



7 PM COMPILATION

1st and 2nd Week April, 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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Delimitation Exercise in India- Explained Pointwise

The recent spat between the Centre and Tamil Nadu over delimitation has again opened up one of the most crucial debates of democracy- **the question of representation**. The **last delimitation happened in 1975**, after which Indira Gandhi put a freeze until 2000. A year later, Parliament again froze the number of members of the Lok Sabha and state assemblies till 2026. The delimitation of constituencies for the Lok Sabha and State Legislative Assemblies is to be carried out on the basis of the **first Census after 2026**. Due to this inordinate delay, several issues related to democracy, demography and federalism await the fifth delimitation exercise.



What is Delimitation? What is the constitutional status behind Delimitation in India?

Delimitation refers to the process of **redrawing the boundaries of electoral constituencies** to ensure **fair representation** based on **population changes**.

Delimitation Commission- The Delimitation Commission is a statutory body responsible for determining the boundaries of various constituencies in the country for the purpose of elections. It is governed by the **Delimitation Act, 2002** and is conducted by the Delimitation Commission under **Articles 82** and **170** of the Indian Constitution. The objective is to provide equitable representation to all regions while maintaining the principle of **one person, one vote**.

What is the significance of Delimitation Exercise in India?

1. Political Representation and Electoral Fairness- Ensures democratic legitimacy through equitable distribution of seats in Lok Sabha and State Assemblies. **E.g.** The 2002 Delimitation Commission led to a **better voter-per-MP ratio in urban and rural areas** and prevented malapportionment, ensuring each MP represents roughly the same number of citizens.

2. Upholding Democracy- The Reduces gerrymandering (political manipulation of electoral district boundaries to advantage a party, group, or socioeconomic class within the constituency) , ensuring fair electoral contests. **E.g.** Supreme Court in **Kuldip Nayar v. Union of India (2006)** upheld the importance of delimitation for fair democracy.

3. Socio-Economic Equity- The Delimitation Exercise enhances representation for marginalized communities and Scheduled Tribes. **E.g.** The J&K Delimitation Commission **allocated more seats to Jammu** to address past disparities.

4. Strengthening of Federalism- The Delimitation process ensures equitable representation among states, balancing national unity with regional autonomy. **E.g.** The **42nd Amendment's population freeze prevented southern states with lower population growth from losing representation**, thereby upholding the spirit of cooperative federalism, crucial for India's unity.

5. Administrative Efficiency- The Delimitation exercise ensures a manageable voter-to-representative ratio, aiding governance. **E.g.** **Mumbai and Bengaluru saw improved electoral administration post the 2002 exercise.**

6. Electoral Integrity and Governance- The Delimitation process aligns representation with new demographic realities, as seen in global examples like the **UK Boundary Commission**.

What are the concerns associated with Delimitation Exercise?

1. Population vs. Development- Southern states argue that delimitation based solely on population would penalize them for successful family planning and economic development. **E.g.** **Tamil Nadu's fertility rate is 1.6**, while **Bihar's is 3.0**.

2. Federalism at Risk- States with low population growth may feel politically marginalized, leading to North-South divide concerns. There are concerns that the Delimitation Exercise can create federal Imbalance as states with better governance may feel punished for controlling population. **E.g.** **Sarkaria Commission (1983) warned against excessive centralization of power.**

3. Manipulation- There are concerns that political parties may influence constituency boundaries for electoral gains. **E.g.** **Allegations of bias in the J&K delimitation process (2022).**

4. Delays and Political Resistance- There are instances of increased political resistance as seen in the case of **Justice Kuldip Singh-led Commission (2002)** facing pushback from political parties unwilling to lose seats.

5. Economic Disparities- Southern states argue that **higher revenue generation** (GST collections, per capita income) should be factored into representation.

What Should be the Way Forward?

1. Implement Expert Recommendations- The following commissions have suggested the following reforms for ensuring federal balance and delimitation needs.

Sarkaria Commission (1983): Suggested a balanced approach between federalism and national unity.

Punchhi Commission (2010): Proposed equal weightage to population and governance needs.

2. Ensure Transparency and Independent Oversight- The Election Commission's autonomy should be strengthened to ensure fair delimitation process.

In **Kuldip Nayar v. Union of India (2006)**, SC emphasized the need for fair representation while balancing federal concerns.

In **TN Seshan v. Union of India (1995)**, SC highlighted the importance of an independent delimitation body.

3. Constitutional and Legislative Reforms- Amend **Articles 81** and **82** to ensure balanced regional representation and Introduce proportional representation models used in Germany and Canada.

4. Policy Suggestions

- **Weighted Representation Model:** Combining population size, economic performance, and governance.
- **Independent Delimitation Commission:** Free from political interference.
- **Phased Implementation:** A gradual transition to prevent political instability.

Conclusion

Delimitation is a delicate balance between democracy and federalism. While it ensures equal representation, challenges related to regional disparities, population dynamics, and governance issues must be addressed. The Supreme Court and Election Commission must play a proactive role in ensuring transparency and fairness. A balanced approach grounded in constitutional values, expert recommendations, and global best practices—is essential to uphold India's democratic and federal ethos.

Read more– [The Print](#)

UPSC Syllabus- GS 2– Issues and challenges pertaining to the federal structure

The Waqf (Amendment) Bill 2025- Key changes, Reasons and Concerns- Explained Pointwise

The Waqf (Amendment) Bill 2025 was tabled in the Lok Sabha recently by the Union Minister of Minority Affairs. The Bill, **proposes major changes to the Waqf Act 1995**, by introducing **sweeping changes** in the **governance** and **regulation** of **Waqfs** in India. However, the Bill has been met with strong criticism from the opposition parties, who have held it as unconstitutional, divisive and anti-minority.

What is a Waqf Property? What has been the governance structure for Waqf properties in India?

Waqf Property- A waqf, also known as **habs** or **mortmain** property, is an inalienable charitable endowment established under Islamic law. It is a **personal property** given by **Muslims for a specific purpose**– religious, charitable, or for private purposes. The ownership of the property is implied to be with God. However, the beneficiaries of the property can be different.

Formation of Waqf- The Waqf can be formed through a deed, or Instrument, or even orally. A property can be deemed to be Waqf if it has been used for **religious** or **charitable purposes** for a long period of time. Once a property is declared as Waqf, its **character changes forever**, and cannot be reversed.

Governance Structure for Waqfs in India

Pre-colonial Governance- The Waqfs in India have been legally Governed in India since 1913. The Muslim Waqf Validating Act was enacted in 1913. This act was replaced by the Mussalman Wakf Act, 1923.

Post Independence- The **Central Waqf Act, 1954** was enacted after independence to provide for the regulation of Waqfs. This act was ultimately replaced by the **Waqf Act, 1995**.

What are the Major Provisions and Institutional Structure as Provided by the Waqf Act?

Survey commissioner	The Waqf Act provides for the appointment of a survey commissioner. The commissioner maintains a list of all Waqf properties by making local investigations, summoning witnesses, and requisitioning public documents.
Mutawalli (caretaker)	The Act provides for a Mutawalli (caretaker) who acts as a supervisor of the Waqf properties .
Management of Waqf Properties	Waqf properties are managed in a way that is similar to how properties under Trusts are managed under the Indian Trusts Act, 1882 .

Waqf Boards

About	<p>a. It is a body under the state government. It works as a custodian for Waqf properties across the state.</p> <p>b. In most states, there are separate Waqf Boards for the Shia and Sunni communities. Almost all prominent mosques in the country are Waqf properties and are under the Waqf Board of the state.</p>
Composition	<p>A Waqf Board is headed by a chairperson</p> <p>Members-</p> <ol style="list-style-type: none"> One or two nominees from the state government Muslim legislators and parliamentarians Muslim members of the state Bar Council Recognized scholars of Islamic theology Mutawallis of Waqfs with an annual income of Rs 1 lakh and above.
Powers and Functions	<p>a. Administration of the Waqf properties and taking measures for the recovery of lost properties of any Waqf</p> <p>b. Sanctioning any transfer of immovable property of a Waqf by way of sale, gift, mortgage, exchange, or lease. However, the sanction shall not be given unless at least two thirds of the members of the Waqf Board vote in favor of such a transaction.</p>

Central Waqf Council (CWC)

About	The Central Waqf Council (CWC) was established in 1964, to supervise and advise state-level Waqf Boards across India.
Functions	<p>a. Provide Guidance to the Central, state Governments, and Waqf boards on property management.</p> <p>b. It can require boards Waqf boards to provide information on their performance, including financial records and reports.</p>

Waqf Tribunal

About	The Waqf Act provided for a Waqf tribunal to be constituted by the state governments to resolve disputes related to Waqf properties in India. According to the Section 6 of the Waqf Act 1995, the tribunal's decision is taken as final in case of disputes regarding a property's status as Waqf.
Composition	<p>It comprises three members–</p> <p>a. Chairperson who is a state judicial officer not below the rank of a District, Sessions or Civil Judge, Class I.</p> <p>b. An officer from the state civil services.</p> <p>c. A person with knowledge of Muslim law and jurisprudence.</p>

2013 Amendment to Waqf Act 1995

- a. Authority to Waqf Boards to designate a property as Waqf.
- a. Prescribed imprisonment of up to two years for encroachment on Waqf property
- b. Explicitly prohibit the sale, gift, exchange, mortgage, or transfer of Waqf property.

What key changes are introduced by the Waqf Amendment (Bill) 2025?

Retention of Waqf by User Doctrine and future recognition	<p>“Waqf by user” properties registered on or before the law’s enactment will retain their status unless they are disputed or identified as government land.</p> <p>However, the Future recognition of waqf status requires documentary proof or declaration from a practicing Muslim of at least five years.</p> <p><i>“Waqf by user” is a doctrine rooted in Islamic legal traditions that recognised properties as religious or charitable endowments based on their uninterrupted</i></p>
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	<i>communal use, even in the absence of formal documentation.</i>
Inclusion of non-muslims in waqf institutions	<p>1. Non-Muslims will be appointed to key waqf institutions, including the Central Waqf Council, State Waqf Boards, and waqf tribunals.</p> <p>2. Both the Central Waqf Council and State Waqf Boards must include at least two non-Muslim members.</p> <p><i>*Non-Muslims will remain a minority in both the Council and the Waqf Boards.</i></p> <p>3. The requirement that a waqf board's chief executive officer must be a Muslim has been removed.</p> <p>4. State government representatives on the Waqf Board must be a Joint Secretary-level officer "dealing with waqf matters."</p>
Waqf Tribunal & Legal Changes	<p>Tribunal Composition: Waqf Tribunals will now have three members instead of two:</p> <ul style="list-style-type: none"> a. A District judge b. A Joint secretary-level state officer c. An expert in Muslim law <p>2. Appeals: Tribunal decisions can be challenged in the High Court within 90 days</p>
Empowering Government Officials in Property Disputes	<p>The Bill empowers senior government officers (above District Collector rank) to settle disputes over whether a property is waqf or government land, replacing the Waqf Tribunal's exclusive authority under the 1995 Act.</p> <p>Until the officer submits a report, disputed properties will be treated as government property.</p>
Application of Limitation Act to Waqf Properties	<p>The Section 107 of the Waqf Act, which had excluded waqf properties from the Limitation Act, 1963, has been removed. With this deletion, the standard 12-year limitation for reclaiming encroached property will now apply to waqf land.</p>

Centralised Digital Registration of Waqf Properties	The Bill mandates the creation of a digital portal for registering and updating waqf properties.
Central Government Oversight	The Comptroller and Auditor General (CAG) will conduct audits.
Separate Waqf Boards	Separate Waqf Boards will be allowed for the Bohra and Agakhani sects

What is the rationale for the Key changes introduced as part of amendments to the Waqf Act 1995?

- 1. Address Concerns around Mismanagement and Corruption of Waqf Boards-** There have been concerns regarding the **lack of transparency in the operations of Waqf Boards**, in financial and administrative operations. The proposed amendments are aimed at enhancing the operational transparency of Waqf Boards.
- 2. Reduction of property disputes-** The government contends that the amendments will lead to reduction of extensive disputes over waqf property, by **providing clear definitions** and **requiring mandatory verification** of property claims.
- 3. Streamlining of Legal Disputes and Jurisdiction Issues-** According to the Waqf Act, the **Waqf Tribunal's decision could not be appealed in civil courts**. This led to **perceptions of bias and injustice**. The proposed amendments seek to streamline the jurisdictional issues in line with the principles of natural justice.
- 4. Women Representation-** The proposed amendments which allow for women representation as members of Waqf Board is a **step in the direction of Women empowerment**.

What are the concerns surrounding the Waqf (Amendment) Bill 2025?

- 1. Violation of Religious Rights-** Critics argue that the bill **infringes upon the freedom of religion** as provided by Article 25 and the **autonomy of the Muslim community** to manage their own religious affairs.
- 2. Increased Government Control-** The proposed amendments grant greater powers to the government over Waqf properties, including the involvement of district collectors in property disputes. There are concerns that it can lead to **bureaucratic delays** and **potential judicial-executive overreach**.
- 3. Inclusion of Non-Muslims in Waqf Boards-** Critics argue that the inclusion of non-muslims, **undermines the integrity of these religious bodies**. Non-muslim members may lack comprehensive understanding of the cultural and religious practices of Islam.
- 4. Potential for Increased Disputes-** Removal of the waqf tribunal's authority and the assignment of this role to district collectors, could lead to increased disputes over Waqf properties. Critics argue that this **could complicate the resolution process** and **expose properties to further legal challenges**.
- 5. Lack of Community Consultation-** The bill has been criticized for being drafted without adequate consultation with the Muslim community and stakeholders. Many organizations, including the **All India Muslim Personal Law Board**, have voiced their concern that the bill was created without their input.

What Should be the Way Forward?

1. Protection of Waqf Properties- Establish a clear and transparent process for determining waqf properties, with judicial oversight to prevent arbitrary decisions.

2. Broader Consultation- The government should engage in extensive consultations with various stakeholders, including **Muslim community leaders, legal experts, and civil society organizations.**

3. Public Awareness Campaigns- Implementing public awareness campaigns about the Waqf system and the proposed changes can help dispel misconceptions and educate the community about their rights and responsibilities under the new framework.

Read More– [Times of India](#)

UPSC Syllabus- GS 2– Issues related to Constitution

Digital Child Abuse: The Rising Threat of AI Exploitation- Explained Pointwise

One of the most alarming threats is the use of AI to generate, possess, and disseminate **child sexual abuse material (CSAM)**. The **International AI Safety Report 2025**, released by the British government's Department for Science, Innovation, and Technology in collaboration with the AI Security Institute, highlights the risks posed by AI-generated CSAM.

What is Digital Child Abuse & Child Sexual Abuse Material (CSAM)?

Digital child abuse encompasses various online threats, including cyberbullying, grooming, trafficking, and the proliferation of **Child Sexual Abuse Material (CSAM)**. AI-generated CSAM, where AI tools create explicit images of children who do not exist, poses unprecedented challenges.

CSAM- Defined as **any material depicting sexual exploitation of minors**. **AI-generated CSAM** blurs lines—no real child is harmed, but it fuels demand for real abuse.

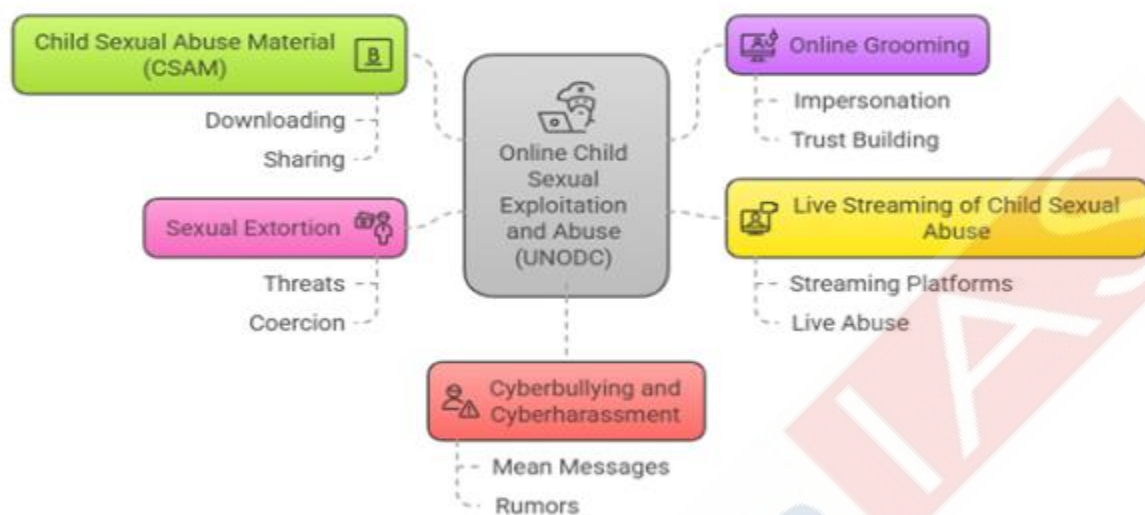
How much sensitive is the situation?

The **National Human Rights Commission (NHRC)** and various global agencies, including **WeProtect Global Alliance (2023 report)** and **Cyber Tipline 2022**, highlight the alarming rise in CSAM cases globally and in India.

- **Cyber Tipline 2022 statistics:** Of the **32 million reports** received on CSAM, **5.6 million** originated from perpetrators based in India.
- **WeProtect Global Alliance 2023:** Reports an **87% increase** in online child exploitation cases since 2019.
- The **International AI Safety Report 2025 (AI Security Institute, U.K.)** flags this as an imminent risk, necessitating legislative reforms. In India, **cybercrimes against children increased substantially (NCRB 2022)**, highlighting the urgency of addressing this menace.

Understanding Digital Child Abuse

Types of Online Child Sexual Exploitation and Abuse

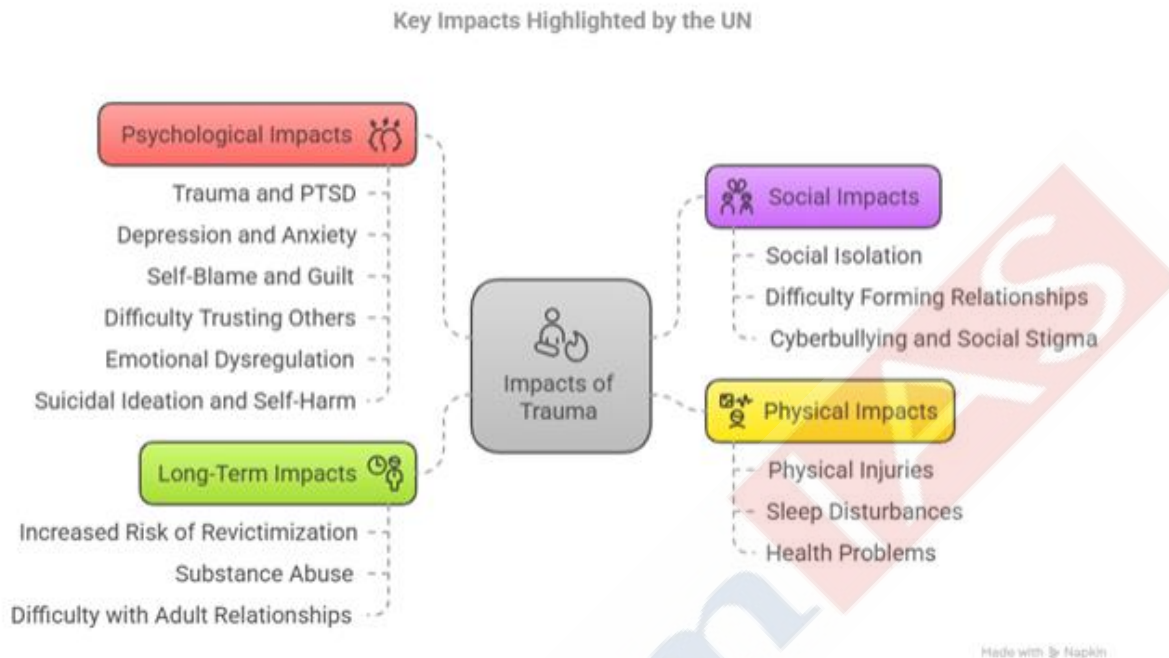


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Platforms Enabling Child Exploitation:

- **Social Media** (Instagram, Snapchat, Discord, TikTok, X)
- **Gaming Platforms** (Metaverse, Grand Theft Auto, Roblox)
- **Messaging Apps with End-to-End Encryption** (WhatsApp, Telegram)
- **Dark Web and Illicit Online Marketplaces**

Impact of Trauma



Source- Copyright infringement not intended

Why Curbing AI-Based Exploitation is Essential?

1. Protecting Children's Rights: "CSAM is a grave violation of a child's **Article 21 (Right to Life & Dignity)** and **POCSO Act's child protection mandate**.

2. Mental and Emotional Well-being: Exposure to such content causes psychological harm. According to **UNICEF 2023 report**, exposure to CSAM leads to **long-term trauma, depression, and behavioral issues** in children. As per **Interpol Data (2024)**, AI-generated CSAM is **used to groom real victims**, escalating abuse cases.

3. Prevention of Secondary Victimization: AI-generated CSAM perpetuates abuse without an actual victim, yet it normalizes harmful behavior.

4. Upholding National Security and Law & Order: **The Internet Watch Foundation (2024)** reported CSAM proliferation on the open web, posing challenges to cybersecurity.

5. Global Commitments: India's adherence to the **UN Convention on the Rights of the Child (CRC)** mandates proactive measures.

6. Global Precedents: **UK's 2025 Law:** First to **criminalize AI tools generating CSAM**, shifting from "act-centric" to "tool-centric" approach. **EU's Digital Services Act (DSA):** Mandates **proactive removal of CSAM** by tech platforms.

What are the government Initiatives to Combat Digital Child Abuse?

1. Legal Frameworks

- **Section 67B, IT Act 2000:** Punishes transmission of CSAM.
- **POCSO Act, 2012 (Sections 13, 14, 15):** Prohibits child pornography.

- **Bharatiya Nyaya Sanhita (BNS) Sections 294, 295:** Criminalizes obscene material sales and distribution to children.
- **Digital India Act 2023 (Proposed):** Aims to regulate AI-generated CSAM and hold tech companies accountable.

2. Institutional Measures

- **India, with over 700 million internet users,** faces escalating cybercrimes against children. **NCRP Portal (Cyber Crime Prevention against Women and Children – CCPWC)** – Reported **1.94 lakh child pornography cases (April 2024)**.
- **NCRB-NCMEC Partnership (USA, 2019):** Shared **69.05 lakh cyber tip-line reports (March 2024)**.
- **NHRC Guidelines 2024:** Recommends **expanding CSAM definitions** and enhancing regulatory mechanisms.

3. Awareness and Capacity Building

- **Interpol's Crimes Against Children Initiative** – India's collaboration to track online exploitation.
- **Cyber Swachhta Kendra** – Government initiative for cyber hygiene.

What are the challenges in Combating AI-Driven CSAM?

1. Legal and Legislative Gaps: Indian laws focus on **'who' has done 'what'**, lacking focus on the **'tools/medium'** (AI-generated CSAM). Enforcement agencies struggle to **prosecute perpetrators using encrypted platforms**.

2. Enforcement Issues: Such as **delayed investigations**, only **30% of NCRB-reported cases** see convictions. **As per Interpol dark web & encryption cause 70% of CSAM is shared via encrypted platforms**.

3. Jurisdictional Challenges: CSAM hosted on foreign servers complicates legal action.

4. Lack of Accountability from Tech Companies: **Congressional hearings (February 2025)** revealed Big Tech's failure to curb online child exploitation. Platforms like **Meta, X, TikTok, and Snapchat** profit from engagement metrics rather than child safety.

5. Technological Advancements and AI Exploitation: **AI-driven deepfakes** and **child-targeted content recommendation algorithms** pose new risks. **Metaverse and VR platforms** enable more immersive and harmful child exploitation methods. **Dark Web and Encrypted Platforms: Telegram, Tor, and end-to-end encrypted apps** enable anonymous dissemination.

6. Inadequate Public Awareness and Digital Literacy: Schools and parents lack **cyber safety education**. Children unknowingly share sensitive data online, **fueling predatory activities**.

What should be the Way Forward?

1. Legal and Policy Reforms

- Amend the **POCSO Act** to replace **'child pornography'** with **"CSAM"** (NHRC Advisory, 2023).
- Define **"sexually explicit content"** in **Section 67B of IT Act** to enable real-time blocking.
- Expand **'intermediary' definition in IT Act** to include **VPNs, Virtual Private Servers (VPS), and Cloud Services**.
- Adopt the **UN Draft Convention on Countering ICT for Criminal Purposes**.

- Integrate provisions of the **U.K. model law criminalizing AI tools for CSAM** into the **Digital India Act**.

2. Holding Tech Companies Accountable: Implement '**safety by design**' models in social media and gaming platforms. Enforce **strict content moderation policies** and AI-based CSAM detection mechanisms. **Adopt global best practices*** from the **UK's upcoming AI-Child Abuse Law**.

3. AI-Powered Monitoring & Law Enforcement Capacity Building: Develop a **National AI-Driven CSAM Detection Unit**. Equip **Interpol-assisted cyber forensic labs** in major cities. Collaborate with **social media giants** to enhance **automated CSAM detection**.

4. Enhancing Public Awareness and Digital Literacy: Launch **school-level digital safety programs** integrated into civic education. Introduce a **National AI Ethics and Child Safety Policy**.

5. Global Collaboration and Cross-Border Data Sharing: Strengthen India's engagement with **Interpol's Crimes Against Children Initiative**. Establish a **South Asian Cybercrime Cooperation Framework** for intelligence sharing.

6. International Collaboration and Policy Reforms: Advocate for the **UN Draft Convention on Cyber Crimes** to criminalize AI-based child exploitation. Adopt **best practices from UNICEF's Child-Centric AI Framework**.

Conclusion

The rise of AI-generated CSAM presents a **new-age digital crime** that requires **immediate legislative action, AI-driven enforcement, and public awareness**. India, with its **growing digital population (900 million users)**, must proactively address this crisis by integrating **technological advancements, global best practices, and legal reforms**. As "**digital child abuse**" evolves, so must our strategies to **safeguard children's rights, uphold national security, and build a safer digital ecosystem** for the future.

Read more– [The Hindu](#)

UPSC Syllabus- GS 3-Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges

Satellite-Based Internet for India- Significance & Challenges- Explained Pointwise

Satellite internet's expansion offers **high-speed connectivity to remote areas**, crucial for **India's digital inclusion**. **SpaceX's Starlink partnerships with Airtel and Jio** signal a major connectivity shift. The **global LEO satellite market** is projected to reach **\$40 billion by 2030**. However, this raises concerns about **monopolization and digital dependence**.

Given India's projected **\$1 trillion digital economy by 2025 (NASSCOM)**, and **NITI Aayog's 2021 Report on Digital Infrastructure** emphasis on an **indigenous satellite ecosystem**, **digital sovereignty** is vital for India's economic and geopolitical security.

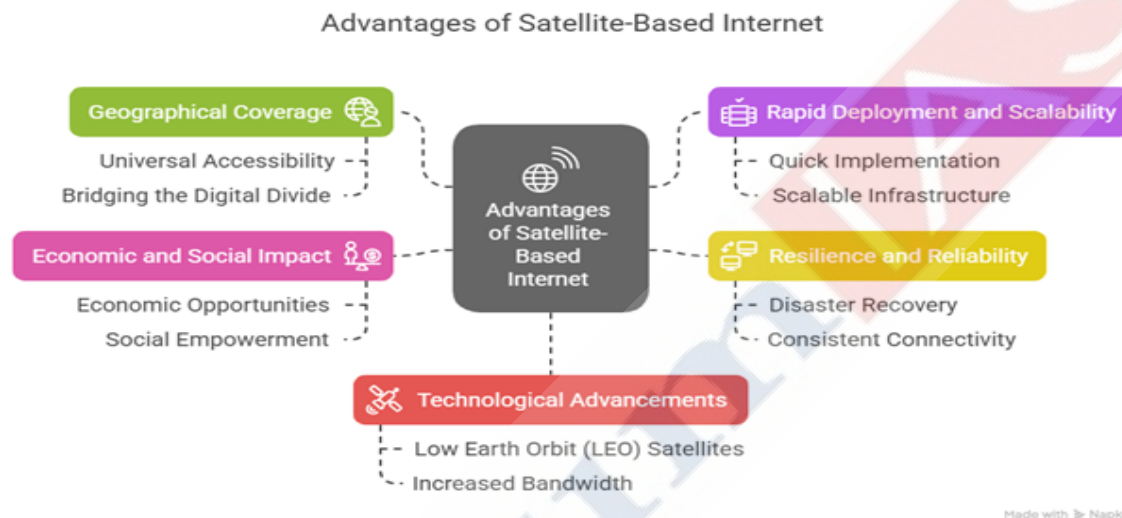
What is Satellite-Based Internet?

Satellite Internet provides broadband services using **low-earth orbit (LEO) (550–1,200 km altitude)**, eliminating the need for physical infrastructure like fiber optic cables. The leading global players include:

- **Starlink (SpaceX): 7,000+ satellites** (largest constellation).

- **OneWeb (India's Bharti Airtel-backed):** 650 satellites.
- **Project Kuiper (Amazon):** Yet to launch commercially.
- **China's GuoWang – 13,000 planned satellites**, state-controlled, aiming for a **Digital Sovereignty** model.

With **India aiming for universal digital connectivity**, satellite Internet offers an opportunity, but it comes with **geopolitical and economic trade-offs**.



Source- Copyright infringement not intended

What is the Significance of Satellite-Based Internet for India?

1. Universal Connectivity & Bridging the Digital Divide: India had 52.4% internet penetration only, with 900 million users (TRAI, 2025) still has regions where **fiber optic cables have never reached**, making satellite Internet a game-changer.

- In remote areas of **Ladakh and Arunachal Pradesh**, satellite-based internet can enable **telemedicine, digital education, and financial inclusion**.
- **Satellite Internet can provide high-speed Internet in rural and tribal areas** where fiber optics are economically unviable.

2. Economic Growth: Enhances **e-commerce, digital banking, education (PM e-Vidya), telemedicine (e-Sanjeevani), digital Economy, MSME integration** and startups. **FICCI (2023) estimates** that satellite broadband can add **\$50 billion to India's GDP**. E.g. E-commerce and digital payments can thrive in rural areas with enhanced connectivity.

3. National Security and Strategic Autonomy: Essential for strategic military communication use in border areas (e.g., Eastern Ladakh, Arunachal Pradesh). Indigenous satellite networks protect against **cyber espionage and data interception**. E.g. **China's BeiDou Navigation System** reduces reliance on US-owned GPS, underscoring the need for India's independent capabilities.

4. Geopolitical Alignment: India's **partnership with Starlink** reflects **geopolitical alignment with the U.S.** rather than China. **GuoWang vs. Starlink**, China's satellite ambitions create a new **"space race" for digital**

influence. Avoids China's "Digital Silk Road" influence, ensuring data security. Potential U.S. leverage over India's digital infrastructure, similar to how SpaceX restricted Starlink's use in Ukraine (2022).

5. Disaster Resilience: Resilient communication and real-time monitoring using satellite networks **during floods, cyclones, and earthquakes**, unlike terrestrial networks. E.g. During the **2018 Kerala floods**, ISRO's satellite communications facilitated **relief operations and rescue missions**.

6. Global Competitiveness and Space Diplomacy: Strengthening India's position in space-tech alliances. E.g. India's collaboration with **France (OneWeb) and Japan (ISRO-JAXA partnerships)** enhances global technological leadership.

7. Enabling 5G and Future Networks: network integration and low-latency services using satellite networks support **5G backhaul infrastructure** in remote areas. **Case Study:** In the US, **Starlink aids T-Mobile's 5G expansion**, showcasing the potential synergy for India.

8. Agricultural and Environmental Monitoring: Real-time satellite data can **enhance agricultural productivity (like precision farming, climate resilience)**. E.g. The **Pradhan Mantri Fasal Bima Yojana (PMFBY)** can benefit from real-time weather monitoring via satellite networks.

What are the government Initiatives for Satellite Internet in India?

- 1. "BharatNet Project"** – Aims to connect **2.5 lakh Gram Panchayats** with broadband, but challenges persist.
- 2. ISRO's GSAT Series Satellites** – Enables digital connectivity, but lacks private-sector scale.
- 3. New Space Policy 2023** – Promotes **private-sector participation** in satellite communications.
- 4. Liberalized FDI Policy** – Allows **100% FDI in satellite technology** to boost private investment.
- 5. Public-Private Partnerships (PPP)** – **Airtel-OneWeb, Jio-Starlink** model ensures faster rollout without huge infrastructure costs.

What are the Challenges in Implementing Satellite Internet?

1. Monopoly & Market Control: **Starlink enjoys first-mover advantage** with 7,000 satellites vs. OneWeb's 650. **Dominates 80% of LEO satellites** (Tendency towards **private oligopoly**).

2. Regulatory and Sovereignty Challenges

- **National security risks:** A **foreign-controlled system can be weaponized**, affecting critical sectors.
- **BSNL's Absence:** Excluding BSNL limits India's **direct control over satellite-based communication**.
- **Data Sovereignty Issues:** Where will Indian user data be stored? If stored in the U.S., this raises **serious privacy and cybersecurity concerns**.

3. Spectrum and Regulatory Challenges: **Spectrum allocation and licensing issues** like **disputes over Ku and Ka-band** frequencies delay approvals. **The TRAI and DoT** face hurdles in allocating **spectrum to private players like Starlink**.

4. Geopolitical and Strategic Risks: Risk of **tech sovereignty** due to foreign satellite providers and lack of **clear global regulations on satellite data ownership**. E.g. The **Personal Data Protection Bill (India, 2023)** lacks specific provisions for satellite data privacy and **U.S. data laws (CLOUD Act)** could compromise **India's data sovereignty**.

5. Cybersecurity Threats: Risk of **cyber espionage, hacking, satellite jamming, and data breaches**. Case Study: **Russia's cyberattack on Viasat (Ukraine, 2022)** showed vulnerabilities in satellite-based networks.

6. High Cost of Deployment: Satellite broadband costs **5-10 times more** than fiber-optic networks. E.g. **Starlink's** pricing at **~₹1,58,000 per year** is unaffordable for many Indians.

7. Space Debris and Sustainability: **Orbital pollution** due to overcrowding in **LEO** increases collision risks. E.g. **The European Space Agency** warns about **satellite congestion and potential Kessler Syndrome**.

What Should be the Way Forward?

1. Strengthening Domestic Satellite Infrastructure: **ISRO and private sector collaboration** to launch a **Made-in-India LEO satellite network**. India should integrate BSNL into satellite partnerships for **greater state control**.

2. Legal and Regulatory Safeguards

- **Data Localization Laws:** Enforce **local data storage mandates** to prevent foreign control over Indian user data. E.g. like **EU's GDPR** for satellite operators.
- **National Security Vetting:** Limit **foreign ownership** in critical satellite communication infrastructure.

3. Developing Affordable Pricing Models: Tiered pricing for rural India as, **"innovation at the bottom of the pyramid"** – a strategy to **make satellite Internet affordable**. Conditional **government subsidies** on private players providing services to **remote villages at affordable costs**.

4. International Cooperation for Global Space Governance: Establishing **global satellite Internet governance frameworks**. Leading discussions at the **UN and G20** to address **space traffic management and orbital debris**.

5. Diversification: Avoid over-reliance on one provider – explore partnerships with **OneWeb, Amazon Kuiper, and Japan's SoftBank Satcom**. Collaborate with **QUAD, ASEAN, and BRICS** nations for satellite security policies. E.g. **India-France joint space programs on cybersecurity**.

6. Global Governance: **ITU & UNOOSA** must regulate **orbital traffic/debris**. India should lead in **Global Satellite Internet Governance** initiatives.

Conclusion

Satellite-based Internet is a **double-edged sword**. It offers India a chance to **bridge the digital divide, boost economic growth, and enhance security**. But it also poses risks of **monopolization, strategic dependence, and digital sovereignty erosion**. India's current model of **"managed dependency"** on **Starlink via Airtel and Jio** is a **pragmatic short-term approach**. However, to achieve true **"Digital Sovereignty"**, India must **develop indigenous satellite broadband capabilities, enforce regulatory safeguards, and ensure affordability for all**.

Read more– [The Hindu](#)

UPSC Syllabus- GS 3– Awareness in the fields of IT, Space, Computers

Role of the Speaker and Anti-Defection Law in India- Explained Pointwise

The **Tenth Schedule** of the Indian Constitution, also known as the **Anti-Defection Law**, was inserted by the **52nd Constitutional Amendment Act, 1985**, to curb the growing menace of political defections which destabilized governments in the post-1967 era. However, in recent years, the issue has once again taken center stage due to partisan actions by **Legislative Speakers**, resulting in erosion of **democratic values and legal safeguards**.

What is the Tenth Schedule?

It addresses disqualification of **MPs and MLAs for defection**, a response to the political instability of the late 1960s when “**party-hopping MLAs**” toppled multiple state governments.

Key Provisions: Disqualification occurs if a member voluntarily relinquishes party membership, votes against party directives, or joins another party (for independents or nominated members after six months).

Evolution of Defection Law

Period	Development/Event	Speaker's Role	Examples
1985	52nd Constitutional Amendment Act inserts the Tenth Schedule into the Constitution	Speaker given sole adjudicatory powers on disqualification of members	Speaker acts as quasi-judicial authority under Tenth Schedule
1992	Kihoto Hollohan v. Zachillhu (SC) upholds the constitutionality of Tenth Schedule , but allows judicial review of Speaker's decision	Speaker's decision subject to judicial review , though he remains the initial authority	SC: “Speaker acts as tribunal; not above the Constitution”
1998–2003	Rise in coalition politics; loopholes like split (1/3rd rule) used to avoid disqualification	Speaker's bias becomes evident; mass defections legalized under ‘split’ provision	Karnataka, Uttar Pradesh, Goa saw misuse of split clause
2003	91st Constitutional Amendment removes the split provision (1/3rd) and introduces merger provision (2/3rd)	Speaker continues to decide on disqualification, including verifying mergers	Aimed at tightening law but allowed mass defections under ‘merger’ loophole

2020	Keisham Meghachandra v. Speaker, Manipur: SC suggests Speaker should not have exclusive powers	SC recommends independent tribunal headed by a retired judge	Speaker delayed decision for over 3 years; defector became Minister
2023	SC in Maharashtra case (Shinde vs. Thackeray): directs Speaker to decide within reasonable time	Court sets specific deadlines for Speaker's decision	October 2023: SC orders Maharashtra Speaker to decide within 2 weeks
Ongoing Debate	Law Commission (1999), Dinesh Goswami Committee (1990), and others suggest reforms	Push to remove Speaker's adjudicatory power; proposal for independent authority	Recommendations remain unimplemented; discussed in Presiding Officers' Conferences

What is the Significance and Importance of an Independent and Neutral Speaker?

1. Guardianship of Legislative Integrity: The Speaker is expected to promote **institutional neutrality, rule of law** and to act as a **quasi-judicial authority** under the Tenth Schedule, but when partisanship takes precedence, it **jeopardizes constitutional morality**. E.g. The 2020 Arunachal Pradesh defection case Supreme Court reiterated, **"neutrality of the Speaker is critical to democratic stability"**.

2. Timely Adjudication and Trust in Institutions: The 2023 Constitution Bench in **Keisham Meghachandra Singh v. Speaker Manipur** reiterated that delays in disqualification proceedings violate the **spirit of democracy**.

3. Check on Political Horse-trading: The absence of an impartial Speaker allows post-election defections to the ruling party, as seen in **Karnataka (2019)** and **Goa (2017)**.

4. Constitutional Expectation: The Speaker is expected to embody "propriety and impartiality," as noted by a five-judge Constitution Bench in May 2023, ensuring the Tenth Schedule's objective—to stabilize governments—is upheld.

5. Judicial Perspective: Justice Gavai's observation that a **speaker's "indecision" cannot defeat the anti-defection law's purpose** emphasizes the need for neutrality. The Supreme Court's invocation of Article 142 powers in cases of non-compliance further reinforces this.

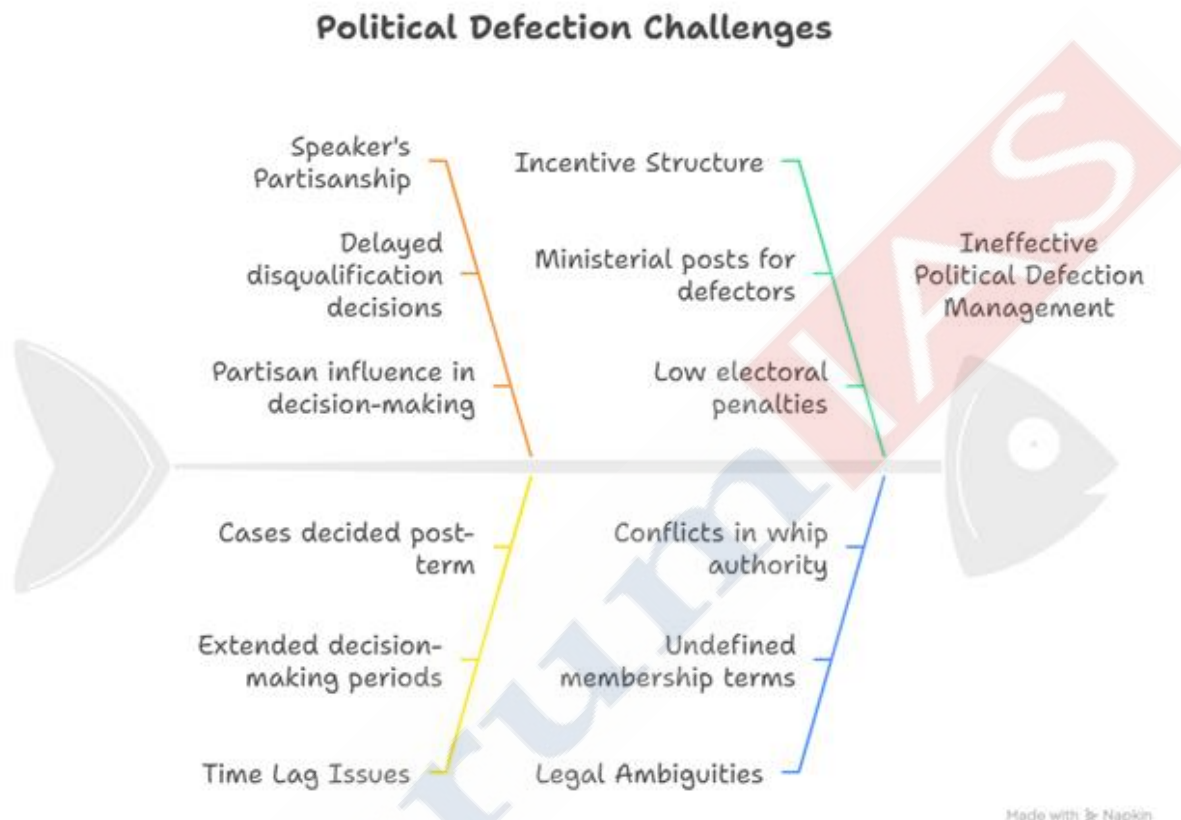
What are the government Initiatives and institutional Developments?

1. All India Presiding Officers Conference (2021-2023): Discussed reforms in Speaker's powers under the anti-defection law. Multiple officers expressed that **"Speakers' roles must be reviewed"**.

2. 91st Constitutional Amendment Act, 2003: Made merger provisions more stringent by raising the requirement to **two-thirds of members** for party mergers.

3. Supreme Court's Role as Constitutional Guardian: Article 142 has been invoked to “ensure justice is not defeated by technicality or partisan silence” — SC has directed Speakers in **Maharashtra, Karnataka, and Telangana** to act within a “reasonable time frame.”

What are the challenges to the Autonomy and Integrity of Speaker's Role?



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1. Structural Partisanship & Political Capture: Speakers are elected by ruling parties and often act in a politically motivated manner. **E.g. Maharashtra defection case (2022)** where delay benefited defectors who joined the ruling coalition.

2. Procedural Vacuum & Legal Ambiguity: The Tenth Schedule is silent on timelines for deciding petitions. Exceptions include a “merger” where at least two-thirds of a party's members agree, as amended by the 91st Constitutional Amendment Act, 2003 (up from one-third in 1985).

3. Limited Jurisdiction & Constitutional Boundaries: Courts cannot dictate the decision of the Speaker but can only ensure timely adjudication, limiting judicial recourse.

4. Legal Ambiguities: No definition of voluntary giving up membership and Whip's authority vs. conscience vote conflicts. **E.g. Average 2.3 years for disqualification decisions (ADR 2022 study), 68% cases decided after MLA's term ended (PRS 2023).**

5. Misuse of Delay to Influence Governance: Defectors are inducted as Ministers or enjoy influence before eventual disqualification. **E.g. Defecting MLAs get ministerial posts in 71% cases (CMS 2021 study), only 12% of defectors lost subsequent elections (Trivedi Centre 2023).**

6. Democratic Fatigue & Electoral Cynicism: Frequent defections with impunity undermine public faith in electoral processes.

7. Institutional Opacity & Role Ambiguity: No penalties or disciplinary procedures exist for Speakers who delay decisions.

8. Political-Electoral Engineering: Major parties like the have engineered mass defections post-elections in Goa, Manipur, and Madhya Pradesh.

What should be the Way Forward?

1. Independent Tribunal Mechanism: Establish a **neutral tribunal headed by retired judges** to decide disqualification pleas, as recommended by **Law Commission** and **NCRWC**.

2. Statutory Timeline for Decision: Amend the law to provide a **maximum of 60 days** to decide defection cases.

3. Code of Conduct for Presiding Officers: Create binding **norms and codes** for neutrality and accountability.

4. Constitutional Remedy & Democratic Safeguard: Allow courts to intervene if decisions are unduly delayed, using **Article 142** for enforcing timelines.

5. Public Accountability and Electoral Penalty: Launch civic education campaigns and promote electoral punishment for defectors.

6. Strengthening Intra-Party Democracy: Empower parties to uphold ideological integrity and reduce dependence on post-election deals.

7. Global Best Practices

- In **UK and Canada**, Speakers are strictly non-partisan and elected by a secret ballot across party lines.
- In **South Africa**, a Judicial Commission handles defection matters, not the Speaker.

8. Committees Recommendations

- The **Dinesh Goswami Committee (1990)** and **Law Commission's 170th Report (1999)** recommended divesting the Speaker of adjudicatory powers under the Tenth Schedule.
- **NITI Aayog and National Commission to Review the Working of the Constitution (NCRWC)** have advocated for setting up an independent tribunal headed by a retired judge.

Read more- [The Hindu](#)

UPSC Syllabus- GS 2- Indian Constitution—historical underpinnings, evolution, features, amendments, significant provisions and basic structure

Preventive Healthcare in India- Explained Pointwise

India's economic aspirations of becoming a **\$5 trillion economy** are threatened by a "**silent epidemic**" of **Non-Communicable Diseases (NCDs)**, which account for **66% of all deaths** (WHO 2023). With **5-6 million annual NCD deaths** and **22% of India**. These chronic illnesses, often preventable, are fast becoming the **leading cause of mortality and morbidity**, placing massive strain on India's healthcare system and economy.

What is the “Silent Epidemic”? Understanding NCDs

Non-Communicable Diseases (NCDs) refer to chronic conditions that are **not caused by infectious agents** and typically progress slowly. Major NCDs include:

1. Major NCDs:

- **Cardiovascular diseases (CVDs):** Leading cause of death (28% share).
- **Diabetes:** 101 million cases (highest globally, **ICMR 2023**).
- **Cancer:** 1.4 million new cases yearly (**National Cancer Registry**).
- **Chronic Respiratory Diseases:** Linked to **air pollution** (COPD affects 55 million).

2. Early Onset: Heart attacks in 30–40-year-olds rising due to sedentary lifestyles, **E.g. Delhi NCR reports 25% increase in young stroke patients (AIIMS 2024).**

Impact:

1. Economic Cost: NCDs drain **5-10% of GDP** (~\$3.5–4 trillion loss projected by 2030, **WEF-Harvard Study**).

2. Risk Factors: 80% of heart disease, stroke, and diabetes cases are preventable (**WHO**).

3. Lifestyle Crisis: **23% adults overweight**, 30% hypertensive (**NFHS-5**).

4. Death Parameters: NCDs account for nearly **66% of all deaths in India**. (WHO India, 2023). An estimated **5-6 million Indians die annually** due to NCDs. **22% of Indians aged 30+ are at risk of dying from an NCD before age 70.**

5. Diabetes/ Cancer Capital of the World: Increasing incidence in the **30–40-year age group** — especially cardiac diseases and diabetic complications.

6. Productivity Loss: WHO estimates that India may lose **\$3.5-\$4 trillion** between 2012 and 2030 due to NCD-related productivity losses.

What is Preventive Healthcare?

Preventive healthcare focuses on averting the onset of diseases through:

1. Primary Prevention: Vaccinations, anti-tobacco campaigns (e.g., **COTPA Act**). E.g. Kerala’s “**Aardram Mission**” reduced CVD risks via screening.

2. Secondary Prevention: Early detection, Mammograms, HbA1c tests for diabetes.

3. Tertiary Prevention: Rehabilitation, post-stroke physiotherapy, Use of **wearables and mobile apps** to monitor vitals like heart rate and activity levels.

It is guided by the principle of “**catching the disease before it catches you**”.

What is the significance of Preventive Healthcare in India?

1. Demographic Dividend & Workforce Productivity: NCDs are affecting the **working-age population**, undermining India’s economic potential. **E.g. 65% population under 35**—NCDs threaten labor productivity.

2. Economic Imperative: NCDs cost India an estimated **5%-10% of GDP** annually. A **World Economic Forum-Harvard study** projected \$3.5-\$4 trillion losses by 2030.

3. Health System Burden Reduction: Preventive models reduce strain on secondary and tertiary care systems. E.g. **Early diabetic care** avoids need for dialysis or amputations.

4. Digital & AI Integration: India has **750+ million smartphone users** — offering a wide digital reach. AI tools can create personalized **health risk scores**, enabling early alerts. E.g. Machine learning to detect early signs of lung nodules or fatty liver.

5. SDG Alignment: SDG 3.4, reduce NCD deaths by **30% by 2030**.

What are the Government Initiatives for Preventive Healthcare?

1. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS): It is part of the **National Health Mission (NHM)** which focuses upon community-based screening, diagnosis, and health promotion. E.g. **677 NCD clinics and 187 District Cardiac Care Units set up (MoHFW, 2023)**.

2. Ayushman Bharat – Health and Wellness Centres (HWCs): Over **1.6 lakh HWCs** operational as of March 2024. It provides **preventive, promotive, and curative services** at the grassroots. It provides services like screening for hypertension, diabetes, oral/breast/cervical cancers.

3. Fit India Movement & Eat Right India: Behavioral change campaigns promoting active lifestyle and healthy eating. E.g. **#22KStepsChallenge**.

4. School Health Programme: Joint initiative by the **Ministry of Education & Health** under Ayushman Bharat. Focuses on health education and screening of school children.

5. National Tele Mental Health Programme (Tele-MANAS): Addresses **mental health**, a rising component of the NCD burden.

6. National Clean Air Programme (NCAP): To address **air pollution**, a contributor to COPD and cardiac issues.

7. Pradhan Mantri Jan Arogya Yojana (PMJAY): Covers NCD treatments for **500 million**.

8. Disease Surveillance: India's **Integrated Health Information Platform (IHIP)** and the **Integrated Disease Surveillance Programme (IDSP)** enable real-time disease tracking, vital for early detection and response to outbreaks.

What are the challenges to Preventive Healthcare in India?

1. Low Public Awareness: Health-seeking behavior is often **reactive**, not preventive. Screening is often neglected until symptoms arise. E.g. **Only 12% Indians access preventive screenings (NITI Aayog 2023)**.

2. Fragmented Healthcare System: Preventive services are **underfunded** and lack integration with curative services. E.g. **Out-of-pocket expenditure on health: 47% (NHA Estimates, 2023)**.

3. Inadequate Screening Infrastructure: Shortage of trained personnel and equipment at the primary level. E.g. **Low availability of mammography and HPV testing facilities**.

4. Urban-Rural Divide: Rural India lacks **access to digital health tools and diagnostics**.

5. Air Pollution as a Urbanization Hazards: India has **7 of the world's 10 most polluted cities (IQAir, 2024)**. Contributes to lung disease, strokes, and even cardiac problems. E.g. **Air pollution causes 1.6 million annual deaths (Lancet)**.

6. Behavioral Barriers: “Chalta Hai” attitude toward health checks. E.g. NFHS-5: Only 38% women get blood sugar tests.

What should be the Way Forward?

1. Strengthen Primary Health Infrastructure: Expand HWCs with adequate staff, diagnostics, and telemedicine. Invest in rural digital infrastructure to support tech-driven preventive care. E.g. Economic Survey 2022-23, emphasizes the shift towards preventive and promotive healthcare as a long-term cost-saving strategy.

2. Leverage AI and Big Data: Use AI algorithms for predictive modelling and risk mapping. Partner with private tech companies for scalable health solutions. Use Aayushman Bharat Digital Mission (ABDM) for predictive analytics. E.g. Telangana’s “eHealth” app tracks NCD risks.

3. Regulatory Action: Enforce food labeling norms, sugar/fat/salt limits, and junk food taxes. Implement urban planning reforms to create more walkable green spaces.

4. Corporate, Schools and Community Engagement: Mandate employee wellness programs. Encourage community health volunteers and local schools for awareness campaigns. E.g. Google India’s Fit Weeks. “Health Olympics” in schools (modeled on Australia’s “Active Kids”).

5. Integrate Health into All Policies (HiAP): Kasturirangan committee: suggested health literacy in school curriculum. Embed health concerns in education, transport, housing, environment, etc. Health Impact Assessments (HIA) before approving infrastructure projects. E.g. NITI Aayog Health Index, also recommends states to prioritize health education and preventive spending.

6. Fiscal Measures: Increase health spending to 2.5% of GDP (currently 1.28%, Economic Survey 2024). Additionally Sin Tax on ultra-processed foods (like Mexico’s soda tax). Insurance discounts for healthy habits (e.g., Singapore’s “Healthier SG”).

7. Behavioral Nudges: Use “nudge theory” for behavior change — reminders, gamification, rewards for healthy choices.

8. Global Best Practice/ Models:

- **Japan’s “Specific Health Checkups”:** Mandatory annual screenings cut metabolic syndrome by 25%.
- **Finland’s North Karelia Project:** Reduced CVD deaths by 80% via diet/exercise campaigns.
- **Singapore’s “War on Diabetes”:** Nationwide screening + sugar tax.

Conclusion

The battle against NCDs is not just a medical one — it is a **societal and economic challenge**. A shift to a **preventive mindset**, where individuals, communities, corporates, and the government all prioritize “health-first”, is essential. As the article rightly states — “**an investment in preventive healthcare is our best insurance policy for sustainable development.**” The power to transform lies in our daily choices. If scaled across 1.4 billion Indians, these choices will not only create a healthier nation but also **propel India towards its economic and developmental aspirations.**

Read more—[The Hindu](#)

UPSC Syllabus- GS 2– Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources

Future Ready Workforce- Significance & Challenges- Explained Pointwise

India's ambition to become a **\$10 trillion economy by 2047** hinges on its ability to build a **future-ready workforce**. The **World Economic Forum's (WEF) Future of Jobs Report 2025** and the **QS World Future Skills Index** highlight critical gaps and opportunities in India's workforce preparedness, presenting a strategic roadmap for transforming education, skilling, and employment. With **92 million jobs at risk of displacement** and **170 million new roles emerging**, India must urgently reform its **skilling, education, and policy frameworks**.

What is a Future Ready Workforce?

A **future-ready workforce** is one that is **resilient, technologically adept, adaptable to disruptions**, and equipped with both **cognitive and non-cognitive skills** to navigate the **21st-century global economy**. As India marches toward its demographic peak, with over **65% of the population below 35 years**, preparing the workforce for the demands of **India@2047** is not merely aspirational—it is imperative.

What are the key Findings from the World Economic Forum's Future of Jobs Report 2025?

1. Technological Disruption & Green Transition: Technological advancements and digital access are expected to be the **top driver of labour market transformation**, with **60% of employers identifying them as key influences**. Simultaneously, **50% of employers expect economic factors** such as automation and job displacement to reshape industries. The **green transition**, driven by climate mitigation and geopolitical pressures, is projected to both displace traditional jobs and create **170 million new roles**, especially in renewable energy and sustainability.

2. Job Creation vs Job Displacement: An estimated **92 million roles could become obsolete**, underscoring the need for **reskilling and upskilling**. Emerging roles in **AI, data science, green technologies, and digital finance** will see exponential growth.

3. Skills Gap and Training Needs: **59 out of every 100 workers** will require training in **analytical thinking, resilience, and technological literacy**. Soft skills like **emotional intelligence, adaptability, and leadership** are now seen as essential in dynamic work environments.

Key insights from the QS World Future Skills Index Regarding India: India ranks 2nd globally in preparedness for AI and green skills but:

- Scores only **59.1** in 'Skills Fit', indicating a mismatch between **available skills** and **employer needs**.
- Ranks just **26th in Academic Readiness**, highlighting poor alignment between curricula and innovation demands.
- Achieves **only 15.6/100 in innovation & sustainability performance**, worsened by **limited R&D investment**.
- WEF says, "**India's potential is immense, but performance gaps in skill delivery and academic innovation limit its global competitiveness.**"

What is the significance of a Future-Ready Workforce?

1. Demographic Dividend: With over **1 million youth entering the workforce monthly**, **65% of the population under 35 years** must be skilled for **Industry 4.0**.

2. Economic Competitiveness: A skilled workforce contributes directly to **GDP growth**, global value chain participation, and **Atmanirbhar Bharat**. The **Economic Survey 2022-23** emphasized the need to enhance employability through demand-aligned training.

3. Harnessing Global Opportunities: India's workforce can cater to the **global skill shortage**, especially in areas like **nursing, construction, and tech services**.

4. Global Competitiveness: India aims to be the **global hub for AI and green tech** (PM's "AI for All" vision). E.g. Israel's "**Innovation Nation**" model (5% GDP spent on R&D).

5. Social Stability & Equity: Equipping youth with future skills will reduce **regional, rural-urban, and gender disparities** in employment. E.g. **SWAYAM MOOCs**.

What are the government Initiatives towards a Future-Ready Workforce?

1. Skill Development Missions:

- **Skill India Mission**, 500 million skilled workers by 2030.
- **PM Kaushal Vikas Yojana (PMKVY)**, offers short-term training with industry linkages.
- **SANKALP & STRIVE Projects** (World Bank-aided), focus on institutional capacity and skilling ecosystem reform.
- **Academic Bank of Credits** for flexible learning.

2. National Education Policy 2020: Introduces "**multidisciplinary education**", experiential learning, coding from Class 6, and **flexible exit options** in higher education. Emphasizes **vocational training** integrated into mainstream education.

3. Digital Infrastructure:

- **DIKSHA and SWAYAM platforms**, expand e-learning access.
- **PM e-Vidya and BharatNet** aim to bridge the **rural-urban divide** in digital access.

4. Entrepreneurial Ecosystem: **Startup India, Atal Innovation Mission (AIM)**, and **National Innovation Foundation** support skill-based entrepreneurship.

What are the Challenges in Building a Future-Ready Workforce?

1. Skills Mismatch:

- **India Skills Report 2023** only 46.8% of graduates are employable.
- **QS Index** there is low 'skills fit' despite high 'skills identification' among Indian youth.
- **NSDC-2023** only 5% of the workforce is formally skilled.
- **Aspiring Minds Report**- 83% engineer's unemployable.
- **Digital Divide:** Only 31% rural schools have internet (UDISE 2022).

2. Faculty & Curriculum Gaps: Outdated curricula, **theoretical focus**, lack of **experiential learning** and insufficient faculty training. **India ranks 101 out of 132** in the **Global Innovation Index 2023** in "Knowledge Workers".

3. Inequitable Access: Digital divide persists as **only 29% of rural India has internet access (NFHS-5)**. Gender disparity in STEM fields and skill programs remains wide.

4. Low R&D Investment: India's R&D spending is **only 0.7% of GDP (vs. 2.8% in US)**, compared to 3% in developed countries. **E.g.** India files **60 patents per million** vs. **China's 1,200 (WIPO 2023)**.

5. Weak Academia-Industry Linkages: Lack of internship opportunities, applied learning, and real-time market feedback in academia. **E.g.** As per AICTE, **less than 10% of universities** collaborate with industries.

What should be the Way Forward?

1. Curriculum Overhaul & Experiential Learning: Embed **"problem-solving, critical thinking, entrepreneurial thinking"** into the curriculum. Promote **design thinking workshops, hackathons, interdisciplinary projects**. Establish **Centres of Excellence in AI, climate science, digital finance**, and green innovation. **E.g.** Finland's **"Phenomenon-Based Learning"**.

2. Green Curriculum & Sustainability Focus: Courses in **renewable energy, ESG standards, circular economy**. Encourage **student-led sustainability** initiatives and **community-based projects**.

3. Industry-Academia Collaboration: Joint curriculum design, internships, mentorship, real-time feedback. **E.g.** TCS iON, Infosys Springboard, AICTE's NEAT platform and **Apprenticeship Bill 2023** to scale industry training.

4. Faculty Capacity Building: Global faculty exchange programmes, AI training for teachers, certified workshops. **E.g.** GIAN.

5. Inclusive Digital Infrastructure: Invest in **public Wi-Fi**, rural digital labs, regional-language content. **Encourage Regional Skill Development** through **District Skill Committees** and **One District One Skill**. **E.g.** PM-WANI.

6. Policy & Funding Push: Double R&D investment to at least **1.5% of GDP** by 2030. Increase allocations to the **Skill Development Ministry** and **Higher Education Innovation Funds**.

7. Monitoring & Evaluation Framework: Use of AI and Big Data to assess skilling programme outcomes. Create a **"National Skill Preparedness Dashboard"**.

8. Global Best Practices:

- **Finland, focus on lifelong learning models.**
- **Germany's Dual Education Systems, 50% youth in vocational training.**
- **Singapore's SkillsFuture, \$4,000 credit per citizen for lifelong learning.**

Conclusion

The **"urgency of aligning educational strategies with evolving global demands"** cannot be overstated. India stands at a historic juncture—where its **demographic dividend, digital push, and developmental aspirations** can be harmonized through strategic skilling and education reforms. A **future-ready workforce** is not only key to economic competitiveness but also to **realizing the vision of Viksit Bharat by 2047**. The roadmap lies in **bold, collaborative, and innovative reforms across institutions, industries, and policies**—powered by **data, driven by inclusion, and steered by foresight**.

Read more– [The Hindu](#)

UPSC Syllabus- GS 3- Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment

PM Mudra Yojana- Significance & Challenges- Explained Pointwise

On 8 April 2025, India marks 10 years of the Pradhan Mantri MUDRA Yojana (PMMY). PM Mudra Yojana, the Flagship Programme of the Prime Minister aimed at Funding the Unfunded micro enterprises and small businesses. By removing the burden of collateral and simplifying access, MUDRA laid the foundation for a new era of grassroots entrepreneurship. Over the past decade, the scheme has disbursed over 52 crore loans worth ₹32.61 lakh crore.

What are the salient Features of the Scheme?

MUDRA was set up for **development and refinancing activities** relating to **micro units**. PMMY ensures **collateral-free institutional credit up to Rs 20 lakh**, which is provided by **Member Lending Institutions (MLIs)** i.e. **Scheduled Commercial Banks (SCBs), Regional Rural Banks (RRBs), Non-Banking Financial Companies (NBFCs)** and **Micro Finance Institutions (MFIs)**. Under the scheme, three categories of interventions have been formulated which include:



Source- Copyright infringement not intended

Category	Loan Amount	Target Segment	Share of Total Loans	Key Sectors Funded
Shishu	Up to ₹50,000	First-time entrepreneurs, nano-units	~88% of total loans	Street vendors, tailoring, petty shops, dairy, home-based work
Kishore	₹50,001–₹5 lakh	Small-scale expansion, working capital	~9–10% of total loans	Food stalls, repair shops, beauty parlors, transport
Tarun	₹5–₹10 lakh	Growth-stage small businesses	~2% of total loans	Manufacturing, logistics, services, retail stores

Tarun Plus	Loans above ₹10 lakh and up to ₹20 lakh	Designed specifically for Tarun category, who have previously availed and successfully repaid loans
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What are the achievements and impact of PM Mudra Yojana?

1. Massive Outreach & Entrepreneurial Shift: Since 2015, over **52 crore loans worth ₹32.61 lakh crore** have been sanctioned under PMMY, shifting the mindset from job-seeking to **job-creating**, especially in small towns and rural India.

2. MSME Credit Surge: MSME lending rose from **₹8.51 lakh crore (FY14)** to **₹27.25 lakh crore (FY24)**; projected to cross **₹30 lakh crore (FY25)**. Their credit share in total bank lending grew from **15.8% to nearly 20%**, boosting grassroots enterprise and self-reliant growth.

3. Women Empowerment through Finance: Women make up **68% of all PMMY beneficiaries**. Average disbursement per woman grew at **13% CAGR**, and their incremental deposits at **14% CAGR**, indicating rising financial empowerment and participation in the workforce.

4. Inclusive Growth for Marginalized Groups: **50% of accounts** are held by SC/ST/OBCs and **11%** by minorities. PMMY has helped integrate these communities into the formal financial system and entrepreneurial economy.

5. Shift Towards Growth-Stage Financing: The share of **Kishor loans** (₹50,000–₹5 lakh) grew from **5.9% (FY16)** to **44.7% (FY25)**, indicating enterprise upscaling. **Tarun loans** (₹5–₹10 lakh) also show growing traction.

6. Rising Loan Sizes & Confidence: Average loan size increased from **₹38,000 (FY16)** to **₹1.02 lakh (FY25)**. Loan disbursement grew **36% in FY23**, reflecting **revived entrepreneurial confidence** and improved scale of operations.

7. Top Performing States and UTs: Leading states in total loan disbursements:

- **Tamil Nadu: ₹3.23 lakh crore**
 - **Uttar Pradesh: ₹3.14 lakh crore**
 - **Karnataka: ₹3.02 lakh crore**
- Jammu & Kashmir leads among UTs with **₹45,816 crore** disbursed across 21 lakh+ accounts.

8. Funding the Unfunded Micro Sector: Micro enterprises—providing jobs to ~10 crore people—form the backbone of India's non-corporate small business sector. PMMY has enabled credit access to this previously excluded informal economy, aiding livelihoods and economic mobility.

What is the significance of MUDRA Yojana?

1. Financial Inclusion for the Unbanked: Mudra Yojana bridges the **credit gap for small entrepreneurs** who lack collateral or formal credit history. **E.g. 2021 RBI report** highlighted that **70% of Mudra beneficiaries were first-time borrowers**, indicating enhanced financial inclusion.

2. Democratization and Grassroots Development: Democratized credit in Tier-2, Tier-3 cities and rural areas and 1st-time entrepreneurs from marginalized communities.

3. Boosting Entrepreneurship & Employment: It has spurred self-employment, particularly in sectors like **retail, food processing, and handicrafts**. According to **2019 CMIE report**, Mudra loans contributed to the creation of **1.12 crore net new employment opportunities** between 2015 and 2018. **Case Study: Lalita Devi (Varanasi)** – A homemaker who started a small tailoring unit with a ₹50,000 Shishu loan, now employs five women.

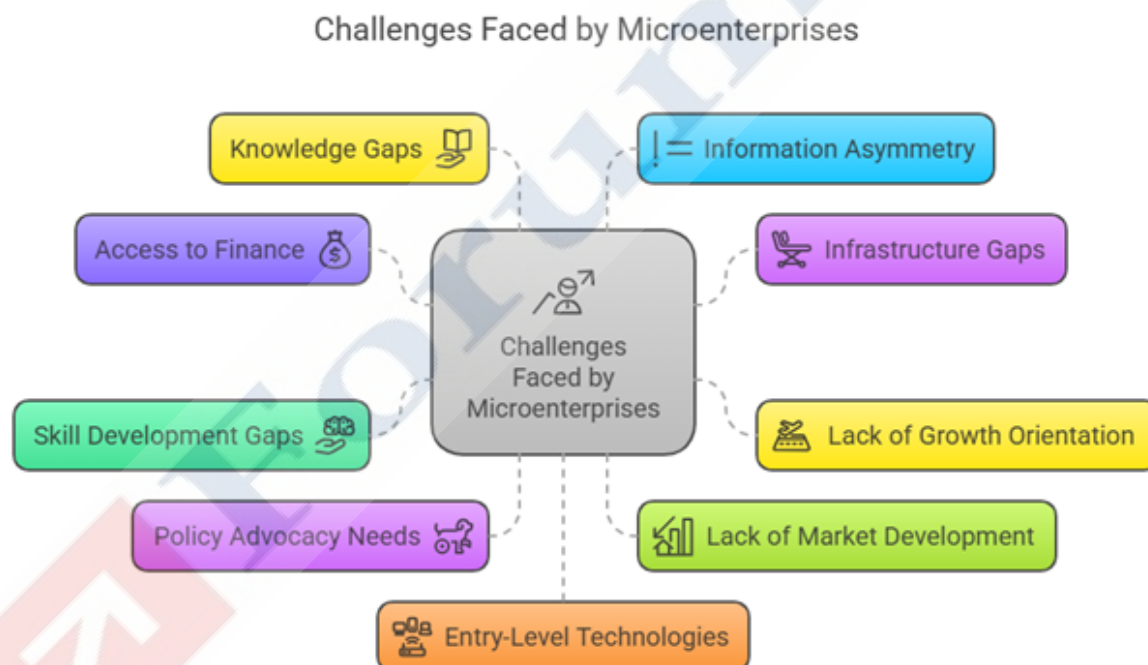
4. A Gender-Inclusive Economic Policy: Played a crucial role in India's rise in female labor force participation (from 23% in 2017-18 to ~41.7% in 2023-24, PLFS). **Case Study: Shanti Devi (Rajasthan)** – Used a Kishore loan to expand her papad-making business, increasing her monthly income from ₹5,000 to ₹25,000.

5. Supporting Informal Sector Growth: The scheme formalizes informal businesses by integrating them into the banking system. A **2022 SIDBI report** noted that **30% of Mudra borrowers transitioned to formal credit lines** after initial loans.

6. Alignment with SDGs: Supports SDG 8 (Decent Work and Economic Growth) and SDG 5 (Gender Equality).

7. Boost to Atmanirbhar Bharat: Facilitated local manufacturing, services, and self-reliance post-COVID.

What are the challenges faced by the micro enterprises?



1. Access to Finance: Many micro-entrepreneurs still struggle to secure loans due to **lack of collateral, credit history, or banking access** this led to **informal debt traps** due to lack of formal credit access. **RBI Report (2023)**, found that **~30% of rejected Mudra loan applications** were due to insufficient documentation.

2. Infrastructure Gaps: Poor roads, electricity, and digital connectivity limit business scalability this end up in **lower productivity** → Higher NPAs. **E.g. World Bank (2022)**, only **60% of rural MSMEs** have reliable electricity, affecting production.

3. Lack of Growth Orientation: Most Mudra loans (80% under **Shishu category**) support subsistence-level businesses, not scaling this causes **Stagnation in income levels** despite loan support. E.g. **SIDBI Study (2023)**, only **5% of Mudra borrowers** expanded beyond micro-enterprises.

4. Skill Development Gaps: Many borrowers lack **business management, digital, or technical skills**. It increases business failures despite funding. E.g. **NSDC Report (2024)**, only **25% of Mudra beneficiaries** received formal skill training.

5. Policy Advocacy Needs: Complex regulations and **lack of awareness** about subsidies/tax benefits. E.g. **CAG Audit (2022)**, found that **40% of beneficiaries** were unaware of GST exemptions for small businesses.

6. Lack of Market Development/Market Making: No structured **market linkages** for small entrepreneurs. E.g. **NITI Aayog (2023)**, only **15% of Mudra-made products** reach organized markets.

7. Knowledge Gaps: Entrepreneurs lack **financial literacy, digital banking knowledge, and legal compliance awareness**. E.g. **SEBI Survey (2023)**: **60% of Mudra borrowers** didn't understand loan repayment terms.

8. Information Asymmetry: Banks lack **real-time data** on borrower credibility, leading to risk aversion. E.g. **TransUnion CIBIL (2024)**, **35% of rejected loans** were due to insufficient credit history.

9. Entry-Level Technologies: Most micro-entrepreneurs lack **affordable tech tools** (digital payments, inventory software). E.g. **Deloitte Study (2023)**: Only **20% of Mudra businesses** use digital tools.

What should be the way forward?

1. From Credit-Linked to Credit-Plus Model: Integrate PMMY with **Skill India, Startup India, and One District One Product (ODOP)**. Provide digital tools, mentorship, and market linkages. E.g. **South Korea's KOSME (Korea SMEs and Startups Agency)** provides **integrated financial + non-financial support**—credit, mentoring, training, and export promotion.

2. Sector-Specific Credit Targets: Promote MUDRA loans in agri-tech, renewable energy, health-tech, and EV-related MSMEs. E.g. **Germany's KfW Bank for Green and Tech SMEs**, sets **targeted credit lines** for green energy, circular economy, and tech-driven startups.

3. Robust NPA Monitoring: India can implement **AI-driven early warning systems, interactive financial literacy modules, and community-based loan circles** for improving repayment culture..

4. Formalization and Tax Incentives: Encourage Mudra borrowers to register under UDYAM and file returns; link with **GST and TReDS**.

5. Stronger Data and Impact Audits: Annual performance audit by third-party bodies; public dashboards on employment and enterprise outcomes. E.g. **UK's British Business Bank**.

6. Regional Credit Ecosystems: India can **empower DLCCs (District Level Consultative Committees)** to become "**Credit Ecosystem Hubs**", linking PMMY with local Krishi Vigyan Kendras, RSETIs, and Common Service Centres (CSCs). E.g. **Kenya's Huduma Centres**.

Conclusion

The **Pradhan Mantri Mudra Yojana** marks a significant step in democratizing credit and fostering grassroots entrepreneurship in India. Its 10-year journey is a story of empowerment, especially for women and the underserved. However, for India@2047, the success of PMMY must evolve from credit outreach to entrepreneurial **outcomes**, from quantity to **quality** of enterprises. With reforms in mentorship, monitoring,

and integration with developmental schemes, PMMY can become the backbone of India's self-reliant economy and inclusive growth strategy.

Read more- [PIB](#)

UPSC Syllabus- GS 3- Indian Economy- growth and development

Aircraft Objects Bill, 2025-Significance & Challenges- Explained Pointwise

The Parliament has recently passed the **Protection of Interests in Aircraft Objects Bill, 2025** to address recurring disputes involving repossession of leased aircraft—exemplified by high-profile cases like **Kingfisher**, **SpiceJet**, and **Go First**. The Bill was introduced to address long-standing challenges in India's aviation sector, particularly the legal uncertainties faced by international lessors & creditors. It also operationalizes the **Cape Town Convention and Aircraft Protocol (CTC)**, a long-pending reform aligned with India's aviation ambitions under **India@2047**.

What is the Cape Town Convention and Aircraft Protocol?

1. The **Cape Town Convention and Protocol**, adopted by the **International Civil Aviation Organization (ICAO)** in **2001**, is an international treaty that:

- **Standardizes legal frameworks** for transactions involving aviation assets like aircrafts, engines, and helicopters.
- **Protects the interests of creditors and lessors**, enabling faster repossession in case of default.
- Creates a **global aircraft registry** and lays out **remedies** for lessors, overriding conflicting domestic insolvency provisions.

2. India signed the Convention in **2008**, but its implementation remained stalled due to the absence of ratification and legislative backing—until now.

What are the key Provisions of the Protection of Interests in Aircraft Objects Bill, 2025?

1. **Implementation of Cape Town Convention:** Gives statutory force to the CTC and Aircraft Protocol in India.

2. **DGCA as Registry Authority:** It empowers the **Directorate General of Civil Aviation (DGCA)** to manage registration and de-registration of aircraft as well as issue directions to implement the Convention.

3. **Time-bound Repossession:** Creditors can reclaim aircraft **within two calendar months** of default or a mutually agreed period, whichever is shorter.

4. **Debtor Obligations:** Airlines must maintain accurate records of dues and comply with DGCA directions.

5. **Overriding Effect:** If any existing law conflicts with this Bill, the **provisions of this Bill will prevail**, including over the IBC.

What is the significance of the Bill?

1. **Dispute resolution:** The legislation establishes a legal framework to resolve the disputes between airlines & lessors over high-value aviation assets, such as, aircraft, helicopters & engines.

2. **Global integration:** The legislation aims to align India's aviation laws with international standards, in order to boost investor confidence amid rapid fleet expansion by IndiGo & Air India.

3. Streamlined processes: Once enacted, the law will streamline the processes, allowing lessors to repossess aircraft for unpaid dues, avoiding lengthy court proceedings like those seen with GoFirst's 2023 shutdown.

4. Improving Legal Clarity: According to the Civil Aviation Minister, the Bill provides much-needed legal clarity, citing delays in GoFirst and SpiceJet cases.

5. Enhancing Investor Confidence:

- The Bill will reduce the perceived risks, bringing India closer to global leasing hubs like **Dublin, Singapore, and Hong Kong**. Helps attract international financiers and **domestic leasing activity at GIFT City**.
- The Bill will also lower the risk of doing future business in India, which will positively impact an airline's net income.

6. Cost Reduction: Airlines estimate **leasing costs may fall by 8–10%**, which will have a trickle down effect like fleet expansion and financial sustainability as well as potentially reducing the airfares – benefiting the customers.

7. Support for Domestic Leasing Ecosystem: The Bill promotes Gujarat's **GIFT City** as a hub for aviation financing, aligned with **India's Financial Sector Development Council's goals**.

8. Support for Startups: Smaller airlines may benefit from **EXIM Bank's 10% interest rebate** for leasing.

9. Training Hub Vision: With a demand for **30,000 pilots in the next 15–20 years**, the Bill complements the goal of making India a **pilot training hub**.

What are the challenges with respect to aircraft leasing in India?

1. Challenges in Aircraft Leasing & Repossession:

- **Kingfisher Airlines (2012):** Lessors faced **years-long legal battles** to reclaim the aircraft.
- **Go First (2023):** Insolvency proceedings under **IBC** imposed a **moratorium**, blocking lessors from reclaiming aircraft for months.
- **SpiceJet-BBAM Dispute (\$132 million):** Legal ambiguities led to prolonged settlement.

2. Conflict with Domestic Laws: Despite India's accession to the **Cape Town Convention (2008)**, the absence of **enabling legislation** has led to conflicts of domestic laws like **IBC and SARFAESI Act** with international standards. Also, courts have often **interpreted the treaties differently**, creating uncertainty for lessors. This led to difficulties in repossessing aircraft during airline insolvencies, as seen in the case of GoFirst (2023).

3. Lag in AWG Rating: The inconsistencies between the domestic laws & international standards has increased the risks of lessors & lowered India's compliance score on Aviation Working Group's (AWG) Cape Town Convention Index. Though India's compliance rating has improved from **50 to 62**, it is still far from the target score of **90** required to match leading jurisdictions.

4. Challenges Faced by Lessors: Moratoriums under the Insolvency and Bankruptcy Code (IBC) prevented lessors from reclaiming assets. **Operational dues to airports and oil companies** were unfairly passed onto lessors. **Complex tax laws** and **ad-hoc arrangements** created an unpredictable business environment.

What are the concerns associated with the Bill?

1. Unsubstantiated claims:

- Executives in the international leasing industry explain that the claims promoted of reduced leasing costs as a result of proposed law are not entirely true as the creditworthiness of an airline, its financial & volume of orders are the real driving factors, especially for airlines like Air India & IndoGo.
- Similarly, airline executives state that the claims of a likely respite in airfares are exaggerated as ticket prices are driven by market forces of demand & supply for air travel, and that costs incurred by airlines don't drive the fares.

2. Taxation and Regulatory Burden: Industry executives describe India's tax regime as "whimsical, suspicious, and inconsistent." Lessors face **Income Tax notices for using SPVs** to lease aircraft without a "permanent establishment," reducing ease of doing business.

3. Market Dominance & Viability: Concerns over dominance of **IndiGo and Air India**. Debt burdens and high **aviation fuel costs** remain unresolved.

4. Lack of Comprehensive Arbitration Reform: Aviation disputes still fly overseas for resolution. **Bharatiya Vayuyan Adhiniyam, 2024** lacks detailed arbitration provisions.

What should be the way forward?

1. Harmonize with IBC: A formal amendment or override clause in the **Insolvency and Bankruptcy Code** to ensure smooth operation of repossession rights. *E.g. Ireland's Cape Town Convention Act, 2005*

2. Comprehensive Arbitration Reform: Enact a **sectoral dispute resolution mechanism** or amend the **Bharatiya Vayuyan Adhiniyam, 2024** to include arbitration panels under DGCA. *E.g. Singapore International Arbitration Centre (SIAC) with a specialized aviation dispute desk.*

3. Simplify Taxation and SPV Norms: Align tax structures with **international leasing norms**, removing ambiguity around SPVs and permanent establishments. *E.g. Introduce 'safe harbor' tax rules for SPVs operating within IFSC-GIFT City.*

4. Boost Domestic Leasing: Incentivize domestic lessors and financial institutions to invest in aviation through policy support and **EXIM Bank rebates**. *E.g. Japanese Operating Lease (JOL) scheme.*

5. Improve Compliance Ratings: Work with **Aviation Working Group** to reach a **compliance score of 90**, sending a strong signal to international markets. *E.g. UAE, Malaysia, and New Zealand maintain high scores by implementing CTC-based repossession timelines.*

6. Ratification Monitoring: Regular review of India's compliance with Cape Town Convention. Leverage the **AWG Compliance Index** as a benchmark. *E.g. Institute a CTC Implementation Oversight Committee (CIOC).*

7. Regulatory Integration: Implement recommendations from the **High-Level Committee for Regulatory Reforms** across aviation and financial domains. *E.g. UK's Better Regulation Task Force.*

Conclusion

The **Protection of Interests in Aircraft Objects Bill, 2025**, is a **landmark reform** that addresses long-standing **legal ambiguities** in aircraft leasing. While it **boosts investor confidence** & will align India with global norms, challenges like **taxation disputes** and **delayed implementation** remain. For India to become a **global aviation hub by 2047**, consistent policy reforms, tax rationalization, and **faster dispute resolution** are crucial. The Bill is a **step in the right direction**, but **sustained efforts** are needed to unlock its full potential.

Read more- [The Hindu](#)

UPSC Syllabus- GS 2- Government Policies and interventions for development in various sectors

Deep Tech Startups-Significance & Challenges-Explained Pointwise

Commerce Minister Piyush Goyal has recently commented that the Indian startup ecosystem is less focused on advanced technologies vis-à-vis China, has led to raising of a question about whether this gap can be closed or not?

In this article we delve about deep tech startups, its significance, the challenges they are facing in India, the initiatives taken by the government for their growth & what could be the way forward.

What are Deep tech Startups?

Deep tech startups refer to startups based on high technology fields like Artificial intelligence, Deep learning, Robotics, Semiconductors, Biotechnology, Space, e-vehicles, etc. which aim to solve complex problems & create significant impact across various sectors.

What is the significance of Deep Tech Startups?

1. Drive innovation: Deep tech innovations form the basis for science & tech breakthroughs. They form the backbone of transformative industries. *For e.g. Discovery of Penicillin by Alexander Fleming in 1928 ushered in the era of antibiotics & dramatically reduced the deaths from infections.*

2. Economic & industrial impact: Deep tech innovations like GenAI can add \$1 trillion to India's GDP by 2030. According to the former NITI Aayog CEO Amitabh Kant, the cascading effects of deep tech innovations would be critical for India to become a developed economy. Deep tech startups are crucial for ushering in Industrial Revolution 4.0.

3. Strategic importance: Deep technologies are not only economic drivers, but are essential for developing self-reliance (**Atmanirbharta**) in critical sectors like defence, energy, healthcare etc. Developing & leveraging such deep tech innovations helps in providing a technological bulwark against geopolitical uncertainties & supply chain vulnerabilities *for e.g. China developed DeepSeek AI to achieve technological independence from the West, particularly in the face of US-led restrictions on advanced semiconductors exports.*

4. Solving societal challenges: Development of India-centric deep technologies can help in fueling innovations to provide solutions to India-specific problems like affordable & accessible healthcare or sustainable energy, language-based AI, North-South divide etc.

What are the challenges hindering the growth of deep tech startups in India?

1. Low R&D funding & investment: Annually, USA, UK, Germany & Japan spend >3% of their GDP on R&D, China spends 2.68%, while India spends less than 1% of its GDP. While China's '**Made in China 2025**' initiative poured in >\$800bn in strategic sectors, India's total technological investment from 2014-2024 estimated at \$160bn is pale in comparison. This funding gap stifles the startups aiming to tackle complex problems. Moreover, the investment from the private sector remains low despite government policies like Make in India.

2. Long gestation conundrum: Building of deep tech innovations takes time – which is usually longer than what the venture capital timelines allow in India. The venture capital landscape in India prioritizes quick return investments over deep tech startups that require patience. This myopic view, coupled with regulatory hurdles like Angel Tax (now scrapped) – stifles deep tech growth in India.

3. India's talent paradox: Though India produces lakhs of engineers annually, but only a fraction of engineers in India specialize in frontier technologies. Also, there is a continuous brain drain happening from India to Western countries where many Indians are driving innovations at firms like Tesla & NVIDIA or founding startups in Silicon Valley for e.g. Aravind Srinivas (Co-founder of Perplexity).

4. Commercialization bottlenecks: Indian startups face difficulties in scaling-up from prototype to product due to long R&D cycle, weak industry-academia collaboration for tech transfer, lack of regulatory sandbox etc.

5. Regulatory & bureaucratic hurdles: Complicated IP protection & patent filing process, regulatory uncertainties in sectors like genomics, drones etc are delaying the development of deep tech startups.

6. Dominance of USA & China: While the USA is the global leader in through companies like Nvidia, China is also very rapidly catching up. According to a WIPO report, China has filed over 38,000 generative AI patents between 2014-2023. Also, according to a study by the Australian Strategy Policy Institute, China leads globally in 57 out of 64 critical technologies.

7. Stagnation in startup ecosystem: Though India has the 3rd largest startup ecosystem in the world with >100 unicorn startups, but majority of the startups in India are based on quick commerce & other consumer-tech innovations rather than deep tech breakthrough such as startups like OpenAI, Blue Origin, Deep Mind etc.

8. Innovation ecosystem: India lags behind in innovation. According to the Global Innovation Index 2024, India ranks 39th while China ranks 11th. None of the Indian universities rank among global leaders in original research & innovation.

What are the government initiatives?

1. Policy reforms in high tech sectors: Government has taken several initiatives in high tech sectors to promote innovation & private sector participation as well as to boost entrepreneurship & self-reliance for e.g. **Indian Space Policy 2023**, **liberalized Drone Rules 2024**, **Draft National Deep Tech Startup Policy (NDTSP) 2023**, **Nuclear Energy Expansion Policy 2024** etc.

2. India Semiconductor Mission & Design-linked Incentive Scheme: Government has allocated Rs 76,000cr to build FAB capacity & design ecosystems.

3. IndiaAI Mission: In 2024, the Union Cabinet has approved Rs 10,000cr for IndiaAI Mission – which aims to establish a comprehensive AI ecosystem.

4. National Supercomputing Mission: Aim is to build a network of 70 high-performance computer facilities with a cumulative capacity of 45 PF (Petaflops).

5. National Quantum Mission: Aims to put India among the top 6 leading nations involved in the R&D in quantum technologies.

6. Deep Tech Fund: Government has recently announced Rs 10,000cr Deep Tech Fund of Funds as well as Rs 1000cr space tech venture capital fund with the aim to bridge the critical funding gaps & catalyzing innovations. These initiatives also send a strong signal to the private investment ecosystem that India is committed to playing the long game in advanced technology.

7. Innovation ecosystem: Govt has introduced policies like Atal Innovation Mission, NIDHI-PRAYAS, T-Hub, iCreate etc to foster innovation & entrepreneurship at early stages for inquisitive minds.

8. Slow but definite growth: Despite various challenges, India has seen pockets of deep tech startups success – supported by various government initiatives such as Space tech (Skyroot, Agnikul, Digantara), Robotics

(Addverb, CynLR), Gene editing (CrisprBits), Quantum solutions (Qnu Labs), EVs (Ola, Ather) etc. As per NASSCOM, India's 4000 deep tech startups attracted \$1.6bn investment in 2024 – which is a 78% increase year-on-year.

What is the way forward?

1. Increase R&D investments: USA is facilitating a \$500bn AI initiative called Stargate, France is mobilizing \$112bn in public & private investments towards AI development. China has set up a \$138bn fund for accelerating growth in emerging technologies. Thus, India is also required to follow their steps.

2. Increased & patient capital: Attracting more venture capital with a long-term perspective, as well as government-backed funds specifically for deep tech, is crucial. Loan guarantees and other mechanisms to reduce investor risk can help.

3. Industry-Academia linkage: A close collaboration between India's premier universities & research institutes like IITs, IISc and deep-tech startups is needed. *For e.g. India can take inspiration from USA's Federal institutes like Defence Advanced Research Projects Agency & NASA to encourage bold innovations.*

4. Education sector reforms: Reforms in the education sector are needed to build a framework for cutting-edge research & promoting innovation from the very beginning.

5. IPR Ecosystem: Providing robust IPR protection & speeding up the process of patent approval can also help in promoting deep tech innovations in India.

6. Global integration: Encourage international collaboration for joint R&D and market access. Facilitate Indian deep tech participation in global standards bodies & consortia. Promote collaboration of Indian universities & research institutes with global powerhouses in frontier technologies.

7. Developing Specialized Talent: Focused programs to train and upskill professionals in deep tech domains, along with initiatives to attract and retain global talent, are necessary.

Conclusion:

Deep tech startups are essential to India's technological sovereignty, economic resilience, and strategic autonomy. By promoting deep tech entrepreneurship, streamlining regulatory processes, enhancing IP protection, India can unlock the immense potential of its deep tech startups & position itself as global leader in this transformative space.

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UPSC Syllabus GS3-Indian economy, Awareness in the field of IT, Space, Computers

Second 1991 Moment – Significance & Challenges – Explained pointwise

'1991' marks an important year in Indian economic history because this is the year when the Indian policymakers adopted the LPG reforms which opened up the Indian economy. However, even though these reforms laid the foundation for the tremendous growth of the economy in the following decades, but still the experts on Indian economy asked for 2nd generation reforms to compliment them for helping the Indian economy to achieve its true potential.

This article basically delves into the significance/need for 2nd generation economic reforms, what could be the challenges to them, what have been the government's initiatives & what could be the way forward – particularly

given the opportunity provided by the tariffs imposed by the Trump administration (Trump Tariffs) – which can be regarded as India's 2nd 1991 moment.

What are the Economic reforms 2.0?

Economic Reforms 2.0 refers to the next generation of structural & policy reforms aimed at transforming the Indian economy for sustained growth, global competitiveness, and inclusive development. While the 1991 reforms primarily focused on opening up the economy, reducing government control, and promoting private sector participation to overcome a severe economic crisis, "Economic Reforms 2.0" has a broader and more nuanced agenda.

Why do we need Economic reforms 2.0?

1. Reviving investment & economic growth: India economy has been growing at a moderate pace of 6% for the past few years – which is insufficient for India to overcome the Middle Income Trap & become a developed economy by 2047. Economic reforms 2.0 are required to achieve and maintain a high growth trajectory needed to become the 3rd & potentially the 2nd largest economy in the world and to become a major global economic power.

2. Addressing Structural Bottlenecks: Economic reforms 2.0 will help in overcoming the persistent challenges in land acquisition, outdated labor laws, regulatory bottlenecks (Red Tapism), inefficiency in public institutions etc that hinder investment and growth in India. The 2nd generation reforms will help in reviving the private sector confidence by improving the ease of doing business, providing opportunity for investment & enhancing the infrastructure.

3. Enhancing Competitiveness: India's Foreign Trade Policy 2023 aims to achieve the target of \$1 trillion merchandise export target by 2040. To achieve this target, India needs reforms that promote innovation, entrepreneurship & integration with global value chains. Economic reforms 2.0 are required to make Indian businesses more competitive globally and boost exports.

4. Creating Quality Jobs: Jobless growth has been the biggest criticism of the 1991 reforms. Thus, the 2nd generation reforms are required to generate sufficient high-quality employment opportunities for India's large and growing workforce (quantitative & qualitative job opportunities). India has the largest workforce in the world & it is currently enjoying the advantage of demographic dividend which is expected to last a couple of decades more – Economic reforms 2.0 are expected to take advantage of this opportunity & prevent this demographic dividend from becoming a demographic catastrophe.

5. Inclusive Growth: One of the biggest challenges of Economic reforms 1.0 was the skewed growth pattern that they had induced. 2nd generation reforms will ensure that the benefits of economic growth reach all sections of society and reduce the inequality in the country by improving the access to quality healthcare & education as well as expanding the scope of social security benefits in the country.

6. Adapting to Global Changes & Challenges: The global economic order has been rapidly changing since the last decade particularly in the wake of COVID19, Russia-Ukraine war & now the protectionist trade policies like the Trump Tariffs. Also, the Western world is betting on India to stand up to the Chinese rising hegemony. Thus, to respond to the evolving global economic trends, technological advancements (e.g. AI), and geopolitical shifts – India needs to step up by introducing the economic reforms 2.0.

What are the challenges to such reforms?

1. Complacency: India has not adopted the 2nd generation reforms for such a long time because of the '*deep comfort*' among the policymakers with the mediocre level of economic growth. China, after the financial crisis

of 2008, decided to move up in the global value chain & leave the lower value manufacturing space to other players – which was quickly occupied by countries like Vietnam, Indonesia, Mexico, Bangladesh – while India remained complacent because of its ‘deep comfort’.

2. Political Consensus: Achieving broad political consensus on reforms, especially those that are politically sensitive, can be challenging. *For e.g. resistance shown by the political parties & pressure groups to the farm laws introduced in 2020-21.*

3. Resistance from Vested Interests: Incumbent players and beneficiaries of the existing system may resist changes. *For e.g. major industrialists in India are not in favour of the reforms because these reforms would provide competition to them & dent their existing easy profits.*

4. Implementation Capacity: Effective implementation of reforms at the ground level across a diverse country like India is a significant challenge.

5. Balancing Growth with Social Equity: Ensuring that reforms lead to inclusive growth and do not exacerbate inequalities is crucial. *For e.g. Industrial Revolution 4.0 is expected to generate higher skills jobs but it could also trigger unemployment in semi-skilled & unskilled labour sectors.*

6. Centre-State Relations: The federal structure of India creates coordination challenges between the central and state governments, particularly in areas like taxation (e.g., GST), agriculture, and infrastructure development. Lack of incentive sharing or trust between Centre & States can delay or dilute the reforms.

7. Global Economic Headwinds: External factors like global slowdowns, protectionist measures, trade wars, conflicts like Russia-Ukraine war or climate change related tariff measures like EU's Carbon Border Adjustment Mechanism (CBAM) can impact the effectiveness of domestic reforms.

What have been the government's initiatives in this regard?

1. Labor Reforms: The government has introduced several labour sector reforms like consolidating and simplifying complex labor laws into 4 labour codes – Code on wages, Code on social security, Code on industrial relations & Code on occupational safety. Skill development of workforce by establishing a separate Ministry of Skill Development, introducing Skill India Mission etc.

2. Land Reforms: Digitalization of Land Records by introducing Digital India Land Records Modernization Programme (DILRMP) that aims to modernize land records, improve transparency, and reduce disputes. Enacting Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 to speedup the process of land acquisition in a fair & transparent manner.

3. Financial Sector Reforms: The government has introduced several reforms to strengthen the public sector banks, develop the bond markets, and improve the regulatory frameworks such as Project Shashakt, National Asset Reconstruction Companies, Mission Indradhanush etc.

4. Agricultural Reforms: The government has made attempts to liberalize the agricultural markets by introducing the farm laws in 2020, promoting private investment in the sector by promoting contract farming, introducing reforms in agriculture markets such as e-NAM etc.

5. Manufacturing sector reforms: Introducing “Make in India” initiative which is a broad program aimed at boosting domestic manufacturing, attracting foreign investment, improving infrastructure, and simplifying business processes. Production Linked Incentive (PLI) Scheme that aims to boost manufacturing, attract investments, and create jobs in strategic sectors.

6. Digital India Initiative: Promoting digital payments (UPI), e-governance, and digital infrastructure.

7. Infrastructure development: Large-scale investment in infrastructure projects such as Bharatmala, Sagarmala, introduction of National Infrastructure Pipeline, Dedicated Freight Corridor etc.

8. Logistic efficiency: Providing efficient logistics by introducing National Logistic Policy that aims to provide an integrated logistics ecosystem to reduce costs & improve export competitiveness. PM Gati Shakti which is a strategic initiative to enhance logistics efficiency through multimodal connectivity infrastructure, promoting economic growth and sustainable development

9. Taxation reforms: Introduction of Goods and Services Tax (GST), reduction in corporate tax rate, digitalisation of tax system etc.

10. Ease of Doing Business: Improving Ease of Doing Business by introducing Insolvency and Bankruptcy Code (IBC) that aims to strengthen the framework for resolving insolvency. Strengthening the legal framework for commercial dispute resolution to improve contract enforcement by establishing Commercial Courts & Arbitration Centres.

What could be the way forward?

1. Building Political Consensus: Engage in extensive consultations with all political parties, industry associations, labor unions, farmer groups, and civil society organizations to build a wider understanding and consensus on the need and direction of reforms.

2. Phased Implementation: Implement reforms in a phased manner, carefully assessing the impact and making necessary adjustments along the way. Avoid “big bang” approaches that can lead to significant disruptions.

3. Enhancing Ease of Doing Business: Reduce the regulatory burden by simplifying the regulations at all levels of government, focusing on reducing compliance costs and improving transparency. Leverage technology for online portals and single-window clearances. Improve the efficiency and speed of the judicial system for commercial dispute resolution. Promote alternative dispute resolution mechanisms.

4. Boosting Manufacturing and Exports Competitiveness: Negotiate Favorable Trade Agreements to enhance market access for Indian goods and services. Invest in export-oriented infrastructure, including ports, airports, and special economic zones. Further strengthen the PLI scheme by focusing on value addition & technological upgradation.

5. Strengthening the Financial Sector: Introduce Banking Sector Reforms that improve the governance, efficiency and financial health of Public Sector Banks. Deepen and broaden Indian capital markets to provide diverse sources of funding for businesses. Promote the development of the corporate bond market in India.

6. Investing in Human Capital and Social Infrastructure: Fully implement the National Education Policy (NEP) and strengthen vocational training programs to create a skilled workforce that meets the demands of a modern economy. Increase investment in healthcare infrastructure and improve access to quality healthcare services to enhance productivity and well-being. Strengthen social safety net programs to protect the vulnerable populations during periods of economic transition and ensure inclusive growth.

Conclusion:

The next generation economic reforms are required for India to achieve not only a sustainable & inclusive economic growth but also to become the next economic superpower. The Trump Tariffs provide the right opportunity for India to introduce these reforms that have been long delayed and to achieve the economic progress & social welfare that it long desires.

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UPSC Syllabus GS 3– Indian Economy

Role of Governor

Recently, the SC passed a judgment regarding the reservation of Bills by the Governor – laying down a specific timeframe within which the Governor & the President have to act. The issue becomes important particularly in the wake of the ongoing tussle between the Governor of the State of TN & the State Government.

What is the role & powers of Governor in Indian polity?

1. Constitutional & Ceremonial Role = The Governor is the constitutional head of the State executives. The executive power of the State is vested in the Governor (Article 154), and all executive actions of the State government are formally taken in their name (Article 166). The Governor acts as a bridge between the Centre and the State. He/she enjoys various executive, legislative, financial and discretionary powers.

2. Constitutional Provisions:

- **Article 153:** Provides for a Governor for one or more than one states.
- **Article 154:** The executive powers of the state are vested in the Governor and can be exercised directly or through subordinate officers in accordance with the Constitution.
- **Article 155:** Provides for the appointment of the Governor by the President by warrant under his hand and seal.
- **Article 156:** Provides the term of office of Governor- Appointed for a period of five years and holds office during the pleasure of the President. Pleasure of the President means that he can be removed anytime by the President, even before the expiry of five years.
- **Article 157:** Qualifications- He should be a citizen of India and must have completed the age of thirty-five years

3. Discretionary Powers = Governor has two types of discretion in the execution of his work:

- **Constitutional discretion** which is discretion mentioned directly in the Constitution. This is exercised in matters such as reserving a bill for the consideration of the President, recommendation of the President's rule under Article 356.
- **Situational discretion** which means hidden discretion that is derived from the exigencies of political situations. For instance, the appointment of Chief Minister of a state when no party has a clear cut majority in the state legislative assembly or when the chief minister in office dies suddenly and there is no obvious successor, dissolution of the state legislative assembly if the council of ministers has lost its majority etc.

What are the issues associated with the Office of Governor?

1. Appointment of the Governor = There is a lack of specific provisions related to the appointment of a Governor in the Constitution. For instance, apart from the provision that he should be a citizen of India having completed the age of 35 years, there is no other provision regarding his appointment. This is taken advantage of by the central government to appoint loyalists and retired politicians. *For example, former Delhi CM Sheila Dikshit was immediately made the Governor of Kerala after her defeat in the legislative assembly elections of 2014 as a reward for her contribution to her political party.*

2. Acting as an agent of Centre = There is an abuse of the position of Governor usually at the behest of the ruling party at the Centre. The post has been reduced to being a retirement package for politicians faithful to the centre. As a result, the Governor sends motivated, distorted and partial reports to the Central government with the intention to hamper the functioning of the State government and ultimately get rid of them. *For example, the Governor of Rajasthan appealed to people to re-elect the incumbent Prime Minister in the General Elections of 2019, which is against the spirit of non-partisanship that is expected from the person sitting on constitutional posts.* Many Governors appointed have had strong political affiliations to the ruling party at the Centre, raising concerns about their neutrality, especially when dealing with State governments led by opposition parties.

3. "Retirement Package" = The post has sometimes been viewed as a reward or a retirement package for loyal politicians or bureaucrats, rather than being based solely on merit and suitability for the constitutional role.

4. Misuse of Article 356 = In a number of situations of political instability in the State, the Governors recommend President's rule under Article 356 without exhausting all possible options. This power is exercised to dismiss the State government controlled by a political party opposed to the ruling party at the centre. The **Sarkaria Commission** (1998) notes that since Independence, Article 356 has been misused a 100 times.

5. Misuse of discretionary powers:

- **Formation of Government in Hung Assemblies:** The Governor's discretion in inviting the leader of a party or coalition to form the government after an inconclusive election has been a source of controversy. Allegations of bias have arisen when Governors have seemingly favored a particular party, even if it didn't have the clearest majority initially.
- **Withholding Assent to Bills:** Governors have been accused of deliberately delaying or withholding assent to Bills passed by the State legislatures, sometimes without valid constitutional reasons, thereby obstructing the legislative process and creating friction with the elected State government.
- **Interference in State administration:** In some instances, Governors have been accused of overstepping their constitutional boundaries by interfering in the day-to-day administration of the State, such as involving themselves in transfers of officials or university affairs without the advice of the Council of Ministers.
- **Reservation of Bills** = The ongoing impasse between the Governors & opposition ruled State governments primarily hinges on the interpretation of the first proviso to Art 200 that stipulates that if the Governor decides to withhold assent, the Bill must be returned to the Assembly "as soon as possible", accompanied by a request to reconsider the proposed legislation or suggest amendments. While it mandates prompt action, it stops short of prescribing a definitive timeline. This '**constitutional silence**' has often been exploited by the Governors to indefinitely delay action on a Bill without formally returning it – a tactic colloquially known as the '**Pocket Veto**'. Similarly, in the case of NCT of Delhi, the provisions of Article 239AA (4), mandates that in case of a difference of opinion between the L-G and the Council of Ministers, the former has to refer the issue to the President. In the meantime, while that decision is pending before the President, the L-G, if the matter is urgent, can use his discretion to take immediate action. The Lt. Governor of Delhi misused this provision to take administrative decisions and deprive the State assemblies of their legislative rights.

6. Arbitrarily removal of Governor = The Governors do not enjoy security of tenure. The Governors of various states are arbitrarily removed whenever there is a change of government at the centre because unlike the President there is no provision for the impeachment of the Governor. For instance, in 1989, the V.P Singh government asked all the Governors appointed by the previous government to resign.

What are various SC's Judgments?**1. State of TN v/s Governor of TN case (2025):**

- SC declared TN Governor's prolonged refusal to give assent to 10 Bills as illegal & erroneous in law. Invoking its powers under Article 142 of the constitution, the court deemed the 10 pending bills to have received the assent.
- SC has imposed a timeline on the Governor to prevent any obstruction to the State's legislative process.
 - If the governor, acting on the Cabinet's advice, opts to withhold assent or reserve a bill for president's consideration – then such action shall be taken in less than **1 month** period of time.
 - If the governor withholds the assent contrary to the advice of the minister, the bill must be returned within **3 months**, accompanied by the message detailing the rationale for the decision.
 - If the governor reserves the bill for the President against the Cabinet's recommendation, this must be done within **3 months**.
 - If the bill is re-passed by the State legislature after reconsideration, the Governor is required to grant assent within **1 month**.
- SC has also set a 3 months deadline for the President to decide on the Bills referred to her by the Governor.
- SC has also recommended that the President shall seek the advice of the SC on such a Bill, in line with the procedure outlined in Article 143 of the constitution, as a measure of prudence.
- Further limiting the discretionary powers of the Governor, the court ruled that a Bill cannot be reserved for the President's consideration once it has been returned to the State legislature, reconsidered & resubmitted for assent.
- The reservation of Bill cannot be based on "personal dissatisfaction" or "political expediency" & is only permissible in instances where there is a grave threat to democratic principles.
- SC emphasised that any exercise of **gubernatorial discretion** (i.e. governor's discretion) can be judicially reviewed to prevent any disregard for the will of the people, as expressed through their elected representatives.
- The court identified only 3 circumstances in which the governor could act without the aid & advice of the ministers – 1) When a Bill undermines the powers of the HC, 2) When a Bill requires presidential assent is explicitly mandated for e.g. under Art 31C where a law was sought to be protected from judicial review, and 3) When a Bill fundamentally undermines the constitutional values.
- Reservation of bills in 2nd instance: The governor cannot reserve the bill passed by the State legislature after its re-passage by the Legislature for the President's consideration – except – when the Bill is different from the 1st instance.

2. Samsher Singh vs State of Punjab (1974) = The exercise of discretion by the Governor should be in concurrence and harmony with the Council of Ministers. He should not take decisions against the wishes of the Council of Ministers.

3. SR Bommai v/s Union of India (1994) = It is one of the historic cases that dealt with the issue of arbitrary dismissal of State governments under Article 356. The Karnataka Governor in 1989, refused to allow the democratically elected Chief Minister to prove his majority on the floor of the Assembly and this led to the imposition of President's rule under Article 356. The verdict ruled that the floor of the Assembly is the only forum that should test the majority of the government of the day, and not the subjective opinion of the

Governor. It also stated that the Governor's report regarding the proclamation of President's Rule in a State in the wake of breakdown of Constitutional machinery is subject to judicial review.

4. Rameshwar Prasad case (2006) = Article 361 grants personal immunity to the governors, but does not insulate them from legal immunity. Also, the discretion of the Governor can be judicially reviewed by the Supreme Court.

5. BP Singhal case (2010) = The Supreme Court ruled that even though the President could dismiss a Governor without having to provide reasons for doing so, this power could not be exercised in an "arbitrary, capricious or unreasonable manner". A change in central government cannot be a ground for removal of Governors, or to appoint more favourable persons to this post.

6. Nabam Rebia case (2016) = The Supreme Court ruled that Article 163 does not give Governors a general discretionary power and he is bound by the aid and advice of the elected Council of Ministers. He cannot take steps relating to disqualification of the Speaker. He is barred from unilaterally sending messages to the Assembly on any matter. The Governor has no power to summon an Assembly session unless the Government has lost its majority.

7. NCT Delhi v/s Union of India case (2018) = Supreme Court declared that the Lt. Governor has to work on the aid and advice of the Council of Ministers and the power to refer any matter to the President does not mean every matter.

What are the recommendations by various Committees & Commissions?

1. First Administrative Reforms Commission (1966):

- **Appointment:** Governor should have long experience in public life and administration and be politically neutral. Retired Judges should not be appointed as Governors and the Chief Minister may be consulted before his appointment.
- **Discretion:** Guidelines must be formulated regarding the exercise of discretionary powers by the Governors duly approved by the Inter-State Council and the Central government. The Governor should act on his own judgement and discretion in matters relating to submission as well as on reservation of bills for the consideration of the President.

2. Rajamannar Committee:

- **Governor not as an agent of the Centre:** The Rajamannar Committee emphasized that the Governor should act as the constitutional head of the state and not as an agent of the central government. This highlights the need for the Governor to maintain the autonomy of the state within the federal structure.
- **Deletion of Articles 356 and 357:** The committee recommended the deletion of Articles 356 and 357, which deal with the imposition of President's Rule in a state. This recommendation was aimed at preventing the misuse of these articles by the central government to undermine state autonomy.

3. Sarkaria Commission:

- **Appointment:** Governor should be an eminent person, not belonging to the same state. A person belonging to a minority group should be given preference. It recommended that a politician from the ruling party at the Union level should not be appointed as a Governor of a state run by some other political party. It recommended the amendment of Article 155 prescribing the procedure of consultation with the State Chief Minister in the selection of a person as Governor.

- **Removal:** Governors must not be removed before completion of their five year tenure, except in rare and compelling circumstances. It provided for an order of preference to be followed by the Governor to deal specifically with the situation where no single party obtained a majority.

4. National Commission to review the working of the Constitution (2002) (Venkatachaliah Commission):

- **Appointment:** It reiterated Sarkaria Commission recommendations regarding the qualifications of a person to be appointed as the Governor.
- **Removal:** If the Governor is to be removed before completion of term, the central government should do so only after consultation with the Chief Minister.
- It recommended setting up a time limit of six months for the Governor to give his assent to a bill or reserve it for the consideration of the President.
- The Governor should not be allowed to dismiss the State government as long as it enjoys the support and confidence of the Legislative assembly.

5. 2nd ARC:

- **Appointment of non-partisan persons:** The 2nd ARC recommended that individuals appointed as Governors should be non-partisan and have extensive experience in public life and administration. This recommendation seeks to ensure that the Governor's actions are guided by the principles of impartiality and public service rather than political considerations.
- **Guidelines for discretionary powers:** The 2nd ARC suggested that the Inter-State Council should establish clear guidelines for Governors to follow when exercising their discretionary powers. This is intended to bring more clarity and structure to the Governor's role in situations where they are not bound by the advice of the Council of Ministers, reducing the potential for arbitrary or politically motivated decisions.

6. Punchii Commission:

- **Appointment:** As a qualification for the Governor, it suggests that the person should not have participated in active politics at even local level for a couple of years before his appointment.
- **Removal:** Governor should be removed only by the resolution of the State legislature. It recommended the deletion of the doctrine of pleasure of the President from the Constitution. It also opined that there should be provisions for the impeachment of the Governor by the State legislature along the same lines as that of the President.
- It also suggests that the Governors should have the right to sanction the prosecution of a Minister against the advice of the Council of Ministers.

What is the way forward?

1. Governors must act judiciously, impartially and efficiently to reflect the spirit of non-partisanship.
2. A report by the Committee of Governors titled, '**Rajyapal —Vikas Ke Rajdoot: Catalytic Role of Governors as Agents for Change in Society**', can be taken into consideration for improving the functioning of the office of Governor. It talks about the role of Governors in the development process and highlights the need for an action oriented framework to improve the functioning of the Office of the Governor. The report emphasises identifying priority areas along with activities that can help realise the objectives of Sarv Shreshth Bharat

(paramount India). It also suggests that Governors can play a mentoring role in overall implementation of developmental schemes in their States.

3. Sardar Hukum Singh in the Constitutional Assembly Debates on 30 May 1949, had argued in favour of providing a panel of names, elected by the State Legislature, for the President to choose from. In his speech on the constitutional role of Governors, Dr. B.R. Ambedkar described how a Governor should use his discretion not as “representative of a party” but as “the representative of the people as a whole of the State”.

4. Implementation of reforms suggested by various committees & commission as well as SC judgments, such as:

- **Consultation with the Chief Minister:** Making it mandatory to consult the Chief Minister before appointing a Governor.
- **Fixed Tenure:** Providing a fixed tenure for Governors to ensure their independence.
- **Grounds for Removal:** Clearly defining the grounds and procedures for the removal of Governors.
- **Limiting Discretionary Powers:** Clearly defining and limiting the discretionary powers of the Governor through constitutional amendments or a code of conduct.
- **Non-Partisan Appointments:** Appointing individuals with eminence in public life who are not actively involved in politics.
- **Impeachment Process:** Considering a process for the impeachment of Governors by the State legislature.

Conclusion:

The SC ruling in TN case not only provides the opposition-ruled state government a clear constitutional remedy against the inordinate delays by the Governors in granting assent to the Bills passed by the Legislature but also upholds the principles of federalism. By recognising automatic assent in cases where the Governor fails to adhere to the prescribed timelines, the court has instituted a crucial safeguard against the abuse of the office. However, it is time that the Office of Governor also realise that they must rise above partisan politics while discharging constitutional obligation & act as a ‘friend, guide & philosopher’ to the State & not as a hindrance.

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RTI Amendment via DPDP Act, 2023- Explained Pointwise

The **Right to Information (RTI) Act, 2005**, hailed as a revolutionary step towards transparency and accountability in governance, is now facing a significant dilution through **Section 44(3) of the Digital Personal Data Protection (DPDP) Act, 2023**. This amendment **alters Section 8(1)(j)** of the RTI Act, effectively **removing the public interest override** and restricting access to all “personal information”.

As the minister **warns**, this will have a “**devastating effect** on the transparency law”. Over **30 civil society groups**, backed by **130 opposition MPs**, have raised alarm. This issue underlines the delicate balance between the **right to privacy** (as upheld in **K.S. Puttaswamy v. Union of India, 2017**) and **right to information**—both derived from **Article 21 of the Constitution**.

What is Right to Information Act (RTI), 2005?

Objective: The RTI Act was enacted to enhance transparency and accountability in government operations by empowering citizens to access information held by public authorities.

Coverage: The Act extends to all public authorities, including central and state government bodies, ministries, and institutions significantly financed by the government.

Access to Information: Under this law, citizens can seek information in the form of records, documents, reports, and data from public authorities, thereby promoting openness in governance.

Exemptions: Certain categories of information are exempt from disclosure—particularly those that could jeopardize national security, violate confidentiality, or interfere with active investigations.

Response Timeline: Authorities must furnish the requested information within 30 days. In specific situations, this timeline may be extended up to 45 days.

Penal Provisions: Officials who unjustifiably deny information or provide misleading details may face penalties as per the provisions of the Act.

What is the significance of RTI Act, 2005 across Sectors?

1. Strengthening Governance and Accountability: As per Central Information Commission reports over 3 crore RTI applications have been filed since 2005. Exposed several scams: **Adarsh Housing Scam, Vyapam, and Ration distribution irregularities** through **social audits**. Ensures accountability of **public servants** through access to information like **educational qualifications, salary records, and property declarations**. **Case Study:** Social audits under RTI helped expose ration distribution fraud in various states like Rajasthan and Andhra Pradesh.

2. Strengthening Democratic Participation: RTI promotes **citizen-led oversight** and informed public discourse. Ensures **parity of information access** between citizens and legislators. **E.g. Over 13 lakh RTIs filed annually (CIC 2022-23).**

3. Social Justice and Welfare Delivery: RTI has been used extensively to obtain information related to **welfare schemes (MGNREGA, PDS, pensions, etc.)**, empowering marginalized communities. **Case Study:** In Madhya Pradesh, activists used RTI to expose ghost beneficiaries in the Public Distribution System (PDS).

4. Judiciary and Executive Oversight: RTI flows from **Article 19(1)(a) (Freedom of Speech and Expression)**. In **Central Public Information Officer, Supreme Court of India v. Subhash Chandra Agarwal (2019)** – held that the office of the CJI falls under RTI.

5. Environmental and Public Health: RTIs have exposed issues in **environmental clearances, pollution data, and COVID-19 relief fund utilization**.

What are the issues with Recent Amendment (Section 44(3) of DPDP Act, 2023)?

1. Deletion of Public Interest Clause: Section 8(1)(j) originally allowed disclosure of personal information if “**larger public interest justifies it.**” The DPDP Act **removes this proviso**, creating a **blanket ban** on disclosure of all personal information.

2. Against the Spirit of Puttaswamy Judgment: The **K.S. Puttaswamy v. Union of India (2017)** judgment upheld the **Right to Privacy** as a fundamental right. However, it also stated that “**privacy and transparency are not mutually exclusive but complementary.**” nowhere did the judgment recommend amending the RTI Act.

3. Weakening Institutional Transparency: The amendment violates the RTI Act’s principle that **no information denied to Parliament shall be denied to a citizen**. **Deletion of this proviso affects all of Section 8(1)** and weakens the spirit of **democratic oversight**.

4. Misuse of “Personal Information” Definition: The DPDP Act vaguely defines “personal information”, enabling authorities to **deny access to previously public records** under the **garb of privacy**. The **DPDP Act defines personal information vaguely**, potentially covering, educational qualifications, Disciplinary actions, Property records and Minutes of public meetings. E.g. **Fake caste certificate** cases or qualification disputes (e.g., Maharashtra bureaucrat case) may go unverified.

5. Procedural and Legislative Bypass: Amendment was passed through a **side clause (Section 44(3))** without **detailed parliamentary scrutiny**.

6. Judicial Responses: Supreme Court in *Anjali Bhardwaj vs Union of India (2019)*, delays in appointments to Commissions defeat the purpose of RTI. Despite petitions, no rollback of the 2019 amendments yet.

7. Civil Society Pushback: NCPRI, Article 21 Trust, PUCL, SFLC India have vocally opposed the amendment. Activists like **Anjali Bhardwaj and Nikhil Dey** have warned that this will **cripple social audits** and verification of public service delivery.

What are the current challenges to the RTI Framework and its impact across different sectors?

Challenge	Details
Backlog & Vacancies	Over 3 lakh appeals pending (Satark Nagrik Sangathan, 2023).
Dilution of Autonomy	RTI (Amendment) Act 2019 gave the Centre power to decide tenure and salaries of CIC/SICs.
Opaque Governance	Officers’ transfers, disciplinary records, assets can now be withheld
Threat to Activists	Over 100 RTI activists killed; no functional whistleblower protection (Report by Commonwealth Human Rights Initiative).
Non-compliance	45% of public authorities failed Section 4 disclosures (Status of RTI Report 2022).
Low Awareness	Especially among rural, SC/ST, and women (NSSO Report 2018).
Misuse and Vagueness	Vague RTIs or misuse by vested interests increases administrative burden.

Impact Across Sectors

Sector	Impact
Public Services	No way to verify distribution of rations, pensions, or benefits
Education & Employment	Degrees, appointments, promotions may remain unverified
Legislative Oversight	Citizens lose access to data accessible to MPs/MLAs
Anti-Corruption Efforts	Transparency in scams involving public servants weakened
Environmental Governance	Access to clearance reports, data on polluters may be curtailed

What should be the Way Forward?

1. Repeal or Revise the RTI-DPDP Amendment: Section 44(3) of the DPDP Act should be repealed. Retain the “public interest” safeguard in Section 8(1)(j). Restore **fixed tenure and pay parity** for CIC/SICs. Implement **recommendations of 2nd ARC and Law Commission**.

2. Define ‘Personal Information’ Clearly: Adopt standards based on **OECD Privacy Guidelines**, with **narrow definitions** and **public interest exceptions**.

3. Uphold Proportionality Doctrine: Follow **B.K. Pavitra v. Union of India (2020)** which applied proportionality in administrative actions.

4. Ensure Parliamentary Scrutiny: Future amendments to transparency laws must be passed **after detailed debates and standing committee reviews**.

5. Strengthen Information Commissions: Fill vacancies, increase budget allocation. Ensure **functional autonomy and security of tenure**. E.g. As per PRS India, the Central Information Commission received only ₹37 crore in Budget 2023-24 — insufficient for 2 lakh+ pending cases.

6. Strengthen the CIC: Empower CIC with enforcement powers, as recommended by the **2nd Administrative Reforms Commission (ARC)**.

7. Balance Privacy and Transparency: Formulate rules under **DPDP Act** ensuring **narrow and specific definition of “personal information.”** Establish **public interest tests** through an independent authority.

8. Promote Proactive Disclosure: Strengthen **Section 4 of RTI Act** — suo motu disclosures by public authorities.

9. Reports and Recommendations

Report/Body	Key Recommendation

2nd ARC Report	Strengthen proactive disclosure; protect whistleblowers
Law Commission (255th Report)	Ensure transparency in public appointments
CIC Annual Reports	Urged filling of vacancies and increased awareness

10. Comparative Global Models

Country	Key Feature
Sweden (1766)	First RTI law, based on “Principle of Public Access to Official Documents”.
USA (FOIA, 1966)	Judicial remedy for delays; well-defined appellate mechanism
Mexico	Autonomous Information Commission; RTI law part of Constitution
South Africa	RTI guaranteed under Bill of Rights; includes private bodies if rights are implicated.

Conclusion

The RTI Act is **not just a legal instrument**, but a **democratic lifeline** that empowers citizens to hold the State accountable. As Mr. M.M. Ansari rightly notes, the current provisions were already “**very balanced**”, safeguarding privacy while ensuring transparency. The amendment through the DPDP Act **erodes this balance**, endangering public accountability. As India celebrates 20 years of RTI, the need is not to weaken but to **deepen transparency**, keeping intact the spirit of **participatory democracy**

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