

The Hindu Important News Articles For UPSC CSE

Tuesday :28 July, 2026

Edition : International Table of Contents

Page 05 Syllabus: GS II :Indian Polity & Governance / Preliminary Examination	Govt. introduces paper leak Bill in Lok Sabha; debate likely today
Page 07 Syllabus : GS III :Environment / Preliminary Examination	How a political term can majorly fix urban India's water woes
Page 08 Syllabus: GS III :Indian Economy / Preliminary Examination	Beyond compliance, India's road to cleaner mobility
Page 09 Syllabus: GS III :Indian Economy / Preliminary Examination	To fix unemployment, fix the economy first
Page 10 Syllabus: GS II : Governance and Social Justice / Preliminary Examination	The next chapter for Education Ministry
Page 08: Editorial Analysis Syllabus : GS III :Science and Tech	AI's next test — reaching India's informal women worker

Page 05:GS II :Indian Polity &Governance / Preliminary Examination

The Union Government introduced the Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026 in the Lok Sabha amid intense political friction. The Bill proposes stringent penal provisions, including up to 10 years of imprisonment and fines up to ₹50 lakh, alongside time-bound investigations to curb paper leaks in competitive examinations.

The backdrop reveals a complex dynamic: while youth protests demand administrative accountability and state action against paper leak syndicates, the legislative debate was initially stalled by Opposition demands for discussions on police conduct against student demonstrators and broader socio-political issues. The brokering of a truce by the Speaker to allocate six hours of structured debate with 91 proposed amendments highlights the critical balance required between executive speed and parliamentary deliberation on issues affecting youth livelihoods.

Core Analytical Dimensions

1. Penal Deterrence vs. Systemic Administrative Reform

- **Enhancing the Cost of Crime:** Stringent penal sanctions (10-year imprisonment and heavy monetary fines) aim to dismantle the economic rationale of organized examination syndicates.

- **The Risk of Over-Reliance on Criminalization:** Deterrence via law addresses symptoms rather than underlying procedural vulnerabilities. Without technological safeguards—such as audited examination software, end-to-end chain of custody tracking, and secure paper printing processes—penal laws alone rarely eliminate malpractices.

- **Time-Bound Investigations:** Enforcing strict timelines for investigation is crucial to prevent administrative delays that leave millions of candidates in legal and career limbo for years.

2. Youth Aspiration, Social Mobility, and Livelihood

Govt. introduces paper leak Bill in Lok Sabha; debate likely today

Six hours allocated for discussion; 91 amendments moved by members, says Speaker as he brokers truce between govt. and Opposition, which demanded a discussion on police action on protesting students; Ram Temple, E20 issues may be raised

Sreenama Chakrabarty
Sandeep Phukan
NEW DELHI

The Union government introduced in the Lok Sabha a Bill providing for harsher penalties and time-bound investigations into examination paper leaks amid a huge uproar by the Opposition members, who demanded a discussion on the police action on protesting students in the country.

The stalemate is likely to end on Tuesday, with Speaker Om Birla brokering a truce between the Treasury and the Opposition benches on Monday afternoon, sources said. The floor leaders of both the National Democratic Alliance (NDA) and Indian National Developmental, Inclusive Alliance (INDIA) had been in touch since the morning.

Six hours have been allocated for the Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026, and 91 amendments have been moved by Lok Sabha members cutting across party lines. Mr. Birla announced in the House earlier.

The Bill seeks to amend the anti-paper leak law with stricter punishment of up to 10 years in jail and ₹50 lakh fine.

The proposed legislation, which seeks to amend an existing law, was first promised by Prime Minister Narendra Modi in a midnight Instagram post last week in a bid to quell the students' protest at Jantar Mantar.

The Bill was introduced by Union Minister of State for PMO and Personnel, Public Grievances and Pensions Jitendra Singh even as the Opposition protested and sloganised over the police crackdown on students during the Cockroach Janta Party (CJP)-led July 20 protest march to Parliament as well as in some States like West Bengal and Bihar.

No let-up in protests
The Opposition, which had been protesting since 11 a.m., when the House was convened, was unrelenting and did not let the Bill be taken up for discussion and passage despite repeated appeals from Mr. Birla as well as Parliamentary Affairs Minister Kiren Rijiju. He said several members, including those from the Opposition, were prepared to participate in the debate but the Congress and "some of its friends" were causing disruptions and not allowing a debate. At 2 p.m., however, the Speaker said both ruling and Opposition sides should try and arrive at a decision by 5 p.m. till when the House was adjourned.

Senior Congress leaders are understood to have met the Speaker after this and agreed to the discussion being taken up on Tuesday.

"All political parties have agreed to discuss the anti-paper leak Bill on Tuesday. Following Om Birla's initiative and sustained dialogue, floor leaders of political parties have agreed to commence discussion on the Public Examinations (Prevention of Unfair Means) Amendment Bill 2026," sources said.

Opposition sources said they were now looking to widen the offensive by targeting the government over the alleged Ram Temple donation — embroilment case and ethanol-blended fuel.

With the Uttar Pradesh Assembly election due in early 2027, the Samajwadi Party is seeking to use the Ram Temple issue to make inroads among the BJP's core support base of Ram devotees, while the Congress has held over 50 press conferences demanding Prime Minister Narendra Modi's statement on the alleged donation theft.

"We shouldn't allow the BJP to hijack our religion. We are all very proud Hindus and not political Hindus like them," a senior Congress leader told *The Hindu*.

The Opposition plans to highlight concerns over ethanol-blended fuel, which it believes resonates with the middle class, another key BJP constituency.

And with the CJP taking limelight for spearheading the GenZ protests and the government appearing intent on sidelining Opposition parties, these parties do not want to give much elbow room to the government.

Presiding officer Dilip Saikia arriving to conduct the proceedings of the Lok Sabha during the Monsoon Session on Monday. ANI

Daily News Analysis

- **Socio-Economic Cost of Paper Leaks:** For millions of youth from middle-class and underprivileged backgrounds, public recruitment exams represent a primary avenue for upward social mobility. Systematic leaks result in financial loss, mental anguish, and erosion of meritocracy.
- **State-Citizen Trust Deficit:** Police crackdowns on peaceful student protests deepen institutional distrust. When grievances are met with administrative force rather than swift redressal, youth frustration can escalate into broader societal unrest.

3. Parliamentary Functioning: Scrutiny vs. Stalemate

- **Importance of Detailed Deliberation:** The moving of 91 amendments across party lines underscores that a consensus on penal measures requires granular legislative scrutiny rather than hasty voice-vote passage.
- **Erosion of Floor Discipline:** Frequent disruptions hinder the primary duty of Parliament—legislative debate. While political leverage and Opposition maneuvering are standard features of parliamentary politics, prioritizing non-legislative issues over crucial public policy debates risks diluting focus on urgent structural reforms.

Challenges in Execution

- **State-Level Enforcement Divergence:** Since several recruitment exams fall under state jurisdiction, seamless coordination between Central agencies (like CBI) and state police forces remains a hurdle in multi-state leak cartels.
- **Institutional Capacity of Testing Bodies:** Agencies conducting public examinations often suffer from inadequate permanent staffing, forcing reliance on third-party vendors for infrastructure, printing, and digital invigilation, which introduces points of compromise.
- **Evidence Collection in Cyber-Enabled Cheating:** Modern paper leaks increasingly involve encrypted messaging networks and remote desktop access tools, demanding advanced digital forensics capabilities that standard local police forces may lack.

Related Static Dimensions (GS Framework)

Constitutional Framework

- **Article 14 & 16:** Right to Equality and Equality of Opportunity in Matters of Public Employment. Paper leaks directly violate the fundamental right to fair and equal opportunity for candidates.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Article 21:** Right to Life and Livelihood. Prolonged examination cancellations and delayed recruitments adversely affect youth livelihoods and mental well-being.
- **Article 320:** Functions of Public Service Commissions, emphasizing the constitutional mandate to conduct fair examinations.

Administrative Reforms Commission (2nd ARC) Recommendations

- **Ethics in Governance:** Stresses institutional independence, mandatory transparency audits, and strict whistle-blower protection mechanisms within government recruitment boards.
- **Citizen-Centric Administration:** Calls for time-bound dispute resolution mechanisms and grievance redressal portals specifically tailored for candidates appearing in national competitive assessments.

Key Precedents and Principles

- **Principle of Natural Justice & Proportionality:** Legal frameworks must distinguish between organized leak syndicates and innocent candidates who inadvertently become victims of compromised exams.
- **Doctrine of Severability (Judicial View on Canceled Exams):** The Supreme Court has repeatedly held that where compromised exam results can be segregated from untainted candidates, wholesale cancellation should be avoided to protect genuine meritorious applicants.

Way Forward

- **Technological Hardening:** Transition to secure Computer-Based Tests (CBT) backed by biometric verification, randomized question generation, and encrypted transmission minutes prior to exam commencement.
- **Independent Oversight Body:** Establish an autonomous Examination Oversight Authority to audit the operational security of both private testing vendors and public examination bodies.
- **Standardized SOPs for Grievances:** Create institutionalized channels for candidates to raise complaints about paper anomalies without resorting to street protests or facing heavy-handed police actions.
- **Bipartisan Parliamentary Scrutiny:** Floor leaders must ensure that amendments moved by members are evaluated on merit through committee scrutiny or detailed floor debates rather than being lost in political confrontation.

Addressing the crisis of public examination integrity demands an integrated approach where robust penal legislation is matched by technological modernization, institutional autonomy, and empathetic administrative engagement with

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

student aspirations. Legislative deterrence acts as a necessary shield, but sustainable reform requires rebuilding public trust through transparent, foolproof, and accountable examination systems across the nation.

UPSC Prelims Practice Questions

Question: The Doctrine of Natural Justice primarily aims to ensure:

- (a) Separation of powers
- (b) Fairness, impartiality, and the right to be heard before an adverse decision
- (c) Judicial review of constitutional amendments
- (d) Federal distribution of legislative powers

Ans: b)

UPSC Mains Practice Questions

Question: Discuss how paper leaks undermine the constitutional principles of equality and merit in public employment(10 Marks, 150 Words)

Page 07 :GS III :Environment/ Preliminary Examination

India's ambition of becoming a **Viksit Bharat (Developed Nation)** relies heavily on its urban centers, which are projected to drive the bulk of national GDP growth. However, this growth rests on fragile, deteriorating municipal water infrastructure.

Currently, urban water utilities in India face severe structural inefficiencies:

- **High Non-Revenue Water (NRW):** Over **30%** of produced water is lost to leaks, theft, or unbilled usage before reaching consumers.
- **Inadequate Wastewater Treatment:** Only **27%** of urban sewage is treated, leaving massive potential for circular reuse untapped.
- **Fiscal Unviability:** Most utilities recover less than **55%** of their Operation and Maintenance (O&M) costs through user fees, starving them of funds to expand and maintain networks.

Rather than relying on capital-intensive mega-projects with long gestation periods, the authors argue that an aligned city-state administration can stabilize urban water security within a **single 5-year political cycle** by addressing four fundamental questions: Source, Efficiency, Equity, and Finance.

Core Analytical Dimensions: The 4-Pillar Agenda

1. Water Sourcing: Shifting from Distant Supply to Circular Re-use

- **Reducing Distant Dependence:** Moving away from energy-intensive pumping from remote reservoirs and depleted aquifers, which triggers inter-state water conflicts and high carbon footprints.
- **Rainwater as Mainstream Supply:** Systematically harvesting urban roof and surface runoff to meet local baseload demand.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

How a political term can majorly fix urban India's water woes

Over the past few decades, Indian cities have depended more and more on distant rivers and groundwater; this has rendered higher energy bills, political disputes, greater vulnerability to drought and contamination; a focused agenda for one political cycle can stabilise urban water services

Manish Dubey
K.V. Santhosh Ragavan

How much can realistically change within the span of a single political term? The answer matters because India's wider growth and development ambitions now hinge on how its cities handle water.

Urban India is expected to drive the bulk of GDP growth this decade – yet many city water systems remain fragile. Utilities lose more than 30% of the water they produce before it reaches consumers or is billed, a measure known as non-revenue water.

Only around 27% of sewage is treated, leaving significant potential for reuse untapped.

Many utilities also recover less than 55% of their operation and maintenance costs through user charges, limiting their ability to maintain networks and improve services.

In effect, India is trying to build a 'Viksit Bharat' on top of a leaky and crumbling urban water system.

Fortunately, a focused agenda for one political cycle can stabilise urban water services, especially for those who are currently worst-served. Such an agenda comes to light by answering four questions: Where does the water come from? How efficiently is it moved and used? Who receives what? And how is it paid for?

Where does the water come from? Over the last few decades, Indian cities have steadily depended more and more on distant rivers and groundwater. This has rendered higher energy bills, political disputes over allocations, and greater vulnerability to drought and contamination. Within one political term, cities are unlikely to abandon these sources altogether but they can reduce their dependence.

This starts with a simple change in mindset: treating rainwater and treated wastewater as mainstream sources rather than as fringe add-ons. Most large cities receive enough rain on their roofs, roads, and open spaces to make a meaningful contribution to local demand if it is captured.

Similarly, a significant volume of wastewater can be treated to a standard suitable for non-drinking uses, such as industrial cooling, construction, landscaping, and flushing.

Practically, this means three kinds of policies over the next few years: stricter enforcement and incentivising of rainwater harvesting in large buildings and industries; a clear plan to route treated wastewater to high-demand users who do not need drinking-quality water; and realistic targets to meet part of the city's non-potable demand from these sources.

A city that meets even a quarter of these needs through rain and reuse will be less at the mercy of reservoirs and over-stressed aquifers.

How efficiently is water moved? Many urban water providers are public utilities or departments that face familiar political, regulatory, and capacity constraints. They often operate with high non-revenue water, limited wastewater



Utilities lose more than 30% of the water they produce before it reaches consumers or is billed, a measure known as non-revenue water. GETTY IMAGES

treatment and reuse, and weak revenue collection. These are important reasons why supply is intermittent, pressure is low, and expansion into poorer neighbourhoods is delayed so often.

Over a single term, then, three steps are achievable to good effect. First, clarify responsibility: A clear mandate and support from the State government and formal coordination mechanisms with shared standards and joint planning can significantly improve service delivery.

Second, get serious about measuring and managing losses. In most Indian cities, a large share of water is lost before it ever reaches a tap, due to leaks or unbilled consumption. Over a four- or five-year horizon, utilities can map their networks into district metered areas, install bulk meters at key points, and run sustained leak reduction programmes in the worst performing districts.

Third, modernise basic customer-facing services. This includes universal metering for larger consumers, better billing and collection systems, and accessible grievance redress mechanisms.

When people know how much they use, what they pay for, and where they can raise complaints, honest conversations about tariffs, service levels, and equity are easier to have. Better information also helps utilities manage operations and plan investments.

Who receives what? Current approaches for coverage, delivery and affordability have not closed the equity gap. Free standposts and ad-hoc tankers are important safety nets but they often coexist with tariffs and subsidies that benefit those already connected to the network. The result is a pattern where poorer households may pay more per litre – through time, health and informal payments – than those receiving piped water at low, flat rates.

Most water providers operate with high non-revenue water. Limited wastewater treatment and reuse, and weak revenue collection; these are important reasons why supply is intermittent, pressure is low, and expansion into poorer neighbourhoods is delayed

A one-term reform agenda can start to change this by making it smarter.

One strand is to rethink service benchmarks. National per-capita norms have their place but cities can use local data to prioritise a guaranteed minimum amount of safe water for every resident – regardless of neighbourhood or tenure. This may mean investing in last-mile connections, shared infrastructure, and better pressure management in low-income and informal areas, rather than only in network extensions to new real estate.

Another strand is to redesign tariffs and subsidies so that they protect basic needs while discouraging waste. This is often framed as a technical exercise but at heart it is a political choice: should scarce public support be spread thinly across all users or focused more on those who need it most?

Over a term, cities can pilot and refine tariff structures that combine lifeline blocks, cross-subsidies from higher consumption, and targeted support for the poor, backed by transparent communication about why these changes are being made.

Who pays for it? A one-term agenda can also change how water investments are chosen and evaluated. Too often, decisions focus on

construction costs while neglecting long-term operation, maintenance, and the broader benefits of good water management, including lower health costs and less flood damage.

Before approving major projects, cities should ask three questions: (i) Have all reasonable options for reducing demand or losses before adding new supply? (ii) Have the full lifetime costs, including energy, maintenance, and adaptation to climate risks been considered? (iii) Have environmental and social impacts of choices such as protecting wetlands versus piping water from afar valued? Answering these questions does not require new laws. It requires better guidance, capacity-building, and a willingness to learn from successful examples. Over a term, States and cities can build these habits into appraisal processes, perhaps starting with a few 'lighthouse' projects that explicitly test and demonstrate better ways of planning and financing.

Towards a single system None of these changes will be simple. There will be entrenched interests, capacity gaps, and the ever-present temptation to announce something big and visible rather than fix what already exists. Yet these reforms are not utopian. They fall squarely within what an aligned city-state combination can start and significantly advance within a single political cycle.

Overall, India must shift from counting connections to managing performance and resilience, treating water, energy, finance and institutions as a single system, and investing equally in operations and local capacity.

Manish Dubey is Dean & Rahul Bajaj Chair, School of Governance, Indian Institute for Human Settlements (IIHS). K.V. Santhosh Ragavan is Adjunct Faculty, IIHS.

- **Treated Wastewater Integration:** Mandating treated secondary and tertiary sewage water for non-potable uses—such as industrial cooling, construction, horticulture, and toilet flushing.

2. Efficiency & Infrastructure: Fixing the Leaky Pipeline

- **District Metered Areas (DMAs):** Segmenting city distribution networks into manageable zones equipped with bulk meters to detect and repair leaks proactively.
- **Digitalization & Customer Modernization:** Implementing smart bulk metering, automated billing, and transparent grievance redressal mechanisms to build public trust.
- **Institutional Clarity:** Establishing clear governance structures and coordination bodies between state water boards and Urban Local Bodies (ULBs).

3. Equity & Distribution: Closing the Access Gap

- **Rethinking Benchmarks:** Moving beyond generic per capita supply norms (e.g., 135 LPCD) toward a guaranteed minimum safety volume for every household, irrespective of informal housing tenure.
- **Progressive Tariff Redesign:** Replacing flat or heavily subsidized rates with a **Lifeline Tariff Structure** (free or low-cost water up to basic human needs, with higher volumetric rates and cross-subsidies for high-volume consumers).
- **Pro-Poor Infrastructure:** Prioritizing last-mile connections and pressure regulation in low-income informal settlements over network expansion into speculative real estate.

4. Sustainable Finance: Whole-of-Life Capital Planning

- **Demand Management Before Supply Creation:** Mandating that utilities exhaust demand-reduction and leak-repair options before sanctioning new dam or pipeline projects.
- **Lifecycle Costing:** Evaluating projects based on total operational, energy, maintenance, and climate-adaptation costs over 20–30 years, rather than just initial capital expenditure (CapEx).
- **Valuing Ecosystem Services:** Accounting for the natural flood mitigation and groundwater recharge benefits of preserving urban wetlands and waterbodies.

Major Challenges to Implementation

- **Political Myopia:** Preference for visible, photo-friendly heavy construction (dams, long pipelines) over invisible, maintenance-focused underground leak repairs.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Municipal Capacity Deficit:** ULBs across India frequently suffer from acute shortages of technical staff, hydraulic engineers, and urban planners.
- **Entrenched Water Cartels:** Informal, unregulated water tanker syndicates profit from pipeline supply failures and resist municipal metering.
- **Reluctance to Levy User Charges:** Municipal politicians often treat water tariffs as politically sensitive, fearing backlash from raising charges even on wealthy consumers.

Related Static Dimensions (GS Framework)

1. Constitutional & Policy Framework

- **74th Constitutional Amendment Act (1992):** Entrusts Water Supply for domestic, industrial, and commercial purposes to Urban Local Bodies under the 12th Schedule (Entry 3).
- **Article 21 (Right to Safe Drinking Water):** Explicitly recognized by the Supreme Court as part of the Fundamental Right to Life (Subhash Kumar v. State of Bihar).
- **National Water Policy (2012):** Emphasizes treating water as an economic good after meeting essential human and ecological needs.

2. Key National Schemes & Benchmarks

- **AMRUT 2.0 (Atal Mission for Rejuvenation and Urban Transformation):** Aims to achieve 100% coverage of water supply in all statutory towns and 100% management of sewage in 500 AMRUT cities.
- **Jal Jeevan Mission (Urban):** Designed to provide functional tap connections and achieve circular economy goals through recycled water usage.
- **Service Level Benchmarks (SLBs):** Ministry of Housing and Urban Affairs (MoHUA) sets 135 Litres Per Capita Per Day (LPCD), 100% metering, and 15% maximum Non-Revenue Water as national goals.

Way Forward

- **Adopt "Lighthouse" Pilot Projects:** State governments should designate select cities or municipal zones as pilot areas to demonstrate full metering, leak reduction, and 24x7 water supply before scaling statewide.
- **Mandate Circular Economy Norms:** Enforce dual-piping systems in all upcoming commercial and multi-story residential developments to separate potable supply from recycled flushing water.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Empower Municipal Utilities Financial Autonomy:** Ring-fence municipal water budgets so that collected user charges are re-invested directly into network O&M rather than general municipal funds.
- **Establish Independent State Water Regulatory Authorities:** Set up autonomous state regulators to set rational, inflation-linked tariffs scientifically, free from immediate electoral interference.

Conclusion

Urban India's water security does not require grand technology breakthroughs or decades of legislative reform; it demands administrative discipline, political willpower, and operational execution over a single 5-year term. By shifting focus from **building new connections** to **managing system performance and resilience**, Indian cities can establish a secure, equitable, and self-sustaining water ecosystem capable of powering a Viksit Bharat.

UPSC Prelims Practice Questions

Question: With reference to Non-Revenue Water (NRW), consider the following statements:

1. It refers to water produced but not billed due to physical losses, theft, or metering inaccuracies.
2. High NRW adversely affects the financial sustainability of urban water utilities.
3. The Ministry of Housing and Urban Affairs (MoHUA) Service Level Benchmark recommends that NRW should not exceed 15%.

Which of the statements given above is/are correct?

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

Ans: d)

UPSC Mains Practice Questions

Question: Discuss the role of Urban Local Bodies (ULBs) in ensuring sustainable urban water management in India. **(10 Marks, 150 Words)**

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Page 08 :GS III :Indian Economy / Preliminary Examination

The Ministry of Power (administered via the Bureau of Energy Efficiency - BEE) issued the draft notification for **Corporate Average Fuel Economy (CAFE) Phase III norms** (applicable from FY2027–28 to FY2031–32).

While CAFE I (2017) and CAFE II (2022) initiated India's fuel efficiency journey, CAFE III arrives at a crucial juncture. India remains heavily reliant on imported crude oil, leaving its macroeconomy exposed to foreign exchange fluctuations, global inflation, and West Asian geopolitical instability. CAFE III aims to reduce overall fleet-wide CO₂ emissions from ~113 gCO₂/km down to **77–78 gCO₂/km by FY2031–32**.

However, the analytical concern is whether the current draft focuses purely on **administrative compliance** or drives an **industrial transformation** toward clean mobility.

Beyond compliance, India's road to cleaner mobility

The debate over India's proposed Corporate Average Fuel Efficiency (CAFE) III norms comes at a crucial time for the global automobile industry as it transitions from internal combustion engines (ICE) to electrified powertrains. It also highlights India's vulnerability to imported crude oil amid renewed geopolitical tensions. The framework India adopts today will influence investment, technology choices and energy security for decades.

CAFE III, compliance or transformation
The Power Ministry's July 16 draft notification marks the third iteration of CAFE III after months of industry lobbying. While some manufacturers pushed for stricter norms, others sought flexibility. The proposal attempts a compromise, but the question remains whether it prioritises compliance over transformation.

CAFE norms set annual sales-weighted average fuel-efficiency targets for manufacturers' passenger vehicle fleets rather than individual models. Introduced in the United States in 1975 after the 1973 Arab oil embargo, they aimed to reduce oil dependence and protect consumers from high fuel costs. The rules caused automakers to adopt smaller, more efficient vehicles. This also helped accelerate the rise of Japanese manufacturers.

From the 1990s, fuel-efficiency regulations gained a second purpose: reducing greenhouse-gas emissions. In the United States, the EPA's Endangerment Finding brought greenhouse gases under the Clean Air Act, with later emissions standards aligned closely with CAFE rules. While technology-neutral, the rules encouraged innovation in hybrids and electric vehicles (EV). Ironically, the Obama administration's \$465 million Department of Energy loan to Tesla in 2010 helped accelerate an EV industry now dominated by China.

China's experience is even more instructive. It introduced mandatory fuel-consumption standards in 2004, initially regulating individual vehicle models by weight rather than fleet averages. As car ownership surged, concerns over oil imports and urban air pollution grew. The standards tightened over time before China changed direction in 2018 with the introduction of its Dual Credit System.

Under this framework, manufacturers must meet both Corporate Average Fuel Consumption (CAFC) standards and New Energy Vehicle (NEV) credit requirements. Fuel-efficiency compliance alone is insufficient. Companies that fail to earn enough NEV credits through EV or plug-in hybrid production must purchase credits from those with surplus EV production, creating a market that rewards innovation and penalises delayed electrification. For example, in India, Maruti Suzuki could remain NEV credit-deficient by 18%



Kunal Shankar

despite having highly fuel-efficient ICE models if it had no EVs in its portfolio. It would need to buy credits from companies such as Tata Motors or Mahindra, which generate NEV credits through their EV portfolios. While CAFC credits can be banked, carried forward or transferred within corporate groups, NEV credits cannot be offset in the same way. The results are evident. According to the International Energy Agency's Global EV Outlook 2026, China sold more than 13 million electric cars in 2025, accounting for almost 55% of new passenger vehicle sales. Comparable figures were about 27% in the European Union, nearly 10% in the U.S. and around 4% in India.

India's own debate has centred on differences between Maruti Suzuki, Tata Motors and Mahindra & Mahindra. An earlier proposal effectively carved out lighter small cars from the full stringency of CAFE III. That exemption has since been removed. The current proposal seeks to reduce average emissions from around 113 gCO₂/km to 77 gCO₂/km by FY2031-32. On paper, that appears ambitious. Yet, the headline target tells only part of the story.

The cost of flexibility

The revised framework introduces several flexibility mechanisms that, taken together, substantially reduce its effective stringency.

The first is the Carbon Neutrality Factor, which awards compliance benefits for vehicles compatible with higher ethanol blends and other fuels. Yet, the government has informed Parliament that no decision has been taken to move beyond E20 blending (20% plant-based ethanol with 80% regular petrol). Manufacturers therefore receive compliance advantages for technologies whose long-term policy trajectory remains uncertain. Ethanol is also more expensive than petrol, and has lower energy density, and therefore delivers lower mileage – a fact belatedly acknowledged by the Centre after it drew severe criticism.

The second is the use of super credits. Battery EVs, plug-in hybrids, strong hybrids and flex-fuel vehicles receive additional weight in fleet calculations. While this encourages cleaner technologies, it also means that fewer actual low-emission vehicle sales are required to offset higher-emission models. Strong hybrids, which generally rely primarily on the ICE while using electric propulsion over relatively short distances and at lower speeds, also receive super-credit benefits despite offering only partial electrification.

The third mechanism is banking and trading of compliance credits. Manufacturers outperforming their targets can accumulate credits and sell them to others. In addition, the draft allows companies to buy credits directly from the Bureau of Energy Efficiency (BEE) at administratively fixed prices if deficits remain

after trading. The BEE is therefore not a market exchange but effectively a seller of last resort.

In theory, this introduces efficiency into the system. In practice, it allows companies that are lagging to meet compliance requirements without upgrading their own technology. Moreover, the draft notification allows manufacturers to buy compliance credits from the BEE at ₹2,500 per gram of CO₂/km in FY2028, rising to ₹4,500 by FY2032. By comparison, the Energy Conservation Act prescribes additional penalties of ₹25,000 or ₹50,000 per vehicle depending on the extent of non-compliance. Expressed in CAFE terms, the lower penalty threshold is broadly equivalent to a little over ₹5,000 per gram of CO₂/km, implying that the proposed buyout price begins at less than half that level.

Finally, compliance is assessed over three-year blocks before shifting to two-year blocks, allowing manufacturers to average performance across multiple years rather than meeting targets annually. Therefore, delays in one year can be compensated in another.

The case of CNG

Taken together, these mechanisms significantly alter the stringency of these regulations. Which raises a fundamental question: What is the purpose of a regulation?

Regulation should shape markets rather than simply accommodate prevailing market preferences. India's own experience with compressed natural gas (CNG) illustrates the point. Once policy support aligned with regulatory certainty, manufacturers rapidly introduced CNG variants. Regulation can create markets as much as respond to them.

To put this in perspective: manufacturers' voluntary commitments already average nearly 20% EV share by 2030, with several original equipment manufacturers aiming for 30% or higher. In effect, the revised regulation attempts only half of what the industry itself has committed to. The timing also matters. India remains heavily dependent on imported crude, exposing the economy to geopolitical shocks, imported inflation and currency pressures. Strengthening fuel-efficiency standards is therefore not merely an environmental objective. It is an energy-security strategy, an industrial policy and a macroeconomic imperative.

These developments highlight the urgency and significance of revising India's CAFE norms, as they offer an opportunity to address a macroeconomic vulnerability while helping meet India's Glasgow commitment on energy efficiency.

India should seize this opportunity to position itself alongside the world's leading automotive markets in the transition to low-carbon mobility.

kunal.shankar@thehindu.co.in

Weak fuel efficiency norms risk keeping the country dependent on imported oil

CAFE Norms: Evolution & Global Comparisons

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai – 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

CAFE rules set an annual, sales-weighted average fuel-efficiency cap for an entire manufacturer's fleet rather than capping emissions for individual vehicle models.

- **United States (1975):** Originally created following the 1973 Arab oil embargo to lower crude consumption, later expanded under the Clean Air Act to cut greenhouse gases and boost EV/hybrid adoption.
- **China's Dual Credit System (2018):** China mandates both Corporate Average Fuel Consumption (CAFC) targets and New Energy Vehicle (NEV) credit quotas. Automakers cannot simply rely on fuel-efficient petrol/ICE cars; they must produce EVs/PHEVs or buy NEV credits from zero-emission manufacturers. Consequently, EV market penetration in China reached over 55% in 2025, compared to ~4% in India.
- **India's Model:** India currently uses a single unified fleet average system without a separate mandatory EV credit target.

Major Structural Issues & "Flexibility Dilutions" in CAFE III

The draft regulation introduces several dilution mechanisms that may inadvertently lower the effective stringency of the target:

1. Carbon Neutrality Factor (CNF)

- The draft grants compliance discounts for vehicles engineered to run on higher biofuel blends (e.g., flex-fuels, higher ethanol).
- **Policy Mismatch:** The government has clarified that no formal decision exists to move beyond E20 (20% ethanol) petrol blending. Giving regulatory concessions for technologies whose fuel supply roadmap remains uncertain dilutes real-world carbon abatement. Additionally, lower energy density in ethanol reduces overall fuel mileage.

2. Over-reliance on Super Credits

- Battery EVs, Plug-in Hybrids, Strong Hybrids, and Flex-Fuel vehicles receive extra weighting (multipliers) in fleet calculations.
- **The Loophole:** High multipliers mean manufacturers need to sell significantly fewer actual zero-emission vehicles to offset high-emitting ICE models or SUVs. Strong hybrids, which still run primarily on petrol, receive generous credit multipliers without offering full electrification.

3. Safety-Valve Credit Buyouts via BEE

- Instead of a strict market-based trading exchange between carmakers, the draft allows defaulting manufacturers to purchase compliance credits directly from the Bureau of Energy Efficiency (BEE) as a "seller of last resort".

Daily News Analysis

- Low Cost of Penalty: The buyout rate starts at **₹2,500 per gCO₂/km** (FY28) and rises to **₹4,500** (FY32). In contrast, the Energy Conservation Act specifies penalties equivalent to over ₹5,000 per gCO₂/km. This lower buyout price turns penalties into a cheap operational fee rather than a deterrent.

4. Multi-Year Compliance Blocks

- Assessing compliance over 3-year and 2-year blocks enables manufacturers to defer targets, offsetting shortfalls in early years with promises of future performance.

Related Static Dimensions

Constitutional & Legal Framework

- Energy Conservation Act, 2001 (Section 14):** Empowers the Central Government and BEE to prescribe fuel consumption standards for equipment and appliances, including motor vehicles.
- Article 48A & 51A(g):** Directive Principles and Fundamental Duties concerning the protection and improvement of the environment and safeguarding natural resources.

Institutional Mechanisms

- Bureau of Energy Efficiency (BEE):** Statutory body under the Ministry of Power that formulates and administers CAFE standards.
- Ministry of Road Transport and Highways (MoRTH):** Responsible for notifying and enforcing vehicle testing, certification, and emission standards under the Central Motor Vehicles Rules (CMVR).

Difference Between CAFE and Bharat Stage (BS) Norms

Metric	CAFE Norms	Bharat Stage (BS-VI) Norms
Focus	Limits total fuel consumption & CO ₂ emissions.	Regulates local tailpipe air pollutants (NO _x , PM2.5, CO).
Scope	Fleet-wide sales average per manufacturer.	Per-vehicle model testing and cap.
Administering Body	Ministry of Power / BEE.	Ministry of Road Transport & Highways (MoRTH) / MoEFCC.

Way Forward

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Transition to a China-Style Dual-Credit System:** Disentangle pure ICE fuel-efficiency credits from New Energy Vehicle (NEV/EV) credits to prevent automakers from using conventional hybrids to avoid electric powertrain investments.
- **Recalibrate Buyout Pricing:** Set the BEE credit buyout price above the statutory penalty under the Energy Conservation Act to ensure that purchasing credits is financially less viable than technological upgrades.
- **Rationalize Super Credits:** Phase out super-credit multipliers for partial-electrification technologies (like mild/strong hybrids) as the EV supply chain matures, directing regulatory preference toward zero-tailpipe-emission vehicles.
- **Align Regulation with Industry Pledges:** Strengthen headline targets so that public policy drives innovation rather than trailing behind carmakers' voluntary EV adoption targets (20–30% by 2030).

Addressing India's mobility transition requires moving beyond regulatory loopholes. Strict, well-designed CAFE III norms serve not only as an environmental imperative under India's Panchamrit climate goals, but also as a vital macroeconomic shield against oil import dependence and global energy volatility.



UPSC Prelims Exam Study Questions

Question: Which of the following correctly distinguishes CAFE norms from Bharat Stage (BS-VI) emission standards?

- (a) CAFE regulates local pollutants, whereas BS-VI regulates fuel efficiency.
- (b) CAFE regulates fleet-average fuel consumption and CO₂ emissions, whereas BS-VI regulates tailpipe pollutants such as NOx and particulate matter.
- (c) Both regulate only carbon dioxide emissions.
- (d) Both are administered exclusively by the Ministry of Environment, Forest and Climate Change.

Ans:b)

UPSC Mains Exam Study Questions

Question: "Corporate Average Fuel Economy (CAFE) norms should act as instruments of industrial transformation rather than mere regulatory compliance." Critically examine this statement in the context of India's clean mobility transition. **(10 Marks, 150 Words)**

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Page 09 :GS III : Indian Economy / Preliminary Examination

India faces a major structural paradox: while its gross domestic product (GDP) continues to grow, **employment elasticity**—the quantum of job creation per unit of economic growth—remains structurally depressed. The ongoing societal and political friction surrounding youth unemployment highlights that fixing education and skill development programs alone cannot solve the job crisis.

Author Arun Maira argues that the fundamental structure of the economy must be realigned. India is currently caught in three conflicting economic trajectories:

1. Pushing "Ease of Doing Business" by deregulating markets, diluting labor laws, and easing environmental norms.
2. Aggressively promoting Artificial Intelligence (AI) and automation under the conventional economic definition of "productivity"—producing more output with less human input.
3. Attempting to boost employment elasticity to absorb the world's largest youth population.

To prevent jobless growth from turning into widespread socio-economic instability, India must shift its primary economic focus from **Ease of Doing Business** to **Ease of Living and Earning** for its citizens.

To fix unemployment, fix the economy first

The Cockroach Janta Party's movement has highlighted the political urgency for reforming the economy to create more employment for India's youth. Fixing the education system alone will not solve the unemployment problem. The basic structure of the economy must be reformed.

China and India, the only two countries in the world with populations exceeding one billion, have the greatest need for meaningful employment. If citizens are not fully employed, and incomes of masses do not rise, their economies cannot grow.

China has done much better than India in this regard; the per capita income of Chinese citizens has risen roughly eight times faster than Indians' in the last 30 years. India's leaders find themselves in the middle of conflicting trends. First, they are pushing ahead with reforms for 'ease of doing business'; diluting the rights of workers to organise; and weakening environmental protection. Second, they are promoting the wide-spread application of Artificial Intelligence (AI) to improve 'productivity' (and other benefits) in agriculture, industry, health and education, with productivity defined, purely in economic terms, as more output with less human input. Third, they also see the need to change the pattern of growth and increase employment elasticity. Employment elasticity is the amount of meaningful employment created with each unit of GDP growth, in which India has been a laggard since the liberal market economic reforms of the 1990s.

Since India has the largest population of youth in the world, its economic growth should have the highest employment elasticity. However, the increased adoption of AI will only make it worse.

The China model
China has invested billions to become an AI superpower and has raced to integrate the technology



Arun Maira
Author of
'Reimagining India's
Economy: The Road
to a More Equitable
Society'

across a range of industries. By 2024, more than two million robots were already working in Chinese factories. And in Beijing, Shanghai and Shenzhen, Meituan, the nation's largest food delivery service, has experimented with using small autonomous robots to deliver food. But China's advances in AI have run headlong into a growing problem: anxiety over the workers who could be displaced.

China's political and economic history reveals that, despite being an authoritarian country, the Chinese government is very attentive to what people are thinking and saying on the Internet. History has taught them that another revolution will form if disenfranchised and educated youth rise along with the disgruntled workers and peasants. They know they must respond.

Unemployment has been increasing in China. The unemployment rate for migrant workers rose to 5.7% in March this year, which has been the highest in nearly three years for China, while youth unemployment stood at 16.3% in April. Moreover, 70% of unemployed young people are university graduates, with older laid-off workers facing prolonged periods of joblessness.

However, Chinese courts have been swift to act. A court ruled in May that a tech company had illegally laid-off a worker after replacing him with AI software. Another ruled that, "the development of artificial intelligence technology should be applied to liberating labour, promoting employment and improving people's livelihood". And yet another ruled that "companies that benefit from technology must, at the same time, adopt social responsibilities and protect worker rights".

China's Ministry of Human Resources and Social Security announced in January that it would roll out policies to address the impact of AI on jobs, including targeted support for key industries. In June, the State Council issued a plan on

implementing an "employment-first" strategy for the 2026-2030 period. Party officials have proposed sweeping government interventions such as requiring employers to offer training to help workers adapt to an AI-centric job market.

The Chinese government's 'people-first' ideology has served China's economy and its people well. China's leaders have remained socialists; they have always put the needs of common citizens, and the stability of China's society, above economists' demands for deregulation of markets and prices, especially with respect to labour, food, education, health, and housing.

The road ahead for India
Indian income levels must rise rapidly – in agriculture, manufacturing, and services. The government has added 'ease of living' to 'ease of doing business' as the purpose of the reforms required for India to become 'Viksit Bharat' by 2047. To make it a reality, it will have to put more teeth into its policies to increase employment and incomes, and stave off the negative impacts that AI will have on employment. Policies must require that employers take more responsibility for training their own workers; they must be restrained from laying them off.

New policies must put workers' rights ahead of capitalists' rights, as China has done. India's labour market reforms, with the four labour codes, are directed to improve 'ease of doing business', which is undoubtedly necessary. However, the 'ease of doing business' must now become subordinate to the ease of living and earning for all citizens.

India's leaders would do well to learn from China's leaders on how to navigate this moment in history. The rights of all workers must be firmly protected. While the views of financial investors must be heard, the views of workers and small-time entrepreneurs must be heard much more.

Core Analytical Dimensions

1. The Paradox of AI-Driven Productivity

- **Capital vs. Labor Efficiency:** Classical economic models define productivity as maximizing output per unit of human input. When applied to labor-surplus nations like India and China, aggressive AI adoption and

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

industrial robotics substitute labor with technology, deepening joblessness instead of expanding production capacity.

- **Displacement Across Skill Spectrum:** Unlike previous industrial shifts that primarily automated manual tasks, AI displaces white-collar university graduates in services, IT, and administrative functions, escalating youth unemployment among educated demographics.

2. Labor Market Flexibility vs. Worker Security

- **Labor Code Reforms:** While simplifying multiple labor laws into four consolidated Labor Codes aims to attract foreign direct investment (FDI) and simplify compliance, critics point out that easing firing norms and restricting trade union bargaining rights prioritize capital over labor.
- **The China Model of Judicial Intervention:** Despite its capitalist manufacturing push, China's state machinery and judiciary actively enforce corporate social responsibility during technological shifts. Recent Chinese court rulings explicitly mandate that AI deployment must liberate labor rather than cause illegal layoffs, holding tech firms accountable for retraining displaced workers.

3. Economic Structure and Domestic Demand

- **The Demand-Side Bottleneck:** Economic growth relies on mass consumption. If mass employment falls and wages stagnate, domestic aggregate demand collapses. High GDP growth driven by capital-intensive sectors ultimately hits a ceiling if the domestic population lacks purchasing power.
- **Shift to "Employment-First" Policy:** To achieve the goal of Viksit Bharat by 2047, employment creation must become the central metric of economic health, rather than treated as a secondary byproduct of GDP expansion.

Comparative Matrix: India vs. China on Labor & Tech Governance

- **Economic Objective:** India has prioritized "Ease of Doing Business" and capital market deregulation, whereas China balances market mechanisms with state-directed "Employment-First" strategies (e.g., China's 2026–2030 Employment Implementation Plan).
- **Judicial & Regulatory Stance on AI Layoffs:** Indian courts generally view workforce optimization as a prerogative of private management. In contrast, Chinese courts have ruled that technology benefits must be accompanied by social responsibility, ruling against companies replacing workers with AI without adequate safeguards.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Demographic Dividend Management:** India faces declining employment elasticity despite possessing the world's largest youth cohort. China, confronting aging demographics alongside high educated-youth joblessness (~16%), uses direct policy interventions to enforce employer-led retraining programs.

Related Static Dimensions (UPSC Core)

Constitutional Framework

- **Article 39(a) & (e) (Directive Principles of State Policy):** Mandates that the State direct its policy toward securing an adequate means of livelihood for all citizens and ensuring that the health and strength of workers are not abused.
- **Article 41:** Right to work, to education, and to public assistance in cases of unemployment.
- **Article 43:** Mandates the State to secure a living wage and decent standard of life for all workers.

Policy & Regulatory Framework

- **Four Labor Codes:** Code on Wages (2019), Industrial Relations Code (2020), Social Security Code (2020), and Occupational Safety, Health and Working Conditions Code (2020).
- **National Strategy for Artificial Intelligence (NITI Aayog):** "AI for All" philosophy, which seeks to balance technological innovation with inclusive growth.

Challenges in Execution for India

- **Global Competitive Pressure:** Restricting AI adoption or imposing heavy penalties on layoffs risks reducing the export competitiveness of Indian IT, services, and manufacturing industries against global rivals.
- **Informal Economy Constraints:** Over 80–90% of India's workforce operates in the informal sector, where corporate training mandates and judicial protections against AI displacement are difficult to enforce.
- **Fiscal Limitations:** Unlike high-income or state-capitalist economies, the Indian government faces fiscal constraints in subsidizing large-scale retraining and universal social security nets for displaced workers.

Way Forward

- **Subordinate "Ease of Doing Business" to "Ease of Living":** Reframe economic success metrics so that fiscal incentives, tax breaks, and production-linked subsidies (PLI) are directly linked to the number of quality jobs created rather than capital outlay alone.
- **Mandatory Corporate Retraining Standards:** Introduce statutory frameworks requiring enterprises adopting AI and automation to invest a set percentage of technology-derived profits into upskilling and redeploying their existing workforce.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Promote Labor-Absorbing Micro-Sectors:** Divert economic policy focus toward high-employment elasticity sectors such as apparel manufacturing, food processing, care economy, sustainable agriculture, and decentralized green energy projects.
- **Institutionalize Tripartite Consultations:** Re-energize institutional dialogue involving government, industry leaders, and worker representatives to ensure technological transitions are ethical, fair, and socially sustainable.

Conclusion

Resolving India's unemployment crisis requires moving beyond supply-side fixes like routine skill development. It demands a fundamental realignment of macroeconomic policy. While technological progress and capital efficiency are essential for growth, an economic architecture that excludes human labor undermines its own domestic market. By protecting worker security and making employment creation the core driver of economic strategy, India can convert its demographic dividend into a sustainable foundation for Viksit Bharat.

UPSC Prelims Practice Questions

Question: Which of the following Directive Principles of State Policy are directly related to employment and workers' welfare?

1. Article 39(a)
2. Article 41
3. Article 43

Select the correct answer using the code below:

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

Ans: d)

UPSC Mains Practice Questions

Question: What is employment elasticity? Why has employment elasticity remained low despite sustained economic growth in India? (10 Marks, 150 Words)

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Page 10 :GS II :Governance and Social Justice / Preliminary Examination

The transition at the Union Ministry of Education—with Pralhad Joshi taking charge following Dharmendra Pradhan's tenure—comes at a critical juncture in the implementation of the **National Education Policy (NEP) 2020**.

The Ministry's reform trajectory reflects a dual push: driving structural standardization, digital-skilling integration, and performance accountability, while encountering execution bottlenecks, federal friction, and institutional resistance from states and state-level public universities.

The next chapter for Education Ministry

As Pralhad Joshi takes charge of the Education Ministry, several key 'reforms' remain under way, including the National Curriculum Framework, the Viksit Bharat Shiksha Adhishtthan Bill, the three-language formula, and new teacher-training initiatives in school education

EXPLAINER

M. Kalyanaraman

The story so far:

Pralhad Joshi, the new Union Minister for Education, inherits a range of structural changes to Indian education initiated by Dharmendra Pradhan.

Mr. Pradhan's exit as Education Minister has been under a cloud, but his five-year tenure was marked by a ramping up of efforts to implement the National Education Policy 2020, which the Union Cabinet had accepted a year before he took charge. Earlier, at the Petroleum Ministry, he had made his mark on programme implementation by delivering eight crore LPG connections to poor households in three years against a four-year target.

From the National Curriculum Framework, flexible learning and multidisciplinary, and the Viksit Bharat Shiksha Adhishtthan Bill (VBSA), to PM SHRI, the three-language formula and new teacher-training initiatives in school education, his Ministry was constantly in the news for introducing 'reforms.' Common threads ran through them: performance evaluation and accountability, skilling-education convergence, promotion of a certain vision of Indianness, ambition undercut by implementation challenges, and a push for uniformity that critics called centralisation and a disregard for diversity. Almost all remain works-in-progress that the new Education Minister will have to carry forward.

NEP's recommendations on foundational literacy

Through Nipun Bharat, formally launched by Mr. Pradhan's predecessor on the heels of pandemic-era learning losses, the government was finally acting on decades of evidence from surveys by voluntary organisations that India's schoolchildren



Union Minister Pralhad Joshi took additional charge of the Ministry of Education on July 26. ANI

were lagging far behind in reading and math, despite formally graduating year after year. It seeks to ensure every child attains foundational literacy and numeracy – a concept advocated by NEP – by the end of Grade 3, by 2026-27. ASER 2024 showed a seven-percentage-point gain in numeracy since 2018, and PARAKH 2024 found Grade 3 students who benefited from the mission's first three years, outperforming Grades 6 and 9 in language and math. Yet fewer than a quarter of students nationally could read a Grade 2 text, and Grade 5 levels remained roughly where they were pre-pandemic – a sign of implementation gaps that may well necessitate a Nipun Bharat 2.0.

The push to boost teaching quality

Though standards for teachers are common in advanced nations, the National Professional Standards for Teachers (NPST) is India's first initiative to assess and classify teachers – as proficient, expert or advanced – against uniform national standards, with career

progression tied to this ladder. The National Mentoring Mission, meant to identify mentor teachers to guide others up this ladder through nomination and volunteering, is being rolled out with online sessions, but awareness among the country's one crore teachers remains low and impact assessments are yet to be formalised. NPST itself has not been rolled out, leaving teachers little incentive to engage with the mentoring sessions.

Key changes attempted in higher education

Some initiatives drew sharper controversy. The 2025 draft UGC regulations on appointing teachers, Vice-Chancellors and staff faced strong opposition – notably for giving governors a decisive say in Vice-Chancellor appointments and for removing the cap on contractual professorships. Separately, the UGC's new undergraduate and postgraduate degree rules, built around flexibility and multidisciplinary to create a skilled workforce, have been formally in force since the 2025 academic year – but

institutions across States are still barely grasping radical concepts such as a commerce student studying science, or transferring credits across colleges via the National Credit Framework.

An example of education-skilling convergence is the Swayam Plus platform, which offers over 500 industry-developed courses across 15 sectors, including emerging technologies. Some 6.5 lakh have registered for these courses. The new modules under "AI for All" have reportedly drawn one lakh registrations. Courses such as AI for Physics, AI for Chemistry, AI in Accounting, AI for Educators, and AI/ML using Python are intended to be skilling courses for professionals that are supposed to make them job ready. The key gap is that most colleges that come under State universities are often resistant to changing the idea of giving a package deal and accept flexibility in accepting credits. There is an awareness gap, too.

While the higher education initiatives appear aspirational and sound grand on paper, there is little or no funding allocation to State universities to accomplish such flexibility. The VBSA in fact has no grant giving function – a key element of the University Grants Commission that it seeks to replace.

The controversy over language policy

Mr. Pradhan also pushed to steamroll NEP adoption – particularly the three-language policy – by tying central funding for primary education schemes to compliance by States. Tamil Nadu remains a holdout, though West Bengal's new government has accepted it. In CBSE schools, Mr. Pradhan directly mandated the learning of two *Bharatiya* languages from Classes 6 to 12, prioritising Indian languages over English. Some relief has been granted to current students, but the government has held firm on this as the norm going forward – even though NEP, in the same breath as it champions Indian languages, also emphasises the learning of English and other foreign languages.

THE GIST

➤ Dharmendra Pradhan's exit as Education Minister has been under a cloud, but his five-year tenure was marked by a ramping up of efforts to implement the National Education Policy 2020.

➤ Pradhan pushed to steamroll NEP adoption – particularly the three-language policy – by tying central funding for primary education schemes to compliance by States.

Core Analytical Dimensions

1. Foundational Literacy & School Education Reforms

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

- **NIPUN Bharat & Early Grade Learning:** Designed to achieve universal Foundational Literacy and Numeracy (FLN) by Grade 3. While survey data (e.g., ASER, PARAKH) indicates gains in basic numeracy among primary students, middle-school learning levels remain stagnant relative to pre-pandemic benchmarks. This signals a need for a refined "NIPUN Bharat 2.0" targeting sustained learning retention across primary grades.
- **Teacher Standardization (NPST & NMM):** The National Professional Standards for Teachers (NPST) introduces a structured career ladder (Proficient, Expert, Advanced) tied to performance assessments. However, the lack of operational rollout and low awareness among the nearly 1 crore schoolteachers limits the impact of capacity-building initiatives like the National Mentoring Mission.

2. Restructuring Higher Education Governance

- **The Viksit Bharat Shiksha Adhishtan (VBSA) Bill:** A pivotal legislative effort aimed at replacing existing regulatory bodies (UGC, AICTE, NCTE) with a single umbrella commission. A major structural shift in the proposed VBSA is the **separation of regulatory oversight from financial grant disbursement**, raising concerns among state universities regarding future funding mechanisms and financial sustainability.
- **Regulatory & Multidisciplinary Mandates:** Draft regulations governing the appointment of Vice-Chancellors and faculty face opposition over executive/gubernatorial influence and the removal of caps on contractual faculty. Furthermore, implementing the National Credit Framework (NCrF) across state universities faces administrative inertia due to rigid institutional structures and a lack of dedicated capacity-building funds.

3. Education-Skilling Convergence & AI Integration

- **Swayam Plus & "AI for All":** Platforms offering industry-aligned skill certification across emerging domains (e.g., AI in Physics, Chemistry, Accounting) attempt to make higher education market-ready.
- **The Structural Gap:** State-level public universities often operate on rigid, fixed-degree package models. Transitioning to flexible credit transfers demands institutional autonomy and funding, both of which are constrained in regional higher education ecosystems.

4. Language Policy & Federal Dynamics

- **Three-Language Formula & Bharatiya Bhasha Push:** Strengthening instruction in native Indian languages over English in secondary education (CBSE curriculum) aligns with NEP's cultural objectives.

Daily News Analysis

- **Fiscal Federalism Concerns:** Tying central funding for primary education schemes (e.g., Samagra Shiksha) to state-level compliance with the three-language policy has reignited federal friction, particularly with holdout states like Tamil Nadu defending state language policies.

Related Static Dimensions (UPSC Core)

1. Constitutional Provisions

- **Concurrent List (Entry 25, 7th Schedule):** Education was moved to the Concurrent List via the 42nd Constitutional Amendment Act, 1976, making it a shared subject requiring federal consensus between Centre and States.
- **Article 350A:** Mandates the provision of adequate facilities for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups.
- **Article 21A:** Right to Free and Compulsory Education for children aged 6 to 14 years (RTE Act, 2009).

2. Institutional Framework

- **National Education Policy (NEP) 2020:** The overarching policy framework guiding early childhood care, multidisciplinary higher education, and regulatory streamlining.
- **NIPUN Bharat Mission:** Launched under Samagra Shiksha to ensure every child attains foundational literacy and numeracy by the end of Grade 3 by FY2026–27.

Challenges in Execution

- **Implementation Gap in State Universities:** Regional universities lack the financial and infrastructural capacity to seamlessly adopt credit bank systems (Academic Bank of Credits) or multidisciplinary subject choices.
- **Centralization vs. Federal Diversity:** Critics argue that uniform national standards (NPST, VBSA, language mandates) risk imposing a centralized blueprint that overlooks regional educational contexts and state-level administrative realities.
- **Funding Disparity:** Separating grant-giving functions from higher education regulatory bodies without establishing an autonomous, transparent funding mechanism risks starving resource-strapped state public universities.

Way Forward

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Cooperative Federalism in Policy Implementation:** Avoid tying crucial primary education funding to rigid policy compliance; engage state governments through collaborative dialogue to adapt language and curriculum frameworks flexibly.
- **Financial Safeguards for Higher Education:** Ensure that regulatory reforms under the proposed VBSA Bill incorporate transparent, statutory grant-disbursal mechanisms to support infrastructure development in state universities.
- **Capacity Building for Schoolteachers:** Accelerate the formal rollout of the National Professional Standards for Teachers (NPST) alongside incentive-backed professional development to boost motivation among educators.
- **Bridging the Academic-Skilling Divide:** Provide direct financial assistance and technological support to state universities to help them adopt flexible credit transfer systems and industry-integrated skill courses.

Conclusion

The reform agenda of the Education Ministry presents a transformational vision for Indian education, spanning early childhood literacy to AI-driven higher education models. However, sustainable educational reform cannot rely solely on executive mandates or centralized regulation. To translate these ambitious frameworks into meaningful learning outcomes, the Union Government must prioritize cooperative federalism, financial capability enhancement, and institutional autonomy for educational institutions across the country.

www.lakshyaacademy.co | www.lakshyaaiasacademy.com

UPSC Prelims Exam Study Questions

Ques: The NIPUN Bharat Mission primarily aims to:

- Universalize digital education in higher educational institutions.
- Ensure every child achieves Foundational Literacy and Numeracy by the end of Grade 3.
- Promote vocational education among secondary school students.
- Improve India's global university rankings.

Ans:b)

UPSC Mains Exam Study Questions

Ques: Discuss the significance of Foundational Literacy and Numeracy (FLN) in improving learning outcomes under the National Education Policy, 2020. (10 Marks, 150 Words)

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

AI's next test — reaching India's informal women worker

India's journey towards Viksit Bharat by 2047 rests on whether the productivity gains unlocked by artificial intelligence (AI) are broadly shared or concentrated among those already well-served. AI is reshaping value chains across agriculture, logistics, health care and financial services. The design choices in these systems, who they are built for, whose data they train on, and whose languages they speak, will determine whether this transformation amplifies India's inclusive growth story or adds a dimension to structural inequalities.

About 82% of working women in India are in informal employment according to a 2018 ILO report, spanning agriculture, home-based production, domestic services and micro-enterprises. The gender implications of AI adoption are, above all, a question of economic inclusion. India's AI Governance Guidelines, released in November 2025, set out seven guiding principles, including fairness and equity; translating these into gender-responsive outcomes is both a governance priority and a development opportunity. As UN Women has warned, AI is already reimagining reality for billions, but it is still getting women wrong; without gender-responsive design, testing and oversight, it risks amplifying stereotypes, discrimination and digital violence instead of expanding opportunity.

In agriculture and informal work

AI holds considerable promise for Indian farmers through precision agriculture applications, real-time advisory on crop health, input optimisation and market access. With 76.9% of rural women engaged in agriculture as in Periodic Labour Force Survey (PLFS) 2023-24 reporting, women are a primary constituency. Early evidence is telling: a 2024 study of Farmer.Chat, deployed across 12 States, found that 61% of women users reported improved quality of life within 45 days, with engagement levels two to three times those of male users. While the specific design features driving this outcome



S. Krishnan

Secretary, Ministry of Electronics and Information Technology (MeitY), Government of India



Shoko Ishikawa,

Country Representative, UN Women India and part of Team UN in India

require further documentation, the results suggest that when AI agricultural tools reach women, keeping in mind language, land access patterns, mobility constraints, and relevance, meaningful engagement follows. Building on this foundation, three areas merit focused attention as India scales its AI deployment.

Governance priorities

First, gender impact assessments. The India AI Governance Guidelines' principles of fairness and equity require operationalisation through proportionate gender impact assessments for AI systems affecting economic opportunity, welfare access or safety for women and girls. These should examine whether outcomes vary by sex, location, caste, disability and work status, and whether redressal mechanisms are accessible in regional languages. Where AI decisions on credit, employment or welfare cannot be explained, trust suffers disproportionately among marginalised groups. Similarly, Gender Responsive Budgeting offers a practical test for decisions on AI spend. For any significant AI investment, four questions can be applied: which women will benefit; which specific barrier (access, language, safety or capability) is being addressed; how outcomes will be measured; and which budget line will finance corrective action if results fall short.

Second, AI literacy as public infrastructure. Access to tools is a necessary but not sufficient condition for inclusion. Training programmes for women in informal work must be designed around their time constraints, literacy levels and livelihood contexts. Embedding AI literacy within Deen Dayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM), Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) and Skill India, with linkages to Mission Shakti's Sakhi network, would allow trusted community infrastructure to carry new digital capability. The measure of success should be outcome-based: did this help a woman access an entitlement, navigate a platform, or move to

better-paid work? Third, digital safety as a condition for economic participation. Technology-facilitated gender-based violence, including deepfakes, online harassment and non-consensual imagery, creates a measurable "chilling effect", discouraging women from participating fully in digital economic spaces. The IT (Amendment) Rules, 2021 require grievance mechanisms for harmful content; the Ministry of Electronics and Information Technology (MeitY)'s proposed mandatory labelling of AI-generated synthetic content adds further protection. Effective implementation, with accessible survivor-facing remedies in regional languages, is a prerequisite for women's sustained digital participation.

The National Commission for Women's review of cyber laws provides evidence-based recommendations warranting timely inter-ministerial action.

AI prosperity for all

India has built substantial AI infrastructure in a short period: the IndiaAI Mission, the BHASHa Interface for India (BHASHINI) multilingual platform, the AI Governance Guidelines and targeted cross-sector partnerships. The India AI Impact Summit 2026 showed that these ambitions are matched by a growing ecosystem of practitioners, innovators and civil society.

The opportunity is to ensure that the productivity gains from this infrastructure reach those at the base of the economic pyramid, viz., women farmers, home-based workers, self-help group members, platform participants. This requires deliberate design: in procurement standards, training programmes, safety frameworks and the measurement of success.

By 2047, the measure of India's AI success should not be aggregate indicators alone, but whether women in informal work have gained meaningful, productive access to the tools and opportunities that AI enables. That is the standard consistent with Viksit Bharat, and it is within India's reach.

Artificial Intelligence (AI) must empower informal women workers for truly inclusive economic growth

GS Paper III: Science and Tech

UPSC Mains Exam Practice Questions: Discuss the importance of gender-responsive Artificial Intelligence in promoting inclusive development in India. **10Marks, 150 Words)**

Context :

India's broader vision of **Viksit Bharat @2047** hinges on whether the productivity gains brought by Artificial Intelligence (AI) are equitably distributed across society or concentrated among affluent urban populations.

According to International Labour Organization (ILO) data, approximately **82% of working women in India are engaged in the informal economy**—spanning agriculture, home-based production, domestic work, and micro-enterprises. Furthermore, the Periodic Labour Force Survey (PLFS 2023–24) reports that **76.9% of rural working women are engaged in agriculture**.

While AI holds immense potential to transform sectors like agriculture, health, and finance, UN Women has warned that AI systems risk amplifying gender biases, stereotypes, and digital violence if designed without gender-responsive testing and oversight.

Core Analytical Dimensions

1. Proof of Concept: Gender-Responsive AI Deployment

- **Farmer.Chat Study (2024):** Deployed across 12 Indian states, the study revealed that **61% of women users reported improved quality of life within 45 days**, with engagement levels two to three times higher than those of male users.
- **Key Drivers of Adoption:** When AI tools accommodate local languages, land ownership realities, mobility constraints, and contextual relevance, women in rural and informal sectors adopt and benefit from these technologies rapidly.

2. Operationalizing Gender-Responsive AI Governance

- **Applying the India AI Governance Guidelines (Nov 2025):** The 2025 guidelines articulate seven core principles, including **Fairness and Equity**. To move from principles to practice, the author proposes:
 1. **Gender Impact Assessments (GIAs):** Conducting mandatory GIAs for AI tools used in credit, employment, or welfare distribution to evaluate potential sex, caste, regional, or disability-based biases.
 2. **Gender-Responsive Budgeting (GRB) for AI:** Applying four key evaluation metrics to public AI expenditures:
 - Who benefits? (Identifying target women cohorts).

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

- Which barrier is resolved? (Addressing language, access, safety, or capability).
- How are outcomes measured? (Outcome-based tracking).
- Which budget line funds corrective action? (Ensuring financial accountability if outcomes fall short).

3. Leveraging Existing Community Infrastructure for AI Literacy

- **Embedding AI Literacy into Public Delivery Networks:** Rather than building isolated digital literacy programs, AI capability building should be integrated into trusted grassroots networks:
 - **DAY-NRLM** (Deen Dayal Antyodaya Yojana – National Rural Livelihoods Mission).
 - **DDU-GKY** (Deen Dayal Upadhyaya Grameen Kaushalya Yojana).
 - **Skill India & Mission Shakti's Sakhi Network.**
- **Outcome-Driven Success Metrics:** Measuring success based on functional empowerment—whether AI helps a woman access a public entitlement, navigate a market platform, or transition to higher-paid work.

4. Digital Safety as a Precondition for Economic Participation

- **Chilling Effect of Online Violence:** Technology-facilitated gender-based violence (TFGBV)—including AI-generated deepfakes, online harassment, and non-consensual synthetic imagery—discourages women from fully participating in digital economic platforms.

• Regulatory & Legal Frameworks:

- **IT (Intermediary Guidelines & Digital Media Ethics Code) Rules:** Mandatory grievance mechanisms for swift content removal.
- **Mandatory Labelling of AI Synthetic Content:** Proposed MeitY rules requiring permanent identifiers/watermarks on synthetically generated data.
- **National Commission for Women (NCW) Cyber Law Review:** Recommends inter-ministerial action to ensure survivor-centric remedies in regional languages.

Related Static Dimensions (UPSC Core)

1. Constitutional & Policy Framework

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

Daily News Analysis

- **Article 15(3):** Empowers the State to make special provisions for women and children.
- **Article 39(a) & (I):** Directs state policy toward securing an adequate means of livelihood for all citizens without gender discrimination.
- **IndiaAI Mission & Bhashini Platform:** National digital initiatives designed to build foundational AI infrastructure and enable multilingual digital public infrastructure (DPI) access in 22 official languages.

2. SDG Alignment

- **SDG 5 (Gender Equality):** Enhancing the use of enabling technology, particularly information and communications technology, to promote the empowerment of women.
- **SDG 8 (Decent Work and Economic Growth):** Achieving full and productive employment and decent work for all women and men.
- **SDG 10 (Reduced Inequalities):** Ensuring equal opportunity and reducing inequalities of outcome.

Way Forward

- **Gender-Audited Procurement Standards:** Mandate that government departments purchasing or deploying public-facing AI tools require suppliers to provide algorithmic bias audits and gender impact certifications.
- **Localized Voice-Based Interfaces:** Expand integration with **Bhashini** to ensure AI applications for informal workers rely on localized voice and conversational interfaces, bypassing traditional text-based literacy barriers.
- **Strengthen Regional Grievance Redressal:** Establish regional-language, user-friendly channels for rural women to report algorithmic errors, credit denials, or digital harassment.
- **Data Inclusivity:** Mandate that training datasets used for public AI models (such as AIKosh) systematically collect and incorporate disaggregated data representing informal rural women workers.

Conclusion

The true test of India's technological leadership will not be measured solely by headline computational capacity or high-tech exports, but by whether artificial intelligence improves the livelihoods of women in the informal economy. Translating governance guidelines into gender-responsive design, community-driven AI literacy, and enforceable digital safety frameworks ensures that the productivity gains of AI drive an inclusive, equitable, and sustainable Viksit Bharat.

Add- 21/B, Om Swati Manor Chs, J.K. Sawant Marg, Opp. Shivaji Natyamandir, Behind Cambridge Showroom, Dadar (West) Mumbai - 400028
Con.- 09820971345, 9619071345, 9223209699
G-mail-lakshyaacademymumbai@gmail.com

