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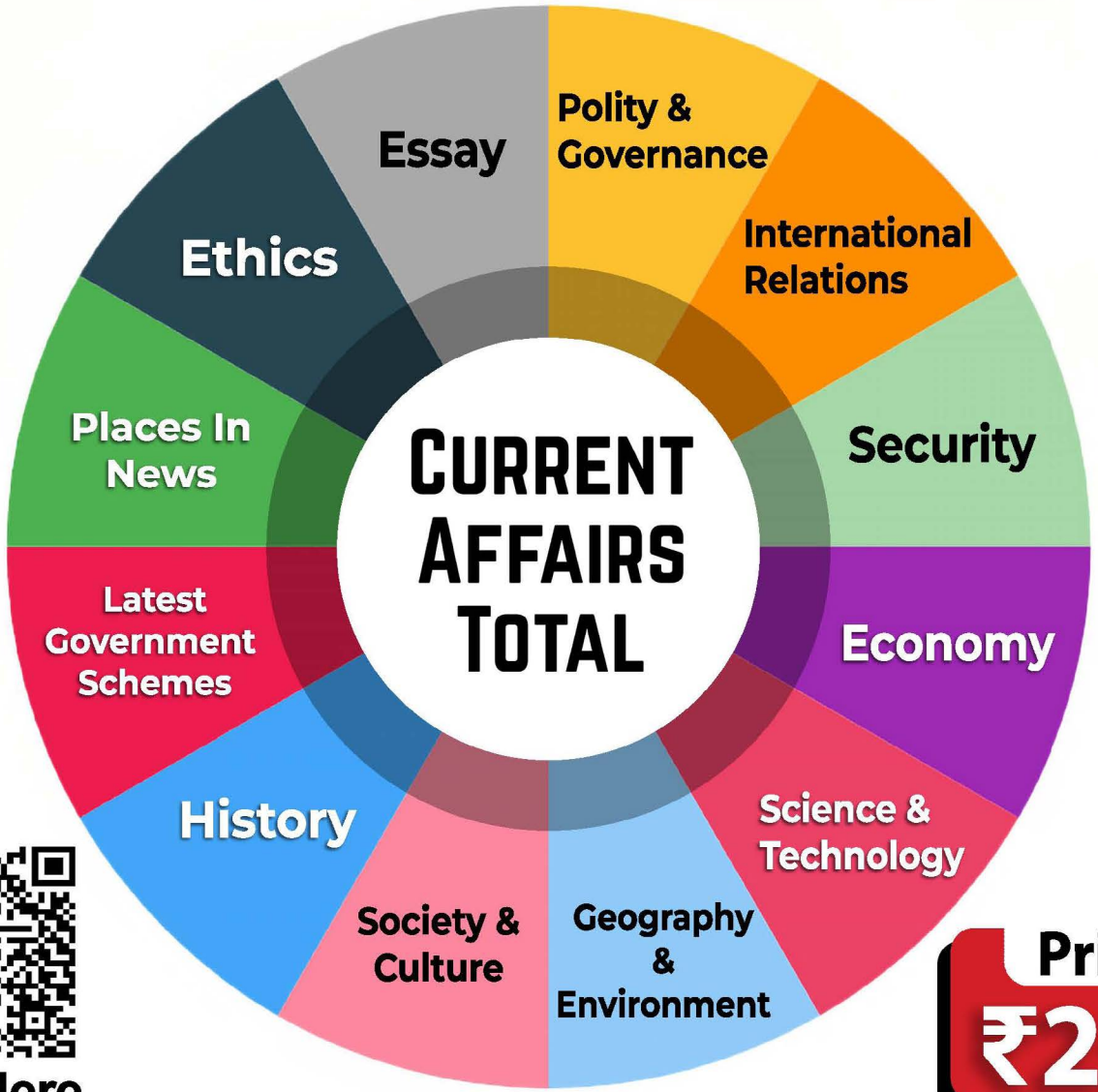

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POLITY & GOVERNANCE

1. Need for Digital Constitutionalism

Context

The **central government withdrew its directive** requiring mandatory installation of the **Sanchar Saathi** app after widespread concerns regarding **privacy, consent, surveillance, and unlimited data access**. The rollback occurred within **48 hours**, highlighting rising concerns over **state power**, **data protection**, and the need for **digital constitutionalism** in India.

What is Digital Constitutionalism?

1. **Digital constitutionalism** refers to the application of **constitutional values** (such as **liberty**, **privacy**, **dignity**, **equality**, **accountability**, and **rule of law**) to digital technologies, platforms, and government data systems.
2. It ensures that digital tools like **AI, biometric surveillance, facial recognition, digital ID systems, and large data platforms** protect citizens' rights rather than restrict them.
3. **Example:** A system like **Aadhaar-based verification or facial recognition in public spaces** must ensure **voluntary consent, transparency, limited purpose use, and independent oversight**.
4. Without such safeguards, technology can be misused for **mass surveillance** or **denial of services**, violating **Article 21 (Right to Privacy and Dignity)**.

Why Does Digital Constitutionalism Matter?

1. **Digital systems now affect everyday life:** Digital tools decide access to **welfare benefits**, **KYC verification**, **education**, **job opportunities**, and **healthcare**. Without constitutional safeguards, citizens become **passive data subjects** rather than active rights-holders.
2. **Growing concentration of power:** A few **tech companies**, **state agencies**, and **algorithm designers** control vast amounts of personal data and decision-making power, leading to **imbalances between citizens and institutions**.
3. **Invisible and continuous surveillance:** Modern surveillance through **metadata**, **location tracking**, **biometric data** and **predictive analytics** is silent and constant, creating **fear of being watched** and pushing people towards **self-censorship**.
4. **Impact on democratic freedoms:** Fear of tracking and profiling restricts **free speech**, **dissent**, and **participation**, weakening democratic spaces and creating a culture of **silence and conformity**.

How Constitutional Rights Are Being Challenged due to Lack of Digital Constitutionalism?

1. **Weak Protection of Right to Privacy (Article 21):** The **Digital Personal Data Protection Act, 2023** provides **broad exemptions** to the government and lacks **independent oversight**, reducing citizens' control over personal information.
2. **Meaningless Consent:** Consent has turned into **forced or click-through approval**, not a **free and informed choice**, reducing user autonomy over data.
3. **Expansion of Surveillance without Legal Framework:** Tools like **facial recognition**, **CCTV networks**, and **biometric scanners** operate **without dedicated surveillance laws**, **judicial warrants**, or **transparency**, increasing the risk of misuse.
4. **Algorithmic Governance without Accountability:** Automated systems can decide **who receives welfare**, **who is profiled by police**, or **whose content gets removed**, but do not provide explanations or appeals, violating principles of **natural justice**.
5. **Discrimination through Biased Technology:** Research shows facial recognition is **less accurate for women and minority groups**, leading to **wrongful identification, exclusion or denial of benefits**, contradicting **equality and non-arbitrariness**.

Implications

1. **Chilling Effect on Free Speech:** People avoid expressing opinions when they fear digital tracking, weakening democratic debate.

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2. **Exclusion from Welfare and Public Services:** Algorithmic errors have prevented many genuine beneficiaries from receiving **ration, pensions, or healthcare**.
3. **Transformation into a Surveillance State:** Continuous monitoring can shift governance from **public accountability** to **control and monitoring**.
4. **Loss of Autonomy and Human Dignity:** Users lose control over identity, data, and decision-making processes.
5. **Erosion of Trust in Governance:** Lack of transparency and remedy mechanisms creates **public distrust** in digital initiatives.

Challenges and Way Forward

Challenges	Way Forward
Absence of a **comprehensive surveillance law** and weak oversight	Enact a **surveillance regulation law** with judicial warrants, transparency reports, strict limits on data access
Government exemptions in DPDP Act and weak data protection	Create **independent Digital Rights Commission** and remove broad exemptions
Opaque algorithms and biased AI decisions	Mandate regular **algorithm audits, bias testing**, and **right to explanation and appeal**
Lack of public awareness and ability to exercise rights	Promote **digital literacy** so citizens understand rights and question misuse
No framework to ensure **proportionality and necessity**	Use **Puttaswamy principles** to evaluate whether digital actions are legally justified

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2. SIM Binding Directive for Messaging Platforms

Context

The **Department of Telecommunications (DoT)** has directed messaging platforms such as **WhatsApp, Telegram, Signal, Snapchat, ShareChat** and others to **mandatorily link user accounts to the SIM card** used during registration, a process called **SIM binding**. Users cannot access these services without the registered SIM in the device, and **web versions will log out every six hours**, raising concerns about **privacy**, **usability**, and **access across multiple devices and during international travel**.

What is SIM Binding?

1. **SIM binding** means continuously linking a user's messaging application to the **SIM card** used during registration.
2. If the registered SIM is removed, switched, deactivated, or replaced, the user will **lose access** to the messaging application.
3. At present, platforms verify users through a **one-time password (OTP)** at registration, after which the application continues to work even without the SIM.
4. Under the new rule, apps will have to access **IMSI (International Mobile Subscriber Identity)** to verify the SIM continuously.

Why is SIM Binding Introduced?

The directive aims to **prevent cyber fraud and scams** where criminals:

1. Use apps like WhatsApp remotely without a SIM in the device,
2. Access accounts from outside India,
3. Use SIM cards obtained illegally or through **forged or mule identities**.

The government expects **greater traceability** and **accountability** for digital communication platforms.

What the Directive Requires?

1. Messaging platforms must ensure **SIM-linked continuous access** to their services within **90 days**.
2. **Web portals** like WhatsApp Web must **log out automatically every six hours**.
3. Platforms must send a **compliance report** within **four months**.
4. The directive draws power from the **Telecommunication Cybersecurity Amendment Rules, 2025**.
5. The rule introduces the concept of **TIUE (Telecommunication Identifier User Entity)**, meaning any entity that uses telecom identifiers such as mobile numbers to identify its users.

Implications of the SIM Binding Rule

1. **Accountability and traceability** in cybercrime cases may improve.
2. May reduce **identity misuse**, **hacking**, and **impersonation fraud**.
3. Platforms like WhatsApp (with 500+ million users in India) must **re-engineer systems** specifically for Indian regulation.
4. There may be a **major impact on working professionals** who depend on WhatsApp Web for productivity.

Concerns and Challenges Raised

1. Users travelling abroad may **lose access** if they switch to a foreign SIM card.
2. Users with **multiple devices** (phone + laptop + iPad) may face **disruptions**.
3. **Privacy issues** arise as platforms must access **IMSI** and link accounts more tightly to telecom identity.
4. People using services for work may face **friction**, as auto-logout interrupts workflow.
5. Cybercriminals may still bypass rules using **fake KYC SIMs**, raising questions about effectiveness.
6. Lack of clarity exists regarding **SIM upgrades (4G to 5G)**, **lost SIM**, **device change**, or **damaged SIM replacement**.

Challenges and Way Forward

Challenges	Way Forward
Disruption for travellers when switching to foreign SIM cards	Provide **temporary exceptions** or **secure alternative verification** options
Multiple-device use becomes difficult due to frequent logouts	Increase logout window and improve **secure multi-device authentication**
Privacy concerns due to continuous tracking through IMSI	Ensure **strict data protection rules**, transparency, and independent audits
Unclear process during SIM replacement or upgrade	Formulate **clear guidelines** for SIM change, damaged SIM, or device switch
Cyber fraud may continue due to fake SIM cards	Strengthen **KYC verification and SIM issuing process**, crack down on mule identities
Technical redesign required for global platforms	Provide **transition support** and allow **phased implementation**
Friction in professional use due to 6-hour logout limit	Extend logout time and create **work mode** flexibility features

3. Involuntary Narco Test declared Unconstitutional

Context

The **Supreme Court** has **overturned a Patna High Court decision** that had allowed an involuntary narco test in the case ***Amlesh Kumar v. State of Bihar (2025).***

What does Narco Analysis Means in Criminal Investigations?

1. A narco test involves giving a person **sedative drugs** like Sodium Pentothal, a barbiturate, **to lower their inhibitions** and **increase** the **chances of revealing information**.
2. This method works in a manner similar to **polygraph examinations and brain-mapping techniques**, aiming to uncover hidden details **by weakening conscious control**.
3. Even though the procedure is **not physically violent**, it **interferes with a person's mental autonomy** and has long been questioned on constitutional grounds.

Why Do Narco Tests Raise Constitutional Issues?

1. **Right Against Self-Incrimination - Article 20(3)**
   a. Article 20(3) protects an accused person from being forced to provide evidence against themselves.
   b. An involuntary narco test violates this right because it compels the person to speak under the influence of drugs, overriding their free will.
   c. The Supreme Court reaffirmed that without voluntary, informed consent, any information obtained through narco analysis cannot be admitted as evidence.
2. **Personal Liberty and Privacy - Article 21**
   a. Article 21 includes the right to life, personal liberty, bodily autonomy, and mental privacy.
   b. The Court held that forcing someone to undergo a narco test infringes upon these rights.

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c. Any investigative method must meet the standard of being fair, just, and reasonable - the "**procedure established by law**."

d. The Court also connected this principle to the "**Golden Triangle**" of **Articles 14, 19, and 21**, as articulated in ***Maneka Gandhi v. Union of India (1978)***, which collectively safeguard constitutional freedoms.

3. **Key Judicial Precedents on Narco Tests**

a. **Selvi v. State of Karnataka (2010)**

i. This landmark ruling banned the involuntary use of narco analysis, polygraph tests, and brain-mapping. It required that:

1. Consent must be voluntary, informed, and recorded before a magistrate.
2. Strict medical and legal safeguards must be followed.
3. **Test results cannot be treated as independent evidence** and must be supported by other material.

ii. The Supreme Court struck down the Patna High Court order because it violated these established principles.

b. **Other Consistent Judgments**

i. Manoj Kumar Saini v. State of MP (2023)

ii. Vinobhai v. State of Kerala (2025)

iii. Both decisions reiterated that narco test results cannot prove guilt on their own; they can only assist investigations and must always be backed by separate evidence.

4. **Consent and Ethical Standards in Criminal Justice**

a. The Court referred to philosophical ideas of autonomy, especially Kantian ethics, which state that an action is ethical only when done with consent. Forced narco testing violates:

i. Human dignity
ii. Bodily integrity
iii. Principles of natural justice

b. Thus, ethical reasoning supports the constitutional prohibition on involuntary narco tests.

Significance of Informed Consent

1. The Supreme Court emphasized that narco tests can be conducted only when the accused voluntarily requests or agrees to it.
2. Even during the defence stage, where Section 253 of the Bharatiya Nyaya Sanhita (BNSS) may allow such testing, the accused does not have an absolute right to demand it.

Implications

1. **Promoting Rights-Based Policing:** The judgment strengthens procedural fairness and makes it clear that **investigative convenience cannot override fundamental rights**.
2. **Balancing Victims' and Accused Persons' Rights:** While investigative agencies may seek faster methods to solve cases, the judiciary insists that constitutional morality must remain the guiding principle.
3. **Ensuring Judicial Consistency:** By relying on *Selvi (2010)* and later rulings, the Supreme Court reinforces continuity and predictability in criminal law - essential for protecting civil liberties and maintaining legal integrity.

Challenges & Way Forward

Challenges	Way Forward
Involuntary narco tests violate Article 20(3) and Article 21 protections	Ensure strict adherence to consent-based procedures and constitutional safeguards
Misuse of narco tests as investigative shortcuts	Strengthen training in scientific, rights-based investigation methods
Lack of clarity on evidentiary value of narco results	Reinforce judicial guidelines that narco findings require corroboration
Pressure on courts due to misuse of intrusive techniques	Promote alternative, non-coercive investigative tools and forensic methods
Ethical concerns: autonomy, dignity, bodily integrity	Institutionalise ethical review mechanisms and mandatory medical-legal oversight
Inconsistent application of Selvi (2010) guidelines	Standardise protocols across states and ensure accountability for violations

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4. Right to Health in India

Context

The **National Convention on Health Rights** (Dec 2025) is being held in New Delhi to discuss India's major **public health challenges**. The event focuses on strengthening the right to health, regulating privatisation, improving public spending, ensuring equity, and learning from the COVID-19 experience.

What is the National Convention on Health Rights?

1. A national platform bringing together **health professionals, activists, and community leaders** from over 20 States.
2. Organised by **Jan Swasthya Abhiyan (People's Health Movement - India)**, which has worked for 25 years on pro-people health policies.
3. Aims to address issues such as **privatisation, weak regulation, inequity, and high out-of-pocket expenditure**.
4. Focuses on **universal health care**, patient rights, and strengthening public health systems.
5. Seeks to shape an agenda where **health is recognised as a basic human right**.

Why is the right to health important?

1. **Over 80 crore Indians** depend on public health services, making public system strengthening essential.
2. India has **low public spending** on health (2% of Union Budget), leading to poor infrastructure and high financial burden.
3. Rapid privatisation without proper regulation increases **unaffordable care**, overcharging, and exploitation.
4. Frontline health workers face **low wages and insecure jobs**, affecting system performance.
5. Persistent social discrimination denies equal access to **marginalised groups** - Dalits, Adivasis, minorities, LGBTQ+ persons, and persons with disabilities.

How is this convention addressing these issues?

1. Civil society is advocating for **stronger laws**, better regulation of private hospitals, and enforcement of patient rights.
2. The convention proposes **rate standardisation**, transparent pricing, and grievance redress systems.
3. Discussions emphasise **public financing models** to reduce out-of-pocket expenses and reform insurance-based schemes.
4. Sessions on medicines highlight measures such as **removal of GST**, regulation of irrational drugs, and boosting public-sector manufacturing.
5. Community-led models and decentralised planning are being promoted for **revitalising public health systems**.

Important Aspects

1. **Privatisation Trend:** Expansion of PPPs and handover of medical colleges to private entities may weaken public health capacity.
2. **Regulatory Gaps:** The Clinical Establishments Act (2010) is poorly implemented, allowing overuse of C-sections and unethical pricing.
3. **Financial Vulnerability:** Out-of-pocket expenditure remains high due to medicines being outside price control.
4. **Health Workforce Issues:** Lack of social security, low salaries, and poor working conditions reduce system resilience.
5. **Social Determinants:** Food security, pollution, and climate change directly influence health outcomes.

Implications

1. Without stronger public systems, India risks **deepening health inequity**.
2. Excessive privatisation may increase **commercialisation of essential services**, undermining affordability.
3. Poor regulation reduces **patient safety and trust** in health systems.
4. Strengthened public investment can help India progress toward **Universal Health Coverage**.
5. Addressing social justice issues supports an **inclusive, rights-based health system**.

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Challenges and Way Forward

Challenges	Way Forward
Low public health spending and reliance on insurance schemes.	Increase government expenditure and prioritise primary healthcare.
Unregulated private sector and frequent overcharging.	Enforce Clinical Establishments Act, standardise rates, ensure transparency.
High cost of medicines and irrational drug practices.	Expand price control, remove GST on essential drugs, boost public manufacturing.
Poor working conditions for health workers.	Ensure permanent jobs, better wages, social security, and safe workplaces.
Social discrimination affecting access.	Embed inclusion policies, empower marginalised groups, decentralised community monitoring.
Weak grievance redress and patient rights mechanisms.	Strengthen patient rights charter, accessible complaint systems, and legal accountability.

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5. Judicial Overreach and Free Speech

Context

1. The Supreme Court's proceedings in **Ranveer Allahbadia vs Union of India** and connected cases raised concerns about the **judiciary's role** in shaping **online speech regulation.**
2. These observations triggered a debate on whether **judicial interventions** themselves **could endanger** the constitutionally guaranteed **freedom of speech.**

Freedom of speech in the constitutional framework

1. **Article 19(1)(a)** guarantees freedom of speech and expression.
2. **Article 19(2)** permits restrictions only on explicitly listed grounds such as sovereignty, security of the State, public order, decency, morality, defamation, and incitement to an offence.
3. The Supreme Court's constitutional role is to **review the validity of restrictions**, not to design or advocate new regulatory frameworks.

Existing legal and regulatory framework

1. **IT Act, 2000**:
   a. Section 67 - obscenity
   b. Sections 66, 66E - cyber offences and privacy violations
   c. Section 66F - cyber terrorism
2. **Bharatiya Nyaya Sanhita (BNS)**: Sections 294, 295, 296 penalise obscenity-related offences.
3. **IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**:
   a. Provide Central government oversight.
   b. Impose prior restraint through vague standards such as "due caution and discretion" in matters involving religion or beliefs.
4. These laws already regulate online speech, though many are criticised as excessive or vague.

Why the Supreme Court's Approach Raises Constitutional Concerns

1. **Judicial expansion of case scope**
   a. The original case concerned challenges to FIRs alleging obscene content.
   b. On March 3, 2025, the Court expanded the scope to examine broader online content regulation, despite this not being the subject matter of the petition.
2. **Separation of powers**
   a. Identifying regulatory needs lies within the **legislative domain**.
   b. In *Common Cause v. Union of India* (2008), the Court cautioned against courts solving policy problems beyond their institutional competence.
3. **Risk of prior restraint**
   a. Judicial endorsement of stricter regulation may legitimize **pre-censorship**, historically viewed as constitutionally suspect.
4. **Institutional limitations**
   a. Courts lack technical expertise in evolving areas such as digital media regulation.

Judicial precedents on restraint and free speech

1. **Sahara India v. SEBI (2012)**:
   a. A Constitution Bench held that pre-censorship must be avoided.
   b. Postponement orders are permissible only as a last resort and must meet a high standard of reasonableness.
2. **Kaushal Kishor (2023)**:
   a. Held that the grounds under Article 19(2) are exhaustive.
   b. No additional restrictions can be imposed under the guise of competing fundamental rights.
3. **Adarsh Co-operative Housing Society (2018)**:
   a. The Court refused to direct filmmakers to add disclaimers, recognising that such decisions lie with statutory bodies, not courts.

Constitutional role of the Court

1. Constituent Assembly Debates (December 1, 1948) clarify that the Supreme Court is the **final arbiter of reasonableness**, not a law-maker.
2. Constitutional propriety requires judicial abstention from proposing or deliberating on new restrictions affecting citizens' freedoms.

Comparative Global Practice

1. **European Union (Digital Services Act, 2022)**: Focus on content removal mechanisms.
2. **Germany (Network Enforcement Act, 2017)**: Ensures swift takedown of unlawful content without prior censorship.
3. **United Kingdom (Online Safety Act, 2023)** and **Australia (Online Safety Act, 2021)**:
   a. Emphasise post-publication accountability and fines for non-compliance.
4. **Authoritarian regimes (China, Russia)**:
   a. Use surveillance and pre-censorship.
5. Academic research warns that courts can be co-opted in democratic erosion through "abusive judicial review."

Implications

1. **Threat to free speech**: Judicial advocacy for stringent laws may legitimise overbroad restrictions.
2. **Erosion of separation of powers**: Courts risk entering legislative and policy-making domains.
3. **Normalisation of prior restraint**: Could chill speech and dissent.
4. **Democratic backsliding risk**: Excessive regulation may align India with illiberal global practices.
5. **Citizen trust deficit**: Perception of shrinking freedoms undermines constitutional faith.

Challenges and Way Forward

Challenges	Way Forward
The judiciary may cross into areas meant for law-making and policy design.	Courts should exercise self-restraint and limit their role to reviewing the constitutionality of laws made by the legislature.
Vague and broadly worded regulations can restrict speech arbitrarily.	Any regulation affecting speech should be narrowly drafted, clearly defined, and proportionate to the harm addressed.
Increasing reliance on prior restraint can chill free expression.	Post-publication remedies should be preferred, and pre-censorship should be used only in the rarest circumstances.
Convergence between judicial suggestions and executive regulation may reduce democratic oversight.	Parliament should remain the primary forum for debating and framing speech-related laws, with adequate public consultation.
Balancing digital harms with free speech remains complex and contested.	Restrictions on speech must strictly follow the grounds listed in Article 19(2) and be justified through clear evidence of necessity.

6. Regulating Hate Speech in India

Context

1. Karnataka has become **the first state in India** to introduce a dedicated law to prevent hate speech: *The Karnataka Hate Speech and Hate Crimes (Prevention) Bill, 2025*.
2. The Bill fills a longstanding legal gap and brings new ideas like **collective liability** for organisations.

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Why Hate Speech Law Is Needed?

1. Hate speech cases are rising across India, especially on digital platforms.
2. Current legal provisions only address "**public disorder**" or "**religious insult**", not hate speech as a standalone offence.
3. **Low conviction rates** show weak enforcement and lack of clarity.
4. The Supreme Court has repeatedly urged governments to act but implementation has remained weak.

Existing Legal Framework

1. **Bharatiya Nyaya Sanhita (Earlier IPC Sections)**
   a. Current hate-speech-related offences appear under provisions meant mainly to protect *public order*, not specific harms of hate speech.
   b. **Section 196 (Earlier IPC 153A):** Punishes promoting enmity, disturbing harmony.
      i. Conviction rate extremely low: **20.2% in 2020**.
   c. **Section 299 (Earlier IPC 295A):** Targets deliberate, malicious acts insulting religion.
   d. **Section 353 (New provision):** Punishes statements inciting offences against the State or community.
   e. All these offences are **cognisable** and carry up to 3 years' imprisonment.
2. **Online Hate Speech**
   a. **Section 66A (IT Act)** was once used heavily but struck down by SC (2015) for vagueness.
   b. No clear substitute exists today.
3. **Supreme Court's Interventions**
   a. **2022-23:** Directed states to take *suo motu* action on hate speech → poor implementation.
   b. **2023:** Acknowledged difficulty in defining hate speech; enforcement is the main challenge.
   c. **2024:** Court stated it cannot monitor every case; directed states to follow *Tehseen Poonawalla* guidelines (mob violence nodal officers).

Attempts to Define Hate Speech Before Karnataka Bill

1. **Law Commission (2017) - 267th Report**
   a. Proposed inserting:
      i. **Section 153C:** criminalising incitement to hatred
      ii. **Section 505A:** targeting speech provoking violence
2. **Private Member's Bill (2022)**
   a. Proposed defining:
      i. **Hate speech**: any expression promoting discrimination/hostility/violence
      ii. **Hate crime**: offence motivated by prejudice (religion, caste, sexual orientation, etc.)

Not passed, but shaped current discourse.

Karnataka Hate Speech and Hate Crimes (Prevention) Bill, 2025

Key Features:

1. **Defines hate speech clearly**
   a. Any expression causing *injury or disharmony* against a person or group based on: *religion, caste, race, gender, sexual orientation, place of birth, disability*.
2. **Penalties**
   a. **2 to 10 years imprisonment** → highest punishment ever proposed for hate speech.
3. **Collective Liability**
   a. If hate speech is linked to an organisation: persons in charge can be held accountable.
4. **Digital Regulation**
   a. State empowered to block/remove online hate content.
5. **Addresses groups previously ignored**
   a. Includes gender & sexual orientation - missing in IPC/BNS.

Implications

Positive

1. Creates a **clear, enforceable definition** of hate speech.
2. Stronger deterrence through **higher penalties** and **organisation-level accountability**.
3. Helps streamline policing and prosecution.
4. Protects vulnerable groups (LGBTQIA+, disabled individuals).

Concerns

1. Vague terms like "injury" or "disharmony" may risk misuse.
2. Collective liability may be challenged legally.
3. Overbroad powers to block online content may raise questions on **free speech**.
4. Coordination needed between state law and central laws like the IT Act.

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Challenges and Way Forward

Challenges	Way Forward
No national definition of hate speech	Centre may consider a **uniform legal framework**
Low conviction rates under existing laws	**Clear procedures**, training of police & prosecutors
Risk of **political misuse**	**Independent oversight mechanism**
Online hate content **spreads rapidly**	Coordination with intermediaries; **transparent takedown process**
Overlap between BNS & state law	Harmonise definitions; **avoid legal contradictions**

7. Migration, Citizenship and Electoral Democracy

Context

1. The **Election Commission of India (ECI)** has initiated a **Special Intensive Revision (SIR)** of electoral rolls, starting with Bihar.
2. The move is justified on the grounds of **rapid migration and duplicate voter registrations**.
3. Similar debates are unfolding globally, especially in the **United States**, where voter lists, citizenship proof, and migration have become politically contentious.
4. These developments highlight the growing tension between **citizenship, mobility, voting rights, and democracy**.

Citizenship and the Assumption of Territorial Residence

1. Citizenship is traditionally linked to **residence within a clearly defined territorial boundary**, where individuals are expected to live and participate politically.
2. **Voting rights, welfare entitlements, and political representation** are structured around the assumption that citizens remain settled in one place.
3. Migration, whether internal or international, **disrupts this assumption** by **separating physical residence from legal and political identity**.

Why Migration Creates Governance and Electoral Challenges

1. Migrants often move for **education, employment, marriage**, or **safety**, but electoral systems struggle to keep pace with these movements.
2. Some individuals remain registered as voters in their place of origin while residing elsewhere, increasing the possibility of duplicate entries.
3. Others lose the practical ability to vote because voting rights are tied to a fixed polling booth based on ordinary residence.
4. These administrative gaps generate public anxiety about electoral integrity and political manipulation.

Global Trends in Migration

1. The proportion of migrants in the global population has remained relatively stable over decades, but the absolute number of migrants has increased sharply.
2. The number of people living outside their country of birth rose from around **154 million in 1990** to **over 300 million by 2024**.
3. This growth has occurred faster than overall population growth, intensifying political and social pressures in host countries.

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Migration and Politics in Developed Democracies

1. Many developed countries have witnessed a significant rise in foreign-born populations, reshaping electoral politics.
2. In the United States, about **14-15%** of the population is foreign-born, while the United Kingdom has seen this share rise to around 16%.
3. Countries like **Canada and Australia** have even higher proportions, with Australia having nearly one-third of its population born overseas.
4. Immigration has become one of the top electoral issues in most developed democracies, contributing to the rise of **nativist and populist political movements**.

Temporary Labour and Restricted Political Rights

1. Wealthy countries increasingly seek migrant labour without granting full political membership.
2. Migrants are often encouraged to work temporarily and leave rather than settle permanently and claim citizenship.

3. Examples include **H-1B workers** in the **United States**, **migrant workers in Gulf Cooperation Council countries**, and **foreign labour regimes in Singapore**.
4. These models create a class of workers who contribute economically but lack political voice.

India's Migration Landscape

1. India **sends migrants abroad** and experiences **large-scale internal migration** as well.
2. There are approximately **35.4 million Overseas Indians**, of whom **15.8 million are Indian citizens** and **19.6 million are Persons of Indian Origin**.
3. Internal migration within India is extensive, with migrants accounting for about 31% of the population in 2001 and rising to **38% by 2011**.
4. The majority of internal migrants are **women** who migrate **due to marriage**, while **male migration** is largely driven by **economic reasons** and involves longer distances.

Electoral Implications of Internal Migration

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1. Voting rights in India are linked to the place where a citizen is **ordinarily resident**, which creates **difficulties for migrant populations**.
2. The **Special Intensive Revision** exercise not only determines voter eligibility but also decides the geographical location where a person can vote.
3. **Migrant-receiving States** such as **Maharashtra and Kerala** gain political weight, while **migrant-sending States** like **Bihar** may lose influence.
4. These shifts have **long-term implications for national politics**, particularly during delimitation.

Urban Transformation and Identity Politics

1. **Migration** has **altered the demographic composition** of major cities, **affecting traditional identity-based politics**.
2. In **Mumbai**, for example, **Marathi speakers** now form **less than 40%** of the population, while **Hindi speakers** constitute **around 30%.**
3. As a result, **nativist political movements** have **weakened**, and political parties increasingly field candidates from migrant communities.
4. Electoral strategies are adapting to reflect changing population realities.

Overseas Indians and Voting Rights

1. Indian citizens living abroad are **allowed to register as voters** under the **Representation of the People (Amendment) Act, 2010**.
2. However, they must be **physically present in India** to exercise their vote, which limits effective participation.
3. A **petition before the Supreme Court** argues for **remote voting**, stating that the current system grants a right without meaningful access.
4. The issue raises **broader questions about political equality and the nature of citizenship** in a mobile world.

State Policies and Domicile Laws

1. Government policies have also shaped internal migration patterns, including changes to domicile rules.
2. In **Jammu and Kashmir**, **domicile rules were relaxed in 2020**, allowing non-locals to gain residency rights after meeting certain criteria.
3. Critics argue that such changes may **alter demographic and political balances**, while the government maintains they promote development and integration.
4. Domicile laws in other States similarly restrict access to education and jobs, **reinforcing regional identities**.

Migration, Culture and Social Change

1. Migrants carry **languages, beliefs, customs,** and **political attitudes** with them, **influencing host societies**.
2. Historical migration played a key role in spreading religious practices, shaping languages, and expanding cultural boundaries.
3. Contemporary migration continues this process, **reshaping national identity** and **political behaviour**.
4. Cultural practices, festivals, and linguistic patterns in many countries reflect these **migratory influences**.

Birthright Citizenship Under Strain

1. Migration has **challenged the idea of birthright citizenship** in countries where it was once unquestioned.
2. In the United States, attempts have been made to reinterpret the 14th Amendment to restrict citizenship by birth.

3. India has also amended its citizenship laws to **deny citizenship by birth to children of illegal immigrants.**
4. These changes signal a shift towards more **conditional and regulated forms of citizenship**.

Future Implications for India

1. **Census 2027** is expected to **capture the full scale of migration** after nearly **two decades**, revealing its demographic and political impact.
2. Delimitation will **redistribute parliamentary seats** based on population changes, reshaping political power across States.
3. **Electoral roll revisions, migration patterns, and citizenship rules** will collectively **redefine democratic participation** in India.

Challenges and Way Forward

Challenges	Way Forward
Duplicate and inaccurate voter rolls	Use **technology** while ensuring due process and transparency
Migrants losing effective voting rights	Enable **remote or absentee voting** with safeguards
Politicisation of migration	**Base policies** on data, not populist narratives
Federal tensions over representation	Ensure **fair delimitation** respecting demographic realities
Exclusion of vulnerable groups	Balance **electoral integrity** with inclusive democracy

8. Ethnographic Study of Tribes

Context

1. Five years after commissioning an ethnographic study to classify **268 Denotified, Nomadic and Semi-Nomadic Tribes (DNT/NT/SNT)**, the Union Government has stated in Parliament that **there is no proposal** to classify these groups afresh into **SC/ST/OBC categories**.
2. This is despite the **Anthropological Survey of India (AnSI)** submitting a detailed report in 2023 recommending **fresh or revised classification** for many communities.

What are DNTs, NTs, and SNTs?

These tribes remain among India's **most marginalised** due to lack of settled livelihoods, absence of documentation, and difficulty accessing welfare schemes.

1. **Denotified Tribes (DNTs):** Communities once notified as "**criminal tribes**" under British laws (Criminal Tribes Act, 1871) and denotified in 1952.
2. **Nomadic Tribes (NTs):** Communities with **traditional occupations** involving **mobility** - pastoralists, performers, artisans, traders.
3. **Semi-Nomadic Tribes (SNTs):** Groups that live **partially settled lives** but still **migrate seasonally**.

Why Was the Study Launched?

1. Multiple commissions - including **Idate Commission (2017)** - stressed that DNTs/NTs/SNTs were never properly classified under **SC, ST, OBC**, leading to:
   a. Lack of caste certificates
   b. Exclusion from reservation benefits
   c. High vulnerability and poverty
2. In 2019, the Government set up a **Development Welfare Board for DNT/NT/SNT (DWBDNC)** and tasked **NITI Aayog** to oversee fresh classification, with **AnSI** conducting the ethnographic study.

What Did the AnSI Study Find?

1. Studied **268 communities** across India.
2. Recommended:
   a. Fresh classification: 85 communities
   b. Reclassification: 9 communities
   c. Many others found **partially classified**, meaning only some states recognised them.
3. Urged clarity on their status for accurate delivery of welfare benefits.

Why is the Issue Stuck Now?

1. The government told Parliament that **no proposal is under consideration** for reclassification.
2. This contradicts expectations raised after the 2019-2023 exercise.
3. Many states do not issue certificates due to unclear classification, because of which people cannot claim SC/ST/OBC benefits even if listed.

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Why Are DNT/NT/SNT Groups Demanding a Separate Category?

Civil society groups argue:

1. These communities are **socioeconomically distinct** and historically oppressed.
2. They are scattered across states → classification varies widely.
3. A **separate scheduled category** would ensure:
   a. Issuance of identity certificates
   b. Uniform access to welfare
   c. Focused policy design similar to SC/ST/OBC

Administrative Issue: SEED Scheme

1. The government claims welfare is being provided through the **SEED Scheme (Scheme for Economic Empowerment of DNTs)**.
2. But board officials acknowledge:
   a. Low uptake
   b. Major bottleneck: People lack clarity and certification of community status
   c. Without classification clarity, **SEED benefits cannot reach actual beneficiaries**

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SEED Scheme (Scheme for Economic Empowerment of DNTs)

The **SEED Scheme**, launched by the Ministry of Social Justice & Empowerment, aims to support **Denotified, Nomadic and Semi-Nomadic Tribes (DNT/NT/SNT)** who have historically been marginalised and lack access to welfare.

Key Features:

- **Free coaching** for competitive exams through empanelled institutions.
- **Financial assistance** for housing through PMAY.
- **Health insurance coverage** under Ayushman Bharat.
- **Livelihood support**, including skill development and income-generation activities.

Why is it needed?

- DNT/NT/SNT communities often do not have caste certificates, permanent settlement, or awareness about government schemes.
- SEED is designed as a **targeted welfare programme** for these groups.

Implications

1. Continued uncertainty perpetuates **exclusion and marginalisation** of DNT/NT/SNT groups.
2. Possible political and social unrest due to unfulfilled expectations.
3. Undermines **affirmative action policy**, **social justice mandates**, and **constitutional guarantees** under Articles 14, 15, 16, 46.
4. Affects implementation of welfare schemes, reservation benefits, and identity rights.

Challenges and Way Forward

Challenges	Way Forward
Lack of **clear classification** into SC/ST/OBC	Government must **publish and act upon AnSI findings** with transparent criteria
States hesitant to issue caste certificates	Create a **uniform national list** for DNT/NT/SNT with state coordination
Poor **access to welfare schemes** like SEED	**Simplify documentation**; allow self-identification verified by local bodies
Historical stigma and mobility issues	Provide **permanent ID documentation**, housing support, livelihood programmes
Variation across states in nomenclature & classification	**Standardised classification guidelines** with periodic revision
Policy inertia after major studies	Establish **statutory commission** (like NCBC/NCST) exclusively for DNT/NT/SNT communities

9. Collegium Composition and Legitimacy

Context

1. The Madras High Court Collegium in November 2025 recommended six district judges for elevation to the High Court.
2. The **State government** did not challenge the candidates' merit but sought a **legal clarification about the Collegium's constitution** after a disputed transfer and seniority notification involving Justice J. Nisha Banu.

3. The Collegium proceeded to recommend additional names without answering the State's procedural query, raising questions about the legitimacy of the recommendations and the integrity of the judicial appointments process.

The institutional framework for High Court appointments

1. **Collegium at High Court level:** The **Chief Justice of the High Court** plus the **two senior-most judges** recommend names for elevation to the High Court.
2. **Role of the State government:** The Collegium's recommendation goes to the State government which may seek clarifications or raise objections; if the Collegium reiterates, the government must follow the recommendation.
3. **Memorandum of Procedure (MoP):** The MoP describes the consultative and procedural steps for judicial appointments, reflecting the Collegium practice developed by the Supreme Court.

Key Events and Procedural Developments

1. **Justice J. Nisha Banu:** Elevated to Madras High Court on 5 October 2016; now among the seniormost judges and a sitting Madras High Court judge.
2. **Union notification (14 Oct 2025):** The Supreme Court Collegium recommended and the Union Ministry issued a transfer notification allegedly placing Justice Nisha Banu at ninth in seniority at the Kerala High Court; Justice Nisha Banu did not take that posting and remains at Madras. Reasons for the notification's seniority placement are not publicly known.
3. **State's clarificatory request (Nov 2025):** When the Madras Collegium recommended six district judges, the State government asked why a currently sitting, senior Collegium judge (Justice Nisha Banu) was not included and what legal basis justified substituting her with the next seniormost judge, Justice M.S. Ramesh. The State did not contest merit.
4. **Collegium response (or lack of it):** The Collegium moved ahead by recommending additional nine advocates to fill other vacancies without resolving the State's question about its own composition and the exclusion of a senior Collegium judge.
5. **Core legal concern:** If a Collegium is incorrectly constituted (by excluding a judge who retains administrative authority or by including a judge without jurisdiction), the validity of its recommendations may be open to challenge under Article 217 and the MoP.

Legal and Institutional Stakes

1. **Procedural legitimacy is constitutional substance:** The Collegium system is judge-made; its legitimacy depends on strict adherence to the norms (composition, records, reasons). Procedure determines who may lawfully recommend appointments.
2. **Seniority and administrative authority matter:** A seniormost judge who exercises administrative functions in the High Court is conventionally part of the Collegium; unexplained exclusion raises rule-of-law concerns.
3. **Inter-branch confidence:** The State government's right to seek clarification preserves cooperative federal checks; a refusal to clarify risks creating mistrust between the judiciary and the executive.
4. **Potential voidability of recommendations:** Recommendations produced by a body whose constitution is doubtful risk being challenged as ultra vires or procedurally invalid.
5. **Transparency and accountability deficits:** The Collegium system is often criticised for opacity; unexplained substitutions feed narratives of partiality or political influence.

Sequence and mechanics of events and possible legal trajectories

1. **Background action**
   a. The Supreme Court Collegium recommended Justice Nisha Banu's transfer; Union issued a notification changing her posting and seniority (14 Oct 2025). Justice Nisha Banu did not join the new posting and remains at Madras.
2. **Madras Collegium recommendations (9 Nov 2025)**
   a. The Collegium recommends six district judges for elevation. The State queries the exclusion of Justice Nisha Banu and inclusion of the next seniormost judge.
3. **State seeks legal clarification**
   a. The State asks for authority or Supreme Court direction validating the substitution or non-inclusion of the sitting Collegium judge. This is not a challenge to merit but to procedure.
4. **Collegium proceeds without resolving the issue**
   a. Collegium recommends nine additional advocates to fill more vacancies without publicly recording an answer to the central procedural question.

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5. **Probable next steps and legal remedies**
   a. The State can record the request and await clarification or raise the matter before the Supreme Court by way of an original petition or representation seeking directions.
   b. Affected parties (excluded judge, candidates) may approach the Supreme Court, which may be asked to adjudicate the validity of the Collegium's composition and recommendations.
   c. The Supreme Court could either provide corrective clarification, require recorded reasons, or revisit Collegium norms and MoP provisions.

Implications

1. **Institutional legitimacy at risk:** Repeated procedural indeterminacy can erode public confidence in judicial appointments.
2. **Pending and future appointments jeopardised:** If recommendations are legally challenged, vacancies will remain unfilled, affecting court functioning and access to justice.
3. **Judicial-Executive friction:** Non-responsiveness to valid governmental queries can aggravate tensions between State governments and judiciary.
4. **Precedent for opacity or arbitrariness:** Lack of recorded reasons for procedural choices invites allegations of nepotism or ideological capture.
5. **Momentum for systemic reform:** The controversy could catalyse demands for codified, transparent rules on Collegium composition, publication of reasons, and mandatory disclosures.

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Challenges and Way Forward

Challenges	Way Forward
Unclear status and seniority changes (transfer notification without public justification)	Collegiums and the Supreme Court should issue clear, reasoned communications on transfers and seniority; ministries should publish relevant orders with explanatory notes.
Collegium ignoring procedural queries from State government	Collegium must respond formally to clarificatory queries before making further recommendations; establish a fixed timeline for clarifications.
Opacity in Collegium decision-making	Publish anonymised minutes or recorded reasons for recommendations consistent with confidentiality needs; introduce mandatory disclosure norms in MoP.
Risk of void or challengeable recommendations	Before forwarding, certify the Collegium's constitution and jurisdiction in the record; seek contemporaneous concurrence or resolve pending composition questions.
Calls for systemic reform but judicial sensitivity to external interference	The Supreme Court should revisit Collegium jurisprudence and update the MoP (or issue binding internal rules) to clarify composition, recusal, seniority rules and publication of reasons while preserving judicial independence.

10. Child Trafficking and Victim Testimony

Context

1. The Supreme Court of India delivered an important judgment in **December 2025**, dealing with **child trafficking and commercial sexual exploitation**.
2. The case arose from the trafficking of a **minor girl in Bengaluru**, who was forced into sexual exploitation by an organised trafficking gang.
3. The judgment laid down **clear guidelines for courts** on how to appreciate the evidence of trafficked children.

Nature of Child Trafficking in India

1. Child trafficking in India is a **serious and organised crime** that continues despite the existence of protective laws.
2. Trafficking networks operate through **multiple verticals**, such as:
   a. Recruitment of children
   b. Transportation across regions
   c. Harbouring in hidden locations
   d. Sexual or commercial exploitation
3. These activities are **intentionally fragmented and concealed** to escape detection and confuse victims and law enforcement agencies.

Key Legal Issue Before the Court

1. The main issue was whether **minor inconsistencies** in the testimony of a trafficked child could be used to **discredit her evidence**.
2. Defence arguments often claim that:
   a. The victim did not protest immediately
   b. The victim could not describe events clearly
   c. The victim's behaviour did not match "ordinary human conduct"

3. The Supreme Court rejected these arguments in the context of child trafficking.

Supreme Court's Key Guidelines on Evidence

1. The Court held that **the sole testimony of a trafficked child can be sufficient for conviction**, if it is credible and trustworthy.
2. Courts must **not treat a trafficked child as an accomplice** in the crime.
3. A trafficked child must be treated as an **"injured witness"**, whose testimony deserves **due regard and credibility**.
4. Minor contradictions or lack of precision in narration **do not undermine the truthfulness** of the victim's account.

Understanding Victim Behaviour and Trauma

1. Trafficked children are often under **fear, coercion, isolation, and psychological control**.
2. Immediate resistance or protest is not always possible due to:
   a. Threats by traffickers
   b. Physical confinement
   c. Emotional manipulation
3. Courts must not discard a victim's testimony merely because she did not behave in a manner expected of an "ordinary person".

Socio-Economic and Cultural Vulnerability

1. Many trafficked children belong to **marginalised, poor, or socially backward communities**.
2. Their vulnerability affects:
   a. Their ability to understand legal processes
   b. Their confidence in narrating events clearly
3. Judicial evaluation of evidence must therefore be guided by **sensitivity, realism, and social context**.

Secondary Victimisation in the Justice System

1. Recounting experiences of sexual exploitation is itself **deeply traumatic** for victims.
2. Repeated questioning, disbelief, and aggressive cross-examination can cause **secondary victimisation**.
3. Courts and law enforcement agencies must ensure that victims are **not re-traumatised** during legal proceedings.

Constitutional and Legal Significance

1. The Court described child trafficking and sexual exploitation as crimes that violate:
   a. **Human dignity**
   b. **Bodily integrity**
2. These values are protected under **Article 21 of the Constitution of India**.
3. The State has a **constitutional obligation to protect children** from exploitation.
4. Failure to do so was described as **"moral and material abandonment"** of the child.

Outcome of the Case

1. The Supreme Court upheld the conviction of the traffickers under the **Immoral Traffic (Prevention) Act, 1956**.
2. The Court dismissed attempts to discredit the victim's testimony based on minor inconsistencies.
3. The judgment strengthened **victim-centric justice** in trafficking cases.

Broader Implications of the Judgment

1. The ruling reinforces a **child-sensitive approach** in criminal trials.
2. It discourages technical and procedural attacks on victim testimony.
3. It strengthens India's legal framework against **human trafficking and sexual exploitation of children**.
4. It aligns judicial practice with **constitutional values and child rights jurisprudence**.

Challenges and Way Forward

Challenges	Way Forward
Victims are disbelieved due to minor inconsistencies	Courts must adopt a **holistic and sensitive approach** to testimony
Trauma affects victims' ability to narrate events clearly	Recognise **psychological impact and fear** in evidence appreciation
Social stigma and marginalisation of victims	Ensure **child-friendly and inclusive judicial processes**
Secondary victimisation during trials	Minimise repeated questioning and adopt **trauma-informed procedures**
Weak understanding of organised trafficking networks	Improve **judicial training and investigative capacity**

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INTERNATIONAL RELATIONS

1. Australia's Social Media Ban for Under-16s

Context

Australia has become the **first country in the world** to enforce a **minimum age of 16** for using major social media platforms. From **December 2025**, platforms like **Instagram, YouTube, TikTok, Snapchat, X** must block or deactivate under-16 accounts. The move has triggered global debate on **online safety, children's rights, Big Tech regulation, and global policy alignment**.

What Is the New Australian Law?

1. The law, called the **Online Safety Amendment (Social Media Minimum Age) Act**, requires platforms to:
   a. Take **"reasonable steps"** to find existing under-16 accounts and **deactivate** them
   b. **Prevent new accounts** by under-16s, including blocking **workarounds**
   c. **Provide** a **mechanism** to **correct errors** if someone is wrongly included or excluded
   d. Face **fines up** to **$33 million** for non-compliance
2. Platforms covered include **Facebook, Instagram, Reddit, Snapchat, TikTok, Twitch, YouTube, X, Threads, Kick**, and others that enable **social interaction, user-generated content, and user-to-user linking**.
3. **Important exclusions**:
   a. Dating apps
   b. Gaming platforms
   c. AI chatbots (for now, though concerns exist about inappropriate interactions)
4. Australia initially exempted **YouTube** because of educational value but reversed the exemption after evidence showed it was the **most common platform for harmful content exposure** among children.

Why did Australia Introduce the Ban (Rationale)?

1. The government wants to protect young users from:
   a. **Cyberbullying**
   b. **Stalking and grooming**
   c. **Harmful and hateful content**
   d. **Excessive screen-time pressures**
   e. **Algorithm-driven harmful content** that affects mental health
2. A national safety regulator found that **over half** of Australian children had faced **harmful online content**.
3. The central idea: **When children log in to social media, platform design increases exposure to risks that under-16s are not developmentally prepared to manage.**

How Tech Companies Reacted?

Tech companies publicly opposed the law but are complying.

1. **YouTube** says removing accounts will eliminate parental controls and safety filters, making kids less safe.
2. **Meta (Facebook, Instagram)** calls the law inefficient and believes it won't truly improve safety.
3. **Snapchat** argues that disconnecting teens could push them to less safe, unregulated apps.
4. **X** raises concerns about freedom of expression and access to information for young people.

This reveals a tension between **Big Tech business models** (which rely on young users) and **government safety regulations**.

How Australia's Approach Differs from India?

1. India does **not** ban children from social media.
2. Under the **Digital Personal Data Protection Act, 2023**:
   a. Children = **below 18 years**
   b. Platforms must obtain **verifiable parental consent** before processing data
   c. No **targeted advertising**, **behavioural tracking**, or **profiling** of children
   d. Safety provisions are notified but not yet fully operational

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3. Thus: **Australia** restricts access while **India** regulates usage.

How the Law Works (Mechanism)?

1. Platforms use **age verification tools**, AI-based detection, and self-declaration checks
2. Under-16 users' accounts are **identified and deactivated**
3. Attempts to reopen accounts through VPNs, fake ages, or alternate sign-ups must be prevented
4. Platforms maintain **error-correction systems**
5. This makes Australia's model a practical test for **age-gating technology**, which many countries may adopt.

Implications

1. **For Australia**
   a. A new global precedent for **strong online safety regulation**
   b. Higher compliance costs for Big Tech
   c. Debates on children's **digital rights** and **freedom of expression**
2. **For Big Tech**
   a. Loss of millions of young users
   b. Need to build costly age-verification systems
   c. Possible shift of young users to **unregulated platforms**
3. **Global Impact**
   a. Many countries may consider similar bans
   b. Raises debate on whether **children's digital safety outweighs access rights**
   c. Accelerates global demand for stronger **tech accountability**

Challenges and Way Forward

Challenges	Way Forward
Young users may move to unregulated apps	Develop safe, regulated digital alternatives for under-16s
Difficulty in accurate age verification	Build robust, privacy-preserving age-check systems
Restrictions may affect children's access to information	Create safe-learning digital spaces for minors
Tech companies argue it will not reduce harm	Continuous monitoring and evidence-based review of outcomes
Global inconsistency in regulations	Develop international frameworks on children's online safety

2. India-Ethiopia Relations

Context

India-Ethiopia relations have gained renewed momentum amid Ethiopia's efforts to rebuild national consensus after civil conflict and India's growing engagement with Africa. The recent meeting between **Prime Minister Narendra Modi and Ethiopian Prime Minister Abiy Ahmed Ali** at the **G20 Summit in Johannesburg** has further catalysed bilateral ties.

What is Ethiopia's Strategic Importance?

Ethiopia is one of **Africa's most pivotal states** due to the following factors:

1. **Demography and Economy**: With a population of around **109 million (2024)**, Ethiopia is one of Africa's fastest-growing economies and has a large domestic market and substantial manufacturing base.
2. **Geopolitical Location**: Located in the **Horn of Africa**, Ethiopia plays a central role in a region marked by conflict and geopolitical competition.
3. **Political and Security Role**: Despite internal challenges, Ethiopia is viewed as a **regional anchor of stability** with an effective military and hosts the **African Union headquarters**, giving it major diplomatic weight.
4. **Energy Potential**: Ethiopia is a **potential renewable energy powerhouse**, especially in **hydropower**, with the capacity to become a regional energy exporter.
5. **Trade and Logistics Aspirations**: Although landlocked, Ethiopia is seeking **strategic autonomy in trade routes**, traditionally relying on Djibouti but now exploring access through **Somaliland and Eritrea**.

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Why This Is the Right Moment to Deepen India-Ethiopia Ties?

1. Ethiopia is emerging from civil conflict and attempting to build a **new national consensus**. This phase of regeneration creates a window for trusted partners like India to expand cooperation.
2. At the same time:
   a. India is strengthening its **Africa outreach**
   b. Ethiopia has become a **member of BRICS**
   c. Global supply chains are being restructured, increasing demand for **trusted partners and new markets**

How India-Ethiopia Relations Have Evolved?

1. Education and Capacity Building

a. Indian teachers and professors have contributed to Ethiopia's education system for **over a century**.
b. Ethiopia was the **pilot country** for the **Pan-African e-Network Project (2007)**.
c. Long-standing collaboration with **IIT Delhi** for tele-education continues.
d. Ethiopia sends one of the **largest numbers of African students to India**, including the **highest number of African PhD students**.
e. Graduates of Indian-supported programmes have staffed Ethiopia's new universities.
f. Education cooperation remains one of the **strongest pillars** of the relationship.

2. Investment and Economic Cooperation

a. Indian businesses entered Ethiopia in the **1950s**, with major expansion after **Lines of Credit from 2006**.
b. Total Indian private investment has exceeded **$4 billion**.
c. Earlier focus on agriculture saw setbacks due to taxation and operational issues.
d. New Areas of Opportunity
   i. **Mining**: Gold, critical minerals, and rare earth elements - crucial for renewable energy, batteries, and semiconductors.
   ii. Ethiopia has vast but **underexplored mineral potential**.
   iii. Indian Embassy surveys highlight opportunities along with regulatory and logistics challenges.
e. Mining cooperation could become a **strategic economic pillar**.

3. Defence Cooperation

a. Ethiopia was among the **first recipients of Indian military assistance**.
b. Harar Military Academy (1956) was established with Indian support.
c. Since **2009**, India has trained Ethiopian forces.
d. Ethiopia's military now needs **modernisation** after extensive internal and regional deployments.
e. India offers **cost-effective, battle-tested defence platforms**.
f. Recent developments:
   i. New **MoU on defence cooperation**
   ii. First meeting of the **Joint Defence Cooperation Committee**
   iii. Scope for **defence exports, training, and capacity building**

4. Multilateral and Trade Dimensions

a. Cooperation through **BRICS, G20, and South-South platforms** enhances political convergence.
b. Under the **African Continental Free Trade Area (AfCFTA)**, Ethiopia can serve as a **manufacturing and export hub** for Indian companies.
c. India's **Duty-Free Tariff Preference Scheme** remains important for Ethiopian exports, especially amid uncertainty in US and EU trade regimes.

Implications

1. Strengthens India's role as a **development partner in Africa**
2. Secures access to **critical minerals** for India's green transition
3. Enhances India's **defence exports and training footprint**
4. Promotes **South-South cooperation**
5. Positions Ethiopia as a **gateway for Indian firms** into African markets

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Challenges and Way Forward

Challenges	Way Forward
Investor concerns over forex availability	Improve forex access and payment mechanisms
Regulatory inconsistency and taxation issues	Update DTAA and Bilateral Investment Treaty
Infrastructure and logistics constraints	Joint planning and targeted infrastructure support
Limited awareness of opportunities	Showcase Indian investment success stories
IMF-related fiscal constraints	Design investments within IMF-compliant frameworks
Skills and technology gaps	Expand training, education, and digital cooperation

3. Recalibrating India-Africa Economic Ties

Context

Various developments such as the **African Union's entry as a permanent member of the G20 during India's presidency in 2023**, **Prime Minister Narendra Modi's visits to Namibia and Ghana in July 2025**, and his **visit to Ethiopia in December 2025** have renewed focus on **India-Africa economic relations**.

What is the current status of India-Africa Economic Relations?

1. India and Africa share a long history of **cultural affinity and political solidarity**.
2. In recent decades, the relationship has increasingly become **economic in nature**.
3. India is currently **Africa's fourth-largest trading partner**.
4. Bilateral trade between India and Africa has reached **nearly $100 billion**.
5. In **FY24**, India exported goods worth around **$38 billion** to African countries.
6. Major export destinations include **Nigeria, South Africa, and Tanzania**.
7. Key Indian exports to Africa are **petroleum products, engineering goods, pharmaceuticals, rice, and textiles**.
8. In **2024**, Africa's imports from India accounted for around **6% of its total imports**, indicating scope for further expansion.

Why does India need to deepen economic ties with Africa?

India needs to **deepen its economic engagement** with Africa due to **two major reasons**:

1. **Unpredictability in Western Markets**
   a. In **FY24**, around **40% of India's exports** were directed to the **United States and the European Union**.
   b. These markets are facing **economic uncertainty** and the risk of a slowdown.
   c. High dependence on a few Western markets makes India's exports **vulnerable to external shocks**.
   d. Africa offers an alternative **high-growth market** for export diversification.
2. **China's Dominance and India's Untapped Opportunities**
   a. China is Africa's **largest trading partner**, with bilateral trade exceeding **$200 billion**.
   b. Around **21% of Africa's total imports** in 2024 came from China.
   c. Nearly **33% of Chinese exports to Africa** fall under **HSN 84 and 85**, covering **machinery, electrical equipment, and semiconductor devices**, reflecting strong industrial presence.
   d. In comparison, India's trade share remains modest, highlighting **significant untapped potential**.
   e. Recognising this gap, India has set a target to **double its trade with Africa by 2030**.

How India Can Unlock Africa's Economic Potential (Five-Pillar Strategy)?

India can achieve its target of **doubling trade with Africa** by **2030** through the following **five strategic pillars:**

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1. **Trade Liberalisation and Market Access**
   a. Focus on **removing trade barriers** that restrict Indian exports.
   b. Negotiate **Preferential Trade Agreements (PTAs)** and **Comprehensive Economic Partnership Agreements (CEPAs)**.
   c. Engage with **regional economic communities** and major African economies to improve market access.
2. **Shift to Value-Added Manufacturing and Joint Ventures**
   a. Move away from **low-value commodity exports** to **value-added manufacturing**.
   b. Promote **cross-border joint ventures** and two-way manufacturing partnerships.
   c. Indian firms have not fully used **manufacturing incentives** offered by African governments.
   d. Setting up manufacturing units in Africa offers a **dual advantage**:
      i. Preferential access to the **U.S. market** through favourable tariff regimes.
      ii. Direct access to Africa's **growing consumer base and industrial demand**.
   e. Reducing dependence on **petroleum and traditional exports** is essential.
   f. Deeper engagement with the **African Continental Free Trade Area (AfCFTA)** can expand export opportunities.
3. **Support MSMEs through Trade Finance and Credit**
   a. Africa provides strong opportunities for **Indian MSMEs**, unlike U.S. and EU markets.
   b. There is **limited policy support** for helping MSMEs enter African markets.
   c. Key measures required include:
      i. Scaling up Lines of Credit: Providing more government-backed loans to help Indian firms finance exports and projects in Africa.
      ii. Improving access to **trade finance**: Making it easier for exporters, especially MSMEs, to get bank credit for international trade.
      iii. Promoting **trade in local currencies**: Allowing trade payments in local currencies to reduce dependence on the US dollar and exchange-rate risks.
      iv. Creating a **joint insurance pool**: Sharing political and commercial risks through insurance so firms and banks feel safer investing in Africa.
   d. These steps can **reduce risk perception** for MSMEs and banks and ensure **sustainable trade**.
4. **Improve Logistics and Connectivity**
   a. High freight and logistics costs reduce India's trade competitiveness in Africa.
   b. India should invest in:
      i. Port modernisation.
      ii. Better **hinterland connectivity**.
      iii. Development of **India-Africa maritime corridors**.
   c. Improved connectivity will **lower costs** and **boost trade volumes**.
5. **Expand Services Trade and People-to-People Links**
   a. Scale up **services exports**, digital trade, and human exchanges.
   b. Leverage **India's strengths** in:
      i. Information Technology
      ii. Healthcare
      iii. Professional services
      iv. Skill development
   c. Services trade enables **high-value exports** and supports goods trade.
   d. Existing policy measures are insufficient and need **significant strengthening**.

Preferential Trade Agreements (PTAs)

1. PTAs are trade agreements where countries **reduce or remove tariffs** on selected goods traded between them.
2. They do **not cover all goods**, only a limited list agreed upon by the partner countries.
3. The aim is to **increase trade volumes** by making certain imports cheaper.
4. PTAs are usually the **first step** towards deeper economic integration.

Comprehensive Economic Partnership Agreements (CEPAs)

1. CEPAs are **broad and deep trade agreements** covering goods, services, investment, and economic cooperation.

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2. They aim to **eliminate or significantly reduce tariffs** on most goods over time.
3. CEPAs also include rules on **services trade, investment protection, intellectual property, and movement of professionals**.
4. They promote **long-term economic integration**, not just tariff reduction.

HSN 84 and 85

1. HSN (**Harmonised System of Nomenclature**) codes are used to **classify traded goods globally**.
2. **HSN 84** includes machinery, mechanical appliances, boilers, and industrial equipment.
3. **HSN 85** covers electrical machinery, electronics, telecom equipment, and semiconductor devices.
4. A high share of exports under HSN 84 and 85 indicates **strong industrial and manufacturing capability**.

Challenges and Way Forward

Challenges	Way Forward
India's **investments** in Africa are **overstated** due to routing through **Mauritius**, often for **tax-related reasons** rather than real economic activity	Encourage **direct investments** into African economies and **improve transparency** in investment reporting
Bureaucratic hurdles, **political instability**, and **high financing costs** discourage Indian firms from investing in Africa	**Strengthen bilateral investment agreements**, provide risk mitigation mechanisms, and improve institutional support
Limited private sector participation in high-risk sectors	**Public Sector Units (PSUs)** should lead investments, especially in **mining and mineral exploration**, to crowd in private players
India-Africa engagement remains largely **transactional**	Shift focus towards **long-term, sustainable partnerships** in manufacturing, infrastructure, and technology cooperation

4. India-Russia Summit 2025

Context

Russian President **Vladimir Putin** visited India for the annual **India-Russia Summit** in New Delhi. The visit was his first since the Ukraine war began in 2022, taking place at a sensitive geopolitical moment when India is negotiating major trade partnerships with the **US and EU**, and facing challenges due to **Western sanctions** on Russia.

What Happened During the Summit? (Key Outcomes)

1. **Focus on Economic and Trade Cooperation**
   a. The summit prioritised **economic ties** over expected defence announcements.
   b. Both sides agreed to strengthen the roadmap for **India-Russia economic cooperation till 2030**.
   c. Discussions focused on improving **bilateral trade settlement in national currencies** and logistics through the **Chennai-Vladivostok Maritime Corridor** and **International North-South Transport Corridor**.
2. **Labour Mobility Agreement**
   a. Russia expects a labour shortage of nearly **three million workers** by decade-end.
   b. To overcome this, India and Russia signed a **Labour Mobility Agreement** to enable Indian skilled workers to take up employment in Russia.
3. **Industrial and Manufacturing Links**
   a. Fertiliser companies signed an MoU to set up a **urea plant in Russia**.
   b. Agreements were concluded on **ports, maritime cooperation and customs processes**.
4. **Limited Defence and Energy Announcements**
   a. Expected announcements on **defence co-production, aircraft and missile systems** did not materialise.
   b. No new announcements on **oil imports**, **nuclear** or **space cooperation** due to Western sanctions, pressure and concerns around CAATSA.

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CAATSA

1. It stands for **Countering America's Adversaries Through Sanctions Act**, a US law passed in **2017** to impose sanctions on countries engaging in significant defence or energy trade with **Russia, Iran, and North Korea**.
2. The law penalises entities involved in **major defence purchases or strategic deals** with these countries through financial and trade restrictions.
3. For India, CAATSA is relevant due to major defence acquisitions from **Russia** (like the **S-400 air defence system**), creating a risk of **secondary US sanctions**.
4. The US President can grant **waivers** under certain circumstances, and India has sought such waivers to protect its strategic autonomy and defence readiness.

India's Position on the Ukraine Conflict

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1. PM Modi stated: **"India stands on the side of peace"**, reiterating India's diplomatic balancing stance.
2. Putin expressed hope for progress in the US-Russia peace talks.
3. The Ukraine war remained a backdrop to discussions, affecting India's strategic decisions.

Why is the visit significant?

Dimension	Significance
Energy security	Russia promised continued fuel supplies; but imports have dropped sharply due to sanctions.
Strategic autonomy	India aims to balance ties with Russia while deepening ties with the US and EU.
Economic diversification	Efforts to rebalance trade that is heavily skewed due to oil imports.
Diplomatic timing	Visit occurs ahead of key US and EU leadership visits to India.
Managing geopolitical pressure	Europe and US have signalled concern over India-Russia proximity.

Challenges and Way Forward

Challenge	Way Forward
Impact of Western sanctions: EU and US sanctions have reduced India's Russian oil imports and affected Indian companies.	**Expand payments in national currencies** to reduce vulnerability to sanctions and dollar-linked disruptions.
CAATSA risk: Defence cooperation announcements may trigger US sanctions under CAATSA.	**Maintain strategic autonomy & diplomacy** through calibrated defence engagements, seeking waiver assurances where required, and balancing relations with Russia and the West.
Trade imbalance: Russian exports (mainly oil) dominate bilateral trade; Indian exports remain limited.	**Diversify non-energy trade** by boosting exports in pharmaceuticals, textiles, machinery, agricultural products, and services to correct the trade imbalance.
Russia's deepening pivot to China: Russia's increasing reliance on China could affect India's long-term strategic space.	**Advance labour mobility and technology partnerships** to deepen economic cooperation, expand strategic footprints, and reduce dependence on any single partner.
Diplomatic tightrope: Balancing ties with Russia while negotiating FTAs with US and EU requires careful diplomacy.	**Improve logistics through maritime corridors & INSTC** to expand trade routes, reduce transit costs, and strengthen diversified connectivity supporting balanced diplomacy.

5. Cyber Slavery Hubs in Southeast Asia

Context

Indian agencies recently rescued hundreds of Indians trapped in **cyber slavery syndicates** in Myanmar, Cambodia, and Laos. These victims were lured with IT job offers and forced into cyber-fraud operations in "**scam compounds**". Multiple Indian States have reported such cases, and the Centre is **conducting repatriation** and **running awareness campaigns**.

What Is Cyber Slavery?

1. Cyber slavery refers to a system where people are **deceived with job offers**, transported illegally across borders, **have their passports taken away**, and are forced to carry out online frauds in harsh, confined environments.
2. **Victims typically face**:
   a. **Seizure** of identity documents
   b. **Illegal movement** into Myanmar/Cambodia/ Laos
   c. 15-18 hour **workdays**
   d. **Threats**, **torture**, and **confinement**
   e. **Poor living conditions** inside scam compounds
3. These operations function like **large call-centre structures**, where tasks are assigned according to the victim's technical skills.

Why Southeast Asia Became Cyber Slavery Hubs?

1. **Presence of armed rebel groups:** Certain regions in Myanmar and Cambodia are controlled by non-state armed groups that run illegal activities, including human trafficking and cyber scam centres.
2. **Weak regulation and corruption:** Widespread corruption and easy visa-on-arrival make it easier for syndicates to recruit unsuspecting job seekers.
3. **Post-COVID job crisis:** Casinos and betting centres, legal in these countries, were converted into scam hubs during COVID when they lost business.
4. **Job scams targeting South Asians:** Victims receive fake offers from Thailand promising **₹80,000-1 lakh** per month. After landing:
   a. Passports are seized
   b. They are transported through illegal routes to Myanmar/ Cambodia/ Laos.
   c. They are placed in scam compounds and forced to commit online frauds
5. These combined conditions created a **large-scale cyber scam industry** recruiting Indians, Pakistanis, Nepalis, Bangladeshis, and other South Asians.

When and How the Issue First Gained Attention?

1. The problem was first officially highlighted in **September 2022** by **Tamil Nadu Chief Minister M. K. Stalin**, who reported that many IT professionals from the State were trapped in Myanmar.
2. Soon after, cases emerged from **Gujarat, Delhi, Haryana, and Uttar Pradesh**.
3. Reports described victims being taken through **Dubai**, then trafficked to scam compounds and tortured if they resisted participation.

How the Indian Government Responded?

1. **Enhanced airport checks:** Immigration officials now verify:
   a. Purpose of travel
   b. Employer details
   c. Authenticity of job contracts
2. **Awareness programmes:** Security agencies started campaigns to warn job seekers about such scams.
3. **Large-scale rescue operations:** Between **January 2022 and May 2024**, over **70,000 Indians** travelled to these countries for jobs. After the issue gained attention in 2022:
   a. India brought back **over 1,500 people**
   b. Around **20,000 Indians** are still awaiting repatriation
   c. Rescues have been done mostly from **Myanmar and Cambodia**
4. **Role of Embassies and MEA:** Indian embassies in Thailand, Myanmar and Cambodia are:
   a. Conducting raids on scam centres
   b. Coordinating evacuation
   c. Assisting victims with travel documents
5. **Use of Indian Air Force aircraft:** The IAF has been used to airlift rescued Indians back home.

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6. **Investigation by central and state agencies:** After return, victims' cases are investigated by State Police, Central Bureau of Investigation (CBI) and Indian Cyber Crime Coordination Centre (I4C).

Implications

1. **Growing international trafficking networks** exploiting educated youth
2. **High vulnerability of job seekers** due to unemployment and social media fraud
3. **Need for stronger digital literacy**, especially about overseas job scams
4. **Greater diplomatic cooperation** required with Southeast Asian countries
5. **Demand for a robust migration and placement regulatory system** in India

Challenges and Way Forward

Challenges	Way Forward
Large-scale recruitment through social media job scams	Strengthen monitoring of online job portals and run continuous awareness campaigns
Weak regulation in Myanmar, Cambodia, Laos	Build bilateral and multilateral agreements for joint operations and quick repatriation
High unemployment pushes youth to accept risky foreign jobs	Improve domestic job creation and regulate overseas recruitment agencies
Lack of verification mechanisms for foreign job offers	Create a centralized, verified international job-offer portal under MEA
Syndicates seize passports and move victims illegally	Enhance cooperation with Thailand border authorities and tighten immigration tracking
Around 20,000 Indians still stranded	Prioritise rescue missions and expand embassy capacities in the region

6. Trump Gold Card Visa Programme

Context

The United States has launched the **Trump Gold Card visa programme**, offering **permanent residency and a direct path to citizenship** for foreign nationals paying **$1 million**. The scheme has gone live and is set to **replace the EB-5 visa programme**, triggering global debate on investment-based citizenship and its implications.

What is the Trump Gold Card Visa?

1. The **Trump Gold Card** is a new **investment-linked US visa** that grants:
   a. **Permanent legal residency** (Green Card-like status)
   b. A **direct pathway to US citizenship** for qualified and vetted applicants
2. It is **designed** to:
   a. Attract **foreign capital**
   b. Retain **global talent**
   c. Generate large revenues for the **US Treasury**
3. The programme marks a shift from **investment-for-jobs** to **investment-for -residency**.

Why Was the Gold Card Introduced?

1. The US government aims to:
   a. Replace the **EB-5 visa**, which required job creation
   b. Generate **billions of dollars** in direct government revenue
   c. Offer a **faster and more predictable route** to residency
   d. Attract **high-net-worth individuals (HNIs)** and skilled migrants
2. All funds collected under the Gold Card go **directly to the US government**, unlike EB-5 where money is invested in private projects.

How the Gold Card Programme Works?

1. **Eligibility**
   a. **Individuals**: Must be admissible for US permanent residency
   b. **Corporations**: Can sponsor foreign employees
   c. **Families**: Spouse and unmarried children under 21 allowed (extra fees apply)
2. **Costs**
   a. **Processing fee**: $15,000 (non-refundable)
   b. **Contribution**:
      i. $1 million for individuals
      ii. $2 million per employee for corporate sponsorship

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c. This contribution is **not an investment** and offers **no financial return**.

3. **Key Features**
   a. Faster processing than many employment-based visas
   b. Residency granted under **EB-1 or EB-2 categories**
   c. Status can be revoked for **security or criminal reasons**
   d. Applicants must pay **US tax on global income**

What is the Trump Platinum Card?

1. The upcoming **Trump Platinum Card** is a premium version with stricter conditions:
   a. Requires **$5 million contribution**
   b. Additional **$15,000 DHS (Department of Homeland Security) fee**
   c. Allows stay in the US for up to **270 days annually**
   d. Exempts holders from US tax on **non-US income**
   e. Not open to existing US citizens or resident aliens
2. This targets **ultra-high-net-worth** individuals (**HNIs**).

Gold Card vs EB-5 Visa (Core Differences)

Aspect	Gold Card	EB-5 Visa
Nature	Contribution to government	Investment in projects
Minimum Amount	$1 million	$800,000-$1.05 million
Job Creation	Not required	Mandatory (10 jobs)
Capital Return	No	Possible
Eligibility	EB-1/EB-2 criteria apply	No extraordinary ability needed
Processing	Faster	Slower but predictable

Why EB-5 Still Attracts Indian Investors?

1. Despite the Gold Card launch, experts believe **EB-5 remains preferable for many Indians** because:
   a. Does **not require extraordinary ability**
   b. Offers **investment returns**
   c. Helps prevent children from **aging out** during long wait periods
   d. Is backed by the **EB-5 Reform and Integrity Act, 2022**, valid till 2027
2. India has emerged as:
   a. The **second-largest source** of EB-5 applicants
   b. Contributor of **$4.1 billion** in the first three quarters of FY2025

Implications

1. **Globalisation of citizenship** through wealth-based access.
2. Increased competition among countries for **foreign capital.**
3. Ethical concerns over **citizenship-for-sale** models.
4. Limited accessibility despite "faster" pathways.
5. Continued relevance of employment-linked migration routes.

Challenges and Way Forward

Challenges	Way Forward
Citizenship and residency becoming linked mainly to wealth, raising ethical concerns	Balance investment-based visas with merit-based and skill-based migration pathways
Exclusion of ordinary skilled migrants who cannot afford high costs	Continue and strengthen employment-based visas alongside investor visas
Gold Card does not mandate job creation, unlike EB-5	Retain job-creation conditions in parallel programmes to support real economic activity
Risk of widening global inequality, favouring only HNIs	Promote inclusive migration frameworks through international cooperation
Unclear long-term effectiveness compared to EB-5	Periodic review of outcomes in terms of investment, employment, and social impact
Heavy tax obligations may deter applicants	Provide clearer tax guidelines and certainty to avoid legal and financial ambiguity

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7. India-Oman CEPA

Context

1. India and Oman have signed a **Comprehensive Economic Partnership Agreement (CEPA)** in **Muscat**.
2. The agreement aims to **liberalise trade, boost services, enhance labour mobility, and strengthen investment ties**.
3. This is **Oman's first bilateral trade agreement since 2006** and **India's second CEPA with a Gulf Cooperation Council (GCC) country**, after the UAE (2022).

What is CEPA?

1. A **Comprehensive Economic Partnership Agreement (CEPA)** is a deep trade agreement that goes beyond traditional Free Trade Agreements.
2. It covers:
   a. Reduction or elimination of **tariffs on goods**
   b. Liberalisation of **services**
   c. Investment facilitation
   d. Mobility of professionals and workers
   e. Cooperation in MSMEs, innovation, and emerging sectors
3. CEPAs aim to create **long-term, rules-based economic integration** between partner countries.

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Key Features of the India-Oman CEPA

1. Oman has offered **duty-free access on 98.08% of its tariff lines**, covering **99.38% of India's exports** to Oman.
2. India has offered **liberalised tariffs on 77.79% of its tariff lines**, covering **94.81% of imports from Oman**.
3. The agreement includes **important concessions in services**, particularly benefiting:
   a. Indian professionals
   b. Skilled and semi-skilled workers
4. The CEPA is expected to promote **investment flows, technology collaboration, and business confidence**.

India-Oman Trade Profile

1. In **2024-25**, India exported goods worth **$4.06 billion** to Oman, accounting for **0.93% of India's total exports**.
2. India imported goods worth **$6.5 billion** from Oman, making up **0.91% of total imports**.
3. Although bilateral trade volume is modest, the CEPA aims to **expand trade rapidly by removing structural barriers**.

Strategic and Regional Significance

1. Oman is a **strategically located country** at the mouth of the **Strait of Hormuz**, a critical global energy chokepoint.
2. The CEPA positions Oman as a **gateway for India** to:
   a. The **Gulf Cooperation Council (GCC)**
   b. Eastern Europe
   c. Central Asia
   d. Africa
3. This aligns with India's broader goals of **diversifying trade partners and strengthening West Asia engagement**.

Benefits to Labour-Intensive and Domestic Sectors

1. The agreement is expected to **significantly benefit labour-intensive sectors**, which generate large-scale employment.
2. Key beneficiaries include:
   a. Micro, Small and Medium Enterprises (MSMEs)
   b. Artisans and traditional industries
   c. Women-led enterprises
3. Enhanced market access and services liberalisation will support **inclusive growth and job creation**, especially for youth.

Services Sector and Labour Mobility

1. Services concessions under the CEPA are important for India, given its **comparative advantage in skilled manpower**.
2. Easier movement of professionals will:
   a. Strengthen people-to-people ties
   b. Increase remittances
   c. Improve employment opportunities for Indian workers in Oman
3. This complements India's long-standing role as a **human resource provider to the Gulf region**.

Geopolitical and Economic Implications

1. The CEPA strengthens India's presence in the **Gulf amid global trade fragmentation**.
2. It reflects India's shift towards **bilateral and regional trade agreements** after exiting RCEP.
3. The deal enhances India's image as a **reliable economic partner** and supports its ambition to be a **global manufacturing and services hub**.

Challenges and Way Forward

Challenges	Way Forward
Limited awareness among MSMEs about CEPA benefits	Conduct **outreach programmes** and trade facilitation support
Risk of **import surge** in sensitive sectors	Use **safeguard measures** and **phased tariff liberalisation**
Implementation gaps in services and mobility provisions	Establish **joint monitoring** and **dispute-resolution mechanisms**
Need to **scale up exports** beyond traditional goods	Promote **value-added exports** and new sectors

8. India's Blue Ocean Leadership

Context

1. Global attention on oceans has intensified with **COP30 (Belém, 2025)**, the outcomes of the **3rd UN Ocean Conference (UNOC3)**, and the **entry into force of the** Biodiversity Beyond National Jurisdiction **(BBNJ) Agreement**.
2. Major financial commitments to the blue economy were announced at the **Blue Economy and Finance Forum (BEFF), Monaco (2025)**.
3. India's stated readiness to **ratify the BBNJ Agreement** and its growing role in the **Indian Ocean Rim Association (IORA)** place it at the centre of emerging ocean governance debates.

India's historical role in ocean governance

1. During the **UNCLOS negotiations (1970s-1980s)**, India aligned with small and vulnerable states to uphold the principle that the **seabed beyond national jurisdiction is the "common heritage of mankind."**
2. This reflected India's early recognition, articulated by **Jawaharlal Nehru in the 1950s**, that national security and prosperity are deeply linked to the oceans.

Present-day ocean crisis

1. Oceans now face unprecedented stress due to **climate change**, including warming, acidification, sea-level rise, and ecosystem collapse.
2. The **Indian Ocean**, hosting **one-third of humanity**, is among the world's most **climate-vulnerable ocean basins**.
3. Illegal, unreported and unregulated (**IUU**) fishing, coral degradation, and extreme weather events threaten livelihoods and regional stability.

Strategic choice before India

1. India's task has shifted from **drafting international law** to **shaping practical regional solutions**, ensuring the Indian Ocean becomes a zone of **sustainability, innovation, and resilience**, rather than rivalry.

Why India's Leadership is Necessary

1. **Moral and historical credibility**: India's principled stand during UNCLOS negotiations gives it legitimacy among developing and island states.
2. **Climate vulnerability of the Indian Ocean**: Littoral and island nations face existential threats from climate impacts.
3. **Geopolitical competition**: Security-focused Indo-Pacific narratives risk overshadowing environmental collapse as the root of long-term insecurity.
4. **Global finance momentum**: Blue economy financing is expanding but requires regional leadership to convert pledges into outcomes.
5. **Equity imperative**: Ocean governance must balance development, sustainability, and justice for vulnerable coastal communities.

How India Can Operationalise a Blue Ocean Strategy

India's proposed **Blue Ocean Strategy** rests on three interconnected pillars:

1. **Stewardship of the Commons**
   a. Treat the Indian Ocean as a **shared space**, not a contested one.
   b. Prioritise **ecosystem restoration**, **biodiversity protection**, and **sustainable fisheries**.

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c. Promote cooperative management over competitive extraction.

2. **Climate Resilience and Innovation**
   a. Establish a **Regional Resilience and Ocean Innovation Hub**.
   b. Strengthen **ocean observation systems**, **early warning mechanisms**, and **disaster preparedness**.
   c. Enable **technology transfer** to small island developing states and African coastal nations.
3. **Inclusive Blue Growth**
   a. Promote **green shipping**, **offshore renewable energy**, **sustainable aquaculture**, and **marine biotechnology**.
   b. Align development pathways with climate goals through regional coordination and long-term investment.

Financing the Blue Economy: Emerging Global Signals

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1. **BEFF, Monaco (June 2025):**
   a. €25 billion pipeline of existing investments.
   b. €8.7 billion in new commitments with near parity between public and private finance.
2. **Finance in Common Ocean Coalition:**
   a. $7.5 billion in annual commitments from 20 public development banks.
3. **COP30, Belém:**
   a. Launch of the **One Ocean Partnership** with a goal of mobilising **$20 billion by 2030**.

India's Opportunity

1. Creation of an **Indian Ocean Blue Fund**, seeded by India and supported by development banks, philanthropy, and private capital, to translate finance into region-specific projects.

Security Through Sustainability

1. Traditional maritime security narratives focus on **naval balance and sea lanes**.
2. The deeper source of insecurity lies in **ecosystem collapse and climate disruption**.
3. IUU fishing, coral loss, and storm surges undermine livelihoods and social stability.

India's Strategic Framework

1. **SAGAR doctrine (2015)**: Security and Growth for All in the Region, emphasising peace, stability, and prosperity.
2. Role of the **Indian Navy and Coast Guard**:
   a. Maritime domain awareness
   b. Disaster response
   c. Ecosystem monitoring
3. India's approach is **cooperative, consultative, and outcome-oriented**, not dominance-driven.

Implications

1. **Redefinition of maritime security**: Sustainability becomes central to long-term stability.
2. **Regional trust-building**: Cooperative ocean governance reduces rivalry.
3. **Economic transformation**: Blue economy sectors create climate-compatible growth.
4. **Global leadership**: India positions itself as a bridge between developed and developing ocean nations.
5. **Norm-setting role**: Indian Ocean practices could shape global ocean governance models.

Challenges & Way Forward

Challenges	Way Forward
Geopolitical rivalry in the Indian Ocean	Emphasise multilateral, ecosystem-based governance
Fragmented ocean finance	Establish an Indian Ocean Blue Fund
Weak capacity in small island states	Scale up technology transfer and regional hubs
IUU fishing and ecosystem degradation	Strengthen cooperative monitoring and enforcement
Gap between commitments and outcomes	Align vision with finance through project pipelines

9. Colombo Security Conclave

Context

1. In **November 2025**, India hosted the **7th NSA-level Summit of the Colombo Security Conclave (CSC)**. **Seychelles** joined as a **full member**; **Malaysia** attended as guest.
2. The summit took place during major geopolitical shifts in the **Indian Ocean Region (IOR)**, especially with **China's expanding presence**.

What is the Colombo Security Conclave (CSC)?

1. A **maritime security and regional cooperation platform** for the Indian Ocean.
2. **Started in 2011** as a trilateral: **India-Sri Lanka-Maldives**.
3. **Reactivated in 2020** with a broader mandate.
4. **Full Members (2025):**
   a. India
   b. Sri Lanka
   c. Maldives
   d. Mauritius
   e. Bangladesh (joined 2024)
   f. Seychelles (joined 2025)
5. Observers/Guests: Malaysia (2025).
6. **Key security areas:**
   a. Maritime security
   b. Counter-terrorism
   c. Anti-trafficking and organised crime
   d. Cybersecurity
   e. Humanitarian Assistance & Disaster Relief (implicit through cooperation)

Why is CSC Important Today?

2011-2015: Started as a trilateral, but slowed due to political transitions in Sri Lanka and Maldives.

2020 onwards:

1. Revival as **CSC**, expansion of membership, creation of working groups.
2. Renewed focus due to **frequent maritime incidents, trafficking networks, cyberattacks, and climate-driven disasters**.

2025 Summit Significance:

1. **Expansion -** Seychelles became a full member.
2. **India's maritime neighbourhood diplomacy deepened**.
3. **Rising geopolitical tensions in IOR** made CSC a crucial platform.
4. **Malaysia's presence** hints at future expansion to ASEAN-linked states.

Why Are CSC Countries Focused on Maritime Security?

1. The IOR lacks a **single, unified maritime security architecture**.
2. **Littoral economies** depend heavily on:
   a. Fisheries
   b. Sea-borne trade
   c. Coastal livelihoods
3. Challenges are **non-traditional**, e.g.:
   a. Drug trafficking routes
   b. Human smuggling
   c. Illegal fishing
   d. Cyberattacks on ports
   e. Climate-related disasters
4. Economic development is directly linked to ocean stability.

How is the CSC Evolving?

1. Expanding membership and agenda.
2. Increasing cooperation in:
   a. Joint maritime exercises
   b. Information sharing
   c. Coast guard coordination
   d. Disaster response
3. India positions CSC as a **regional security anchor** to counter fragmentation in IOR mechanisms (IORA, QUAD maritime initiatives, SAGAR vision).

Implications

1. **Strengthens India's maritime leadership** in the Indian Ocean.
2. Provides smaller states a **collective security platform** beyond bilateral dependence on major powers like China.

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3. Enhances **regional stability** through coordinated responses to trafficking, piracy, cyber threats, and environmental risks.
4. Adds **geopolitical weight** to India's SAGAR doctrine ("Security and Growth for All in the Region").
5. Helps India balance **China's economic and military footprint** without confrontation.
6. Encourages a shift from **ad-hoc cooperation** to institutionalised, rules-based mechanisms.

Challenges and Way Forward

Challenges	Way Forward
Different threat perceptions - China seen as a security challenge only by India, not by others dependent on Chinese investments	Build trust, **emphasise non-traditional threats** where all members agree; use development-based maritime cooperation
CSC **not fully institutionalised**; currently NSA-level only	**Create permanent secretariat, technical committees, annual action plans**
Domestic political instability (e.g., Bangladesh, Maldives shifts) affecting continuity	Establish **legally-backed cooperation frameworks** independent of political cycles
Fragmented IOR security architecture	**Align CSC** work with IORA, IPOI, and regional coast guard networks
Limited maritime capabilities of smaller states	**India-led capacity building**, shared domain awareness, joint patrols
Risk of **over-expansion** diluting focus	**Expand membership gradually** with clear benchmarks

10. Yearender 2025 and Evolution of Diplomacy

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Why was 2025 a turning point in global and Indian diplomacy?

1. The **post-World War II global order** saw its biggest rupture in decades.
2. US President Trump's second-term policies reshaped trade and alliances.
3. Conflicts in **Pakistan, Ukraine, and Gaza** added instability.
4. India faced both **setbacks (US tariffs, Pakistan tensions)** and **openings (Europe, Canada, China re-engagement)**.

How did India's ties with major powers evolve in 2025?

Country/ Region	What happened in 2025	Implication for 2026	What India can do to maintain good relations
United States	Imposition of very high tariffs (50%) on India. Ceasefire claims on India-Pakistan conflict. Pressure to stop oil imports from Russia.	In 2026, relations are expected to remain turbulent. Trade negotiations may move forward, but strategic trust between the two countries is weak.	India should work towards a pragmatic trade deal, diversify supply chains to reduce dependence, and keep defense and technology cooperation steady despite disagreements.
Pakistan	Both had a brief but lethal conflict. Terror attacks in Pahalgam and near Red Fort tested India's redlines. Pakistan's Army Chief Asim Munir declared himself Field Marshal, consolidating power.	In 2026, ties will remain tense. There is a high risk of new terror incidents, and India will need to use military, political, and diplomatic resources to respond.	India should strengthen border security, improve intelligence cooperation, and keep backchannels open while responding proportionately to provocations.

China	India re-engaged with China by restoring visas and flights, and leaders met at the SCO summit. However, about 50,000 troops remain deployed on each side of the Line of Actual Control.	In 2026, relations may improve economically, but security distrust will continue due to the unresolved border situation.	India should push for confidence-building measures at the border, selectively open economic ties in non-sensitive sectors, and use forums like SCO and BRICS to keep dialogue alive.
Russia	India hosted President Putin and continued energy and defense ties, though US tariffs on Russian oil imports created pressure.	In 2026, Russia will remain important for India's energy and defense needs, but balancing ties with the West will be tricky.	India should deepen defense co-production, balance energy security with global compliance, and engage in the Ukraine peace process to protect its global image.
European Union	Relations improved in 2025, with trade talks advancing. EU leaders are invited as chief guests for Republic Day in 2026.	In 2026, India has an opportunity to expand market access and strengthen technology partnerships with Europe.	India should conclude a balanced free trade agreement, cooperate on climate and digital issues, and align standards to boost exports.
United Kingdom	India signed a trade deal with the UK in 2025.	In 2026, this deal will open opportunities for investment and services expansion.	India should implement the agreement quickly, resolve standards issues, and boost collaboration in education, fintech, and clean energy.
Canada	Relations reset under new PM Mark Carney. Both sides restored visas, staffed missions, and separated political disputes from trade.	In 2026, ties are expected to stabilize, with economic and people-to-people engagement improving.	India should institutionalize this separation, expand student and work mobility, and protect investments.
Nepal	Gen Z protests led to regime change in 2025, with an interim government under Sushila Karki. Elections are due in early 2026.	In 2026, Nepal's politics will remain fluid, and foreign policy may shift depending on election results.	India should respect Nepal's democratic process, fast-track connectivity and power trade projects, and focus on people-centric initiatives.
Bangladesh	After Sheikh Hasina's ouster, unrest continued under interim leader Muhammad Yunus. Communal tensions and legitimacy issues persisted. Elections are scheduled for February 2026.	In 2026, ties may be volatile, with risks of migration and security challenges.	India should cooperate on border management, counter radicalization, and expand trade and connectivity to stabilize Bangladesh's economy.
Turkey	Relations worsened in 2025 after Turkish drones were found in Pakistan's arsenal and President Erdogan openly backed Islamabad.	In 2026, ties are likely to remain strained.	India should limit defense exposure, engage economically where possible, and use multilateral forums to manage disputes.

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Afghanistan (Taliban-ruled)	India deepened engagement with the Taliban in 2025, hosting ministers and handing over the Afghan embassy. Kabul was reframed as "the enemy's enemy" amid Pakistan tensions.	In 2026, cooperation will remain transactional, focused on security and connectivity.	India should provide humanitarian aid and capacity building without formal recognition, while securing trade corridors via Chabahar and Central Asia.
West Asia (Israel, Arab states, Iran, Qatar)	The Gaza war paused after a Trump-brokered ceasefire. US-Israel strikes weakened Iran's nuclear sites. Israel's strike inside Qatar created diplomatic tensions.	In 2026, peace remains fragile, and the revival of the India-Middle East-Europe Corridor (IMEC) depends on regional stability.	India should support IMEC with balanced diplomacy, expand energy and tech ties with GCC and Israel, and maintain neutrality to keep channels open with Iran.
Ukraine/ Russia war	The war entered its fourth year in 2025. Trump pushed for a ceasefire, but disagreements over territory and security guarantees remained. India became more involved in peace efforts while facing pressure on Russian oil imports.	In 2026, India will continue walking a diplomatic tightrope between autonomy and Western expectations.	India should support a credible peace framework, diversify energy sources, and offer mediation venues without taking sides.
Africa	After including the African Union in the G20 in 2023, India prepared for deeper engagement in 2025.	In 2026, Africa offers opportunities for markets, minerals, and development partnerships.	India should host the India-Africa Forum Summit, expand credit lines, and co-develop value chains in pharma, agriculture, solar, and digital sectors.
Quad (US, Japan, Australia, India)	The Quad summit in 2025 depended on Trump's visit to India, which did not happen.	In 2026, maritime and technology cooperation could advance, but progress depends on US ties.	India should keep working-level initiatives moving in maritime domain awareness, critical tech, and infrastructure, while decoupling Quad progress from bilateral turbulence with the US.
BRICS	India prepared to host the BRICS summit in 2026, with Putin and Xi expected to attend.	In 2026, BRICS will test India's convening power and ability to balance autonomy with global leadership.	India should use the summit to highlight Global South priorities like finance, health, and energy, and seek pragmatic outcomes without bloc politics.

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What is the overall outlook for India's diplomacy in 2026?

1. India enters 2026 with **autonomy, alignment, and ambition**, but little room for missteps.
2. Balancing ties with the US, China, Russia, and Europe will be crucial.
3. Regional stability in Pakistan, Nepal, and Bangladesh will demand constant attention.
4. Hosting major summits (BRICS, Quad, AI, Africa) offers India a chance to showcase leadership.
5. The fractured global order means India must act with **strategic caution, economic resilience, and diplomatic agility**.

Conclusion

For India, 2025 was a year of rupture; 2026 will test its ability to balance great-power ties, manage neighbourhood volatility, and project global leadership without compromising autonomy.

SECURITY

1. Linking NATGRID with NPR

Context

The government **had many databases** like Aadhaar, CCTNS, NRC, NPR, still **NATGRID** was set up in 2009. This is because these databases **operated separately**, which NATGRID - and its present linkage with NPR - aims to overcome.

Why was NATGRID set up under the Ministry of Home Affairs after the 2008 Mumbai attacks?

1. After the **2008 Mumbai Terror Attacks**, the government found that it had **many existing databases** (like Aadhaar, CCTNS, NRC and NPR) that **worked separately**, not as one system and could not give fast real time information about the attack.
2. Police and intelligence agencies **could not easily link information** from different databases and important clues remained scattered causing delays, intelligence blind spots and missing links before the attacks.
3. To fix this, the government decided to create **one common platform** and therefore, **NATGRID** was **set up in 2009** as **India's Master Intelligence Database** to collect **real time information** from all **databases** (government and private databases) and give **fast information** to **intelligence agencies.**
4. NATGRID was placed under the **Ministry of Home Affairs** because counter-terrorism, internal security, etc. fall within its mandate.

What is the National Intelligence Grid (NATGRID)?

1. It is a **secure** and **centralized technology platform.**
2. It is **not a database** as it does **not store data permanently** or **generate original data**.
3. It just provides data from existing databases to the intelligence agencies by connecting different **pieces of information** (like Identity records, Travel details, etc.)
4. It helps in investigation against **counter-terrorism** and **internal security threats**.

NATGRID collects data from many databases (Aadhar, CCTNS, NRC, NPR, etc.) → NATGRID = Master Intelligence Database (MID) → NATGRID sends data to many government agencies for fast action.

How is it different from previous databases?

Basis	Other Databases (Aadhaar, CCTNS, NRC, NPR)	NATGRID
Nature	Stand-alone databases that store data	Not a database; a secure technology platform
Purpose	Created for a **single function** such as identity, policing records, or population data	Created for **intelligence sharing and security analysis**
Data creation	**Generate and store original data**	**Does not create or store data permanently**
Scope of use	Limited to **one department or sector**	Used across **multiple agencies and sectors** (Helps agencies **connect the dots)**
Data access	Data is accessed **within that single database** (No cross-database analysis)	Data is accessed **from many databases together** (**Cross-database intelligence analysis)**
Speed	Information sharing is **slow or manual**	Provides **real-time, digital access**

From which government and private databases does NATGRID collect data?

1. NATGRID integrates data from multiple **government and private databases** formulti-dimensional analysis.
2. **Government Databases:** NATGRID collects information from many **government databases** related to identity, travel, crime, and finance, such as:

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1. Aadhaar - for identity details	**5. Railway passenger data -** for train travel information
2. National Population Register (NPR) - for resident and family details	**6. Driving licence and vehicle registration records -** for transport details
3. Passport and visa records - for travel and nationality information	**7. Airline travel data -** for flight booking and travel history
4. Immigration and foreigner registration data - for entry and exit details	**8. CCTNS (Crime and Criminal Tracking Network and Systems) -** for FIRs and crime records

3. **For financial intelligence,** NATGRID also uses:
   1. **Tax records**
   2. **Export-import data**
   3. **Suspicious transaction reports** from the **Financial Intelligence Unit (FIU)**
4. **Private Databases:** From private companies, NATGRID accesses only basic data (metadata) and not personal content. These include:
   1. Telecom companies - call detail records (who called whom, time and duration, not call content)
   2. Banks - transaction logs and account-related details
   3. Insurance companies - policy-related records
   4. Transport and toll systems - FASTag records and booking details
   5. The system **does not allow blanket access** to **personal communications** (call recordings or message content).

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To which intelligence agencies is this data made available by NATGRID?

1. The **initial access to NATGRID** was limited to the following **10 central intelligence and law-enforcement agencies**:

1. Intelligence Bureau (IB)	6. Research and Analysis Wing (RAW)
2. National Investigation Agency (NIA)	7. Central Bureau of Investigation (CBI)
3. Enforcement Directorate (ED)	8. Narcotics Control Bureau (NCB)
4. National Crime Records Bureau (NCRB)	9. Financial Intelligence Unit (FIU-IND)
5. Directorate of Revenue Intelligence (DRI)	10. Central Board of Indirect Taxes and Customs (CBIC - through its enforcement arms)

2 Recently, access has been **expanded to Superintendent of Police (SP)-rank officers** in State police forces to speed up investigations.

What are the key technological components of NATGRID (Hub, data integration, analytics, AI tool Gandiva, etc.)?

1. **Hub-and-Spoke Architecture**
   a. NATGRID works on a **secure hub and spoke model** where it acts as a **central hub** and the **original data** remains with the **respective departments**.
   b. When an authorised officer makes a request, relevant data is temporarily fetched. Data is **not copied or stored permanently** in NATGRID to ensure **data security**.
2. **Data Integration Layer**
   a. Different databases store data in different formats.
   b. NATGRID has a **data integration layer** that **standardises data** and **converts** it into a **common format**. This allows **cross-database analysis**.
3. **Advanced Analytics Tools**
   a. NATGRID uses **data analytics tools** to analyse large volumes of data.
   b. These tools help in:
      i. **Pattern recognition** (finding suspicious behaviour)
      ii. **Link analysis** (connecting people, accounts, and locations)
      iii. **Network mapping** (tracking crime or terror networks)
   c. This supports **intelligence-led investigation** instead of **manual checking.**
4. **AI Tool - Gandiva**
   a. It is an **indigenous AI-based analytical tool**, named after **Arjuna's bow**.
   b. It supports **multi-source data collection, entity resolution** (checking if records belong to the same person) and **Facial recognition**.

c. If a **suspect's photo is available**, it can be matched with **telecom KYC, driving licence**, **vehicle registration**, and **other photo IDs**.
d. After **linking with NPR**, Gandiva can also **access family-wise demographic details** of a suspect.
e. This **saves time, manpower,** and **investigation effort**.

5. **Organised Crime Network Database**
   a. NATGRID's IT platform is also used to build an **Organised Crime Network Database**.
   b. This database helps in **secure data-sharing** between **National Investigation Agency (NIA)** and **State Anti-Terror Squads (ATS).**
   c. It improves coordination against Terrorism and Organised crime networks.

Why is NATGRID being linked to the National Population Register (NPR) in 2025? What are the security benefits and the concerns (right to privacy, data protection, misuse, etc.) associated with this integration?

Reason Security Benefits of Linking NATGRID with NPR:

1. The **NPR contains family-wise demographic and residential details** of about **119 crore residents**.
2. This data was first collected during the **2011 Census** and last updated in **2015**.
3. By linking NPR with NATGRID, investigators can **quickly verify a person's identity and family background**.
4. It makes it easier to **detect fake or duplicate identities**.
5. It allows agencies to **trace family and residential links** of suspects.
6. It helps in identifying **Illegal migrants, Terror sleeper cells and Organised crime networks.**
7. It strengthens **Fraud prevention, Counter-terrorism efforts and Organised crime detection.**
8. It speeds up criminal investigations, which is why the **Ministry of Home Affairs has encouraged States to use NATGRID more actively**.

Concerns Related to This Integration

1. **Right to Privacy:** Critics fear that linking population-wide data with intelligence systems may lead to **excessive surveillance**. There are also concerns about **profiling of citizens** (collecting and combining a person's data to create a detailed profile about them, often without their knowledge or consent).
2. **Data Protection:** India does not yet have a **fully tested data protection framework**. Large-scale data integration raises the risk of **data leaks or misuse**.
3. **Function Creep:** There is concern that data collected for one purpose may be **used for other purposes later**. This is known as **function creep**.
4. **Link with NRC:** NPR (represent resident data) is seen as the first step towards National Register of Citizens (NRC - helps in categorizing citizen and non-citizen) because it collects data that can later be used for citizenship verification, raising public and political concerns.

The government has responded by emphasising that access is restricted, queries are logged, and oversight exists, but the debate highlights the need for **stronger statutory safeguards and transparency**.

What safeguards and oversight mechanisms exist to prevent misuse of NATGRID by agencies or individuals, and what role does NATGRID play in combating terrorism, financial crimes, and cybercrime in practice?

Safeguards and Oversight Mechanisms to Prevent Misuse of NATGRID

1. NATGRID currently handles around 45,000 queries per month, showing its regular use in criminal investigations.
2. **Controlled and Purpose-Based Access:** NATGRID can be accessed only by authorised officers. Every data request must be made for a specific case. The officer must clearly mention the purpose of the query.
3. **Logging and Audit Trail:** Every search made on NATGRID is digitally recorded. These records can be checked later. This creates accountability and discourages misuse.
4. **Classification of Data:** Data is classified into **Non-sensitive, Sensitive and Highly sensitive**. Highly sensitive data (bank statements, tax records, financial transactions) is given extra scrutiny.

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5. **Senior-Level Supervision:** Senior officers monitor how NATGRID is used. Junior officers cannot access the system freely. This ensures institutional oversight.

Role of NATGRID in Combating Terrorism, Organised Crimes, Financial Crimes, and Cybercrimes

1. **Role in Counter Terrorism:** It helps agencies to correlate travel history, financial flows, telecom metadata, and identity records to detect terror networks and sleeper cells.
2. **Combating Organised Crime:** It helps map crime syndicates working across States. It connects people, money, and movement.
3. **For Financial Crimes**: It supports agencies like the Enforcement Directorate by tracing money laundering trails and shell companies.
4. **For Cybercrimes**: It assists in identifying mule accounts, SIM misuse, and coordinated fraud networks.
5. NATGRID represents a shift from **reactive** (after crime) **policing** to **intelligence-led investigation**, allowing agencies to act faster and more accurately, while remaining bound by oversight mechanisms.

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Conclusion

NATGRID was created to integrate and analyse data in real time for internal security. Its linkage with NPR and use of AI tools like Gandiva have strengthened investigations, but its effectiveness depends on strong oversight, controlled access, and data-protection safeguards to protect citizens' rights.

2. Assam's Karbi Anglong Violence

Context

Violence erupted in **Karbi Anglong** and **West Karbi Anglong** districts of Assam in December 2025 following long-standing tensions over **land rights and eviction from protected grazing lands**.

What is the chronological background of the Karbi Anglong dispute related to land rights under the Sixth Schedule?

1. **Constitutional and Administrative Setting**
   a. Karbi Anglong and West Karbi Anglong are **tribal-majority hill districts**.
   b. They are governed under the **Sixth Schedule of the Constitution**, which provides:
      i. Special protection to tribal land
      ii. Self-governance through autonomous councils
   c. Administrative authority in these areas is exercised by the **Karbi Anglong Autonomous Council (KAAC)**.
2. **Historical Roots of Tension**
   a. Since the **late 1980s**, parts of Karbi Anglong have witnessed **ethnic mobilisation and insurgency**, primarily centred on demands for:
      i. Greater political autonomy
      ii. Protection of tribal land and identity
   b. Over time, while armed activity declined, **land-related grievances** remained unresolved.
   c. A key source of tension has been the settlement of **non-tribal communities** on certain categories of protected land.
3. **Nature of disputed land (PGR and VGR)**
   a. Professional Grazing Reserve (PGR) and **Village Grazing Reserve (VGR)** lands are areas:
      i. Set aside mainly during the **colonial period**
      ii. Intended for **livestock grazing** and community use
   b. Professional Grazing Reserve (PGR) is land reserved for grazing by professional cattle rearers, while **Village Grazing Reserve (VGR)** is land reserved for the grazing needs of a village.
   c. These lands are legally **restricted from permanent settlement**.
   d. Tribal organisations have repeatedly raised concerns about **encroachment** on these lands.
   e. Settlers living on such land argue that they have resided there **for several decades**.
4. **Events leading up to the present unrest**
   a. In **February 2024**, protests were held by local tribal organisations demanding eviction from PGR and VGR lands.
   b. During this period, KAAC authorities stated that a large number of families were residing on protected grazing land in certain administrative areas.

c. Eviction plans were **not implemented** due to a **Public Interest Litigation (PIL)** pending before the **Gauhati High Court**, with authorities citing the risk of contempt of court.

What was the immediate build-up to the violence in December 2025 related to hunger strike and removal of protestors?

1. **Hunger strike at Phelangpi**
   a. In early December 2025, a **hunger strike (fast unto death)** began at **Phelangpi in West Karbi Anglong**.
   b. **Nine protesters** participated, demanding:
      i. Eviction of alleged encroachers from **PGR and VGR lands** within KAAC areas
   c. The protest continued for **more than two weeks**, drawing local attention.
2. **Removal of protesters from the site**
   a. On **December 23, 2025**, the hunger-striking individuals were **removed from the protest site**.
   b. According to police officials, they were taken to **Guwahati for medical treatment**, citing concerns over their deteriorating health after prolonged fasting.
   c. However, among sections of the local population, there was a **perception that the protesters had been detained**.

How did the violence break out and unfold, involving arson and clashes?

1. Following the removal of the protesters, **tensions escalated rapidly**.
2. Misunderstandings and rumours contributed to:
   a. **Stone-pelting**
   b. **Arson of shops and market areas**
3. On the preceding day, the **ancestral residence of a senior KAAC office- holder** in Dongkamukam was set on fire.
4. Clashes in the **Kheroni area** led to:
   a. **Two deaths**
   b. **Injuries to several people**, including police personnel

What administrative response was taken by the State, including security deployment, internet suspension, and prohibitory orders?

1. Security forces were deployed to restore order.
2. **Mobile internet services were suspended** in Karbi Anglong and West Karbi Anglong.
3. **Prohibitory orders** were imposed to prevent further violence.

What are the underlying causes of repeated unrest, including land disputes, tensions and legal delays in Sixth Schedule areas?

1. **Unresolved land disputes** involving protected grazing lands
2. Tension between:
   a. **Tribal land protections under the Sixth Schedule**
   b. **Long-term settlement claims**
3. **Legal delays** due to ongoing court proceedings
4. **High sensitivity** surrounding land, identity, and autonomy in tribal areas

What is the way forward through administrative, legal, and social & political measures to prevent such conflicts?

1. **Administrative Measures**
   a. Authorities should ensure **clear communication** during protests and law-and-order actions to prevent rumours and misunderstandings.
   b. District administration and autonomous council officials must adopt **early-warning and conflict-management mechanisms** in sensitive areas.
   c. Temporary measures such as internet suspension should be **used proportionately** and reviewed regularly.
   d. Strengthening coordination between **State government, KAAC, and district police** is essential for timely response.
2. **Legal Measures**
   a. Pending land-related cases, especially involving **PGR and VGR lands**, should be **fast-tracked** in courts to reduce prolonged uncertainty.
   b. Clear and uniform **guidelines on eviction procedures** in Sixth Schedule areas should be framed, ensuring compliance with court orders.

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c. Any eviction or rehabilitation action must strictly follow **due process of law** to avoid contempt and unrest.

3. **Social and Political Measures**
   a. **Dialogue and consultation** with all stakeholders, including tribal bodies and long-term settlers, should be institutionalised.
   b. **Peace committees and local mediation mechanisms** can help defuse tensions before they escalate.
   c. Rehabilitation and livelihood alternatives should be explored for affected families to ensure **social stability**.
   d. Greater public awareness about the **legal status of grazing lands** can reduce misinformation.

Conclusion

The Karbi Anglong violence was immediately triggered by developments surrounding a hunger strike over eviction from protected grazing lands, but it is rooted in **decades-old issues of land rights, autonomy, and governance under the Sixth Schedule**. The episode highlights the need for **legal clarity, transparent communication, and sustained dialogue** to prevent misunderstandings from escalating into violence in constitutionally protected tribal regions.

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3. Navy Inducts Second Seahawks Squadron

Context

The Indian Navy has commissioned its **second MH-60R Seahawk helicopter squadron (INAS 335 - Ospreys)** at **INS Hansa, Goa**. This comes as India strengthens its maritime security and anti-submarine warfare capabilities amid evolving conventional and asymmetric threats.

What is the MH-60R Seahawk Helicopter?

1. The **MH-60R Seahawk** is a **US-origin, multi-role maritime helicopter**, a naval version of the Black Hawk.
2. It is distinct from the **V-22 Osprey**, which is a tilt-rotor transport aircraft.
3. India has acquired **24 MH-60R helicopters** from the United States under a deal worth **over ₹15,000 crore**.
4. These helicopters are **replacing the ageing Sea King helicopters**, which had been in service for several decades.
5. The first squadron (**INAS 334**) was inducted at **INS Garuda, Kochi** in **March 2024**, making the platform fully integrated into naval operations.
6. The helicopters can operate from **shore bases, aircraft carriers, and large naval ships**, enhancing fleet flexibility.

Why Does the Induction Matter?

1. India faces increasing **submarine threats**, especially in the Indian Ocean Region (IOR).
2. Maritime security challenges now include **terrorism, piracy, smuggling, drones, and non-state actors**.
3. The Navy needs **modern, versatile platforms** to support blue-water operations far from India's coastline.
4. The induction also marks **75 years of the Indian Navy's Fleet Air Arm**, making it symbolically and operationally significant.

How the MH-60R Enhances Naval Capabilities?

1. **Multi-Role Operational Capability:** The MH-60R is designed for:
   a. **Anti-Submarine Warfare (ASW)**
   b. **Anti-Surface Warfare (ASuW)**
   c. **Search and Rescue (SAR)**
   d. **Medical Evacuation (MEDEVAC)**
   e. **Vertical Replenishment (VERTREP)** for ship-to-ship logistics at sea
2. **Advanced Sensors and Weapons**
   a. Equipped with **multi-mode radar**, **infrared cameras**, **electronic support measures**, **datalinks**, and **dipping sonar**.
   b. Uses **sonobuoys** to detect submarines.
   c. On-board mission systems create a **real-time picture of surface and underwater threats**.
   d. Can be armed with **torpedoes, air-to-ground missiles, rockets, and guns**.
3. **Countering Conventional and Asymmetric Threats**
   a. **Conventional threats**:
      i. Enemy submarines
      ii. Surface warships
      iii. Sea denial and deep-sea operations

b. **Asymmetric threats**:
   i. Maritime terrorism
   ii. Piracy and smuggling
   iii. Sea-borne infiltration
   iv. Use of fishing boats for hostile activities
   v. Drones and autonomous vessels
   vi. Sabotage of ports and offshore infrastructure

4. **Sustainment and Operational Readiness**
   a. The Ministry of Defence signed **sustainment support agreements worth ₹7,995 crore** for five years.
   b. Support includes **spares, training, repairs, maintenance facilities, and technical assistance**.
   c. This ensures **high availability**, longer service life, and operations from **dispersed locations and ships**.

Implications of the Induction

1. Strengthens India's **anti-submarine warfare capability**, critical in the Indian Ocean.
2. Enhances **blue-water navy operations**, extending the reach of warships.
3. Improves India's ability to counter **new-age asymmetric maritime threats**.
4. Reduces dependence on obsolete platforms like Sea Kings.
5. Deepens **India-US defence cooperation** and interoperability.

Challenges and Way Forward

Challenges	Way Forward
Dependence on foreign-origin platforms	Gradually build indigenous helicopter capabilities
High cost of acquisition and maintenance	Ensure efficient sustainment and lifecycle management
Rapidly evolving asymmetric threats	Continuous upgrades in sensors and weapons
Need for trained personnel	Strengthen training and skill development
Long-term operational readiness	Develop domestic maintenance and repair ecosystem

4. Fifth Schedule and Maoist Insurgency

Context

1. **Maoist insurgency** continues to **persist in Fifth Schedule areas** of **central and eastern India** despite decades of **security operations and development programmes**.
2. Recent debates emphasise that **administrative neglect, weak governance, and poor tribal representation**, rather than only poverty, have sustained insurgency in these regions.

What is Maoism and How Did It Originate?

1. **Maoism in India** traces its origins to the **Naxalbari uprising of 1967** in West Bengal.
2. It is inspired by **Mao Zedong's ideology**, advocating armed struggle to overthrow the state and establish a "**people's government**".
3. The movement claims to represent the interests of the **landless, poor peasants, adivasis, and marginalised groups**.
4. Over time, Maoism evolved through different phases and expanded into **central and eastern India**, forming what is popularly called the **Red Corridor**.
5. By the 1990s and early 2000s, Maoism had consolidated itself in **tribal-dominated regions**, especially where governance failures were acute.

What is the Fifth Schedule? (Constitutional Framework)

1. The **Fifth Schedule of the Constitution** applies to **tribal-dominated areas** in States such as **Chhattisgarh, Jharkhand, Odisha, Madhya Pradesh, Maharashtra, Telangana** and **Andhra Pradesh**.
2. It was envisioned as a **special social contract** between the Indian State and adivasis, recognising their distinct social, cultural and economic conditions.
3. **Key Features of the Fifth Schedule**
   a. **Tribal Advisory Council (TAC):**
      i. Mandatory body with **three-fourths tribal representation** to advise the State on tribal welfare.
   b. **Governor's Special Powers:**
      i. Governors are empowered to regulate land transfer, prevent land alienation, and ensure protection of tribal interests.

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c. **Tribal Sub-Plan (TSP):**
   i. Dedicated financial mechanism for tribal development.

d. **Objective:**
   i. **Protect** tribal land, culture, livelihoods, and ensure **self-governance** within the constitutional framework.

Despite these strong safeguards, implementation remained weak.

Why Maoist Insurgency Deepened in Fifth Schedule Areas?

1. **Failure of governance despite constitutional protection**
   a. Constitutional safeguards existed on paper but were **poorly implemented**.
   b. Colonial administrative structures, legal systems, and bureaucratic processes continued unchanged, making **governance inaccessible** to low-literate tribal communities.
2. **Severe underdevelopment and poverty**
   a. The **Planning Commission's Expert Committee (2008)** documented **extreme poverty in resource-rich tribal regions**.
   b. The **Oxford Multidimensional Poverty Index (2010)** ranked these regions **worse than Sub-Saharan Africa**.
3. **Large-scale land alienation and displacement**
   a. Despite legal safeguards, millions of adivasis **lost land due to mining, dams** and **industrial projects**.
   b. Studies show tribal **land loss increased** sharply **after economic liberalisation**.
4. **Denial of forest and livelihood rights**
   a. Control over forests, the main source of livelihood, steadily shifted away from tribal communities.
   b. **Access to justice** against arbitrary land acquisition **remained weak**.

How Governance Failures Created Space for Maoism?

1. **Administrative exclusion and lack of representation**
   a. Governance institutions were dominated by **non-tribal officials** unfamiliar with local realities.
   b. B.D. Sharma noted that **outsiders carried biases** that **deepened alienation**.
2. **Weak oversight institutions**
   a. Bodies such as the **Ministry of Tribal Affairs** and **National Commission for Scheduled Tribes** failed to prevent exploitation (**Mungekar Committee, 2009**).
   b. Governors rarely exercised their Fifth Schedule powers.
3. **Limited success of PESA, 1996**
   a. **Panchayat Extension to Scheduled Areas Act (PESA)** aimed to establish tribal self-governance.
   b. Although political representation improved, **Gram Sabha powers were routinely violated**, especially regarding land acquisition and mining consent.
4. **Rise of parallel Maoist governance**
   a. Governance gaps enabled Maoists to run **parallel administrations**.
   b. They provided **quick dispute resolution, basic schooling, health support** and **food distribution**.
   c. The slogan **"Jal, Jungle aur Zameen"** resonated with dispossessed adivasis.

Implications

1. Constitutional safeguards **lost credibility** on the ground.
2. **Deep distrust** developed between tribal communities and the State.
3. **Security-centric approaches** proved **insufficient** without governance reform.
4. Maoists exploited **governance vacuums** to gain legitimacy.
5. Long-term peace remained elusive.

Challenges & Way Forward

Challenges	Way Forward
Under-representation of adivasis in administration	Ensure **meaningful tribal representation** in bureaucracy and decision-making
Weak justice, health and education institutions	Strengthen grassroots **service delivery institutions**
Dilution of Forest Rights Act and PESA	Restore and **strictly enforce** original mandates
Undermining of Gram Sabha authority	**Protect consent powers** over land and mining
Over-centralised governance	Consider Sixth Schedule-like **autonomous arrangements**

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ECONOMY

1. The Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Bill, 2025

The bill introduces significant reforms to the **Insurance Act 1938, LIC Act 1956, and IRDAI Act 1999**, aiming to **modernize** the **sector**, **boost FDI**, and **enhance policyholder protection** over the previous framework.

Key Improvements

The bill brings at least 15 targeted enhancements for greater accessibility, regulation, and efficiency:

Changes Introduced	Earlier (Before the Amendment)	Now (After the Amendment)
1. FDI Limit Increased	Foreign investment in insurance companies was allowed only up to **74%**. Indian ownership was mandatory.	Foreign investors can own **100%** of an insurance company in India, allowing full foreign ownership.
2. Net Owned Funds (NOF) requirement. (It represents the net financial strength of a company after adjusting for reserves, losses, and intangible assets.	Insurance companies were required to have **Net Owned Funds of at least ₹5,000 crore** to operate.	Insurance companies now need **Net Owned Funds of only ₹1,000 crore**, lowering the entry requirement.
3. Empowers IRDAI with disgorgement powers to recover wrongful gains.	IRDAI could impose penalties but **could not directly recover illegal or wrongful profits** earned by insurers or intermediaries.	IRDAI can **order recovery of wrongful or illegal gains** made through violations, ensuring offenders do not benefit financially.
4. One-time registration for insurance intermediaries	Insurance intermediaries had to **apply for multiple registrations and renew them repeatedly** for different activities.	Insurance intermediaries need **only a one-time registration**, which can be used for permitted activities, reducing repeated compliance.
5. IRDAI approval threshold for equity transfers	Any equity transfer **above 1%** required **prior approval from IRDAI**, even for small share changes.	IRDAI approval is required **only when equity transfer exceeds 5%**, allowing routine share transfers without prior approval.
6. Policyholders' Education and Protection Fund (PEPF)	There was **no dedicated and mandatory fund** created specifically for policyholder education and protection using penalties and donations.	A **Policyholders' Education and Protection Fund (PEPF)** is mandated, where **penalties and donations are used for consumer awareness, grievance redress, and insurance literacy programs**.
7. Data security rules for policyholder information	Data protection requirements for policyholder information were **limited and not explicitly stringent**, leaving scope for misuse or weak safeguards.	Insurers must follow **strict data security norms**, including **mandatory safeguards against data leaks, hacking, and unauthorized sharing of customer information**.

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8. Binding Directions	IRDAI's directions were **limited in scope** and often relied on advisory or procedural actions.	IRDAI can issue **binding and compulsory directions** to insurers and intermediaries in **public interest**, such as stopping harmful products or correcting unfair practices immediately.
9. Rationalizes Penalties	Penalty provisions were **fragmented, unclear, or inconsistent**, with limited coverage for unregistered intermediaries.	**Clear and proportionate penalties up to ₹10 crore** are prescribed, including **new fines for unregistered agents or platforms** selling insurance without IRDAI approval.
10. Transparent SOPs	Regulatory rules were often framed **internally with limited public consultation or regular review**.	IRDAI must follow **transparent Standard Operating Procedures (SOPs)**, including **publishing draft regulations and conducting periodic reviews**.
11. Permits online premium payments	Insurance coverage usually began **only after cheque realization or formal approval**, and online payments could still lead to delays in coverage.	**Risk coverage starts immediately once the online premium payment is successfully made**, without waiting for cheque clearance or manual approval.
12. Updated Definitions for Insurance Activities	Insurance activities were governed by **outdated and unclear definitions**, leading to confusion and legal ambiguity.	The Bill introduces **updated and clear definitions** of insurance activities, streamlining operations and reducing ambiguity.
13. Enhances overall policyholder protections	Policyholder protection measures were **less stringent**, and regulatory violations were **not always publicly disclosed**.	Insurers must follow **stricter compliance norms** and **publicly disclose regulatory violations**, such as penalties for mis-selling or claim settlement failures.
14. Easier entry for new players and innovative products.	Entry barriers and regulatory rigidity **limited the entry of new insurers and innovative products**.	**Easier entry for new players and innovative insurance products**, promoting greater competition in the market.
15. Reforms LIC governance	LIC operated under a **legacy governance framework** with limited alignment to modern regulatory and corporate governance standards.	LIC's governance structure is **reformed and modernised**, including **improved board oversight, stronger compliance norms, and better disclosure standards**.

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These changes prioritize **"Insurance for All by 2047"** while addressing gaps in the prior laws' rigidity and limited foreign participation.

Missing Elements from the Bill

Reform	What is the current position?	Why it is a missed opportunity
Composite Licence	No provision allowing insurers to operate in both life and non-life segments. Current law maintains strict separation: Life insurers → only life insurance; General insurers → only non-life insurance.	It would have allowed one company to offer multiple insurance products together, making it easier for customers and improving global alignment.
Reduced Capital Norms for New Insurers	Minimum paid-up capital remains unchanged: ₹100 crore for insurers and ₹200 crore for reinsurers. **(Paid-up capital is the money invested by shareholders at the start, while net owned capital includes reserves and adjusts for losses)**	High capital needs stop small and specialised insurers from entering the market. Lower norms could increase insurance reach.
Cross-selling of Financial Products	The Bill is silent on allowing insurers to distribute mutual funds, loans, and credit cards.	Insurers could have offered more financial products and earned additional income.
Greater Flexibility in Investment Norms	No changes proposed in existing investment restrictions for insurers. **For example:** insurers still have limited freedom to invest policyholder funds beyond prescribed instruments.	More flexibility could help insurers earn better returns and manage funds efficiently.
Multi-insurer Agency Model	Insurance agents are still not allowed to sell policies of multiple insurers.	Agents could have offered more choices to customers and improved competition.
Captive Insurance Companies	Large corporations are not permitted to set up captive insurance companies. **(Captive insurance companies are insurers created by large firms to insure their own risks instead of buying insurance from the market.)**	Companies could have better managed their own risks and reduced insurance costs.

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The **Insurance Amendment Bill, 2025** marks a major step in **liberalising** and **strengthening** India's **insurance sector**, especially through **100% FDI** and **enhanced regulation**. However, **key omissions** such as **composite licences** and **capital norm reforms** limit its **transformative potential**. **Future reforms** will be **crucial** to fully **realise inclusive** and **competitive insurance growth**.

2. Securities Market Code Bill, 2025

Context

In **December 2025**, the Union Finance Minister **Nirmala Sitharaman** tabled the **Securities Market Code Bill, 2025** in the **Lok Sabha**. The Bill seeks to **unify and modernise securities market laws** and has been referred to the **Standing Committee on Finance** for detailed examination.

What is the Securities Market Code Bill, 2025?

1. The Bill aims to **consolidate three major laws** governing India's securities market: **Securities Contracts (Regulation) Act, 1956, SEBI Act, 1992** and **Depositories Act, 1996.**
2. The proposal was first announced in the **Union Budget 2021-22**.
3. The objective is to **rationalise, simplify, and modernise** the regulatory framework.
4. The Bill seeks to create a **principle-based, technology-friendly code** that supports:
   a. Investor protection
   b. Capital mobilisation at scale
   c. Faster adjudication
   d. Ease of doing business
5. It removes **obsolete and redundant provisions**, eliminates duplication, and ensures **uniform regulatory procedures** across securities laws.

Why Was the Bill Needed?

1. India's securities market laws had **overlapping provisions**, leading to complexity and compliance burden.
2. Separate Acts resulted in **fragmented regulation** and slower enforcement.
3. A growing, technology-driven market requires **modern, flexible, and principle-based regulation**.
4. There was a need to **balance strict regulation with ease of doing business**, without weakening investor protection.

How the Securities Market Code Bill Proposes to Reform the System?

1. Unification of Securities Laws

a. By merging three laws into a single code, the Bill creates a **streamlined and coherent legal framework**.

b. This reduces confusion, duplication, and regulatory arbitrage.

2. Changes in SEBI's Composition and Governance

a. The Bill proposes to increase the number of members in the **Securities and Exchange Board of India** from **9 to 15**.

b. The Board will include:

i. A **Chairperson**

ii. **Two Central Government officials** (ex-officio)

iii. **One representative from the Reserve Bank of India** (ex-officio)

iv. **11 other members**, of whom **at least five must be whole-time members**

c. Currently, SEBI has only **three whole-time members**.

d. The Bill also mandates **disclosure of direct or indirect interests** by Board members to avoid conflicts of interest.

3. Decriminalisation of Minor Offences

a. Violations of a **minor, procedural, or technical nature** will be shifted from criminal prosecution to **civil penalties**.

b. This **aims** to:

i. Reduce compliance burden

ii. Improve ease of doing business

iii. Focus criminal punishment only on serious offences

c. **Criminal liability** will remain for **serious violations** such as:

i. Insider trading

ii. Trading while in possession of material, non-public information

d. The Bill also brings **"unlawful gains or losses"** under civil penalties.

4. Limitation on Inspections

a. No inspection can be initiated if **eight years have passed** since the date of contravention.

b. This provides **certainty and closure** for market participants.

5. Faster and More Effective Adjudication

a. The Bill seeks to balance **speedy enforcement** with **adequate deterrence**.

b. Experts have noted that the changes aim to align regulatory efficiency with fairness.

Concerns Raised During Introduction

1. Some Members of Parliament argued that the Bill gives **excessive powers to a single regulator**, raising concerns over the **principle of separation of powers**.
2. The Finance Minister clarified that such concerns would be examined by the **Standing Committee on Finance**.
3. The presiding officer noted that referring Bills to Parliamentary Committees is within the **Speaker's authority**.

Implications of the Bill

1. Creates a **uniform and modern securities market framework**.
2. Improves **investor confidence** through clearer rules and governance standards.
3. Reduces **regulatory complexity and compliance costs**.
4. Encourages **capital mobilisation and market growth**.
5. Strengthens India's position as a **technology-driven financial market**.

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Challenges and Way Forward

Challenges	Way Forward
Concentration of extensive regulatory powers in a single authority may raise concerns regarding checks and balances.	Ensure strong **parliamentary oversight**, regular review by Standing Committees, and transparency in regulatory functioning.
Decriminalisation of minor violations may **reduce deterrence** if not carefully implemented.	Retain **strict civil penalties** and criminal liability for serious offences such as insider trading and market manipulation.
Transitioning from three separate laws to a single consolidated code may create short-term **compliance confusion.**	Issue **clear rules, regulations, guidance notes**, and conduct stakeholder consultations for smooth transition.
Expansion of SEBI's powers increases the **need for institutional accountability.**	Mandate **disclosure of conflicts of interest**, strengthen internal governance norms, and ensure judicial review mechanisms.
Rapid technological changes in securities markets **may outpace existing regulations.**	Adopt a **principle-based framework** with periodic review to keep regulation flexible and future-ready.

3. India's Economic Outlook (2025-26)

Context

India ended 2025 with **strong macroeconomic stability** despite external shocks, but **weak domestic consumption** has emerged as a **key challenge** for **2026**, **threatening private investment** and **future growth**.

1. What was expected at the beginning of 2025 regarding US tariffs and US trade deal?

1. At the start of 2025, policymakers broadly believed that India would **remain largely insulated** from the tariff actions initiated by the United States and would conclude an **early trade deal with the US**.
2. There was confidence that India's domestic economic strength would cushion any external disruption.
3. However, as the year progressed, **both assumptions proved incorrect**.

2. What external shock did India face during 2025 in the form of tariffs and H-1B Visa norms?

1. In 2025, the US administration imposed a **25% reciprocal tariff** on Indian goods and later added an **additional 25% penalty** due to India's purchase of Russian crude oil.
2. As a result, India faced the **highest effective tariffs into the US**, even higher than China.
3. At the same time, a **tightening of H-1B visa norms** affected India's services exports.
4. This created a **two-pronged shock**, hitting both **goods exports through tariffs** and **services exports through visa restrictions**.
5. Initially, there were serious concerns that India's export engine would stall but this did not happen.

3. Why did India's exports not collapse despite high tariffs?

1. Although exports declined between September and October 2025, a **strong recovery was seen in November**.
2. This recovery was driven by higher exports of **tariff-exempt goods**, particularly **pharmaceuticals and electronics**, and by Indian exporters successfully **diversifying into alternative global markets**.
3. As a result, the impact of tariffs turned out to be **less damaging than feared**, even though the external environment remained hostile.

4. How did the domestic economy perform during 2025 with low inflation and low interest rates?

1. Despite external pressures, the domestic economy showed **steady performance**.
2. Indian businesses recorded stable growth in recent quarters, and the economy closed 2025 with **low inflation and low interest rates**.
3. This domestic stability acted as a **buffer**, preventing external shocks from triggering a broader economic slowdown.

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5. How did the government respond during 2025 with reforms like GST rationalization, labour reforms and financial sector reforms?

1. The government used the crisis period to **push through several reforms**, despite concerns that reform momentum had slowed after the 2024 general election.
2. In the second half of the year, policy actions included **GST rate rationalisation**, progress on **long-pending labour law reforms**, and **amendments to the nuclear sector** aimed at attracting private and foreign investment, even though this involved diluted supplier liability provisions.
3. In the financial sector, reforms such as **100% foreign ownership in insurance** and new investment norms for banks and pension funds were introduced to attract foreign capital amid concerns over capital outflows and a widening **current account deficit (CAD)**.
4. Other significant steps included a **reduction in MGNREGA spending**, which weakened the rural safety net, and the withdrawal of several **Quality Control Orders (QCOs)** that had burdened smaller firms in sectors such as textiles and steel.

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6. What role did capital flows and the rupee play?

1. Towards the end of 2025, India saw a **late surge in foreign direct investment**, led by commitments from global technology firms in cloud and AI infrastructure.
2. This helped ease concerns about capital flows.
3. The rupee depreciated to **over ₹90 per US dollar**, and this **managed depreciation** provided partial relief to exporters facing a 50% tariff barrier in the US.
4. Together, these factors helped India **weather the tariff shock without a financial crisis**.

7. What is the domestic outlook for 2026 with GDP growth forecast at 7.3% in FY26?

1. India continues to be the **fastest-growing major economy**, with GDP growth forecast at **7.3% in FY26**.
2. High-frequency indicators suggest that economic activity remained resilient in the October-December quarter of 2025.
3. Agricultural growth has been supportive, aided by a healthy **kharif harvest** and improved **rabi sowing**.
4. The Chief Economic Adviser has indicated that growth in 2025-26 is expected to be **at least 7%**.
5. However, early signs of weakness are emerging in some indicators.

8. Where is the main weakness emerging?

1. The central weakness lies in **domestic consumption**.
2. Rural demand remains relatively strong, but **urban consumption is still recovering**.
3. Festival spending and GST changes supported demand temporarily, but it is uncertain whether this momentum will continue.
4. Private investment has shown mild improvement, supported by higher non-food bank credit and rising capacity utilisation.
5. However, utilisation remains at **75-77%**, while companies typically require **around 80% for several quarters** before committing to major new investments.
6. Without stronger consumption demand, **private investment is unlikely to accelerate sustainably**.

9. What are the key external risks going forward?

1. Externally, uncertainty remains high.
2. There is still no clarity on how long US tariffs will continue, and global trade conditions remain weak.
3. There is also a risk that **Chinese exports, blocked from the US market, may be redirected to other regions**, including India, increasing competition for Indian producers.
4. The **AI boom in the US is hiding deeper economic weaknesses**. Although technology-driven growth looks strong, the **US labour market has weakened**, which may slow the economy over time.
5. At the same time, many developed countries have **high debt and fiscal deficits**. To reduce this burden, governments may allow **higher inflation to erode the real value of debt**, a process known as **inflating away debt**.
6. If this happens, it could create **global market instability**, affecting countries like India.

10. Why is consumption critical for India's long-term growth?

1. According to a World Bank report, India must grow at an average of **7.8% for over two decades** to reach high-income status by 2047.
2. Historically, India's trend growth has been **6-7%**, with **near-8%** growth achieved only briefly during **FY03-08.**
3. India's most reliable growth engine has been **domestic consumption**, which can revive private investment and attract FDI.
4. However, weak demand visibility is discouraging companies from expanding capacity.
5. At the same time, rising capital productivity relative to labour productivity raises concerns about how growth benefits will be distributed.
6. India's new labour codes are only a **small initial step** in addressing this challenge.

11. What is the way forward to revive consumption and sustain growth?

1. India must focus on **reviving domestic consumption**, especially urban demand, to provide confidence for private investment.
2. Policy must **balance fiscal prudence** with **targeted support** to boost demand, while continuing structural reforms that improve productivity and employment.
3. Externally, India should **accelerate trade negotiations** with the EU and other partners to reduce tariff dependence on the US.
4. Strengthening **services exports, remote work opportunities, and skill development** will be crucial in an AI-driven global economy.

Conclusion

India successfully **weathered severe tariff shocks in 2025** due to domestic stability, reform efforts, and capital inflows. However, the sustainability of growth now depends on **reviving domestic consumption** to drive private investment. Without this, external uncertainties, weak demand, and global disruptions could constrain India's economic momentum in the years ahead.

4. World Inequality Report 2026

Context

The **World Inequality Report (WIR) 2026** shows that India continues to have **one of the highest income and wealth inequalities in the world**. The top 10% earners capture 58% of national income, while the bottom 50% receive only 15%. Wealth inequality is deeper: the top 1% holds 40% of national wealth. The report provides new data on income distribution, wealth concentration, gender gaps, global inequality patterns, and the link between inequality and climate emissions.

What Is the World Inequality Report?

1. The WIR is produced by the **World Inequality Lab**, involving 200+ scholars (including Thomas Piketty).
2. It analyses **income, wealth, gender inequality, regional inequality, and carbon inequality** using global comparable data.
3. The 2026 edition is the **third report**, after the 2018 and 2022 editions.
4. It highlights both **national trends** (India included) and **global patterns** in inequality.

What the Report Shows About India?

1. **Income Inequality in India**
   a. **The top 10%** earn **58%** of India's national income (2024).
   b. **The bottom 50%** earn only **15%**.
   c. **The top 1%** alone earns **22.6%** of all income.
   d. Average annual income per person is **€6,224 (PPP)**.
   e. **Trend:**
      i. The income share of the top 10% has risen steadily since the 1980s.
      ii. The income share of the bottom 50% has fallen over time.
      iii. India now ranks among **the most unequal countries globally**.
2. **Wealth Inequality in India**
   a. The top 10% hold **65% of national wealth**.
   b. The top 1% holds **40%** - almost as much as the bottom 50%.
   c. The bottom 50% owns only **6.4%** of India's wealth.

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d. **Average household wealth:**
   i. National average: **€28,141**
   ii. Bottom 50%: **€1,801**
   iii. Top 10%: **€182,913**
   iv. Top 1%: **€1.1 million**
e. **Income gap (Top 10% to Bottom 50%) remains very high:**
   i. **2014: 38.0**
   ii. **2024: 38.2** (almost unchanged)

3. **Gender Inequality in India**
   a. **Female labour participation remains at 15.7%**, unchanged for a decade.
   b. Shows persistent gender barriers in work, income, and economic opportunities.

What the Report Shows About Global Inequality?

1. **Income and Wealth Distribution**
   a. **Globally, inequality is extreme:**
      i. The bottom 50% of the world earns **8% of income**, owns **2% of wealth**.
      ii. The top 10% earns **53% of global income**, and owns **75% of global wealth**.
      iii. The top 1% owns **37% of wealth**, 18 times more than the bottom 50%.
   b. **Ultra-rich concentration:**
      i. The top 0.001% (≈60,000 people) own **3x the wealth** of half of humanity.
      ii. The top one-in-100 million (56 individuals) have **€53 billion each on average**.
      iii. Their wealth exceeds the **annual GDP of several African countries**.
2. **Regional Inequality**
   a. **Monthly average incomes (PPP):**
      i. **Sub-Saharan Africa:** €300
      ii. **South & Southeast Asia:** €600
      iii. **Latin America:** €1,100
      iv. **World average:** €1,200
      v. **Europe:** €2,900
      vi. **North America & Oceania:** €3,800
   b. **Insight:** The richest region earns **12-13 times** more than the poorest.
3. **Global Mobility in Income Distribution**
   a. **1980 vs 2025:**
      i. **China** has moved from the bottom to the **middle 40%** globally, with some entering the upper-middle.
      ii. **India** has moved downward:
   1. In 1980, many were in the middle 40%.
   2. By 2025, **most Indians are now in the bottom 50%** globally.
      iii. **Sub-Saharan Africa** remains in the lowest percentiles.
4. **Gender Inequality Worldwide**
   a. Women earn **61% of male earnings** (paid work only).
   b. When unpaid labour is included, women earn only **32%** of men's income.
   c. **Women's share of total labour income**:
      i. Middle East & North Africa: **16%**
      ii. South & Southeast Asia: **20%**
      iii. Sub-Saharan Africa: **28%**
      iv. East Asia: **34%**
      v. Europe & North America: **~40%**
   d. **Insight:** The gender gap has barely improved since 1990.
5. **Climate Inequality**
   a. Carbon emissions linked to private capital ownership:
      i. Bottom 50%: **3% of emissions**
      ii. Top 10%: **77% of emissions**
      iii. Top 1%: **41% of emissions**
   b. **Implication:** The rich contribute disproportionately to climate damage, while the poor bear the consequences.

Why Do These Findings Matter?

1. Inequality in India is **deep, persistent, and multi-dimensional** - in income, wealth, gender, and global position.
2. High concentration of wealth at the top limits **social mobility** and **equal opportunity**.
3. India's fall in global income distribution shows **slow relative progress** compared to China.
4. Gender inequality blocks utilisation of half the population's talent.
5. Carbon inequality shows that the **top global elite drive the climate crisis**, highlighting the need for equitable climate policies.

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Challenges and Way Forward

Challenges	Way Forward
Extreme concentration of income & wealth at the top	Implement progressive taxation on billionaires and ultra-rich
Persistent low incomes for bottom 50%	Expand public investment in education, health, childcare, nutrition
Weak redistributive systems	Strengthen pensions, unemployment benefits, and targeted cash transfers
Gender gap in labour income and participation	Improve childcare support, provide safe workplaces, expand skill training
Regressive taxation patterns	Ensure high-income groups contribute fairly; close loopholes used by ultra-rich
Climate inequality driven by rich	Impose carbon taxes on luxury emissions and high-wealth individuals

5. The Evolution of Pension Reforms in India

Context

1. India is witnessing rapid ageing. Today, **153 million Indians are above 60 years**, and this number is expected to **increase to 347 million by 2050**.
2. However, **more than 88% of senior citizens continue to work in the informal economy without pensions or reliable social security**, instead of retiring.
3. This has created a major challenge for India's pension system and financial inclusion framework.

What is a Pension System?

1. A pension system provides **regular income after retirement**, ensuring financial security in old age.
2. In India, pension coverage has historically been limited because most workers are in the **informal sector**, lacking formal retirement benefits.

What are Pension Reforms in India?

1. Pension reforms refer to **changes in government policies and schemes** aimed at expanding pension coverage, especially to unorganised and vulnerable groups.
2. India has moved from **welfare-based support** to a **contributory and inclusion-based model**.

How Pension Schemes Have Evolved Over Time?

1. **Early Welfare-Based Social Assistance**
   - a. **Indira Gandhi National Old Age Pension Scheme (IGNOAPS), 1995**
     - i. Targeted persons **over 65 years living below the poverty line**
     - ii. Direct monthly support from government
     - iii. Aim: Provide basic income security to vulnerable elderly
   - b. **Old Pension Scheme (OPS)**
     - i. For **government employees in the formal sector**
     - ii. Provided guaranteed lifelong pension
2. **Shift Toward Contributory Pension Models:** Research showed that contributory schemes encourage better saving habits. Hence, reforms moved toward participation-based models:
   - a. **New Pension Scheme (NPS), 2004**
     - i. Replaced OPS for government employees
     - ii. Contributions from both employee and government
     - iii. Later extended to **corporate sector employees**
     - iv. **NPS 2.0** introduced flexible options and **up to 100% equity investment** for higher returns
   - b. **Atal Pension Yojana (APY), 2015-16**
     - i. For workers **aged 18-40** in the informal sector
     - ii. Periodic contributions, flexible payment options (monthly/ quarterly/ half-yearly)
     - iii. Government **guarantees minimum pension amount**
     - iv. Designed to include agriculture and informal income earners
3. **Labour Code Reforms**
   - a. Introduced a **uniform definition of wages**
   - b. Ensured **basic pay = at least 50% of earnings**

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c. Result: Higher calculation base for pension, gratuity, and social security benefits

4. **Digital Inclusion Initiatives**
   a. **e-SHRAM portal**
      i. A national database for informal workers to register and access eligible schemes
      ii. Supports integration of informal workforce with protection systems

Why Do These Reforms Matter?

1. Pension access is crucial because most elderly remain in informal employment even after 60.
2. India is transitioning from: **welfare support → participatory and inclusive financial protection**
3. Enables workers to build savings and secure retirement income.

Implications of Pension Reforms

1. **Greater financial inclusion** across informal and formal sector barriers
2. **Improved retirement security** for vulnerable elderly
3. **Encourages saving behaviour** among low-income groups
4. **Supports ageing** with **dignity**
5. Helps build a **data-driven welfare delivery system**

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Challenges and Way Forward

Challenges	Way Forward
Low awareness about pension schemes	Strengthen outreach via local institutions, panchayats, SHGs, banking correspondents
Digital divide and technology barriers	Simplify digital processes, offline registration options, assisted help centres
Exclusion due to Aadhaar-phone mismatch or lack of bank accounts	Improve verification systems and support for account opening
Informal sector income instability	More flexible contribution options and periodic contribution holidays
Slow enrolment in APY and NPS	Incentives for enrolment, employer contributions, community mobilisation

6. Rupee Depreciation and Effective Exchange Rates

Context

The Indian rupee recently weakened sharply, breaching the **₹89 per US dollar** mark for the first time, and also falling against the **euro, pound, and yen**. This decline has led to discussions on the **nominal effective exchange rate (NEER)** and **real effective exchange rate (REER)**, which provide a clearer picture of the rupee's movement. The rupee is now considered **undervalued** after significant changes in the last year.

What is Rupee Depreciation? How is it different from Devaluation?

1. **Rupee Depreciation** means the **market value of the rupee falls** compared to other currencies because of **market forces** like demand and supply of foreign exchange.
2. **Example:** ₹84 per dollar → ₹89 per dollar → rupee has depreciated.
3. **Devaluation** happens **only under a fixed exchange rate system** when the **government/RBI officially reduces the value** of the rupee.
4. **Example:** The Government declares ₹70 per dollar → ₹80 per dollar.
5. **Simple Difference**:
   a. **Depreciation** = automatic, market-driven
   b. **Devaluation** = deliberate, government decision

What do you mean by Effective Exchange Rates (NEER & REER)?

1. Effective exchange rates are **broader measures** of a currency's strength compared to many countries at once, not just one.
2. They show whether the rupee is getting stronger or weaker in **global trade**, not just against the US dollar.
3. There are **two types**:
   a. **NEER** (Nominal Effective Exchange Rate)
   b. **REER** (Real Effective Exchange Rate)

What is NEER and REER?

1. **NEER** is a **weighted average exchange rate** of the rupee against the currencies of **40 major trading partners**.

a. Base year = **2015-16 (value = 100)**
b. A fall in NEER means the rupee has **depreciated**.
c. Does **not** adjust for inflation.

2. **REER** is **NEER adjusted for inflation differences** between India and its trading partners.
   a. Shows whether a currency is **overvalued**, **undervalued**, or **fairly valued**.
   b. If **REER increases** → domestic goods become costlier globally → exports less competitive.
   c. If **REER decreases** → currency becomes more competitive.

Why is the Rupee's Fall 'Real' This Time?

1. The rupee is weakening not just in nominal terms but also in **real economic value** after adjusting for inflation.
2. It has depreciated against **all four major currencies**: dollar, euro, pound, and yen.
3. Decline in REER confirms **real depreciation**, not just nominal movement.

How the Rupee Has Moved?

1. **Bilateral Exchange Rate**
   a. From **Nov 2024 to Nov 2025**, rupee fell from:
      i. ₹84.49 → **₹89.46** per dollar
      ii. ₹89.12 → **₹103.63** per euro
      iii. ₹106.97 → **₹118.27** per pound
      iv. ₹0.5574 → **₹0.5720** per yen
2. **NEER Trend**
   a. Below **100 since 2018-19**
   b. Fell from **90.75 (Jan 2025) to 84.58 (Oct 2025) - 6.8% decline in 9 months**
3. **REER Trend**
   a. REER hit an all-time high **108.06 (Nov 2024)**
   b. Dropped to **97.47 (Oct 2025) - 9.8% fall**
   c. Indicates the rupee has shifted from **overvalued** to **undervalued**

Why REER Fell More Strongly?

Two main reasons:

1. **Broad nominal depreciation:** The rupee weakened against most major currencies including the **Chinese yuan (11.66 → 12.63)**.
2. **Lower inflation in India compared to other countries :** India's CPI inflation in Oct 2025 was **0.25%**, while:
   a. US, Japan = **3%**
   b. UK = **3.6%**
   c. Euro area = **2.1%**
   d. Brazil = **4.7%**

Low inflation + nominal depreciation = **large fall in REER**, making the rupee more competitive.

Implications of the Trend

1. Rupee is now **undervalued**, helping **exports** become more competitive globally.
2. Imports may become costlier, raising risks for **oil and commodity prices**.
3. Reduced inflation pressure means **RBI does not need a strong rupee** to control prices.
4. Encourages a more market-driven **exchange rate policy**.

Challenges and Way Forward

Challenges	Way Forward
Sharp rupee depreciation increases import cost and risk of volatility	Strengthen forex reserves and manage orderly movements
Global trade uncertainty and tariff actions	Diversify export markets and improve production competitiveness
Risk of inflation rising again if imports become expensive	Monitor price trends closely and adjust interest rates when needed
Need for balanced intervention	Use limited RBI intervention to avoid excess volatility
Maintaining competitiveness without destabilising economy	Promote export-led sectors and maintain stable macro policies

7. 'C-grade' for India's National Account Statistics

Context

1. The **International Monetary Fund (IMF)**, in its **2025 Article IV report**, has **retained a 'C-grade' for India's national account statistics (GDP data)**, indicating **data shortcomings that somewhat hamper surveillance**.

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2. This comes at a time when **India's GDP growth for July-September 2025 surged to 8.2%**, raising questions on the credibility and transparency of official GDP estimates.

What is IMF Data Adequacy Assessment?

1. Under **Article IV consultations**, the IMF annually evaluates macroeconomic data of member countries.
2. Its purpose is to check **whether a country's statistics are reliable enough for global policy assessment and surveillance**.
3. Grades range from **A to D**:
   a. **A**: Data adequate and reliable
   b. **B**: Some shortcomings but broadly adequate
   c. **C**: Shortcomings that **somewhat hamper surveillance**
   d. **D**: **Serious shortcomings** that significantly hamper evaluation
4. **India received:**
   a. **B overall rating** (for prices, government finance, external sector, monetary & financial data)
   b. **C for National Accounts** (GDP)

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Why did the IMF Graded India 'C' for National Accounts?

The IMF has retained a **C-grade** for India's GDP statistics because it believes certain weaknesses reduce reliability and make economic assessment difficult. These concerns include:

1. **Outdated Base Year (2011-12):** India still calculates GDP using old consumption and production patterns that do not fully reflect today's digital economy, gig workforce, services growth, and modern industry structure. This means **GDP may not accurately represent the current economy**.
2. **Limited Data Revisions and Weak Granularity:** Major countries frequently revise GDP data using updated information. In India, revisions take longer and lack detailed breakdowns, making it difficult to analyse sector-wise strengths or weaknesses effectively.
3. **Methodological Issues:** India uses the **Wholesale Price Index (WPI)** to convert nominal GDP to real GDP in some sectors, while global standards use the **Producer Price Index (PPI)**. **PPI better reflects actual producer-level prices**, so IMF argues that using WPI may **distort real growth estimates**.
4. **Delays in the National Census and Government Financial Data:** Without an updated Census, data on population, employment, income and poverty may be inaccurate. Similarly, **fiscal data for Centre + States is not available on time**, making accurate budgeting and debt assessment difficult.

Hence, the IMF believes these shortcomings **reduce accuracy and transparency**, affecting investor confidence and policy planning.

What IMF Suggested?

To **improve credibility** and align with **global standards**, the IMF recommended:

1. **Regular revisions** of GDP, inflation and other macroeconomic data using modern methods
2. **Completing the Population Census quickly**, as it is essential for reliable estimates of consumption, labour force and poverty
3. **Timely and consolidated reporting of government accounts** from both Centre and States to ensure transparency in public finance
4. **Adopting global best practices** such as modern price indices (PPI), updated surveys and big data sources (GST, digital payments, corporate filings, satellite data)

The IMF wants **faster, more transparent and internationally comparable statistical systems** so that macroeconomic decisions are based on accurate numbers.

Government Response

The **Ministry of Statistics and Programme Implementation (MoSPI)** says:

1. Work is ongoing to **improve data systems**
2. **New GDP series** with **2022-23 as base year** and **new CPI inflation series** will be launched in **February 2026**
3. Expected improvements:
   a. Revised methodology
   b. New data sources such as **digital economy, GST data, formal sector payroll, rural-urban surveys**
   c. Better sectoral coverage

The government believes **better ratings should be given** once the new system is implemented.

Why the New GDP Series Matters

1. Updates economy measurement to reflect **structural changes** (digital economy, services expansion, gig economy)
2. Improves **accuracy, credibility, and global confidence**
3. Reduces **policy misinterpretation & sudden controversies**
4. Helps **better monetary, fiscal and investment decisions**

Implications

Positive Implications	Concerns
Better statistics **improve policy planning** & **global trust**	C-grade **affects credibility** of India's GDP and reforms narrative
Helps **attract foreign investment** & rating agencies confidence	**Data inconsistencies** fuel doubts during unexpected growth numbers
Supports **more accurate inflation**, **employment** & fiscal numbers	**Weak statistical base** can misguide monetary policy
Strengthens India's push for **global standard ranking**	**Census delays affect accuracy** of per-capita, poverty & labour estimates

Challenges and Way Forward

Challenges	Way Forward
Outdated base year (2011-12)	Expedite launch of **new GDP and CPI series** based on current economy
Methodology gaps: WPI instead of PPI	Adopt **Producer Price Index (PPI)** to reflect real prices accurately
Incomplete fiscal & Census data	Conduct **Population Census urgently** and enhance Centre-State fiscal coordination
Limited transparency and real-time updates	Use **GST, digital payments, corporate filings, satellite data, AI analytics**
Credibility concerns among global agencies	**Communicate improvements clearly** to ratings, investors, and research bodies

8. India Post's DHRUVA Framework

Context

1. India Post has proposed a new digital framework called **DHRUVA (Digital Hub for Reference and Unique Virtual Address)** to standardise physical addresses using digital "labels" similar to email IDs.
2. To enable this, the government has released a **draft amendment to the Post Office Act, 2023**, following the launch of **DIGIPIN.**
3. DHRUVA is expected to strengthen governance, improve service delivery, and enhance user experience.

What is DHRUVA?

1. **DHRUVA** is a new **Digital Public Infrastructure (DPI)** similar to Aadhaar and UPI, but for **digitalising physical addresses**.
2. Instead of writing full addresses, users will be able to share a **digital label**, like: **name@dhruva**
3. When a user authorises this label, platforms (e-commerce, gig platforms, logistics providers, etc.) can access:
   a. The **descriptive address**
   b. The **geo-coded DIGIPIN** linked to that address

What is DIGIPIN?

1. **DIGIPIN** is an open-source, **10-digit alphanumeric code** (**location-based pin**) developed by India Post.
2. Every **12 sq. metre area** in India has a **unique DIGIPIN**.
3. Useful for **rural or poorly defined addresses**, ensuring **precise delivery** even when descriptive addresses are unclear.

Ecosystem envisioned under DHRUVA

DHRUVA will have multiple actors:

1. **Address Service Providers** - generate proxy addresses/labels.
2. **Address Validation Agencies** - verify and authenticate user addresses.
3. **Address Information Agents** - manage user consent for sharing addresses.
4. **Governance Entity** - similar to NPCI for UPI, overseeing the entire framework.

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Why is DHRUVA Needed?

1. India has **inconsistent** and **non-standardised** address formats.
2. Many rural areas lack precise descriptive addresses.
3. Delivery services, logistics, and governance require accurate and verified location data.
4. A digital address system improves **accuracy**, **consent-based sharing**, and **interoperability** between platforms.

How Will DHRUVA Be Used?

1. **Consent-based Address Sharing**
   a. Users can **tokenise** their addresses (just like UPI tokenises bank accounts).
   b. Users control **who can access their address**, **when**, and **for how long**.
   c. Ensures privacy and user autonomy.
2. **Easy Address Updates**
   a. When users shift homes, they can **update their DHRUVA label**.
   b. All platforms using the label automatically get the updated address → no need to individually update every service.
3. **Doorstep Service Discovery**
   a. DHRUVA allows platforms to show users which **doorstep services** (delivery, health visits, government services) are available at their exact location.
4. **Support for Digital Platforms**
   a. E-commerce, gig platforms (Uber, Amazon), and logistics companies can accurately access verified addresses.
   b. Helps reduce delivery failures and improves last-mile connectivity.
5. **Requirement of a Legal Framework**
   a. Since it involves personal data and location information, there is a need for a **specific enabling law** with strong consent rules.

Implications

1. **Positive Implications**
   a. **Better service delivery** due to accurate, standardised addresses.
   b. **Improved logistics** and lower delivery errors.
   c. **Inclusion for rural households** where descriptive addresses are unclear.
   d. **Greater user control** through consent-based access.
   e. **Unified national address system** for both public and private services.
2. **Negative Implications**
   a. **Urban governance gap:** Since DHRUVA links addresses to **people**, not **physical structures**, it may not produce complete datasets for city planning.
   b. **Risk of incomplete data:** If users do not generate labels or refuse consent, datasets become fragmented.
   c. **Digital exclusion:** Many elderly and vulnerable people may struggle with digital systems → risk of being left out.
   d. **Privacy concerns:** Linking personal details to exact geo-coded locations requires strict safeguards.

Challenges and Way Forward

Challenges	Way Forward
Standardisation may miss structures if users don't opt in	Consider a parallel address digitisation independent of user consent
Data privacy concerns due to geo-coded addresses	Strong consent architecture and data protection safeguards
Low digital literacy, especially among elderly	Assisted registration centres and offline mechanisms
Risk of excluding those without Aadhaar- linked phones or bank accounts	Simplify verification and allow alternative ID proofs
Dependence on users generating labels	Awareness campaigns and government incentives for adoption
Unclear usefulness for urban governance	Integrate structural surveys and municipal datasets with DHRUVA

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9. Capital Account Problem

Context

1. The rupee has weakened sharply against major currencies in the last year:
   a. **Against the US dollar:** from about **₹84.7** to **₹89.9**
   b. Also weaker against the **euro, pound, yen and yuan**.
2. This fall is happening **even though the current account deficit (CAD) is not very high and is declining**.
3. The main reason is a **capital account problem** - foreign capital inflows into India have **dropped sharply**.

What is Balance of Payment?

1. The Balance of Payments records **all economic transactions** of India with the rest of the world. It has two main parts:
   a. **Current Account**
   b. **Capital Account (plus financial account)**

What is a Capital Account?

1. The **capital account / financial account** records cross-border flows of **money and investments**, such as:
   a. **Foreign Direct Investment (FDI)**
   b. **Foreign Portfolio Investment (FPI)**
   c. **External commercial borrowings**
   d. **External assistance (loans, aid)**
   e. **NRI deposits** and other capital flows

What is a Current Account?

1. The **current account** shows exports and imports of **goods and services**, plus **income and transfers** (like interest, dividends, remittances).
2. It has **two main subcomponents**:
   a. **Merchandise Trade (Goods Trade Balance)**
      i. Exports and imports of **physical goods**.
      ii. India's goods trade balance has **always been in deficit**.
      iii. The goods trade deficit:
         1. Around **$91.5 billion in 2007-08**
         2. More than doubled to **$195.7 billion in 2012-13**
         3. Narrowed to **$112.4 billion in 2016-17** and **$102.2 billion in 2020-21**
         4. Then widened sharply to about **$286.9 billion in 2024-25**
         5. Likely to **cross $300 billion in 2025-26**, based on trends till September 2025.
   b. **Invisibles (Services, Transfers, Income, etc.)**
      i. These are **non-physical transactions**:
         1. IT and software services
         2. Business and financial services
         3. Remittances from Indians working abroad
         4. Other professional and miscellaneous services
      ii. India gets **large surpluses** here because receipts from services and remittances are much higher than payments like interest, dividends, royalties, and education abroad.
      iii. The invisibles surplus:
         1. About **$75.7 billion in 2007-08**
         2. Around **$150-151 billion by 2021-22**
         3. Rose to about **$263.9 billion in 2024-25**
         4. Likely to **top $280 billion in 2025-26**.
3. These strong invisibles show India is becoming the **"office of the world"** (IT engineers, accountants, doctors, nurses, etc.), just as China is called the **"factory of the world"**.

What is Current Account Deficit (CAD)?

1. CAD refers to the difference between the value of imports and exports of goods, services, and income flows.
2. If a country imports more than it exports, it has a **current account deficit**.
3. India has historically had a structural CAD, with only **four years of surplus** in the last 25+ years: **2001-02, 2002-03, 2003-04 and 2020-21**.

How has India managed CAD so far?

1. India has a **structural CAD** - that means it is usually in deficit.
2. In the last **25+ years**, India had current account **surpluses in only four years**:
   a. **2001-02:** $3.4 billion
   b. **2002-03:** $6.3 billion

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   c. **2003-04:** $14.1 billion
   d. **2020-21:** $23.9 billion
3. CAD peaks:
   a. **2011-12:** about **$78.2 billion**
   b. **2012-13:** about **$88.2 billion**
4. In most other years CAD stayed **below $50 billion**, except **2018-19** and **2022-23** (around **$57.3 billion** and **$67.1 billion**).
5. Recently, CAD has **declined**:
   a. **April-September 2024:** about **$25.3 billion**
   b. **April-September 2025:** about **$15.1 billion**
6. So, **CAD is present but not exploding** because the **invisibles surplus almost offsets the goods deficit**.

Why Does the Rupee Have a Capital Account Problem (Not a Current Account Problem)?

1. From the BoP side, **CAD is manageable and falling**.
2. However, the rupee is still falling because:
   a. **Capital inflows have reduced sharply** and are **no longer enough to finance the CAD comfortably**.
   b. Both **FDI** (long-term investment like factories) and **FPI** (investment in stock markets) have reduced. Investors are pulling money out instead of bringing money in.
   c. India has strong GDP growth, but foreign investors are still not investing. Because less capital is coming in, the rupee is becoming weaker against the dollar and other currencies.
3. Earlier, the capital inflows were **higher than CAD**, so India could **finance the deficit easily and still add to forex reserves**.
4. Now, capital inflows are **lower than CAD**, so **forex reserves face pressure**, and the rupee weakens.

Implications of the Framework

1. **Rupee Weakness:** Continued pressure on the rupee makes imports costlier (especially oil, machinery, electronics).
2. **Imported Inflation:** Higher import costs can raise domestic prices, adding to inflation risk.
3. **Investment and Jobs:** Lower FDI means fewer new factories and infrastructure projects, affecting job creation.
4. **External Vulnerability:** If capital inflows remain low, India may find it harder to finance CAD comfortably and build reserves.
5. **Disconnect:** There is a worrying gap between **high GDP growth** and **low foreign investor interest**.

Challenges and Way Forward

Challenges	Way Forward
Structural goods trade deficit and dependence on large imports	Improve competitiveness of manufacturing, diversify export basket, reduce unnecessary imports
CAD financed increasingly by invisibles, not goods exports	Continue strengthening services and remittances, but also push "Make in India" for goods exports
Sharp fall in FDI and FPI, leading to low net capital inflows	Enhance policy stability, improve ease of doing business, ensure faster clearances and contract enforcement
Capital inflows now lower than CAD, putting pressure on forex reserves and rupee	Attract stable long-term FDI, encourage sovereign and pension funds, avoid over-reliance on volatile portfolio flows
Frequent FPI outflows cause exchange rate volatility	Deepen domestic capital markets, promote long-term domestic investors to balance foreign flows
High growth not translating into investor confidence	Maintain macro-stability, predictable tax regime, transparent regulations, and credible communication from policymakers
Global uncertainties and tightening financial conditions reduce flows to emerging markets	Build stronger foreign exchange reserves, diversify sources of external financing, and maintain prudent external debt levels

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10. National Security Cess on Demerit Goods

Context

1. The **Union Government introduced the Health and National Security Cess Bill, 2025**, proposing a **National Security Cess** on **demerit goods such as pan masala**, to generate dedicated funds for **health initiatives** and **national security**.
2. The issue has triggered a debate in Parliament over impact on **MSMEs**, **federal revenue sharing**, and potential return of **inspector raj** (excessive bureaucratic control).

What is the National Security Cess?

1. The **National Security Cess** is a levy imposed on **specified demerit goods** (products associated with **high health risks)**, such as **pan masala** and similar items.
2. It is designed to create a **predictable revenue stream** for **health services** and **national security programmes**.

Key Features of the Proposed Cess

1. **Applicable Only on Demerit Goods**
   a. The cess applies **only to high-risk products** like **pan masala**, not on essential or commonly used goods.
   b. It is a **capacity-based cess**, levied on the **machines installed** for production rather than actual production output.
   c. This structure aims to **reduce tax evasion**, enhance **transparency**, and regulate historically opaque sectors.
2. **Revenue Sharing with States**
   a. A **portion of the collected revenue will be shared with states** specifically for **health-related schemes and awareness programmes**.
   b. This diverges from typical cesses which are **not shareable**, and strengthens **cooperative fiscal federalism**.
3. **No Adverse Impact on GST System**
   a. The cess is **independent of GST** and will not impact GST revenue distribution.
   b. For example, pan masala is already taxed at **28% GST + compensation cess**; the proposed cess is **additional** and **capacity-based**.
   c. It **does not disturb the GST Council mechanism** or the compensation arrangements.

Why was it Introduced (Objectives)?

1. **To discourage consumption** of harmful goods like pan masala by increasing economic deterrence.
2. **To raise funds for critical sectors**, namely **health infrastructure** and **national security systems**.
3. **To improve transparency** in revenue utilisation by dedicating collections to specified purposes.
4. **To reduce tax evasion** in the pan masala manufacturing industry.

How the Cess Works?

1. The cess will be imposed **not on consumption**, but on **machine-linked production capacity**.
2. **Pan masala** will be taxed at a **maximum 40% rate under GST**, plus the new cess.
3. The cess applies **independent of GST**, and **will not reduce GST collections**.
4. **Different factories** will have **different liabilities** based on the number and capacity of installed machines.
5. A **compliance mechanism** may require **factory inspections**, raising concerns about administrative overreach.

Implications

1. **Improved Funding for Health and Security:** Better resources for hospitals, preventive healthcare, and national defence infrastructure.
2. **Public Health Benefits:** Taxing harmful goods may reduce usage and lower long-term disease costs.
3. **Compliance and Administrative Implications:** Factory-level oversight may increase operational demands for units, especially smaller ones.
4. **Strengthening Fiscal Federalism:** Revenue-sharing model promotes collaborative centre-state fiscal planning.
5. **Ethical and Policy Questions:** Raises debate about whether public welfare should be financed through taxation of harmful products.

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Challenges and Way Forward

Challenges	Way Forward
Burden on MSMEs: Capacity-based cess may increase compliance costs and machinery-related assessment could pressure small manufacturing units.	Provide **simplified compliance procedures**, capacity-based slabs for small units, **technology upgrade support**, and **single-window clearance** to reduce cost and paperwork burden.
Fear of 'Inspector Raj': Greater inspection and monitoring may increase regulatory interference and risk of harassment.	Introduce **digital auditing**, transparent online reporting, **time-bound inspections**, and clear accountability rules to prevent discretion.
Effectiveness Debate: Higher taxation alone may not significantly reduce consumption of harmful goods.	Combine taxation with **awareness campaigns**, **public health education**, strict enforcement against illegal supply, and consider **policy alternatives** such as targeted restrictions where appropriate.
Increased reliance on cesses ('Cessification of governance'): Concerns that frequent cesses bypass standard revenue-sharing frameworks.	Maintain **clear utilisation reports**, periodic public audits, apply **sunset clauses**, and ensure revenues are transparently earmarked.
Administrative complexity for implementation: Machine-linked assessment may require frequent inspections, accurate tracking, and sector reforms.	Ensure **digital monitoring tools**, capacity verification through online systems, and consult industry stakeholders for smooth transition.
Impact on small manufacturers' competitiveness: Capacity-based tax may favour larger firms with automation.	Provide **gradual transition timelines**, financial assistance, and incentives for efficiency improvements.

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Science And Technology

1. Brain-Computer Interfaces Explained

Context

Interest in neurotechnology has surged as **Brain-Computer Interfaces (BCIs)** are advancing globally. India is strengthening its neuroscience ecosystem, while countries like the U.S., China and EU are rapidly creating technologies, laws, and ethical frameworks. BCIs are emerging as **major tools for healthcare, human enhancement,** and **strategic advantage**.

What is Neurotechnology?

1. Technology that **interacts directly with the brain** to record, analyse, or influence neural activity.
2. **Uses sensors, electrodes, AI,** and **computing tools** to understand or stimulate brain signals.
3. **Helps decode thoughts or intentions** into digital commands.
4. Enables **communication with machines** such as robotic limbs, wheelchairs or computers.
5. Includes **non-invasive systems** (EEG) and **invasive systems** (implanted electrodes).

Difference between Invasive and Non-invasive Systems

Feature	Invasive Systems	Non-Invasive Systems
Placement	Inside the brain via surgery	Outside the scalp
Accuracy	Very high	Moderate to low
Risk	High (surgery, infection)	Very low
Use Cases	Paralysis, Parkinson's, severe neurological injury	Research, mild therapy, training, communication
Cost	Very high	Low to moderate

What is a Brain-Computer Interface?

1. A system that **captures brain signals** and **converts them into commands** for external devices.
2. **Allows control** of robotic arms, prosthetics, wheelchairs, or computer cursors using thought.
3. Can be used for **diagnosis, rehabilitation, cognitive research,** and **neuroprosthetics**.
4. **Helps patients** with paralysis, stroke, spinal cord injuries, or degenerative diseases.
5. Some BCIs also **stimulate parts of the brain** to reduce symptoms of depression or Parkinson's disease.

Why Does India Need Neurotechnology?

1. **High burden of non-communicable neurological disorders** such as stroke, epilepsy and Parkinson's disease.
2. Rising number of **injury-related neurological disabilities** due to accidents and spinal cord injuries.
3. Potential for **restoring mobility, speech and communication** for paralysed individuals.
4. **Reduces long-term dependence on medication** in mental health disorders through **targeted stimulation**.
5. **Strengthens India's position** in biotechnology, AI and medical innovation.

How Neurotechnology Helps Neurological Disorders?

1. **Stroke & paralysis:** BCIs restore limb movement through robotic exoskeletons or prosthetics.
2. **Parkinson's disease:** Deep brain stimulation delivers electrical impulses to reduce tremors.
3. **Depression:** Stimulating specific neural circuits can improve mood and treatment-resistant depression.
4. **Spinal cord injury:** BCIs can bypass damaged nerves to restore communication between brain and limbs.
5. **Cognitive rehabilitation:** Helps patients regain speech, memory or decision-making abilities.

India's Progress in Neurotechnology

1. **IIT Kanpur** created a **BCI-controlled robotic hand** for stroke rehabilitation.
2. **National Brain Research Centre (NBRC)** and **IISc Bengaluru** are advancing neuroscience research.

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3. **Startups** are emerging - e.g., systems analysing animal neural signals for disease detection.
4. Growth in AI, biomedical engineering, and robotics strengthens the ecosystem.
5. **India's genomic diversity** and **large patient base** provide significant research opportunities.

How Other Nations are Advancing?

1. **United States:** The BRAIN Initiative accelerates innovative neurotechnologies; Neuralink has FDA approval for human trials.
2. **China:** China Brain Project focuses on cognition, brain-inspired AI and neuro-disorder therapies.
3. **European Union:** Leading global efforts on neurorights, ethics, and regulation of BCIs.
4. **Chile:** First nation to legislate "neurorights" in its constitution.
5. **Global trend:** Increasing investment in neurological therapies, military research, and human-machine integration.

Can BCIs Be Used for Human Enhancement or Military Advantage?

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1. **Technically possible:** Enhanced cognition, faster reaction time, improved memory or attention.
2. **Military interest:** Control of drones, machines or communication tools through thought.
3. **Dual-use technology:** Therapies can evolve into performance-enhancing tools.
4. **Ethical concerns:** Autonomy, surveillance, manipulation, hacking of neural data.
5. **Requires strong regulation:** Safeguards, consent norms, and global ethical frameworks.

Implications

1. **Healthcare transformation:** Potential to treat severe neurological disorders and disabilities.
2. **Economic opportunity:** Creates a high-value biotechnology and AI industry.
3. **Ethical challenges:** Raises concerns about privacy, consent, and manipulation of brain data.
4. **Security dimension:** BCIs could influence future warfare and national security doctrines.
5. **Global leadership:** Nations with strong regulatory ecosystems will shape norms for emerging neurotechnologies.

Challenges and Way Forward

Challenges	Way Forward
Lack of specific BCI regulations in India	Create **tailored regulatory pathways** for invasive and non-invasive BCIs
Ethical risks: privacy, autonomy, brain data misuse	Introduce neurorights and **ethical guidelines**
High cost, limited access	Promote **public-private partnerships** and indigenous manufacturing
Limited public awareness	Launch **nationwide public engagement** on benefits and risks
Fragmented research initiatives	Create a **national neurotechnology mission** with multi-disciplinary hubs

2. Data Exclusivity and India's Generic Drug Industry

Context

The Indian government is **reportedly considering** introducing **data exclusivity** in the pharmaceutical sector, despite earlier rejecting such demands during trade negotiations with the **UK** and the **European Free Trade Association (EFTA)**. Recent meetings between government officials and pharmaceutical stakeholders have renewed concerns about the impact on India's generic drug industry and access to affordable medicines.

What is Data Exclusivity?

1. When a pharmaceutical company develops a **new drug**, it must submit **clinical trial data** to regulators to prove safety and efficacy.
2. **Generic drug manufacturers** usually rely on this data and conduct simpler **bio-equivalence studies** to show their drug works the same as the original.
3. They can then launch generics **once the patent expires**.
4. **Data Exclusivity Provision**
   a. Data exclusivity gives the **innovator company exclusive rights over its clinical trial data** for a fixed period.

b. During this period, regulators **cannot use the innovator's data** to approve generic versions.
c. Generic companies must either:
   i. **Wait** until the **exclusivity period ends**, or
   ii. Conduct **costly clinical trials themselves**.

5. **Relation with Patents**
   a. **Patents protect the invention** for 20 years.
   b. **Data exclusivity protects trial data**, even if the patent is weak or close to expiry.
   c. Together, they **extend market protection** for **innovator companies**.

Why Data Exclusivity Matters for India?

1. India's pharmaceutical industry is **built on generic medicines**.
2. Nearly **90% of Indian pharma companies manufacture generics**, not new drugs.
3. The **absence of data exclusivity** has allowed India to supply **cheap medicines globally**, especially to developing countries.
4. **Introducing data exclusivity** could:
   a. Delay entry of generics
   b. Increase drug prices
   c. Reduce access to affordable medicines

What Has the Indian Government Been Doing?

1. In recent weeks, the government has held **multiple meetings with pharmaceutical industry stakeholders** to discuss the issue of data exclusivity.
2. These meetings involved officials from the **Commerce Ministry**, **Department for Promotion of Industry and Internal Trade (DPIIT)**, the **Department of Pharmaceuticals**, and the **Health Ministry**.
3. According to industry experts present in these meetings, discussions were focused **not on whether data exclusivity should be introduced**, but on **how it could be implemented** if adopted.
4. The **Health Ministry publicly stated** that there is **no proposal from its side** to introduce data exclusivity.
5. At the same time, discussions continued at the **inter-departmental level**, indicating differing views within the government.
6. The **EFTA trade agreement does not require India to implement data exclusivity**; it only mentions that discussions on the issue may take place after one year.
7. The Commerce Minister has indicated that introducing stronger intellectual property protections, including data exclusivity, **could help attract large foreign investments**, estimated at around **$150 billion** under the EFTA deal.

How Data Exclusivity Can Affect Indian Pharma?

1. **Loss of Competitive Edge**
   a. Indian generics may lose their advantage in **global markets**.
   b. Entry of cheaper drugs could be delayed **even after patent expiry**.
2. **Impact on Access to Medicines**
   a. Delayed generics mean **higher drug prices** for longer periods.
   b. This affects patients, especially in **low- and middle-income countries**.
3. **Extension of Monopoly Beyond Patents**
   a. If a drug is marketed late in its patent life, data exclusivity can extend monopoly **after patent expiry**.
4. **Weakening of Patent Challenges**
   a. Currently, generic firms can seek regulatory approval and then **challenge patents** or request **compulsory licences**.
   b. Data exclusivity blocks this route.
   c. Example: **Risdiplam** for **Spinal Muscular Atrophy**, where a generic version was allowed after a patent challenge.

Role of the Drug Regulator (CDSCO)

1. The **Central Drugs Standard Control Organization (CDSCO)** issued a notice highlighting "**unequal regulatory burden**".
2. It argued that innovators **conduct costly trials**, while generics rely on **bio-equivalence studies.**
3. Activists fear this is a **backdoor push for data exclusivity**.
4. **Concerns raised** include:
   a. Patent evergreening
   b. Delay in generic entry
   c. Unnecessary clinical trials
   d. Possible monopolies over traditional medicines

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Patent Evergreening

1. **Patent evergreening** is the practice where pharmaceutical companies **extend monopoly rights** by filing **new patents on minor modifications** of an existing drug.
2. These changes may involve **new dosage forms, salts, delivery methods, or slight formulation changes**, without real therapeutic improvement.
3. The aim is to **delay entry of generic drugs** even after the original patent expires.
4. **Example:** Filing a **new patent for a slightly modified version** of an existing cancer drug just before the original patent expiry to block generics.

Compulsory Licensing

1. **Compulsory licensing** allows a government to **permit a third party to produce a patented product without the consent of the patent holder**.
2. It is used in situations of **public health emergencies, high prices, or inadequate supply**.
3. The patent holder still receives **reasonable royalty**, but **monopoly pricing is broken**.
4. **Example:** India granted a **compulsory licence** for **Nexavar (cancer drug)** in **2012** to allow **cheaper generic production**.

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Implications

1. Data exclusivity could **undermine India's generics-driven pharma model**.
2. It may conflict with **Atmanirbhar Bharat** and public health priorities.
3. Higher medicine prices could **reduce access to life-saving drugs**.
4. While **innovation incentives** may **increase**, **public health costs** could **rise** sharply.
5. The move may shift India away from its role as the **"pharmacy of the developing world."**

Challenges and Way Forward

Challenges	Way Forward
Possible delay in entry of affordable generic medicines due to data exclusivity	Design any data exclusivity regime with **clear limits, shorter duration, and strong public-health safeguards**
Risk of extending monopoly beyond patent life (data exclusivity + late patent filing)	Ensure **no post-patent market exclusivity** by aligning exclusivity periods strictly within patent timelines
Weakening of **patent challenges** and **compulsory licensing** mechanisms	Explicitly **protect compulsory licensing, patent opposition, and TRIPS flexibilities** in domestic law
Concerns of **evergreening** and **unnecessary clinical trials**	Strengthen **patent examination standards** and regulate incentives to prevent misuse
Tension between **attracting investment** and **access to medicines**	Adopt a **balanced innovation policy** that supports R&D investment while ensuring **timely generic entry**
Policy opacity and **regulatory uncertainty**	Ensure **transparent, consultative policymaking** involving public health experts, industry, and civil society
Regulatory burden imbalance between innovators and generics	Explore **non-IP incentives** (tax benefits, faster approvals, grants) instead of strong exclusivity provisions

3. Concerns about 'fake rabies vaccine' in India

Context

1. In **November 2023**, a **counterfeit packaging** of the **rabies vaccine Abhayrab** was found being circulated in India.
2. This **raised concerns** about the **'fake rabies vaccines'** as rabies is **nearly 100% fatal** once symptoms appear and **vaccination** is the **only effective preventive measure**.
3. Also, even a **single missed effective dose** of vaccine can be fatal and counterfeit vaccines globally are known to **reduce efficacy and sometimes contain harmful substances**.

4. So, **many countries (Australia, the UK and the US)** raised health advisory warnings to their citizens who received **rabies vaccination in India** to check whether additional doses are required.

Why is Rabies Such a Serious Concern?

1. **What is Rabies:** Rabies is a **viral zoonotic disease** transmitted through the **saliva of infected animals**, most commonly dogs.
2. **Transmission:** Dog, cat, monkey, bat bites or scratches. Saliva entering **open wounds or mucous membranes.**
3. **Symptoms:**
   a. **Early**: fever, headache, nausea
   b. **Advanced**: hydrophobia (fear of water), hallucinations, excessive salivation, paralysis
   c. **Outcome**: **Almost always fatal** once clinical symptoms develop
4. **Why vaccines matter:** Rabies can be **completely prevented** if **vaccinations after exposure** (post-exposure prophylaxis - **PEP**) are **given correctly** and **on time**.

India's Rabies Burden (Background)

1. According to the **World Health Organization**, rabies causes **18,000-20,000 deaths annually** worldwide
2. **India accounts for ~36% of global rabies deaths**
3. Children under **15 years** constitute a large proportion
4. India reported **6,644 clinically suspected rabies deaths (2012-2022)** - likely an under-estimate
5. Hence, **any doubt about vaccine integrity becomes a global public health concern.**

What is Abhayrab and what did investigations find out?

1. Abhayrab is a **human rabies vaccine** manufactured by Indian Immunologicals Limited and holds around **40% of the rabies vaccine market share** in India as it is widely used in government and private health facilities.
2. **Allegation**: **Counterfeit packaging** detected in the market.
3. The company clarified that one batch was found with **different outer packaging** but the **inner vial** had **genuine vaccine**.
4. Raids were conducted in **Delhi, Agra and Mumbai** and vaccines were tested at **Central Drug Testing Laboratory** which also found **genuine vaccine content** in the vials.
5. The **problem** was **possible illegal diversion** of government-supplied vaccines to **the open market.**
6. This is a **regulatory and supply-chain integrity issue**, not vaccine failure.

Have There Been Vaccine Failures in India?

1. In **2022**, as cases of **rabies spiked in Kerala** and some vaccinated individuals died of rabies, **initial suspicion** was raised about **vaccine failure**.
2. But the **Union Health Ministry Committee** found that the main reasons for deaths were improper wound washing, non-administration of rabies immunoglobulin and poor adherence to protocol for category 3 bites.
3. As per **Dr. M K Sudarshan (APCRI)** (expert), India uses **multi-dose schedules.** So, even if **one dose is doubtful**, other doses + immunoglobulin usually provide protection.

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Understanding Rabies Vaccination Protocol

WHO-recommended Post-Exposure Prophylaxis:

1. **Immediate wound washing**
2. **Rabies Immunoglobulin (RIG)** on Day 0 for **Category 3 bites**
3. Vaccination: **3 intramuscular doses** or **2 intradermal doses**
4. Previously immunised persons: **2 booster doses**
5. Vaccines alone are **not sufficient** without immunoglobulin in severe bites.

Implications of the Abhayrab Row

1. **Public Health Implications:** Risk of **vaccine hesitancy** especially among rural populations and potential loss of trust in India's vaccination program.
2. **International Reputation:** It may raise concerns over **drug regulatory oversight** and impact on India's image as **global vaccine supplier.**
3. **Governance & Supply Chain:** It highlights **vulnerability** in packaging security, distribution monitoring and government-to-market leakages.

Challenges and Way Forward

Challenge	Way Forward
Counterfeit packaging is easier to **fake** than the vaccine formulation	Introduce **tamper-proof packaging**, QR-code based authentication, and holograms
Weak supply chain oversight allows diversion of government vaccine supplies	Implement **real-time batch tracking** from manufacturer to end-user
Shortage of rabies immunoglobulin limits effective post-exposure prophylaxis (PEP)	Ensure **universal availability of rabies immunoglobulin**, especially for Category-3 bites
Public awareness gaps lead to improper wound washing and delayed treatment	**Train healthcare workers** and run public campaigns on WHO-recommended PEP protocols
Slow regulatory enforcement delays detection and recall of compromised batches	Strengthen **rapid surveillance, recall mechanisms**, and transparent information sharing

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4. Strengthening India's Biosecurity Framework

Context

India is being urged to strengthen its **biosecurity system** because experts believe biological threats are increasing. **New biotechnologies, the growing abilities of non-state actors, and weaknesses in India's current systems** make the country more vulnerable.

What is Biosecurity?

1. Biosecurity means **protecting people, animals,** and **plants** from the **intentional misuse of biological agents, toxins, or technologies**. It includes:
   a. Keeping labs with dangerous pathogens secure
   b. Stopping deliberate outbreaks
   c. Protecting health across humans, animals, and plants
2. Biosecurity is different from biosafety. Biosafety prevents **accidental** leaks, but strong biosafety helps support biosecurity.

How Global Biosecurity Evolved?

1. The **Biological Weapons Convention (BWC) of 1975** was the **first global treaty** banning biological weapons and requiring countries to destroy existing stockpiles.
2. Although bioweapon use has reduced, new technologies and global tensions have increased risks again.

Why India Needs Stronger Biosecurity?

1. **Geographic and Ecological Risks:** India's large borders, rich biodiversity, and dense population make it easy for natural or engineered outbreaks to spread quickly.
2. **Dependence on Agriculture:** Since agriculture supports millions of people, any biological attack on crops or livestock can damage food security and the economy.
3. **Threat from Non-State Actors:** A recent case involving the alleged preparation of Ricin toxin shows that terror groups may be exploring biological weapons.
4. **Fast-Growing Biotechnology:** Modern biotech tools allow easy manipulation of biological systems. While useful, they can also be misused to create engineered threats.

India's Current Biosecurity System

1. **Department of Biotechnology:** Oversees lab safety and biotech research.
2. **National Centre for Disease Control:** Handles disease surveillance and public health response.
3. **Department of Animal Husbandry & Dairying:** Tracks livestock diseases.
4. **Plant Quarantine Organisation:** Protects crops and regulates agricultural imports.
5. **Key Laws and Policies:**
   a. **Environment Protection Act (1986):** Regulates hazardous microorganisms and GMOs.
   b. **WMD Act (2005):** Criminalises biological weapons.
   c. **Biosafety Rules (1989) & rDNA Guidelines (2017):** Govern lab safety and genetic research.
   d. **NDMA Guidelines:** Cover biological disaster management.

6. **International Role:** India is part of the **BWC** and the **Australia Group**, which controls export of dual-use technologies.

Gaps in India's Biosecurity System

1. India lacks a single, unified national biosecurity framework. The system is scattered across many agencies, causing weak coordination and slow response.
2. India ranks **66th** on the **Global Health Security Index**, showing declining ability to respond to threats.
3. **Major Weaknesses:**
   a. Old laws that don't match modern biotech developments
   b. Poor coordination between human, animal, and environmental health sectors
   c. Not enough high-containment labs
   d. Weak surveillance for engineered biological threats

Global Best Practices India Can Learn From

1. **United States:** National Biodefense Strategy integrates health, defence, and biotech.
2. **US DNA Screening Guidelines (2024):** Gene synthesis companies must screen DNA orders.
3. **European Union:** One Health-based Health Security Framework.
4. **China:** Biosecurity Law treats biotech and genetic data as national security assets.
5. **Australia:** Biosecurity Act covers synthetic biology.
6. **United Kingdom:** Focuses on surveillance and rapid response.

These examples show the value of unified oversight, modern laws, and early detection systems.

Challenges and Way Forward

Challenges	Way Forward
Fragmented biosecurity system	Create a **National Biosecurity Framework** to coordinate all sectors
Outdated laws not suited for new biotechnologies	Update laws to cover **synthetic biology, gene editing, and dual-use research**
Weak surveillance and limited high-containment labs	Invest in **biosurveillance tools, genomic sequencing, and BSL-3/BSL-4 labs**
Poor coordination between human, animal, and environmental health	Adopt **One Health** approach across ministries
Rising threat from non-state actors	Strengthen **lab security, monitoring, and intelligence sharing**
Limited ability to detect engineered threats	Use **AI-based detection, microbial forensics, and digital surveillance**
Need for stronger global cooperation	Participate more in **international data-sharing, crisis simulations, and global norms**

5. SHANTI Bill and Nuclear Liability Debate

Context

1. The Lok Sabha passed the **Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, 2025**.
2. The legislation triggered strong **opposition**, particularly over the **removal of supplier liability** under the existing **nuclear liability framework**.
3. The Bill will now be taken up in the Rajya Sabha.

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What is the SHANTI Bill, 2025?

1. The SHANTI Bill aims to **reform India's nuclear energy sector** to:
   a. Increase nuclear power capacity
   b. Attract **private and foreign investment**
   c. Support India's clean energy and net-zero goals
2. A key feature of the Bill is the **modification of the Civil Liability for Nuclear Damage Act, 2010**.

Major Change Introduced in New Bill

1. The Bill **removes the provision** that allowed nuclear plant operators to **seek compensation (right of recourse)** from equipment suppliers if an accident occurred due to defective equipment.

India's Current Nuclear Liability Framework

1. The **Civil Liability for Nuclear Damage Act, 2010 (CLNDA)** was enacted after the **Bhopal Gas Tragedy**, reflecting strong public concern about corporate accountability.

2. The Act uniquely allowed:
    a. The **operator** (usually NPCIL) to claim recourse from **suppliers**.
3. This clause was **not common internationally**, where liability generally rests only with the operator.
4. **Impact of the Clause:**
    a. Foreign companies were reluctant to invest due to:
        i. Fear of **unlimited liability**
        ii. High insurance risks
    b. This limited the benefits of the **India-US Civil Nuclear Agreement (2008)** despite India receiving a waiver from the **Nuclear Suppliers Group (NSG)**.

Why Has the SHANTI Bill Become Controversial?

1. **Removal of Supplier Liability**
    a. Opposition argued that removing supplier responsibility:
        i. Weakens **public safety safeguards**
        ii. Shifts the burden of accidents onto the Indian State and public
    b. Congress MP **Manish Tewari** highlighted that the BJP had earlier opposed the absence of such a clause in 2008.
2. **Allegations of Corporate Favouritism**
    a. Questions were raised over:
        i. The **timing of the Bill**
        ii. Reported interest by large conglomerates, particularly **Adani**, in the nuclear sector
    b. The government rejected these allegations, calling them **baseless and damaging to parliamentary dignity**.
3. **Cap on Operator Liability**
    a. The Bill reportedly **caps operator liability at ₹3,000 crore**.
    b. Opposition MPs questioned:
        i. The scientific and financial basis of this figure
        ii. Whether it is adequate to compensate victims in case of a major nuclear accident.

Government's Justification for the Bill

1. **Changing Technology and Risk Profile**
    a. According to the government:
        i. **Technology has evolved** since 2010
        ii. India is moving towards **Small Modular Reactors (SMRs)**
    b. SMRs:
        i. Are smaller in size
        ii. Have enhanced safety features
        iii. Can be installed closer to urban areas
2. **Lower Risk of Catastrophic Accidents**
    a. The government argues that:
        i. Modern reactors significantly reduce accident risks
        ii. The older liability framework no longer reflects technological realities
3. **Need for Investment and Energy Transition**
    a. India needs massive investment to:
        i. Expand clean energy
        ii. Reduce dependence on fossil fuels
    b. Private participation is seen as essential due to:
        i. Fiscal constraints
        ii. Rising energy demand

Political and Economic Dimensions

1. Opposition parties linked the Bill to:
    a. Falling foreign investment
    b. Currency depreciation
    c. Global trade pressures
2. They accused the government of **compromising public interest** to attract foreign capital.
3. The government maintained that the Bill is **policy-driven**, not company-specific.

Implications

1. **Boost to nuclear investment**: May attract domestic and foreign private players.
2. **Faster nuclear expansion**: Supports India's clean energy and climate commitments.
3. **Reduced supplier risk**: Aligns India with international nuclear liability norms.
4. **Public safety concerns**: Raises questions about victim compensation and accountability.
5. **Federal and parliamentary scrutiny**: Highlights the need for wider consultation on sensitive sectors.

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Challenges & Way Forward

Challenges	Way Forward
Public concern over safety and liability	Strengthen **independent nuclear regulation** and transparency
Reduced supplier accountability	Create **robust insurance** and compensation mechanisms
Trust deficit due to lack of consultation	Refer **complex laws to parliamentary committees**
Risk of inadequate compensation	Periodically **review liability caps** based on risk assessment
Balancing investment with public interest	Ensure **strong regulatory oversight** alongside liberalisation

6. LVM3-M6 Mission and ISRO's Heavy-Lift Capability

Context

1. Indian Space Research Organisation successfully launched the **LVM3-M6 mission**, carrying the **heaviest satellite ever launched by India, BlueBird Block-2 (~6,100 kg)**, into **Low Earth Orbit (LEO)**.
2. The mission is significant as it tests **ISRO's heavy-lift capability, launch turnaround time, and cost competitiveness** in the global commercial launch market.

Low Earth Orbit (LEO):

1. LEO is an orbit close to Earth, usually at an altitude of **less than 1,000 km** above the Earth's surface.
2. Satellites in LEO have **low communication delay**, making them suitable for internet, mobile communication, and Earth observation.
3. LEO satellites require **less power** to transmit signals compared to higher orbits.
4. Because of their low altitude, **multiple satellites are needed in constellations** to provide continuous global coverage.

What is the LVM3-M6 Mission?

1. **LVM3 (Launch Vehicle Mark-3)** is India's **heavy-lift launch vehicle**, earlier known as **GSLV-Mk3**.
2. It is a **three-stage rocket**, about **43.5 metres tall** and weighing **~640 tonnes**.
3. The **LVM3-M6 mission** placed the **BlueBird Block-2 satellite** into a **520 km LEO**, about **15 minutes after lift-off** from **Sriharikota**.
4. This was ISRO's **sixth operational flight of LVM3** and **third commercial mission** using this vehicle.

What is the BlueBird Block-2 Satellite?

1. **BlueBird Block-2** is a **commercial communication satellite** designed by **AST SpaceMobile**.
2. It is the **largest commercial communications satellite ever deployed in LEO**.
3. It will be part of a **LEO constellation** that provides **direct-to-mobile connectivity**.
4. Unlike traditional satellites, it can **communicate directly with normal smartphones**, without ground relay stations.
5. It will enable **4G/5G voice calls, video calls, messaging, streaming, and data services** globally.

Why is the LVM3-M6 Mission Important?

1. It proves ISRO's ability to **launch very heavy payloads to LEO**, not just geosynchronous orbits.
2. It shows that ISRO can offer **commercial heavy launches at lower cost** compared to competitors like Falcon-9 and Ariane-6.
3. It strengthens India's role as a **reliable alternative launch provider**, especially after:
   a. Russia's refusal to launch OneWeb satellites after the Ukraine war
   b. Retirement of ESA's Ariane-5
4. It supports India's future missions such as **Gaganyaan** and the **Bharatiya Antariksh Station**.

How does the LVM3 Rocket Work?

1. **Stage 1: S200 Solid Strap-On Boosters**
   a. Two large solid boosters provide **huge thrust at lift-off**.
   b. They help the rocket overcome Earth's gravity and dense atmosphere.

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2. **Stage 2: L110 Liquid Core Stage**
   a. Uses **liquid propellants** for controlled and stable thrust.
   b. Shapes the rocket's trajectory after booster separation.
3. **Stage 3: C25 Cryogenic Upper Stage**
   a. Uses **liquid oxygen and liquid hydrogen** at very low temperatures.
   b. Provides **high efficiency, long burn time, and precise orbit insertion**.
   c. Supplies **nearly 50% of the velocity** needed for higher orbits.

ISRO's Efforts to Optimise LVM3

1. **Increasing cryogenic engine thrust:** ISRO plans to upgrade the cryogenic upper stage from the current **C25** (28,000 kg propellant, 20-tonne thrust) to the **C32** stage (32,000 kg propellant, 22-tonne thrust), which will enable carrying heavier payloads and support space-station modules.
2. **Shift to semi-cryogenic engine:** ISRO plans to replace the liquid second stage with a **semi-cryogenic engine** using **refined kerosene and liquid oxygen**, which will reduce costs, improve efficiency, increase LEO payload capacity from about **8,000 kg to 10,000 kg**, and support missions such as the **Bharatiya Antariksh Station**.
3. **Bootstrap reignition technology:** ISRO is developing bootstrap reignition for cryogenic engines, which allows the engine to restart without external gases like helium, reduces system weight, increases payload capacity, and is especially useful for LEO constellation missions requiring deployment into multiple orbits.

Operational Readiness and Cost Efficiency

1. The mission came just weeks after the **CMS-03 (communication satellite) launch (November 2025)**.
2. This is the **shortest gap between two LVM3 launches**, testing ISRO's **rapid assembly and launch capability**.
3. It is only the **second time since 2023** that ISRO has launched **two LVM3 missions in a single year**.
4. Demonstrates **higher launch cadence**, reliability, and commercial readiness.

Challenges and Way Forward

Challenges	Way Forward
Strong global competition from Falcon-9 & Ariane-6	Focus on **cost-effective heavy launches**
Need for faster turnaround for commercial missions	Improve **assembly, testing, and integration speed**
Human-rating requirements for Gaganyaan	Add **redundancies and safety systems**
Limited payload capacity compared to competitors	Upgrade engines (C32, semi-cryogenic)
Multi-orbit deployment complexity	Develop **bootstrap reignition** technology

7. Google's Project Suncatcher

Context

1. Google has announced **Project Suncatcher**, a long-term research initiative to deploy **solar-powered AI data centres in space**, starting with prototype satellites by **2027**.
2. CEO Sundar Pichai stated that within a decade, **space-based data centres could become common**, signalling a major shift in global digital infrastructure.

What is Project Suncatcher?

1. **Project Suncatcher** is Google's plan to move part of its **AI computing infrastructure into space**.
2. It aims to deploy **solar-powered satellite constellations** equipped with **Tensor Processing Units (TPUs)** for large-scale machine learning tasks.
3. Satellites will be connected using **laser-based optical links**, allowing coordinated computing similar to Earth-based data centres.
4. Google has tested its chips for **radiation tolerance**, ensuring they can function in space conditions.
5. As a first step, **two prototype satellites** will be launched with **Planet Labs by early 2027** to test feasibility and performance.

Why Are Data Centres Being Moved to Space?

1. The rapid **AI boom** has sharply increased the demand for computing power.

2. Terrestrial data centres consume huge amounts of **electricity and water** and depend heavily on **fossil fuels**.
3. According to estimates, global data centre power demand could grow by **up to 165% by 2030**, intensifying climate concerns.
4. Space offers an alternative that reduces environmental stress on Earth.

How Space-Based Data Centres Work and Why They Are Attractive?

1. **Energy, Stability, and Reliability Advantages**
   a. Space offers **continuous and predictable solar energy**, especially on the lunar surface.
   b. This reduces dependence on **fragile Earth-based power grids**.
   c. Space-based systems are protected from **natural disasters**, extreme weather, and **undersea cable disruptions**.
2. **Data Sovereignty and Legal Flexibility**
   a. Many countries impose **data localisation laws**, restricting where data can be stored or processed.
   b. Under the **1967 Outer Space Treaty**, no country can claim sovereignty over outer space.
   c. This could allow **multi-country data hosting** from a single space-based facility, offering legal flexibility.
3. **Technological Enablers**
   a. Advances in **rocket and launch technologies** have reduced the cost of space missions.
   b. This makes it feasible to launch experimental computing payloads and test space data infrastructure.

Implications of Project Suncatcher

1. Marks a shift towards **clean-energy-based digital infrastructure**.
2. Could significantly reduce the **carbon and water footprint** of AI computation.
3. May reshape global rules around **data governance and sovereignty**.
4. Positions space as a new frontier for **critical digital infrastructure**.
5. Encourages innovation in satellite computing, optics, and energy systems.

Challenges and Way Forward

Challenges	Way Forward
High construction and launch costs	Gradual scaling starting with small prototypes
Difficulty of repairs and maintenance	Develop autonomous systems and remote diagnostics
Latency in data transmission	Use space computing mainly for non-time-sensitive AI tasks
Cybersecurity risks in space	Build space-specific encryption and security protocols
Need for skilled intervention	Advance robotics and AI-led maintenance systems
Legal and regulatory uncertainty	Develop international norms for space data infrastructure

8. Air Pollution and Rising Burden of Rheumatoid Arthritis

Context

1. **Increasing winter pollution** in **Delhi** is leading to a sharp **rise in rheumatoid arthritis** (RA) flare-ups.
2. **AIIMS research** shows a strong **link between long-term PM2.5** exposure and early immune system changes.
3. Hospitals report a yearly spike in symptoms from November to February, coinciding with hazardous AQI levels.

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What is Rheumatoid Arthritis?

1. A **chronic autoimmune disease** in which the immune system mistakenly attacks joint lining (synovium).
2. Causes swelling, stiffness, pain, fatigue, and long-term joint damage.
3. Can also affect eyes, lungs, blood vessels, heart, and skin.
4. No cure, but symptoms can be controlled with immunosuppressive drugs.

Why Pollution Triggers Autoimmune Reactions

1. **PM2.5 Entry Into the Body**
   a. Tiny particles (2.5 microns) easily enter the lungs.
   b. They move from the lungs into the bloodstream.
2. **Systemic Inflammation**
   a. PM2.5 particles act as strong oxidizers.
   b. They damage cells, tissues, and proteins → causing widespread inflammation.

3. **Immune System Rewiring**
   a. Polluted air alters proteins in the airway lining.
   b. The body no longer recognises these altered proteins → a "breach of immune tolerance".
4. **Molecular Mimicry**
   a. Altered proteins begin to resemble synovial lining of joints.
   b. Immune system attacks both the altered proteins and the synovium.
   c. Leads to joint inflammation and higher risk of autoimmune diseases.

Synovial Lining (Synovium)

The **synovial lining**, or **synovium**, is a thin, soft tissue layer that lines the inside of joints. It produces **synovial fluid**, which lubricates the joint, reduces friction, and keeps the bones moving smoothly.

How Pollution Leads to Winter Flare-Ups

1. Cold weather causes stiffness but not inflammation.
2. PM2.5 exposure triggers inflammation, especially during winter when pollution peaks.
3. AIIMS OPDs observe predictable **seasonal patterns**:
   a. Stable patients (March-October)
   b. Symptom flare-up (November-February)
4. **Clinical Pattern Noted Each Year**
   a. Increased joint swelling
   b. Severe morning stiffness
   c. Reduced mobility
   d. Fatigue and exhaustion
   e. Higher hospital visits
5. **Key Findings from AIIMS Studies**
   a. Autoantibody Presence Near High-Pollution Zones
   b. People living within 50 metres of arterial roads show higher autoantibody levels.
   c. Autoantibodies signify early immune system alteration even before RA symptoms appear.
6. **Pre-clinical Autoimmunity**
   a. About 20% of Delhi's population may have early markers of autoimmune disease due to pollution.
7. **Long-Term Exposure**
   a. Pollution does not cause RA immediately; it develops after years of exposure.
   b. Chronic inflammation accelerates disease progression.

Implications

1. **Public Health Burden:** Rising autoimmune diseases increase long-term healthcare costs and disability.
2. **Elderly Vulnerability:** Higher pollution-induced inflammation worsens arthritis, heart disease, hypertension.
3. **Pressure on Hospitals:** Winter months bring predictable spikes in OPD load.
4. **Economic Impact:** Reduced mobility lowers productivity, especially for older workers.
5. **Policy Relevance:** Strengthens case for strict air pollution control and targeted health interventions.
6. **Environmental Justice:** People living near major roads face higher disease risk due to unequal exposure.

Challenges and Way Forward

Challenges	Way Forward
Rising PM2.5 levels during winter **worsen inflammation and trigger autoimmune reactions**.	Strengthen **urban air-quality management**, enforce emission norms, and expand monitoring.
High exposure near arterial roads increases **early autoantibody formation**.	Create **green buffers, restrict construction dust**, and relocate high-emission activities.
Patients **unaware** of pollution-immune link and ignore early symptoms.	Public **awareness** campaigns on pollution-related autoimmunity and preventive steps.
Elderly and chronic patients face **severe flare-ups**.	Promote **indoor exercise, protective masks,** air purifiers, and seasonal medical plans.
Lack of **personalised preventive strategies**.	Develop **community-based screening** for autoantibodies in high-risk zones.

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9. AI in Everyday Life and What 2026 Holds

Why was 2025 a turning point for AI?

1. AI began changing how people **access knowledge on the internet**, challenging Google's dominance.
2. Adoption was **rapid**, with new products and updates every few days.
3. Despite the hype, promised **efficiencies are still slow to materialise**, raising fears of an AI bubble.
4. AI is now used across industries and by individuals, but **autonomous agents and hardware integration** are still evolving.

How is AI changing the way we access information online?

1. Traditional search engines like Google rely on **clicks and links**.
2. AI platforms deliver information in **concise, personalised nuggets**, with **follow-up questions** possible.
3. This has led to "**zero-click panic**" for websites, as users no longer need to visit them.
4. AI browsers like **ChatGPT's Atlas** and **Perplexity's Comet** are emerging, offering **direct answers** and **daily updates**.
5. Google is responding with **AI overviews** in search results, but its **monopoly** is **under threat.**

How is AI entering everyday devices?

1. **AI-powered devices** are expected to become like personal assistants - summarising your day, scheduling appointments, and reminding you of tasks.
2. Smartphones and laptops may integrate **AI browsers** as their core, moving towards a **post-app era** where tasks are handled conversationally.
3. Interaction may shift to **goggles or earbuds**, reducing reliance on screens.

What new possibilities do AI devices bring?

1. Devices may offer a **rewind on your life**, recording what you see and hear, and helping recall forgotten details.
2. **AI glasses** could translate languages, suggest reactions in real-time, and solve problems instantly.
3. These assistants will work **passively in the background**, raising both **privacy concerns** and **productivity benefits**.

What is AI agent orchestration and why does it matter?

1. In 2025, users experimented with **AI agents** (programs that act independently).
2. In 2026, platforms will allow **orchestration of multiple agents** to complete complex tasks.
3. This will benefit businesses by managing **different departments, vendors, and dashboards** efficiently.
4. Market estimates suggest the **autonomous AI agent industry could reach $8.5 billion by 2026**.

What is "Physical AI" and how is it evolving?

1. **Autonomous taxis** (like Waymo) showed safer rides without human drivers.
2. Adoption of **autonomous public transport** and **drone deliveries** is expected to grow.
3. **Robots** from Tesla, Boston Dynamics, and Figure AI are being developed to handle household chores and factory work.
4. Widespread use depends on **cost reduction** - robots must become **affordable** (**under $50,000 per unit**).

What are the challenges and concerns with AI adoption?

1. **Efficiency gap**: AI has not yet delivered the productivity gains it promised.
2. **Privacy risks**: Devices that record daily life raise surveillance concerns.
3. **Economic disruption**: AI is driving job cuts and reshaping industries.
4. **Adaptability**: Users and businesses are still learning how to integrate AI effectively.

What is the way forward for AI in 2026?

1. Expect **AI browsers** to become mainstream, changing how the internet works.
2. **AI-powered devices** will act as personal assistants, moving us into a **post-app era**.
3. **AI agent orchestration** will bring efficiencies to businesses.
4. **Physical AI** (autonomous vehicles, robots) will expand if costs fall.
5. The focus will be on **balancing innovation with privacy, regulation, and affordability**.

Conclusion

2025 was the **year AI became part of everyday life**, reshaping how we search, work, and interact with devices. In **2026**, AI will **move deeper** into our **routines** - from browsers and phones to glasses, cars, and robots. The challenge will be to ensure that this transformation delivers **real efficiencies, safeguards privacy, and remains affordable**, while opening new opportunities for both **individuals** and **businesses**.

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GEOGRAPHY AND ENVIRONMENT

1. Seven-Point Plan for Energy Transition

Context

India must submit **new Nationally Determined Contributions (NDCs) up to 2035** under the **Paris Agreement**. To strengthen credibility and scale up climate action, a **seven-point strategy** has been proposed for the next decade, aligned with the goal of achieving **net-zero emissions by 2070**.

What is Net Zero?

Net zero means **balancing greenhouse gas emissions with absorption or removal**, so that **total emissions become zero** by a target year. India has committed to **net zero by 2070**.

Why are the next 10 years critical?

1. India is currently the **third-largest emitter** in the world, and emissions are still rising as the economy grows.
2. The next decade is crucial because announcing a specific year when emissions will **peak** will build **international credibility** and demonstrate **responsible climate leadership**.
3. Delaying action will force India to continue investing in **fossil fuel infrastructure**, which will later become **stranded assets** and cause financial losses.
4. Acting now allows India to create a **strong and planned transition** that supports **economic growth**, **employment opportunities**, and **clean energy investment**, rather than reacting in crisis mode later.

How the Seven-Point Plan Works?

1. **Reduce Emission Intensity**
   a. The target for 2035 should be **65% reduction in emission intensity** compared to **2005 levels**.
   b. GDP is expected to grow **7.6% per year**, meaning total emissions will still rise but at a slower rate.
   c. Emissions should **peak around 2035**, increasing credibility of India's decarbonisation commitment.
2. **Scale Up Non-Fossil Electricity Capacity**
   a. Raise **non-fossil capacity to 80% of total** by **2035** (from **50% by 2030**).
   b. Total capacity is expected to reach **1,600 GW by 2035**; **solar and wind** around **1,200 GW**.
   c. The share of electricity from solar and wind is expected to increase from **13.5% currently to 50%** by 2035.
   d. Energy storage must expand from **<1 GW today to ~170 GW by 2035**.
   e. Requires **major grid infrastructure expansion**.
3. **Phase Down Unabated Coal**
   a. No new **unabated coal plants** should be commissioned **after 2030**.
   b. Coal capacity to rise to **293 GW by 2030**, then fall to **230 GW by 2040**.
   c. Limited coal may remain by 2070 only if **carbon capture and storage (CCS)** becomes competitive.
   d. Coal-dependent states should prepare **retraining, diversification, and social protection** programmes.
4. **Rapid Electrification of Transport**
   a. Achieve **near-100% electric traction** in railways by **2035**, phasing out diesel locomotives.
   b. Ensure **50% electric buses** in city fleets.
   c. Electric three-wheeler segment to move from over **50% currently to 100%** soon.
   d. Set EV sales targets for other vehicle categories with industry consultation.
5. **Implement Carbon Credit Trading Scheme (CCTS)**
   a. Operational from April 2026.
   b. Review after two years, gradually **expand coverage** to more sectors, including **power**.
   c. Tighten emission intensity targets over time to align with **net-zero** goals.

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6. **Reform Electricity Markets**
   a. Higher renewable share brings **intraday and seasonal variability**.
   b. Require reforms shifting from **fixed power purchase agreements** to **exchange-based trading**.
   c. Introduce **time-of-day tariffs** to influence consumer behaviour and improve grid stability.
7. **Mobilise Investment and Financing**
   a. Estimated investment needed: **$62 billion per year (2026-2035)** or **0.84% of GDP annually**.
   b. 80% should come from domestic sources, including private capital.
   c. Remaining **$12.5 billion per year** from international private investment and MDBs (Multilateral Development Bank like World Bank, New Development Bank, Asian Development Bank, etc.).
   d. MDBs should provide **risk-sharing and credit enhancement** to leverage private finance.

Implications

1. Establishes a **clear pathway toward net zero by 2070**.
2. Strengthens India's position in international climate negotiations.
3. Aligns transition with **economic growth, innovation, and employment**.
4. Creates opportunities for **green manufacturing, storage, and export potential**.

Challenges and Way Forward

Challenges	Way Forward
No declared year for emissions peak	Announce **2035** as peaking year for credibility
High dependence on coal and employment concerns	**Retraining**, **economic diversification**, and **social safety** for coal regions
Weak grid capacity and storage limits	**Expand grid**, **accelerate storage**, and adopt **market-based pricing reform**
Financial stress in DISCOMs	**Reform distribution companies** and strengthen financial discipline
Large investment requirement	Use **domestic capital**, **private investment**, and **MDB risk-sharing mechanisms**
Resistance to electricity price reforms	Build public awareness on **time-of-day tariffs**
Need for national coordination	**Revive PM's Council on Climate Change** for unified planning

2. Protecting the Aravalli Range

Context

In **November 2025**, the **Supreme Court of India** settled on a **uniform definition of the Aravalli hills and ranges** and **paused the grant of fresh mining leases** across **Delhi, Haryana, Rajasthan, and Gujarat**. The decision followed concerns over excessive and illegal mining and the ecological degradation of the Aravalli range.

What is the Aravalli Range and Its Significance?

1. The **Aravalli Range** is **India's oldest mountain range**, nearly **two billion years old**.
2. It stretches for about **650 km**, from **Delhi to Gujarat**.
3. It acts as a **natural ecological barrier**, preventing the **eastward spread of the Thar Desert** into **Haryana, Rajasthan, and western Uttar Pradesh**.
4. The range plays a key role in:
   a. Preventing desertification of the Indo-Gangetic Plain
   b. Climate regulation and biodiversity support
   c. Groundwater recharge and maintenance of aquifers
5. It is the source of **important rivers** such as the **Chambal, Sabarmati, and Luni**.
6. The region is rich in minerals like **sandstone, limestone, marble, granite, lead, zinc, copper, gold, and tungsten**.
7. While mining has existed historically, the last four decades saw **excessive and often illegal quarrying**, leading to: **Falling groundwater levels, poor air quality** and **ecological damage**.

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8. India is also bound by the **UN Convention to Combat Desertification (UNCCD)** to protect vulnerable ecosystems like the Aravallis.

Why is Protection of the Aravalli Range Necessary?

1. Unregulated mining weakened the range's ability to stop **desertification**.
2. **Illegal stone and sand mining** caused **irreversible ecological damage**.
3. Groundwater recharge declined sharply in surrounding regions.
4. Different States followed **different definitions** of the Aravallis, allowing mining through legal loopholes.
5. Without intervention, continued degradation would threaten **food security, water security, and climate stability** in northern India.

How the Aravalli Range is Being Protected?

1. **Judicial Intervention on Mining**
   a. Since the **early 1990s**, the **Environment Ministry** restricted mining to sanctioned projects, but rules were widely violated.
   b. In **2009**, the Supreme Court imposed a **blanket mining ban** in **Faridabad, Gurugram, and Mewat (Haryana)**.
   c. In **May 2024**, the Court:
      i. Stopped **new mining leases and renewals** in the Aravalli range.
      ii. Asked the **Central Empowered Committee (CEC)** to examine the issue in detail.
   d. Based on CEC recommendations, the Court passed a **detailed order** in **November 2025**.
2. **Central Empowered Committee (CEC) Recommendations:** The CEC suggested a **comprehensive and scientific approach**, including:
   a. Scientific mapping of the entire Aravalli range across States
   b. Macro-level environmental impact assessment of mining activities
   c. Complete prohibition of mining in ecologically sensitive zones such as:
      i. Protected forests and wildlife habitats
      ii. Water bodies
      iii. Tiger corridors
      iv. Aquifer recharge zones
      v. Areas within the **National Capital Region (NCR)**
   d. Strict regulation of stone-crushing units
   e. No new mining leases or renewals until mapping and assessments are completed.
3. **Need for a Uniform Definition of the Aravallis**
   a. States used **inconsistent criteria**, enabling mining in fragile areas.
   b. The **Forest Survey of India (FSI)** earlier used slope-based and buffer- based definitions (2010).
   c. To resolve confusion, the **SC set up a committee** including: Environment Ministry, FSI, Geological Survey of India, State Forest Departments and CEC.
   d. In **October 2025**, the committee submitted its findings.
   e. The Court accepted the definition that **only hills above 100 metres** would be considered part of the Aravalli range.
   f. While **concerns** were raised that this **may exclude lower hills**, the Court held the definition to be **more inclusive and workable**.
4. **Other Supreme Court Directions**
   a. The Court ordered the preparation of a **Management Plan for Sustainable Mining (MPSM)** for the entire Aravalli range.
   b. The **plan must**:
      i. Identify **no-mining zones**
      ii. Specify areas where **limited, tightly regulated mining** may be allowed
      iii. Map wildlife corridors and **sensitive habitats**
      iv. Assess **cumulative ecological impacts**
      v. Determine **ecological carrying capacity**
      vi. Provide for **restoration and rehabilitation**
5. **Why Mining Was Not Completely Banned**
   a. The Court observed that **total bans often lead to illegal mining and sand mafias**.

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b. Hence, it adopted a **calibrated approach**:
   i. **Existing legal mining continues** under strict regulation
   ii. **New mining is paused** until scientific planning is completed
   iii. **Ecologically sensitive areas** remain permanently **off-limits**

Aravalli Green Wall Initiative

1. In **June 2025**, the Centre launched the **Aravalli Green Wall Project**.
2. **Aim:** Expand green cover in a **5-km buffer zone** across **29 districts** in Gujarat, Rajasthan, Haryana, and Delhi.
3. **Target:** Help restore **26 million hectares of degraded land by 2030**.

Implications of the Decision

1. Strengthens protection against **desertification and groundwater depletion**.
2. Brings **uniformity and clarity** across States.
3. Balances **environmental protection with economic realities**.
4. Reinforces India's commitment under **international environmental agreements**.
5. Encourages **science-based** and **sustainable mining practices**.

Challenges and Way Forward

Challenges	Way Forward
Illegal mining and weak enforcement	Strengthen monitoring, surveillance, and penalties
Conflicting State interpretations	Implement the SC's uniform definition strictly
Pressure for mineral extraction	Prioritise ecological carrying capacity
Risk of mining mafias	Regulated mining with transparency and accountability
Degraded ecosystems	Restore forests through projects like the Aravalli Green Wall

3. Methane Emissions from Waste in India

Context

Recent **satellite-based observations** suggest that **methane emissions from Indian landfills are significantly under-estimated** in official inventories. At several major landfill sites, actual emissions are found to be **many times higher** than model-based estimates, raising concerns for **climate action and waste management policy**.

What is Methane and Why Does It Matter?

1. **Methane (CH_4)** is a greenhouse gas released during the **decomposition of organic matter** in oxygen-poor conditions, such as landfills.
2. **Key features:**
   a. It is **84 times more potent than carbon dioxide** over a 20-year period.
   b. It contributes to **landfill fires**, air pollution, and climate change.
   c. It can also be **captured and used as fuel** for cooking, vehicles, and power generation.
3. **In India:**
   a. About **15% of methane emissions come from the waste sector.**
   b. Unlike agriculture or energy, **waste-sector methane can be reduced quickly** through targeted interventions.

Why Waste-Sector Methane Is a Key Opportunity for India?

1. Waste management offers **immediate climate gains**, unlike long-term energy transitions.
2. National frameworks like the **Swachh Bharat Mission** already exist.
3. Reducing landfill methane improves **urban safety, public health, and climate outcomes.**
4. However, effective action requires **accurate identification of emission hotspots**.

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How Methane Emissions Are Traditionally Estimated?

1. Historically, India has relied on **model-based estimates**, which:
   a. Use incoming waste volumes
   b. Apply standard emission factors
   c. Depend on **aggregated, infrequently updated data**
2. **Limitations:**
   a. Lack of **granular, site-specific information**
   b. Difficulty in identifying **individual high-emission landfills**
   c. Especially unreliable in **developing country contexts**
3. **Ground-based monitoring** is also difficult due to:
   a. High costs
   b. Maintenance requirements
   c. Limited scalability in large cities

How Satellite Monitoring Changes the Picture?

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1. Advances in satellite technology now allow **direct observation of methane emissions**.
2. **Two types of satellite data:**
   a. Regional monitoring: Tracks broad trends over large areas
   b. High-resolution monitoring: Pinpoints emission hotspots down to specific landfill sites
3. **India's progress:**
   a. ISRO-led research (2023 data) mapped **anthropogenic methane emissions**
   b. Identified major landfill hotspots in **Ahmedabad, Mumbai, and Delhi**
   c. Findings triggered **National Green Tribunal (NGT) action** for ground verification
4. Global platforms such as **ClimateTRACE** and **WasteMAP** combine satellite data with traditional models to improve accuracy.

What the New Data Reveal (Key Discrepancies)

1. **Satellite observations show that:**
   a. Actual landfill methane emissions can be **1.8 times higher globally** than model estimates
   b. In India, discrepancies are even sharper due to outdated State-level data (mostly from 2018)
2. **Illustrative patterns:**
   a. In some cities, **one or two landfills emit almost as much methane as the entire city's estimated waste sector**
   b. Engineered landfills assumed to be efficient are sometimes **emitting far more than expected**
   c. This suggests **leakages, system failures, or faster methane generation**
3. These gaps indicate that **India does not yet know the true scale or location of its methane problem**.

Why Are These Findings Important?

1. Hidden methane emissions mean **missed climate mitigation opportunities.**
2. Policies may target the wrong sites or underestimate urgency.
3. Without accurate data, **hazards remain unaddressed simply because they are invisible.**
4. Satellite data now makes it possible to:
   a. Measure the **true magnitude** of emissions
   b. Identify **exact leakage points**
   c. Design **targeted, cost-effective solutions**

How Satellite and Ground Action Must Work Together?

1. Satellite data alone is not sufficient due to:
   a. Cloud cover
   b. Weather interference
   c. Urban complexity
2. The solution lies in a **feedback loop**:
   a. Satellites detect methane hotspots
   b. Ground teams investigate causes (poor waste cover, gas system failure, illegal dumping)
   c. Ground data improves satellite accuracy
   d. Refined data guides further action
3. Different landfill types need different data:
   a. Open dumps: Track dumping and reclamation patterns
   b. Engineered landfills: Assess gas collection infrastructure
4. Cities with advanced waste systems, like **Bengaluru**, can integrate these datasets effectively.

Institutional and Policy Integration Needed

1. **Current challenges:**
   a. Urban Local Bodies (ULBs) and **State Pollution Control Boards** work in silos
   b. Lack of **standardised national data-sharing systems**
2. **Opportunities:**
   a. Revised municipal waste rules already propose a **centralised data portal**
   b. This can be expanded for methane tracking
   c. Bodies like **CAQM (NCR)** can oversee regional monitoring
   d. Swachh Bharat Mission can integrate methane reduction targets
   e. Schemes like **GOBARdhan** show methane's potential as an energy resource (e.g., Bio-CNG plants)

Implications

1. Stronger alignment with **India's climate commitments**
2. Improved **urban safety and air quality**
3. Better utilisation of methane as a **clean energy resource**
4. Data-driven governance replacing assumptions
5. Faster, cheaper climate mitigation compared to energy-sector reforms

Challenges and Way Forward

Challenges	Way Forward
Underestimation of landfill methane	Expand satellite-based monitoring nationwide
Lack of site-specific data	Combine satellite detection with ground validation
Fragmented institutional oversight	Integrate ULBs, SPCBs, and central agencies
Technical limits of satellites alone	Build feedback loops with on-ground teams
Poor waste handling practices	Strengthen landfill management and gas capture
Missed energy potential	Scale Bio-CNG and waste-to-energy projects

4. Energy Policy in the Age of AI and Climate Change

Context

1. India has achieved major progress in energy access, affordability, and supply security.
2. However, new pressures from **climate change**, **rapid technological growth**, and **the rise of AI-powered data centres** are creating complex policy dilemmas.
3. India must now **balance economic growth**, **employment concerns**, **geopolitical risks**, and **environmental sustainability** within an evolving global energy landscape.

What is Energy Policy?

1. Energy policy refers to the set of **plans, measures, and rules** that guide how a country **produces, distributes, and uses energy**.
2. The **aim** is to **ensure reliable supply**, **affordable access**, and **environmental sustainability** while supporting national economic and security goals.

Why India's Energy Policy Needs Change?

1. Energy policy must now focus on **reducing the link between growth, technology progress, rising energy demand, and environmental damage**.
2. This shift is necessary because India is simultaneously facing:
   a. Rising pressure to **cut carbon emissions** and improve air quality.
   b. Growing energy needs due to **digital and AI expansion** requiring massive electricity supply.
   c. Strategic concerns about **dependency on China** for renewable energy technologies.
   d. Social and political challenges related to transitioning away from coal, which is a major employer.

How India's Energy System Has Functioned Traditionally?

1. Historically, energy management was driven mainly by **government-run Public Sector Enterprises (PSEs)** such as Coal India, ONGC, and NTPC.

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2. When PSEs alone could not meet energy needs, private investment was allowed, resulting in a **dual system** of public and private players.
3. Responsibilities are now divided among **central ministries, states, regulators, and companies**, but there is **no single integrated authority** overseeing national energy strategy.
4. This system has **provided broad access** but now faces **limitations** due to **fragmentation** and **slow response capacity**.

Key Trade-Offs and Dilemmas in Today's Energy Landscape

1. **Green Transition vs Employment and Political Reality**
   a. Coal India employs around **3,50,000 workers**, and millions more depend on coal-linked sectors.
   b. A rapid move toward clean energy could lead to major **job losses** and **political resistance**, especially in coal-dependent states.
   c. At the same time, **fossil fuel** use contributes heavily to pollution, with **six Indian cities** among the **world's top 10 most polluted** in **2024**.
   d. The **challenge** is **deciding**:
      i. What should be the **right energy mix** for future years?
      ii. How quickly should India transition from coal to clean energy?
      iii. What policies are needed to support affected workers and regions?
2. **Cheaper Green Supply Chains vs National Security Risks**
   a. China controls **80% of global solar panel manufacturing**, **95% of polysilicon wafers**, and **80% of lithium-ion processing**, making it the **cheapest global supplier** for renewable technologies.
   b. Dependence on China can accelerate green energy growth, but also increases **geopolitical and economic vulnerability**.
   c. The dilemma is whether India should **import cheaper inputs** to speed up renewable adoption **or reduce dependence** to ensure **strategic autonomy** and **supply security**.
3. **AI Data Centres vs Clean Energy Commitments**
   a. Major technology companies are investing heavily in AI hubs in India.
   b. These data centres require **gigawatt-scale electricity**, and most companies promise to use only renewable power.
   c. However, India currently lacks adequate transmission networks, battery storage systems, and renewable infrastructure to meet such massive demand.
   d. In such situations, priority to AI could force **extension of fossil fuel plants**, risking climate goals.
   e. Reports indicate some thermal plants have already been kept running to meet growing electricity needs.

Implications

1. These evolving challenges require a **new integrated governance structure** that can align environmental goals, technology development, job protection, national security, and energy investment.
2. **Policy choices** made today will shape **India's competitiveness** and **sustainability** for decades.
3. **Coordinated planning** across **government**, **corporates**, **research institutions**, and **civil society** is essential for **balancing trade-offs** and **avoiding fragmented decision-making**.

Challenges and Way Forward

Challenges	Way Forward
Deciding the right future energy mix and speed of transition	Create a **clear and phased roadmap** for energy transition with timelines and targets
Social and political resistance due to job losses in coal-dependent regions	Implement a **Just Transition Plan**, reskill workers, and promote **green employment** in renewable and manufacturing sectors
Heavy dependence on China for renewable technology supply chains	Expand **domestic manufacturing**, diversify sourcing, and build strategic reserves

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Massive electricity demand from AI data centres may push fossil fuel use	Upgrade **transmission grid**, build **battery storage**, and promote **renewables ecosystem** before expansion
Fragmented governance with no unified decision-making body	Establish a **National Integrated Energy Authority** to coordinate policy across ministries and states
Need to balance affordability, sustainability, and national security	Promote stable long-term policy frameworks, **public-private partnerships**, and innovation incentives
Financing large-scale renewable and grid infrastructure	Use **green bonds**, climate finance, global investment partnerships, and policy support for private investors

5. Conserving the Western Tragopan

Context

The **western tragopan**, one of **India's rarest pheasants**, faces severe long-term survival challenges despite the success of captive breeding efforts in Himachal Pradesh. Concerns arise from habitat degradation, climate variability, and stalled rewilding initiatives, even as fewer than 9,500 birds remain in the wild.

About Western Tragopan

1. The western tragopan **(Tragopan melanocephalus)** is a **vulnerable Himalayan pheasant** and the **state bird of Himachal Pradesh**.
2. Once found across Jammu & Kashmir, Himachal Pradesh, and Uttarakhand, it now survives in small, fragmented habitats across the **western Himalayas and parts of Pakistan**.
3. **Conservation status** of Western Tragopan:
   - **a. IUCN Red List:** Vulnerable (VU)
   - **b. Indian Wildlife Protection Act, 1972:** Schedule I species (Provides highest legal protection in India)
   - **c. CITES:** Not listed in CITES Appendices

What is the Western Tragopan Issue?

1. Its population is estimated at **3,000-9,500** mature individuals, forming a single subpopulation.
2. Habitat fragmentation, human disturbance, and climate change threaten its survival.
3. **Captive breeding** has been successful, but habitat conservation has not improved proportionately.
4. Ex-situ and in-situ measures remain poorly integrated.
5. Reintroduction trials have begun but remain paused due to funding and research gaps.

Captive breeding: It is the process of **breeding and raising wildlife species in controlled environments such as zoos, breeding centres, or conservation facilities**, with the aim of increasing their population, preserving genetic diversity, and supporting future **reintroduction into natural habitats**.

Why Does the Conservation Challenge Exist?

1. **Severe Habitat Fragmentation**: Forests in Kazinag and Limber show suitable climate conditions, but human disturbance breaks continuity.
2. **Single Small Population**: All wild individuals belong to one subpopulation, increasing vulnerability.
3. **Climate Variability**: Changes in seasonal timing affect food availability, breeding cycles, and chick survival.
4. **Overemphasis on Ex-Situ Breeding**: Captive breeding progressed, but wild habitat protection lagged behind.
5. **Resource Limitations**: Funding gaps, limited research, and slow protocol development hinder reintroduction.

How Conservation Efforts Have Unfolded?

1. **Captive Breeding at Sarahan Pheasantry**
   - a. First **captive births began** in **1993**.
   - **b. Breakthrough in 2005:** four chicks hatched through the world's first successful captive breeding programme for the species.
   - c. Between 2007-2015, 43 captive-born individuals were recorded.

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d. Genetic analysis showed all captive birds descended from eight wild founders, retaining 87% genetic diversity.

e. **Husbandry systems** were redesigned:

i. Dense cover, natural nesting material, seasonal diets, and stress-reduction measures.

f. Today, the pheasantry maintains around 46 birds; 6-8 eggs hatch annually with 4-5 chicks surviving.

2. **Challenges in Early Years**

a. Several years saw no eggs or chicks.

b. Improvements came only after biologists redesigned management practices.

3. **Climate-linked Biological Disruptions**

a. Breeding cycles no longer align with insect availability.

b. Lower-altitude warming affects habitat suitability.

4. **Stalled Reintroduction Attempts**

a. Experimental releases in 2020-2021 showed promising survival (one bird survived nearly a year).

b. Since 2023, reintroduction has paused due to funding shortages and the extensive research required for site preparation, predator mapping, and protocol development.

5. **Role of Communities**

a. Community-based tourism in areas like Rakhundi and Shilt incentivises villagers to protect habitats.

b. Reduced disturbance has already improved wild sightings.

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Implications

1. **Species Survival at Risk**: Without habitat protection, captive breeding alone cannot guarantee recovery.
2. **Genetic Bottleneck Concerns**: Dependence on eight founders may reduce long-term genetic resilience.
3. **Climate-induced Mismatches**: Disrupted breeding cycles threaten chick survival rates.
4. **Need for Integrated Conservation**: Ex-situ and in-situ strategies must work together to secure habitats and reintroduce birds successfully.
5. **Community Involvement as a Key Lever**: Local stewardship can stabilise and restore breeding areas.

Challenges & Way Forward

Challenges	Way Forward
Fragmented and disturbed habitats	Strengthen protected areas, **restrict disturbance in breeding zones**
Climate-driven disruption of breeding cycles	**Monitor phenology** and adapt site-specific conservation actions
Stalled reintroduction due to **limited funding and protocols**	Allocate **stable funding** and develop standardised reintroduction guidelines
Overdependence on ex-situ breeding	**Balance ex-situ and in-situ approaches** through joint planning
Limited local incentives for conservation	Expand **community-based tourism** and livelihood programmes

6. Climate Change and Increasing Cyclonic Rainfall

Context

1. Severe floods triggered by **Cyclones Dithwa and Senyar (November 2025)** caused widespread devastation in **Sri Lanka, Malaysia, Indonesia and Thailand**, killing around **1,600 people**.
2. A new scientific study by the **World Weather Attribution (WWA)** group, analysed the role of **climate change, deforestation and rapid urbanisation** in intensifying cyclone-related rainfall.

How Cyclones Cause Floods?

1. Cyclones do not only bring strong winds. Their biggest danger often comes from **heavy rainfall**.
2. Cyclones draw moisture from warm oceans.
3. This moisture falls as intense rainfall over land.
4. When rainfall is prolonged and heavy, rivers overflow and low-lying areas get flooded.
5. In the case of Cyclones Dithwa and Senyar, **rainfall - not wind - was the main cause of destruction**.

Role of Climate Change in Intensifying Cyclone Rainfall

1. **Rising Global Temperatures**

a. Since the mid-1800s, global temperatures have risen by about **1.3°C**.

b. Warmer air can hold **more moisture**.
c. For every **1°C rise**, the atmosphere can hold about **7% more water vapour**.

2. **Impact on Cyclones**
   a. More moisture in the atmosphere leads to **heavier rainfall** during storms.
   b. Cyclones now produce **longer-lasting and more intense rain** than in the past.
3. **Sea Surface Temperatures (SSTs)**
   a. During the cyclones, **sea surface temperatures in the North Indian Ocean were 0.2°C higher** than the 1991-2020 average.
   b. Without climate change, SSTs would have been **around 1°C cooler**.
   c. Warmer seas provide **extra energy** to cyclones, increasing evaporation and rainfall.

Evidence of Increased Rainfall Intensity

The study found clear evidence that climate change has increased rainfall:

1. In **Sri Lanka**, heavy five-day rainfall events are now **28% to 160% more intense**.
2. In the **Malacca Strait region**, the probability of extreme rainfall rose from **9% to 50%**.
3. These changes explain why floods reached **unprecedented levels**.

How Deforestation Worsened Flooding?

1. Forests absorb rainwater and slow down surface runoff.
2. Tree roots hold soil together and reduce landslides.
3. **Extent of Deforestation**
   a. **Sri Lanka's forest cover** declined from **90% in 1900 to about 20% by 2002**.
   b. In **Indonesia**, about **25% of forest land** was converted to oil-palm plantations between **1991 and 2020**.
4. **Impact on Floods**
   a. With fewer trees, rainwater flows quickly over land instead of being absorbed.
   b. This leads to **sudden floods and landslides**, especially in **steep regions like Sumatra**.
   c. Deforestation removed the **natural protective barrier** against floods.

Impact of Rapid Urbanisation

1. **Expansion into High-Risk Areas**
   a. Cities expanded into **floodplains and low-lying regions**.
   b. More people began living in **high flood-risk zones**.
2. **Infrastructure and Flood Risk**
   a. Roads, railways, and concrete surfaces reduce water absorption.
   b. Natural drainage systems get blocked.
3. **Result**
   a. Floodwaters spread faster.
   b. Human casualties and property damage increase sharply.

Human and Economic Consequences

1. **Human loss:** Around **1,600 deaths** across four countries.
2. **Economic damage:**
   a. **Indonesia:** Losses of about **$4.13 billion**
   b. **Sri Lanka:** Losses of **$6-7 billion**, nearly **3%-5% of GDP**
3. **Agriculture:**
   a. Over **137,000 acres of farmland were destroyed** in Sri Lanka.
   b. Damage worsened by destruction of dams and canals.

Why This Is a Warning for the Future?

1. Climate change is making **extreme rainfall more frequent and intense**.
2. Deforestation and unplanned urbanisation are increasing vulnerability.
3. Floods are no longer rare disasters but **predictable outcomes of current development patterns**.

Challenges and the Way Forward

Key Challenges	Way Forward
Rising global temperatures	Strengthen climate mitigation efforts
Loss of forest cover	Protect forests and promote afforestation
Unplanned urban growth	Adopt flood-sensitive urban planning
Weak disaster preparedness	Improve early warning and evacuation systems
High vulnerability of poor populations	Integrate climate adaptation into development

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7. Kosi Floods and the Embankment Paradox

Context

1. The Kosi River breached its embankment again in 2024, repeating past disasters such as the 2008 Kusaha breach that affected 33 lakh people.
2. This raises fresh questions about whether **concrete embankments actually protect flood-prone plains**, or whether they worsen long-term vulnerability.
3. Experts, local communities, and geologists are increasingly arguing for **alternatives to embankment-based flood control**.

What are Embankments?

1. **Artificial walls** made of earth, stone, or concrete built along rivers to "contain" water.
2. Intended to prevent flooding, protect agriculture, and enable settlements.

About River Kosi

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1. **Origin & Course**
   a. Originates in **Tibet (China)**, flows through **Nepal**, and enters India in **Bihar**.
   b. Known as **Sapta Kosi** (formed by 7 Himalayan tributaries - Sun Kosi, Arun, Tamur, dudh kosi, Indravati, Likhu, and Tamur).
   c. Joins the **Ganga** near Kursela, Bihar.
2. **Geographical Characteristics**
   a. A **high-sediment, braided Himalayan river**.
   b. One of the **most dynamic rivers in the world**.
   c. Has shifted **~120 km westwards in the last 250 years** due to natural sedimentation.
   d. Known as the **"River of Sorrow"** because of recurrent destructive floods.
3. **Hydrology & Sedimentation**
   a. Carries **one of the highest sediment loads** among Himalayan rivers.
   b. Natural tendency to **avulse** (sudden course shift).
4. **Flood Issues**
   a. Major breaches of embankment: **1963, 1968, 1971, 1980, 1984, 1987, 1991, 2008, 2024**.
   b. 2008 Kusaha breach:
      i. Affected **33 lakh people**, over 400 deaths.
      ii. Considered one of India's worst flood disasters.
5. **Socio-economic Importance**
   a. Supports agriculture in north Bihar's plains.
   b. Floods bring temporary soil fertility but long-term devastation.
   c. Millions live in **diara lands** (between river and embankments).
   d. High migration from Kosi belt due to chronic flood risk.
6. **Western vs Eastern Himalayan Rivers**
   a. Kosi is an **affluent** river (precipitation increases downstream).
   b. Eastern Himalayan rivers = high rainfall + weak geology → embankments less stable.
   c. Western Himalayan rivers = more stable, embankments sometimes workable.
7. **Climate Change Angle**
   a. Intensified monsoon bursts → higher sediment load → more unpredictable floods.
   b. Increased glacial melt may alter flow patterns.

Why Do Embankments Fail in the Kosi Basin?

1. **Historic Warnings**
   a. 1951 G.R. Garg Committee warned embankments disrupt natural river functions:
      i. Land creation (erosion & deposition)
      ii. Basin drainage
   b. People's Commission reports highlight ecological distortions caused by embanking Kosi.
   c. Experts argue for **"living with floods"** strategy instead of hard engineering.
2. **Science of the Problem**
   a. High Silt Load
      i. Himalayan rivers carry enormous sediment.
      ii. Embankments trap the river between two fixed walls that leads to silt accumulation, because of which **riverbed rises each year**.
   b. Height Race
      i. To prevent overtopping, governments keep raising embankments → unsustainable costs.
   c. When Breach Happens
      i. Breach is the sudden release of water from an elevated channel, leading to **catastrophic floods** that are much worse than natural floods.

d. **Waterlogging & Flooding Inside Embanked Zone**
   i. Communities living between embankments and river (the "diara lands") get trapped and waterlogged.

Evidence of Repeated Failures

1. Kosi breached embankments multiple times: **1963, 1968, 1971, 1980, 1984, 1987, 1991, 2008, 2024**
2. Similar patterns are seen in Brahmaputra (Assam), Gandak, Bagmati.

Influent vs Effluent Rivers

1. **Western Himalayan rivers** → *influent* (precipitation decreases downstream): Embankments may work better.
2. **Eastern Himalayan rivers (Kosi, Brahmaputra, etc.)** → *effluent* (precipitation increases downstream): Embankments are geologically risky.

Paleochannels

1. Ancient abandoned river channels that naturally hold excess water.
2. Reviving them improves natural drainage.

Why Floods Without Embankments Are Milder

1. Without embankments, rivers **spread gently** over floodplains.
2. Silt distributes naturally → fertility improves.
3. Water levels drop faster.
4. Damage is widespread but **not violent**.

US Example

1. US Army Corps of Engineers removed embankments in several basins.
2. **Result:** reduced catastrophic floods and restored wetlands.

The Politics of Embankments

1. In Bihar elections, political promises emphasise "**flood-to-fortune**" river-linking (Kosi-Mechi project).
2. However, **5,247 cusecs diverted is negligible compared to Kosi's 6 lakh cusecs during flood**, proving river-linking will not reduce flood intensity.

Implications

1. **Greater Flood Vulnerability** due to siltation and breaches.
2. **Permanent Waterlogging** for communities trapped between embankments.
3. **Ecological Degradation** - groundwater imbalance, loss of wetlands.
4. **High Fiscal Cost** - raising and repairing embankments every few years.
5. **Social Injustice** - most affected are poor farmers, with little rehabilitation.
6. **Policy Blind Spots** - engineering solutions overshadow traditional ecological knowledge.

Challenges and Way Forward

Challenges	Way Forward
High siltation raising riverbeds	Planned desiltation using scientific methods
Frequent breaches causing catastrophic floods	Strengthen early warning systems; relocate vulnerable households
Waterlogging inside embankment zone	Restore paleochannels for natural drainage
High maintenance cost of embankments	Prioritise **nature-based solutions** over engineering-heavy approaches
Dependence on single flood-control model	Adopt **flood-resilience model** instead of flood-control model
Ecological disruption	Encourage controlled flooding to maintain ecological balance
Lack of rehabilitation for people living between embankments	Provide planned relocation and livelihood support packages

8. Restoring India's Grasslands

Context

New studies from **Maharashtra's Solapur grasslands** and **Gujarat's Banni grassland** show that **restoring native grasslands significantly increases soil organic carbon (SOC)**, strengthens biodiversity, and improves livelihoods. This has opened major discussions on **climate mitigation**, **ecosystem services**, and **policy corrections**.

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What Are India's Grasslands?

1. Semi-arid savannahs dominated by grasses, not trees.
2. Historically undervalued due to colonial classification as "**wastelands**."
3. Support pastoral economies, wildlife (e.g., Great Indian Bustard), and dryland ecology.
4. Function mainly through **deep, fibrous root systems** underground.

Key Features of Grasslands

1. **Colonial Legacy of "Wastelands"**
   a. The British prioritised timber forests; grasslands seen as unproductive.
   b. This thinking continued in independent India.
   c. **National Wastelands Development Board (1985)** wrongly grouped grasslands with barren lands, ravines, rocky areas, etc.
   d. **Result** - Negative policy bias, afforestation drives in grasslands, invasive species spread.
2. **Ecological Importance**
   a. Productivity is **below ground**, unlike forests.
   b. Roots:
      i. Stabilise soil
      ii. Improve infiltration
      iii. Reduce erosion
      iv. Store long-term carbon
   c. Grasslands support rich **microbial and fungal diversity** that maintains soil fertility.
3. **Climate Importance - Carbon Storage**
   a. Research shows grasslands can store huge amounts of **soil organic carbon (SOC)**, often more stable than forest carbon because it is underground.
   b. SOC remains stable even during fires and droughts.

Case Studies (Evidence-Based Analysis)

1. **Solapur, Maharashtra - CAMPA Grassland Restoration**
   a. The forest department used CAMPA funds to **restore degraded grasslands** in Malshira's range.
   b. Native grasses are raised and replanted after monsoon (e.g., *Dicanthium annulatum*, *Chrysopogon fulvus*).
   c. An ATREE-Grasslands Trust study compared restored sites with untreated and natural grasslands.
   d. **Results:**
      i. 2-year restoration → **21% increase in SOC**
      ii. 3-year restoration → **50% increase in SOC**
      iii. Strong evidence that grassland restoration contributes to India's climate goals.
2. **Banni Grassland, Kutch (Gujarat)**
   a. Once Asia's largest tropical grassland, degraded by invasive **mesquite** (*Prosopis juliflora*).
   b. **Community-led restoration** removed invasive trees and revived native grasses.
   c. **Key Findings:**
      i. Banni stores **~27 tonnes of carbon (top 30 cm soil)**
      ii. Average SOC density: **~120 tonnes/ha** - among the world's richest arid ecosystems
      iii. Restored "**wada**" patches had the highest SOC
      iv. Pastoralist **Maldharis** use rotational grazing & biomass harvesting which ultimately improves resilience

Lesson: Healthy grasslands, not invasive trees, provide true climate resilience in drylands.

Implications

1. **Climate Mitigation:** Grasslands store massive, stable below-ground carbon.
2. **Biodiversity Conservation:** Key habitat for endangered species.
3. **Livelihoods:** Millions rely on pastoralism supported by grasslands.
4. **Policy Reform:** Need to treat grasslands as distinct ecosystems, not wastelands.
5. **Land Management:** Overemphasis on tree planting can damage savannah ecosystems.
6. **Adaptation to Climate Change:** Grasslands withstand drought, fire, and extreme heat better than forests.

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Challenges & Way Forward

Challenges	Way Forward
Colonial-era "wasteland" classification persists in policy documents	Create a **national grassland policy** recognising savannahs as distinct ecosystems
Misguided afforestation in grasslands (tree planting where trees don't belong)	Promote **ecosystem-appropriate restoration**, especially native grasses
Spread of invasive species (Prosopis, mesquite)	Launch **large-scale removal programmes** with community participation
Weak recognition of pastoralist rights	Include pastoralists in **co-management and governance** models
Lack of scientific monitoring of SOC and grassland health	Consortium of scientific agencies to **monitor SOC, biodiversity, and grazing impacts**
Fragmented land management between forest, revenue, and agriculture departments	Establish **unified grassland management authority**

9. Energy Storage and Green Hydrogen

Why was there a need for energy storage and green hydrogen when renewable energy (like solar and wind) already existed?

Due to climate change, the world started shifting towards renewable energy like solar and wind. These sources are clean and abundant, but they come with limitations:

1. **Intermittency** - the sun doesn't shine at night, and the wind doesn't always blow.
2. **Storage gaps** - Without storage, excess electricity generated during peak hours is wasted.
3. **Grid balancing issues** - sudden surges or drops in renewable supply make it hard to maintain a stable power grid.

To overcome these challenges, scientists and policymakers began focusing on **energy storage technologies** (like batteries, pumped hydro, and thermal storage) and **green hydrogen**.

How does Energy Storage and Green Hydrogen complement Renewable Energy?

1. **Energy storage** allows renewable power to be saved when it is produced and used later when demand is high, ensuring stable power supply.

The Main Types of Energy Storage Technologies include:

1. **Battery storage** (Lithium-ion, sodium-ion, and emerging solid-state batteries) - These have high efficiency and fast response time for balancing grids. These can be used in solar rooftop systems, home backup power, EVs, etc.
2. **Pumped hydro storage** (Water is pumped uphill when excess electricity is available and released to generate power when needed) - It has very large capacity, long duration storage and relatively low cost of per unit of energy stored. It can act as a backup for hydro and thermal power plants.
3. **Thermal storage** (Heat stored in molten salts or other materials for later use) - It can directly supply industrial heat or be converted back to electricity. It can be used in concentrated Solar Power (CSP) plants and district heating and cooling systems.

> **Concentrated Solar Power (CSP) plants** use large mirrors to focus sunlight onto a central point. This concentrated sunlight creates very high heat. The heat is used to boil water (or heat special fluids like molten salt), which produces steam. The steam then spins a turbine, and the turbine generates electricity.

4. **Compressed air storage** (Air compressed and stored underground, then released to drive turbines) - It can be used as an emergency reserve power for companies that supply electricity to homes, businesses, and industries.

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2. **Green hydrogen** is hydrogen produced by splitting water (electrolysis) using renewable electricity.
3. It is different from grey or blue hydrogen (made from fossil fuels) as it is **carbon-free**.
4. It can be stored, transported, and used as a **fuel for industries, transport, and power generation**.
5. It can be converted back into electricity through fuel cells or turbines.
6. It provides clean fuel for **hard-to-decarbonize sectors** like steel, cement, shipping, and aviation.

Together, **energy storage and green hydrogen** are seen as the **game-changers** that will make renewable energy reliable, scalable, and capable of replacing fossil fuels in the future.

How do energy storage and green hydrogen benefit the future and shape renewable energy?

1. **Reliable power**: Ensure 24/7 supply by balancing variable solar and wind.
2. **Decarbonization**: Cut dependence on coal, oil, and gas, driving net-zero goals.
3. **Energy security**: Nations can produce and store their own clean fuel.
4. **Industrial use**: Enable clean steel, cement, fertilizers, shipping, and aviation.
5. **Integrated ecosystem**: Electricity, hydrogen, and storage work together for large-scale adoption.
6. **Global leadership**: Nations investing early in hydrogen and storage can lead the clean energy revolution. **Example: India's National Green Hydrogen Mission,** targeting 5 million tonnes of green hydrogen production by 2030, will help reduce hydrogen costs and make renewable power more competitive.

What does shifting focus on energy storage and green hydrogen mean for India?

1. **Energy storage and green hydrogen** are not just **technological solutions** - they are central to **India's energy roadmap, investment strategy**, and **global positioning** in the clean energy transition.
2. India has set a target of **500 GW of non-fossil capacity by 2030**, backed by nearly **₹30 lakh crore investment.**
3. **Financing** is being mobilized through **green bonds** (bonds issued to raise money specifically for environmentally friendly projects), **blended finance, multilateral institutions,** and **global investors**.
4. The growing focus on hybrid and storage-backed projects is improving their bankability, making them more attractive to investors and ensuring long-term stability.

Blended Finance: Financing model that combines public or concessional funds with private investment to reduce risk and attract large-scale private capital for clean energy projects.

What are the associated challenges and way forward for energy storage and green hydrogen?

Challenges	Way Forward
High costs: Batteries and electrolyzers are still expensive, making projects less competitive.	Promote domestic manufacturing, scale up production, and provide incentives under missions like the National Green Hydrogen Mission.
Infrastructure gaps: Hydrogen pipelines, storage tanks, and refueling stations need heavy investment	Develop **green energy corridors**, build hydrogen hubs, and expand refueling and storage infrastructure.
Efficiency losses: Converting electricity to hydrogen and back reduces overall efficiency.	Invest in R&D for advanced electrolyzers, fuel cells, and **large-scale battery storage systems** to improve efficiency.
Safety concerns: Hydrogen is highly flammable and requires strict handling and safety standards.	Establish strict safety codes, training programs, and international best practices for hydrogen handling.
Policy and regulation: Strong frameworks are needed to ensure fair use and prevent misuse.	Introduce clear policies, **transmission upgrades**, and better **grid integration mechanisms** to support storage and hydrogen adoption.

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Society And Culture

1. Reimagining Mental Health Care

Context

A national debate on transforming mental health care has intensified as personal narratives reveal **deep gaps in dignity, access,** and **social understanding**. India continues to face **high distress, low service engagement,** and **weak systemic support** for people with psychosocial disabilities.

What is the core problem in mental health care in India?

1. Mental health systems remain dominated by a **deficit-based, biomedical approach**.
2. Lived experiences of trauma, abandonment, and discrimination are **poorly understood or ignored**.
3. Treatment gaps globally and in India remain **70-90%**, showing inadequate reach.
4. Care often focuses on "normalising" individuals rather than addressing **structural inequality and social context**.
5. People frequently disengage from services due to **lack of trust, stigma, and inadequate support systems**.

Why does reimagining mental health care matter?

1. Human suffering is shaped by **abuse, poverty, social exclusion, and stigma**, which medical models alone cannot address.
2. NCRB suicide data shows major distress linked to **family conflict and relational breakdown**, reflecting deeper emotional pain.
3. Distress is influenced by intertwined **biological, psychological, cultural, political, and historical factors**.
4. Ignoring caste, class, gender, and queer identities limits effective care.
5. Without a justice-based approach, mental health care risks becoming **ineffective, discriminatory, and inaccessible**.

How should mental health care be redesigned?

1. Centre mental health care around **dignity, disability justice, equity, and inclusion**.
2. Provide support that stays with individuals through **material hardship and relational suffering**.
3. Combine medicines and tangible support with **relational work, meaning-making, and emotional coherence**.
4. Recognise and integrate community knowledge and **lived-experience practitioners** into mental health systems.
5. Treat care as enabling people to ask: **"What do I need to live a meaningful life?"**

Mental Health as a Public Health and Governance Challenge

1. Mental health **impacts productivity, social cohesion, crime, homelessness,** and **poverty cycles**.
2. India faces one of the world's **largest treatment gaps** (70-90%), making it a structural governance issue.
3. **Weak public health infrastructure** limits long-term psychosocial care.
4. Mental health is deeply linked to **SDGs (3, 5, 10, 11, 16)**.

The Justice-Based Approach to Mental Health

1. Goes beyond clinical treatment: focuses on dignity, equality, and lived experience.
2. Recognises mental health problems as outcomes of **violence, exclusion, discrimination, deprivation**, not merely biology.
3. Aligns with **constitutional values (Articles 14, 15, 21)** and the **Rights of Persons with Disabilities Act, 2016**.

Social Determinants and Intersecting Inequalities

1. Mental health struggles emerge from **poverty, caste hierarchy, gender violence, job insecurity, and housing instability**.

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2. NCRB data linking suicides to **family problems, relational breakdowns, and economic distress** shows the social nature of suffering.
3. Historical trauma (displacement, caste violence, migration) affects community mental health patterns.

Current Mental Health Frameworks in India

1. **Legal Frameworks**
   a. **Mental Healthcare Act, 2017 (MHCA 2017)** - The main law replacing the older 1987 Act. It guarantees the **"right to access mental healthcare"**, protects the rights of persons with mental illness (non-discrimination, confidentiality, informed consent, humane treatment, community living, advance directives, legal aid).
   b. MHCA aligns Indian law with international standards, especially obligations under the **UN Convention on Rights of Persons with Disabilities (UNCRPD).**
   c. **Establishments offering mental health services** must be **registered under MHCA**, ensuring minimum standards of care and regulation.
2. **Policy Frameworks**
   a. **National Mental Health Policy, 2014** - Provides a broad vision and guiding principles for mental health in India. Focuses on decentralised community care, inclusion, access to services, and addressing social determinants.
   b. **National Health Policy, 2017** - Recognised mental health as a priority and reiterated the commitment to integrate mental health services into primary health care, strengthen human resources, and expand access across the country.
3. **Programme-level Frameworks**
   a. **Tele-MANAS / National Tele Mental Health Programme (launched 2022)** - A digital initiative offering **24×7 toll-free helpline** and tele-counselling, integrated with National Mental Health Programme (NMHP). Helps expand access especially in remote or underserved regions.
4. **Institutional & Regulatory Mechanisms**
   a. **Mental Health Establishments Registration & Regulation** - Under MHCA 2017 and associated rules, all public or private establishments providing mental health services must register. This ensures regulation, quality standards, and accountability.
   b. **Mental Health Review Boards & Legal Safeguards** - MHCA provides for review boards and legal provisions to protect patient rights: confidentiality, informed consent, safeguards against inhuman treatment, capacity assessment, advance directives, and complaint redressal.

Implications of Transforming Mental Health Care

1. A dignity-based system can reduce **stigma and disengagement**.
2. Community-based support can prevent homelessness, isolation, and crisis escalation.
3. Recognising lived-experience workers can **bridge treatment gaps** in underserved areas.
4. Relational and contextual care encourages **long-term healing and trust-building**.
5. A justice-oriented model aligns mental health reforms with **rights-based governance**.

Challenges and Way Forward

Challenges	Way Forward
Overemphasis on biomedical models with little attention to social context.	**Integrate** biological, psychological, social, cultural, and political explanations.
Large **treatment gaps** and weak continuity of care.	**Strengthen** community care, long-term follow-up, and relational support.
Stigma and deficit-based framing of individuals.	**Reframe care** around dignity, autonomy, and justice.
Lack of recognition for lived-experience practitioners.	Provide **formal roles, training, compensation**, and institutional support.
Research **focuses on large-scale statistics**, ignoring real-life nuances.	Adopt implementation science and transdisciplinary research.

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2. Intimate Partner Violence: A Hidden Health Crisis

Context

1. Recent global health research, including a **Lancet study using Global Burden of Disease 2023 data**, shows that **intimate partner violence (IPV)** is a major cause of poor health among women in South Asia.
2. For women of reproductive age, IPV causes **more long-term health damage than obesity, smoking, alcohol use, or high blood sugar**.
3. This evidence demands a shift in thinking; **domestic violence must be seen as a health risk, not only a social or legal issue**.

What is Intimate Partner Violence (IPV)?

1. Intimate partner violence refers to **physical, sexual, emotional,** or **economic abuse** by a current or former **spouse or partner**.
2. It includes acts such as **beating, marital rape, coercive control, threats,** and **financial deprivation**.
3. IPV usually does not happen once; it **continues over many years**, slowly damaging a woman's physical and mental health.

How IPV Affects Health?

1. IPV causes serious **mental health problems**, such as anxiety, depression, post-traumatic stress disorder (PTSD), and suicidal thoughts.
2. It also leads to **long-term physical illnesses**, including heart disease, digestive problems, chronic pain, and constant tiredness.
3. Women facing violence are at higher risk of **sexually transmitted infections and pregnancy-related complications**.
4. In South Asia, IPV is among the **top causes of disability and chronic illness** in women.

Why Domestic Violence Remains Invisible in Healthcare

1. Women experiencing IPV often visit health facilities repeatedly with **non-specific symptoms**, such as chest pain, palpitations, insomnia, or unexplained pain.
2. Medical investigations frequently return normal results, leading to **symptomatic treatment rather than identification of the root cause**.
3. Medical education in India treats domestic violence largely as a **forensic or legal issue**, not as a clinical risk factor.
4. Doctors are rarely trained to **ask about violence safely, recognise trauma patterns, or provide trauma-informed care**.

Problems in Medical Training and Healthcare Systems

1. The medical curriculum in India gives **very little importance** to gender-based violence.
2. Young doctors may sense abuse but **do not know how to question, record, or respond properly**.
3. Families often block mental health referrals due to stigma or fear.
4. As a result, women receive treatment again and again, while the **real cause of illness remains unaddressed**.

Why Reframing IPV as a Public Health Issue Matters

1. Viewing IPV as a health risk shifts focus from **isolated incidents to long-term disease prevention**.
2. It explains why conditions like diabetes, hypertension, heart disease, and mental illness are more prevalent among abused women.
3. This reframing integrates IPV into **non-communicable disease prevention, mental health care, and primary healthcare systems**.
4. Without this shift, healthcare systems will continue treating diseases while ignoring one of their main causes.

Challenges and Way Forward

Challenges	Way Forward
Domestic violence is seen primarily as a **social or legal issue.**	Recognise intimate partner violence as a **public health risk factor** within healthcare policy.
Medical education **inadequately addresses** gender-based violence.	**Integrate IPV and trauma-informed care** across clinical subjects in medical curricula.

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Doctors lack training to identify and manage abuse safely.	**Train healthcare workers** in screening, documentation, and referral for IPV cases.
Fragmented care pathways for mental health support.	Strengthen mental health services and ensure confidential, **survivor-centred care**.
Survivors remain **dependent** on abusive environments.	**Link healthcare responses with social support systems** without coercion.

3. AI and India's Aadhaar-UPI Model

Context

India has successfully built digital public infrastructure (DPI) such as **Aadhaar** and **UPI**, enabling secure identity and payments for over a billion people. With AI reshaping global economies, India now aims to build an **AI ecosystem** rooted in Indian laws, green computing, and citizen-centric digital systems. This moment is seen as a potential **leapfrog opportunity** similar to how India jumped from no landline network to mass mobile connectivity.

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What Is India's AI Opportunity?

1. AI will transform how people **learn, work, access services, and make decisions**. But it can also disrupt India's strengths, especially IT and back-office work, where automation may reduce certain roles.
2. India can convert this **challenge into an opportunity** because:
   a. It already has **identity (Aadhaar)** and **payments (UPI)** infrastructure at scale.
   b. It has large **datasets**, growing **internet access**, and a young, tech-savvy population.
   c. It aims to combine **AI + renewable energy** to build a sustainable, globally competitive AI ecosystem.
3. India can build an AI system similar to its DPI model: **inclusive, affordable, lawful, secure, and built for India's needs**.

Why India Needs Its Own AI Framework?

Three concerns make domestic AI capability essential:

1. **Digital Sovereignty:** If powerful AI systems operate from abroad, India loses control over:
   a. Data usage
   b. Algorithmic decisions
   c. Bias and accountability
   d. Security risks
2. **National Security:** AI will increasingly run:
   a. Public infrastructure
   b. Administrative systems
   c. Defence, energy, and financial services
3. Foreign-controlled AI creates vulnerabilities.
4. **Economic Competitiveness:** India must avoid depending on foreign AI in the same way it depends on foreign hardware manufacturing. Building domestic AI ensures **high-value jobs**, not just low-value back-office tasks.

How India Can Build Its AI Future?

1. **AI Must Operate Under Indian Law and Jurisdiction**
   a. Foundation models (large AI systems) must be **trained, hosted, and regulated in India**.
   b. India must chart its own path - not the corporate-led American model or the State-controlled Chinese model.
   c. Domestic AI ensures:
      i. Data stays in India
      ii. Accountability to Indian users
      iii. Transparent and secure AI operations
   d. Just as Aadhaar and UPI were designed for Indian needs, India now needs its own **AI intelligence layer**.
2. **Build a Green, Low-Carbon AI Infrastructure**
   a. AI requires **massive computing power** - currently concentrated mostly in the US and China.
   b. India must quickly expand its capacity by building **green data centres** powered by:

i. **Solar and wind energy**
ii. **Green hydrogen**
iii. **Energy-efficient cooling systems**
iv. **Next-generation semiconductors and power electronics**

c. This becomes a **green industrial opportunity**, stimulating investment in:
   i. Renewable energy
   ii. Data-centre technology
   iii. AI hardware ecosystems

d. India can leap directly to a **green frontier**, where economic growth and sustainability go together.

3. **Every Indian Should Have a Multilingual Personal AI Agent**

a. India's future AI ecosystem should give every citizen a **secure, private, multilingual AI assistant** that they control.

b. Examples:
   i. A **farmer** receives weather, pest, and crop advice in his local language.
   ii. A **student** uses AI for language learning and revision support.
   iii. A **patient** manages medical records and receives health guidance.

c. Key features:
   i. Secure data storage
   ii. User control over information
   iii. Privacy and transparency
iv. Open standards for interoperability

d. This mirrors Aadhaar-UPI principles: **inclusion, accessibility, trust, and scale**.

Implications

1. **New economic opportunities** in data infrastructure, model development, and AI-powered services.
2. **Potential job shifts** in IT and back-office sectors due to automation.
3. **Enhanced national security** through domestic AI governance.
4. **Green economic growth** driven by renewable-energy-powered AI.
5. **Stronger global competitiveness**, similar to how India built leadership in digital payments.

Challenges and Way Forward

Challenges	Way Forward
Dependence on foreign AI models	Build domestic foundation models trained and hosted in India
Limited computing power	Scale green data centres using solar, wind, and hydrogen
Risks to privacy and data security	Establish strong AI laws, open standards, and citizen control over data
Unequal access to AI tools	Ensure multilingual AI assistants for all citizens
Job disruptions due to automation	Upskill workforce and create new roles in AI development and domain-specific applications
Competition from global AI ecosystems	Invest early, collaborate with academia and startups, and build long-term capabilities

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History

1. Diwali and UNESCO Intangible Heritage Recognition

Context

UNESCO has inscribed **"Deepavali, the festival of light"** on its **Representative List of the Intangible Cultural Heritage of Humanity (2025)**. This makes Diwali the **16th Indian element** on the list. The decision was finalized during UNESCO's 20th Session held at the Red Fort in December 2025.

What Is UNESCO's Intangible Cultural Heritage List?

1. The Intangible Cultural Heritage (ICH) list recognises **living cultural traditions**, not monuments or physical sites.
2. It includes practices passed down over generations in five broad domains:
   a. **Oral traditions**
   b. **Performing arts**
   c. **Social practices, rituals, festivals**
   d. **Knowledge of nature and the universe**
   e. **Traditional craftsmanship**
3. **Examples** include India's **Vedic chanting, Ramlila, Yoga, Garba dance, Kumbh Mela**, and global examples such as **French baguette-making**.
4. To qualify, a tradition must be:
   a. **Community-based**
   b. **Representative of cultural identity**
   c. **Inclusive and transmitted across generations**
5. ICH also identifies practices that are **at risk and need urgent safeguarding**, such as pottery traditions from Vietnam and Chile.

Why Does This Recognition Matter?

1. It preserves and promotes **living cultural practices** at a time when globalisation can weaken local traditions.
2. It emphasises cultural **diversity and shared heritage**, which strengthens community identity.
3. It supports **safeguarding measures**, ensuring traditions remain alive for future generations.
4. It enhances India's cultural diplomacy and visibility on a global stage.

How the Nomination and Inscription Process Works?

1. Countries submit **nominations** which must show that the cultural practice is alive, community-supported, and safeguarded.
2. The Intergovernmental Committee evaluates nominations under the **2003 Convention**.
3. Once approved, UNESCO provides guidance, promotes best practices, and can mobilise financial support for protection.
4. For 2025, Diwali was chosen. For next year, India has nominated **Bihar's Chhath Puja**.

Implications for Diwali

1. **Cultural Significance and Safeguarding**
   a. The inscription **raises global awareness** about Diwali's traditions - light, community bonding, rituals, craftsmanship, and storytelling.
   b. It encourages governments and communities to **protect rituals, artisanal work, traditional crafts, and local knowledge** linked to the festival.
2. **Impact on the Indian Diaspora**
   a. Recognition strengthens cultural identity among the **global Indian community**.
   b. It supports cultural exchange programmes and international celebrations.
3. **Economic and Tourism Impact**
   a. Higher global visibility can **boost tourism**, especially around festival seasons.
   b. Artisans who produce lamps, rangoli materials, idols, sweets, textiles, and festival crafts may receive **better recognition and sustainable income opportunities**.

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Challenges and Way Forward

Challenges	Way Forward
Risk of commercialisation overshadowing cultural value	Promote community-led celebrations and safeguard core rituals
Loss of traditional knowledge among younger generations	Strengthen local training, workshops, and documentation
Uniform festival formats due to globalisation	Encourage regional diversity and local variations of Diwali
Limited awareness of UNESCO safeguards	Launch campaigns explaining benefits and responsibilities under ICH

2. 100 Years of the Communist Party of India (CPI)

Context

The **Communist Party of India (CPI)** completed **100 years** on **December 26, 2025**. The centenary has revived discussion on the **origins of the Communist movement in India**, its ideological roots, and its role in the freedom struggle and post-Independence politics.

What is the Communist Party of India?

1. The CPI considers **December 26, 1925**, when Indian Communist groups met in **Kanpur**, as its **foundation date**.
2. It emerged as a political organisation aiming to:
   a. End **British imperial rule**
   b. Establish a **workers' and peasants' republic**
   c. Socialise the **means of production and distribution**
3. The CPI was shaped by both **global socialist ideas** and **Indian anti-imperialist conditions**.
4. Over time, the Communist movement in India adopted **both revolutionary and parliamentary paths**.

Global Ideological Roots of Indian Communism

1. After the **French Revolution (1789)**, Europe became divided between:
   a. Right (monarchists, defenders of old order)
   b. Left (republicans, supporters of change)
2. Industrialisation created wealth but also **deep inequality**.
3. **Karl Marx** argued that capitalism would collapse due to its internal contradictions and be replaced by socialism.
4. Contrary to Marx's expectation, the **first socialist revolution** occurred in **Russia (1917)** under **Vladimir Lenin**, not in Western Europe.
5. The Russian Revolution strongly influenced **colonial countries**, including India.

Three Political Strands that Shaped Indian Communism

1. **Revolutionary Diaspora Abroad**
   a. Led by **M. N. Roy**, who worked across the US, Mexico, Europe, and the USSR.
   b. Roy represented India at the **Communist International (Comintern)** in 1920.
   c. The Comintern advised colonial Communists to **first fight imperialism**, even through temporary alliances.
2. **Indigenous Left Groups in India**
   a. Independent Communist groups arose within India:
      i. Bombay - S. A. Dange
      ii. Calcutta - Muzaffar Ahmad
      iii. Lahore - Ghulam Hussain
      iv. Madras - Singaravelu Chettiar
   b. These groups sought coordination for nationwide political action.
3. **Workers' and Peasants' Organisations**
   a. Formation of the **All India Trade Union Congress (AITUC)** in **1920**.
   b. Labour and peasant movements provided the **mass base** for Communism.

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Tashkent (1920) vs Kanpur (1925): The Foundation Debate

1. **Tashkent Meeting (1920)**
   a. Indian revolutionaries formed a Communist party abroad with Comintern approval.
   b. It had **no strong links with Indian-based Communist groups**.
2. **Kanpur Conference (1925)**
   a. Indian Communist groups met on Indian soil.
   b. Declared the formation of the **Communist Party of India**.
   c. Focused on **anti-imperialist struggle** and Indian conditions.
3. **Divergent Views**
   a. **CPI (Marxist)** considers **Tashkent (1920)** as the starting point.
   b. **CPI** considers **Kanpur (1925)** as the true foundation, as it reflected Indian realities.

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Role of Communists in the Anti-Imperialist Struggle

1. Active in labour and peasant mobilisation during the 1920s-30s.
2. Leaders were jailed in cases like the **Meerut Conspiracy Case (1929)**.
3. Worked with the **Congress Socialist Party** during the 1930s.
4. Led major peasant movements after 1945:
   a. **Tebhaga movement** (Bengal)
   b. **Telangana movement** (Hyderabad)
5. Briefly deprioritised the anti-British struggle during **1942-45** due to opposition to Fascism in World War II.

Post-Independence Trajectory

1. The movement split between:
   a. **Insurrectionary path**
   b. **Parliamentary democratic path**
2. Communists formed elected governments in:
   a. **Kerala**
   b. **West Bengal**
   c. **Tripura**
3. In **1964**, the party split into **CPI** and **CPI (Marxist)** due to ideological and geopolitical differences.

Implications

1. Indian Communism shifted from **revolutionary politics** to **constitutional participation**.
2. It shaped India's **labour laws, land reforms, and federal politics**.
3. The movement highlighted class inequality even within democratic systems.
4. Its relevance today lies more in **social justice discourse** than mass mobilisation.

Challenges and Way Forward

Challenges	Way Forward
Declining mass base among workers and peasants	Rebuild close engagement with **labour unions, farmers, and informal-sector workers** through ground-level mobilisation
Ideological fragmentation and internal divisions	Update Marxist ideas to suit **contemporary Indian social and economic realities** while maintaining core principles
Electoral marginalisation in many States	Strengthen **grassroots organisation**, local leadership, and issue-based politics rather than relying only on ideology
Perception of ideological rigidity and dogmatism	Show flexibility by working **within the constitutional and democratic framework**
Reduced appeal among youth	Address issues that concern youth today such as **job insecurity, inequality, unemployment and social justice**

LATEST GOVERNMENT SCHEMES

1. PM Internship Scheme

Context

The **PM Internship Scheme** has faced low participation, as only **20%** of selected candidates accepted internship offers, and **20% of those who joined quit early**, raising concerns about the scheme's design and effectiveness.

What is the PM Internship Scheme?

1. The **Prime Minister's Internship Scheme** provides **graduates** with **practical exposure** to the functioning of **Central Ministries, Departments, and Public Sector Institutions**.
2. Interns work on **research**, **data analysis**, **field studies**, **project tracking**, and **documentation** to understand **policy implementation** and **administrative processes**.

How the PM Internship Scheme Works?

1. The scheme follows a **national-level online application process**, where students submit applications through a central portal.
2. Candidates are shortlisted based on **academic merit**, **motivation**, and **interest in public policy**, assessed through submitted documents such as the **Statement of Purpose**.
3. Selected interns are **placed in Central Ministries, Government Departments, and Public Sector Institutions**, depending on project requirements and availability.
4. Interns work on tasks like **research**, **data analysis**, **field surveys**, **documentation**, and **monitoring government projects**, providing exposure to **real administrative functioning**.
5. Each intern is assigned a **mentor** within the department to **guide work** and **ensure structured learning**.
6. Interns receive a **stipend** for the duration of the programme, but the scheme **does not guarantee a government job** after completion.
7. Interns are expected to **work full-time** during the internship period and may be posted to **different locations or states** depending on deployment needs.
8. The **internship duration** and **nature of work** vary across departments and project themes.

Why is participation so low?

1. **Recent government data** shows **major concerns:**
   a. **Only 1 out** of **5 shortlisted candidates** accepted the internship.
   b. **One in five interns** exited the programme **before completion**, indicating dissatisfaction.
2. **Reasons for Low Offer Acceptance**
   a. **Low stipend** that does not cover relocation and living costs in **Tier-1 cities**.
   b. **Better private sector opportunities** offering higher pay and career security.
   c. **No assured government employment**, reducing long-term appeal.
   d. **Postings in distant locations** causing relocation and financial strain.
3. **Reasons for Early Dropouts**
   a. **Mismatch** between expectations and actual assigned tasks.
   b. **Weak mentorship** and limited structured learning support.
   c. **Minimal participation in real decision-making** processes.
   d. **Accommodation and logistical difficulties** for out-station interns.

Implications

1. If unresolved, the scheme may **fail to attract talent**, especially from **rural and low-income backgrounds**.
2. Risk of losing potential **young professionals**, **innovative thinking**, and **data-driven governance support** for ministries.
3. A weak internship pipeline limits efforts to strengthen **youth engagement in governance** and India's **demographic dividend**.

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Challenges and Way Forward

Challenges	Way Forward
Low stipend and financial burden	Increase stipend, especially in **Tier-1 cities**
Weak learning structure and mentorship	Introduce **strong orientation**, **assigned mentors**, and scheduled learning modules
Mismatch of postings and academic background	**Improve matching** of interns with relevant departments
High dropout due to relocation issues	Explore **hybrid / remote models** and local placement options
Limited exposure to decision- making	Provide structured participation in **policy discussions and field projects**
No clear career pathway	Introduce **certification**, skill records, and preference in public hiring processes
Limited monitoring and evaluation	Adopt **digital tracking systems** and transparent evaluation frameworks

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2. Sanchar Saathi App and Privacy Concerns

Context

The **Department of Telecommunications** directed smartphone companies to **pre-install** the **Sanchar Saathi** application on all devices, creating concerns about **privacy**, **surveillance**, **data security**, and **lack of user choice**. Although **Telecom Minister Jyotiraditya Scindia** later stated that installation is **optional**, the written directive still requires the application to remain **visible** and **not restrictable**, leading to **confusion**.

What is Sanchar Saathi?

1. Sanchar Saathi is a **telecom cybersecurity and anti-fraud application** developed by the Government of India. It allows users to:
   a. Report **fraudulent calls and SMS**
   b. Report and block **stolen mobile phones**
   c. Verify device identity using **IMEI scanning**
   d. Track misuse of mobile numbers
2. The app aims to reduce **cyber fraud**, **SIM misuse**, and **counterfeit device circulation**.

What is the Recent DoT Directive?

1. The DoT, under **Telecommunication Cybersecurity Amendment Rules, 2025**, has directed smartphone companies to:
   a. Pre-install Sanchar Saathi on all **new devices**.
   b. Push a **software update** to install the app on **existing devices** already sold.
2. Clause **7(b)** of the directive instructs manufacturers to ensure that:
   a. The app is **readily visible**.
   b. Its functionalities are **not disabled or restricted**.
3. Initially, companies were told the app **cannot be deleted** or disabled by users.
4. Compliance is required within **90 days**, making this the **first time** a mandatory state application is being pushed at scale to phones in India.
5. Later, Telecom Minister Scindia stated that:
   a. The app is **not mandatory**.
   b. Users can **choose not to register** and can **delete the app**.
   c. The government's intention is to **make the app available widely** to protect citizens from fraud.

This contradiction between the **written directive** and the **verbal clarification** creates uncertainty about **actual user choice and consent**.

How Sanchar Saathi Works and What Data It Can Access?

Sanchar Saathi works by helping users **report fraud**, **block stolen phones**, and **verify IMEI numbers**.

To do this, it needs certain permissions and access on the phone.

What Data Sanchar Saathi Can Access?

1. **On Android phones:**
   a. Phone number and call management: It reads the phone number on the device to register the user and verify identity.
   b. Send SMS: It can send an automatic message to DoT during registration.
   c. Call and SMS logs: It can read call and SMS history so that users can report fraud correctly.
   d. Photos and files: It uses them if users want to upload images or screenshots related to fraud or stolen phones.

e. **Camera:** It uses the camera to scan the **IMEI barcode** to check whether a phone is genuine.
f. **Device information:** It may access the device's serial number and information about active calls.

2. **On iPhones (iOS)**
   a. It **cannot** automatically make calls or send SMS.
   b. It can only access:
      i. **Camera**
      ii. **Photos and files**

Why Do These Permissions Raise Concerns?

1. The app can work **without asking explicit permission** in some cases (especially on Android).
2. It has **wide access** to sensitive data like call logs and device identity.
3. The privacy policy **does not clearly say**:
   a. How long data will be stored,
   b. Whether users can delete their data,
   c. What rights users have.
4. App store declarations stated **"no data collected"**, but the app does collect data like phone numbers and logs.
5. **Exemptions Under Data Protection Law**
   a. Under India's **Digital Personal Data Protection (DPDP) Act**, the **state and its agencies** enjoy **broad exemptions** in the name of **national security and public order**.
   b. This means that **statutory safeguards** against misuse are weaker when the **government itself** is the data collector.
   c. Mandating a government-backed app with **high-risk permissions** therefore raises concerns of **mass surveillance** and **profiling**.

Constitutional Perspective: Article 21 and the Puttaswamy Test

The right to privacy is a part of the **right to life and personal liberty under Article 21** of the Constitution.

In **KS Puttaswamy (2017)**, a **nine-judge Bench** of the **Supreme Court** held that **any state action affecting privacy** must satisfy a **three-part test**:

1. **Legality** - There must be a **valid law** backing the action.
2. **Necessity / Legitimate Aim** - The action must pursue a **legitimate state aim**, such as security.
3. **Proportionality** - The measure must be **proportionate and least restrictive**, with a **rational connection** between the aim and the means.

Experts argue that:

1. There is **no clear statutory law** passed by Parliament specifically authorising **compulsory installation** of such an app on all phones.
2. The power is derived from **rules and executive notifications**, which is a form of **delegated legislation**, not primary law.
3. Less intrusive alternatives already exist, such as:
   a. **Web portals** for IMEI verification.
   b. **SMS-based services**.
   c. **Voluntary apps** that users can choose to download.

Therefore, there are serious doubts about whether this mandate satisfies the **legality** and **proportionality** requirements under **Article 21** and the **Puttaswamy judgment**.

Some legal experts compare this situation to **Aadhaar**, where the government eventually had to bring a **specific Act** after legal challenges.

Surveillance, Function Creep, and Cybersecurity Risks

1. A centrally installed, government-controlled app on most smartphones can become a **single point of failure** and a **high-value target for hackers**.
2. Even if the present stated purpose is limited (fraud prevention, IMEI verification), there is a fear of **"function creep"**:
   a. Data collected for one purpose is later used for **other purposes**.
   b. Over time, the backend could be expanded to enable **mass tracking, profiling, and surveillance**.
3. Experts note that the government already has **less intrusive means** to achieve its goals, so a **mandatory app** is not clearly justified as the **least invasive option**.

Implications

1. Trust in **digital governance** may decline if people believe their phones are becoming **"state-controlled devices"**.
2. The move may be seen as **undermining the spirit of the DPDP Act**, which is supposed to protect **user consent and autonomy**.
3. It leads to possible increase in **cyber vulnerability** due to a single access point for hackers

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4. It sets a precedent for potential **future mandatory digital tools** without adequate legal and constitutional safeguards.
5. Internationally, it could raise concerns about **digital rights** and **rule-of-law standards** in India.
6. It may lead to potential conflict between **national security objectives** and **constitutional rights**

Challenges and Way Forward

Challenges	Way Forward
Absence of clear user consent and ambiguity between written order and verbal clarification	Issue a **transparent official notification** confirming voluntary installation and delete rights
Excessive access permissions raising surveillance fears	Limit app permissions to **only essential features**, ensure **independent security audits**
No clarity on data storage, retention, deletion or user rights	Provide clear **data lifecycle transparency**, allow users **data deletion and correction rights**
Risk of mass surveillance and "function creep"	Establish strong **legislative oversight**, create safeguards against secondary use of data
Lack of trust due to DPDP exemptions for government agencies	Build **independent regulatory supervision** and grievance mechanism
No statutory basis for forced installation	Introduce **Parliament-approved legal backing** for any compulsory technology
Risk of cybersecurity threats due to single-point policy	Adopt **distributed systems**, strengthen encryption and regular third-party audits

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3. Tex-RAMPS Scheme

Context

1. The **Union Government has approved the Tex-RAMPS Scheme (Textiles Focused Research, Assessment, Monitoring, Planning and Start-up)** with a financial outlay of **₹305 crore for 2025-26 to 2030-31**.
2. The scheme aims to strengthen **research, technology, data-driven policy planning, and innovation capacity** to make India a **globally competitive textile hub**.

Background: Importance of India's Textile Sector

1. One of India's **oldest and largest industries**
2. Contributes **about 2% to GDP**, **11% of industrial output**, and **13% of export earnings**
3. Employs **over 45 million workers - second-largest employer after agriculture**
4. Integrated value chain from **fibre to finished garments and home textiles**
5. India is one of the largest producers of **cotton, jute, silk, polyester, and technical textiles.**

Key Challenges Faced by the Sector

1. **Slow adoption of advanced technologies**
2. **Weak R&D and low innovation capacity**
3. **Fragmented supply chains and lack of organised data systems**
4. **Increasing global competition** from agile manufacturing economies such as **China, Vietnam, and Bangladesh**
5. **Limited professional workforce and start-up support**

About the Tex-RAMPS Scheme

1. The Tex-RAMPS Scheme intends to build a **future-ready ecosystem** by integrating **research, data analytics, innovation, industry collaboration and entrepreneurship**.
2. **Objectives**
   a. Build a **national ecosystem for textile research and innovation**
   b. Strengthen **data-driven policy making**
   c. Promote **sustainability and circular economy**
   d. Support **textile-based start-ups and incubation**
   e. Enhance collaboration between **government, industry, academia, and states**

Key Components of the Scheme

1. **Research and Innovation Development**
   a. Promote high-end research in **smart textiles, technical textiles, sustainable materials, advanced manufacturing and frontier technologies**

b. Improve **value chain efficiency** and integration into global markets

2. **Data and Analytics Ecosystem**
   a. Set up a real-time and transparent data framework for:
      i. **employment mapping**
      ii. **supply chain assessment**
      iii. **diagnostic studies and forecasting**
      iv. **standardised analytics for planning**
3. **Integrated Textiles Statistical System (ITSS)**
   a. A centralized digital platform for:
      i. **continuous sector monitoring**
      ii. **policy diagnostics**
      iii. **strategic decision-making for states and industry**
4. **Capacity Building and Knowledge Network**
   a. Strengthening **state-level planning units**
   b. **Training programmes, workshops, cluster-level knowledge sharing**
   c. Promote a strong **quality culture** across production chains
5. **Start-up and Entrepreneurship Support**
   a. Funding support for **incubators, hackathons, innovation challenges**
   b. **Academia-industry partnerships**
   c. Support for **early-stage textile technology start-ups**

Expected Outcomes

1. Improved **global competitiveness** of India's textile and apparel sector
2. Strong **R&D and innovation ecosystem**
3. Better **productivity, quality, and supply-chain resilience**
4. **Data-driven policy** and **industrial strategy**
5. Boost to **employment generation and skilling**
6. Strengthened cooperation across **States, academia and industry**

Challenges and Way Forward

Challenges	Way Forward
Low R&D investment and technology lag in manufacturing	Increase public-private partnerships and innovation funding
Lack of skilled manpower in advanced textile engineering	Strengthen training, internships and industry collaboration
Fragmented and informal supply chains	Build integrated digital data systems like **ITSS**
Global competition from low-cost manufacturers	Promote **smart textiles** and **high-value technical textile** exports
Limited support for start-ups	Expand incubation, finance access and scale-up support

4. VB-G RAM G Bill, 2025

Context

The **Viksit Bharat-Guarantee for Rozgar and Ajeevika Mission (Gramin) Bill, 2025** has been introduced to **replace the MGNREGA, 2005**, which has been India's main rural employment guarantee law for nearly two decades. The Bill proposes major changes in **employment days, funding pattern, planning, and monitoring**, and has triggered debate on its **impact on States, rural workers, and federalism**.

What is the VB-G RAM G Bill, 2025?

1. The VB-G RAM G Bill is a **new statutory framework** for rural employment and livelihood creation.
2. It **replaces MGNREGA, 2005**, which guaranteed at least 100 days of wage employment to rural households.
3. The Bill seeks to combine **employment generation, livelihood creation, and rural infrastructure development** under a single, technology-driven mission.
4. It introduces **fixed employment guarantees, normative funding limits, seasonal pauses, and digital monitoring**.

Key Statutory Changes Proposed

1. **Expansion of Guaranteed Employment Days**
   a. Employment guarantee increased to **125 days per rural household per year**.
   b. Under MGNREGA, 100 days became a practical ceiling despite legal flexibility.
   c. Earlier exceptions like **extra days in drought areas or for forest-dwelling STs** are now replaced by a **uniform statutory entitlement**.
2. **Change in Centre-State Funding Pattern**
   a. Unlike MGNREGA, where the Centre paid **100% unskilled wage costs**, the new Bill shifts costs to States.

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b. Proposed sharing:
   i. **90:10** for Northeastern, Himalayan States and UTs with legislature
   ii. **60:40** for other States
   iii. **100% Centre-funded** for UTs without legislature
c. This significantly increases **State fiscal responsibility**.

3. **Normative Allocation Replacing Labour Budget**
   a. The Centre will decide **State-wise fixed allocations** every year.
   b. Any spending beyond this limit must be **borne by the State**.
   c. This replaces the **demand-driven labour budget system** of MGNREGA.
   d. The scheme thus shifts from **rights-based and demand-led** to **budget-capped and supply-driven**.
4. **Statutory Pause During Peak Agricultural Seasons**
   a. Public works will be **legally paused for up to 60 days** during sowing and harvesting seasons.
   b. States must notify these periods based on **local cropping patterns**.
   c. While this helps agriculture, it **reduces the effective window** to realise the 125-day guarantee.
5. **Viksit Gram Panchayat Plans & National Infrastructure Stack**
   a. All works must originate from **Viksit Gram Panchayat Plans** and move upward to the national level.
   b. These plans feed into the **Viksit Bharat National Rural Infrastructure Stack**, covering:
      i. Water security
      ii. Core rural infrastructure
      iii. Livelihood infrastructure
      iv. Climate and extreme weather mitigation
   c. Integration with **PM Gati Shakti National Master Plan** enables spatial and inter-departmental convergence.

Why the Overhaul of MGNREGA Was Proposed?

1. MGNREGA, enacted in **2005**, is seen as **misaligned with current rural realities**.
2. Issues highlighted by the government include:
   a. **Misuse of funds** (₹193.67 crore in FY 2024-25)
   b. Weak monitoring and delayed payments
   c. Creation of **low-quality assets**
   d. Only **7.61% households** completed 100 days of work
3. The new Bill aims to create a **more accountable, efficient, and infrastructure-focused system** using technology.

How the VB-G RAM G Framework Works

1. Employment and asset creation are **planned digitally** through Panchayat-led plans.
2. Funding is **pre-allocated through norms**, not open-ended demand.
3. Works are **paused during peak agricultural seasons** to support farming.
4. Payments, monitoring, and verification are **digitised and Aadhaar-linked**.
5. National-level infrastructure planning is aligned with **climate resilience and productivity goals**.

Implications of the Bill

1. Rural employment becomes **more structured and predictable**, but less demand-driven.
2. States face **higher fiscal and administrative burden**.
3. Focus shifts from short-term relief to **long-term infrastructure and productivity**.
4. Farmers may benefit from **better labour availability during peak seasons**.
5. Workers gain **more guaranteed days**, but with stricter conditions and timelines.
6. Federal balance may be affected due to **centralised planning and capped allocations**.

Challenges and Way Forward

Challenges	Way Forward
Increased financial burden on States	Provide transition grants and flexible fiscal support
Shift away from rights-based employment	Retain legal safeguards and grievance redressal
Reduced effective working days due to seasonal pause	Allow limited flexibility in distress periods
Budget-capped allocations may limit employment	Periodic revision of norms based on ground demand
High centralisation of planning	Strengthen State and Panchayat autonomy
Risk of digital exclusion	Ensure offline access and local facilitation support

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PLACES IN NEWS

Place	Context	Key Highlights
1. Southern Ocean	Recent research published in **Nature Climate Change** has revealed an unexpected **carbon 'anomaly'** in the **Southern Ocean**, where observations show **increased carbon absorption** despite **climate models** predicting a **weakening** of its **carbon sink** due to **stronger winds** and **rising greenhouse gases**.	**Also known as:** Antarctic Ocean. It is one of the five major ocean basins of the Earth, encircling and surrounding the Antarctic continent. **Areal extent:** Consists of the southern portions of the **Pacific, Atlantic, and Indian Oceans**. Includes their marginal seas lying **south of 60° South latitude** around Antarctica. **Climatic features:** Characterised by **strong westerly winds**, frequent and intense storms, and **very low temperatures**. **Oceanic circulation:** Dominated by the **Antarctic Circumpolar Current (ACC)**. The ACC is the **longest, strongest, and deepest-reaching ocean current** on Earth. **Marine biodiversity:** Supports diverse marine life including **whales, penguins, seals, and orcas**, which depend on the nutrient-rich waters of the Southern Ocean.
2. Benin (Capital: Porto- Novo)	**Cotonou**, the country's largest city and administrative centre, recently witnessed an **unsuccessful coup attempt** by a group of soldiers, drawing attention to Benin's internal security situation.	**Location:** West African country bordered by **Niger, Nigeria, Togo and Burkina Faso**. **Coastline:** Southern coast lies along the **Bight of Benin** in the **Gulf of Guinea (Atlantic Ocean)**. **Relief:** Coastal plains rise inland to the **La Terre de Barre Plateau**. **Mountains: Atakora range** in the northwest; **Mt. Sokbaro** is the highest peak. **Rivers: Niger** (north) and **Ouémé** (south-flowing).
3. Cambodia (Capital: Phnom Penh)	Thailand recently carried out **airstrikes inside Cambodian territory**, bringing regional security and border sensitivities in mainland Southeast Asia into focus.	**Regional grouping:** Member of **ASEAN**. **Land borders: Vietnam** (east & southeast), **Laos** (northeast) and **Thailand** (northwest). **Maritime front:** Southwestern coast along the **Gulf of Thailand**. **Physical features:** Rich in **oil & gas, timber, gemstones and minerals**. **Water bodies: Tonlé Sap Lake** - largest freshwater lake in Southeast Asia. **Relief: Dangrek, Krâvanh (Cardamom) and Dâmrei** ranges; **Phnom Aural** is the highest peak. **Rivers: Mekong** and **Tonlé Sap**.

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4. Nigeria (Capital: Abuja)	The **United States conducted powerful airstrikes** against **Islamic State-linked militants** in Nigeria, highlighting ongoing counter-terrorism operations in West Africa.	**Location:** Major country in **West Africa**. **Land borders: Niger** (north), **Chad & Cameroon** (east), **Benin** (west). **Coastline:** Southern coast along the **Gulf of Guinea** (Atlantic Ocean). **Ecology:** Dominated by **savanna vegetation**; northern parts lie in the **Sahel** - a semi-arid transition zone. **Drainage: Niger-Benue river system**, with tributaries like **Kaduna**. **Lake Chad:** Shared freshwater lake with **Chad, Cameroon and Niger**. **Relief:** Highlands include **Chappal Waddi** (highest peak) and **Mount Dimlang**.
5. Mexico (Capital: Mexico City)	Mexico announced **tariffs of up to 50%** on imports from **non-preferential trade partners**, including **India**, signalling a shift towards stronger trade protection measures.	**Location:** Country in **North America**. **Land borders: United States** (north), **Guatemala & Belize** (southeast). **Seas: Pacific Ocean** to the west; **Gulf of Mexico** to the east. **Global groupings:** Member of **UN, G20 and OECD**. **Resources:** Rich in **petroleum, silver, copper, gold, natural gas and timber**. **Relief:** Dominated by **Sierra Madre** mountain ranges. **River: Rio Grande**, forming part of the US-Mexico border.

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ETHICS

1. Ethics of Animal Representation in Democracy

Why in the News?

1. A growing **intellectual** and **policy debate** questions whether **modern democracies** adequately represent the **interests of non-human beings** in governance structures.
2. Scholars argue that existing welfare laws are reactive and insufficient, necessitating **fiduciary institutions** or **guardians** to defend animal interests in political decision-making.
3. The issue has gained traction after **judicial interventions** such as the Supreme Court's committee for elephants, which exposed **structural gaps** and **operational failures** in protecting vulnerable animal species.

Ethical Issues Involved

1. **Anthropocentrism vs Moral Considerability of Animals**
   a. **Democracy** is structurally built on a **human-animal divide**, treating **animals** as "**property**" rather than **moral subjects**.
   b. Peter Singer's principle of **equal consideration of interests** challenges speciesism and demands ethical regard for sentient beings.
   c. Martha Nussbaum's **Capabilities Approach** extends justice to all beings capable of flourishing.
   d. Ignoring morally relevant capacities (sentience, vulnerability) leads to systemic injustice.
   e. Civil servants often rely on human-centric cost-benefit models, marginalising ecological and animal interests.
2. **Structural Invisibility and Lack of Representation**
   a. Animals neither vote nor lobby, creating a **political vacuum** in democratic institutions.
   b. **Without representation**, powerful industrial actors (agribusiness, entertainment, transport) **override animal welfare**.
   c. **Existing welfare frameworks** act **after harm**, violating the ethical principle of *ex ante* protection.
   d. **John Rawls' justice as fairness** demands safeguards for those unable to represent themselves.
   e. **Vulnerability theory** (Martha Fineman) argues societies must proactively protect dependent beings.
3. **Fiduciary Responsibility and Accountability**
   a. The idea that humans act as trustees aligns with Gandhian ethics of **non-violence** and stewardship.
   b. Fiduciary bodies often fail due to political capture, delay, and lack of independence.
   c. The Supreme Court's elephant committee shows how noble intent can collapse without accountability.
   d. Ethical public administration requires impartiality, diligence, and competence - core values in Nolan's Principles of Public Life.
   e. Apathy within institutions violates administrative ethics of care, loyalty, and responsibility.
4. **Power Asymmetry and Ethical Decision-Making**
   a. Animals are the most powerless stakeholders in governance; their interests are overridden for profit, convenience or cultural inertia.
   b. Bentham's utilitarian question - *"Can they suffer?"* - underscores moral duty regardless of cognitive capacity.
   c. Majoritarian democracy fails to protect non-electoral groups, similar to future generations, children, or persons with disabilities.
   d. Ethical governance requires compensating for structural disadvantages by institutional design.
   e. Examples like forest officers resisting illegal wildlife trade illustrate how civil servants act as moral guardians in practice.

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5. **Transparency, Independence and Democratic Ethics**
   a. Without transparent processes, fiduciary institutions risk corruption and elite capture.
   b. Kant's principle of **duty-based ethics** demands decisions be morally justified even when inconvenient.
   c. Public officials must disclose reasons, metrics, and consequences of decisions affecting voiceless beings.
   d. Ethical institutions require fixed terms, independent budgets, and scientific expertise (ethology, cognition, welfare science).
   e. Lack of transparency leads to moral hazards and weakens public trust in democratic institutions.

Course of Action

1. **Establish Independent Fiduciary Institutions for Animals**
   a. Create constitutionally protected bodies with investigative and enforcement powers.
   b. Appoint experts through transparent, merit-based procedures; insulate them from political and economic pressure.
   c. Provide separate budget lines to avoid resource dependency.
   d. Define clear fiduciary duties: prudence, care, impartiality, and loyalty to animal interests.
   e. Model these on successful bodies like the National Commission for Protection of Child Rights (NCPCR).
2. **Institutionalise Animal-Impact Assessments in Policymaking**
   a. Mandate impact assessments for policies affecting land use, transport, agriculture, forestry and urban planning.
   b. Develop standard scientific indicators: stress markers, habitat disruption metrics, welfare scores.
   c. Automatically trigger review when projects pose high risks to animal welfare.
   d. Publish assessments for public scrutiny, enhancing democratic transparency.
   e. Integrate non-voting expert representatives in parliamentary committees.
3. **Strengthen Accountability and Monitoring Mechanisms**
   a. Implement annual independent audits on performance against welfare benchmarks (preventable harm reduction, rescue outcomes).
   b. Empower RTI-based transparency to prevent institutional decay.
   c. Introduce penalties for delays or negligence in fiduciary responsibilities.
   d. Establish grievance redressal channels for citizens, NGOs and whistleblowers.
   e. Create horizontal checks through collaboration with environmental regulators and biodiversity boards.
4. **Build Ethical Capacity in the Civil Services**
   a. Train officers in animal ethics, environmental ethics, sentience research and multi-species justice.
   b. Promote decision-making models rooted in precaution, empathy and sustainability.
   c. Encourage field exposure for IAS/IFS officers to wildlife rescue, veterinary science and habitat conservation.
   d. Highlight examples of ethical civil servants - e.g., K. Vijaya Kumar's anti-poaching reforms, or Anand Kumar's humane wildlife relocation efforts.
   e. Strengthen coordination between Forest, Rural Development, Agriculture and Urban Ministries.
5. **Promote Public Awareness and Gradual Reform**
   a. Launch campaigns that reframe humans as **trustees**, not owners, of animal life - resonating with Gandhian trusteeship.
   b. Involve schools, media and civil society to normalise animal stewardship as a democratic value.
   c. Pilot small-scale reforms (municipal animal-impact reviews) before nationwide rollout.
   d. Redirect harmful subsidies (e.g., those fueling intensive farming) to welfare institutions.
   e. Use transparent public consultations to ensure legitimacy and prevent elite capture.

Conclusion

Democratising animal representation **expands ethics** beyond **anthropocentric boundaries**. **Independent, accountable fiduciary institutions** rooted in transparency, expertise and justice can ensure that vulnerable non-human beings are meaningfully protected, thereby deepening democracy and strengthening moral legitimacy.

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ESSAY

It is best to see life as a journey, not as a destination

Life unfolds like an endless river, carrying us through valleys of struggle and peaks of triumph, each bend revealing new landscapes of possibility. When **Steve Jobs** delivered his **famous Stanford commencement** address, he spoke of connecting the dots only in retrospect - a profound reminder that life's meaning emerges not from reaching predetermined endpoints, but from embracing the **transformative process** of becoming. This perspective challenges our **destination-obsessed culture**, where success is often measured by achievements rather than growth, by arrivals rather than adventures.

The metaphor of life as a journey rather than a destination represents a fundamental shift in consciousness - from **outcome-based living to process-oriented existence.** While destinations provide direction and purpose, viewing life primarily through this lens **can lead to perpetual dissatisfaction,** as each achieved goal merely becomes a stepping stone to the next. The journey perspective, conversely, invites us to find meaning in the present moment, **to celebrate growth over achievement,** and to recognize that our **character is sculpted not by what we attain, but by how we navigate the path.**

This philosophical distinction **extends beyond personal fulfillment** to encompass broader questions of human purpose, societal progress, and the very nature of meaningful existence. In examining this perspective, we must explore how the journey mindset transforms our relationship with failure and success, shapes our approach to relationships and personal growth, and influences our understanding of legacy and contribution to society.

The Alchemy of Experience: Transformation Through Process

The journey perspective fundamentally **reframes our relationship with experience**, transforming every encounter - whether joyful or painful - into an opportunity for growth and self-discovery. Unlike the destination mindset, which categorizes experiences as either stepping stones or obstacles to our goals, the journey approach recognizes that **wisdom emerges from the process itself,** not merely from achieving predetermined outcomes.

Consider the life of **Dr. A.P.J. Abdul Kalam**, whose journey from a newspaper boy in Rameswaram to becoming India's President illustrates this principle beautifully. Kalam often spoke of how his early struggles with poverty and academic challenges were not obstacles to overcome but **formative experiences** that shaped his character, empathy, and determination. His famous quote, **"Dream is not that which you see while sleeping, it is something that does not let you sleep,"** reflects a journey-oriented mindset where the pursuit itself becomes the source of meaning and energy.

The **psychological benefits** of adopting a journey perspective are profound and well documented. Research in positive psychology demonstrates that individuals who focus on **intrinsic motivations** - personal growth, meaningful relationships, and contribution to society - report higher levels of life satisfaction than those driven primarily by extrinsic goals like wealth, fame, or status. This occurs because journey-oriented thinking cultivates **resilience**, allowing us to view setbacks as temporary detours rather than permanent failures.

Furthermore, the journey mindset fosters **continuous learning and adaptation**. When we're not fixated on specific destinations, we remain open to unexpected opportunities and alternative paths. The story of **Ratan Tata's** leadership of the Tata Group exemplifies this approach - his willingness to experiment, learn from failures like the **Nano project**, and continuously evolve the company's vision demonstrates how journey-thinking enables **innovative leadership** and sustainable success.

This perspective also transforms our relationship with **time and patience**. Instead of rushing toward future goals, we learn to appreciate the **rhythm of natural**

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development. Like a tree that grows strongest when it develops deep roots before reaching for the sky, human flourishing requires time for reflection, integration, and gradual maturation of our capabilities and wisdom.

The Paradox of Presence: Finding Fulfillment in the Now

The journey perspective creates a beautiful paradox: by focusing less on future destinations, we become more **fully present** and, consequently, more effective in creating meaningful outcomes. This mindset shift addresses one of modern life's greatest challenges - the tendency to postpone happiness and fulfillment until we reach some future state of achievement or acquisition.

Mindfulness traditions across cultures have long recognized this wisdom. The **Buddhist concept** of "**being present**" and the **Hindu philosophy** of "**karma yoga**" (action without attachment to results) both emphasize that true fulfillment comes from engaging wholeheartedly with the present moment rather than constantly **striving toward future goals**. When we embrace life as a journey, we discover that **happiness is not a destination to reach but a way of traveling.**

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This approach profoundly impacts our **relationships and social connections**. When we're not constantly focused on where we're going, we can truly see and appreciate the people walking alongside us. The journey perspective encourages us to invest in **deep, meaningful relationships** rather than viewing others merely as **networking opportunities** or stepping stones to our goals. Research consistently shows that the quality of our relationships is the strongest predictor of life satisfaction - a finding that supports the journey approach to living.

The **creative process** also flourishes under journey-oriented thinking. Artists, writers, and innovators often speak of how their best work emerges not from forcing predetermined outcomes but from **surrendering to the creative process** itself. **Pablo Picasso's** artistic evolution from his **Blue Period** through **Cubism** demonstrates how embracing experimentation and change - core elements of journey thinking - leads to breakthrough innovations and authentic self-expression.

However, critics of the journey perspective raise important concerns about the potential for **aimlessness and lack of direction.** They argue that without clear destinations and measurable goals, individuals might become complacent or lose motivation to achieve meaningful accomplishments. This criticism suggests that pure journey-thinking could lead to a form of **philosophical drift**, where the absence of concrete objectives results in mediocrity or unfulfilled potential.

While this concern merits consideration, it often stems from a **false dichotomy** between journey and destination thinking. The most effective approach typically involves **holding both perspectives simultaneously** - maintaining **clear intentions** and **goals** while **remaining flexible** about the path and open to unexpected opportunities. This **balanced approach** allows us to benefit from the motivation that destinations provide while avoiding the rigidity and tunnel vision that can accompany **excessive goal fixation.**

Legacy Through Living: The Ripple Effects of Journey Oriented Existence

When we embrace life as a journey, our understanding of **legacy and contribution** undergoes a **profound transformation**. Rather than focusing solely on grand achievements or monuments to our success, we begin to recognize that our most significant impact often comes through the **daily interactions, small kindnesses, and authentic presence** we bring to each moment of our lives.

The journey perspective reveals that **influence is cumulative and often invisible**. Every conversation, every act of compassion, every moment of authentic vulnerability creates ripples that extend far beyond our immediate awareness. **Mother Teresa's approach** to service exemplifies this understanding - she famously said, **"We cannot do great things on this earth, only small things with great love."** Her focus on the journey of service, rather than the **destination** of **recognition** or **achievement**, created a legacy that continues to inspire millions.

This mindset also transforms our approach to **failure and setbacks**. When life is viewed as a journey, failures become **valuable teachers** rather than shameful defeats.

The story of **Thomas Edison's** thousands of unsuccessful attempts before **inventing the light bulb** illustrates how journey-thinking reframes failure as an essential part of the discovery process. His famous observation that he had not failed but found thousands of ways that didn't work reflects a journey-oriented understanding of **progress and innovation**.

The journey perspective also encourages **sustainable living and long-term thinking.** When we're not rushing toward immediate destinations, we're more likely to consider the **environmental and social impact** of our choices. This approach aligns with **indigenous wisdom traditions** that emphasize making decisions based on their effects seven generations into the future - a profound example of journey-oriented thinking that **prioritizes process** and **continuity over immediate results**.

Furthermore, embracing life as a journey cultivates **humility and continuous learning**. When we recognize that we're always in process, always growing and evolving, we become **more open to feedback**, **more willing** to **admit mistakes**, and **more curious** about **perspectives** different from our own. This **intellectual humility** is essential for **personal growth and social harmony** in our increasingly **complex and interconnected** world.

The journey mindset also addresses the **modern epidemic of burnout and anxiety** that often results from excessive focus on **achievement** and **external validation**. By finding meaning in the process rather than just the outcomes, we develop greater **emotional resilience** and **sustainable motivation**. This approach is particularly relevant in our **current era of rapid change**, where **traditional career paths** and **life trajectories** are becoming **increasingly unpredictable**.

Synthesis and Forward Vision: Navigating the Path Ahead

The wisdom of viewing life as a journey rather than a destination offers profound insights for both **individual fulfillment** and **collective human flourishing**. This perspective doesn't diminish the importance of **goals** and **aspirations** but rather **recontextualizes them** as guideposts rather than ultimate endpoints. When we embrace the journey mindset, we discover that the path itself becomes the teacher, the companion, and the reward.

The integration of journey-oriented thinking with practical goal-setting creates a **dynamic balance** that honors both our need for direction and our capacity for growth and adaptation. This approach is particularly relevant in our rapidly changing world, where the ability to **navigate uncertainty** and embrace continuous learning has become essential for success and satisfaction.

As we move forward in an era of unprecedented global challenges - from climate change to technological disruption to social inequality - the journey perspective offers valuable guidance. It encourages us to focus on **sustainable practices** rather than quick fixes, to prioritize **relationship-building** over competition, and to measure progress through **collective wellbeing** rather than individual accumulation.

The journey mindset also provides a framework for **intergenerational wisdom**, helping us understand that our role is not to reach some final destination but to contribute meaningfully to the ongoing human story. Like gardeners who plant trees knowing they may never sit in their shade, we can find purpose in **nurturing growth** and creating conditions for future flourishing.

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Ultimately, the choice to see life as a journey rather than a destination is an invitation to **embrace the fullness of human experience** - the struggles and celebrations, the certainties and mysteries, the connections and solitudes that comprise our shared adventure. As the poet **Rainer Maria Rilke** beautifully expressed, **"The only journey is the one within."** When we honor this inner journey while remaining engaged with the outer world, we discover that the path itself becomes our greatest teacher and our most faithful companion.

In this understanding, **every step becomes sacred**, **every encounter meaningful**, and **every moment** an **opportunity** to embody the **wisdom**, **compassion**, and **authenticity** that make the human journey truly worthwhile. The destination, we discover, was never separate from the journey - it was always found in the **quality of our traveling.**

NOTES

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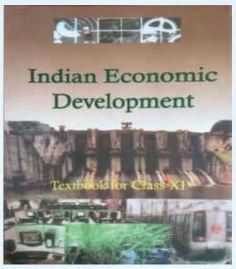
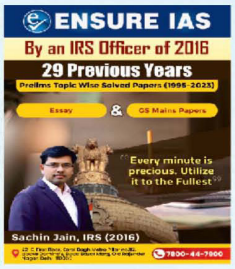
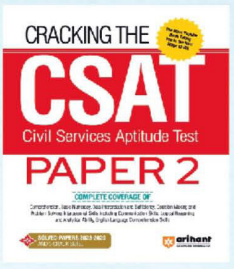
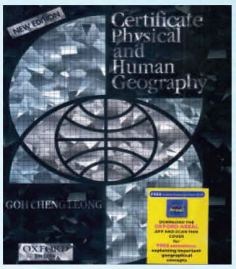
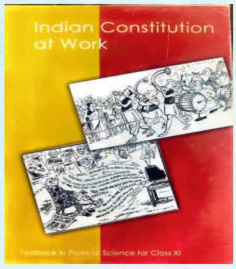
New List of Books to be provided to our classroom students since December 2023

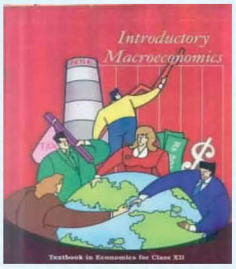


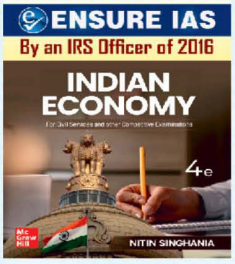


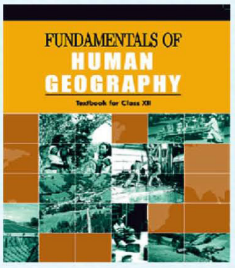


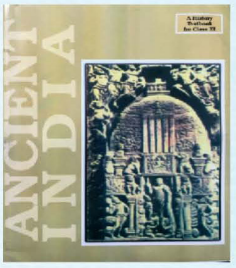


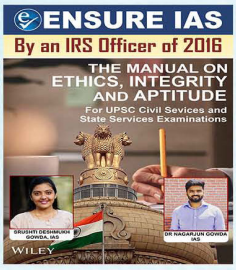


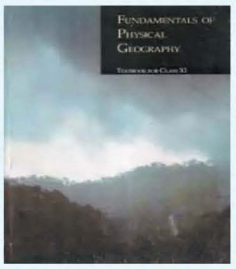


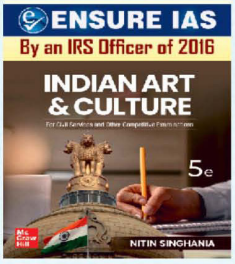


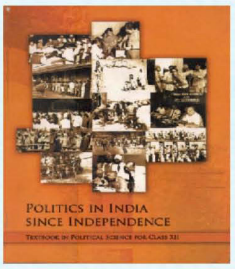


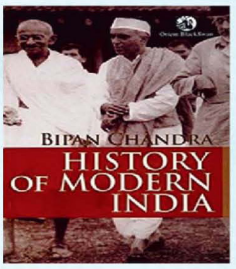


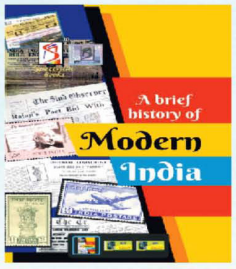


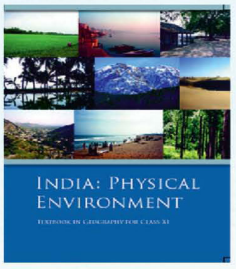


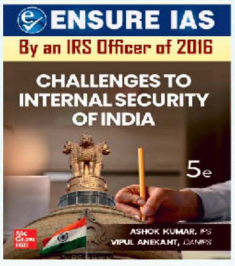


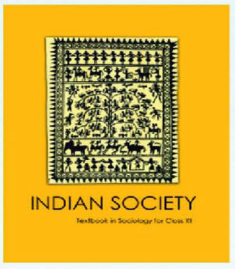


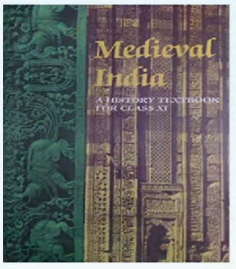


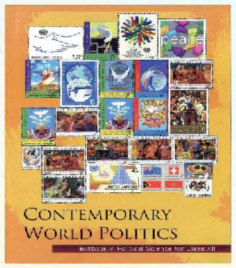


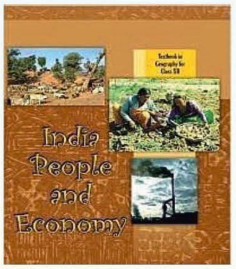


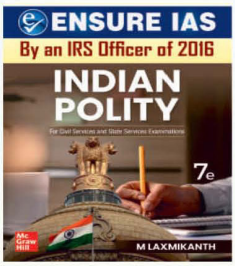


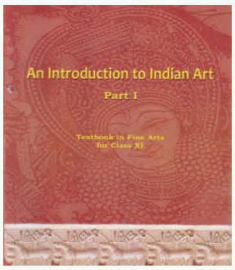












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