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**EDITORIAL ANALYSIS**



**APRIL 17**



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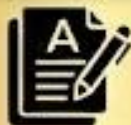
# AXIA IAS ACADEMY

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# The institutionalised sluggishness of the legal system

**F**or the millions of Indians who have spent years navigating the labyrinthine corridors of our legal system, the courthouse is often a place where hope goes to languish. While high-profile cases capture the headlines and move through the docket with visible momentum, the average citizen finds himself trapped in a cycle of adjournments and procedural hurdles that can span generations. We have reached a point where the phrase “justice delayed is justice denied” is no longer a warning but a standard operating procedure.

It's time for the focus to shift away from the judge holding the gavel and towards the people standing in the dock. The urgency of judicial reform in India is not a professional concern for lawyers or a theoretical exercise for academics; it is a fundamental human rights crisis that demands a total reimagining of how the state delivers on its promise of fairness.

## The excruciating wait

The primary grievance of the common person is the sheer, suffocating weight of pendency. With over five crore cases currently clogging the arteries of our courts, the system has become its own worst enemy. For a layman, the legal process feels like a black hole where time and money disappear without a clear horizon for resolution. This backlog emboldens the lawbreaker and exhausts the law-abiding. When a land dispute takes 20 years to resolve, the winner often finds the victory hollow, having spent more on legal fees than the property was worth.

The institutionalised sluggishness of the Indian legal system has transformed the pursuit of justice into an endurance test, giving rise to the grim observation that “the process is the punishment.” Unnecessary procedural bottlenecks and the culture of frequent, and often frivolous adjournments create a gravitational pull that keeps cases in limbo for decades, effectively stripping the accused of their dignity, livelihood, and social standing long before a verdict is ever reached. This systemic failure is most visible in the tragic stories of individuals charged with grave offences who are eventually acquitted, only to find their lives in ruins and their prime years spent behind bars, without compensation.

It is particularly unconscionable that those charged under stringent anti-terrorism laws, such as the Unlawful Activities (Prevention) Act (UAPA), languish in overcrowded prisons without trial and without the possibility of bail, as the *prima facie* evidence standard often makes



**Shashi Tharoor**

Fourth-term Member of Parliament (Congress) for Thiruvananthapuram (Lok Sabha), and award-winning author of 28 books, including, most recently, *The Sage Who Reimagined Hinduism: the Life, Lessons and Legacy of Sri Narayana Guru*, and the Chairman of the Parliamentary Standing Committee for External Affairs

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incarceration the rule rather than the exception. To uphold the constitutional promise of liberty, the judiciary must urgently lay down clear, mandatory guidelines that fix a firm timeline – perhaps no longer than one or two years – within which the state must either commence a meaningful trial or grant the accused bail.

This transition requires a radical embrace of the 21st century. For too long, our courts have operated as if they were frozen in the colonial era, reliant on mountains of physical files, and the personal presence of litigants who must often travel hundreds of miles just to hear a new date for the hearing. The digital revolution that has transformed how we bank, shop, and communicate must now also conquer the judiciary. Artificial Intelligence (AI) and data-driven case management are not luxuries, but necessary tools to dismantle the backlog. Imagine a system where AI handles the routine administrative filing, flags delays, and even assists in legal research, allowing judges to focus their cognitive energy on the heart of the matter.

## Need for inclusivity and accessibility

However, a faster court is only half the battle; we also require a more inclusive one. Citizens' trust in the law is deeply tied to whether they see themselves reflected in the people who interpret it. The judiciary has long been criticised for being an insular “old boys’ club,” where the glass ceiling for women and marginalised communities remains intact, with too many judges being relatives of earlier generations of judges. True reform means breaking these barriers to ensure that the Bench represents the vast and diverse tapestry of India. This is not about identity politics; it is about judicial quality. A Bench that understands the lived realities of a diverse population is a Bench that can deliver more nuanced and empathetic rulings. When a woman or a person from a historically oppressed community sits in judgment, she brings a perspective that enriches the law and makes it more responsive to the nuances of Indian society.

Beyond the composition of the Bench, there is the crushing issue of affordability. In its current form, justice is a luxury good. The cost of hiring competent counsel and the incidental expenses of long-term litigation effectively price out a significant portion of the population. India must overhaul the legal aid system, transforming it into a high-calibre institution that offers the poor a comparable quality of the representation available to the rich. If the state can provide food

and education, it must also provide the means for a citizen to defend their life and liberty.

Furthermore, the geographical centralisation of our highest courts remains a relic of the past. The idea that a litigant from south India must travel to the capital for a final appeal is an unnecessary burden. Regional Benches or a more robust system of virtual hearings for the Supreme Court would go a long way in making the highest level of justice a local reality rather than a distant dream.

Beneath these logistical changes lies the soul of the reform: the preservation of constitutional morality and judicial independence. The people need a judiciary that acts as a fearless referee, one that can hold the powerful to account without blinking. This independence is the bedrock of a functioning democracy. Yet, independence should not be confused with a lack of accountability. By opening up the process – through live-streaming of important cases and clearer criteria for judicial appointments – the court can rebuild the ‘social contract’ it has with the people.

## A systemic overhaul

The country must stop treating judicial reform as a series of small, incremental adjustments and start treating it as a national emergency. The current state of affairs is a slow-motion catastrophe that erodes the rule of law every day. The people are not looking for grand speeches or ceremonial promises; they are looking for a system that works, and is fast and fair. We need to move away from the adversarial culture that views every legal disagreement as a battle to the death, toward a culture of resolution. We need judges who are as comfortable with a computer screen as they are with a law book, and a legal profession that values the closing of a case more than the prolongation of a fee.

As we move towards ‘Viksit Bharat’ 2047, the measure of our success as a nation will not just be our GDP or our technological prowess, but how we treat the person seeking justice in our courts. If we fail to reform, we risk a future where the law is seen merely as a tool of the powerful rather than as a shield for the weak.

But if we succeed, we can create a system where the scales of justice are finally balanced, ensuring that no Indian is ever again forced to wait a lifetime for a truth that should have been delivered in a day. The time for deliberation has passed; the time for a transformation that puts the citizen first, is now.

- **Key Terms and Explanations**

- **Pendency:** The state of a case being "pending" or undecided in a court of law. India currently faces a backlog of over 5 crore cases.
- **Adjournment:** The postponement of a court session or hearing to another time or place. Frequent "frivolous" adjournments are a primary cause of delay.
- **Prima Facie:** Latin for "at first sight." In legal terms, it refers to evidence that is sufficient to establish a fact unless disproved. Under laws like UAPA, the *prima facie* standard makes obtaining bail extremely difficult.
- **Judicial Independence vs. Accountability:** Independence ensures judges are free from executive pressure; accountability ensures the system is transparent to the public (e.g., through live-streaming).
- **Constitutional Morality:** Adherence to the core principles of the Constitution (liberty, equality, fraternity) rather than just popular sentiment or literal text.
- **Viksit Bharat 2047:** The government's vision to transform India into a developed nation by the 100th anniversary of its independence.

## Main Arguments and Substantive Parts

The core thesis is that the Indian judiciary is undergoing a **human rights crisis** due to systemic inefficiency, requiring a shift from "judge-centric" to "citizen-centric" justice.

**The "Process is the Punishment"**: The argument that for an average Indian, the length and cost of litigation are so high that they effectively serve as a penalty, regardless of the final verdict.

**Technological Deficit**: The system is "frozen in the colonial era." The argument pushes for AI-driven case management to automate routine filings and research.

**The "Old Boys' Club" Critique**: A lack of diversity (gender, caste, and regional) on the Bench limits the "empathetic depth" of rulings.

**Geographical and Financial Barriers**: Justice is a "luxury good" due to the centralization of the Supreme Court in Delhi and the high cost of legal counsel.



- **Historical Evolution of the Issue**

- **Colonial Era:** Introduction of the Adversarial System by the British. It prioritized procedural formality over substantive justice, creating a culture of "mountains of physical files."

- **Post-Independence (1950s-70s):** The formative years of the Supreme Court. Focus was on land reforms and fundamental rights (e.g., *Kesavananda Bharati* case).

- **The 1980s (PIL Revolution):** Justice P.N. Bhagwati introduced Public Interest Litigation, expanding access to justice for the poor, but inadvertently adding to the docket.

- **2000s–Present:** The "Digital Courts" era began with the e-Courts Integrated Mission Mode Project (2005). Despite this, pendency surged from 2 crore to over 5 crore in two decades.



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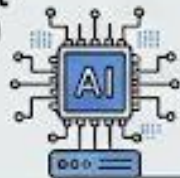
## SYSTEMIC CHALLENGES (The Justice Labyrinth)

- Over 5 Crore Pending Cases (Suffocating Weight)
- Frequent & Frivolous Adjournments (Culture of Delay)
- Inaccessible Supreme Court (Centralization in Delhi)



## RADICAL TRANSFORMATION PILLARS

- 21st Century Embrace: AI-Driven Case Management (Routing Files, Flagging Delays)
- Mandatory Trial Timelines (E.g., 2 Year Verdict Limit)
- Bail as the Rule, Jail as Exception (Preserving Liberty)



SPEEDY &  
TIMELY



ACCESSIBLE  
&  
TRANSPARENT

INCLUSIVE &  
REPRESENTATIVE

## VISION: CITIZEN-CENTRIC JUDICIARY



## IMPACT ON THE CITIZEN

- Trial Becomes Punishment (Endurance Test)
- Eroded Faith in Rule of Law
- Land Dispute Traps (Victory Becomes Hollow)

Verdict for  
a lifetime of waiting



## INCLUSIVITY & AFFORDABILITY

- Breaking the Old Boys' Club (Representative Bench)
- Robust Legal Aid System (Comparable Quality Representation)
- Regional Benches of the Supreme Court (Decentralizing Justice)



AXIA IAS ACADEMY - Shaping the Future of Justice in India

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## Logical and Philosophical Base

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graph TD; A[Logical and Philosophical Base] --> B[Social Contract Theory: The state's legitimacy rests on its ability to resolve disputes fairly. When courts fail, the "social contract" between the citizen and the state fractures.]; B --> C[Utilitarianism vs. Rights-based Approach: The current system often sacrifices individual liberty for "procedural correctness." The article argues for a rights-based approach where bail is the rule and jail is the exception.]; C --> D[Epistemology of Law: The belief that "truth" in a legal sense is only valid if it is discovered within a reasonable timeframe. A truth delivered after 20 years is epistemologically "dead."];
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- **Multidimensional Analysis**

- **Social:** Marginalized communities and women face "glass ceilings" in judicial appointments, leading to a lack of "lived experience" in judgments.
- **Political:** The "executive-judicial" standoff over the Collegium system often leads to delays in filling judge vacancies.
- **Legal:** The "adversarial" nature of Indian law encourages conflict over resolution.
- **Ethical:** It is an ethical failure to keep under-trials in prison for longer than their potential maximum sentence.
- **International:** High pendency and "weak contract enforcement" hurt India's ranking in the "Ease of Doing Business," deterring Foreign Direct Investment (FDI).
- **Economic:** Billions of dollars are locked in stalled litigation, hindering capital flow and productivity.

## Linkages with NCERTs

### **Class 8, Social and Political Life – “Understanding Our Criminal Justice System”**

- Explains roles of police, public prosecutor, defence lawyer, and judge; presumption of innocence and fair trial.
- Directly connects to discussions on undertrials, pre-trial detention, and fairness.

### **Class 9, Democratic Politics – “Working of Institutions”**

- Describes how key institutions (including judiciary) function in a democracy.
- Useful for linking judicial independence, accountability, and institutional reforms.

### **Class 11, Indian Constitution at Work – “Judiciary”**

- Covers structure, role, PIL, judicial review, independence.
- Forms the base for understanding compositions of courts, powers, and debates around activism vs restraint.

### **Class 11, Indian Constitution at Work – “Constitution as a Living Document”**

- Discusses evolving interpretations of rights and constitutional morality.
- Supports arguments around speedy trial, dignity, and progressive interpretation of Article 21.

### **Class 12, Politics in India since Independence – “Challenges to and Restoration of the Congress System” & “Democratic Resurgence”**

- Provides historical background on Emergency, civil liberties, and judiciary’s role.
- Helps contextualise the importance of judicial independence and rights protection.

- Linkages with UPSC CSE syllabus
- GS Paper 2
- **Polity and Constitution:**
  - Structure, organisation and functioning of the judiciary.
  - Separation of powers, dispute redressal mechanisms and institutions.
  - Issues and challenges pertaining to federal structure (e.g., regional benches).
- **Governance and Social Justice:**
  - Mechanisms, laws, institutions and bodies constituted for the protection of vulnerable sections.
  - Issues relating to poverty and hunger (legal aid, access to justice as a welfare function).
- GS Paper 1
- **Indian Society:**
  - Salient features of Indian society, diversity of India: impact of caste, class, gender on access to justice.
  - Role of women and women's organisations: glass ceiling in judiciary.
- GS Paper 3
- **Internal Security:**
  - Role of various agencies and laws in internal security (UAPA and anti-terror laws).
  - Challenges of terrorism and extremism vs civil liberties.
- **Science and Technology:**
  - Awareness in the fields of IT, computers, robotics; AI in governance and justice delivery.
  - Indigenisation of technology and developing new technology (e-courts, AI-based case management).
- GS Paper 4 (Ethics)
- **Ethics in public administration:**
  - Ethical concerns in delivering justice, impartiality, objectivity, empathy.
  - Case studies on undertrials, delay, and fairness.



- Way forward
- **Legislative and procedural reforms**
  - Amend CrPC and special laws to mandate outer timelines for commencement of trials in serious cases; beyond a limit, bail should be the norm.
  - Rationalise offences under special laws and ensure strict proportionality and narrow tailoring.
- **Strengthening lower judiciary and human resources**
  - Substantially increase sanctioned strength of judges and fill vacancies quickly.
  - Improve training academies for judges, prosecutors, and court staff on case management, technology, and human rights.
  - Introduce performance indicators that reward timely, reasoned disposal without incentivising mechanical judgments.
- **Deepening e-courts and AI with safeguards**
  - Fully implement e-Courts Phase III: universal e-filing, digitised records, standardised templates, AI tools for scheduling and research, while preserving human decision-making.
  - Provide e-Sewa Kendras and paralegal volunteers in court complexes for assisted access to digital systems.
  - Create robust data protection, audit, and explainability requirements for any AI tools used.
- **Reimagining legal aid**
  - Increase budgets for legal services authorities and adopt a professional public defender model in high-volume criminal courts.
  - Use technology to match cases with competent lawyers and track performance and outcomes.
  - Conduct regular outreach in prisons to identify eligible undertrials and assist in bail applications.
- **Promoting diversity and transparency in appointments**
  - Evolve clear, publicly known criteria for judicial appointments and elevations, including commitment to diversity.
  - Publish reasons for selections and rejections to the extent compatible with privacy and independence.
  - Encourage mentorship and scholarships for law students from marginalised backgrounds to build a diverse pipeline.

- UPSC CSE Mains – GS Paper 2
- **2014, GS-2:** Question on the need for reforms in the criminal justice system in India.
- **2015, GS-2:** Question on the growing importance of Public Interest Litigation and its impact on judiciary and governance.
- **2016, GS-2:** Question on the collegium system, its criticisms, and the need for transparency in judicial appointments.
- **2017, GS-2:** Question on undertrial prisoners and measures to address their plight.
- **2018, GS-2:** Question on “access to justice” for the poor and marginalised and the state of legal aid in India.
- **2019, GS-2:** Question on the pendency of cases and suggestions to improve judicial efficiency.
- **2020, GS-2:** Question on the use of technology in improving transparency and accountability in governance (relevant to e-courts).
- **2021, GS-2:** Question on constitutional morality and the role of the judiciary.
- **2022, GS-2:** Question on tribunals and alternative dispute resolution mechanisms in reducing the burden on regular courts.
- **2023, GS-2:** Question on live-streaming of court proceedings and transparency.
- UPSC CSE Mains – GS Paper 3
- **2017, GS-3:** Question on the role of anti-terror laws and concerns about civil liberties.
- **2019, GS-3:** Question on cyber security and data protection (relevant for digitised courts).
- **2020, GS-3:** Question on AI and its ethical, legal implications.
- UPSC CSE Mains – GS Paper 4 (Ethics)
- Multiple case-study style questions across years on:
  - A poor man wrongly jailed for years.
  - Public functionaries dealing with systemic injustice.
  - Conflicts between law, morality, and justice.

# India's rural models are shaping development diplomacy

**W**hen India launched the National Rural Livelihood Mission (NRLM) in 2011, under the Ministry of Rural Development, it did so with an ambitious objective: to tackle multidimensional poverty by enabling rural households to access gainful employment and sustainable livelihoods through self-employment, financial inclusion, and learning new skills.

Now, 15 years later, the programme's scale, endurance, and outcomes have exceeded even its early champions' expectations. Over 20 million women members of Self-Help Groups (SHGs) earn over ₹1,00,000 in income, and women banking correspondents are present in over 60% of local governments. Further, over 50 million women have accessed bank credit, boosting female labour force participation since 2018.

Remarkably, the NRLM has crossed borders, guiding rural livelihood initiatives across the Global South, particularly in Africa, and is subtly shaping India's development diplomacy.

## India's quiet transformation

The magnitude of the NRLM's achievements is striking. As of mid-2025, the mission is active in 742 districts; has reached over 100 million households; mobilised more than nine million SHGs; facilitated ₹51,368 crore in capitalisation support; and enabled bank linkages amounting to ₹12 lakh crore, an expansion unprecedented in both scale and its focus on women. The Union Budget 2026-27 strengthened this trajectory with a ₹19,200 crore allocation, reaffirming the NRLM as India's flagship programme for rural poverty alleviation. What sets the NRLM apart is not only its breadth but the ecosystem it has nurtured. It has created federated community institutions at the village, cluster, and block levels; established community-based cadres delivering last-mile services; and embedded rural women in formal financial systems. Such a combination of social mobilisation, institutional architecture, and



**Veda Vaidyanathan**

Fellow, Centre for Social and Economic Progress

In recent years, a growing number of African governments have begun exploring the Indian SHG-based livelihoods framework

access to credit and skills has made the mission a unique and enduring intervention in global development practice.

## Beyond borders

Innovations in development rarely travel easily across borders because they are shaped by local political economies, social structures, and state capacities. Yet the NRLM's design appears unusually portable. In recent years, a growing number of African governments have begun exploring the Indian SHG-based livelihoods framework. Delegations from Ethiopia, Tanzania, Malawi, Kenya, and Rwanda have undertaken detailed study visits to India, examining not just the outcomes of the NRLM but the operational mechanics that make it work. They sought to understand how India managed to scale SHGs to tens of millions of women; how credit linkages with banks were created and sustained; how communities were mobilised into federations; how trained cadres were deployed at scale; and how accountability and financial discipline were embedded in the system. This surge of interest reflects a wider shift in how countries of the Global South envision development: no longer in terms of Western knowledge templates but through peer learning, centred on contextually relevant and locally rooted innovation.

African policymakers are drawn to the NRLM for several interrelated reasons. First, its focus on women's collective empowerment resonates strongly with ongoing efforts across Africa to deepen women's economic participation. The SHG model, built on pooled savings, peer learning, and trust-based credit discipline, offers a structured yet flexible way to strengthen women's agency. Second, the NRLM's architecture is cost-effective, relying not on heavy capital investment but on community-driven processes and cadre systems that allow even resource-constrained governments to scale the programme. Third, the model aligns well with the

realities of large informal economies across Africa, where livelihood diversification and microenterprise formation are crucial. And finally, the model appeals to these countries because it is an institution-building approach rather than a mere scheme; it strengthens local governance, enhances accountability, and creates long-term community capacity.

## India's emerging development diplomacy

India's development cooperation has historically emphasised capacity-building, concessional finance, and technical assistance. The dissemination of the NRLM marks a clear evolution – the country is now exporting social-sector institutions grounded in its own developmental experience. Such institutional models create sustained linkages between bureaucracies, implementing agencies, and community organisations, offering a distinct channel for international engagement. They also provide potential entry points for collaboration in digital governance, agriculture, and financial architecture. The NRLM example illustrates how India's domestic innovations are shaping South-South cooperation by circulating knowledge and institutional practices rather than resources alone. To build on this momentum, India could institutionalise the sharing of its rural livelihoods knowledge through a dedicated Rural Livelihoods Knowledge Exchange Platform, linking state livelihood missions, training institutions, and African governments. Expanded training, longer fellowships, immersion visits and joint pilot projects could help adapt SHG-based initiatives to local contexts.

The NRLM is no longer only India's story of rural transformation. Growing interest from African nations demonstrates that India can generate solutions that develop livelihoods far beyond its borders. In doing so, New Delhi is shaping a new paradigm for global development.

*Views expressed are personal.*

- **Key Terms and Explanations**

- **Self-Help Groups (SHGs):** Small, voluntary associations of rural poor (primarily women) who come together to save small amounts regularly. These groups foster "internal lending" before seeking bank credit.

- *Example:* A group of 10 women in a village saving ₹100 monthly to provide emergency loans to members for health or education.

- **Multidimensional Poverty:** A concept that looks beyond just income to include deprivations in health, education, and living standards.

- **Banking Correspondents (BC Sakhi):** Women SHG members trained to provide doorstep banking services in unbanked areas using ICT devices.

- **Capitalization Support:** Seed money provided by the government (like Revolving Funds) to SHGs to strengthen their financial base.

- **Federated Institutions:** A tiered structure where SHGs at the village level join to form Village Organizations (VOs), which then form Cluster Level Federations (CLFs).

- **Global South:** A term used to describe developing, emerging, or lower-income nations, primarily located in Africa, Asia, and Latin America.

- **Development Diplomacy:** The use of a country's developmental success stories and technical expertise as a tool of foreign policy to build bilateral relations.

- **Main Arguments and Substantive Parts**

- **The Core Thesis**

- The NRLM has transitioned from a domestic poverty alleviation scheme to a global "institutional export," proving that community-led models are more effective than top-down bureaucratic interventions.

- **Key Points of Success**

- **Scale and Endurance:** Reaching 100 million households and 9 million SHGs demonstrates that the model is "fail-safe" at scale.

- **Financial Mainstreaming:** Moving from "micro-credit" to "macro-linkages" (₹12 lakh crore in bank linkages) has integrated the rural poor into the formal economy.

- **Women as Drivers:** The mission has shifted women from being passive beneficiaries to active "Lakhpati Didis" (earning over ₹1 lakh annually).

- **Portability to Africa**

- **Contextual Alignment:** African nations share similar informal economies and social structures with India, making the SHG model more relevant than Western developmental templates.

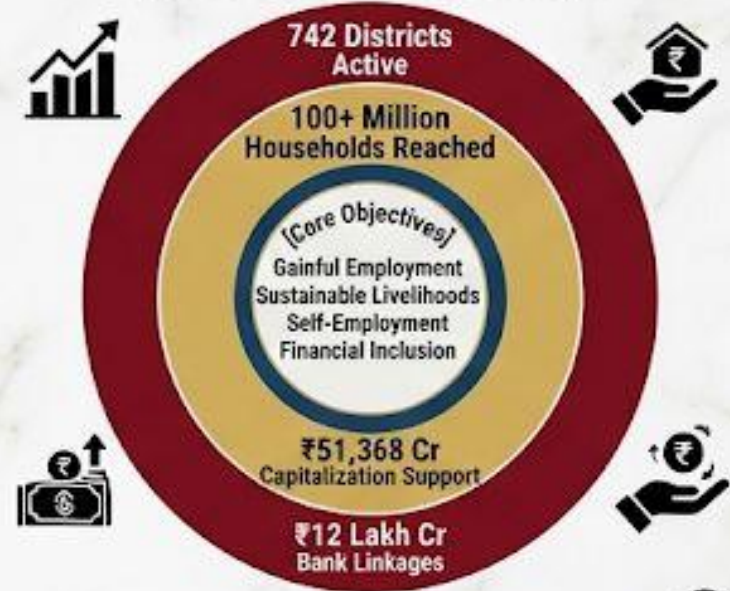
- **Cost-Effectiveness:** The reliance on human capital (community cadres) rather than infrastructure makes it viable for resource-strapped nations.

- **Historical Evolution of the Issue**
- **Pre-1999: Fragmented Approach:** Various schemes like the Integrated Rural Development Programme (IRDP) existed but suffered from high subsidy leakages and poor repayment.
- **1999: Swarnjayanti Gram Swarozgar Yojana (SGSY):** The first major shift toward the "Group Approach" (SHGs) rather than individual beneficiaries.
- **2011: Launch of NRLM (Aajeevika):** SGSY was restructured into NRLM with a focus on universal mobilization and professional management.
- **2015: Deendayal Antyodaya Yojana (DAY-NRLM):** The mission was renamed and scaled up with an emphasis on "convergence" with other schemes.
- **2018–Present: The "Lakshpati" and "Global" Phase:** Focus shifted toward high-value livelihoods, digital finance (BC Sakhis), and international knowledge sharing under South-South cooperation.



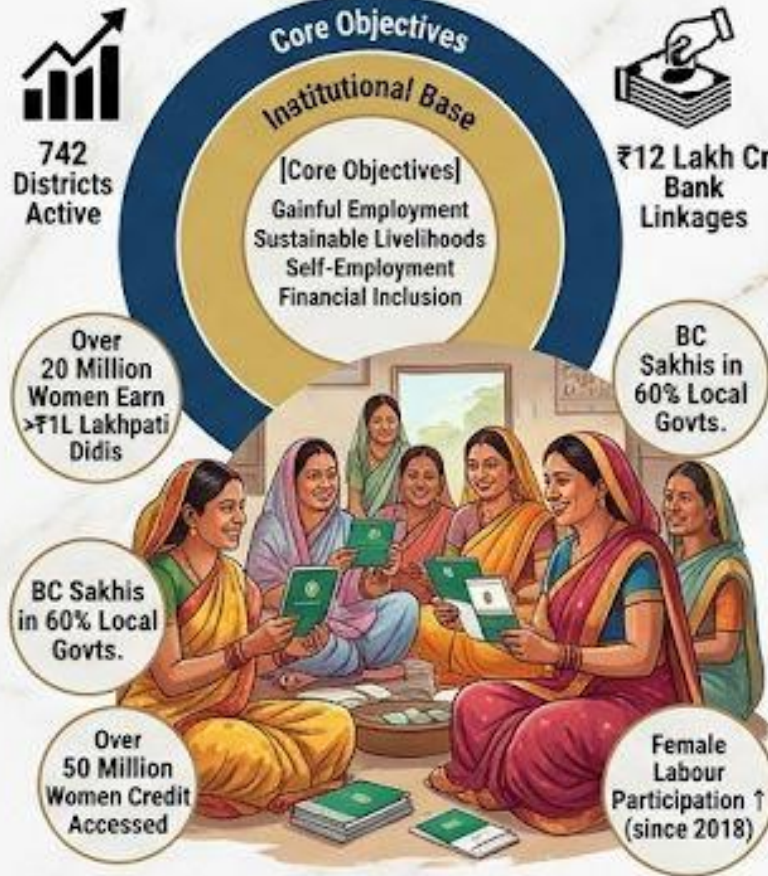
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### 1. INDIA'S QUIET TRANSFORMATION (DOMESTIC MILESTONES)



### 1. INDIA'S QUIET TRANSFORMATION (DOMESTIC MILESTONES)

DAY-NRLM: A Case Study in Scale



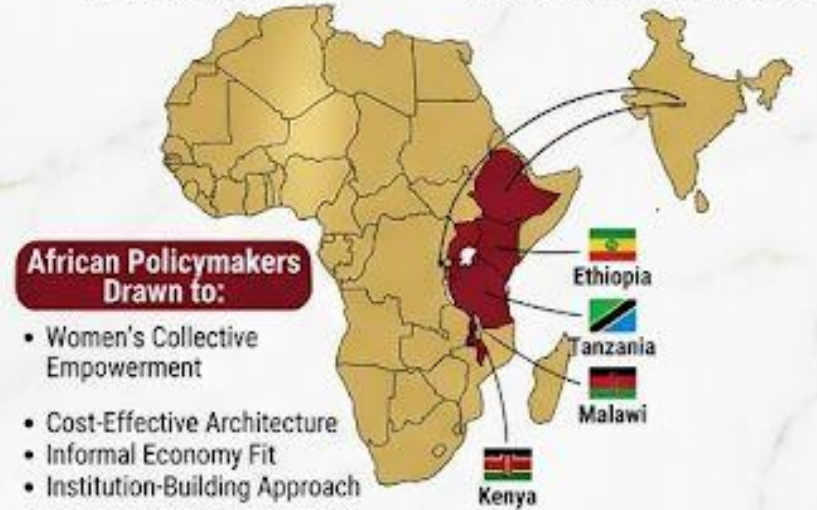
Path to Empowerment



### 3. BEYOND BORDERS (GLOBAL SOUTH LEADERSHIP)

GLOBAL SOUTH RECEPTIVITY

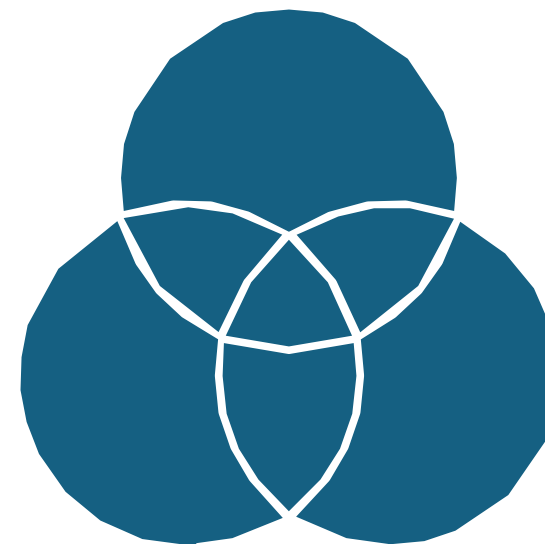
THE NRLM EXPORT: INSTUTIONAL MODELS



### NEW DEVELOPMENT DIPLOMACY (SOUTH-SOUTH COOPERATION)



- **Logical and Philosophical Base**
- The NRLM operates on a set of distinct logical and philosophical assumptions that differentiate it from earlier state-led welfare models.
- **Logic of Collective Efficacy (vs. Individual Deficit):**
  - *Assumption:* The poor do not lack skills or willingness; they lack **institutions** that provide bargaining power, risk mitigation, and voice.
  - *Philosophical Anchor: Amartya Sen's Capability Approach.* Poverty is not just low income (resource deprivation) but the **lack of freedom to convert resources into well-being**. An SHG provides the **agency** (collective voice) and **opportunity** (credit access) to enhance this capability.
- **Social Capital as Collateral (vs. Physical Collateral):**
  - *Logic:* The poor lack land or gold to pledge to banks (traditional collateral). NRLM substitutes this with **Social Collateral**. The peer pressure within the SHG ensures repayment. Defaulting on a loan means losing face and trust within the village community. This drastically reduces Non-Performing Assets (NPAs) for banks.
- **Demand-Driven vs. Supply-Driven Development:**
  - *Philosophy:* NRLM is **subsidiarity** in action. It creates a **Community Investment Fund (CIF)** and lets the **Gram Sabha-level SHG Federation** decide who gets the loan, for what purpose, and at what interest rate. This devolution of financial decision-making is a stark departure from the top-down, target-based IRDP era.
- **Feminist Economics in Practice:**
  - *Assumption:* Investing in women's collectives yields higher **multiplier effects** (better child nutrition, education, health) than investing in men. This is the "Gender Dividend" hypothesis. NRLM operationalizes this by mandating a focus on women (though men's groups exist under specific sub-components).



## Multidimensional Analysis

### Social:

- **Women's Agency:** NRLM has demonstrably increased women's **mobility** (going to bank meetings), **decision-making** in household expenditure, and **collective action** against social evils (liquor shops, domestic violence).
- **Caste and Class Dynamics:** Federations can either **bridge or reinforce** caste divides. In some villages, SHGs are mixed-caste, fostering social cohesion. In others, dominant castes control the federation board, excluding Dalit women from leadership.

### Political:

- **Vote Bank vs. Stakeholder:** Political parties now actively court the "SHG Didi" vote. This gives women political leverage. However, it also risks co-opting the non-partisan nature of the institution.
- **Decentralization:** NRLM is a practical example of the **73rd Amendment** in action, as SHG Federations often work closely with Panchayats on planning and implementation of schemes like MGNREGA and sanitation.

### Legal:

- **Legal Identity:** The need for SHG Federations to be registered under the **Societies Registration Act, 1860** or as **Producer Companies (Companies Act, 2013)** to enable them to sign contracts, hold land leases, and access larger institutional finance.

### Ethical:

- **Financial Literacy vs. Debt Trap:** Is it ethical to push formal credit onto the poorest women without ensuring robust financial literacy? There is a fine line between **financial inclusion** and **predatory inclusion**.

### International:

- **Soft Power and Brand India:** The interest from Africa positions India as a "**Solutions Hub**" for the Global South. It counterbalances Chinese infrastructure debt diplomacy with an Indian **institution-building diplomacy** model.
- **Global Indices:** The rise in FLFPR due to SHG activities directly improves India's ranking in **Global Gender Gap Reports**.

### Economic:

- **Aggregate Demand:** 100 million households with increased income fuel **rural consumption demand**, a critical driver for India's FMCG and two-wheeler markets.
- **Formalization of Credit:** SHG-Bank Linkage shifts rural credit from the **informal sector (moneylender at 60% interest)** to the **formal sector (bank at 7-12% interest)**.

- **Linkages with NCERTs**

- Class 9 Economics, Chapter “Poverty as a Challenge”: Concepts of poverty, vulnerability and the need for multi-dimensional interventions are directly relatable.
- Class 10 Economics, “Development” and “Money and Credit”: Development indicators, role of credit in rural areas, formal vs informal sectors connect closely to SHGs and NRLM.
- Class 11 Sociology, “Introducing Sociology” and “Understanding Society”: Concepts of social change, stratification, patriarchy and collective action underpin why women’s SHGs matter.
- Class 12 Sociology, “Indian Society” and “Social Change and Development in India”: Chapters on rural society, women and development, social movements, and NGOs map onto SHG-based mobilisation.
- Class 11 Political Science, “Indian Constitution at Work”: 73rd Amendment, local self-government and democratic decentralisation provide the institutional context.
- Class 12 Economics (Indian Economic Development), chapters on rural development, human capital formation, and poverty: direct factual and conceptual linkage.

- Linkages with UPSC CSE syllabus
- GS Paper 1
- Indian Society: “Role of women and women’s organisation”, “Poverty and developmental issues”.
- Social empowerment, communalism, regionalism & secularism (SHGs as instruments of empowerment).
- GS Paper 2
- Governance and Social Justice: “Welfare schemes for vulnerable sections”, “Issues relating to poverty and hunger”, “Development processes and the development industry”.
- Local self-government and panchayati raj; role of civil society and pressure groups (SHG federations as quasi-civil society).
- International relations: India’s development cooperation and South-South cooperation.
- GS Paper 3
- Inclusive growth and issues arising from it.
- Agriculture and allied sectors, food processing and value chains; SHG-based producer collectives.
- Mobilisation of resources, financial inclusion, and the informal sector; role of micro-finance and SHG–bank linkage.
- GS Paper 4 (Ethics)
- Ethics in public administration: citizen-centric governance, empathy and responsiveness to weaker sections.
- Values like justice, equality, compassion, service and their institutionalisation through community-based programmes.



- Way forward
- **Deepening quality, not just numbers**
  - Focus on strengthening governance, transparency and internal democracy in SHGs and federations, using social audits and peer review.
  - Standardised, modular training curricula for cadres and leaders, delivered through blended digital and face-to-face models.
- **Moving from credit to viable enterprises**
  - Integrate structured entrepreneurship development, value-chain development and market access (branding, e-commerce, producer companies).
  - Promote green and climate-resilient livelihoods (solar enterprises, climate-smart agriculture, ecosystem services).
- **Stronger convergence with other schemes**
  - Institutionalise convergent planning between NRLM, MGNREGA, PM-FME, MSME schemes, health and nutrition programmes at block and district levels.
  - Use SHG federations as “service partners” for delivering public services, with clear contracts and performance metrics.
- **Addressing social barriers**
  - Systematic gender-sensitisation programmes for men and community leaders; incentivise male champions of women’s groups.
  - Ensure deliberate inclusion of most marginalised women (SC/ST, single women, disabled) with tailored support.
- **International collaboration and adaptation**
  - Create the proposed Rural Livelihoods Knowledge Exchange Platform anchored in MoRD, involving state missions and training institutions.
  - Encourage joint pilots with African countries where Indian community resource persons mentor local groups, but with local adaptation and research feedback loops.

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- **UPSC CSE Mains – GS Papers**

- 2014 GS-2: “The penetration of Self-Help Groups (SHGs) in rural areas in promoting participation in development programmes is facing socio-cultural hurdles. Examine.”
- 2016 GS-2: Question on “community-based organisations and their role in development and service delivery” (SHGs as example).
- 2019 GS-2: “Do you agree that the success of Self-Help Groups (SHGs) in rural development programmes is uneven and requires structural reforms? Discuss.” (theme).
- 2020 GS-2/GS-3: Questions on “financial inclusion”, “micro-finance as an anti-poverty tool” and “women’s collectives” where NRLM is a key case.
- Essay: Repeated themes on women’s empowerment, inclusive growth, India as voice of Global South, where NRLM offers rich content.

- **UPSC Prelims**

- Questions on SHG–Bank linkage, micro-finance, features of DAY-NRLM, and women’s empowerment schemes.
- Questions on South-South cooperation and India’s development partnerships in Africa.



# Should the Mythos AI model raise cybersecurity alarms?



**Aseem Jakhari**

Founder of Payatu and co-founder of the Nullcon cybersecurity conference



**Sharda Tickoo**

Country Manager, India at Trend AI, formerly Trend Micro

## PARLEY

**I**n April 7, AI firm Anthropic said its new model, Mythos, is so powerful at finding cybersecurity vulnerabilities that it will not be released publicly. Instead, the company said it will be shared with firms that build critical software used across the economy. The initiative, known as Project Glaswing, has raised cybersecurity concerns among most firms, which must now contend with AI-enabled attackers using so-called “zero-day” exploits, which are unknown even to a given piece of software’s developers, and therefore are not patched through software updates. *The Hindu* reported last week that the Union government and the Indian IT sector’s main cybersecurity body are both studying the implications of Mythos. Should the Mythos AI model raise cybersecurity alarms? Aseem Jakhari and Sharda Tickoo discuss this in a conversation moderated by **Aroon Deep**. Edited excerpts:

**Mythos is being billed as a powerful model for cybersecurity. To what extent will this have ripple effects? How seriously should the government and industry take it?**

**Aseem Jakhari:** As per Anthropic, based on what their research and blog posts say – we do not know exactly what is going on behind the scenes – Mythos is quite a leap from previous models, because they say it could do a lot of steps autonomously, whereas current researchers typically need to define and do it in an agentic fashion. We are going to see a lot of bugs being identified. It is not just Anthropic; other companies will also develop their models. I think delaying its release is good, but eventually, they will have to release it.

From the government side, I think the urgency is real. What Mythos and other research demonstrate is the ability to autonomously identify bugs, triage them, and even create exploits. This is going to give a lot of power to zero-day sellers, both in underground markets and companies that are selling it. I think things are going to change once these models are available to the general public.

**Sharda Tickoo:** Governments and industry should take it seriously, but not in a sensational way. It is not like AI is entering cyber for the first time; what has changed is the level of autonomy, scale, and sophistication. It is not just about AI finding vulnerabilities faster; it is also about compressing the entire lifecycle.



GETTY IMAGES

Because when we talk about vulnerabilities, there are multiple phases. You discover it, work on the exploit, develop, and maybe then try to weaponise it. The shift is there. That is where I think the urgency is more than before, because it is definitely going to be a very threatening move for governments and the public sector. But here is the practitioner’s reality: whenever we have been dealing with enterprises for a very long time, the discovery of the vulnerability has never been the biggest bottleneck.

The biggest bottleneck has always been execution. The reality is that while there is a focus on discovering new vulnerabilities, most enterprises are still struggling to patch even known (N-day) vulnerabilities.

If AI starts finding vulnerabilities at scale, it might cause a problem. But vulnerability management is not a scanning exercise; it is a full-fledged programme. Discovery is just one part of it. I think the real challenge is still prioritisation, validation, and managing it at scale.

So yes, this is a wake-up call. But the real response is not “find faster,” but rather to protect faster and smarter. And that is where I think multiple other controls have to work together from a defensive mechanism standpoint.

**What does the growing integration of LLMs into cybersecurity mean for cybersecurity professionals? Many Indians have made handsome sums in “bug bounties” by alerting companies to vulnerabilities in their code...**

**AJ:** It depends on the time horizon. Over the next five years, I think it will help bug bounty hunters find vulnerabilities faster. It is also about faster identification and reporting, and on the



What Mythos and other research demonstrate is the ability to autonomously identify bugs, triage them, and even create exploits. This is going to give a lot of power to zero-day sellers

ASEEM JAKHARI

customer side, it will help with triaging. Specifically for cybersecurity professionals, it will be good for those focusing on core learning, and in the future, they will need less expertise on specific subjects.

For example, in vulnerability identification today, you need deep expertise in reverse engineering across different architectures, such as ARM and Intel. That requirement will go down over the years. Those who focus on core learning and learn to use AI efficiently in their workflow will benefit the most. Over the long term, let us say 10 years, we may not need that much expertise, as AI will handle most of the heavy lifting.

**ST:** I think this will reshape how we view cybersecurity as a profession. It will also raise the bar for many professionals. Of course, some part of vulnerability hunting may become more efficient and automated. If a model can autonomously identify and exploit sophisticated flaws, then lower-level, repetitive work will get commoditised. Anthropic has said that even non-experts were able to use Mythos to find serious vulnerabilities, and in several cases, the model could also autonomously develop exploits.

However, I believe this does not mean the research will become less relevant – in fact, the opposite may happen. The bottleneck will shift from merely finding vulnerabilities or bugs to contextualising, prioritising, validating them, and defending at scale.

Human research will still matter. While AI will give much-needed assistance and improve accuracy, human research will remain essential in deciding what is truly exploitable in real-world environments and in understanding, for example, factors such as business impact and attack paths.

On bug bounties specifically, I would not expect elimination. Definitely there will be some disruption. Trend AI runs zero-day initiatives; it is one of the largest bug bounty programmes that we run and we are already seeing that it is

getting more and more efficient through the use of AI. So if AI can find vulnerabilities faster, then yes, some of the discovery work may get automated. But that is not where the real value lies anyway. It is good that it gets automated. I think the real value lies in the reality that we currently have more vulnerabilities than we can handle.

**What happens to state-sponsored attackers, like governments that use Pegasus to hack into phones using zero-day exploits? Does that ecosystem of firms get a new weapon or is it under threat?**

**AJ:** I think it will work both ways. Every new technology goes through Fear, Uncertainty, and Doubt (FUD) cycles, where people say, “If you don’t do this, you will be compromised.” The bad guys are eventually going to get access to these [Mythos-class] tools and use them. A lot of research shows that small open-source models with a few billion parameters were also able to identify what Mythos was able to find.

Both the attackers and defenders will catch up. One change that will happen for the attackers is that the price of zero-day vulnerabilities will drop, because you can identify them cheaply. The economics of zero-day attacks will change.

**ST:** This will definitely make life harder for cyber-offensive outfits, because they typically rely on exclusivity, like an exploit that is not available to anyone else, and a time lag. If there are Mythos-class or similar AI capabilities that can find and patch vulnerabilities faster, the shelf life of zero-days shrinks.

Some brokers might find their business models under pressure. But sophisticated offensive attackers will respond by moving faster. Maybe they will chain vulnerabilities and target environments where patching and visibility remain weak. So while opportunistic actors may struggle, sophisticated groups will evolve. There will be focus on issues such as misconfigurations as a source of vulnerability.

The practitioner’s reality is that even today, many successful attacks do not rely on zero-days, but on known vulnerabilities that were not patched in time.



To listen to the full interview  
Scan the code or go to the link  
[www.thehindu.com](http://www.thehindu.com)



- **Key Terms and Explanations**

- **Mythos / Mythos-class AI:** A hypothetical or emerging generation of Large Language Models (LLMs) capable of **autonomous agency** in identifying and exploiting software code vulnerabilities without human intervention.
- **Zero-Day Exploit:** A cyberattack targeting a software flaw that is unknown to the software creator. The "zero-day" refers to the fact that the developer has had zero days to fix it.
  - *Example:* A hidden bug in an Android update that allows a hacker to access photos, which Google hasn't discovered yet.
- **N-Day Vulnerability:** A vulnerability that has been publicly disclosed and for which a patch (fix) usually exists, but which many users or firms have not yet installed.
- **Project Glasswing:** A restricted-release initiative where high-powered AI tools are shared only with "vetted" entities (e.g., critical infrastructure providers) rather than the general public to prevent misuse by bad actors.
- **Agentic AI:** AI that doesn't just answer questions but can perform sequences of actions to achieve a goal—like navigating a file system, running tests, and rewriting code.
- **Bug Bounty:** A reward offered by companies to ethical hackers for finding and reporting vulnerabilities in their software.
- **Triage:** The process of prioritizing vulnerabilities based on their severity and the risk they pose to the business or state.

## Main Arguments and Substantive Parts


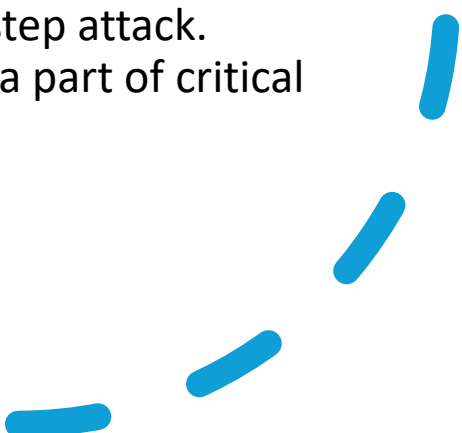
The core debate centers on whether AI-driven vulnerability discovery is a **"Force Multiplier"** for defense or a **"Doomsday Device"** for attackers.

**The Paradigm Shift in Autonomy:** Unlike previous tools that required human "hand-holding," newer models can autonomously bridge the gap between finding a bug and writing an exploit. This "compresses the lifecycle" of an attack.

**The Patching Bottleneck:** A critical counter-argument is that "finding" bugs isn't the problem; "fixing" them is. Enterprises struggle with "N-day" patches. Adding a flood of new "Zero-days" via AI might overwhelm IT departments rather than help them.

**Economic Disruption of the "Zero-Day" Market:** If AI makes finding bugs cheap and easy, the black-market price for exploits may crash. This could democratize high-level hacking, moving it from state-sponsored actors to common criminals.

**Human-Centric Future:** Experts argue that while low-level "scanning" will be automated, high-level "contextualization" (deciding if a bug actually matters in a specific business environment) remains a human domain.

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- **Historical Evolution of the Issue**
  - **Pre-2010s (The Manual Era):** Cybersecurity was largely manual. Experts used "fuzzing" (sending random data to programs) to find crashes.
  - **2010–2020 (The Scripting Era):** Tools became more sophisticated, but still required heavy human logic. The rise of "Stuxnet" showed that zero-days could be used as strategic national weapons.
  - **2021–2023 (The LLM Explosion):** ChatGPT and early models showed they could write code, but struggled with complex logic and "hallucinated" vulnerabilities.
  - **2024–Present (The Autonomous/Agentic Era):** The emergence of models like Mythos that can "think" through a multi-step attack. Governments (like India) began treating AI models as a part of critical national infrastructure (CNI) security.
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# AXIA IAS ACADEMY: UNPACKING THE MYTHOS AI CYBERSECURITY PARADIGM.

## 1. KEY TERMS & FRAMEWORK



**ZERO-DAY EXPLOIT**  
Definition explains seretess as locked exploits.



**N-DAY VULNERABILITY**  
Definite vulnerability of public vulnerability otested.



**N-DAY VULNERABILITY**  
Definition cornute or defined and to racero-day exploit.



**AGENTIC AI**  
A soost inrassive proceations of n-day vulnerability remote.



**AGENTIC AI**  
Agentic AI proteins probote if security and deSetlod AI.



**ETHICAL DUAL-USE**  
The conventions system or secured vulnerabilit-AI.

## 2. THE STRATEGIC DILEMMA



**ATTACKER**  
(AI-Enabled Zero-Day Focus)

VS



**DEFENDER**  
(Focus on Patching Bottlenecks)

## 3. MULTI-DIMENSIONAL IMPACT ANALYSIS



## 4. CHALLENGES & RISKS



Rogue Actors



Over-Patching Systems



Economic Inequality

## 5. THE HUMAN FACTOR & BUG BOUNTIES



AI-Led Scanning

VS



Human Context & Validation

Shift from Discovery to Prioritization

## 6. UPSC RELEVANCE & WAY FORWARD

### GS3 LINKAGES



### WAY FORWARD

Red Teaming

Defensive AI Investment

Updated Legislation

Intl. Treaties

## Logical and philosophical base

### Risk-benefit calculus and dual-use logic

- The same capability (AI that finds vulnerabilities) can serve both defence and offence.
- Ethically, the argument is that defensive deployment by responsible actors can reduce net harm, provided access is controlled.

### Security through pre-emption

- Philosophical stance: It is better for defenders to discover weaknesses first than for attackers to do so.
- This aligns with “proactive security” and “offence-informed defence” doctrines.

### Technological determinism vs human agency

- One underlying assumption is that powerful AI capabilities will inevitably emerge and diffuse; policy should manage, not halt, them.
- Yet the decision to restrict public release shows belief in human agency to shape deployment trajectories.

### Justice and distributive fairness

- Concentrating such powerful defensive tools in a small club of large corporations and states raises questions: who gets protected first, and who is left vulnerable?
- This touches Rawlsian concerns about fairness and the advantage of the least-protected.

### Epistemological trust in AI systems

- Security teams must decide how much to “trust” AI-generated findings and recommendations.
- AI systems can hallucinate, mis-assess risk, or miss contextual factors, raising questions about knowledge, verification, and human oversight.

- **Multidimensional analysis**

- **8.1 Social dimension**

- Public reliance on digital services (banking, healthcare, education) makes society highly vulnerable to cyber disruptions.
- Advanced AI-based defence can enhance citizens' trust in digital infrastructure, but misuse can erode trust and magnify digital divides.

- **8.2 Political dimension**

- Cybersecurity becomes a core component of national security and electoral integrity.
- Governments' choices on AI deployment in cyber operations influence diplomatic relations, strategic stability, and domestic debates on surveillance.

- **8.3 Legal dimension**

- Need to update cyber laws to:
  - Recognise AI-assisted attacks and AI-assisted defence.
  - Clarify responsibilities of software vendors to use such tools and disclose vulnerabilities.
- International law debates: whether AI-assisted cyber operations can be considered "use of force" or "armed attack" under UN Charter interpretations.

- **8.4 Ethical dimension**

- Questions of proportionality and discrimination in cyber operations (e.g., attacks that cripple hospitals or public utilities).
- Responsibility of AI developers towards foreseeable misuse; alignment with principles of beneficence, non-maleficence, autonomy, and justice.

- **8.5 International dimension**

- Cross-border nature of cyber threats demands cooperation on norms, information-sharing, and incident response (e.g., through CERT-to-CERT networks).
- Advanced AI cybersecurity capabilities may become tools of geopolitical influence and bargaining.

- **8.6 Economic dimension**

- Cyber incidents can severely impact GDP, investor confidence, and financial stability.
- AI-driven security may lower long-run breach costs but require significant upfront investment in infrastructure and skills.
- Changing zero-day economics could affect private security markets and state procurement practices.

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- Linkages with NCERTs
- **Class 9–10 Social Science (Information and communication technology, globalisation)**
  - Chapters on globalisation and digital economy: relate to how safe cyberspace is essential for global integration and e-commerce.
- **Class 11 Political Science – “Constitution at Work”, “Indian Constitution: Why and How?”**
  - Discussion on state’s role in ensuring national security and balancing it with rights.
  - Cybersecurity as a modern expression of security vs liberty trade-off.
- **Class 12 Political Science – “Contemporary World Politics”**
  - Chapters on security, globalisation, and international organisations; cyber warfare and AI as part of evolving security landscape.
- **Class 11 & 12 Informatics Practices / Computer Science (where applicable)**
  - Basic concepts of networks, security, and ethics in computing connect directly to AI-driven cyber defence and attacks.
- **Class 12 Ethics-related content in language/Philosophy (state-citizen relationship)**
  - Taken together, they allow you to discuss moral obligations of state and technology firms in protecting citizens’ data and infrastructure.



### Linkages with UPSC CSE syllabus

### GS Paper 2 (Polity & Governance)

- Government policies and interventions for development in various sectors (cybersecurity policies, AI policy).
- Role of civil services and regulatory bodies (CERT-In, NCIIPC, NCCC).
- Issues relating to federal structure and security (coordination between Union and States on cyber incidents).

### GS Paper 3 (Science & Tech, Internal Security, Economy)

- Basics of cyber security; money-laundering; role of external state and non-state actors.
- Developments and applications of AI, IT, and their security implications.
- Infrastructure: Energy, banking, communication as CII needing protection.

### GS Paper 4 (Ethics)

- Ethics in public administration and technology.
- Accountability, transparency, and moral responsibility of AI developers and governments.

## Way forward

### Policy and regulatory measures (India)

- Finalise and operationalise a robust National Cybersecurity Strategy that explicitly addresses AI-enabled threats and defences.
- Issue specific guidelines for responsible use of powerful AI in cybersecurity, including model access controls, logging, and red-teaming.

### Institutional strengthening

- Enhance CERT-In and NCIIPC with AI-driven capabilities, develop sectoral CERTs, and ensure regular joint exercises.
- Create an institutional mechanism for AI safety and cybersecurity coordination (linking MeitY, Home, Defence, RBI, etc.).

### Technical and operational reforms

- Focus not only on discovery but on robust vulnerability management programmes: patch governance, prioritisation, and change management.
- Encourage secure-by-design and zero-trust architectures to reduce impact even when vulnerabilities exist.

### Human resource and capacity building

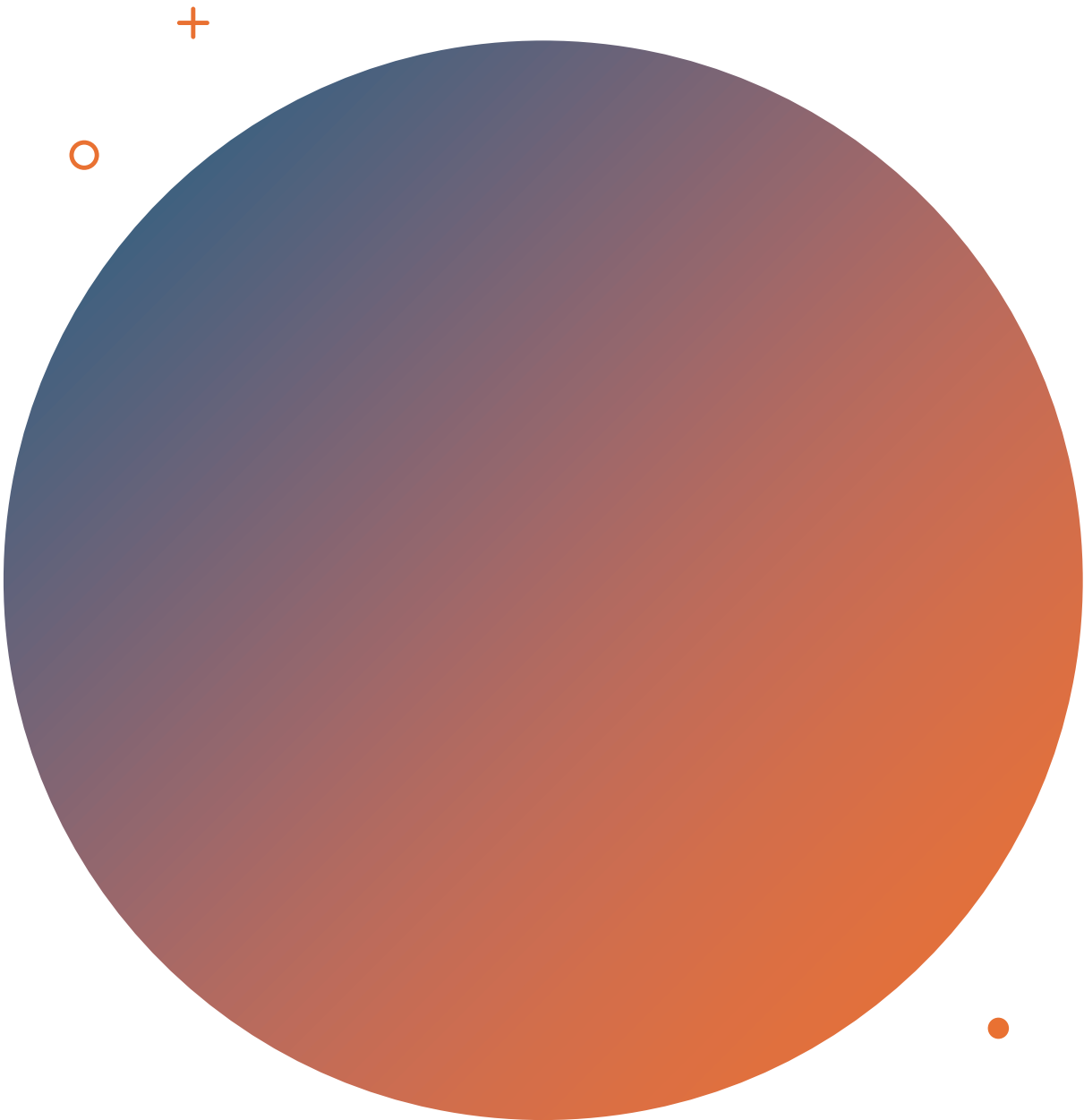
- Integrate AI-assisted cybersecurity training into technical and administrative curricula.
- Promote continuous reskilling so professionals move up the value chain from manual discovery to strategic defence and governance.

### Ethical and legal safeguards

- Develop clear legal standards for AI-assisted cyber operations, including oversight, accountability and redress.
- Encourage industry codes of conduct and transparency reports on use of powerful AI models for security.

### International cooperation

- Participate in multilateral efforts to develop norms on responsible AI use in cyber operations and to curb AI-driven cyber-crime.
- Strengthen cross-border incident-response collaboration and intelligence sharing.



- UPSC – Prelims
- Questions on:
  - CERT-In, NCIIPC, NCCC: their mandates and roles.
  - “Zero-day vulnerability”, “phishing”, “malware”, “botnet”.
  - Provisions of IT Act and related rules.
  - Basic AI / machine learning terms.
- UPSC – Mains
- **GS-2 / GS-3 style themes across years:**
  - “Discuss the challenges posed by cyber security threats to India’s internal security and suggest measures.”
  - “Examine the role of emerging technologies such as Artificial Intelligence and Big Data Analytics in improving governance as well as posing new security challenges.”
  - “What is Critical Information Infrastructure? Discuss the institutional mechanisms for its protection in India.”
  - “Data is the new oil but also a new vulnerability. Discuss.”
  - “How can India balance innovation in AI with the need to ensure safety, ethics, and security?”

# Insights from new GDP data

**SOBERING EFFECT.** The right lessons need to be drawn from lower nominal GDP values in the new series



**ANSHUMAN DAS**  
**SMRITI ROY TRIPATHI**

The year 2020 witnessed the much-anticipated release of the new GDP series with an updated base year. The initial euphoria surrounding the new series, however, has gradually given way to some speculation over the emerging growth scenario.

India was projected as an emerging economic \$4 trillion powerhouse. However, the new GDP series, presumably closer to the ground economic reality, raises the question of whether the actual data tells a different story. Accounting for the low nominal GDP and sustained depreciation, how do we re-estimated the GDP all over?

On February 27, the Ministry of Statistics and Programme Implementation (MoSPI) officially released the new GDP series with a base year of 2021-23. This series replaces the previous 2011-12 base year to better reflect the current economic structure.

The series revision is significant and timely, as recently the IMF's 2022 Article IV report downgraded India's National Accounts Statistics to C category. The new series indeed addresses many concerns regarding the methodological rigor, data availability and data quality, specifically due to an outdated base year. To begin with, the MoSPI released the aggregate data for four years: 2021-23 to 2023-24.

## AGGREGATE CHANGE

While the new series shows some interesting features, it also throws up challenges. The data clearly show that the old series was consistently overestimating nominal GDP by around 3-4 per cent (Table 1).

Besides methodological changes like the shift to double deflation (MoSPI, year-end review 2021), the new series uses extensive data from annual surveys such as the Annual Survey of Unincorporated Sector Enterprises (ASUE), and the Periodic Labour Force Survey (PLFS) and integrates administrative data to capture the sectors contributions accurately (MoSPI, 2021). Further, the use of a mixed methodology by combining Household Consumer Expenditure Survey, production and administrative data, and the commodity flow approach provided robust consumption estimates. This has led to a clearer picture emerging of the actual contributions made (both income and expenditure side), which however have the consistent overvaluation (Table 1).

## SYSTEMATIC DIFFERENCES

We examine this downward revision by comparing new and old nominal GDP

## TABLE 1

### Nominal GDP comparison: The new vs the old series

	2021-23	2021-24	2024-25	2025-26
<b>A. Nominal GDP - New</b>	3,60,17,827	3,98,83,889	4,38,87,309	4,85,47,237
(Base: 2021-23)		(11.6)	(5.7)	(8.6)
<b>B. Nominal GDP - Old</b>	2,88,86,471	3,01,77,894	3,38,98,140	3,57,11,986
(Base: 2011-12)		(13.0)	(9.8)	(8.3)
<b>C. Difference (A-B)</b>	7,13,356	97,06,995	99,89,169	1,28,36,251
% difference	-2.0	-2.8	-2.8	-2.3
<b>Input/Output (Growth)</b>	88,11.38	92,70.1	84,50.90	88,81.38
<b>D. Nominal GDP (in 2021-23 base dollar)</b>	3.24	3.3	3.76	3.93
(Base: 2021-23)				

Note: Figures in brackets indicate % growth. The base of GDP indicated indicates the base in 2021-23 and the, respectively.

## TABLE 2

### Systematic difference (New - Old): Expenditure side nominal GDP

	2021-23	2021-24	2024-25	2025-26
<b>Expenditure (2023)</b>	68,85,824	71,52,486	75,71,884	79,85,647
% difference	-0.1	0.1	0.1	0.0
<b>Government spending (GPI)</b>	1,35,281	38,419	92,717	2,88,122
% difference	4.8	-1	2.8	0.7
<b>Investment (GPI)</b>	37,468	88,159	1,78,798	1,18,860
% difference	0.7	0.0	1.8	2.2
<b>GDP</b>	7,13,356	97,06,997	99,89,169	1,28,36,251
% difference	-2.0	-2.8	-2.8	-2.3

## TABLE 3

### Systematic difference (New-Old): Value added nominal GDP

	2021-23	2021-24	2024-25	2025-26
<b>Primary sector</b>	3,85,136	3,46,375	3,26,240	3,08,933
% difference	0.1	0.1	4	4.4
<b>Secondary sector</b>	5,34,138	5,25,598	4,85,341	4,52,957
% difference	-1.1	-1.1	-2.2	-2.4
<b>Tertiary sector</b>	65,30,245	67,29,828	72,34,387	73,34,842
% difference	-1.9	-1.9	-1.9	-2.4
<b>GDP at basic price</b>	6,80,579	7,04,801	7,44,968	7,87,732
% difference	-1.4	-4	-1.9	-1.1

separately the expenditure approach and value added (production) approach and we do find a systematic pattern. The old series overestimated the nominal consumption data consistently.

The old series overestimated the nominal consumption data consistently, by a whopping 10-12 per cent. It also revised the investment data upward, roughly by 1-2 per cent

by a whopping 10-12 per cent (Table 2). It also revised the investment data upward, roughly by 1-2 per cent. The new series in a way reaffirmed the subdued nature of Indian consumption story in the aftermath of Covid pandemic.

**SECTORAL DIFFERENCES**  
Is the downward revision of aggregate GDP uniformly spread across major sectors? So, here again we find a systematic pattern.

The tertiary sector, mainly the services which accounts for over 58 per cent of the economy, witnessed a massive downward revision to the tune

of 7.4 per cent (Table 3). On the other hand, the primary sector comprising mainly agriculture and related activities had an upward revision to the range of 4-6 per cent.

With the tertiary sector being the backbone of the Indian growth story, and secondary showing a below-optimum growth, this is worrying.

## ACCOUNTING FOR DEPRECIATION

First, the size of economy has taken a sharp dip. With rapid depreciating sharply from 160 USD to 156 USD (see table 1) and simultaneously the downward revision of nominal GDP, India's GDP in dollar terms has grown really sluggishly during 2021-23 to 2025-26.

Based on average rupee USD exchange rate, India's economy has grown from \$1.24 trillion to \$1.93 trillion (Table 1).

In four years' time, it has expanded by \$649 billion. Note that the pace of expansion has slowed down considerably during 2021-23 due to unprecedented depreciation dynamics. With increasing geo-political tensions, ongoing war and Trump's tariff threats, depreciation pressure is likely to intensify.

The following implications emerge: First, it needs to be acknowledged that making India \$20 trillion by 2047 is becoming difficult.

Second, methodological issues need to be highlighted to understand the context in the growth narrative. If the imputation of performance of organised sector for unorganised sector was a source of overestimation, then nominal GDP during Covid times would be even smaller as the effect was disproportionately higher for the unorganised sectors.

Third, while we largely consider the dynamics of nominal GDP here, the confounding observation of nominal GDP deviating and real GDP booming despite deflation, this must be linked to the dynamics of GDP deflation. Understanding double deflation methods by definition the use of different deflators for outputs and inputs), in absence of sector specific price indices (particularly for services), we continue to use a mix of CPI and WPI.

Therefore, if the WPI index is relatively higher for inputs adjustment, real GDP estimate would be mechanically higher as WPI inflation during last few years has been subdued. This point, in fact, is being raised for some time now (see Subramanian 2019, and Anand, Puri, & Subramanian 2020).

Finally, deceleration in nominal GDP needs to be looked at from the point of firms level dynamics, examining trends in nominal sales and pricing behaviour to suggest what ails growth.

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- **Key Terms and Explanations**

- **GDP Base Year:** The benchmark year used to calculate "real" economic growth by removing the effects of inflation. Updating it (from 2011-12 to 2022-23) ensures the data reflects modern consumption patterns (e.g., including digital services that didn't exist a decade ago).
- **Nominal vs. Real GDP:** \* **Nominal GDP:** Value of goods/services at current market prices.
  - **Real GDP:** Value adjusted for inflation.
  - *Example:* if you sell 10 pens at ₹10 each, Nominal GDP is ₹100. If next year you sell 10 pens at ₹12, Nominal GDP is ₹120, but Real GDP remains ₹100 because production didn't actually increase.
- **GVA (Gross Value Added):** GDP minus taxes and subsidies. It shows the "value" added by specific sectors like agriculture or manufacturing.
- **GFCF (Gross Fixed Capital Formation):** A measure of investment—specifically, the net increase in physical assets (infrastructure, machinery).
- **PFCE (Private Final Consumption Expenditure):** The total spending by households on individual goods and services. It is the primary engine of the Indian economy.
- **GDP Deflator:** A measure of inflation that tracks the price changes of all goods and services produced domestically. Unlike CPI, it isn't limited to a fixed basket of consumer goods.
- **Double Deflation:** A sophisticated method where separate price indices are used to deflate the value of outputs and the value of inputs to arrive at a more accurate Real GVA.

- **Main Arguments and Substantive Parts**

- The core thesis suggests that the 2026 data revision reveals a "sobering" reality: previous estimates likely overshoot India's actual economic performance.
- **Overestimation in the Old Series:** The old series (2011-12 base) overestimated nominal GDP by roughly **3–4%**. This was primarily driven by a massive overestimation of the **Tertiary (Services) sector** and **Household Consumption (PFCE)**.
- **The Consumption Gap:** Consumption was revised downward by **10–12%**. This suggests that the post-pandemic recovery in domestic demand was weaker than earlier believed.
- **Currency Depreciation Impact:** The Rupee's slide against the USD (reaching 88/USD by 2025-26) combined with lower nominal GDP means India's economy in dollar terms is growing slower than projected (\$3.93 trillion by 2025-26).
- **Methodological Improvements:** The new series integrates the **Annual Survey of Unincorporated Sector Enterprises (ASUSE)** and **Periodic Labour Force Survey (PLFS)**, providing a more granular look at the unorganized sector, which was previously a "black box" of estimation.



- **Historical Evolution of the Issue**

- **Pre-1990s:** GDP calculation was heavily reliant on the "Production Method," focusing on agriculture and public sector industries with infrequent base-year updates.
- **2015 Revision:** India shifted the base year to 2011-12 and adopted the **MCA-21 database** (corporate filings). This was controversial as it showed high growth despite low industrial activity.
- **2018-2019 Back-series Controversy:** Revisions to older data led to debates regarding the "politicization" of data when growth rates under previous governments were revised downward.
- **2026 Revision (Present):** The shift to the 2022-23 base year represents a move toward international standards (SNA 2008), attempting to capture the unorganized sector and digital economy more accurately.



# INSIGHTS FROM NEW GDP DATA: THE 2026 REVISION AND INDIA'S FUTURE

## KEY FINDINGS & MACROECONOMIC IMPACT

### Nominal GDP Sobering Effect



- Old Series Overestimation: 3-4%
- Revised GDP Estimation



### Consumption Fatigue

- Massive Revision Down: 10-12%
- Consumption damage



### Rupee Depreciation

- \$3.93 Trillion Economy by 2025-26, and Depreciation pressure in incense analysis

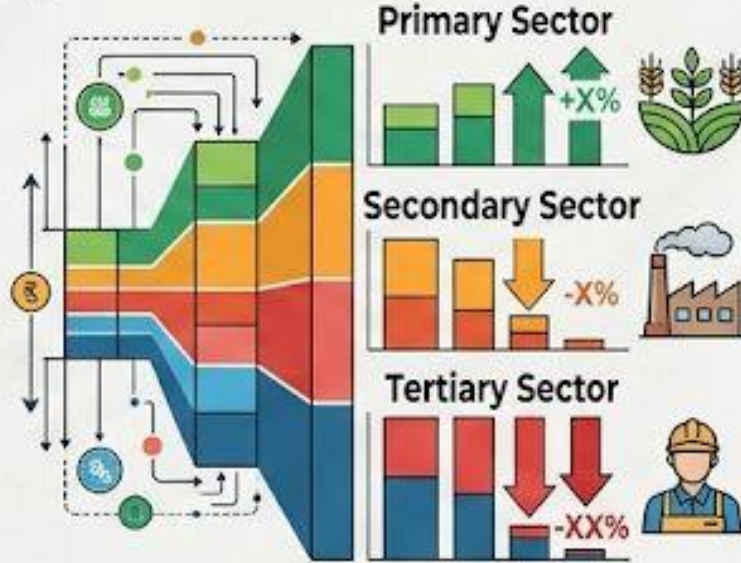


### Unorganized Sector Unveiled

- Integration of ASUSE & PLFS for accuracy

## SECTORAL DYNAMICS & SUSTAINABILITY

### Systematic Sector Revisions (New vs. Old)



- Consumption Gap (K-Shaped Recovery?)  
Consumer economic (sector revisions)
- Investment Revisions (GFCF: +1-2%)

## WAY FORWARD & UPSC STRATEGY

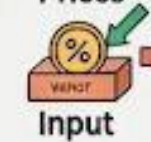
### Actionable Policy Recommendations



#### Institutional Autonomy for NSC

- Strong, Independent Pillar
- Strong, Independent Pillar

### Prices



#### Modernizing Deflators

- Double Deflation
- Service Price Index
- Service Price Index



#### More Frequent Revisions

- 5-year cycle of mam output, condpendn consent

### Focus for UPSC Mains (GS3)

- Economic Growth vs. Development
- Fiscal/CAD denominator effect
- Jobless Growth & Consumption Fatigue

- Logical and Philosophical Base
- **Epistemic Modesty in Economic Measurement**
  - The underlying logic is that macroeconomic aggregates are **estimates**, not perfect truths.
  - The article promotes epistemic modesty: policy makers and analysts should treat GDP numbers as approximations, revisable with new evidence.
- Evidence-based Policy vs Grand Narratives
  - It challenges the tendency to build political or national narratives solely on headline GDP or “trillion-dollar economy” milestones.
  - Instead, it argues for **evidence-based** policy, recognizing that mis-measurement can distort resource allocation and public perception.
- Methodological Consistency and Transparency
  - The philosophy behind revising GDP series is to improve **methodological rigor**, consistency with international standards, and transparency of assumptions.
  - The article implicitly upholds the norm that statistical credibility is a public good, underpinning democratic accountability.
- Balance between Optimism and Prudence
  - There is a tension between developmental optimism (“India as fastest-growing major economy”) and prudential realism (acknowledging over-estimation of consumption and services).
  - The discussion suggests that healthy policy requires optimism **tempered** by realism and honest data.

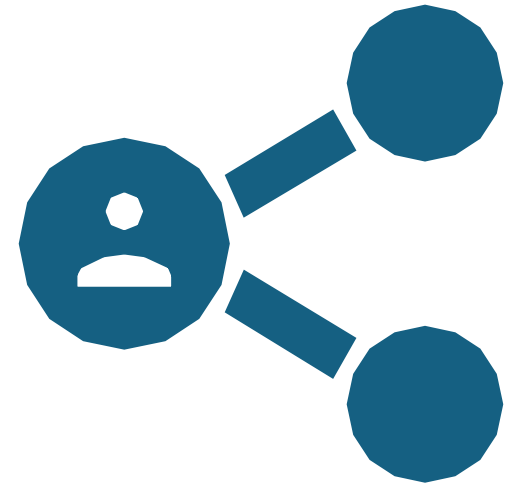


- **Multidimensional Analysis**

- **Social Dimension**

- Overstated GDP can create a **false sense** of social progress, masking persistent issues like unemployment, underemployment, malnutrition, and regional disparities.
- Better measurement helps align welfare schemes and social sector spending with actual needs rather than headline growth.
- Political Dimension
  - GDP figures are often used as political capital; revisions can alter the perceived performance of governments.
  - In a democracy, credible statistics are central to informed debate, federal negotiations, and electoral accountability.
- Legal Dimension
  - GDP estimates influence statutory ratios (like fiscal deficit targets under FRBM-type laws) and Finance Commission recommendations.
  - Disputes over data could prompt calls for statutory guarantees of statistical independence or parliamentary oversight of major revisions.
- Ethical Dimension
  - Presenting inflated economic performance is ethically problematic, akin to misrepresentation in public accounting.
  - Ethical governance demands transparency about assumptions, limitations, and revisions in national data.
- International Dimension
  - GDP in dollar terms is central to India's ranking as the "world's fifth-largest economy" etc.; downward revisions may change timelines but not the fundamental trajectory.
  - International investors, multilaterals, and rating agencies rely on credible data to assess risk; inconsistent or opaque revisions can raise risk premia.
- Economic Dimension
  - Revised nominal GDP changes ratios like tax-to-GDP, credit-to-GDP, and debt-to-GDP, affecting fiscal and monetary policy.
  - Under- or over-estimation can lead to mis-calibrated policies: too tight (if economy is weaker than believed) or too loose (if stronger than believed).

- Linkages with NCERTs
- Class 9, Economics – “People as Resource” and “Poverty as a Challenge”
  - Understanding GDP as an indicator of development and its limitations.
  - The revision debate directly illustrates why quantitative indicators alone cannot capture well-being.
- Class 10, Economics – “Development” and “Indian Economy” sections
  - Concepts of per capita income, other indicators of development, and inter-country comparisons.
  - Use the nominal GDP revision to discuss per capita income and why cross-country comparisons require caution.
- Class 11, Indian Economic Development – Chapters on “Indian Economy 1950–1990”, “Economic Reforms since 1991”
  - Role of planning, structural changes, and national income accounting.
  - Base year changes and sectoral shares can be shown through this example.
- Class 12, Macroeconomics – “National Income Accounting” and “Money and Banking”
  - Definitions of GDP, GVA, nominal vs real, base year, deflator, and sectoral classification.
  - The debate on new vs old series is a live case study for how national accounts are periodically revised.





- **Linkages with UPSC CSE Syllabus**

- GS Paper 3 – Indian Economy
  - Topics: Growth and development, national income and per capita income, inclusive growth, government budgeting, fiscal indicators, and infrastructure.
  - Questions can focus on: “GDP base year revision”, “reliability of India’s national income data”, “nominal vs real GDP and policy implications”.
- GS Paper 2 – Governance and Institutions
  - Role of statutory, regulatory, and quasi-judicial bodies; governance issues.
  - Independence of statistical institutions, data governance, and evidence-based policymaking.
- GS Paper 4 – Ethics, Integrity and Aptitude
  - Themes: Honesty in public communication, integrity of institutions, objectivity, and accountability.
  - Statistical manipulation or selective presentation of data as an ethical issue.
- GS Paper 1 – Indian Society and Post-independence India
  - Socio-economic indicators, structural transformation of the economy, and debates on development models.

## Way Forward

### Strengthening Statistical Institutions

- Grant greater functional and financial autonomy to national statistical agencies.
- Encourage peer review by independent national and international experts, and publish methodology notes in accessible language.

### Improving Data Sources and Coverage

- Expand survey coverage of informal sector, gig economy, and small enterprises.
- Integrate administrative datasets (GST, corporate filings, digital payments) with robust privacy safeguards.

### Transparent Communication of Revisions

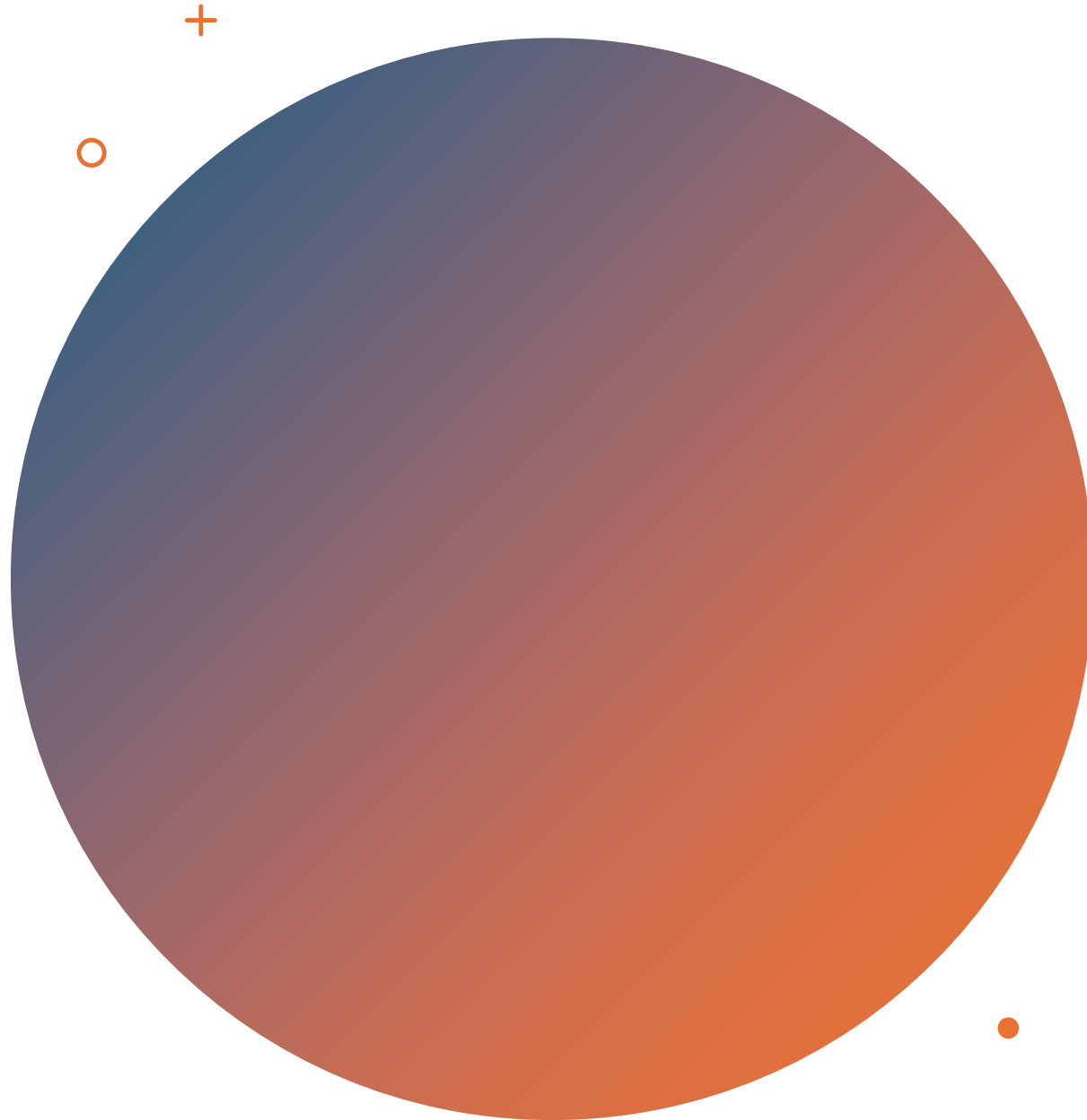
- When base year changes or large revisions occur, issue explanatory notes, FAQs, and technical papers.
- Engage with academia, media, and civil society through regular briefings to avoid mistrust.

### Diversifying Indicators of Progress

- Complement GDP with human development indices, multidimensional poverty indices, employment data, nutrition and learning outcomes.
- For policymaking, track distributional aspects (regional, gender, caste, rural–urban).

### Institutional Checks against Data Misuse

- Strengthen parliamentary committees on statistics and finance to oversee major changes.
- Develop clear codes of ethics for civil servants and statisticians about data handling and public communication.



- UPSC CSE – Prelims (Economy)
- Questions on:
  - “Which of the following is/are included in calculating GDP by expenditure method?”
  - Difference between GDP at constant prices and GDP at current prices.
  - Concept of GVA and the relationship between GVA and GDP.
  - Impact of base year change on GDP growth estimation.
- UPSC CSE – Mains
- 2013/2014 (GS-3): “Critically examine whether GDP is an adequate measure of development.”
- 2015 (GS-3): “Discuss the rationale behind periodically revising the base year for national income estimates in India. What are the implications of such changes?”
- 2018 (GS-3): “How far do you agree that the GDP growth of India has not translated into commensurate employment growth?”
- 2019 (GS-3): “The changing base year and new series of national income have led to conceptual issues. Discuss their implications for assessing economic performance.”
- Essay (multiple years): Themes on development, data, and policy.



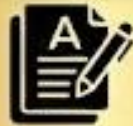
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