merits.

7. Can timelines be imposed on the President under Article 201?
No. Judicial timelines cannot bind the President regarding reserved Bills.

8. Must the President consult the Supreme Court under Article 143 when a Bill is reserved?
No. Article 143 allows consultation but does not make it mandatory. The President's subjective satisfaction is sufficient.

9. Are decisions of the Governor/President justiciable before a Bill becomes law?
No. Judicial review applies only to enacted laws, not proposed Bills. Courts cannot adjudicate on a Bill before it receives assent.

10. Can Article 142 be used to create “deemed assent”?
No. Article 142 allows the Supreme Court to do “complete justice” but cannot create a legal fiction to substitute the Governor’s role.

11. Can a Bill become law without the Governor’s assent?
No. A Bill cannot become law without the Governor’s assent, or the President’s if reserved.

12. Is it mandatory for a Bench to first decide if a matter requires a five-judge Bench under Article 145(3)?
The Court declined to answer, stating it was irrelevant to the reference on legislative assent.

13. Can Article 142 override substantive or procedural provisions of the Constitution?
The Court clarified that Article 142 cannot override substantive provisions such as the requirement of assent.

14. Does the Constitution bar the Supreme Court from exercising jurisdiction beyond Article 131 in Union-State disputes?
The Court declined to answer, deeming it irrelevant to the Governor’s powers.

Significance of the Supreme Court Opinion on Governor’s Powers

1. Clarification of Governor’s Role: The SC reaffirmed that the Governor’s function under Article 200 is discretionary and generally not justiciable, except in cases of prolonged, unexplained, or indefinite inaction.

2. Strengthening Separation of Powers: By rolling back strict timelines, the Court preserves executive autonomy while retaining judicial oversight as a corrective mechanism.

3. Facilitating Dialogue: The Governor’s assent is seen as the “initiation of a dialogic process” between the state and Centre, highlighting its advisory, consultative, and mediative character.

4. Preventing Judicial Overreach: The SC explicitly rejected the idea of “deemed assent” or substituting executive functions, emphasizing adherence to constitutional boundaries.

5. Preserving Federal Balance: The ruling ensures that both the Centre and state governments respect the constitutional discretion of Governors while maintaining checks and balances.

Challenges Highlighted

1. Prolonged Inaction by Governors: Despite constitutional safeguards, delays in granting assent can stall legislative processes, affecting governance and citizens’ interests.

2. Ambiguity in Judicial Intervention: The Court can intervene only in “glaring circumstances,” which leaves a grey area about when exactly judicial review is warranted.

3. Political Pressures: Governors may face political pressure from the Centre or opposition parties, potentially compromising neutrality in legislative assent.

4. Coordination Between Centre and States: Lack of structured dialogue mechanisms can exacerbate disputes and lead to litigation, straining federal relations.

5. Limited Accountability Mechanisms: While the SC can nudge action, there is no fixed timeline, which may reduce the deterrence against deliberate delays.

Way Forward

1. Promote Timely Assent: Governors should ensure prompt consideration of Bills, and state governments should maintain open channels for dialogue.

2. Judicial Oversight as Last Resort: Courts should intervene only in exceptional cases, issuing limited mandamus without reviewing merits of the decision.

3. Institutionalize Dialogue: Establish structured consultations between Governors, state governments, and Centre to resolve legislative impasses.

4. Training and Awareness: Enhance understanding of constitutional roles under Articles 200 and 201 among Governors and state officials.

5. Safeguard Federalism: Both Centre and states must respect the discretionary role of Governors to maintain federal balance.

6. Monitor Deliberate Inaction: States can move courts when Governors delay action excessively, ensuring accountability without compromising discretion.

Read more– IE

UPSC Syllabus- GS 2– Separation of powers and checks and balances

New Labour Codes- Explained Pointwise

In a landmark move, the Government of India has decided to bring all four Labour Codes— the Code on Wages (2019), Industrial Relations Code (2020), Code on Social Security (2020), and Occupational Safety, Health and Working Conditions Code (2020)— into force from 21 November 2025, replacing and consolidating 29 existing labour laws.

This reform aims to modernise labour governance, improve worker welfare, and align labour practices with emerging workplace trends, paving the way for a future-ready workforce and more resilient industries under the vision of Aatmanirbhar Bharat.

Labour and Constitutional Rights in India

The Constitution of India provides several safeguards and rights concerning labour and workers:

1. Article 19(1)(c): Grants all citizens the right to form associations or unions, enabling collective bargaining and organisation of workers.
2. Article 23: Prohibits forced labour, making it unconstitutional to compel any person to work against their will.
3. Article 24: Prohibits child labour, specifically banning the employment of children below 14 years in hazardous occupations or processes.
4. Article 38(1) & 38(2):
    - (1) Directs the state to promote the welfare of the people.
    - (2) Seeks to reduce economic inequalities, including income disparities.

5. Article 43(A): Provides for workers' participation in the management of industrial and other undertakings, fostering cooperative industrial relations.

Overview of Labour Codes

Labour Codes	Major Acts Subsumed	Key Provisions
Code on Wages, 2019	– Payment of Wages Act, 1936 – Minimum Wages Act, 1948 – Payment of Bonus Act, 1965 – Equal Remuneration Act, 1976	• Establishes a uniform definition of 'wages' for all workers. • Mandates timely payment of wages to every employee. • Introduces a national minimum wage, adjustable by states above the central floor. • Ensures equal remuneration for men and women performing the same or similar work.

Industrial Relations Code, 2020	-Trade Unions Act, 1926 – Industrial Employment (Standing Orders) Act, 1946 – Industrial Disputes Act, 1947	• Simplifies trade union registration and recognition. • Introduces negotiation unions or councils for dispute resolution. • Sets conditions for strikes, including a 60-day notice period for strikes in public utility services. • Establishes grievance redressal mechanisms. • Raises threshold for prior government permission for closure, lay-off, or retrenchment from 100 to 300 workers. • Introduces fixed-term employment, providing flexibility for employers while ensuring protection for workers.
Code on Social Security, 2020	– Employees' Provident Funds and Miscellaneous Provisions Act, 1952; – Employees' State Insurance Act, 1948; – Maternity Benefit Act, 1961; – Payment of Gratuity Act, 1972; – Unorganised Workers Social Security Act, 2008	• Expands employee definition to include gig and platform workers. • Introduces social security schemes for gig, platform, and unorganised workers. • Mandates creation of a social security fund for unorganised workers. • Provides maternity benefits and gratuity to women workers, including those in the unorganised sector.
Occupational Safety, Health and Working Conditions (OSHWC) Code, 2020	-Factories Act, 1948 -Mines Act, 1952 -Contract Labour (Regulation and Abolition) Act, 1970 -Inter-State Migrant Workmen (Regulation of Employment and	• Ensures health, safety, and welfare for all workers. • Mandates annual health check-ups for employees. • Regulates working hours and conditions for different sectors. • Introduces a single licensing mechanism for contractors and employers. • Increases thresholds for contract labour applicability and prohibits

	Conditions of Service) Act, 1979	contract labour in core activities, with certain exceptions. • Shifts primary responsibility for welfare facilities from contractors to principal employers.

Comparison of the Labour Ecosystem Before and After Labour Codes

Parameter	Pre-Labour Reforms	Post-Labour Reforms
Formalisation of Employment	No mandatory appointment letters.	Written appointment letters mandatory for all workers, ensuring transparency, job security, and formal employment.
Social Security Coverage	Limited coverage; many workers, especially in the informal sector, remained outside the social security net.	Under the Code on Social Security, 2020, all workers—including gig and platform workers—are eligible for PF, ESIC, insurance, and other social security benefits.
Minimum Wages	Minimum wages applied only to scheduled industries/employments, leaving large segments uncovered	Under the Code on Wages, 2019, every worker has a statutory right to minimum wages. Timely payment and wage protection enhance financial security.
Preventive Healthcare	No legal mandate for employers to provide annual health check-ups	Employers are required to provide free annual health check-ups to workers aged 40+, promoting preventive healthcare and timely diagnosis.
Timely Wages	No strict compliance requirement for timely wage payments.	Employers must ensure timely payment of wages, improving financial stability and worker morale while reducing exploitation.

Women Workforce Participation	Women faced restrictions on night shifts and certain occupations	Women are permitted to work in all occupations, including night shifts, with consent and adequate safety measures, enhancing access to high-paying opportunities
ESIC Coverage	Limited to notified areas; establishments with fewer than 10 workers were largely excluded; hazardous units had non-uniform coverage.	ESIC benefits extended PAN-India: voluntary for establishments with fewer than 10 workers, and mandatory for even one worker in hazardous processes, ensuring wider social protection.
Compliance Burden	Multiple registrations, licences, and returns under separate laws	Single registration, PAN-India licence, and unified return reduce compliance burden and simplify processes for businesses.

Benefits of Labour Reforms Across Key Sectors

1. Fixed-Term Employees (FTE)

- FTEs will receive all benefits equal to permanent workers, such as leave, medical benefits and social security.
- Gratuity eligibility reduced from five years to one year of continuous service.
- Equal wages with permanent employees ensure higher income and better protection.
- Encourages direct hiring, reducing excessive contractual dependence.

2. Gig & Platform Workers

- For the first time, 'Gig work', 'Platform work' and 'Aggregators' are legally defined.
- Aggregators must contribute 1–2% of annual turnover (capped at 5% of payments made/payable to workers) for worker welfare.
- Aadhaar-linked Universal Account Number (UAN) enables fully portable social security benefits across states and migration.

3. Contract Workers

- Fixed-term employment increases employability, ensuring legal and social security benefits equal to permanent employees.
- FTEs become eligible for gratuity after one year of continuous service.
- Principal employers must provide social security and health benefits to contract workers.
- Workers are entitled to a free annual health check-up.

4. Women Workers

- Gender discrimination is legally prohibited; equal pay for equal work is ensured.
- Women can work night shifts and in all types of work, including underground mining and heavy machinery, with consent and safety measures.
- Mandatory representation of women on grievance redressal committees.
- Family definition expanded to include parents-in-law for women employees, increasing dependent coverage.

5. Youth Workers

- Minimum wage guaranteed for all workers.
- Mandatory appointment letters ensure formal employment and employment history records.
- Employers must pay wages even during leave, preventing exploitation.
- Workers to receive wages as per Central Government floor wage, enabling a decent standard of living.

6. MSME Workers

- All MSME workers covered under the Social Security Code, 2020, based on employee count.
- Minimum wages ensured for all workers.
- Workers get access to canteens, drinking water, restrooms, and other welfare facilities.
- Provides standard working hours, paid leave and double overtime.
- Timely wage payment is mandatory.

7. Beedi & Cigar Workers

- Minimum wages guaranteed.
- Working hours fixed at 8–12 hours a day; 48 hours per week cap.
- Overtime is voluntary and paid at double the normal wage rate.
- Timely wage payment ensured.
- Workers become eligible for bonus after 30 days of work in a year.

8. Plantation Workers

- Covered under the OSHWC Code and Social Security Code.
- Codes apply to plantations with more than 10 workers or on 5+ hectares of land.
- Mandatory safety training for handling and storing chemicals.
- Protective gear compulsory to prevent accidents and chemical exposure.
- Workers and families receive full ESI medical facilities, and education benefits for children.

9. Audio-Visual & Digital Media Workers

- Workers such as journalists, dubbing artists and stunt persons get full social security benefits.
- Mandatory appointment letters, defining wages and entitlements.
- Timely wage payment enforced.
- Overtime requires consent and is paid at double the normal wage rate.

10. Mine Workers

- The Social Security Code treats certain commuting accidents as employment-related, under specific conditions.
- Central Government will notify uniform occupational safety standards.
- Workers get free annual health check-ups.
- Working hours limited to 8–12 hours per day, 48 hours per week, ensuring work-life balance.

11. Hazardous Industry Workers

- Free annual health check-ups for all workers.
- National safety standards framed by the Central Government.
- Women can work in hazardous sectors, including underground mining and heavy machinery, with equal opportunities and safety safeguards.
- Mandatory safety committee at every hazardous site for workplace monitoring and chemical handling safety.

12. Textile Workers

- All migrant textile workers (direct, contract-based, self-migrated) get equal wages, welfare benefits and PDS portability.
- Workers can claim dues up to three years back, easing dispute settlements.
- Overtime wages must be double the normal rate.

13. IT & ITES Workers

- Salary must be released by the 7th of every month.
- Equal pay for equal work, with strengthened participation of women.
- Women allowed night shifts with opportunities to earn higher wages.
- Mechanisms established for timely resolution of harassment, discrimination and wage disputes.
- Social security ensured through fixed-term employment and mandatory appointment letters.

14. Dock Workers

- All dock workers receive formal legal recognition and protection.
- Appointment letters mandatory, guaranteeing social security benefits.
- Provident fund, pension and insurance benefits apply to contract and temporary workers as well.
- Annual employer-funded health check-ups and medical facilities, sanitation and washing areas made mandatory.

15. Export Sector Workers

- Fixed-term export workers to receive gratuity, PF and full social security benefits.
- Annual leave available after 180 days of work in a year.
- Right to timely wage payment, no unauthorized deductions and no wage ceiling restrictions.
- Women allowed night shifts with consent, including guaranteed safety protocols—transport, double overtime wages, CCTV, security arrangements.

Challenges with the New Labour Codes

1. Uneven implementation across States
    - Labour is in the Concurrent List, so states frame their own rules.
    - By mid-2025, 30+ states/UTs had published draft rules, but some (e.g., West Bengal, Meghalaya) were still lagging (Ministry of Labour).
    - This has created a patchwork of protections → workers in Karnataka may enjoy better safeguards than those in Assam.
2. Excessive delegation of Powers
    - Key provisions like the definition of "wages" or thresholds for retrenchment are left to government notifications.
    - This reduces parliamentary oversight and opens scope for arbitrary decisions.
    - The Standing Committee on Labour (2023) flagged this as a major concern.
3. Inadequate Protection for Gig & Informal Workers
    - Despite 30+ crore unorganised workers registered on e-Shram, benefits are still unclear.
    - Positive state efforts: Karnataka's 2025 law mandating platform firms to contribute to a welfare fund; Maharashtra mapping 10 lakh gig workers; Telangana study found gig workers earn ~₹20,000/month but face long hours & high commissions.
    - Union Budget 2025–26 extended PM-JAY health coverage to gig workers, but a comprehensive national framework is missing.
4. Weakening of collective bargaining
    - The Industrial Relations Code requires 75% approval for strikes, nearly impossible in large firms.
    - In 2024, trade unions held nationwide protests in Delhi, Lucknow, and Kolkata, calling this provision "anti-labour."
5. Reduced Job Security
    - Retrenchment/closure threshold raised from 100 to 300 workers.
    - Critics say this tilts towards "Ease of Doing Business" over worker security.
    - Example: Gurugram auto-component firms (2024) downsized without government approval due to the new threshold.
6. Precarious Fixed-Term Contracts
    - Employers use fixed-term contracts to avoid permanency.
    - The Supreme Court (2024) criticised exploitative contract renewals.
    - Telangana HC (2025) ordered regularisation of ad hoc staff, calling repeated contracts "unfair labour practice."
7. Broad exemptions diluting protections
    - Governments can exempt industries in "public interest," a vague term prone to misuse.
    - This could let factories bypass rules on wages, safety, and working hours.
8. Low awareness & compliance (MSMEs and Informal Sector)
    - Many MSMEs struggle with digital compliance.
    - CII's 2024 survey: only 46% of small firms were fully aware of labour code requirements.
    - Informal workers remain under-informed about e-Shram benefits.

Way Forward

- Uniform Implementation Across States- Establish a national benchmark framework for minimum wages, occupational safety, and social security. For Example– A GST Council–like institutional mechanism for labour could promote inter-state harmonisation while preserving federal flexibility.
- Strengthening Legislative Oversight- Ensure greater legislative clarity by embedding critical definitions (e.g., "wages," retrenchment thresholds) within the Codes themselves.
- Comprehensive Social Security for Gig & Informal Workers- Draft a National Gig and Platform Workers Policy mandating aggregator contributions to welfare funds. The e-Shram portal should be integrated with DBT-enabled schemes covering health (PM-JAY), pensions (PM-SYM), and accident insurance for effective last-mile delivery.
- Reviving Collective Bargaining Rights- Rationalise the strike approval threshold (from 75% to around 51%) to make it practical while ensuring industrial peace. Promote tripartite consultations (Government–Employers–Workers) for dispute resolution.
- Balancing Flexibility with Worker Security- Couple greater flexibility for firms with mandatory unemployment insurance and reskilling programmes for retrenched workers. This would align with global best practices in labour transition support.
- Regulating Fixed-Term Contracts- Introduce a cap on contract renewals (e.g., 2–3 cycles). Beyond this, workers should either be granted permanency or strengthened social security entitlements to avoid "permanent temporariness."
- Restricting Exemptions- Narrow down the scope of "public interest" exemptions. Make them time-bound, criteria-based, and subject to judicial or legislative review to prevent misuse.
- Improving Awareness and Compliance- Launch multilingual awareness campaigns, labour helplines, and simplified digital compliance portals. Special digital support cells for MSMEs should be set up to ease compliance without imposing excessive costs.

Read more– PIB

UPSC Syllabus- GS 2 & GS 3- Social Sector Initiatives & Labour Reforms

COP30 Outcomes-Explained Pointwise

The 30th Conference of the Parties (COP30) to the United Nations Framework Convention on Climate Change (UNFCCC) concluded in Belém, Brazil, on 22 November 2025. With growing concerns that global climate pledges are not being fulfilled, COP30 became an important test of whether international cooperation can still deliver real results or remain only symbolic.

For India and other Global South countries, this COP was especially significant because they need concrete progress on adaptation finance, just transition, and nature-based solutions to ensure climate justice.

Source- The Print

What Is COP30?

- COP and Its Purpose: The COPs are the annual meetings of the UNFCCC where nearly 200 countries (Parties) negotiate climate policy, review progress, and chart future actions. The goal is to operationalize the Paris Agreement, improve Nationally Determined Contributions (NDCs), and mobilize climate finance, among other things.
- COP30 (Belém, 2025): Hosted in the heart of the Amazon, the choice of Belém was symbolic — highlighting forests' role in the global climate system. COP30 focused on turning long-standing promises into concrete actions, especially on adaptation, nature preservation, just transition, and climate finance.
- Core Themes: The presidency under Brazil emphasized three priorities: (i) strengthen multilateralism, (ii) center climate action on people, and (iii) accelerate implementation of the Paris Agreement.
- Next COP– Türkiye will host COP31 through a consensus-based process, as COP venues are chosen by regional rotation across five UN-designated regions, and when multiple countries volunteer, the region selects one by agreement rather than voting.

Key Outcomes of COP30 (Belém, Brazil, 2025)

Belém Package	• 195 Parties agreed on a 29-point package focused on just transition, adaptation finance, technology, trade, and gender. • More than 122 countries updated their Nationally Determined Contributions (NDCs), renewing global commitment to the 1.5°C target. • A COP30 Action Agenda was launched to involve cities, private sector players, local communities, Indigenous Peoples, and subnational governments in delivering climate solutions on the ground
Adaptation Finance and Clear Measurement Rules	• Countries agreed to triple funding for climate adaptation by 2035, especially expecting developed nations to do more. • The Baku–Belém Roadmap (2026–2028) will guide countries in planning adaptation actions before the next Global Stocktake review.

	• A set of 59 voluntary indicators was adopted to measure adaptation progress in areas like water, food security, public health, infrastructure, and livelihoods.
Belém Health Action Plan	• A major health-centered achievement of COP30, launched on Health Day (13 November 2025). • It aims to strengthen healthcare systems to cope with climate threats like heatwaves, disasters, and disease outbreaks. • Built on two principles: • Climate justice and health equity • Participatory and accountable climate-health governance • Key components include: ○ Climate-based health surveillance ○ Evidence-backed policies and training ○ Digital health tools and climate-resilient medical infrastructure • Received around USD 300 million in philanthropic support to kickstart implementation.
Tropical Forests Forever Facility (TFFF)	• A new system where countries that protect forests get paid based on satellite-verified performance. • Aims to mobilize USD 125 billion using public and private investments. • 20% of funds will go directly to Indigenous Peoples and local communities, recognizing their vital role in conservation. • Brazil demonstrated leadership by making the first contribution of USD 1 billion.
Just Transition Mechanism	• Approved to ensure a fair shift away from fossil fuels, without harming workers and communities. • Focuses on reskilling, secure employment, and social protections. • However, funding and operational specifics are yet to be fully defined
Fossil Fuels & Forest Roadmaps	• The final Belém Political Package did not mandate a fossil fuel phase-out, reflecting divisions among countries.

	• Brazil committed to two voluntary roadmaps: one for a fair transition away from fossil fuels and another to halt and reverse deforestation. • The package addressed key concerns of developing countries, including implementation of Article 9.1 of the Paris Agreement on climate finance and issues like the EU's Carbon Border Adjustment Mechanism (CBAM), though not fully as demanded. • A two-year work programme was proposed to discuss all climate finance issues, including Article 9.1.
Santa Marta Conference on Fossil Fuel Phase-Out	• Announced by Colombia and the Netherlands for April 2026. • Will discuss how to phase out fossil fuels in a way that protects economies, jobs, national security, and fair global trade.
Global Ethical Stocktake (GES)	• Introduced to measure climate progress not only through numbers but also through principles like justice, rights, fairness, and intergenerational equity. • Its Asia edition was held earlier in New Delhi.
Open Planetary Intelligence Network (OPIN)	• A global initiative to standardize climate data systems. • Integrates satellites, digital technology, and artificial intelligence for transparent and faster climate decision-making.
Belem Declaration on Hunger, Poverty & People-Centric Climate Action	• Signed by 43 countries plus the European Union (EU). • Places vulnerable communities at the center of climate policy. • Calls for measures like social protection, crop insurance, community-based adaptation, and livelihood security.
Global Mutirão Platform	• A digital platform encouraging community-powered climate action, inspired by Brazil's collaborative tradition called "Mutirão".

	• Focuses on closing the gap between promises and actual delivery, especially in energy transition, finance, and trade.
Belém 4X Pledge (Sustainable Fuels)	• A global political commitment to quadruple sustainable fuels (biofuels, biogas, hydrogen, etc.) by 2035, from 2024 levels • The initiative supports a people-centric and low-carbon energy transition, broadening mitigation pathways beyond emissions reductions alone.
Climate–Trade Dialogue	A new process was initiated to align climate policies with fair trade, involving bodies like WTO and UNCTAD

Significance of COP30

1. From Promises to Action- COP30 shifted focus from making new pledges to implementing existing ones. The Belém Package now uses measurable tools like 59 adaptation indicators so that climate commitments can be tracked and delivered on the ground.

2. Breakthrough in Forest Finance- The Tropical Forests Forever Facility (TFFF) created a long-term, performance-based fund that rewards countries for protecting forests. With 20% of funds reserved for Indigenous Peoples and local communities, conservation now supports both nature and livelihoods.

3. Making Health a Climate Priority- The Belém Health Action Plan brought public health into climate policy for the first time. It highlighted climate change as a public health emergency and focused on climate justice, equity, and community participation to build climate-resilient health systems.

4. A Fair and Just Transition- COP30 formally recognized a mechanism to support workers and vulnerable groups during the shift away from fossil fuels. Although financing is yet to be finalized, it ensures future climate action includes jobs, reskilling, worker rights, and social protection.

5. Strengthening Equity in Global Climate Governance- All 195 countries approved the Belém Package, strengthening global cooperation. The Global Ethical Stocktake added ethics, justice, and intergenerational rights to climate assessments, showing that fairness is now central to climate policy.

6. Bringing Climate and Trade Together- COP30 launched a climate–trade dialogue to address policies such as carbon border taxes that affect global trade. Its goal is to align trade with climate goals and prevent unfair barriers, ensuring trade supports a just and sustainable transition.

Key challenges that COP30 failed to address

1. Weak Fossil Fuel Action- COP30 did not include clear language on phasing out fossil fuels. Brazil's roadmaps are voluntary and outside the binding UNFCCC text, causing disappointment among vulnerable and pro-mitigation countries at a time when stronger fossil fuel cuts are urgent.

2. Uncertain Adaptation Finance- Although countries agreed to triple adaptation finance by 2035, the deal does not specify a baseline, legal commitments, or interim targets. Without transparency and accountability, richer nations may delay or dilute financial support.

3. Inadequate Loss and Damage Support- Operational structures were created, but funding remains insufficient. Without a reliable and scaled-up Loss and Damage fund, climate-affected countries may not receive timely help for disaster-related losses.

4. Voluntary Implementation Risks- Many major proposals — including just transition mechanisms, financial mobilization, and roadmaps — rely on voluntary efforts. There is a risk that these may remain plans on paper without long-term funding and political will, especially in initiatives like the Tropical Forests Forever Facility (TFFF).

5. Trust Deficit between North and South- The absence of binding fossil fuel commitments could worsen distrust among developing nations. The Amazon dominated the discussions, yet the agreement did not legally restrict fossil fuel expansion, raising concerns about justice and ecological tipping points.

6. Geopolitical Tensions Threaten Progress- Resistance from some Global North countries to stronger commitments, combined with broader geopolitical disputes, may weaken multilateral cooperation. Without rebuilding trust, COP30's achievements could remain symbolic rather than transformative.

Way Forward

1. Deliver Adaptation Finance- Rich countries must turn their promise of tripling adaptation funds into clear yearly targets, with checkpoints for 2028 and 2030. This progress should be tracked openly using UNFCCC's 59 indicators. Funds should come mainly as grants, not loans, so vulnerable nations don't end up in debt while fighting climate disasters.

2. Scale the Tropical Forests Forever Facility (TFFF)- The TFFF needs fast funding to reach USD 125 billion, with both governments and private investors contributing. Indigenous Peoples and local communities who protect forests must have a say in decisions and share the benefits.

3. Advance Just Transition- As the world moves away from fossil fuels, workers and communities must not be left behind. A new fund should support skill training, social security, and local resilience. Countries should include just transition in their development plans and NDCs, using ethical stocktake standards to protect labour rights in climate finance and trade.

4. Create a Fossil Fuel Phase-Out Roadmap- Brazil's fossil fuel phase-out plans need technical support, clear targets, and peer review. These roadmaps should be part of UNFCCC negotiations and the Global Stocktake. Civil society, youth, and Indigenous communities must monitor progress to keep the process fair and accountable.

5. Reform Climate Finance Architecture- The new Global Climate Finance Accountability Framework must be expanded to clearly track how much money is promised and delivered. Multilateral Development Banks should offer more concessional finance, blended finance, and debt-for-climate swaps. Platforms like FINI (Forest-Positive Investment Initiative) should help bring in large private investments.

6. Institutionalize the Ethical Stocktake- Ethics should be a permanent part of global climate assessments. Reviews must focus on justice, rights, and equity, especially for Indigenous Peoples and future generations. Communities, youth, and civil society should have real decision-making power, and ethical findings must shape future NDCs and climate finance.

Read more- TH

UPSC Syllabus- GS 3– Conservation, environmental pollution and degradation, environmental impact assessment

G20 Summit 2025: Key Takeaways-Explained Pointwise

The 2025 G20 Leaders' Summit held on 22–23 November in Johannesburg, South Africa, became the first G20 meet hosted on the African continent. Amid global tensions and development challenges, leaders issued a 122-point declaration focused on multilateral cooperation, climate action, debt relief, and Global South priorities. The summit also drew attention due to the absence of the United States.

Source- CNN

What is G20 (Group of Twenty)?

- It is an informal intergovernmental forum comprising 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, and the United States) and the European Union and African Union.
- It represents about 85% of global GDP, over 75% of international trade, and nearly two-thirds of the world's population.
- It was established in 1999, in response to the Asian Financial Crisis, to enhance international economic cooperation and financial stability.
- The G20 provides a platform for both advanced and emerging economies to discuss global issues such as macroeconomic policy, global governance, sustainable development, and financial stability.
- The grouping has no permanent secretariat; its presidency rotates annually, and coordination is supported by a "Troika" (previous, current, and upcoming Presidencies).During South Africa's Presidency, the members of the G20 troika are Brazil, South Africa and the United States.

Highlights of the G20 Summit 2025 (Johannesburg)

- Ubuntu Philosophy & Multilateralism:- The summit adopted the Ubuntu theme ("I am because we are"), stressing the interdependence of nations and the need for collective global action on inequality, conflict, climate change, and economic instability.

- First G20 Summit in Africa:- Johannesburg hosted the first-ever G20 Leaders' Summit on African soil, strengthening Africa's role in global governance and prioritizing the concerns of the Global South.
- 122-Point Leaders' Declaration:- A 122-point declaration was adopted on Day 1, showing early consensus on development equity, debt relief, institutional reforms, and a just energy transition for developing countries.

Key Outcomes of the Johannesburg Declaration (G20 2025)

- Historic African Summit: The 2025 G20 Leaders' Summit was hosted for the first time in Africa, guided by the Ubuntu philosophy of collective cooperation.
- Greater African Voice in Global Finance: The summit endorsed a new 25th IMF Executive Board seat for Sub-Saharan Africa and supported channeling over $100 billion Special Drawing Rights (SDRs) to the region.
- Debt Sustainability Framework: The G20 strengthened its Common Framework to make debt restructuring more transparent, predictable, and supportive for vulnerable countries.
- Climate Action and Disaster Resilience: Leaders recognized that developing nations need US$ 5.8–5.9 trillion before 2030 and called for scaling up climate finance and support for climate resilience.
- Just Energy Transitions & Mission 300: The declaration supported tripling global renewable energy capacity and launched Mission 300 to provide electricity to 300 million Africans by 2030.
- Critical Minerals Framework: A new framework was adopted for sustainable mining, local value addition, and secure supply chains, benefiting mineral-rich developing countries.
- Global Food Security: Leaders reaffirmed the Right to Food, supported African farmers, and encouraged market integration through the African Continental Free Trade Area (AfCFTA).
- AI and Digital Inclusion: The AI for Africa Initiative was launched to ensure safe, inclusive, and human-centric digital governance and expand access to digital technologies.
- Youth and Gender Targets: The declaration set clear goals to reduce NEET (Not in Education, Employment, or Training) youth by 5% and achieve 25% gender parity in workforce participation by 2030.
- UN Security Council Reform: G20 leaders pledged to make UNSC representation more inclusive and reflective of 21st-century realities, especially for underrepresented regions.

India's Priorities and Contributions

India's Strategic Priorities

- India stressed the need to rethink development models that keep large sections of humanity deprived and exploit natural resources unsustainably.
- It promoted the concept of holistic human development, drawing on the idea that economic progress should integrate material welfare with social and ecological well-being.
- India sought stronger representation of developing nations, especially African countries, in forums like the UN Security Council (UNSC) and IMF, ensuring that development and equity remain central to global decision-making.

Major Initiatives Proposed by India at G20 2025

- G20 Initiative on Countering the Drug–Terror Nexus- Targets narcotics trafficking and its linkages with terror financing, including synthetic drugs.
- G20–Africa Skills Multiplier Initiative- Plans to train one million certified trainers in Africa over the next decade to build local talent and jobs.
- Global Traditional Knowledge Repository- Aims to collect and share traditional knowledge for sustainable lifestyles, health and well-being, drawing on global indigenous wisdom.
- Global Healthcare Response Team- Proposes a network of trained professionals from G20 nations for rapid medical and humanitarian assistance during crises.
- Open Satellite Data Partnership- Promotes accessible and interoperable satellite data to help agriculture, fisheries, disaster management and climate adaptation in developing nations.
- Critical Minerals Circularity Initiative- Focuses on recycling, urban mining, second-life batteries and expanding value-addition to ensure sustainable and equitable mineral supply chains.

Note– India deepened its diplomatic ties through the launch of the ACITI Partnership (Australia–Canada–India), aimed at advancing cooperation in technology and innovation, with a focus on AI, clean energy, and resilient supply chains.

Challenges Ahead

- Limited attention to global conflicts: Major flashpoints like Ukraine and Gaza were mentioned only indirectly, showing weak consensus on security issues.
- Implementation gap in climate finance: Meeting targets in trillions requires accountability mechanisms and financing capacity, especially for developing states.
- Debt distress remains unresolved: Many low-income nations still face high borrowing costs, opaque debt structures and slow restructuring processes.
- Geopolitical divides: Absence of key leaders raises questions about cohesion and collective action within the G20.
- Resource and coordination barriers: India's proposals require funding, governance structures and measurable outcomes to avoid remaining aspirational.
- Equity concerns in critical minerals: Extracting nations need safeguards to ensure social and environmental protection and fair value addition.
- Digital and AI risks: Benefits must be balanced against risks like digital divide, privacy issues, misuse, algorithmic bias and sovereignty concerns.

Way Forward

- Make Global Governance More Inclusive- Implement reforms in the UN Security Council and IMF to give stronger representation to Africa and other underrepresented regions.
- Deliver Climate & Finance Commitments- Turn pledges into action by operationalising climate finance (including the Loss and Damage Fund) and ensuring transparent, timely funding flows.
- Reform Debt Relief Mechanisms- Simplify and expand the G20 Common Framework, promote debt-for-climate and debt-for-development swaps, and reduce unfair borrowing costs for developing nations.
- Ensure a Just Energy Transition- Mobilise investment for renewable energy, accelerate Mission 300, support clean technology access, and develop local green industries in the Global South.
- Strengthen Responsible Tech & AI Governance- Advance a global framework for safe, transparent, and inclusive AI that protects human rights and reduces the digital divide.

- Promote Food Security & Human Capital Development- Support climate-resilient agriculture, integrate food markets, invest in youth skills and women's workforce participation to build long-term inclusive growth.

Read more– IE

UPSC Syllabus– GS 2- Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

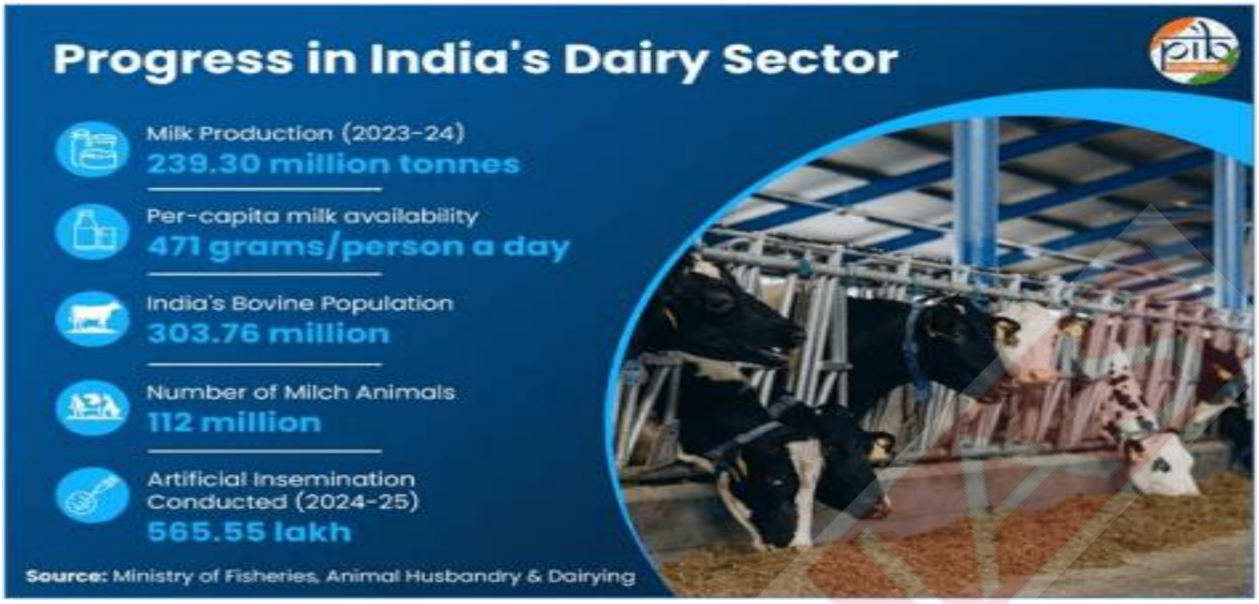
India's Dairy Sector: Significance and Challenges (Explained Pointwise)

National Milk Day, observed on 26 November, commemorates the birth anniversary of Dr. Verghese Kurien, widely known as the "Father of the White Revolution."

India is the world's largest milk producer, accounting for nearly one-fourth of global output.The dairy sector significantly boosts the rural economy, contributing around 5% to the national GDP and providing livelihoods to over 8 crore farmers, with women playing a crucial role in production, processing, and milk collection.

Source- PIB

What is the current status of dairy sector in India?



Source- PIB

Milk Production Data	**India is the world's leading milk producer. The milk production surged from 146.30 million tonnes in 2014–15 to 239.30 million tonnes in 2023–24. The per-capita availability of milk in India has risen to 471 grams per day in 2023-24 compared to a global average of about 329 g/day.**
Milk Sector contribution to Agri GDP	**The milk sector (milk consumed or sold in liquid form, ghee, butter, and lassi produced by producer households) contributed almost 40% (Rs 11.16 lakh crore) to agriculture and related sectors.**
Top Five Milk producing states in India	**The top five milk-producing states- Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat, and Andhra Pradesh– contribute over 53% of the country's total milk production.**
National Average Yield and production data	**The national average yield is 8.55 kg per animal per day for crossbred animals and 3.44 kg for indigenous ones. Indigenous buffaloes account for 31.94% of production, followed by crossbred cattle at 29.81%.**
Handling of milk	**The organized sector, led by cooperatives, manages about one-third of the marketable milk. The unorganized sector handles the remaining two-thirds.**

Cooperative Dairy Network in India & Government Roadmap for White Revolution 2.0

Cooperative dairy network includes 22 milk federations, 241 district unions, 28 marketing dairies, and 25 MPOs, connecting 1.72 crore farmers in 2.35 lakh villages, supported by 31,908 cooperatives, 61,677 milk testing labs.

White Revolution 2.0, launched in 2024–25, represents a renewed commitment to strengthen India's dairy cooperatives, expand milk procurement, and enhance women's participation in the sector. Over the five-year period until 2028–29, the initiative aims to:

- Establish 75,000 new dairy cooperative societies in underserved areas.
- Strengthen 46,422 existing dairy cooperatives to improve service delivery and farmer incomes.
- Expand multi-state cooperative societies for cattle feed, mineral mixtures, biofertilizer, biogas, and sustainable management of animal by-products.
- Increase milk procurement by cooperatives to over 1,007 lakh kilograms per day.

Infrastructure development is a core component, with new plants such as the Sabar Dairy in Rohtak, Haryana, catering to Delhi-NCR's demand and enhancing production of curd, buttermilk, and yoghurt. Large-scale investments in milk processing and chilling capacity aim to raise India's milk processing to 100 million litres per day by 2028–29.

What is the Significance of the Dairy Industry in India?

1. Backbone of Rural Economy:- Dairy contributes about 5% of India's GDP and 40% of agriculture and allied sector output (₹11.16 lakh crore), supporting the livelihoods of over 8 crore farmers, especially small and marginal landholders.

2. Ensures Nutritional Security:- With per capita milk availability at 471 grams/day, milk provides high-quality protein, calcium, magnesium, and Vitamin B12, helping combat malnutrition, anemia, and stunting, particularly among children and women.

3. Promotes Women Empowerment:- Women make up 70% of the dairy workforce and lead 48,000+ cooperatives and 16 all-women Milk Producer Organisations (MPOs), giving them income, independence, and decision-making power in rural areas.

4. Supports Integrated & Climate-Friendly Farming:- India's livestock—303.76 million bovines, 148.88 million goats, and 74.26 million sheep—provides manure for crops and biogas for energy. Programs like Gobar-Dhan and bio-CNG turn cattle waste into organic fertilisers and renewable energy, adding income for farmers.

5. Encourages Sustainability & Circular Economy:- Dairy reduces reliance on chemical fertilizers, promotes waste-to-wealth practices, lowers emissions, and supports rural entrepreneurship, contributing to both environmental and economic resilience.

6. Future Growth under White Revolution 2.0:- Milk procurement by cooperatives is set to increase from 660 lakh litres/day to 1,007 lakh litres/day by 2028–29, focusing on higher production, women's participation, nutritional security, and better market access for farmers.

What are the challenges in the Dairy Industry?

1. Low Scientific Breeding Coverage: Only 33% of breedable bovines undergo artificial insemination (AI), while 70% are bred with scrub bulls of unknown genetic merit. Limited AI use, low-quality germplasm, and shortage of technical staff hinder high-quality cattle development.

2. Disease Threats: Contagious diseases like Foot-and-Mouth Disease (FMD), Brucellosis, Lumpy Skin Disease (LSD), and Black Quarter infections continue to reduce livestock productivity. Mass vaccination

and eradication programs under the National Animal Disease Control Programme aim to control these diseases by 2030.

3. Infrastructure Gaps: Many rural areas still lack access to organized milk markets, chilling centers, and quality-testing laboratories. Cooperative coverage is uneven—well-established in Gujarat and Kerala but below 10% in West Bengal, Assam, and Jharkhand—limiting uniform sector growth.

4. Feed and Fodder Shortages: Seasonal fodder scarcity affects milk yield. India faces a deficit of 12% green fodder, 23% dry fodder, and 30% grains-based concentrate feed.

5. Low Cattle Productivity and State Variability: Average cattle productivity is 1,777 kg per animal per year, below the global average of 2,699 kg. Punjab achieves 13.49 kg per animal per day, while West Bengal only 6.30 kg.

6. Market Volatility: Fluctuating milk prices, rising input costs, and competition from the unorganized sector reduce farmers' incomes. Limited marketing support, absence of price stabilization, and a small share of livestock in agricultural credit (around 4%) further constrain economic security.

7. Declining Growth Rate: Annual milk production growth has slowed from 6.47% in 2018–19 to 3.83% in 2022–23, which may affect the objectives of White Revolution 2.0.

8. Policy and Technology Gaps: Agricultural subsidies mainly favor crops; in 2023–24, only Rs 4,328 crore was allocated to the Department of Animal Husbandry and Dairying compared to over Rs 4 trillion for other agricultural subsidies. Insufficient institutional finance and low adoption of modern breeding technologies limit sector growth.

What are the other government schemes & initiatives for the development of dairy sector?

Rashtriya Gokul Mission (RGM)	It is being implemented for development and conservation of indigenous bovine breeds since December 2014. Its aim is to enhance milk production and to make it more remunerative to the farmers.
National Programme for Dairy Development (NPDD)	Focuses on infrastructure development, milk testing, chilling facilities, and cooperative strengthening. Over 31,000 dairy cooperatives have been revived, benefiting more than 17 lakh milk producers
National Livestock Mission (NLM)	National Livestock Mission (NLM) scheme has been restructured for 2021-22 to 2025-26. The scheme focuses on entrepreneurship development and breeds improvement in poultry, sheep, goat and piggery, including feed and fodder development.

National Artificial Insemination Programme	To suggest novel methods of bringing about impregnation in female breeds and prevent the spread of certain diseases which are genital in nature.
National Cattle and Buffalo Breeding Project	To genetically upgrade important indigenous breeds on a priority basis with a focus on development and conservation.
National Animal Disease Control Programme	Implemented to control FMD and Brucellosis by completely vaccinating cattle, buffalo, sheep, goat and pig populations against Foot & Mouth Disease (FMD) and bovine female calves of 4-8 months of age against Brucellosis.
Animal Husbandry Startup Grand Challenge	To appreciate innovations coming from the villages to expand the dairy sector in India.
GST Reforms	The 56th GST Council reduced GST rates on key dairy products, effective from 22 September 2025. UHT milk and packaged paneer are now tax-free, while ghee, butter, cheese, milk products, ice cream, and milk cans saw GST reduced to 5%.
National Gopal Ratna Awards	The National Gopal Ratna Awards recognize outstanding dairy farmers, cooperatives, and AI technicians for their contribution to livestock and dairy development. The 2025 awards, to be presented on 26 November, include cash prizes of ₹5 lakh, ₹3 lakh, and ₹2 lakh for the top three winners

What Should be the Way Forward?

1. Expansion of Cooperatives: Achieving White Revolution 2.0 targets by establishing 75,000 new societies will bring underserved areas into the organized sector, reducing reliance on informal middlemen.

2. Enhancing Scientific Breeding: Increasing AI coverage, promoting progeny-tested bulls, and adoption of advanced technologies such as IVF and sexed semen will strengthen productivity.

3. Infrastructure Modernization: Scaling up milk processing plants, chilling centers, and quality-testing laboratories will improve efficiency, reduce wastage, and support uniform growth across states.

4. Climate-Smart Practices: Adoption of sustainable feed production, organic manure, biogas generation, and circular economy models will mitigate environmental risks and reduce the sector's carbon footprint.

5. Feed and Fodder Security: Ensuring adequate availability of green and dry fodder, grains, and drinking water is essential, particularly in regions with seasonal scarcity, to enhance milk yields and livestock health.

6. Insurance and Credit Support: Expanding livestock insurance coverage and providing easy access to short-, medium-, and long-term credit will buffer farmers against market volatility and climatic uncertainties.

7. Capacity Building and Training: Continuous skill development for AI technicians, cooperative staff, and farmers will facilitate adoption of modern practices and ensure knowledge transfer.

8. Value Addition and Marketing: Supporting milk producers to enter value-added segments such as ice cream, yogurt, cheese, and whey will significantly improve profit margins compared to raw milk sales.

9. Promoting Indigenous Breeds: Conserving and genetically enhancing native breeds, like the Badri cow, can improve productivity while maintaining resilience to local climatic conditions.

Read More–PIB

UPSC Syllabus- GS 3– Economics of animal rearing

Regulation of AI- Explained Pointwise

India unveiled its AI Governance Guidelines as the country takes a measured approach to regulating artificial intelligence by emphasizing trust, equity and innovation. The guidelines, released by the Ministry of Electronics and Information Technology (MeitY) after a consultation that drew more than 2,500 submissions from government bodies, academia, think tanks, and the private sector, reflect the vision of "AI for All" laid out by Prime Minister Narendra Modi.

Calls for regulation of Artificial Intelligence has emerged stronger than ever with the recent rise in the cases of misuse of AI like proliferation of deepfakes. With the rapid advancement of AI and its potential impact on society, there is a growing consensus among experts that regulation is necessary to ensure responsible and ethical use of AI technology.

Regulation of AI

- The global artificial intelligence market size was valued at USD 136.55 billion in 2022 and is projected to expand at a compound annual growth rate (CAGR) of 37.3% from 2023 to 2030.
- Calls for regulation of Artificial Intelligence has emerged stronger than ever with the recent rise in the cases of misuse of AI like proliferation of deepfakes. With the rapid advancement of AI and its potential impact on society, there is a growing consensus among experts for regulation of AI.

Need

- Bias and discrimination- Facial recognition algorithms have been shown to have higher error rates for women and people with darker skin tones.
- Concerns about privacy and data protection. For ex- Lawsuits against Silicon Valley giants for data and privacy breach.
- Vulnerable to cybersecurity threats and attacks. For ex- Adversarial attacks can manipulate AI models posing risks to autonomous vehicles or healthcare.
- Artificial General Intelligence can go beyond human intelligence, which raises concerns of predictability and security.
- Challenges associated with Deepfakes like women safety (pornographic material), liar's dividend (an undesirable truth is dismissed as fake news) etc.

Way Forward

- Universal adoption of the Bletchley Declaration
- Establish comprehensive and flexible regulatory framework
- Foster international cooperation
- Invest in AI research and education
- Encourage industry self-regulation

Challenges

- Rapid technological advancement makes it challenging for regulators to keep up with the latest developments
- Increase in compliance costs may push small business and startups out of the market.
- Determination of responsibility and liability when AI systems cause harm or make erroneous decisions
- Developing consensus among different countries with varying interests and priorities is a complex task.

For detailed Reading- 7 PM Link

Forum LEARNING CENTRE

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What is the need for regulation of AI?

1. Bias and discrimination: AI systems can inherit biases from the data they are trained on, leading to discriminatory outcomes. For ex- Facial recognition algorithms have been shown to have higher error rates for women and people with darker skin tones.

2. Lack of transparency- Many AI algorithms operate as black boxes, making it difficult to understand how they reach their decisions. For ex- Medical AI system recommending a specific medical treatment but cannot explain its reasoning.

3. Privacy and data protection- AI systems rely on vast amounts of personal data, raising concerns about privacy and data protection. For ex- Lawsuits against Silicon Valley giants for data and privacy breach in their AI systems.

4. Security risks- AI systems can be vulnerable to cybersecurity threats and attacks. For ex- Adversarial attacks can manipulate AI models posing risks in critical domains such as autonomous vehicles or healthcare.

5. Ethical considerations- AI raises ethical questions related to the impact on jobs, social inequality, and concentration of power. For ex- automated decision-making in hiring processes have shown to perpetuate existing biases and result in unfair outcomes.

6. Artificial General Intelligence– AGI can self-learn and go beyond human intelligence, raising concerns of predictability and security.

7. Autonomous Weapons Development- These machines have the potential to make life-and-death decisions without direct human intervention, leading to ethical dilemma regarding the value of human life.

8. Mass State Surveillance: AI, equipped to conduct facial recognition and analyze extensive data, will empower governments to maintain round-the-clock profiles of citizens. This will make dissenting against governments difficult.

9. Challenges associated with Deepfakes generated using AI- There are concerns about women safety (morphed pornographic material), liar's dividend (an undesirable truth is dismissed as fake news) and fuelling radicalisation and violence (Fake videos showing armed forces committing 'crimes in conflict areas').

Read More- Deepfakes- Explained Pointwise

What are the challenges in regulation of AI?

1. Rapid technological advancement- AI is evolving at a rapid pace, making it challenging for regulators to keep up with the latest developments and effectively regulate a technology that is constantly evolving.

2. Complexity and development- Creating effective regulations that address the intricacies of AI systems and keep pace with technological advancements is a considerable challenge.

3. Increased costs and competition- Compliance with regulations may impose additional costs on businesses. This disproportionately effects smaller companies and startups, limiting their ability to compete in the AI market.

4. Accountability and liability- Determination of responsibility and liability when AI systems cause harm or make erroneous decisions is also a considerable challenge.

5. International cooperation- Developing consensus among different countries with varying interests and priorities is a complex task.

What is the status of regulation of AI in India and across the globe?

India

a. AI Governance Guidelines- The India AI Governance Guidelines is the country's first formal, comprehensive blueprint for how AI should be developed and used. Rather than proposing a brand-new overarching AI law immediately, the Guidelines adopt a lighter-touch, flexible regulatory strategy. They rely on existing laws (like the Information Technology Act, 2000 and Digital Personal Data Protection Act, 2023) and propose targeted amendments where necessary.

b. Digital India Framework- India is developing a comprehensive Digital India Framework that will include provisions for regulating AI. The framework aims to protect digital citizens and ensure the safe and trusted use of AI.
c. National AI programme- India has established a National AI Programme to promote the efficient and responsible use of AI.
d. National Data Governance Framework Policy- India has implemented a National Data Governance Framework Policy to govern the collection, storage, and usage of data, including data used in AI systems. This policy will help ensure the ethical and responsible handling of data in the AI ecosystem.
e. Draft Digital India Act- The Ministry of Information Technology and Electronics (MeitY) is working on framing the draft Digital India Act, which will replace the existing IT Act. The new act will have a specific chapter dedicated to emerging technologies, particularly AI, and how to regulate them to protect users from harm.

Rest of the World

1. European Union- The European Union is working on the draft Artificial Intelligence Act (AI Act) to regulate AI from the top down.

2. United States- The White House Office of Science and Technology Policy has published a non-binding Blueprint for the Development, Use, and Deployment of Automated Systems (Blueprint for an AI Bill of Rights), listing principles to minimize potential harm from AI.

3. Japan- Japan's approach to regulating AI is guided by the Society 5.0 project, aiming to address social problems with innovation.

4. China- China has established the "Next Generation Artificial Intelligence Development Plan" and published ethical guidelines for AI. It has also introduced specific laws related to AI applications, such as the management of algorithmic recommendations.

What should be the way forward?

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

Read More- Bletchley Declaration

2. Establish comprehensive and flexible regulatory framework-: The governments should develop clear guidelines and laws that address various aspects of AI, including data privacy, algorithmic transparency, accountability, and potential biases.

3. Foster international cooperation- Given the global nature of AI and its potential impact, collaboration among countries is essential. International standards and agreements should be developed to promote ethical practices and ensure consistency in regulation across borders. In this respect, the G7 Hiroshima AI Process (HAP) could facilitate discussions.

4. Encourage industry self-regulation- Companies involved in AI development should take responsibility for ensuring the ethical and responsible use of their technologies.

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

Read More- India AI Governance Guidelines

India's Persistent Air Pollution Puzzle- Explained Pointwise

Each winter, Delhi plunges into its familiar grey haze, and India relies on quick fixes—cloud seeding, smog towers, water sprinkling, odd-even rules, and festival crackdowns. These visible measures promise action but rarely improve air quality.

Recently, public frustration was evident when 50–60 peaceful protesters gathered near India Gate against the smog; five were detained despite the protest being nonviolent, highlighting growing anger at recurring pollution and weak institutional responses.

Source- TH

What is air Pollution and how is it measured in India?

Air Pollution: Air pollution is the introduction of chemicals, particulates or biological materials into the atmosphere that cause discomfort, disease, or death to humans.

Measurement of Air Pollution In India:

- **In India, air pollution is measured according to the National Air Quality Index developed by Central Pollution Control Board (CPCB) in 2014.**
- **The measurement of air quality in the NAQI framework is based on eight pollutants, namely- Particulate Matter (PM10), Particulate Matter (PM2.5), Nitrogen Dioxide (NO2), Sulphur Dioxide (SO2), Carbon Monoxide (CO), Ozone (O3), Ammonia (NH3) and Lead (Pb).**

Categorization of Air Quality under AQI:

AQI	Remark	Colour Code	Possible Health Impacts
0-50	Good		Minimal Impact
51-100	Satisfactory		Minor breathing discomfort in sensitive people
101-200	Moderate		Breathing discomfort to people with asthma and heart disease.
201-300	Poor		Breathing discomfort to most people on prolonged exposure.
301-400	Very Poor		Respiratory illness on prolonged exposure
401-500	Severe		Affects healthy people and seriously impacts those with existing diseases.

Source- CPCB

Recent data shows Delhi's air quality at its worst in three years, prompting GRAP activation and emergency measures like cloud seeding by IIT Kanpur and the Delhi government, though their effectiveness remains limited by low cloud moisture and high cloud bases.

What are the key drivers of Air Pollution in Delhi?

1. Stubble Burning: Crop residue burning in Punjab, Haryana, and Rajasthan contributes up to 35% of Delhi's PM2.5 levels during October–November. Emissions include methane, carbon monoxide, VOCs, and carcinogenic hydrocarbons.

2. Vehicular Pollution: Delhi hosts one of the highest numbers of registered private vehicles in India. Vehicles contribute approximately 40% of particulate load in the city.

3. Construction and Open Waste Burning: Dust from construction debris and landfill burning aggravates air quality. Construction alone accounts for roughly 10% of particulate pollution.

4. Meteorological Factors: Low winter wind speeds, northwesterly winds carrying dust from Pakistan and Afghanistan, and temperature inversions trap pollutants in the lower atmosphere.

5. Urban Development and Grey Infrastructure: Rapid urbanization, shrinking green cover, and real estate expansion reduce the city's ecological buffers. Promotion of car ownership and poorly planned road widening exacerbate vehicular emissions.

6. Firecrackers: Seasonal burning during festivals like Diwali adds to acute pollution spikes.

What are the harmful effects of air pollution?

The harmful effects of air pollution have been tabulated below:

Economic effects	**(1) Leads to loss of labour productivity, GDP and per capita income levels. (The Confederation of Indian Industry estimates that air pollution costs Indian businesses \$95 billion, or 3 per cent of India's GDP every year). (Poor air amounts to about Rs 7 lakh crore of annual economic loss, which is more than a third of our annual GST collection)** **(2) Air pollution reduces agricultural crop yields and commercial forest yields.**
Human Health Effects	**(1) Air pollution leads to multiple health conditions including respiratory infections, heart disease and lung cancer.** **(2) As per the Global Burden of Disease comparative risk assessment for 2015, air pollution exposure contributes to approximately 1.8 million premature deaths and loss of 49 million disability adjusted life-years (DALYs) in India.**
Environment	**(1) Acid Rain: Damages crops, natural vegetation, soil chemistry and leads to damage to ancient monuments (Taj Mahal Yellowing).** **(2) Eutrophication of water bodies: Increases nitrogen intake of freshwater bodies leading to Eutrophication.**

Government Initiatives to Combat Pollution

1. Cloud Seeding (Artificial Rain): Temporary reduction of particulate matter, constrained by insufficient cloud moisture.

2. Crop Residue Management (CRM) Scheme: Subsidies for turbo happy seeders, rotavators, and other machinery to reduce stubble burning.

3. Commission for Air Quality Management (CAQM): Statutory body established in 2021 to tackle air pollution and coordinate efforts across NCR and adjoining regions.

4. Vehicular Pollution Control: Transition from BS-IV to BS-VI fuels, promotion of electric vehicles, and odd-even traffic rules.

5. Graded Response Action Plan (GRAP): Measures include shutdowns of thermal plants, bans on construction, and deployment of anti-smog guns and water sprinklers at hotspots.

Structural and Institutional Challenges

1. Institutional Fragmentation: No single body has full authority or accountability, creating gaps in coordination across NCR states.

2. Incentive Misalignment: Quick fixes are politically attractive—they are inexpensive, easy to deploy, and visibly responsive, even if they fail to reduce public exposure effectively.

3. Intellectual Trap: Solutions conceived in elite institutions or think tanks often underestimate real-world implementation constraints.

4. Western Trap: Importing foreign "best practices" without adapting them to India's urban density, informal economy, and administrative limitations reduces effectiveness.

To overcome these traps, India requires coordinating institutions, professional science managers, long-term budgets, and multi-year plans that can adapt global solutions to local realities.

Way Ahead

1. Expand AQI Monitoring: Install adequate air quality monitoring stations and deploy hyperlocal sensors to track real-time pollution levels.

2. Empower Authorities: Give agencies the power to act on hyperlocal data for pre-emptive measures, such as penalizing construction or industrial violations immediately.

3. National Nodal Authority: Establish a constitutionally empowered nodal body to coordinate air pollution management across states and sectors with clear timelines.

4. Independent Regional Commissions: Set up city-level commissions like CAQM in other metro regions (e.g., Mumbai, Chennai) to enforce regulations across geographical and jurisdictional boundaries.

5. Stricter Industrial Guidelines: Enforce uniform pollutant reporting, emission reduction targets, and accountability frameworks for industries throughout the production-consumption-recycling chain.

6. Promote Clean-Air Investments: Encourage investment in green mobility, clean energy, and sustainable cooking solutions to reduce pollution while creating economic opportunities.

7. Funds and Capacity Building: Allocate finance and train manpower in urban local bodies and State Pollution Control Boards for effective monitoring, enforcement, and long-term air quality management.

8. Public Awareness and Incentives: Educate and incentivize civil society and stakeholders, e.g., farmers, to adopt sustainable practices like circular economy solutions for crop residue.

9. Sustainable Transport: Enhance public transport, discourage private vehicle use through parking management and taxes, and meet city transport targets for cleaner mobility.

10. Agriculture, Construction, and Waste Management: Limit stubble burning through crop and irrigation practices, manage construction dust, and improve waste handling to reduce airborne pollutants; incorporate lessons from global cities like London, Singapore, and Beijing.

Read More- The Hindu

UPSC Syllabus- GS 3- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

India-Central Asia Relations- Explained Pointwise

India's ties with Central Asia are becoming more important as global politics change. The spotlight on Tajikistan's Ayni airbase, India's former overseas military base, shows the region's strategic value. Central Asian countries are balancing relationships with Russia, China, and the US, while India uses its historical, cultural, and security connections to stay influential and pursue economic and strategic goals

Central Asia Region

- **Location: Situated in the central part of the Eurasian continent, bordered by Russia to the north, China to the east, Iran and Afghanistan to the south, and the Caspian Sea to the west.**
- **Member States: Consists of five landlocked countries – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.**

Evolution of India-Central Asia Relations

Ancient & Medieval Periods	**Trade along the Silk Route and the spread of Buddhism created strong cultural and intellectual links. Many medieval Indian rulers, including the Mughals, came from Central Asia, deepening these historical ties.**

Post-1991 (Post-USSR)	Five Central Asian nations became independent; India quickly established diplomatic relations (1991–92). Engagement was limited in the 1990s but increased from the 2000s
Key Milestones	• 2015: Indian PM visited all five Central Asian Republics (CARs) in one trip, signaling strategic intent. • 2017: India became a permanent member of the Shanghai Cooperation Organisation (SCO), strengthening multilateral engagement. • 2020: India-Central Asia Business Council established to promote trade and investment. • 2022: First India-Central Asia Summit and ministerial dialogues held, consolidating diplomatic relations.

Recent Developments

- **External Affairs Minister S. Jaishankar hosted the 4th India–Central Asia Foreign Ministers' Dialogue, convened after a gap of over three and a half years.**
- **The dialogue, an annual platform bringing together the Foreign Ministers of India and the five Central Asian Republics—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—aims to strengthen regional cooperation across political, economic, and strategic domains.**

Key Highlights

1. **Economic Cooperation: Agreed to tap trade potential in pharmaceuticals, IT, textiles, energy, and agriculture.**
2. **Digital and Technological Partnership: Launched the India–Central Asia Digital Partnership Forum to promote collaboration in Digital Public Infrastructure, innovation, and research.**
3. **Critical Minerals Collaboration: Supported joint exploration following the 1st India–Central Asia Rare Earth Forum (2024).**
4. **Global Partnerships: India invited Central Asian nations to join International Solar Alliance (ISA), Global Biofuels Alliance (GBA), International Big Cat Alliance (IBCA) and Coalition for Disaster Resilient Infrastructure (CDRI) etc.**
5. **UN & Global South Cooperation: Central Asian states reaffirmed support for India's UNSC bid and partnership through India's Global South Centre – DAKSHIN.**
6. **Security & Counterterrorism: Condemned the Pahalgam terror attack and urged early adoption of the UN Comprehensive Convention on International Terrorism (CCIT).**
7. **Connectivity & Regional Stability: Emphasized INSTC, Chabahar Port, health cooperation under One Earth, One Health, and peace in Afghanistan.**

Significance of the Central Asian Region for India

1. **Geostrategic Significance: Situated at the heart of Eurasia, Central Asia acts as a land bridge connecting Europe and Asia. Its stability is crucial for India's extended neighbourhood policy, particularly amid China's Belt and Road Initiative (BRI) and Russia's regional influence.**
2. **Energy and Mineral Security: The region is rich in hydrocarbons, uranium, and rare earth elements. Kazakhstan is a leading uranium producer, and Uzbekistan has significant uranium reserves. Turkmenistan's natural gas reserves are vital for India's energy diversification strategy. Initiatives like the TAPI pipeline, though stalled, reflect India's long-term energy engagement.**
3. **Security Cooperation: Terrorism, drug trafficking, and radicalization are shared concerns, especially following the Taliban's return to power in Afghanistan. Joint efforts in counterterrorism, intelligence sharing, and military exercises (DUSTLIK, KAZIND) enhance regional security collaboration.**
4. **Trade and Investment Potential: Bilateral trade between India and Central Asia reached around $1.7 billion in 2023, up from $500 million in 2010, with pharmaceuticals leading exports and Kazakhstan as the main source of imports. Since 2010, India has invested about $1.5 billion in the region, mainly in coal, oil, and gas, though investment from Central Asia to India remains limited.**
5. **Cultural and Soft Power Influence: India has strong cultural and spiritual ties with Central Asia through shared Sufi and Buddhist heritage. It promotes its soft power using cinema, cuisine, yoga, and traditional medicine, while initiatives like Project Mausam strengthen cultural and maritime connections in the region.**

Initiatives to Boost India-Central Asia Relations

1. Connectivity and Trade Corridors:

- **International North-South Transport Corridor (INSTC): Launched with Iran and Russia in 2000, now expanded to include Central Asian countries, facilitating cargo movement and reducing trade costs.**
- **Chabahar Port: Developed with Iran since 2003 to bypass Pakistan, though US sanctions on Iran delayed implementation.**
- **Ashgabat Agreement: India, along with all five Central Asian Republics, is a party to this agreement, promoting multi-modal transport networks to enhance connectivity.**
- **TAPI Pipeline: Intended to transport Turkmen gas to India via Afghanistan and Pakistan; stalled due to regional security issues.**

2. Economic and Technological Collaboration

- **Trade and Investment: Bilateral trade between India and Central Asia reached approximately $1.7 billion in 2023, with potential for growth in sectors like pharmaceuticals, information technology, and agriculture.**
- **Digital Public Infrastructure: India has introduced its digital governance models, such as Aadhaar and UPI, to Central Asian countries, promoting e-governance and financial inclusion.**
- **Capacity Building: Through the Indian Technical and Economic Cooperation (ITEC) program, India offers training and scholarships in various fields, enhancing human resource development in Central Asia.**

3. Defence and Security Cooperation:

- **Strategic Partnership Agreements (SPA): Signed with Kazakhstan, Tajikistan, and Uzbekistan to deepen defence and trade ties.**
- **Military Exercises: Joint exercises, such as KAZIND-2024, and cooperation at Ayni Airbase in Tajikistan, enhance interoperability and strengthen defence relations**
- **NSA-Level Consultations: Institutionalized dialogue on counterterrorism, Afghanistan, and regional stability.**
- **Multilateral Engagement: India leverages platforms like the Shanghai Cooperation Organization (SCO), Conference on Interaction and Confidence-Building Measures in Asia (CICA), and DAKSHIN (Global South knowledge exchange) to maintain continuous engagement with Central Asian countries**

4. Science, Innovation & Critical Minerals

- **Rare Earth Forum: The first India-Central Asia Rare Earth Forum was held in September 2024 in New Delhi, focusing on joint exploration and cooperation in critical minerals.**
- **Space Technology Cooperation: Collaborations in space technology and innovation enhance strategic and economic ties between India and Central Asia.**

5. Cultural Diplomacy

- **Youth Exchange Programs: India hosted the third Central Asian Youth Delegation from 22nd to 28th March 2025, fostering youth collaboration and cultural exchange.**
- **Cultural Centers and Initiatives: Promotion of Indian cultural centers, Sanskrit chairs, and youth exchange programs strengthen people-to-people connections.**

Challenges in India-Central Asia Relations

- **Geography and Connectivity- India has no direct land border with Central Asia and depends on third countries for access. Projects like the INSTC and Chabahar Port are still partially operational, and air connectivity is limited and costly.**
- **Low Trade Volumes- Bilateral trade is around $1.7 billion in 2023, far below China's $100 billion with the region. High logistics costs, tariff barriers, and banking challenges restrict growth.**
- **Chinese Dominance- China's Belt and Road Initiative (BRI) and CPEC investments in Central Asia are faster and larger, overshadowing India's presence.**
- **Security Concerns- The Taliban's control in Afghanistan increases risks from terrorism, drug trafficking, and arms smuggling. India lacks direct hard-security influence in the region.**
- **Political and Bureaucratic Hurdles- Authoritarian regimes, opaque regulations, language barriers, and limited transparency make business and diplomatic engagement difficult.**
- **Limited People-to-People Links- Despite shared cultural and spiritual heritage, exchanges in education, tourism, and culture remain weak, limiting deeper connections.**
- **Financial and Banking Gaps- Lack of direct banking channels hampers trade, remittances, and currency conversion. Joint financial working groups are still in early stages.**

Way Forward

- **Enhance Connectivity- Make INSTC and Chabahar Port fully operational, develop multimodal transport corridors, digitize customs processes, and encourage full participation of Turkmenistan and Uzbekistan to strengthen regional links.**
- **Secure Energy and Minerals- Resume TAPI pipeline discussions once Afghanistan stabilizes, collaborate on rare earth exploration, and ensure long-term uranium supply agreements with Kazakhstan to support India's energy and strategic needs.**
- **Strengthen Financial and Trade Links- Create a joint financial connectivity group, promote rupee settlements and digital payments, and enhance business-to-business engagement through the India–Central Asia Business Council (ICABC).**
- **Promote Digital Cooperation- Share India Stack and digital governance solutions, roll out pilot Digital Public Infrastructure (DPI) programs, and deepen collaboration through the India–Central Asia Digital Partnership Forum.**
- **Develop Human Capital- Expand ITEC scholarships, vocational training, and medical fellowships, while supporting Indian university campuses and joint research initiatives to build skills and promote innovation.**
- **Enhance Security Cooperation- Institutionalize NSA-level consultations, conduct joint training in counterterrorism and cybersecurity, and use platforms like SCO and bilateral mechanisms to address regional security challenges.**
- **Deepen Cultural and Trade Ties- Strengthen cultural centers, Sanskrit chairs, and youth exchange programs, hold regular Culture Ministers' Meetings, and expand trade and investment in sectors like IT, pharmaceuticals, tourism, and energy.**

Read more–Moneycontrol
UPSC Syllabus- GS 2– Bilateral Relations