

The Hindu Important News Articles & Editorial For UPSC CSE

Tuesday, 14 Oct, 2025

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India's retail inflation cooled sharply to 1.54% in September 2025, marking its lowest level in over eight years. The decline was driven by easing food and fuel prices, pushing inflation below the RBI's lower comfort band of 2% for the second time this year. The data signals a phase of price stability, raising expectations of a possible monetary policy easing ahead.

Key Highlights

1. Historic Low Inflation

- Retail inflation, measured by the Consumer Price Index (CPI), dropped to 1.54% in September 2025, the lowest since June 2017 (1.46%).
- The figure is below the RBI's lower tolerance band of 2%, reflecting significant price moderation.

2. Sectoral Trends

- **Food and Beverages:** Contracted by 1.4%, down from 0.05% in August and 8.4% a year ago.
- **Oil & Fats:** Remained elevated at 18.3%, marking the 11th consecutive month of double-digit inflation.
- **Fuel & Light:** Declined to 1.98%, continuing a downward trend since April (except one month).
- **Clothing & Footwear:** 2.28%, down from 2.33% in August.
- **Housing:** Rose to 4% from 3.1% last month.
- **Pan, Tobacco & Intoxicants:** Increased slightly to 2.7%.

3. Expert Opinions

- **Rajani Sinha (CareEdge Ratings):** Food inflation likely to stay benign due to a favourable base and good monsoon, though late monsoon withdrawal and heavy rains could pose risks.
- **Rajeev Juneja (PHDCCI):** The fall in food and fuel prices has improved household purchasing power.

4. Policy Implications

- The RBI's Monetary Policy Committee (MPC) has revised inflation projections downward for the fourth consecutive time.
- Analysts expect this could open room for a policy rate cut in December.

Static and Current Linkages

Static Topic	Current Relevance
Consumer Price Index (CPI)	Primary measure of retail inflation used by RBI.
Monetary Policy Framework (2016)	RBI's inflation target: $4\% \pm 2\%$. September's data falls below the lower limit.
Repo Rate & Monetary Transmission	Low inflation may prompt rate cuts to stimulate growth.
Food Inflation Dynamics	Driven by monsoon trends, supply chains, and import

Retail inflation hits 8-year low of 1.54% in Sept.

Historic low

India's retail inflation slipped to 1.54% this month, the lowest since June 2017. The chart shows Y-o-Y inflation rate (%)



SOURCE: MOSPI

T.C.A. Sharad Raghavan
NEW DELHI

Retail inflation fell to a more than eight-year-low of 1.54% in September on falling food and fuel prices, official data showed on Monday. This is once again below the Reserve Bank of India's lower comfort bound of 2%.

Inflation, as measured by the Consumer Price Index released by the Ministry of Statistics and Programme Implementation, was last lower in June 2017, when it stood at 1.46%. Inflation had fallen below the RBI's lower comfort limit in July 2025, before rising marginally to 2.1% in August.

The food and beverages grouping saw a contraction of 1.4% in September, compared with a growth of 0.05% in August and 8.4% inflation in September last year.

Food inflation

"Looking ahead, food inflation is likely to stay benign supported by a favourable base and good monsoon," Rajani Sinha, chief economist at CareEdge Ratings, said.

"That said, risks remain from the late withdrawal of the monsoon and heavy rain in certain regions, which could risk crop damage."

In addition, Ms. Sinha said that persistently high double-digit inflation in edible oils warrants close monitoring, given weak sowing trends, import dependence, and elevated

global edible oil prices.

Inflation in the oil and fats category stood at 18.3% in September, the 11th consecutive month of double-digit inflation in the sub-grouping.

Inflation in the fuel and light category came in at 1.98% in September, down from 2.3% in August. Save for one month, inflation in this category has been easing since April.

"The moderation in food and fuel prices has provided much-needed relief to households and improved purchasing power," Rajeev Juneja, president of the PHDCCI, said.

Inflation in the clothing and footwear category was 2.28% in September, marginally lower than the 2.33% seen in August 2025 and the 2.7% in September last year. This is the fifth consecutive month of slowing inflation in this category.

Inflation in the pan, tobacco and other intoxicants category, however, quickened to 2.7% in September from 2.5% in August.

Similarly, the housing sector also saw inflation quickening to 4% in September from 3.1% in the previous month.

Economists say that the low inflation figures, with the RBI's Monetary Policy Committee revising downwards its inflation forecast for the year for the fourth time in a row during its most recent monetary policy meeting, raises hopes of a rate cut in the next meeting in December.

Daily News Analysis

Static Topic	Current Relevance
	dependence on edible oils.

Analytical Perspective

1. Price Moderation and Rural Relief

- Declining food and fuel prices have reduced household burden, especially in rural areas where consumption is price-sensitive.
- The contraction in food prices marks a sharp reversal from last year's 8.4% inflation, indicating an improving supply situation.

2. Policy and Growth Nexus

- Persistent low inflation could encourage the RBI to lower repo rates, stimulating investment and credit growth.
- However, ultra-low inflation might signal weak demand, requiring careful policy calibration.

3. Sectoral Imbalance

- Despite overall moderation, oil & fats inflation at 18.3% highlights structural dependence on imports and global price volatility.
- The housing and services inflation uptick suggests cost pressures in urban areas.

4. Monsoon and Food Security

- A good monsoon supports food price stability, but uneven rainfall and late withdrawal risks may cause supply disruptions in pulses and perishables.

Strategic Implications

- For RBI:** Room for monetary easing in December policy; however, must monitor core inflation stability.
- For Government:** Opportunity to stimulate demand through public investment without immediate inflation risk.
- For Households:** Enhanced purchasing power and potential reduction in borrowing costs.
- For Businesses:** Lower input cost inflation may boost margins, but weak demand could limit expansion.

Challenges Ahead

- Ensuring inflation doesn't fall into deflationary territory, which could dampen growth.
- Managing imported inflation risks from global commodity prices (especially edible oils and energy).
- Balancing growth revival with monetary prudence to prevent asset bubbles.
- Maintaining price stability during the upcoming festive and winter seasons.

Conclusion

The sharp fall in retail inflation to an 8-year low underscores a rare phase of macroeconomic stability for India. While easing prices provide breathing space to households and policymakers, the situation demands careful vigilance against potential food supply shocks and global commodity fluctuations. If sustained, the low inflation trajectory could pave the way for a measured monetary easing cycle, strengthening India's growth outlook for FY2026.

Daily News Analysis

UPSC Prelims Practice Question

Ques: With reference to inflation in India, consider the following statements:

1. Retail inflation is measured by the Wholesale Price Index (WPI).
2. The Reserve Bank of India's inflation target band is $4\% \pm 2\%$.
3. A fall in Consumer Price Index (CPI) below 2% implies it is outside the RBI's comfort zone.

Which of the statements given above is/are correct?

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

Ans: b)

UPSC Mains Practice Question

Ques: Analyze the factors responsible for the recent decline in India's retail inflation. How can the Reserve Bank of India balance price stability with growth revival in such a low-inflation scenario?(250 Words)



The Vital Statistics of India Report (2023), based on the Civil Registration System (CRS) and compiled by the Registrar General of India (RGI), presents updated demographic trends for India. The data reveals that while the number of births registered declined marginally compared to 2022, the number of deaths rose slightly. The report provides key insights into population dynamics, sex ratio at birth, and institutional registration patterns across states, reflecting India's progress toward a more stabilized demographic profile.

Number of births declines; deaths rise slightly: report

The Vital Statistics of India, based on the Civil Registration System report for 2023, shows 86.6 lakh deaths were registered that year, recording a marginal increase from the 86.5 lakh in 2022

Vijaita Singh
NEW DELHI

India registered 2.52 crore births in 2023, around 2.32 lakh fewer than in 2022, the Vital Statistics of India based on the Civil Registration System (CRS) report for the year 2023 shows.

The report, compiled by the Registrar-General of India (RGI) and released on Monday, stated that 86.6 lakh deaths were registered in 2023, a marginal increase from 86.5 lakh deaths in 2022.

The report shows that there was no major spike in deaths in 2022 and 2023, despite the COVID-19 dashboard maintained by the Health Ministry showing that the total number of pandemic-induced deaths stood at 5,33,665 as on May 5.

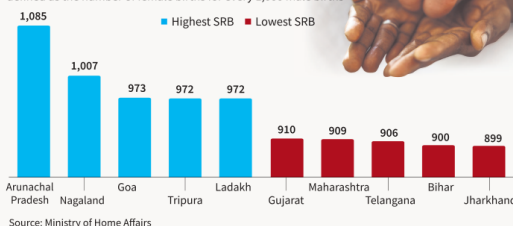
However, there was a significant rise in deaths in 2021, the second-year of COVID-19 lockdown, which recorded an excess of 21 lakh deaths from the 2020 count.

There were 81.2 lakh deaths in 2020 and 102.2 lakh in 2021.

The report also said that

Gender imbalance

The chart shows five States/Union Territories each with the highest and lowest sex ratios at birth (SRB) in 2023. SRB is commonly defined as the number of female births for every 1,000 male births



Jharkhand recorded the lowest sex ratio at birth at 899, followed by Bihar at 900, Telangana at 906, Maharashtra at 909, Gujarat at 910, Haryana at 911 and Mizoram at 911. Since 2020, Bihar has been recording the lowest sex ratio, which is defined as the number of females born per 1,000 males.

Sex ratio count

The highest sex ratio was reported by Arunachal Pradesh at 1,085, followed by Nagaland at 1,007, Goa at 973, Ladakh and Tripura at

972, and Kerala at 967.

The share of institutional births in total registered births is 74.7% in 2023. However, the report did not include information from Sikkim. Overall registration of births for the year 2023 stood at 98.4%.

Statewise data

The report said that 11 States/Union Territories achieved more than 90% registration of births within the prescribed time limit of 21 days.

These States are Gujarat, Puducherry, Chandigarh,

Dadra and Nagar Haveli and Daman & Diu, Tamil Nadu, Lakshadweep, Andaman and Nicobar Islands, Haryana, Himachal Pradesh, Goa and Punjab. Five States – Odisha, Mizoram, Maharashtra, Chhattisgarh and Andhra Pradesh – reported 80-90% registration, while in 14 States – Assam, Delhi, Madhya Pradesh, Tripura, Telangana, Kerala, Karnataka, Bihar, Rajasthan, Jammu & Kashmir, Jharkhand, West Bengal, Meghalaya and Uttar Pradesh – the registration stood at 50-80%.

Key Highlights of the Report

1. Birth and Death Data

- Total births (2023): 2.52 crore — a decline of 2.32 lakh from 2022 (2.55 crore).
- Total deaths (2023): 86.6 lakh — a marginal increase from 86.5 lakh in 2022.
- Despite the official COVID-19 toll of 5.33 lakh deaths, no major spike seen in 2022–23.
 - 2020: 81.2 lakh deaths
 - 2021: 102.2 lakh (COVID peak year)
 - 2022: 86.5 lakh
 - 2023: 86.6 lakh

Daily News Analysis

2. Sex Ratio at Birth (SRB)

- **Lowest SRB:** Jharkhand (899), Bihar (900), Telangana (906), Maharashtra (909), Gujarat (910), Haryana (911), Mizoram (911).
- **Highest SRB:** Arunachal Pradesh (1085), Nagaland (1007), Goa (973), Ladakh & Tripura (972), Kerala (967).
- Bihar has recorded the lowest SRB since 2020, indicating continuing gender disparity.

3. Institutional and Timely Registration

- **Institutional births:** 74.7% of all registered births.
- **Overall registration completeness:** 98.4% (Sikkim excluded).
- **States with >90% timely registration (within 21 days):** Gujarat, Puducherry, Chandigarh, DNH & DD, Tamil Nadu, Lakshadweep, A&N Islands, Haryana, Himachal Pradesh, Goa, Punjab.
- **States with 80–90%:** Odisha, Mizoram, Maharashtra, Chhattisgarh, Andhra Pradesh.
- **States with 50–80%:** Assam, Delhi, MP, Telangana, Kerala, Karnataka, Bihar, UP, WB, J&K, Jharkhand, Rajasthan, Meghalaya, Tripura.

Static and Current Linkages

Static Topic	Current Relevance
Demographic Transition in India	CRS 2023 data reflects a shift towards low fertility and population stabilization.
Gender Issues and Sex Ratio	Persistent low SRB in northern states shows ongoing gender bias in society.
Public Health Administration	Improvement in registration efficiency and institutional deliveries demonstrates stronger governance.
Population Policy & National Health Mission	Supports policy objectives of universal vital registration and maternal-child health coverage.

Analytical Perspective

1. Signs of Population Stabilization

- The fall in birth registration numbers signals declining fertility rates and a movement toward population stabilization, especially in urban and southern India.
- Indicates success of family planning and socio-economic development.

2. Gender Disparity and Social Challenges

- Persistently low sex ratio at birth highlights cultural preference for male children, female foeticide concerns, and gender inequality in access to healthcare.
- States like Arunachal Pradesh and Nagaland showcase better social equity models.

3. Post-COVID Mortality Stabilization

Daily News Analysis

- Data suggests that the mortality spike of 2021 has normalized, reflecting health system recovery and pandemic exit phase.
- Strengthens the reliability of CRS as a public health monitoring tool.

4. Institutional Deliveries and Administrative Efficiency

- With 74.7% institutional births, India shows improvement in maternal and neonatal healthcare.
- However, delayed or incomplete registrations in several states highlight governance gaps and digital divide issues.

Strategic and Academic Implications

- Policy Formulation: Vital for population policy, welfare schemes, and fiscal planning.
- Gender Justice: Data can guide Beti Bachao Beti Padhao and related awareness programs.
- Research & Education: Useful dataset for demographic studies, public health, and UPSC GS Papers I & II.
- Digital Governance: Encourages adoption of real-time digital civil registration systems.

Challenges Ahead

- Regional disparities in registration efficiency and data accuracy.
- Gender imbalance continues despite government interventions.
- Need for integration of CRS, NFHS, and Census databases for comprehensive demographic analysis.
- Awareness gaps and administrative delays in rural and tribal belts.

Conclusion

The Vital Statistics of India 2023 underscores India's entry into a mature demographic phase, marked by declining birth rates and stabilized mortality. While the country edges closer to population stabilization, the gender imbalance and regional inconsistencies in registration remain areas of concern. Ensuring universal, timely, and transparent civil registration will be crucial for evidence-based governance and achieving the SDG targets on health, gender equality, and population data management.

UPSC Prelims Practice Question

Ques: As per the Vital Statistics of India 2023, which of the following states recorded the highest sex ratio at birth?

- (a) Kerala
- (b) Nagaland
- (c) Arunachal Pradesh
- (d) Tripura

Ans: (c)

UPSC Mains Practice Question

Ques: India's declining birth rate marks progress towards population stabilization but also raises new socio-economic challenges. Discuss with reference to recent demographic data from the Vital Statistics of India 2023.



The Institute for Energy Economics and Financial Analysis (IEEFA) and JMK Research and Analytics have jointly released a report evaluating the progress of the PM Surya Ghar: Muft Bijli Yojana (PMSGY), launched by the Government of India to promote residential rooftop solar installations. Despite a substantial rise in applications since early 2024, the study finds that only 13.1% of the government's ambitious 1 crore rooftop target has been achieved till July 2025, making the FY2027 goal increasingly challenging. The report highlights procedural bottlenecks, high domestic component costs, and delayed approvals as key constraints to the scheme's success.

Achieving Centre's rooftop solar targets to remain a challenge: study

Jacob Koshy
NEW DELHI

Despite a near four-fold increase in applications between March 2024 and July 2025, only 13.1% of the targeted 1 crore solar rooftop installations, under the PM Surya Ghar Yojana (PMSGY), has been achieved, and just 14.1% of the allocated ₹65,700 crore in subsidies released till July 2025, a report said.

"In this scenario, the FY2027 target [of 1 crore installations] continues to be viewed as a considerable challenge," said the report on the performance of the scheme, jointly published by the Institute for Energy Economics and Financial Analysis (IEEFA) and JMK Research and Analytics on Tuesday.

Reasons included tardy approval processes, which could stretch anywhere from 45 to 120 days, stem-



The scheme has facilitated the installation of 4,946 MW of rooftop solar capacity till July 2025 across States and Union Territories.

ming largely from "meter shortages, lack of coordination between consumers, installers, and DISCOMs, and procedural inefficiencies at the utility level," it noted.

The PMSGY is a Centred endeavour to encourage more homes to install rooftop solar connections. The government provides capital upfront via loans.

As of July 2025, the pe-

riod until which the report tracked progress, the PMSGY had received 57.9 lakh applications for residential rooftop solar installations. The scheme has facilitated the installation of 4,946 MW of rooftop solar capacity till July 2025 across various States and Union Territories, indicating "robust on-ground execution", the report said. Subsidy disbursements

have crossed ₹9,281 crore (\$1.05 billion), benefiting over 16 lakh households. As of July 2025, the 4.9 GW of installations added under the PMSGY accounted for approximately 44.5% of the country's total residential rooftop capacity.

The PM solar scheme only incentivises solar installations, whose component parts are entirely manufactured in India. Called "DCR-compliant modules", they are on average costlier by ₹12/watt over imported variants. "These higher prices are making larger residential installations less economically attractive," the report said.

"Establishing clear, time-bound rooftop solar capacity targets at the State level is essential for creating a coherent vision," said Vibhuti Garg, Director, IEEFA-South Asia, and a contributing author, in a statement.

Key Highlights of the Report

Daily News Analysis

1. Progress and Performance

- Applications received: 57.9 lakh (as of July 2025) — nearly 4× increase since March 2024.
- Installations achieved: Only 13.1% of the target (i.e., around 13 lakh installations).
- Installed capacity: 4,946 MW (4.9 GW) of rooftop solar across States and UTs.
- Share in total residential rooftop capacity: Around 44.5% of national total.

2. Financial Status

- Total scheme outlay: ₹65,700 crore.
- Subsidy disbursed (till July 2025): ₹9,281 crore (~14.1% of total).
- Beneficiary households: Over 16 lakh.

3. Implementation Challenges

- **Approval delays: Processes taking 45–120 days due to:**
 - Meter shortages,
 - Lack of coordination among consumers, installers, and DISCOMs,
 - Procedural inefficiencies at utility level.
- **Cost constraints:**
 - Scheme mandates use of DCR-compliant modules (fully Indian-made).
 - Domestic panels cost ₹12/W higher than imported ones, reducing economic attractiveness for large installations.

4. Recommendations

- Establish clear, time-bound State-level targets to enhance accountability.
- Improve coordination mechanisms between central agencies, state DISCOMs, and private vendors.

Static and Current Linkages

Static Topic	Current Relevance
Renewable Energy & Solar Policy in India	PMSGY contributes to achieving India's 500 GW non-fossil fuel target by 2030.
Decentralized Energy Systems	Rooftop solar promotes energy independence at household level and reduces grid pressure.
Domestic Manufacturing (DCR Policy)	Aligns with Atmanirbhar Bharat and PLI Scheme for solar modules.
Climate Commitments (Paris Agreement & COP28 Goals)	Critical for India's Net Zero 2070 roadmap.

Analytical Perspective

1. Implementation Gaps and Bureaucratic Delays

Daily News Analysis

- Slow approvals and coordination failures across DISCOMs highlight administrative inefficiency in decentralized policy execution.
- Long procedural timelines discourage household participation and delay subsidy flow.

2. Domestic Manufacturing vs. Affordability

- While DCR compliance strengthens domestic industry and energy sovereignty, it raises project costs.
- Balancing self-reliance with cost competitiveness remains a major policy dilemma.

3. Financing and Consumer Awareness

- Delayed subsidy release and complex loan procedures restrict adoption among middle- and lower-income households.
- Lack of technical guidance and after-installation support also hinder participation.

4. Role in Energy Transition

- Rooftop solar has potential to transform India's urban energy landscape, reducing transmission losses and fossil dependence.
- Current progress, however, indicates that achieving 1 crore installations by FY2027 requires accelerated implementation and inter-agency synergy.

Strategic and Academic Implications

- For Policy Makers: Strengthens the case for State-wise micro-targeting and streamlined regulatory frameworks in renewable deployment.
- For Industry: Highlights the need for domestic innovation and economies of scale to make DCR modules affordable.
- For Research & Education: Provides empirical insights into public-private energy transition challenges — relevant for UPSC GS Paper III (Energy, Environment, Infrastructure).
- For Governance: Underlines how implementation capacity is as critical as policy ambition in India's clean energy mission.

Challenges Ahead

- Procedural delays and weak coordination between DISCOMs, vendors, and households.
- Higher domestic module costs impacting cost-effectiveness.
- Lack of digital monitoring and transparency in subsidy disbursement.
- Uneven state-level participation — some lagging far behind targets.
- Need for skill development and consumer awareness for sustainable adoption.

Conclusion

The IEEFA-JMK study underscores that while the PM Surya Ghar Yojana has triggered strong interest and application growth, its execution efficiency remains the key bottleneck. With only 13% of the rooftop target achieved and 14% of subsidy disbursed, achieving the FY2027 goal demands urgent policy fine-tuning, faster approvals, and better cost rationalization. The report serves as a reminder that India's transition to a solar-powered future will depend not only on ambitious targets, but also on institutional agility, local participation, and financial innovation to ensure inclusive and sustained growth in the renewable energy sector.

Daily News Analysis

UPSC Prelims Practice Question

Ques: Consider the following statements regarding DCR-compliant solar modules:

1. They must be entirely manufactured in India.
2. They are cheaper than imported solar modules.
3. They are mandatory under the PM Surya Ghar Yojana.

Which of the statements given above is/are correct?

- A) 1 & 2
- B) 1 & 3
- C) 2 & 3
- D) All of the above

Ans : b)

UPSC Mains Practice Question

Ques: Critically examine the challenges faced by India's PM Surya Ghar Yojana in achieving its rooftop solar targets. Suggest policy measures to accelerate adoption while balancing domestic manufacturing and affordability. **(250 Words)**



The International Union for Conservation of Nature (IUCN) released its updated Red List of Threatened Species at the World Conservation Congress 2025. The report highlights the increasing risks faced by Arctic seals, bird species, and other wildlife, driven primarily by climate change, habitat loss, and human activity. It marks a significant global assessment, covering 172,620 species, of which 48,646 are threatened with extinction. The report emphasizes the need for urgent nature-based recovery, biodiversity protection, and climate action.

Key Highlights of the Report

1. Status of Arctic Seals

- Hooded seal: Upgraded from vulnerable to endangered.
- Bearded and harp seals: Classified as near threatened.
- Major threats: Global warming, maritime traffic, oil extraction, industrial fishing, hunting.
- Arctic warming: Occurring 4× faster than global average, drastically reducing sea ice, a critical habitat for ice-dependent seals.
- Ecological role: Keystone species, central to Arctic food webs, nutrient recycling, and prey for other animals.

2. Status of Bird Species

- 61% of bird species now have declining populations (up from 44% in 2016).
- 1,256 bird species (11.5% of 11,185 assessed) are globally threatened.
- Major threats: Habitat loss from deforestation, agriculture expansion, especially in Madagascar, West Africa, Central America.
- Positive development: Conservation success stories like green turtles, population increased by 28% since 1970s.

3. Global Species Coverage

- Total species assessed: 172,620
- Threatened species: 48,646
- Focused nine years of work by thousands of experts, integrating global data on birds, mammals, marine species, and reptiles.

4. Human and Climate Impacts

- Maritime traffic, mining, and oil extraction endanger Arctic seals.
- Tropical forest destruction is a growing threat to bird species.
- Rapid changes in Arctic ecosystems, such as the Svalbard archipelago, indicate shrinking ice duration, affecting species survival.



Daily News Analysis

Static and Current Linkages

Static Topic	Current Relevance
Biodiversity & IUCN Red List	Updated list tracks extinction risk and species conservation priorities globally.
Climate Change Impacts	Arctic ice loss and rising global temperatures threaten polar ecosystems and migratory species.
Habitat Loss & Deforestation	Tropical forest destruction directly contributes to bird population decline.
Ecosystem Services & Keystone Species	Ice-dependent seals and certain birds play critical roles in maintaining ecological balance.

Analytical Perspective

1. Climate Change as a Primary Driver

- Arctic species are disproportionately affected due to faster warming rates and shrinking ice habitats.
- Highlights interconnectedness of climate change, human activity, and biodiversity loss.

2. Human Activity and Habitat Degradation

- Logging, agricultural expansion, industrial fishing, and maritime activities pose significant threats to both terrestrial and marine species.
- Demonstrates need for sustainable land use and marine management.

3. Conservation Successes and Lessons

- Green turtle recovery (28% increase since 1970s) showcases that sustained conservation interventions can reverse decline.
- Success stories emphasize policy effectiveness, community engagement, and long-term monitoring.

4. Biodiversity Monitoring and Global Action

- IUCN Red List provides data-driven insights for global conservation policies, including CITES, CBD, and national biodiversity strategies.
- Acts as a benchmark for climate-resilient conservation planning.

Strategic and Academic Implications

- For Policy Makers:** Inform national and global biodiversity policies; integrate climate adaptation into wildlife protection programs.
- For Environmental Management:** Prioritize conservation of ice-dependent, keystone, and threatened species; regulate human activities in sensitive regions.
- For Academia & Research:** Provides empirical evidence for ecology, climate science, and environmental law studies.
- For International Cooperation:** Supports UN Sustainable Development Goal 15 (Life on Land) and SDG 14 (Life Below Water) targets.

Challenges Ahead

- Rapid Arctic warming and sea ice loss may outpace conservation efforts.
- Habitat loss due to deforestation and agriculture continues in tropical regions.
- Enforcement of global and national conservation measures remains uneven.
- Need for funding, technology, and community engagement to scale conservation success stories.
- Monitoring and updating Red List requires continuous scientific collaboration across nations.

Conclusion

The IUCN Red List 2025 update underscores the growing vulnerability of Arctic seals, birds, and other species due to climate change and human-induced habitat loss. While some success stories like the green turtle demonstrate the impact of sustained conservation action, the overall trend shows declining populations and heightened extinction risks. The report reinforces the urgency of global biodiversity governance, nature-based recovery strategies, and climate mitigation to protect vulnerable species and maintain ecological balance.

UPSC Prelims Practice Question

Ques : Consider the following statements regarding the IUCN Red List 2025 update:

1. Hooded seal has been reclassified as endangered.
2. Bearded and harp seals are classified as vulnerable.
3. 61% of bird species now show declining population trends.
4. Green turtles are still listed as endangered.

Which of the above statements is/are correct?

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 2 and 3 only
- D. 1, 3 and 4 only

Ans: a)

UPSC Mains Practice Question

Ques: Discuss the major threats to Arctic and tropical species highlighted in the IUCN Red List 2025 report. How does climate change exacerbate biodiversity loss in polar and tropical ecosystems?(150 Words)

The 2025 Nobel Prize in Economic Sciences was awarded to Joel Mokyr, Philippe Aghion, and Peter Howitt for their seminal work on innovation-driven economic growth. The Royal Swedish Academy of Sciences highlighted that their research explains how sustained economic growth depends on technological innovation, and how “creative destruction” ensures continuous replacement of old products with new and better ones. The prize, valued at 11 million Swedish Kronor (\$1.2 million), underscores the importance of innovation as a driver of long-term economic prosperity.

Key Highlights of the Award

1. Prize Winners and Contributions

- **Joel Mokyr (Northwestern University, USA):**
 - Used historical analysis to identify factors essential for sustained growth via technological innovations.
 - Awarded half of the prize.
- **Philippe Aghion (College de France & INSEAD, Paris; LSE, UK) and Peter Howitt (Brown University, USA):**
 - Developed mathematical model of creative destruction, showing how new innovations replace older products in an endless cycle.
 - Shared the other half of the prize.

2. Significance of Their Work

- Challenges the notion that economic growth is automatic; stagnation has been historically more common than growth.
- Provides framework for policy and entrepreneurship, emphasizing innovation-led growth as crucial for long-term development.

3. Prize Context

- Nobel Economics Prize established in 1969; first awarded to Ragnar Frisch and Jan Tinbergen for dynamic economic modeling.
- Previous notable winners include Ben Bernanke, Paul Krugman, Milton Friedman, and last year’s Simon Johnson, James Robinson, and Daron Acemoglu (for research on colonisation and institutions).

Mokyr, Aghion and Howitt win Nobel economics prize

Winners are professors in U.S., French and British universities; prize worth \$1.2 mn highlights work on innovation-driven economic growth

Reuters
STOCKHOLM

Joel Mokyr, Philippe Aghion and Peter Howitt won the 2025 Nobel economics prize for “having explained innovation-driven economic growth”, the Royal Swedish Academy of Sciences said on Monday.

The prestigious award, formally known as the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, is the final prize to be given out this year and is worth 11 million Swedish Kronor (\$1.2 million).

“The laureates have taught us that sustained growth cannot be taken for granted,” the prize-awarding body said in a statement. Economic stagnation, not growth, has been the norm for most of human history. Their work shows that we must be aware of, and counteract, threats to continued growth.”

Mr. Mokyr is a professor at Northwestern University, in Evanston in the United States, while Mr. Aghion is professor at the College de France and INSEAD, in Paris, and at the London School of Economics and Political Science, in Britain. Mr. Howitt is a professor at Brown University, in Providence in the United States. Mr. Mokyr was



Moment of pride: Visuals of Joel Mokyr, Philippe Aghion and Peter Howitt, recipients of the Nobel Economics prize. REUTERS

awarded half the prize with the other half being shared between Aghion and Howitt.

“Joel Mokyr used historical observations to identify the factors necessary for sustained growth based on technological innovations,” John Hassler, member of the Nobel Committee, said.

Creative destruction

“Philippe Aghion and Peter Howitt produced a mathematical model of creative destruction, an endless process in which new and better products replace the old.”

The awards for medicine, physics, chemistry, peace and literature were announced last week.

Those prizes were established in the will of Swedish dynamite inventor and businessman Alfred Nobel and have been handed out since 1901, with a few interruptions mostly due to the

world wars.

The economics prize was established much later, being given out first in 1969 when it was won by Norway’s Ragnar Frisch and Jan Tinbergen from the Netherlands for work in dynamic economic modelling. Tinbergen’s brother Nikolaas also won a prize, taking home Medicine in 1973.

While few economists are household names, relatively well-known winners include former U.S. Federal Reserve chairman Ben Bernanke, and Paul Krugman and Milton Friedman. Last year’s economics award went to U.S.-based academics Simon Johnson, James Robinson and Daron Acemoglu for research that explored the relationship between colonisation and the establishment of public institutions to explain why some countries have been mired in poverty for decades.

Static and Current Linkages

Static Topic	Current Relevance
Innovation and Economic Growth	Highlights how technology and innovation drive sustained growth, relevant for modern knowledge economies.
Creative Destruction	Explains industrial evolution and disruption of legacy industries by new technologies.

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Static Topic	Current Relevance
(Schumpeterian Model)	
Historical Economic Analysis	Mokyr's approach connects historical context with modern growth policy.
Policy and Institutional Economics	Informs governments and institutions on how to design policies encouraging R&D, entrepreneurship, and innovation ecosystems.

Analytical Perspective

1. Innovation as Growth Engine

- The laureates demonstrate that technological innovation is central to long-term economic prosperity.
- Encourages investment in R&D, education, and start-ups as mechanisms to sustain growth.

2. Creative Destruction

- Markets inherently evolve through displacement of old products by new, driving efficiency and productivity.
- Highlights policy balance needed: encouraging innovation while managing social and employment disruptions caused by industrial shifts.

3. Historical Insights for Modern Policy

- Mokyr's historical perspective shows that societies that fail to innovate risk stagnation, reinforcing the importance of institutional and educational infrastructure.

4. Global Relevance

- Applicable across developed and emerging economies in understanding structural transformations, industrial policy, and economic resilience.

Strategic and Academic Implications

- **For Policy Makers:**
 - Encourages crafting policies promoting innovation-led economic growth and supporting start-ups, entrepreneurship, and digital transformation.
- **For Academia:**
 - Advances interdisciplinary research at the intersection of history, economics, and technology.
 - Provides analytical frameworks for growth economics, industrial policy, and development studies.
- **For Business and Industry:**
 - Underlines importance of R&D investment and embracing disruptive technologies for competitive advantage.

Challenges Ahead

- Translating theoretical insights on innovation and creative destruction into practical policy implementation, especially in emerging economies.

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- Balancing innovation-driven growth with social and employment stability during industrial transitions.
- Ensuring equitable access to technology and innovation benefits across regions and income groups.
- Fostering global collaboration while managing intellectual property and domestic industrial priorities.

Conclusion

The 2025 Nobel Economics Prize awarded to Mokyr, Aghion, and Howitt emphasizes the central role of innovation in sustaining economic growth. Their research bridges historical insights with modern economic theory, highlighting how societies must foster continuous technological innovation and creative destruction to avoid stagnation. The award underscores the importance of policy, institutional support, and entrepreneurship in creating resilient, growth-oriented economies in the 21st century.

UPSC Prelims Practice Question

Ques:The concept of Creative Destruction, highlighted by Aghion and Howitt, refers to:

- a) The replacement of old products with new ones, driving economic growth
- b) The destruction of natural resources due to industrialization
- c) The breakdown of financial systems during recessions
- d) The collapse of monopolies by government regulation

Ans : a)

UPSC Mains Practice Question

Ques:Examine the relevance of creative destruction for India's industrial and entrepreneurial ecosystem. How can government policy balance innovation with employment and social stability? **(150 Words)**

Page : 08 Editorial Analysis

Estimating India's potential growth rate

Several authors, including us, have argued that a growth rate of 6.5% appears to be the potential growth rate of India as of now. But the first quarter growth rate of 2025-26 is estimated at 7.8%. Does this alter our perception about the potential growth rate?

The first quarter real GDP growth in the post-COVID-19 years, from 2022-23 to 2024-25, has averaged 9.9% as compared to corresponding average levels of the second, third and fourth quarters of 7.0%, 6.9% and 7.5%. Thus, a 7.8% real GDP growth in the first quarter of 2025-26 is below the average for the first quarter of the previous three years. The annual real GDP growth rates for 2022-23 to 2024-25 were at 7.6%, 9.2% and 6.5%, respectively.

On the output side, real GVA growth in the first quarter of 2025-26 was 7.6%. This was also lower than the corresponding average GVA growth of 9.5% in the previous three years. The GVA growth in the first quarter of 2025-26 was largely based on improvements in the growth rates of manufacturing and the three important services sectors. It was mainly in manufacturing that the first quarter 2025-26 growth at 7.7% was higher than average first quarter growth for the previous three years at 5.8%.

Potential growth rate and ICOR

We may note that in the three important service sectors – namely trade, transport and others, financial, real estate and others, and public administration and others, growth rates in the first quarter of 2025-26 were quite high at 8.6%, 9.5% and 9.8%. But these were still lower than their corresponding averages in the previous three years at 12.9%, 11.3% and 13.1%, respectively. An increase in potential growth rate would require a sustained increase in growth in all these sectors. It is also important to note that the real gross fixed capital formation rate (GFCFR) in the first quarter was nearly the same in 2023-24, 2024-25 and 2025-26 at 34.5%, 34.6% and 34.6%, respectively. Thus, there is no structural break.

The estimation of 6.5% as potential growth rate in our article, "Potential growth stays at 6.5%"



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Positive and negative forces may balance themselves out, leaving a figure that is close to 6.5%

(The Hindu-BusinessLine, July 4, 2025) is based on the behaviour of GFCFR and Incremental Capital-Output Ratio (ICOR). While the GFCFR does not fluctuate too much, the ICOR is very volatile. The probable reason is that it is not estimated independently. It is derived from dividing the real GFCFR by real GDP growth rate. Thus, the fluctuations in growth get reflected in the ICOR. It is notable that the real GFCFR has been stable at 33.6%, 33.5%, and 33.7% of GDP during 2022-23, 2023-24 and 2024-25, respectively. Using an average ICOR on the GFCFR, the potential growth rate may be derived. With the GFCFR remaining at an average of 33.6% and an ICOR of 5.2, the potential growth rate remains at around 6.5%. For potential growth to rise above this level, it is important that the GFCFR improves tangibly above this average level for the previous three years or the ICOR falls below 5.2.

It may be noted that growth rates and the ICOR have been volatile in recent years because of the COVID-19 pandemic and subsequent adjustments. In estimating India's potential growth rate, one has to look at its performance over a much longer period. India's real GDP growth rate during 2011-12 to 2023-24 averaged 6.1%. In assessing a country's growth potential one may have to give greater weight to recent performance.

On public sector investment

The ICOR is a reflection of how efficiently capital is used. Technology and management ultimately determine the ICOR. One can be confident of sustained higher growth only if fixed capital formation rate goes up. A recent phenomenon in gross fixed capital formation is the bigger role played by government expenditure. In recent years, the share of the public sector in total real GFCF has increased from 21.6% in 2021-22 to 25.1% in 2023-24. Public sector investment is largely focused on infrastructure which has a high sectoral ICOR.

The surge in public sector investment was largely led by the central government. However, that momentum appears to be slowing down.

Growth in the Centre's capital expenditure was at 39.4%, 24.4%, and 28.9% in 2021-22, 2022-23 and 2023-24, respectively. However, this growth fell to 10.8% in 2024-25.

In order to increase the potential growth rate above 6.5%, we will need to increase the GFCFR by about 2% points from the recent average GFCFR which is around 34%. This will call for an increase in the share of real investment of the private corporate sector in total GFCF which has fallen from 37% to 34.4%, during 2021-22 to 2023-24. This may be supplemented by a reduction in the ICOR.

Prospects of growth

Some of the influences that may affect the long-term potential growth on the positive side would include the impact of changing technology such as Artificial Intelligence (AI) and Gen AI. On the negative side, there would be the impact of a growing share of capital consumption as capital stock becomes older and new technologies call for a replacement of old capital at a faster rate. These forces may balance themselves out, leaving India's long term potential growth close to 6.5%.

The global trade environment also remains challenging for India. Given the tariff and supply chain uncertainties, much depends on the pace at which India is able to diversify its trade destinations and investment sources globally. After remaining positive for the previous four consecutive quarters, the contribution of net exports turned negative at (-)1.4% points in the first quarter of 2025-26. This trend is likely to continue. We may recognise that a potential growth rate of 6.5% is, in the present world environment, a reasonably high level, although for creating a higher growth of employment, we do need to push our potential growth further. For this, we need to get the private investment rate to move up. Policymakers need to address this issue at the aggregate and sectoral levels. They must understand what is holding back private investment and suggest appropriate remedies.

The views expressed are personal

GS. Paper 3—Indian Economy

UPSC Mains Practice Question: Discuss the role of gross fixed capital formation (GFCF) in sustaining higher potential growth. Why does a stable GFCF not necessarily imply higher potential growth? (150 Words)

Context :

C. Rangarajan, **Chairman of Madras School of Economics and former RBI Governor**, provides an analysis of **India's potential growth rate**, estimating it at **6.5%**. Despite short-term fluctuations, including a **7.8% GDP growth in Q1 of 2025-26**, the

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author argues that the **long-term sustainable growth** depends on **gross fixed capital formation (GFCF), efficiency of capital use (ICOR), private sector investment, and structural factors**. The article evaluates both **output-side performance and capital efficiency**, highlighting the role of public and private investments in shaping India's growth trajectory.

Key Highlights

1. GDP and GVA Performance

- **First quarter GDP 2025-26:** 7.8% (below the 9.9% average Q1 growth of past three post-COVID years).
- **Real GVA growth Q1 2025-26:** 7.6% (below prior Q1 average of 9.5%).
- **Sectoral contribution:**
 - Manufacturing Q1 growth: 7.7% (above prior three-year Q1 average of 5.8%).
 - Services sectors (trade, transport, financial & real estate, public administration): Growth at 8.6%, 9.5%, and 9.8%, below historical averages of 12–13%.

2. Potential Growth and ICOR

- **Estimated potential growth rate:** ~6.5%.
- **Basis:** Stable **GFCFR (~34%)** and **average ICOR (~5.2)** over 2022-23 to 2024-25.
- **Implication:** For higher potential growth, either **GFCFR must rise** or **ICOR must fall**.

3. Capital Formation and Public Sector Role

- Public sector share in total real GFCF rose from **21.6% (2021-22) to 25.1% (2023-24)**, mainly in infrastructure with high ICOR.
- Growth in Centre's capital expenditure slowed from **39.4% in 2021-22 to 10.8% in 2024-25**.
- Private corporate investment share fell from **37% to 34.4%**, highlighting need for **private sector revival**.

4. Prospects and Constraints

- **Positive influences:** Emerging technologies like **AI and Gen AI**, productivity gains.
- **Negative influences:** Aging capital stock, faster replacement needs, volatile global trade, net export contribution turning negative (-1.4% in Q1 2025-26).
- **Policy focus:** Incentivize private investment, address structural bottlenecks, sector-specific strategies.

Static and Current Linkages

Static Topic	Current Relevance
Potential Growth Rate Concept	Represents long-term sustainable growth achievable without triggering inflation.
GFCF & ICOR	Critical metrics for assessing capital efficiency and investment-driven growth.
Public vs Private Investment	Highlights role of government infrastructure spending vs corporate sector investment.

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Static Topic	Current Relevance
Sectoral Growth Patterns	Manufacturing & services sector performance indicates structural strengths & weaknesses.
Global Trade & Technology	AI, Gen AI, and trade diversification influence India's medium-to-long-term growth potential.

Analytical Perspective

1. Short-term vs Long-term Growth

- Short-term GDP fluctuations (7.8% Q1 2025-26) do not alter the **long-term potential**, which depends on **structural capital efficiency** and **sustained investment rates**.

2. Capital Formation and ICOR

- Stability in **GFCFR** implies no structural break, while ICOR volatility reflects **cyclical growth variations**.
- Increasing potential growth requires **higher GFCFR and lower ICOR**, achievable via **efficient public-private investment strategies**.

3. Private Sector Revitalization

- Private corporate investment is critical to raise potential growth above 6.5%.
- Structural reforms, credit availability, and policy incentives are needed to **unlock private investment**.

4. Technological and Global Considerations

- AI and Gen AI** can boost productivity and output, partially offsetting aging capital and global trade uncertainties.
- Global supply chain disruptions and net export contraction are **constraints on growth realization**.

Strategic and Academic Implications

- For Policymakers:**
 - Focus on **increasing GFCF**, particularly in private sector, and reducing ICOR through technology adoption and efficiency improvements.
 - Address **sector-specific bottlenecks** to sustain manufacturing and services growth.
- For Economists and Academia:**
 - Provides a **framework for potential growth estimation** using GFCFR and ICOR.
 - Highlights importance of **historical trends and sectoral contributions** for policy analysis.
- For Business and Industry:**
 - Signals **opportunities in infrastructure and technology-driven sectors**.
 - Emphasizes need for corporate investment and productivity enhancement to drive national growth.

Challenges Ahead

- Reviving **private sector GFCF share** to complement slowing public investment.
- Reducing **ICOR** through technological adoption, improved management, and sectoral efficiency.
- Balancing **domestic investment needs** with global trade uncertainties.
- Integrating **AI and Gen AI innovations** while managing capital replacement cycles.
- Ensuring **inclusive growth** that translates higher potential into employment generation.

Conclusion

According to C. Rangarajan, India's **long-term potential growth rate remains around 6.5%**, despite higher short-term GDP numbers like 7.8% in Q1 2025-26. Sustaining or increasing this potential requires **higher GFCF, efficient capital utilization, and greater private sector participation**, complemented by **technological adoption** and structural reforms. While short-term performance may fluctuate, the **structural capacity of the economy** and investment efficiency ultimately determine India's **sustainable growth trajectory**.

