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DAILY CURRENT AFFAIRS DATED 04.03.2026

GS Paper II: Current Affairs

1. Doctoral Education in India: Need for Reform

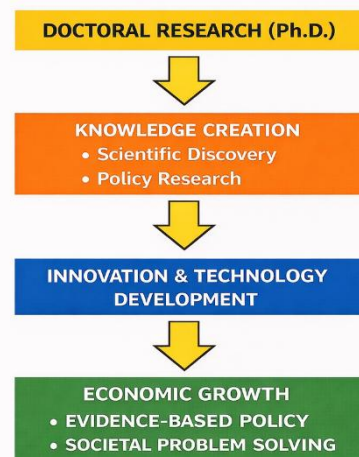
a. Introduction

Doctoral education represents the highest level of academic training and plays a vital role in expanding the frontiers of knowledge. Through rigorous research, doctoral scholars contribute to scientific advancement, technological innovation, and evidence-based policymaking. Countries with strong research ecosystems—such as the United States, Germany, and China—have leveraged doctoral research to develop globally competitive industries, advance cutting-edge technologies, and strengthen research-driven governance.

India, too, faces complex developmental challenges in areas such as public health, agriculture, climate change, digital inclusion, and education. Addressing these challenges requires sustained and high-quality research capable of generating new ideas as well as practical solutions. In this context, the effectiveness of the doctoral education system becomes critically important.

Despite the rapid expansion of higher education and increasing enrolment in doctoral programmes, several structural and cultural weaknesses continue to limit the impact of India's Ph.D. ecosystem. Many doctoral projects remain disconnected from real-world needs, research quality often suffers due to metric-driven evaluation systems, and administrative inefficiencies prolong the duration of doctoral study. These challenges highlight the urgent need to reform doctoral education so that it can contribute more meaningfully to knowledge creation and national development.

Doctoral Education and National Innovation Ecosystem



b. Structural Issues in India's Doctoral Education System

i. Overemphasis on Publication Counts

Metric-Driven Evaluation Culture

In many Indian universities, doctoral scholars are assessed largely through quantitative research metrics. Evaluation frequently depends on:

- Number of research papers published
- Impact factor of journals
- Indexing status of publications

While these indicators are intended to measure academic productivity, excessive reliance on them has produced unintended consequences.

Distortion of Research Priorities

When publication counts become the primary criterion of evaluation, scholars often prioritise speed over depth. Instead of investing time in innovative or high-risk research questions, many researchers pursue incremental studies that can be published quickly.

This environment also encourages the growth of predatory journals—publications that charge fees but provide little or no meaningful peer review. Consequently, the focus on numerical indicators may undermine the broader purpose of doctoral education, which is to generate original and socially relevant knowledge.

ii. Excessively Long Duration of Doctoral Programmes

Structural Causes of Delay

Ideally, a doctoral degree should be completed within three to five years. However, in many Indian universities doctoral studies extend to six or even eight years. Several factors contribute to this prolonged duration:

- Mandatory publication requirements before thesis submission
- Slow peer-review processes in academic journals
- Institutional bureaucratic procedures for approvals and documentation
- Delays in thesis evaluation by external examiners

Consequences of Extended Doctoral Timelines

Prolonged doctoral programmes create several adverse outcomes:

- Loss of productive career years for scholars
- Financial and psychological stress among doctoral candidates
- Reduced attractiveness of research careers for talented students

Over time, these factors weaken the country's research talent pipeline.

iii. Obsession with Lengthy Theses

Cultural Preference for Large Dissertations

In several Indian universities, doctoral theses are expected to be extremely long—often extending to two hundred or even three hundred pages. This expectation has created an implicit assumption that longer theses reflect superior scholarship.

Impact on Research Efficiency

In practice, many globally influential doctoral works are concise yet intellectually powerful. They focus on clearly defined research questions and present precise evidence supporting their conclusions.

The emphasis on length in India often leads scholars to devote excessive effort to:

- Extended literature reviews
- Repetitive explanations
- Overly detailed introductory chapters

These practices consume valuable time that could otherwise be directed toward deeper research, experimentation, and data analysis.

iv. Weak Link Between Research and Societal Needs

Limited Real-World Impact

A major concern within India's doctoral ecosystem is the limited connection between academic research and societal needs. Many doctoral theses remain confined to university libraries without contributing significantly to technological innovation, public policy improvement, or social transformation.

Missed Opportunities for Development

This disconnect is particularly problematic for a country facing pressing developmental challenges. Research in areas such as:

- Agricultural productivity
- Public health systems

- Renewable energy
- Urban planning
- Digital governance

has enormous potential to improve national outcomes. Yet institutional incentives rarely encourage doctoral scholars to pursue applied research addressing these challenges.

v. Pressure from Supervisors and Academic Hierarchies

Power Imbalances in Doctoral Supervision

Doctoral supervision is intended to guide scholars toward intellectual independence. However, hierarchical academic cultures sometimes create unhealthy power dynamics between supervisors and doctoral candidates.

In some departments or laboratories, scholars may be treated primarily as contributors to the supervisor's research agenda rather than as independent researchers.

Academic and Psychological Consequences

Such environments may result in:

- Pressure to prioritise publication output over research quality
- Delays in thesis completion to maintain laboratory productivity
- Mental stress and reduced academic autonomy

Ensuring ethical and supportive supervision practices is therefore essential for a healthy research ecosystem.

vi. Administrative and Bureaucratic Delays

Inefficient Thesis Evaluation Processes

The final stages of doctoral completion involve several procedural steps, including:

- Thesis submission
- External evaluation
- Revisions
- Viva voce — oral defence

In many Indian universities, these stages are affected by administrative inefficiencies.

Impact on Completion Timelines

Communication with external examiners may take several months, and scheduling viva examinations often involves additional delays. As a result, scholars frequently remain enrolled long after completing their research work, solely due to slow administrative processing.

These inefficiencies reduce the overall productivity of the research ecosystem.

c. International Approaches to Doctoral Education

i. Emerging Global Models

Several countries have begun experimenting with alternative models of doctoral training that emphasise practical impact and interdisciplinary collaboration.

ii. Applied Doctoral Programmes

Example of China's Applied Doctorates

China, for instance, has introduced forms of applied doctoral programmes in which evaluation focuses not only on publications but also on tangible outcomes such as:

- Technological prototypes

- Engineering solutions
- Industrial innovations

Multi-Stakeholder Evaluation

In such programmes, evaluation committees may include:

- Academic scholars
- Industry experts
- Technology professionals

This broader evaluation framework encourages doctoral research that contributes directly to economic development, technological advancement, and societal problem-solving.

These international experiences demonstrate that doctoral education can evolve beyond traditional academic models while maintaining rigorous research standards.

d. Importance of Reforming Doctoral Education in India

i. Doctoral Research and National Development

India's aspiration to become a knowledge-driven and innovation-oriented economy depends heavily on the quality of its research ecosystem. Doctoral research can play a transformative role across several strategic sectors.

ii. Strategic Areas Benefiting from Doctoral Research

Public Health

Doctoral studies contribute to:

- Disease control strategies
- Vaccine development
- Health system improvements

Agriculture

Research supports:

- Climate-resilient crop development
- Sustainable farming practices
- Precision agriculture technologies

Environmental Sustainability

Research enables:

- Renewable energy innovation
- Climate adaptation strategies
- Sustainable resource management

Digital Economy

Doctoral work drives advances in:

- Artificial intelligence
- Data science
- Information systems

Education Systems

Research contributes to:

- Pedagogical innovation

- Learning technologies
- Education policy reform

Thus, strengthening doctoral education is not merely an academic concern; it is closely linked with innovation capacity, policy effectiveness, and long-term economic development.

e. Possible Reforms in India's Doctoral Education System

i. Emphasising Research Quality Over Quantity

Evaluation systems should move beyond simple numerical indicators of productivity. Instead of focusing primarily on publication counts, doctoral assessment should prioritise:

- Originality of research
- Methodological rigour
- Societal relevance of research outcomes

Such an approach would encourage scholars to pursue deeper and more innovative research questions.

ii. Promoting Applied and Interdisciplinary Research

Universities should actively encourage doctoral research that addresses real-world challenges through interdisciplinary collaboration. Complex issues such as climate change, healthcare systems, digital governance, and sustainable agriculture require insights from multiple academic disciplines.

Institutional support for such collaborations would significantly increase the practical value of doctoral research.

iii. Strengthening Industry–Academia Collaboration

Closer engagement between universities, industries, and policy institutions can enhance the relevance of doctoral research.

Possible mechanisms include:

- Inclusion of industry professionals in doctoral advisory committees
- Joint research projects between universities and industries
- Policy research partnerships with government institutions

These measures can help translate academic discoveries into practical applications.

iv. Encouraging Concise and Impact-Oriented Theses

Doctoral dissertations should focus on the clarity and originality of their contributions rather than their physical length. Encouraging compact, well-structured theses centred on key findings can improve both efficiency and readability while maintaining academic rigour.

v. Strengthening Research Ethics and Academic Integrity

Improving doctoral education also requires stronger enforcement of ethical research practices.

Key measures include:

- Strict action against predatory publishing
- Transparent supervision and mentoring systems
- Regular monitoring of research progress

Regulatory bodies such as the University Grants Commission can play an important role in strengthening these standards.

vi. Reducing Bureaucratic Delays

Digitising administrative processes related to thesis submission, external evaluation, and viva scheduling can significantly reduce delays in doctoral completion.

Streamlined procedures would allow scholars to complete their programmes within reasonable timelines and improve the efficiency of the research system.

Conclusion

Doctoral education serves as a critical bridge between knowledge creation and societal transformation. For India to emerge as a leading knowledge economy, its doctoral programmes must emphasise intellectual originality, practical relevance, and ethical academic practices. Moving away from a system that prioritises numerical metrics toward one that values meaningful and impactful research will strengthen the country’s innovation ecosystem. By reforming doctoral education in this direction, India can ensure that its research community contributes not only to academic advancement but also to sustainable national development and global scientific progress.

GS Paper II: International Relations

2. Canada–India Uranium Supply Agreement

a. Introduction

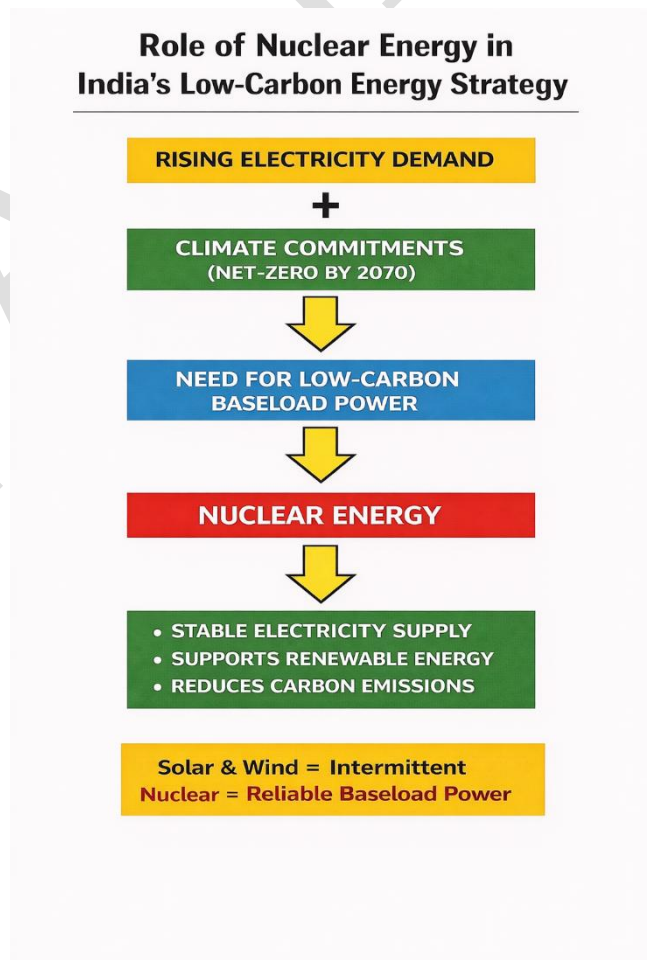
Doctoral-level energy planning increasingly recognises nuclear power as a critical pillar of long-term energy security and decarbonisation strategies. For a rapidly growing economy such as India, balancing rising electricity demand with climate commitments requires reliable sources of low-carbon baseload power. Unlike intermittent renewable sources such as solar and wind, nuclear energy can generate continuous electricity, making it an important stabilising component of the energy mix.

In this context, India and Canada have concluded a long-term uranium supply agreement during the visit of Canadian Prime Minister Mark Carney to India. Under this agreement, the Canadian mining company Cameco will supply approximately twenty-two million pounds of uranium—roughly equivalent to ten thousand tonnes—to India between 2027 and 2035.

Beyond its commercial value, the agreement signals the strengthening of strategic energy cooperation between the two countries and reflects India’s increasing need for reliable nuclear fuel as it expands its nuclear power capacity.

b. India’s Nuclear Energy Strategy

India views nuclear energy as an essential component of its long-term transition toward a low-carbon energy system. Renewable energy sources such as solar and wind have expanded rapidly, but their intermittent nature requires complementary baseload sources to ensure stable electricity supply.



Nuclear power plants fulfil this role by providing continuous generation irrespective of weather conditions.

India has announced ambitious long-term climate and energy goals. The country aims to achieve net-zero greenhouse gas emissions by 2070, and nuclear energy is expected to play an important role in achieving this objective. At present, India's nuclear power capacity is roughly nine gigawatts, but policy planning envisions a dramatic expansion to about one hundred gigawatts by 2047, coinciding with the centenary of India's independence.

Such expansion highlights the importance of reliable nuclear fuel supply chains, which directly connects to India's international uranium procurement strategy.

c. Why India Imports Uranium

Although India possesses uranium deposits, domestic production remains insufficient to meet the requirements of existing and planned nuclear reactors. Several structural factors contribute to this dependence on imports.

i. Low Grade of Domestic Uranium Ore

Indian uranium deposits generally contain relatively low concentrations of uranium. The grade of uranium ore in India typically ranges between 0.02 and 0.45 percent, whereas many global deposits contain 1 to 2 percent uranium. Lower concentrations increase mining costs and reduce extraction efficiency.

ii. Limited Domestic Production Capacity

Existing uranium mines supply only about 30 percent of the fuel required by India's nuclear reactors. As a result, the country relies significantly on international suppliers to bridge the supply gap.

iii. Rising Demand from Expanding Reactor Fleet

India currently consumes roughly 1,500 to 2,000 tonnes of uranium annually. As additional nuclear reactors become operational, fuel demand is expected to increase steadily. Ensuring uninterrupted fuel availability therefore requires long-term international supply agreements.

These structural constraints make diversified global sourcing an essential component of India's nuclear energy strategy.

d. Key Features of the Canada Uranium Agreement

The uranium supply agreement with Canada represents an important addition to India's global nuclear fuel network.

i. Supplier and Contract Quantity

The uranium will be supplied by Cameco Corporation, one of the world's leading uranium producers. The agreement covers approximately twenty-two million pounds of uranium, equivalent to about ten thousand tonnes.

ii. Supply Timeline

Deliveries will begin in 2027 and continue until 2035, ensuring a steady long-term supply of nuclear fuel for India's reactors.

iii. Estimated Contract Value

The agreement is estimated to be worth around 2.6 billion Canadian dollars, equivalent to roughly 1.9 billion US dollars.

iv. Strategic Significance

Beyond the commercial aspect, the agreement strengthens India's long-term nuclear fuel security and deepens strategic energy cooperation between India and Canada.

While this agreement expands India's fuel supply sources, it forms part of a broader strategy of diversifying uranium imports across multiple countries.

e. India's Uranium Supply Network

India has deliberately diversified its uranium import sources in order to reduce dependence on any single supplier and ensure stable long-term fuel availability.

i. Russia

Russia plays a significant role in India's nuclear programme by providing lifetime uranium supplies for the Kudankulam nuclear power plant in Tamil Nadu.

ii. Kazakhstan

Kazakhstan is one of the world's largest uranium producers and supplies uranium to India through the state-owned company Kazatomprom.

iii. Uzbekistan

Uzbekistan also exports uranium to India through its national company Navoiyuran.

iv. Emerging Supply Partnerships

The agreement with Canada further broadens India's supply network. In the future, India may also deepen supply arrangements with Australia and the United States, both of which possess substantial uranium reserves.

Such diversification is crucial because nuclear reactors require predictable, uninterrupted fuel supplies over several decades.

While international imports remain essential, India is simultaneously working to expand its domestic uranium production capacity.

f. Domestic Uranium Production in India

India has initiated several measures to increase indigenous uranium production and reduce long-term import dependence.

i. Major Mining Regions

Important uranium mining areas include:

- Jaduguda belt in Jharkhand
- Tummalapalle deposit in Andhra Pradesh

Additional deposits have also been identified in Rajasthan, Meghalaya and Telangana.

ii. Estimated Uranium Reserves

India's total estimated uranium ore reserves are about 4.3 lakh tonnes.

iii. Current Mining Operations

At present, approximately seven uranium mines are operational in the country.

iv. Production Expansion Plans

Government initiatives aim to increase domestic uranium production to roughly 5,400 tonnes annually in the coming years.

However, even with such expansion, domestic production will still fall short of the requirements of India's rapidly growing nuclear power programme. This limitation reinforces the importance of international fuel partnerships.

g. India's Three-Stage Nuclear Power Programme

India's nuclear energy strategy is distinctive because it aims to utilise the country's abundant thorium reserves, which are significantly larger than its uranium deposits.

i. Stage I – Pressurised Heavy Water Reactors (PHWRs)

In the first stage, nuclear reactors use natural uranium as fuel. These reactors are primarily Pressurised Heavy Water Reactors, which currently form the backbone of India's nuclear power generation.

ii. Stage II – Fast Breeder Reactors

In the second stage, plutonium extracted from spent fuel is used in Fast Breeder Reactors (FBRs). These reactors generate more fissile material than they consume, thereby increasing the available nuclear fuel supply.

India's Prototype Fast Breeder Reactor (PFBR) is located at Kalpakkam in Tamil Nadu.

iii. Stage III – Thorium-Based Reactors

The final stage aims to use thorium as the principal nuclear fuel through advanced reactor technologies such as the Advanced Heavy Water Reactor (AHWR).

Since India possesses some of the world's largest thorium reserves, this stage represents the long-term goal of achieving energy independence through indigenous fuel resources.

Very few countries are pursuing such a thorium-based strategy, making India's nuclear programme unique in the global context.

h. Significance of the Canada Uranium Agreement

The agreement between India and Canada has several strategic implications for India's energy and foreign policy.

i. Strengthening Energy Security

Diversifying uranium imports reduces the risk of supply disruptions and ensures reliable fuel availability for nuclear reactors.

ii. Supporting Nuclear Power Expansion

A stable uranium supply is essential if India is to achieve its goal of 100 gigawatts of nuclear power capacity by 2047.

iii. Advancing Clean Energy Transition

Nuclear energy produces very low greenhouse gas emissions during electricity generation, making it an important component of India's climate strategy.

iv. Reviving India-Canada Nuclear Cooperation

The agreement also symbolises the revival of nuclear cooperation between the two countries. Historically, Canada assisted India in building the CIRUS research reactor and contributed to the development of the Rajasthan Atomic Power Station.

The new partnership therefore represents renewed engagement after a long period of diplomatic tensions.

i. Challenges in India's Nuclear Expansion

Despite its strategic importance, India's nuclear power programme faces a number of constraints.

i. Continued Fuel Dependence

Limited domestic uranium production means that India must rely heavily on imported fuel.

ii. Slow Reactor Construction

Nuclear projects often experience delays due to land acquisition challenges, regulatory approvals and high capital costs.

iii. Technological Barriers

The development of thorium-based reactors remains technologically complex and is still in the experimental stage.

iv. Public Safety and Environmental Concerns

Public concerns regarding nuclear safety, radioactive waste management and environmental risks sometimes generate resistance to new nuclear projects.

Addressing these challenges will be critical if nuclear energy is to realise its full potential in India's energy mix.

j. Way Forward

Strengthening India's nuclear energy sector will require a balanced combination of domestic initiatives and international partnerships.

India should continue to diversify uranium imports through long-term supply agreements with reliable partners. Simultaneously, greater investment in domestic exploration, mining technology and production capacity can gradually reduce import dependence.

Progress in fast breeder reactor technology will be crucial for advancing the second stage of the nuclear programme. In the longer term, sustained research and development efforts will be necessary to operationalise thorium-based reactors, which could ultimately provide India with a largely indigenous nuclear fuel cycle.

If these steps are pursued systematically, nuclear power can become a stable, clean and strategically secure source of electricity, supporting India's long-term energy security while contributing to its pathway toward net-zero emissions.

Conclusion

The Canada-India uranium supply agreement strengthens India's long-term nuclear fuel security and supports the planned expansion of nuclear power capacity. By combining diversified international fuel partnerships with domestic production and technological advancement in its three-stage nuclear programme, India can strengthen energy security while advancing its transition toward a low-carbon and sustainable energy future.

GS Paper III: Economics

3. New GDP Series (Base Year 2022-23): Changes in the Sectoral Structure of the Indian Economy

a. Introduction

Gross Domestic Product (GDP) is the most widely used indicator for measuring the size and performance of an economy. Since economies evolve continuously, statistical systems periodically

revise the base year used for calculating GDP. Such revisions incorporate structural changes in production patterns, improve data quality, and align national accounts with international statistical standards.

In this context, the Ministry of Statistics and Programme Implementation (MoSPI) has introduced a new GDP series with 2022–23 as the base year, replacing the earlier series that used 2011–12 as the base year. The revised methodology incorporates improved datasets and statistical techniques, leading to important changes in the measured structure of the Indian economy. The new series indicates a somewhat larger agricultural sector, stronger manufacturing growth, and a better representation of informal economic activity.

b. Why GDP Series are Periodically Revised

Rebasing the GDP series is a routine statistical exercise undertaken by most countries. The purpose is not to change the economy itself but to measure it more accurately.

i. Structural Changes in the Economy

- Over time, new industries, technologies, and services emerge while older sectors decline in importance.
- Updating the base year helps national accounts capture these evolving economic structures more accurately.

ii. Availability of Improved Data Sources

- Government surveys, administrative records, and digital databases generate more reliable information on production, employment, and consumption patterns.
- Incorporating these datasets improves the accuracy of GDP estimates.

iii. Changing Price Structures

- Real GDP calculations depend on price indices used to adjust for inflation.
- Rebasing ensures that these indices reflect current price patterns rather than outdated ones.

iv. Alignment with International Standards

- GDP revisions help align national statistics with frameworks such as the United Nations System of National Accounts (SNA).
- This improves international comparability of economic data.

India has revised its GDP base year several times in the past, including 1993–94, 1999–2000, 2004–05, and 2011–12, before the latest revision to 2022–23.

c. Key Changes in the New GDP Series

The revised national accounts introduce several changes in the way India's economy is measured.

i. Agriculture Appears Larger

- Improved measurement of horticulture and high-value crops increases agriculture's estimated contribution to GDP.

Why GDP Base Year is Revised



ii. Manufacturing Growth Appears Stronger

- Better measurement techniques and improved coverage of informal enterprises raise the estimated growth of the manufacturing sector.

iii. Informal Economy Better Captured

- Integration of new survey datasets provides a more accurate representation of small and unregistered enterprises.

Together, these revisions provide a more realistic picture of economic activity in India.

d. Agriculture Sector Appears Larger

One of the key outcomes of the new GDP series is the increase in the estimated share of agriculture in the national economy.

According to the revised data, agriculture accounted for approximately 18.2 percent of GDP in 2022–23, compared with about 16.5 percent under the earlier series. Despite this increase, the long-term structural trend remains unchanged: as the economy develops, agriculture’s share gradually declines, reaching roughly 16.2 percent by 2025–26.

Two methodological improvements explain the higher estimate.

i. Inclusion of High-Value Agricultural Production

- The revised series incorporates a broader measurement of horticulture activities, including fruits, vegetables, and floriculture.
- These activities generate higher value added compared with traditional cereal cultivation, thereby raising the estimated contribution of agriculture to GDP.

ii. Revised Estimates of Agricultural Input Costs

- The methodology now accounts for the growing shift from diesel-powered irrigation pumps to electricity and solar-powered systems.
- Lower estimated input costs increase the calculated net value added, which raises agriculture’s share in GDP.

e. Stronger Manufacturing Growth

The new GDP methodology portrays manufacturing as a stronger driver of economic growth.

Under the earlier GDP series, manufacturing growth during 2023–24 to 2025–26 was estimated at around 8 percent annually. Under the revised methodology, the same period shows an average growth rate of about 11.2 percent.

Two methodological improvements explain this difference.

i. Improved Measurement of Informal Manufacturing

- India’s manufacturing sector includes a large number of small and unregistered enterprises operating outside the formal corporate sector.
- Earlier GDP estimates often approximated their output using data from formal sector companies.
- The new series incorporates improved datasets from the Annual Survey of Unincorporated Sector Enterprises (ASUSE) and the Periodic Labour Force Survey (PLFS).
- These surveys provide more accurate information on production, employment, and productivity in small enterprises.

ii. Improved Measurement of Real Growth

- The earlier system relied mainly on the single-deflator method, which used the same price index to adjust both output values and input costs.
- This sometimes produced distortions in growth estimates.
- The revised methodology applies separate price adjustments for outputs and inputs, resulting in a more accurate estimate of real manufacturing growth.

f. Better Representation of the Informal Economy

A significant goal of the revised GDP series is to improve the measurement of India's large informal sector.

A substantial portion of India's economic activity occurs in small enterprises, household businesses, self-employment, and unregistered firms. Earlier GDP calculations were often criticised for underrepresenting these activities because they relied heavily on formal sector data.

The new series incorporates richer datasets from national surveys.

i. Annual Survey of Unincorporated Sector Enterprises (ASUSE)

- Provides detailed information on production, value added, and operations of small enterprises.

ii. Periodic Labour Force Survey (PLFS)

- Offers comprehensive data on employment patterns and workforce participation.

By integrating these datasets, the new GDP series reduces reliance on indirect proxies and provides a more accurate representation of informal economic activity.

g. Impact on the Size and Growth of GDP

The revised methodology slightly alters the estimated size of the Indian economy.

i. Change in Nominal GDP Estimates

- Nominal GDP under the revised calculations is estimated to be about 3–4 percent lower than earlier estimates for the same period.

ii. Smoother Growth Trends

- Earlier GDP estimates suggested growth fluctuating between 6.5 percent and 9.2 percent in recent years.
- Under the revised series, growth appears more stable, ranging between 7.1 percent and 7.6 percent.

This suggests that the new methodology produces less volatile and potentially more reliable growth estimates.

h. Significance of the New GDP Series

The introduction of the new GDP series has important implications for economic analysis and policymaking.

i. Better Policy Design

- Improved measurement of sectoral output and employment enables more targeted development policies.

ii. Clearer Understanding of the Informal Sector

- Accurate data improves insights into India's labour market and small enterprise ecosystem.

iii. Improved Assessment of Structural Transformation

- Revised data provides a clearer picture of how different sectors contribute to economic growth.

iv. Enhanced Global Credibility

- Alignment with international statistical standards improves confidence among global investors and international institutions.

i. Challenges and Criticisms

Despite methodological improvements, measuring a large and diverse economy like India remains difficult.

i. Persistent Informal Sector Challenges

- Many small enterprises remain undocumented, making complete data coverage difficult.

ii. Confusion Due to Methodological Revisions

- Frequent changes in GDP methodology can complicate historical comparisons.

iii. Limitations of Survey Data

- Surveys may still miss some micro-enterprises or household businesses, creating potential data gaps.

Addressing these challenges requires further strengthening of the statistical system.

j. Way Forward

Improving India's national accounts system requires continuous enhancement of economic data collection and integration.

i. Expanding Digital Data Sources

- Digital payments, online business registrations, and electronic tax records can provide real-time information on economic activity.

ii. Strengthening National Surveys

- Surveys such as ASUSE and PLFS should be conducted regularly and expanded to ensure updated datasets.

iii. Integrating Administrative Databases

- Data from GST records, tax filings, and digital payment systems can significantly improve GDP measurement when integrated with national accounts.

Such measures can enhance the accuracy, reliability, and timeliness of India's economic statistics.

k. Important Surveys Used in GDP Calculation

Several national surveys provide the core datasets used in compiling GDP statistics in India.

i. Periodic Labour Force Survey (PLFS)

- Conducted by the National Statistical Office (NSO).
- Provides detailed information on employment patterns, labour participation, and workforce characteristics.

ii. Annual Survey of Unincorporated Sector Enterprises (ASUSE)

- Conducted by the Ministry of Statistics and Programme Implementation (MoSPI).
- Measures production, employment, and value added in small and informal enterprises.

iii. Annual Survey of Industries (ASI)

- Conducted by the National Statistical Office (NSO).
- Provides data on production, investment, and employment in the organised manufacturing sector.

Together, these surveys form the statistical backbone of India's national income accounting system.

Conclusion

The new GDP series with 2022–23 as the base year represents an important step toward improving the accuracy and credibility of India's national income statistics. By incorporating richer datasets, better measurement techniques, and improved coverage of the informal sector, the revised methodology provides a more realistic picture of India's economic structure and growth dynamics. Over time, continued improvements in data collection and digital integration will further strengthen the reliability of India's economic statistics.

Reader's Note — About This Current Affairs Compilation

Dear Aspirant,

This document is part of the PrepAlpine Current Affairs Series — designed to bring clarity, structure, and precision to your daily UPSC learning.

While every effort has been made to balance depth with brevity, please keep the following in mind:

1. Orientation & Purpose

This compilation is curated primarily from the UPSC Mains perspective — with emphasis on conceptual clarity, analytical depth, and interlinkages across GS papers.

However, the PrepAlpine team is simultaneously developing a dedicated Prelims-focused Current Affairs Series, designed for:

- factual coverage
- data recall
- Prelims-style MCQs
- objective pattern analysis

This Prelims Edition will be released separately as a standalone publication.

2. Content Length

Some sections may feel shorter or longer depending on topic relevance and news density. To fit your personal preference, you may freely resize or summarize sections using any LLM tool (ChatGPT, Gemini, Claude, etc.) at your convenience.

3. Format Flexibility

The formatting combines:

- paragraphs
- lists
- tables
- visual cues

—all optimised for retention.

If you prefer a specific style (lists → paras, paras → tables, etc.), feel free to convert using any free LLM.

4. Monthly Current Affairs Release

The complete Monthly Current Affairs Module will be released soon, optimized to a compact 100–150 pages — comprehensive yet concise, exam-ready, and revision-efficient.

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