

ECONOMIC SURVEY 2025-26 SUMMARY

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CHAPTER 1: STATE OF THE ECONOMY

GLOBAL ECONOMIC GROWTH – FRAGILE AND DIVERGING

The global economy during 2025–26 has remained resilient in the short term despite multiple disruptions, particularly the imposition of tariffs by the United States. Initial concerns regarding slower growth and higher inflation proved temporary due to mitigating factors such as trade adjustments, delayed tariff implementation, and pre-emptive spending by firms and households.

While global growth projections stabilised, underlying vulnerabilities persist across regions. The United States has driven growth through strong investment in artificial intelligence, but inflation remains above target and unemployment is rising.

Europe exhibits mixed growth trends, while China faces deflationary pressures due to weak domestic demand despite strong exports. Monetary policy across countries is diverging due to varying growth-inflation dynamics, influencing global capital flows.



Fiscal policies remain expansionary, with high deficits and elevated sovereign bond yields indicating fiscal stress. Additionally, global uncertainty, geopolitical fragmentation, and declining foreign direct investment flows reflect structural weaknesses. The resurgence of economic statecraft highlights a shift where economic tools are increasingly used for strategic and geopolitical objectives.

In this evolving global order, countries, including India, must focus on building resilience and achieving strategic indispensability to safeguard long-term economic interests.

Key Points

1. Short-term Stability vs Structural Fragility

- Global growth remained stable in the short term despite tariff shocks due to adaptive trade and investment behaviour.
- Advanced economies experienced slightly better-than-expected growth, primarily driven by the United States.
- Emerging market and developing economies showed improved growth projections compared to earlier estimates.
- Inflation in advanced economies remained persistently high, while it declined in emerging economies.
- Aggregate global indicators conceal significant regional disparities and structural weaknesses.

2. Regional Growth Divergence

- The United States experienced strong growth driven by **artificial intelligence-related investments**.
- European economies showed mixed growth, with Spain outperforming while major economies remained moderate.
- China faced deflationary pressures due to weak domestic demand despite strong export performance.
- Japan recorded moderate growth but continued to experience inflation above its target.
- Regional divergence reflects uneven recovery and structural challenges across economies.

3. Monetary and Financial Trends

- Central banks are gradually shifting from tight monetary policy to neutral or accommodative stances.
- Divergence in inflation and growth has led to varied policy rate trajectories across countries.



- Differences in interest rates are influencing global capital flows in search of higher returns.
- Financial conditions remain uncertain due to inconsistent macroeconomic signals.

4. Fiscal Stress and Debt Concerns

- Fiscal policies remain expansionary, with deficits higher than pre-pandemic levels in most economies.
- Rising public debt has led to elevated long-term borrowing costs globally.
- Sovereign bond yields, especially long-term yields, have increased significantly.
- Investor concerns regarding fiscal sustainability have reduced demand for long-duration bonds.

5. Global Uncertainty and FDI Trends

- Geopolitical fragmentation and policy uncertainty continue to remain elevated.
- Global FDI flows declined significantly, reflecting weakened investor confidence.
- Investment is increasingly concentrated in sectors such as **semiconductors and AI**.
- Developed economies saw declining FDI inflows, except for the United States.

6. Rise of Economic Statecraft

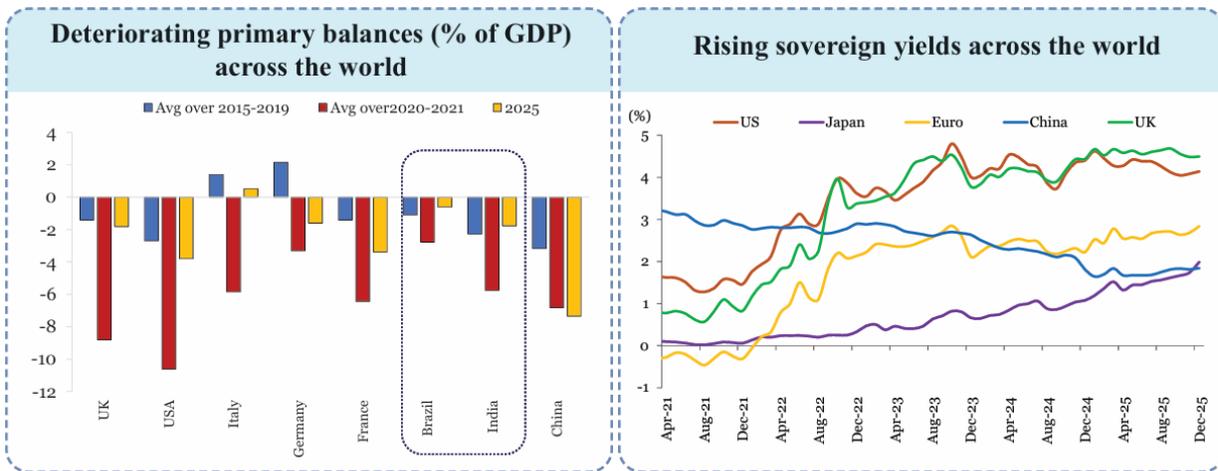
- Economic tools are increasingly used for strategic and geopolitical objectives rather than purely economic goals.
- Countries are prioritising national security, supply chain resilience, and technological dominance.
- Trade restrictions, export controls, and sanctions have become common instruments of policy.
- Strategic sectors such as semiconductors, critical minerals, and renewable energy are receiving state support.
- Nations are shifting towards **friend-shoring** and **near-shoring** to reduce geopolitical risks.

Data & Facts

- Global growth for 2025 stabilised around **3.3%**, with EMDEs outperforming advanced economies.
 - EMDEs means Emerging Market and Developing Economies
- Inflation in advanced economies remained about **40 basis points higher** than initial projections.



- FDI flows declined by **11% in 2024 (YoY)** excluding conduit economies.
 - Conduit economies are financial hubs (like Luxembourg, Singapore, Netherlands) where FDI often just “passes through” without creating real productive assets. Excluding them gives a clearer picture of genuine investment flows.
- US 30-year bond yields reached around **5.15% in 2025**, the highest since 2007.
- AI-related investments accounted for nearly **half of US GDP growth in recent quarters**.



Concepts

- **Economic Statecraft:** The use of economic tools such as trade, finance, and investment to achieve geopolitical or strategic objectives.
- **FDI (Foreign Direct Investment):** Investment made by a firm or individual in one country into business interests in another country.
- **Primary Deficit:** Fiscal deficit excluding interest payments on past debt.
- **Bond Yield:** The return earned by investors on government or corporate bonds.
- **Friend-shoring:** Shifting supply chains to politically allied countries to reduce geopolitical risk.

Analysis

The current global economic phase reflects a transition from globalisation driven by efficiency to one shaped by security and resilience. While short-term stability has been achieved through adaptive responses, deeper structural issues such as fiscal stress, geopolitical fragmentation, and uneven growth persist.

The divergence in monetary policy and capital flows indicates increasing financial volatility. Moreover, the resurgence of economic statecraft signals a paradigm shift where economic interdependence is no longer seen purely as beneficial but also as a source of vulnerability. This



transformation is likely to reshape global trade, investment patterns, and institutional frameworks in the coming years.

TRENDS IN THE DOMESTIC ECONOMY

India's domestic economy in FY26 demonstrates strong and broad-based growth momentum despite global uncertainties.

According to the First Advance Estimates (FAE), real GDP growth is projected at 7.4%, reaffirming India's position as the fastest-growing major economy.

Growth is primarily driven by robust domestic demand, particularly private consumption and investment. Consumption demand has strengthened due to low inflation, rising real incomes, and supportive tax policies, while investment activity is buoyed by public capital expenditure and revival in private sector investment.

On the supply side, services and industry are the key growth drivers, with manufacturing showing strong expansion and services maintaining its role as the stabilising pillar. Agriculture provides steady support, though growth remains structurally constrained by volatility in crop output.

External demand has also contributed modestly, supported by resilient services exports. High-frequency indicators across sectors confirm sustained economic momentum.

Overall, the Indian economy reflects a healthy balance between consumption, investment, and sectoral growth, indicating resilience and strengthening macroeconomic fundamentals.

Key Points

1. Overall Growth Performance

- **Real GDP growth** for FY26 is estimated at **7.4%**, while **GVA growth** stands at **7.3%**.
- India remains the fastest-growing major economy for the **fourth consecutive year**.
- Growth is supported by both demand-side and supply-side factors.
- Domestic demand continues to be the primary driver of economic expansion.

2. Demand-Side Drivers

Private Consumption (PFCE)

- Private consumption remains the largest contributor, accounting for about **61.5% of GDP**.
- Consumption growth is supported by low inflation, rising incomes, and stable employment.
- Rural consumption is strengthened by agricultural performance, while urban demand is improving due to **tax rationalisation**.



- High-frequency indicators such as vehicle sales and UPI transactions confirm strong consumption demand.

Investment (GFCF)

- Investment share remains robust at **around 30% of GDP**.
- Gross fixed capital formation grew by **7.6% in H1 FY26**, above pre-pandemic trends.
- Public capital expenditure and rising private investment announcements are key drivers.
- Indicators such as capital goods imports and credit growth signal a strengthening investment cycle.

External Demand

- Exports of goods and services grew by **5.9% in H1 FY26**.
- Services exports provide stability, offsetting volatility in merchandise exports.
- Export share in GDP remains stable despite global uncertainties.

3. Supply-Side Performance

Agriculture

- Agriculture is expected to grow by **3.1% in FY26**.
- Growth is supported by favourable monsoon and strong allied activities like livestock and fisheries.
- Crop output remains volatile, reflecting structural productivity constraints.
- Rabi sowing and reservoir levels indicate positive outlook for H2 FY26.

Industry

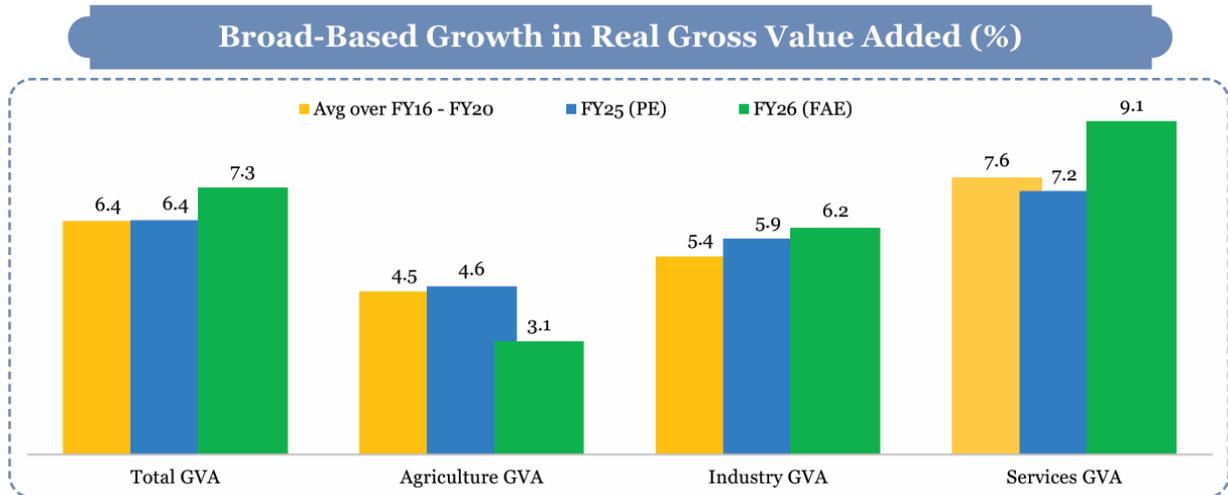
- **Industrial growth** is estimated at **6.2% in FY26**.
- **Manufacturing** grew strongly at **8.4% in H1 FY26**, driven by demand and capacity utilisation.
- Construction activity remains robust due to infrastructure investment.
- Mining sector contracted due to weather-related disruptions.
- Manufacturing share remains stable in real terms, despite decline in nominal share.

Services

- Services sector growth is estimated at **9.1% in FY26**.
- It remains the largest contributor to GDP, with a share **above 50%**.
- Key segments such as financial services and public administration show strong growth.



- High-frequency indicators like PMI services and freight traffic confirm continued momentum.



4. High-Frequency Indicators (HFIs)

- Indicators such as automobile sales, UPI transactions, and air traffic show strong consumption trends.
- Investment indicators like credit growth and capital goods imports signal expansion.
- Industrial indicators such as IIP and PMI reflect strengthening manufacturing activity.
- Services indicators like port traffic and railway freight confirm sustained sectoral performance.

5. Nowcasting and Data Systems

- Nowcasting models use high-frequency indicators to estimate real-time GDP growth.
- The model estimates Q3 FY26 growth at around 7%.
- India is strengthening its statistical system through new surveys, rebasing, and digital platforms.
- Enhanced data availability improves policymaking and economic monitoring.

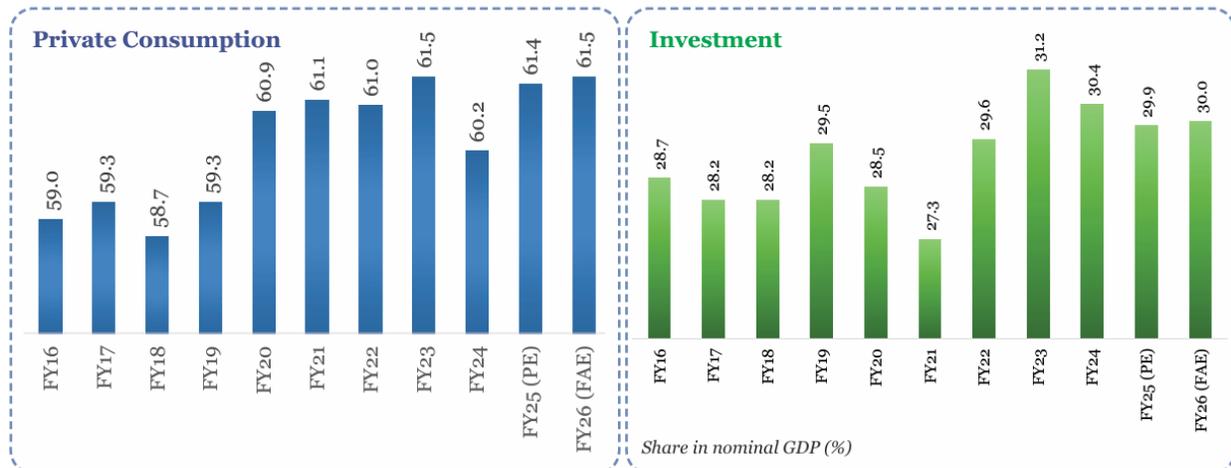
Data & Facts

- GDP growth (FY26): **7.4%**
- GVA growth (FY26): **7.3%**
- PFCE share: **~61.5% of GDP (highest since FY12)**
- GFCF share: **~30% of GDP**
- Services share: **~51% of GDP**
- Agriculture growth: **3.1%**



- Industry growth: **6.2%**
- Services growth: **9.1%**
- Nowcast GDP growth (Q3 FY26): **~7%**

Private Consumption and Investment are Drivers of India's Growth



Concepts

- **GDP (Gross Domestic Product):** Total value of goods and services produced in an economy.
- **GVA (Gross Value Added):** Value of output minus intermediate consumption; sector-wise contribution to GDP.
- **PFCE:** Private Final Consumption Expenditure → Household consumption expenditure on goods and services.
- **GFCF:** Gross Fixed Capital Formation → Investment in fixed assets such as infrastructure and machinery.
- **Nowcasting:** Estimating current economic conditions using high-frequency data before official data is released.

Analysis

The domestic economy in FY26 reflects a balanced and resilient growth structure driven by strong internal demand and improving investment cycles. The dominance of consumption ensures stability, while rising investment signals future growth potential. The services sector continues to anchor growth, but the strengthening of manufacturing is a positive structural shift.

However, agriculture's modest growth highlights persistent structural issues. The increasing use of high-frequency data and nowcasting indicates a shift toward more dynamic and responsive



polycymaking. Overall, the economy is transitioning towards a more investment-driven and structurally robust growth model.

ASSESSMENT OF DOMESTIC MACROECONOMIC FUNDAMENTALS

India's macroeconomic fundamentals in FY26 remain strong and well-balanced, supported by easing inflation, prudent fiscal management, effective monetary transmission, and a stable external sector. Inflation has moderated significantly, primarily due to a sharp decline in food prices, improving real incomes and boosting consumption demand.

Fiscal policy has combined consolidation with growth, marked by strong revenue mobilisation and a shift towards capital expenditure, enhancing the quality of spending. Monetary policy has complemented this through rate cuts and liquidity support, leading to improved credit conditions and a healthier banking system.

The external sector remains stable, with a moderate current account deficit and strong foreign exchange reserves, although challenges such as currency depreciation and volatile capital flows persist.

Meanwhile, labour market indicators show improvement, driven by structural reforms, labour codes, and skill development initiatives. Social sector progress is evident in declining poverty and improving human development indicators.

Overall, India's macroeconomic framework reflects resilience, stability, and a transition towards sustainable and inclusive growth, even in a challenging global environment.

Key Points

1. Inflation Dynamics

- **Headline CPI inflation** declined sharply to around 1.7%, mainly due to falling food prices.
- **Disinflation** was supported by favourable agricultural conditions and supply-side interventions.
- Core inflation remains somewhat persistent but is softer when excluding gold and silver prices.
- Lower inflation has enhanced real purchasing power and supported consumption demand.
- The inflation outlook remains benign but requires monitoring of global commodity prices.

2. Fiscal Policy and Public Finance

- Fiscal strategy focused on balancing consolidation with growth-oriented expenditure.



- Strong tax collections were recorded, with direct taxes reaching about 53% of the annual target by November 2025.
- GST collections remained robust, reflecting strong economic activity.
- Capital expenditure increased significantly, improving the quality of public spending.
- Fiscal deficit is on track to reach the target of 4.4% of GDP in FY26.

3. Shift Towards Capital Expenditure

- Capital spending share increased from about 12.5% (FY20) to 22.6% (FY25).
- Effective capital expenditure rose from 2.6% to 4.0% of GDP.
- The central government incentivised states to maintain capital spending through targeted schemes.
- Rising revenue expenditure in states due to cash transfers poses long-term fiscal risks.

4. Monetary Policy and Financial Sector

- **Policy repo rate** was reduced by 125 basis points since February 2025.
- Liquidity was injected through CRR cuts, open market operations, and forex swaps.
- Lending rates declined, improving credit accessibility.
- Banking sector health improved with low NPAs (~2.2%) and strong profitability.
- Monetary transmission has strengthened the effectiveness of policy measures.

5. Changing Credit Landscape

- Non-food bank credit growth remained stable at around 11–12%.
- Corporates increasingly rely on non-bank sources such as capital markets and internal funds.
- Flow of financial resources from non-bank sources increased significantly (29.3% YoY).
- Reduced dependence on bank credit reflects financial market deepening.

6. External Sector Stability

- Total exports remained strong, with services exports providing stability.
- **Current account deficit** remained moderate at around 0.8% of GDP (H1 FY26).
- **Forex reserves** remain adequate, covering over 11 months of imports.
- **FDI inflows increased**, but **FPI flows remained volatile** due to global uncertainties.
- The rupee depreciated by about **6.5%** but remained orderly.



7. Emerging External Challenges

- Rising trade deficits are offset by services exports and remittances.
- Geopolitical factors and trade restrictions may impact exports in the medium term.
- Migration restrictions may affect remittance inflows.
- Enhancing global competitiveness is critical for long-term stability.

8. Labour Market Developments

- Labour market conditions improved with declining unemployment rates.
- Labour force participation remained stable.
- Labour Codes aim to simplify regulations and improve labour market flexibility.
- **Recognition of gig workers** marks progress in formalising new forms of employment.
- Skill development initiatives are improving employability.

9. Social Sector Progress

- Poverty levels declined, with extreme poverty estimated at around 5.3%.
- Improvements observed in life expectancy, education, and health indicators.
- Welfare schemes and reforms have enhanced inclusive growth.
- Human capital development is strengthening long-term economic resilience.

Data & Facts

- CPI inflation: **~1.7% (FY26 Apr–Dec)**
- Fiscal deficit target: **4.4% of GDP (FY26)**
- Capital expenditure share: **22.6% of total expenditure (FY25)**
- Repo rate cut: **125 basis points (2025)**
- NPAs: **~2.2% (multi-decade low)**
- Current account deficit: **~0.8% of GDP (H1 FY26)**
- Forex reserves: **Cover >11 months of imports**
- Rupee depreciation: **~6.5% (FY26)**
- Extreme poverty: **~5.3% (2022-23, revised WB line)**

Concepts

- **Headline Inflation:** Overall inflation including food and fuel prices.
- **Core Inflation:** Inflation excluding volatile items like food and fuel.



- **Fiscal Deficit:** Difference between government expenditure and revenue.
- **Current Account Deficit (CAD):** Excess of imports over exports in goods, services, and transfers.
- **Monetary Transmission:** Process through which policy rate changes affect the economy.

Analysis

India's macroeconomic fundamentals in FY26 reflect a rare combination of stability, growth, and structural improvement. The decline in inflation alongside strong growth indicates effective policy coordination.

Fiscal policy has improved the quality of expenditure by prioritising capital investment, while monetary policy has supported growth without triggering inflationary pressures. The financial sector's improved health and diversification of credit sources indicate deeper financial maturity.

However, external vulnerabilities such as currency depreciation and volatile capital flows highlight the need for strengthening export competitiveness and reducing dependence on foreign capital. Overall, the economy is moving towards a more resilient and sustainable growth trajectory.

OUTLOOK AND WAY FORWARD (FY27 AND BEYOND)

The outlook for the Indian economy in FY27 is characterised by steady growth amid persistent global uncertainties. FY26 witnessed significant external challenges, including tariff disruptions and global trade instability, but policy responses such as [GST rationalisation](#) and deregulation have strengthened domestic fundamentals.

While the global economy is expected to remain fragile with downside risks such as financial instability from AI-led investments and prolonged trade conflicts, India faces these as manageable external uncertainties rather than immediate threats. Strong domestic drivers, including resilient consumption, improving private investment, low inflation, and healthy balance sheets across sectors, provide a stable foundation for growth.

Structural reforms undertaken in recent years have enhanced India's medium-term growth potential to around 7%. Consequently, real GDP growth for FY27 is projected in the range of 6.8% to 7.2%. The overall outlook emphasises cautious optimism, where maintaining macroeconomic stability, strengthening buffers, and continuing reforms are essential for sustaining growth in a volatile global environment.



Key Points

1. FY26 Experience and Transition to FY27

- FY26 was marked by global trade disruptions and tariff-related uncertainties affecting business confidence.
- Policy reforms such as GST rationalisation and deregulation were accelerated in response.
- FY27 is expected to be a transition year with adaptation by firms and households.
- Domestic demand and investment are expected to strengthen further.

2. Global Economic Outlook

- Global growth is expected to remain modest with persistent downside risks.
- Inflation is easing globally, leading to a more accommodative monetary stance.
- Risks include potential correction in AI-driven asset bubbles and prolonged trade conflicts.
- The global environment remains fragile, with uncertainty as a structural feature.

3. Implications for India

- External risks may affect exports, capital flows, and investor sentiment.
- Trade negotiations, particularly with the United States, may reduce uncertainty.
- External challenges are manageable due to strong domestic fundamentals.
- Maintaining policy credibility and adequate buffers is essential.

4. Domestic Strengths Supporting Growth

- Inflation remains low, supporting purchasing power and demand.
- Balance sheets of households, firms, and banks are healthy.
- Public investment continues to drive economic activity.
- Private investment intentions are improving, indicating a strengthening cycle.

5. Growth Projections

- India's potential growth has increased to around 7% due to sustained reforms.
- **Real GDP** growth for FY27 is projected at **6.8% to 7.2%**.
- Growth outlook is stable with balanced risks.
- Emphasis is on cautious optimism rather than pessimism.

6. Medium-Term Growth Potential

Drivers of Higher Potential Growth

- Sustained public capital expenditure and infrastructure expansion.



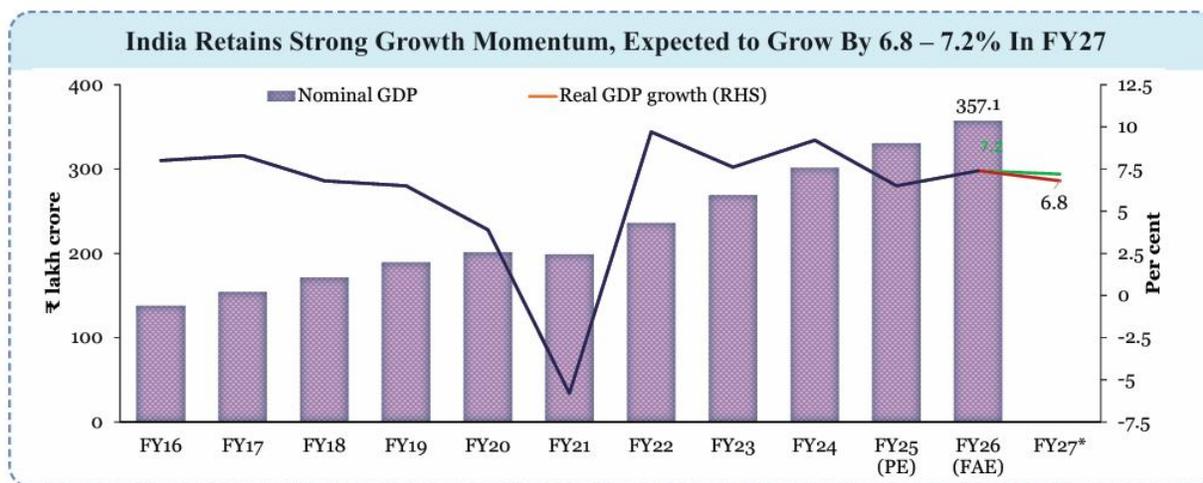
- Manufacturing push through initiatives like PLI and FDI liberalisation.
- Improved corporate and banking sector balance sheets.
- Rising formalisation of employment and better labour market conditions.
- Digital public infrastructure enhancing efficiency and productivity.

Growth Accounting Insights

- Growth is driven by capital, labour, and total factor productivity (TFP).
- Capital formation is strengthening due to public and private investment.
- Labour input is improving due to higher participation and formalisation.
- TFP is rising due to digitalisation, reforms, and better resource allocation.

7. Policy Priorities Ahead

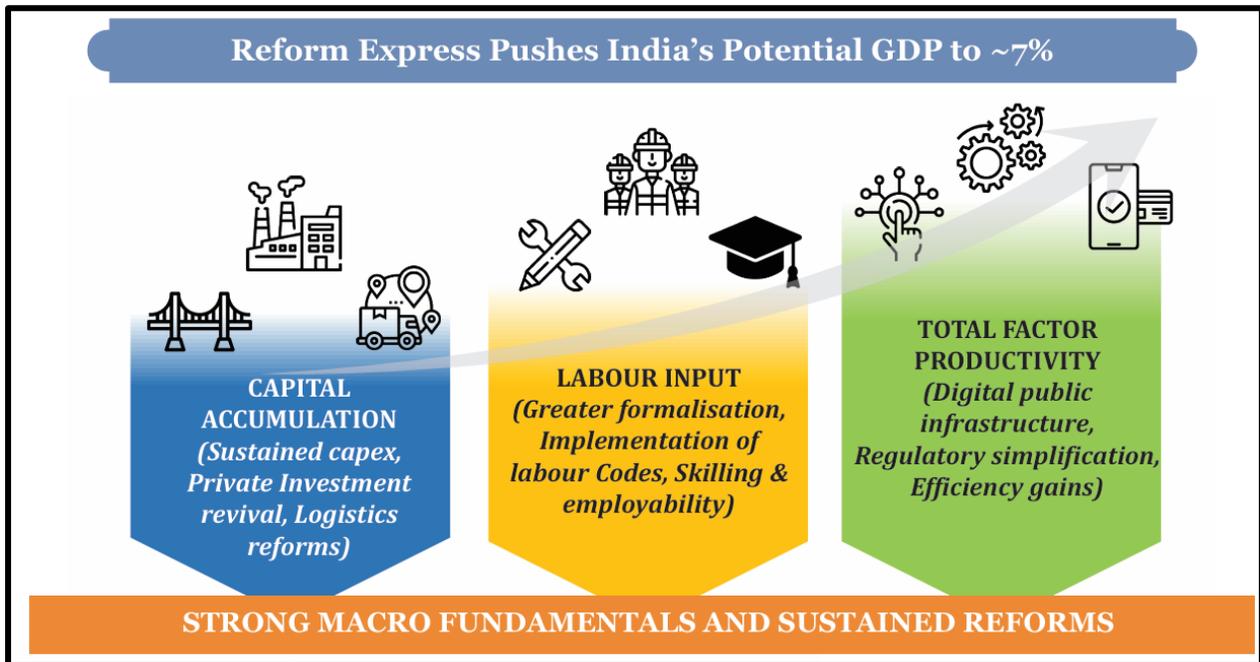
- Maintain macroeconomic stability and fiscal discipline.
- Strengthen export competitiveness and global integration.
- Continue structural reforms in manufacturing, labour, and finance.
- Build resilience against global shocks through buffers and diversification.
- Enhance coordination between Centre and States for sustained growth.



Data & Facts

- FY27 GDP growth projection: **6.8% – 7.2%**
- India's potential growth: **~7% (revised upward)**
- Capital expenditure: **~4% of GDP (recent years)**
- Capital share in growth: **~0.49 (KLEMS data)**
- Labour input growth expected to stabilise above pre-pandemic levels





Concepts

- **Potential Growth Rate:** The maximum sustainable growth rate an economy can achieve without inflationary pressure.
- **Total Factor Productivity (TFP):** Efficiency with which capital and labour are used in production.
- **Growth Accounting:** Method to decompose growth into contributions from capital, labour, and productivity.
- **Capital Deepening:** Increase in capital per worker leading to higher productivity.
- **Policy Credibility:** Trust in government policies that ensures stable economic expectations.

Analysis

The outlook highlights a shift from short-term crisis management to long-term capacity building. India's growth resilience is increasingly rooted in domestic drivers rather than external conditions. The upward revision in potential growth reflects the cumulative impact of structural reforms, digital infrastructure, and improved macro-financial stability.

However, global uncertainties necessitate a cautious approach, particularly regarding exports and capital flows. The emphasis on buffers, policy credibility, and institutional coordination indicates a move towards a more resilient economic framework. Sustaining this trajectory will depend on continued reforms and effective governance.



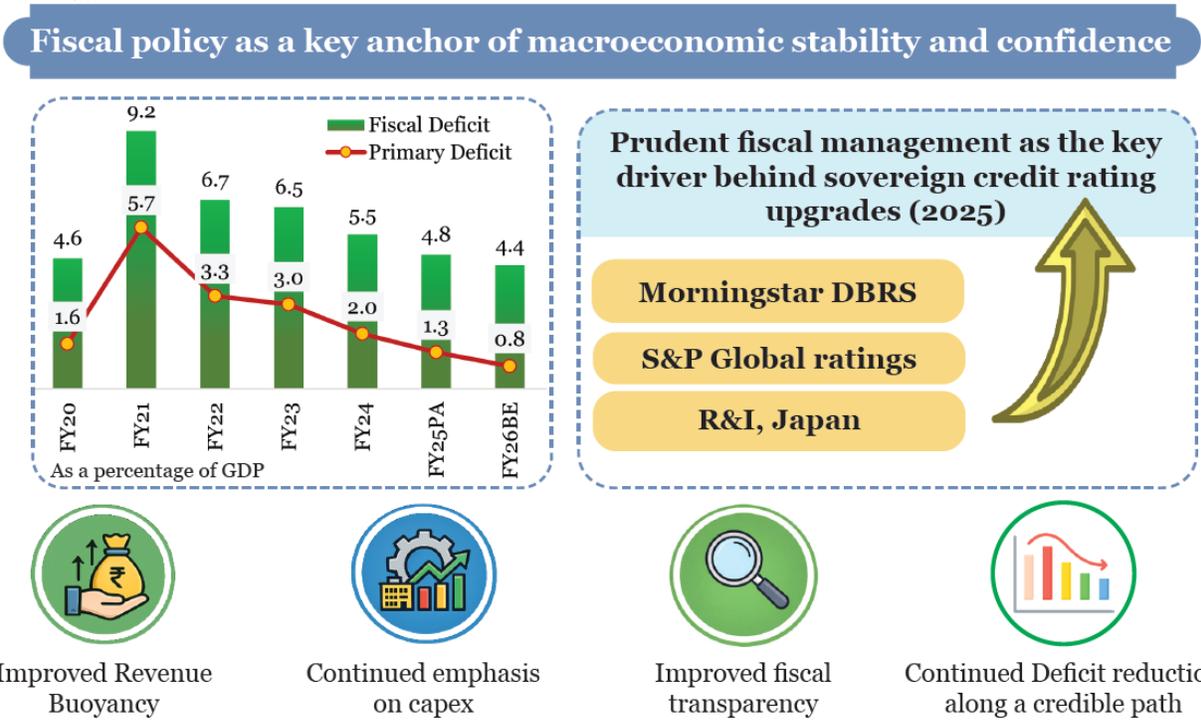
CHAPTER 2: FISCAL DEVELOPMENTS

CENTRAL GOVERNMENT FINANCES

India’s fiscal trajectory in recent years reflects a carefully calibrated balance between growth and fiscal prudence, leading to enhanced macroeconomic stability and global confidence. The recognition of India’s fiscal resilience through **sovereign credit rating upgrades** underscores the success of sustained policy efforts, including deficit reduction, improved revenue buoyancy, and a structural shift towards capital expenditure.

The government adopted a flexible medium-term consolidation path rather than rigid annual targets, ensuring that growth-enhancing spending was not compromised. Fiscal deficits have declined significantly from pandemic highs, accompanied by improvements in the quality of expenditure, as reflected in reduced revenue deficits and rising capital outlays. Strong revenue performance, driven by tax reforms, improved compliance, and formalisation, has strengthened fiscal capacity.

At the same time, rationalisation of subsidies and efficiency gains through digital governance have created fiscal space for productive investments. Capital expenditure has been scaled up substantially, particularly in infrastructure sectors, reinforcing long-term growth potential. Overall, India’s fiscal policy has emerged as a key anchor of macroeconomic stability, combining credibility, flexibility, and growth orientation in a challenging global environment.



Key Points

1. Fiscal Policy as Anchor of Stability

- **Fiscal policy** has ensured macroeconomic stability by balancing growth needs with fiscal discipline.
- A medium-term glide path was adopted, targeting **fiscal deficit below 4.5% of GDP by FY26**.
- Flexibility in fiscal targets allowed continued focus on capital expenditure during uncertain periods.
- Credible fiscal consolidation enhanced investor confidence and sovereign ratings.

2. Trends in Deficit Indicators

- Fiscal deficit declined sharply from **9.2% of GDP (FY21) to 4.8% (FY25) and is budgeted at 4.4% (FY26)**.
- **Revenue deficit** reached its lowest level since FY09, improving expenditure quality.
- Decline in **primary deficit** indicates reduced reliance on fresh borrowing for current expenditure.
- Borrowing is increasingly used for servicing past debt rather than financing consumption.

3. Revenue Buoyancy and Fiscal Capacity

- **Revenue receipts** increased from 8.5% (pre-pandemic) to 9.1% of GDP (post-pandemic).
- Gross tax revenue rose to about 11.5% of GDP due to strong economic growth and reforms.
- Improved tax administration and compliance contributed significantly to revenue gains.
- Revenue buoyancy enabled consolidation without compromising expenditure needs.

4. Expansion of Direct Tax Base

- Share of direct taxes increased to **58.8%** of total taxes in FY25.
- Non-corporate taxes (mainly personal income tax) showed strong growth and high buoyancy.
- Number of income tax returns increased from 6.9 crore to **9.2 crore**, indicating formalisation.
- Data-driven nudging improved voluntary compliance and reduced litigation.

5. Indirect Taxes and GST Performance

- Excise duty collections declined due to tax cuts on petroleum products.
- Customs duty growth remained moderate due to tariff rationalisation and lower global prices.



- GST collections remained robust, reaching ₹17.4 lakh crore (Apr–Dec FY26).
- GST base expanded significantly, with taxpayers rising from 60 lakh to over 1.5 crore.
- GST reforms (GST 2.0) aim to simplify rates, boost consumption, and enhance compliance.

6. Non-Tax Revenue Trends

- Non-tax revenues remained stable at around 1.4% of GDP.
- Dividends and profits surged due to higher RBI surplus and improved PSU performance.
- RBI transferred ₹2.68 lakh crore surplus in FY26, boosting government finances.
- CPSE profitability and dividends increased significantly, reflecting operational efficiency.

7. Non-Debt Capital Receipts and Disinvestment

- Disinvestment focused on market-based transactions such as Offer for Sale (OFS).
- Equity monetisation and InvITs contributed to resource mobilisation.
- Strategic disinvestment progressed gradually, with several CPSE transactions underway.
- Proposal to reduce government ownership threshold could unlock greater monetisation potential.

8. Expenditure Rationalisation

- Revenue expenditure declined from 13.6% (FY22) to 10.9% of GDP (FY25).
- Subsidy expenditure reduced significantly while maintaining welfare commitments.
- Direct Benefit Transfer (DBT) reduced leakages and improved targeting efficiency.
- Committed expenditures like interest, pensions, and salaries limit fiscal flexibility.

9. Capital Expenditure Push

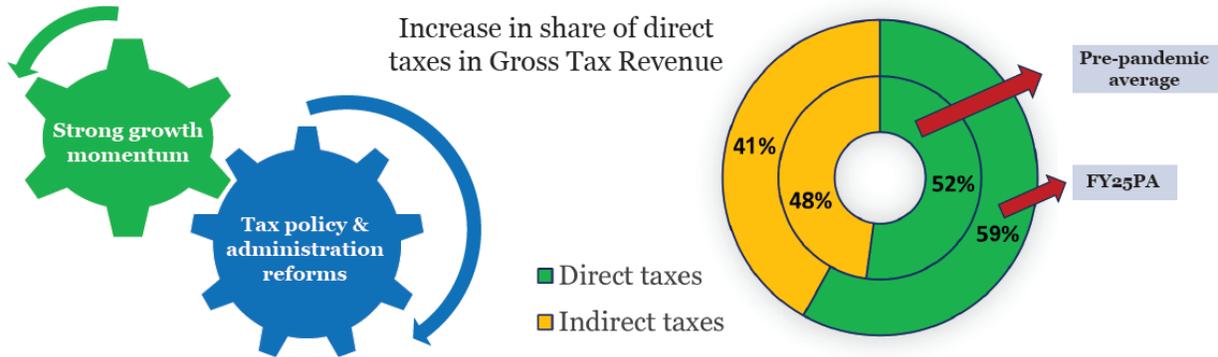
- Capital expenditure increased from 1.7% to around 2.9% of GDP post-pandemic.
- Effective capex rose to about 4% of GDP, reflecting strong infrastructure investment.
- Major sectors include roads, railways, defence, and urban development.
- Shift from revenue to capital expenditure indicates improved quality of spending.

10. Fiscal Management Reforms

- Just-in-Time (JIT) fund release system reduced idle funds and improved efficiency.
- Digital tools like PFMS and SNA-SPARSH enhanced transparency and accountability.
- Route optimisation in PDS reduced logistics costs and environmental impact.
- Technology-driven governance improved expenditure efficiency and reduced leakages.

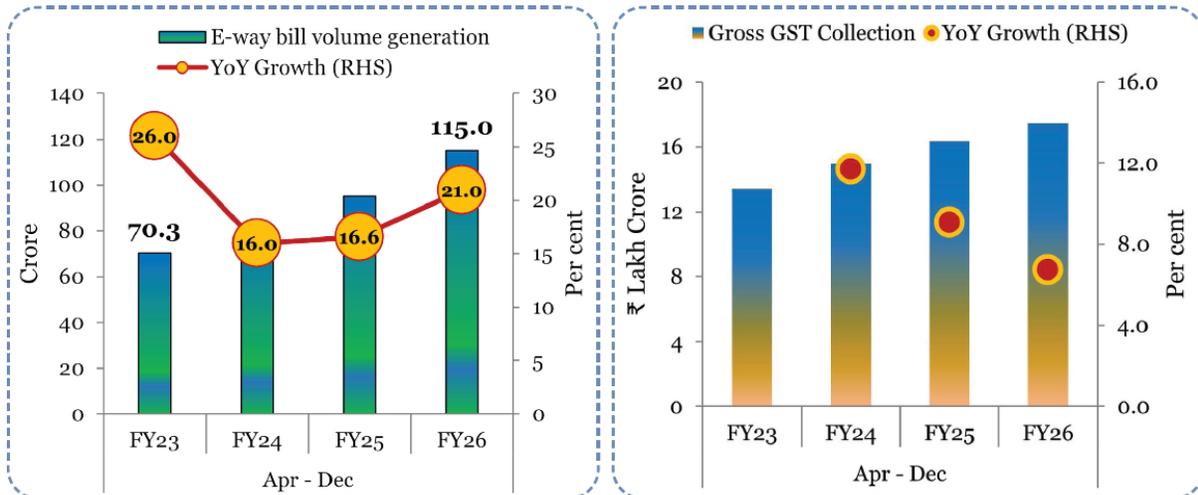


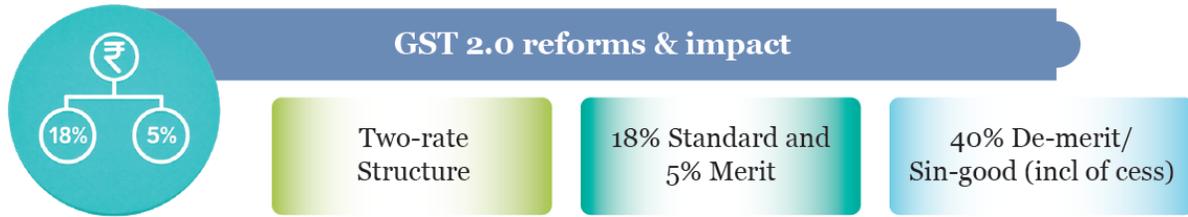
Sustained revenue buoyancy and broadening of the Direct Tax Base



	Revenue receipts / GDP	Gross Tax Revenue / GDP	Non-corporate tax collections / GDP	Income tax returns filed
Post-pandemic avg (FY22-FY25)	9.1%	11.5%	3.3%	9.2 crore
Pre-pandemic avg (FY16-FY20)	8.5%	10.8%	2.4%	6.9 crore
	↑	↑	↑	↑
				2024-25
				2021-22

Robust transaction momentum under GST, even as gross GST collections track nominal GDP growth





Data & Facts

- Fiscal deficit: **9.2% (FY21) → 4.8% (FY25) → 4.4% (FY26 BE)**
- Revenue receipts: **~9.1% of GDP (post-pandemic)**
- Direct tax share: **58.8% (FY25)**
- GST collection (Apr–Dec FY26): **₹17.4 lakh crore**
- Income tax returns: **6.9 crore → 9.2 crore**
- Non-tax revenue: **~1.4% of GDP**
- RBI dividend: **₹2.68 lakh crore (FY26)**
- Effective capex: **~4% of GDP**
- Subsidy expenditure: **1.9% (FY22) → 1.2% (FY25)**

Concepts

- **Fiscal Deficit:** Total expenditure minus total non-debt receipts of the government.
- **Revenue Deficit:** Excess of revenue expenditure over revenue receipts.
- **Primary Deficit:** Fiscal deficit excluding interest payments.
- **Tax Buoyancy:** Responsiveness of tax revenue to changes in GDP.
- **Disinvestment:** Sale of government stake in public sector enterprises.
- **DBT (Direct Benefit Transfer):** Transfer of subsidies directly to beneficiaries' bank accounts.

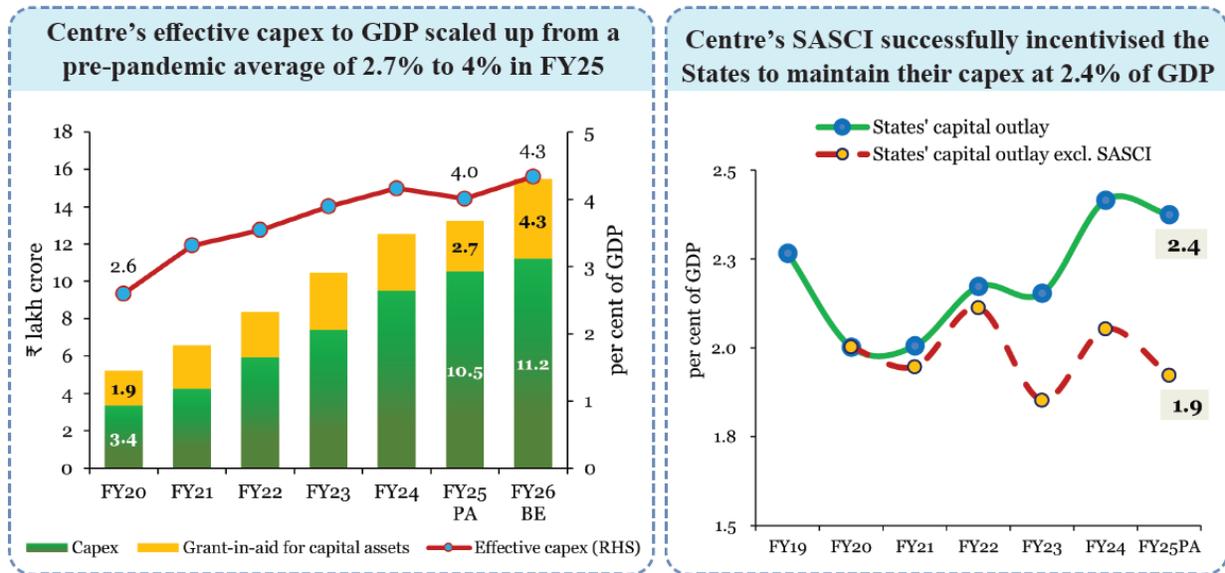
Analysis

India's fiscal strategy reflects a shift from crisis-driven expansion to rule-based consolidation with flexibility. The emphasis on capital expenditure alongside deficit reduction marks a qualitative



improvement in fiscal policy. Strong revenue performance and digital governance reforms have enhanced fiscal capacity without increasing tax burden excessively.

However, challenges remain in managing committed expenditures and ensuring sustainable debt levels. The focus on disinvestment, subsidy rationalisation, and efficiency gains indicates a forward-looking approach. Overall, fiscal policy has evolved into a key instrument for sustaining growth while maintaining macroeconomic stability.



OVERVIEW OF STATE GOVERNMENT FINANCES

State finances in India reflect a complex balance between fiscal autonomy, central support, and emerging expenditure pressures. Transfers from the Centre to States have increased significantly, both in absolute terms and as a share of GDP, strengthening fiscal capacity and supporting development.

However, the effectiveness of these transfers depends on their utilisation, with capital expenditure emerging as the most critical driver of long-term growth. While States' fiscal deficits have remained broadly stable, revenue deficits have increased in recent years due to rising expenditure pressures and relatively slower revenue growth.

Despite these constraints, capital expenditure has been protected, largely due to central support schemes such as interest-free loans for capital investment (SASCI). The revenue composition has improved with higher own tax revenues, reflecting economic recovery and better compliance. However, increasing reliance on **unconditional cash transfers** and committed expenditures is creating fiscal trade-offs, potentially crowding out productive investment.

Overall, State finances remain stable but face structural challenges, requiring a careful balance between welfare spending, fiscal discipline, and growth-oriented investments.



Key Points

1. Expansion of Centre-State Fiscal Transfers

- Total transfers from the Centre to States more than doubled between FY20 and FY26.
- Transfers increased from 5.7% to 6.9% of GDP, reflecting enhanced fiscal support.
- Components include tax devolution, Finance Commission grants, CSS, and other transfers.
- Increased transfers have expanded fiscal space for States.

2. Role of Finance Commission Grants

- Fifteenth Finance Commission recommended ₹1.48 lakh crore grants for FY26.
- Grants include revenue deficit grants, local body grants, health grants, and disaster relief.
- Effective utilisation of grants is critical for growth outcomes.
- Grants support decentralisation and local governance capacity.

3. Fiscal Devolution and Growth Outcomes

- Capital expenditure is the most significant driver of State-level economic growth.
- Higher transfers alone do not guarantee growth without productive utilisation.
- Fiscal discipline and efficient spending determine long-term outcomes.
- Investment-led spending yields more durable income and welfare gains.

4. Borrowing Flexibility for States

- Net borrowing ceiling set at 3% of GSDP, with additional 0.5% for power sector reforms.
- Additional borrowing allowed for contributions under the National Pension System.
- Borrowing flexibility incentivises reforms and sectoral efficiency improvements.

5. Trends in State Fiscal Performance

- Fiscal deficit remained stable around 2.8% of GDP but increased to 3.2% recently.
- Revenue deficit increased from 0.1% (FY19) to 0.7% (FY25), indicating fiscal stress.
- Rising expenditure pressures and slower revenue growth contributed to deficits.
- Number of revenue-surplus States declined significantly.

6. Revenue Composition of States

- States' own tax revenue is the largest source, accounting for about 50% of total revenue.
- Share in central taxes contributes around 32%, followed by grants and non-tax revenue.
- Own tax revenues grew strongly, indicating improved fiscal capacity.
- Total revenue receipts as a share of GDP declined, constraining fiscal space.



7. Role of SASCI in Supporting Capex

- Special Assistance to States for Capital Investment provides interest-free loans.
- Allocation increased from ₹12,000 crore (FY21) to ₹1.5 lakh crore (FY26).
- SASCI helped maintain capital expenditure despite revenue pressures.
- Scheme plays a key role in preventing pro-cyclical reduction in investment.

8. Expenditure Trends and Quality

- Total State expenditure remained stable around 15–16% of GDP.
- Revenue expenditure dominates, accounting for around 84% of total expenditure.
- Increasing share of unconditional cash transfers is altering expenditure composition.
- Higher revenue spending reduces fiscal space for capital investment.

9. Fiscal Trade-offs of Cash Transfers

- Unconditional cash transfers are expanding rapidly across States.
- These transfers provide short-term welfare benefits but raise fiscal sustainability concerns.
- Evidence suggests limited long-term impact on productivity and human capital.
- Rising revenue expenditure may crowd out capital expenditure and affect growth.

10. Trends in FY26 (Current Year)

- Revenue growth moderated to around 6.6% in FY26 (Apr–Nov).
- Revenue deficit overshoot budget estimates due to slower revenue growth.
- Capital expenditure rebounded but lagged behind budgeted targets.
- States face pressure to balance fiscal discipline with expenditure needs.

Data & Facts

- Transfers to States: **₹11.5 lakh crore (FY20) → ₹25.6 lakh crore (FY26 BE)**
- Transfers as % of GDP: **5.7% → 6.9%**
- State fiscal deficit: **~2.8% → 3.2% of GDP**
- Revenue deficit: **0.1% (FY19) → 0.7% (FY25)**
- SASCI allocation: **₹12,000 crore → ₹1.5 lakh crore**
- States' own tax revenue share: **~50% of total revenue**
- Total State expenditure: **~15.4% of GDP**

Concepts

- **Fiscal Devolution:** Transfer of financial resources from the Centre to States.



- **GSDP (Gross State Domestic Product):** Total economic output of a State.
- **Revenue Deficit (States):** Excess of revenue expenditure over revenue receipts.
- **SASCI:** Scheme providing interest-free loans to States for capital expenditure.
- **Unconditional Cash Transfers (UCTs):** Direct cash payments without conditions.

Analysis

State finances reflect a growing tension between welfare expansion and fiscal sustainability. While increased transfers and schemes like SASCI have strengthened fiscal capacity and protected capital expenditure, rising revenue deficits and expanding cash transfer programmes pose long-term risks. The evidence clearly indicates that growth outcomes depend more on capital expenditure than on the volume of transfers.

Therefore, maintaining fiscal discipline and prioritising investment-led spending is essential. The challenge ahead lies in balancing short-term welfare needs with long-term growth objectives, ensuring that fiscal policy at the State level remains both sustainable and growth-oriented.

DEBT PROFILE OF THE GOVERNMENT & GENERAL GOVERNMENT FINANCES

India's debt management strategy reflects a prudent and growth-oriented approach, balancing cost minimisation, risk mitigation, and market development. The Central Government aims to reduce its debt-to-GDP ratio to around 50% by FY31, signalling a shift toward a more credible and flexible fiscal framework.

Debt composition is dominated by domestic, long-term, fixed-rate instruments, which reduces rollover, interest rate, and currency risks. At the State level, rising debt and fiscal pressures highlight inter-state disparities, though market pricing does not adequately reflect fiscal performance differences.

At the aggregate level, general government finances show a clear post-pandemic consolidation trend, with declining debt ratios and improving fiscal discipline. India stands out among emerging economies for achieving debt reduction while sustaining growth, supported by a strong public investment push. Evidence suggests that India's fiscal policy is sustainable, as governments respond to rising debt with corrective measures over time.

However, maintaining sustainability requires continued fiscal discipline, efficient public investment, and coordinated Centre-State action. Overall, India's fiscal framework demonstrates that growth-friendly consolidation is achievable even in a volatile global environment.



Key Points

1. Central Government Debt Strategy

- Debt management is guided by minimising borrowing costs, mitigating risks, and supporting G-sec markets.
- Medium-term target is to reduce debt-to-GDP ratio to **50 ± 1% by FY31**.
- Debt consolidation has strengthened fiscal credibility post-pandemic.
- Flexible fiscal framework is preferred over rigid deficit targets in uncertain conditions.

2. Composition and Cost of Debt

- Marketable securities (G-secs and T-bills) constitute about 65% of total liabilities.
- Weighted average maturity (WAM) is around **19 years**, reducing rollover risk.
- Weighted average coupon (WAC) declined to **~6.65% in FY26**, lowering borrowing costs.
- Strategic issuance across maturities helps stabilise yields and borrowing conditions.

3. Risk Management in Public Debt

- Rollover risk is low, with only ~27% of debt maturing in the next five years.
- Interest rate risk is limited due to dominance of fixed-rate debt (~96%).
- External debt exposure is minimal (~2.6% of GDP), reducing currency risk.
- Debt profile ensures stability against global financial volatility.

4. State-Level Debt Dynamics

- Combined State debt stands at **~28.1% of GDP (FY25)**.
- Interest payments to revenue receipts ratio is around **12.6%**.
- Significant variation exists across States in fiscal health.
- Borrowing costs do not adequately reflect fiscal discipline differences.
- Improved transparency and market development are needed for better risk pricing.

5. General Government Finances

- Combined (Centre + States) debt and deficits are on a consolidation path post-pandemic.
- General government debt declined by **~7.1 percentage points since 2020**.
- India's performance compares favourably with global peers, especially EMEs.
- Fiscal consolidation is being achieved alongside sustained economic growth.

6. Debt Sustainability Framework

- Fiscal Response Function (FRF) shows that fiscal policy responds positively to rising debt.



- Higher debt leads to corrective measures such as improved primary balance.
- Fiscal policy in India is counter-cyclical and institutionally driven.
- Debt sustainability is supported by strong growth and fiscal discipline.

7. Public Investment and Growth

- General government investment is about **4% of GDP**, relatively high globally.
- India allocates a larger share of revenue to capital expenditure compared to peers.
- Public investment enhances productivity, crowds in private investment, and boosts growth.
- Growth-led debt sustainability is a key feature of India's fiscal model.

8. Fiscal Challenges at State Level

- Rising revenue deficits and unconditional cash transfers pose fiscal risks.
- High committed expenditure limits fiscal flexibility.
- Fiscal indiscipline at State level can increase sovereign borrowing costs.
- Need for better coordination between Centre and States.

9. Future Fiscal Reforms

- GST 2.0 and personal income tax reforms aim to improve efficiency and compliance.
- Digitalisation of public finance will enhance transparency and reduce leakages.
- Strengthening local bodies can improve grassroots fiscal efficiency.
- Sixteenth Finance Commission will shape future fiscal federalism.

Data & Facts

- Central debt target: **~50% of GDP by FY31**
- Marketable securities: **~65% of total liabilities**
- WAM: **~19 years**
- WAC: **~6.65% (FY26)**
- Debt maturing in 5 years: **~27%**
- Sovereign External debt: **~2.6% of GDP**
- State debt: **~28.1% of GDP**
- General government debt reduction: **~7.1 percentage points since 2020**
- Public investment: **~4% of GDP**



Concepts

- **Debt-to-GDP Ratio:** Indicator of a country's debt burden relative to its economic output.
- **G-Sec (Government Security):** Debt instrument issued by the government to borrow funds.
- **Weighted Average Maturity (WAM):** Average time to maturity of debt instruments.
- **Fiscal Response Function (FRF):** Relationship between debt levels and fiscal policy response.
- **General Government:** Combined fiscal position of Centre and State governments.

Analysis

India's debt framework reflects a mature and adaptive fiscal strategy that prioritises sustainability without compromising growth. The shift toward a debt anchor instead of rigid fiscal deficit targets indicates pragmatic policymaking in a volatile global environment. Strong reliance on domestic, long-term borrowing has insulated the economy from external shocks.

At the same time, the emphasis on public investment has strengthened growth prospects, making debt more sustainable. However, rising fiscal pressures at the State level and increasing revenue expenditure pose risks to long-term stability. Ensuring coordinated fiscal discipline and maintaining the quality of expenditure will be critical for sustaining this trajectory.



CHAPTER 3: MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION

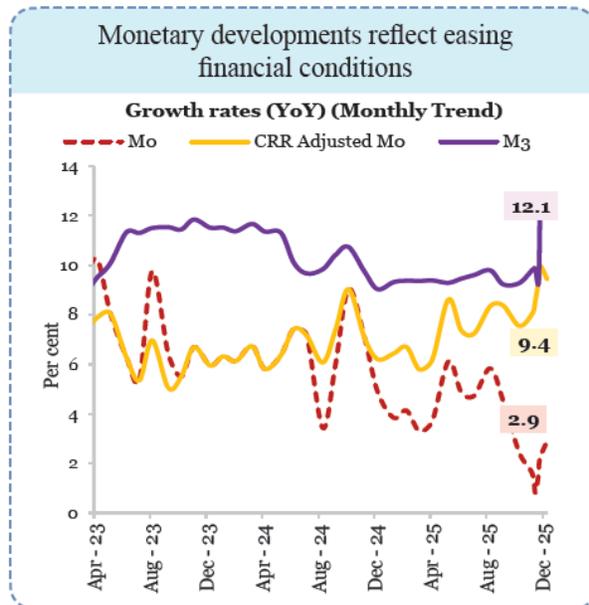
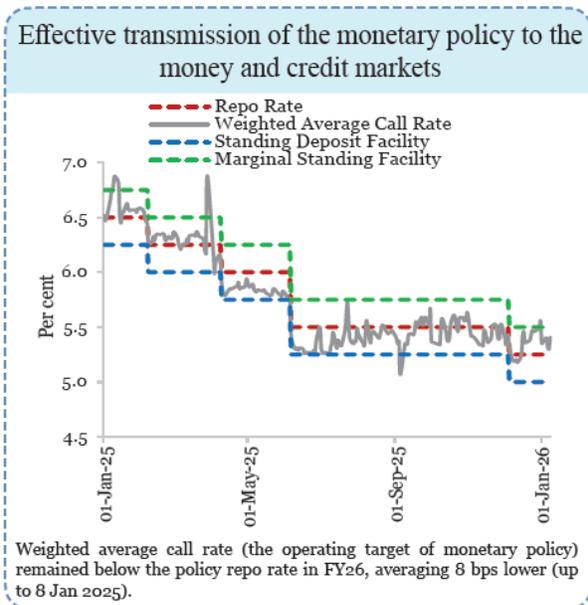
GLOBAL FINANCIAL MARKETS AND MONETARY DEVELOPMENT

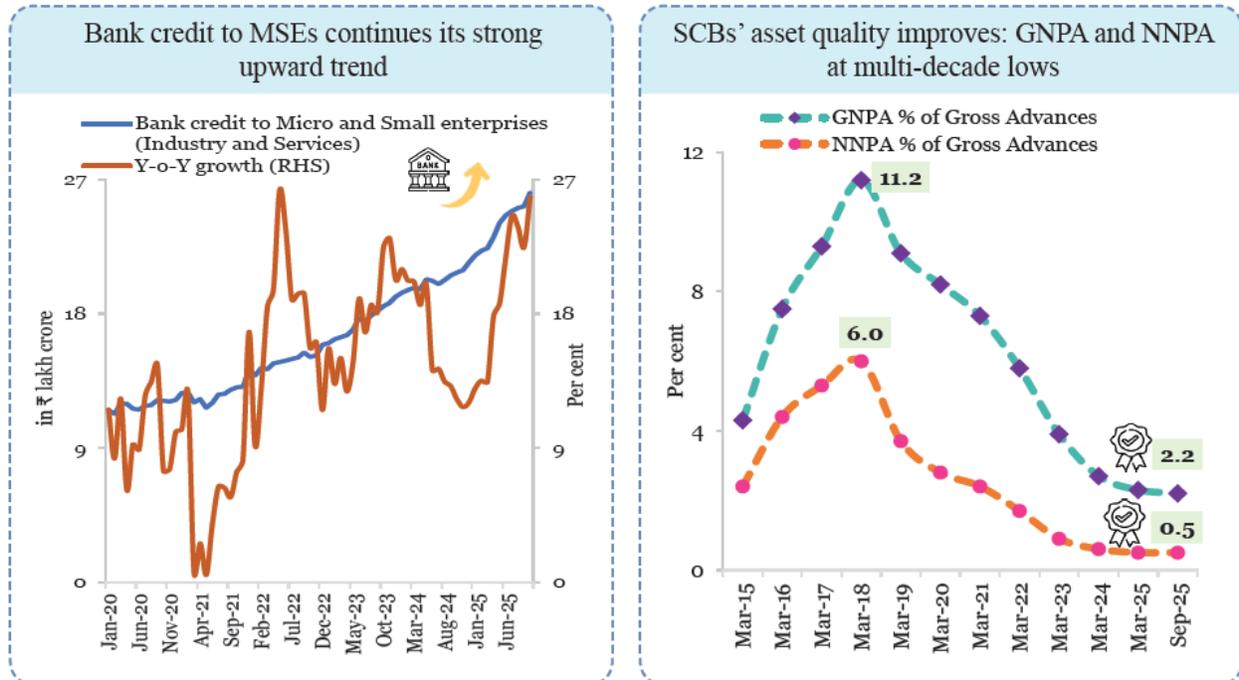
Monetary management and financial intermediation form the backbone of economic stability and growth, with the Reserve Bank of India (RBI) playing a central role in regulating money supply, interest rates, and liquidity.

In a globally interconnected financial system, while globalisation has improved access to capital and reduced borrowing costs, rising geopolitical fragmentation has made financial markets more vulnerable to shocks. Financial markets react quickly to uncertainty, leading to increased volatility, higher risk premiums, and delayed investment decisions. Emerging risks such as AI-driven herding behaviour, inflated asset valuations, and the rise of digital assets like stablecoins further complicate global financial stability.

In this context, India’s monetary policy in FY26 adopted an accommodative yet cautious approach, reducing the repo rate and CRR to boost liquidity, credit flow, and economic activity. Monetary aggregates indicate **expansionary** conditions, supported by strong growth in bank deposits and credit.

Effective liquidity management ensured surplus liquidity and robust monetary transmission, leading to lower lending rates. Overall, India’s monetary framework demonstrates a balanced approach—supporting growth while maintaining price and financial stability amid global uncertainties.





Key Points

1. Role of Monetary Management

- Monetary policy regulates money supply, interest rates, and liquidity to ensure price stability and growth.
- Effective transmission through banks ensures policy changes impact households and businesses.
- A stable financial system enables efficient resource allocation and economic resilience.

2. Global Financial Interconnectedness

- Globalisation has improved access to capital and reduced borrowing costs.
- Financial systems are now highly interconnected, increasing exposure to global shocks.
- Emerging markets must balance benefits of global finance with risks of volatility.
- Domestic financial development acts as a buffer against external shocks.

3. Financial Markets and Uncertainty

- Financial markets react immediately to uncertainty by adjusting prices and risk perceptions.
- **Tariff-related shocks** in 2025 led to capital shifts towards safe assets like gold.
- Equity markets declined and risk premiums increased during uncertainty episodes.



- Market stability returned after policy reversals, highlighting sensitivity to policy signals.

4. Channels of Impact of Uncertainty

- Uncertainty delays investment decisions due to “wait-and-see” behaviour.
- It increases cost of finance through higher credit spreads and intermediation costs.
- Prolonged uncertainty may trigger sharp market corrections and financial contagion.

5. Emerging Risks in Global Finance

- **AI-driven trading** may increase herding behaviour and amplify market volatility.
- Technology stocks show signs of concentration and potential overvaluation.
- Rising global public debt and risk-taking by non-bank institutions add systemic risks.
- Stablecoins are growing rapidly, posing potential spillover risks to traditional finance.

6. Firm-Level Impact of Uncertainty (India Evidence)

- Uncertainty shocks reduce capital formation, with firms cutting investments.
- Mid-sized firms are most affected due to limited flexibility and resources.
- Export-oriented firms are more vulnerable to global shocks.
- Sectoral impact varies, with services and traditional sectors showing resilience.

7. Monetary Policy Actions

- RBI reduced repo rate by **100 basis points** (Apr–Dec 2025) to **5.25%**.
- Policy stance shifted from accommodative to neutral to maintain flexibility.
- CRR reduced by **100 basis points to 3%**, releasing liquidity into the system.
- Policy aimed to balance growth support with inflation control.

8. Trends in Monetary Aggregates

- **Reserve money** (M0) growth declined to 2.9%, but adjusted growth rose to 9.4%.
- Currency in circulation increased significantly, reflecting higher demand.
- Broad money (M3) growth rose to 12.1%, indicating expansionary conditions.
- Growth driven mainly by bank deposits and credit expansion.

9. Credit and Financial Intermediation

- Bank credit to the commercial sector grew by **14.1% (YoY)**.
- Deposits grew by **12.3%**, supporting money supply expansion.
- Money multiplier increased, indicating improved financial intermediation.



10. Liquidity Management

- RBI injected liquidity through CRR cuts, OMOs, and forex swaps.
- System liquidity remained in surplus (~₹1.89 lakh crore).
- Banks relied less on emergency borrowing and parked more funds with RBI.
- Liquidity conditions supported credit growth and market stability.

11. Monetary Transmission

- Lending rates declined in response to repo rate cuts.
- WALR on fresh loans declined by **64 basis points** to 8.71%.
- WALR on outstanding loans declined by **56 basis points**.
- Strong transmission reflects effective monetary policy implementation.

Data & Facts

- Repo rate: **5.25% (Dec 2025)**
- CRR: **3%**
- Liquidity injection: **~₹2.5 lakh crore (CRR cut)**
- M3 growth: **12.1%**
- Bank credit growth: **14.1% (YoY)**
- Deposit growth: **12.3% (YoY)**
- Money multiplier: **6.21**
- System liquidity surplus: **~₹1.89 lakh crore**
- Stablecoin market cap: **USD 305.4 billion (+49.6%)**

Concepts

- **Monetary Policy:** Central bank actions to control money supply and interest rates.
- **Repo Rate:** Rate at which RBI lends money to banks.
- **CRR (Cash Reserve Ratio):** Portion of bank deposits kept with RBI.
- **M0 (Reserve Money):** Currency in circulation plus bank reserves with RBI.
- **M3 (Broad Money):** Total money supply including deposits.
- **Money Multiplier:** Ratio of total money supply to base money.
- **Liquidity:** Availability of funds in the financial system.



- **Weighted Average Lending Rate (WALR):** to measure how effectively monetary policy (like repo rate changes) is transmitted to the real economy.

Analysis

The monetary and financial sector in FY26 reflects a careful balancing act between supporting growth and maintaining stability in a volatile global environment. While global financial markets are increasingly shaped by uncertainty, technological disruption, and geopolitical fragmentation, India's policy response has remained proactive and calibrated.

The expansionary monetary stance, combined with effective liquidity management, has ensured robust credit flow and strong transmission. However, emerging global risks such as AI-driven volatility and digital financial instruments require continuous regulatory vigilance. The key takeaway is that monetary policy is no longer just about inflation control—it has become central to managing financial stability in an uncertain and interconnected world.

FINANCIAL INTERMEDIATION

India's financial sector in FY26 reflects strong resilience, improved intermediation, and proactive regulatory oversight amid global uncertainty. The banking sector remains robust, supported by strong balance sheets, declining non-performing assets, and sustained credit growth.

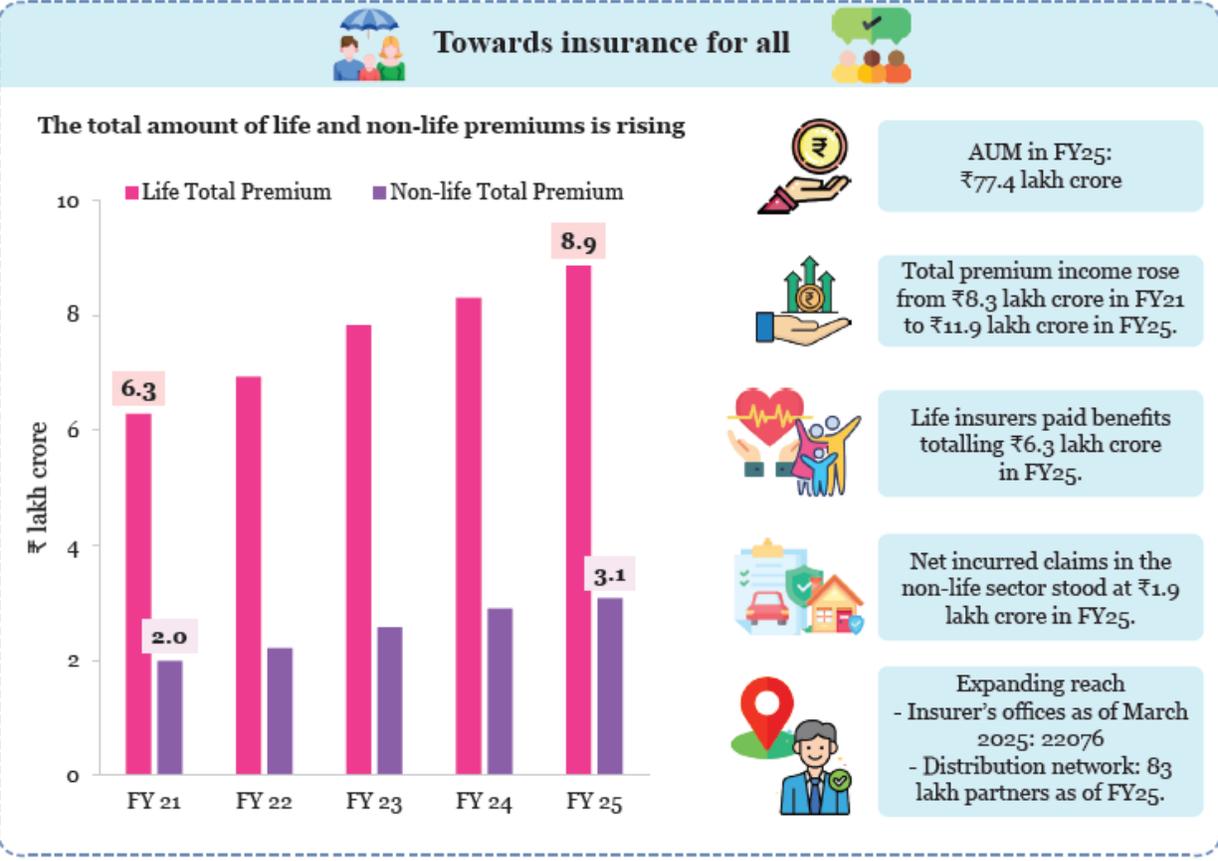
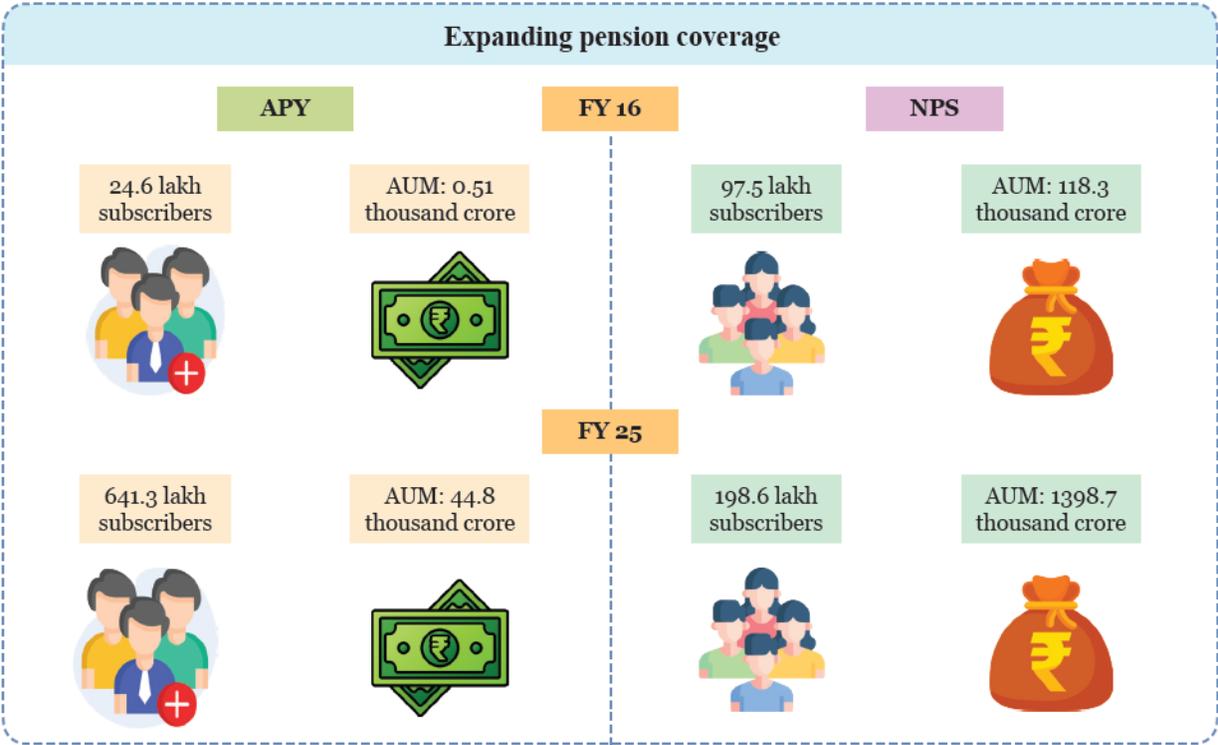
Capital markets have expanded significantly, with increased retail participation and strong equity performance, although concerns of overvaluation persist in certain segments. The debt market has deepened, supported by government securities and corporate bond issuances, improving financing avenues beyond banks.

Foreign portfolio investment flows have remained volatile due to global conditions, highlighting India's exposure to external financial cycles. **Pension and insurance sectors** have continued to expand, contributing to long-term financial stability and inclusion.

Regulatory bodies have played a crucial role in maintaining systemic stability through timely interventions, enhanced supervision, and adoption of digital technologies. However, emerging risks such as global financial volatility, technological disruptions, and evolving market structures require continuous vigilance.

Going forward, strengthening financial resilience, deepening markets, and ensuring effective regulation will be critical for sustaining growth and stability in India's financial ecosystem.





Key Points

1. Banking Sector Performance

- Banks' balance sheets improved with lower NPAs and higher profitability.
- Credit growth remained strong, supporting economic activity.
- Capital adequacy ratios remained above regulatory requirements.
- Improved asset quality reflects effective regulatory oversight and risk management.

2. Credit Trends and Financial Intermediation

- Bank credit continued to grow across sectors, particularly industry and services.
- Financial intermediation improved, supported by liquidity and policy measures.
- Non-bank financial channels are increasingly complementing bank credit.
- Diversification of financing sources reduces systemic risk.

3. Capital Market Developments

- Equity markets witnessed strong participation, including retail investors.
- Market capitalisation expanded significantly, reflecting investor confidence.
- Concerns of overvaluation exist in select sectors, especially technology stocks.
- Capital markets are becoming an important source of corporate financing.

4. Debt Market and Government Securities

- Government securities market remains the backbone of the debt market.
- Corporate bond market is gradually deepening, providing alternative financing.
- Yield movements reflect both domestic and global financial conditions.
- Development of debt markets reduces reliance on bank financing.

5. Foreign Portfolio Investment (FPI)

- FPI flows remained volatile due to global uncertainty and interest rate differentials.
- Capital inflows are sensitive to global monetary policy and risk perceptions.
- India continues to attract long-term investments despite short-term volatility.
- Managing external vulnerability remains a policy priority.

6. Pension and Insurance Sector Growth

- Pension sector assets expanded, enhancing long-term savings mobilisation.
- Insurance penetration improved, supporting financial inclusion.
- These sectors contribute to stable, long-term capital formation.



- Growth reflects rising financial awareness and institutional development.

7. Role of Financial Sector Regulators

- Regulators ensured stability through timely interventions and supervision.
- Adoption of digital tools improved monitoring and compliance.
- Regulatory coordination across sectors strengthened systemic resilience.
- Focus remains on balancing innovation with risk management.

8. Emerging Risks and Challenges

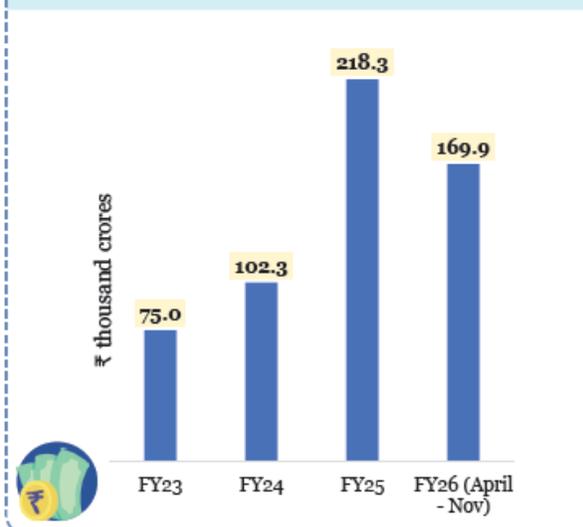
- Global financial volatility poses risks to capital flows and markets.
- Technological disruptions, including AI and digital assets, create new risks.
- Market concentration and asset overvaluation require monitoring.
- Non-bank financial institutions may amplify systemic risks.

9. Financial Sector Outlook

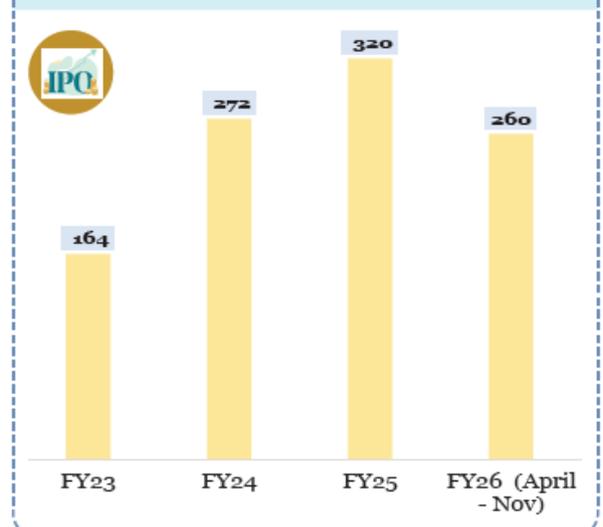
- Financial sector expected to remain stable with continued policy support.
- Market deepening and diversification will enhance resilience.
- Strengthening regulatory frameworks is essential for future stability.
- Focus on inclusion and innovation will drive long-term growth.

Developments in the capital market In FY26 (April-November 2025)

Steady rise in total resource mobilization (equity + debt) from primary markets



Rise in number of Initial Public Offers



Regulatory developments

 <p>Banking Sector</p>	 <p>Capital Markets</p>	 <p>Insurance Sector</p>
<ul style="list-style-type: none"> RBI's Framework for Formulations of Regulations: Standardizes the regulatory process stipulating periodic review and consultation. RBI has consolidated over 9000 existing circulars and guidelines. Public Sector Banks introduced a credit assessment model to ease the doing business for MSMEs. RBI's FREE-AI: Structured approach for financial regulators and institutions to leverage AI while managing its risks. 	<ul style="list-style-type: none"> The Securities Markets Code, 2025, repeals and replaces the SCRA (1956), SEBI Act (1992) and Depositories Act (1996), consolidating India's securities market laws into a single framework. SEBI launched investor protection tools (SEBI Check, SEBI vs SCAM), introduced an ESG debt framework, expanded municipal bond outreach, and introduced electricity derivatives. 	<ul style="list-style-type: none"> The Sabka Bima Sabki Raskha (Amendment of Insurance Laws) Act, 2025, was notified on 21 December 2025. Important provisions include higher FDI limits, simplified insurer regulations, strengthened policyholder protection and aligning insurance governance with India's digital data protection framework.

A decade of 'funding the unfunded' through PMMY

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Disbursed over ₹36.18 lakh crore across 55.45 crore loan accounts. (as of October 2025)
- Women entrepreneurs accessed 69 % of all microloans.


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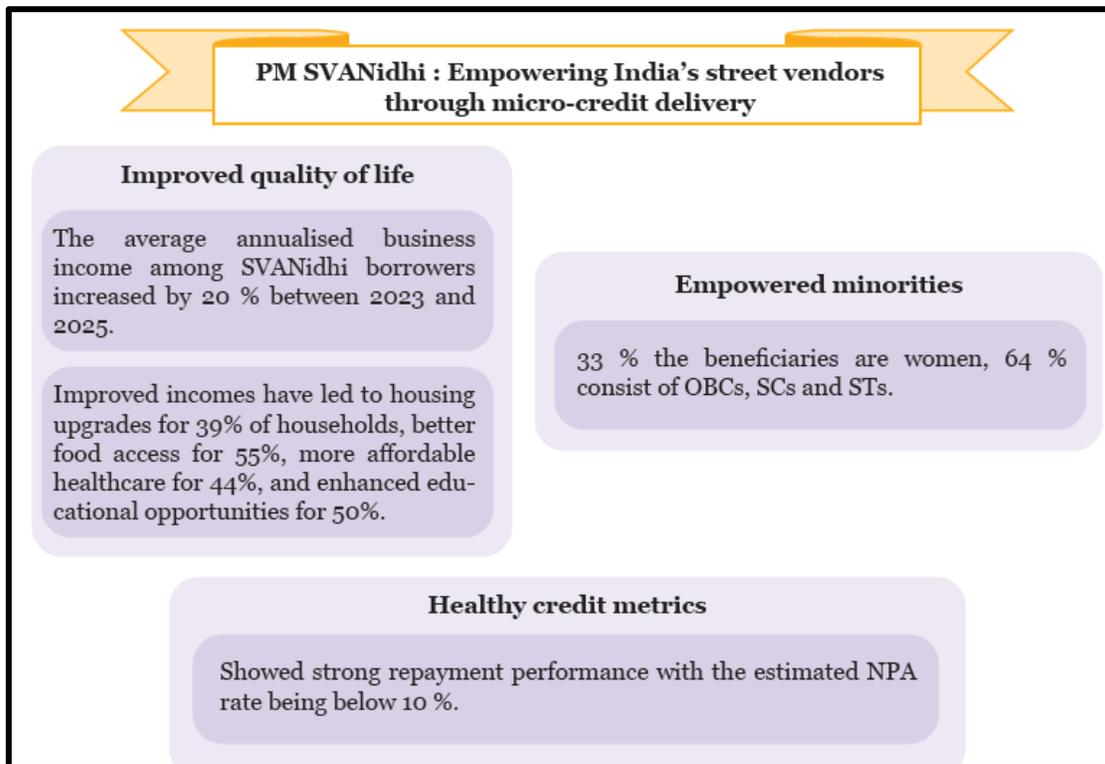
₹ 15.6 lakh crore disbursed across 33.4 crore accounts of SCs, STs, OBCs and other minorities.

Data & Facts

- Banking NPAs: **At multi-year lows (~2-3%)**
- Credit growth: **Double-digit growth (~12-14%)**
- Capital adequacy: **Above regulatory norms**



- Equity market participation: **Rising retail share**
- Pension and insurance assets: **Steady expansion**



Concepts

- **NPA (Non-Performing Asset)**: Loan where repayment has stopped for a specified period.
- **Capital Adequacy Ratio (CAR)**: Measure of a bank's financial strength and risk absorption capacity.
- **FPI (Foreign Portfolio Investment)**: Investment in financial assets like stocks and bonds by foreign investors.
- **Corporate Bond Market**: Market where companies raise funds through debt instruments.
- **Financial Intermediation**: Process of channeling funds from savers to borrowers.

Analysis

India's financial sector is undergoing a structural transformation, moving towards greater diversification, digitalisation, and resilience. The banking sector's improved health and the growing role of capital markets indicate a shift towards a more balanced financial system.

However, global uncertainties and technological disruptions introduce new complexities that require adaptive regulation. The increasing role of non-bank financial institutions and digital



assets necessitates stronger oversight to prevent systemic risks. The key challenge ahead lies in sustaining growth while ensuring stability, particularly in an increasingly interconnected and rapidly evolving global financial environment.



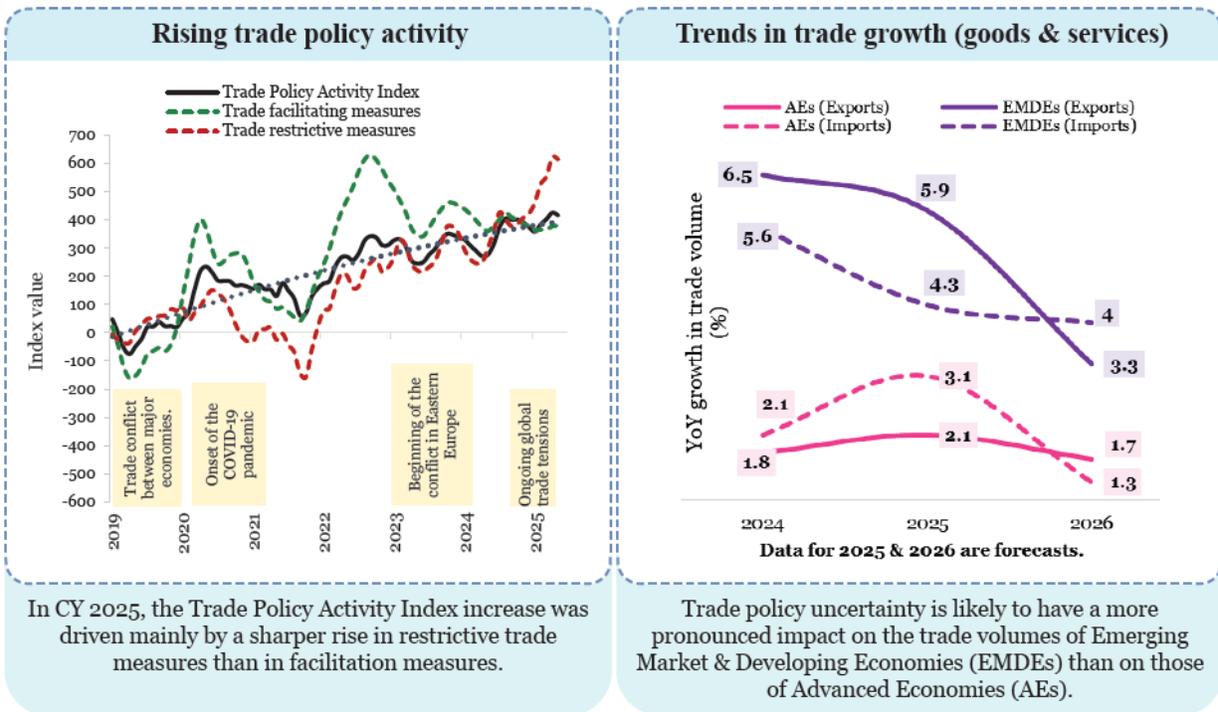
CHAPTER 4: EXTERNAL SECTOR

GLOBAL TRADE DYNAMICS AND INDIA'S TRADE PERFORMANCE

The global economic order is undergoing a structural transformation marked by rising protectionism, geopolitical fragmentation, and a shift from multilateralism to strategic bilateralism. Supply chains are being reconfigured to prioritise resilience, national security, and technological sovereignty over cost efficiency. Trade policy uncertainty has surged, driven by tariff wars, industrial policies, and competition over critical resources, leading to increased volatility in global trade.

In this evolving landscape, India's external sector has demonstrated resilience through diversification, strong services exports, and expanding trade partnerships. While merchandise exports remain stable, the growth of non-petroleum exports and services trade highlights structural strengths. India's integration into global trade has deepened, with rising shares in both merchandise and services exports.

However, challenges persist, including widening trade deficits, dependence on imported intermediates, and limited export complexity. Policy initiatives such as Production-Linked Incentive (PLI) schemes, FTAs, and export promotion measures aim to enhance competitiveness and diversification. Overall, India's external sector reflects a balance between global vulnerabilities and domestic strengths, with significant potential for structural upgrading and export-led growth.



GLOBAL TRADE DYNAMICS

1. Structural Shift in Global Trade

- Globalisation is giving way to a fragmented and protectionist trade environment.



- Supply chains are being restructured to prioritise resilience and national security.
- Bilateral and strategic trade relationships are replacing multilateral frameworks.
- Economies are increasingly focusing on domestic capacity building.

2. Rising Trade Policy Uncertainty

- Trade Policy Uncertainty (TPU) and Global Economic Policy Uncertainty (GEPU) indices surged sharply in 2025.
- Drivers include tariff wars, weakening multilateral agreements, and competition for critical minerals.
- Uncertainty is reinforced by unilateral trade measures and retaliatory policies.
- Elevated uncertainty affects global trade volumes and investment decisions.

3. Emerging Global Trade Trends

- “**Geostrategic globalisation**” is replacing pure economic globalisation.
- **Friend-shoring** and **nearshoring** trends are reshaping trade flows.
- Trade concentration is increasing among major economies.
- Economic, political, and technological factors are increasingly interlinked in trade decisions.

4. Global Trade Performance

- Global trade growth is projected to slow from 3.6% (2025) to 2.3% (2026).
- Emerging economies are expected to grow faster but are more vulnerable to uncertainty.
- Trade growth in 2025 was partly driven by frontloading due to anticipated tariffs.
- Fragmentation continues to constrain long-term trade expansion.

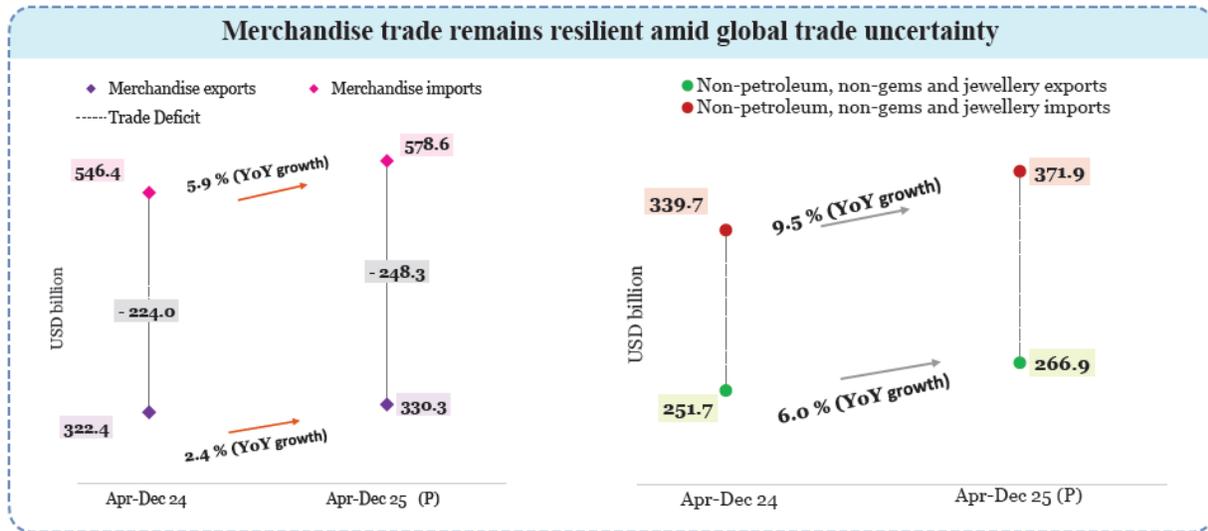
INDIA'S TRADE PERFORMANCE

5. Overall Trade Trends

- India's total exports reached a record **USD 825.3 billion in FY25**, driven by services.
- Imports increased to **USD 919.9 billion**, leading to a trade deficit of **USD 94.7 billion**.
- Strong domestic demand contributed to rising imports.
- Trade performance reflects resilience despite global uncertainty.



India's trade performance in FY26 (April-Dec 2025)



6. Merchandise Trade Performance

- Merchandise exports remained stable at **USD 437.7 billion in FY25**.
- Non-petroleum, non-gems exports grew strongly, indicating core sector strength.
- Petroleum and gems exports masked underlying positive trends.
- Merchandise imports increased due to demand for capital goods and intermediates.

7. Composition of Trade

- Key export sectors include **petroleum products, telecom equipment, and pharmaceuticals**.
- Electronics and telecom exports are growing rapidly, indicating manufacturing strength.
- Imports are dominated by **crude oil, gold, and electronic goods**.
- Rising imports of intermediates indicate integration into global value chains.

8. Trade Deficit Dynamics

- Merchandise trade deficit widened significantly due to rising imports.
- Services trade surplus partially offsets the merchandise deficit.
- Increasing imports reflect growth rather than weakness.
- Managing trade balance requires export diversification and value addition.

9. Agricultural Trade

- Agricultural exports grew to **USD 51.1 billion (FY25)** but remain below potential.
- India's global share in agricultural exports is only **2.2%**, despite high production.



- Policy interventions (export bans, price controls) disrupt export stability.
- Agricultural exports have strong potential as a future growth driver.

10. PLI Scheme and Trade

- PLI sectors recorded strong export growth (**~10.6% annually**).
- High-growth sectors include electronics, IT hardware, and batteries.
- Import growth alongside exports reflects integration into value chains.
- Some sectors show early success in import substitution (e.g., telecom).

11. Diversification of Trade

- India is diversifying export destinations beyond traditional markets like the US.
- Alternative markets include UAE, EU, Africa, and Southeast Asia.
- Crude oil import sources are also becoming more diversified.
- Diversification enhances resilience against global shocks.

12. Export Complexity Challenge

- India ranks **44th in Economic Complexity Index (ECI)**.
- Export basket is dominated by low- and mid-complexity products.
- High-complexity sectors like advanced manufacturing remain underdeveloped.
- However, strong potential exists as per Complexity Outlook Index (COI).

13. Policy Measures for Export Growth

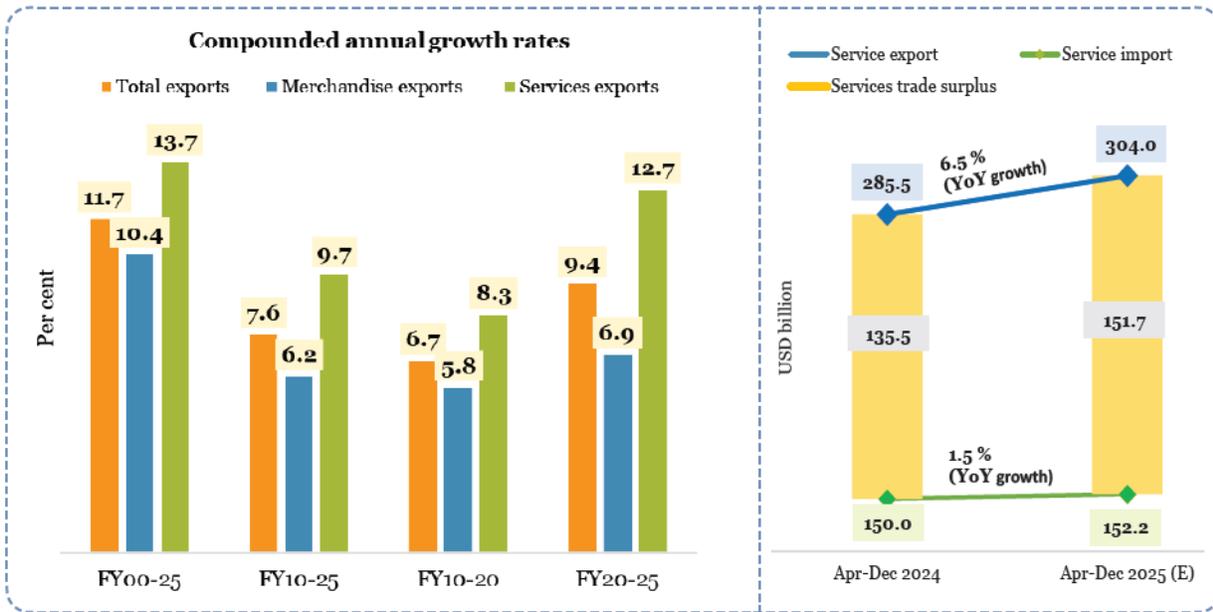
- FTAs (e.g., India-UK, India-Oman) enhance market access.
- Export Promotion Mission provides integrated support to exporters.
- RBI measures improve liquidity and ease credit constraints.
- Focus is shifting toward competitiveness, innovation, and diversification.

14. Services Trade Performance

- Services exports reached **USD 387.5 billion in FY25**, growing 13.6%.
- Services surplus covered nearly **two-thirds of merchandise deficit**.
- Key sectors include IT, business services, and fintech.
- Growth driven by Global Capability Centres (GCCs) and skilled workforce.



Services trade continues to be a key driver of India's trade performance



Data & Facts

- Total exports: **USD 825.3 billion (FY25)**
- Total imports: **USD 919.9 billion (FY25)**
- Trade deficit: **USD 94.7 billion**
- Merchandise exports: **USD 437.7 billion**
- Services exports: **USD 387.5 billion**
- Services surplus: **USD 188.8 billion**
- Agricultural exports: **USD 51.1 billion**
- India's share in global merchandise exports: **1.8%**
- India's share in global services exports: **4.3%**

Concepts

- **Balance of Payments (BoP):** Record of all economic transactions with the rest of the world.
- **Trade Deficit:** When imports exceed exports.
- **Friend-shoring:** Trading with politically aligned countries.
- **Nearshoring:** Shifting production closer geographically.
- **Economic Complexity Index (ECI):** Measures sophistication of a country's exports.



- **PLI Scheme:** Incentive scheme to boost manufacturing and exports.

Analysis

The external sector reflects a dual reality—global fragmentation and domestic resilience. While rising protectionism and uncertainty are reshaping global trade, India has adapted through diversification, services strength, and policy support.

However, structural challenges remain, particularly low export complexity and dependence on imports for intermediates. The key strategic shift required is moving from volume-driven exports to value-driven exports.

Strengthening manufacturing, improving product sophistication, and ensuring policy stability—especially in agriculture—will be crucial. India’s ability to leverage global shifts while building domestic capabilities will determine its long-term position in global trade.



INDIA'S BALANCE OF PAYMENT

India’s external sector demonstrates resilience through a balanced combination of current account management and stable capital inflows. While the economy continues to run a merchandise trade

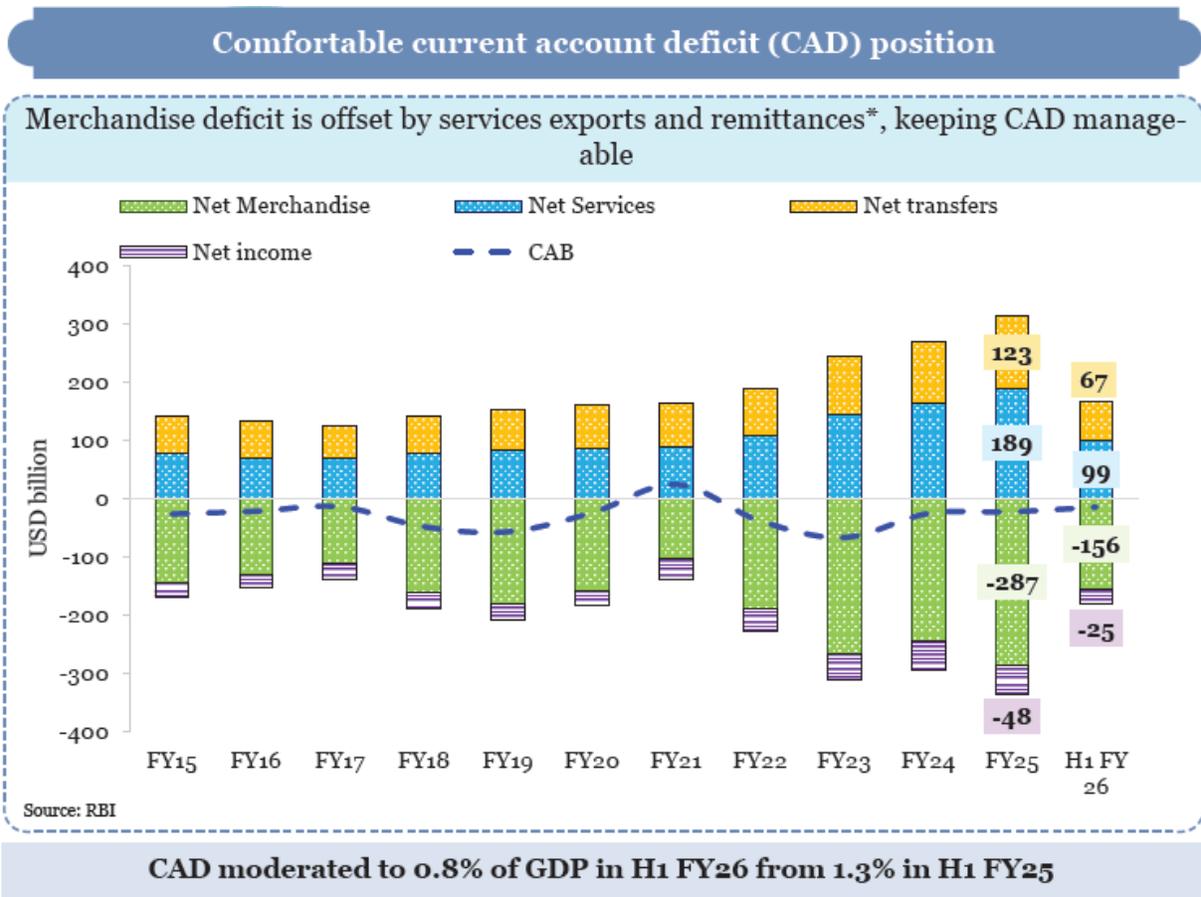


deficit, it is effectively offset by strong services exports and robust remittance inflows, keeping the current account deficit (CAD) at manageable levels.

On the capital account side, India continues to attract significant foreign investments, particularly FDI, which remains stable despite global uncertainty. Portfolio flows, however, remain volatile and sensitive to global financial conditions.

Foreign exchange reserves are at comfortable levels, providing a buffer against external shocks. Exchange rate movements reflect both structural factors such as persistent trade deficits and cyclical factors like capital flow volatility. Empirical evidence suggests that a weaker currency improves India’s trade balance, particularly merchandise exports, while the financial channel may offset some gains.

Over the long term, sustainable external stability depends on strengthening manufacturing exports, improving export complexity, and enhancing domestic savings. The outlook emphasises export-led growth, stable capital inflows, and structural reforms as key drivers of external sector resilience.

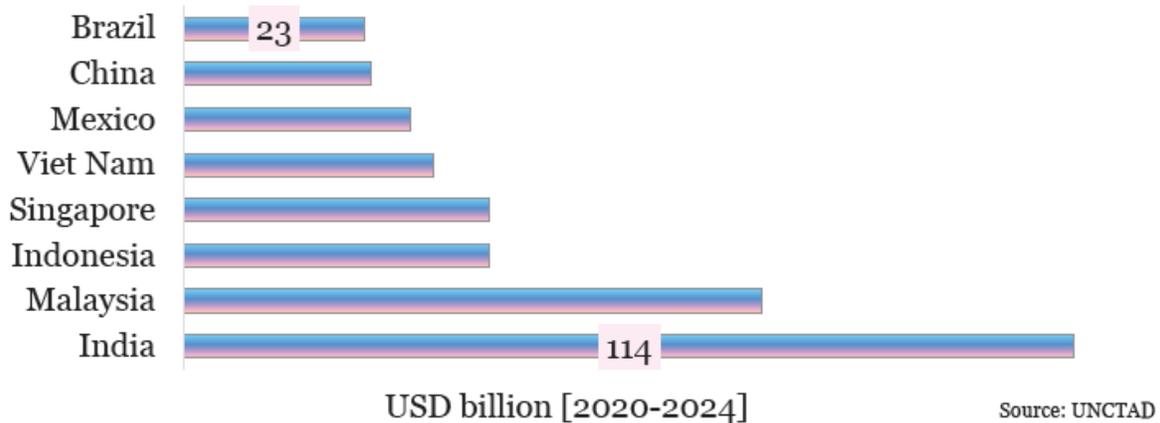


*Transfer receipts mainly represent remittances by Indians employed overseas



India leads the world in greenfield digital investment between 2020-2024

Top economies by project announcements in digital economy



- India emerged as the largest destination for greenfield digital investments, attracting USD 114 billion between CY 2020-2024.
- Investments span digital services, data centres, and IT infrastructure

Key Points

1. Current Account Dynamics

- India runs a structural merchandise trade deficit, offset by services surplus and remittances.
- CAD moderated to **0.8% of GDP in H1 FY26** from 1.3% a year earlier.
- Services exports and remittances act as stable buffers.
- India's CAD remains modest compared to other deficit economies.

2. Role of Remittances

- Remittances reached **USD 73 billion in H1 FY26**.
- India remains the **world's largest recipient of remittances**.
- Remittances account for around **3.5% of GDP** and exceed FDI inflows in many years.
- Shift observed towards advanced economies (US, UK) as major sources.

3. Capital Account Trends

- Capital account reflects foreign investments, borrowings, and external financing.
- FDI remains stable and reflects investor confidence in India's growth.
- Portfolio flows are volatile and influenced by global interest rates.
- External borrowing trends depend on global liquidity conditions.



4. Global FDI Trends

- Global FDI declined by **11% in 2024**, reflecting weak investment climate.
- Technology sectors (AI, semiconductors) attract majority investments.
- Infrastructure investments declined due to high interest rates.
- Shift towards short-term, technology-driven investments.

5. FDI in India

- Gross FDI inflows: **USD 81 billion (FY25)** with continued growth in FY26.
- Net FDI improved due to reduced repatriation and steady inflows.
- India ranks among top global destinations for greenfield investments.
- Key sectors: services, IT, infrastructure, and manufacturing.

6. Outward Direct Investment (ODI)

- ODI increased, reflecting global expansion of Indian firms.
- Helps acquire technology, markets, and resources.
- Complements domestic investment in the long run.
- India is transitioning toward greater global economic integration.

7. Foreign Portfolio Investment (FPI)

- FPI flows are cyclical and sensitive to global financial conditions.
- FY26 witnessed alternating inflows and outflows.
- Equity flows dominate during favourable market conditions.
- Debt flows stabilised through VRR and FAR mechanisms.

8. Foreign Exchange Reserves

- Forex reserves reached **USD 701.4 billion (Jan 2026)**.
- Cover around **11 months of imports**, indicating strong adequacy.
- Increasing share of gold reflects diversification strategy.
- Reserves provide a buffer against external shocks.

9. Exchange Rate Dynamics

- INR depreciated by **~5.4% in FY26** against USD.
- Depreciation driven by capital outflows and trade dynamics.
- Exchange rate influenced by both CAD and capital inflows.
- Persistent import demand creates structural depreciation pressure.



10. Exchange Rate Channels

Trade Channel

- Currency depreciation improves export competitiveness.
- Merchandise trade responds strongly to exchange rate changes.
- Services exports are relatively less sensitive to exchange rates.

Financial Channel

- Currency appreciation attracts capital inflows in short term.
- However, long-term effects may reverse due to policy responses.
- Overall, trade gains outweigh financial losses for India.

11. External Debt & NIIP

- External debt: **USD 746 billion (Sept 2025)** (~20% of GDP).
- India's debt levels are moderate compared to global standards.
- NIIP remains negative but is improving gradually.
- Asset-liability ratio rising indicates strengthening external balance sheet.

12. Structural Drivers of External Balance

- High growth leads to increased imports (capital goods, energy).
- Export sectors depend on imported intermediates.
- Gold imports contribute to trade deficit.
- External balance depends on both trade and capital flows.

13. Lessons from Global Experience

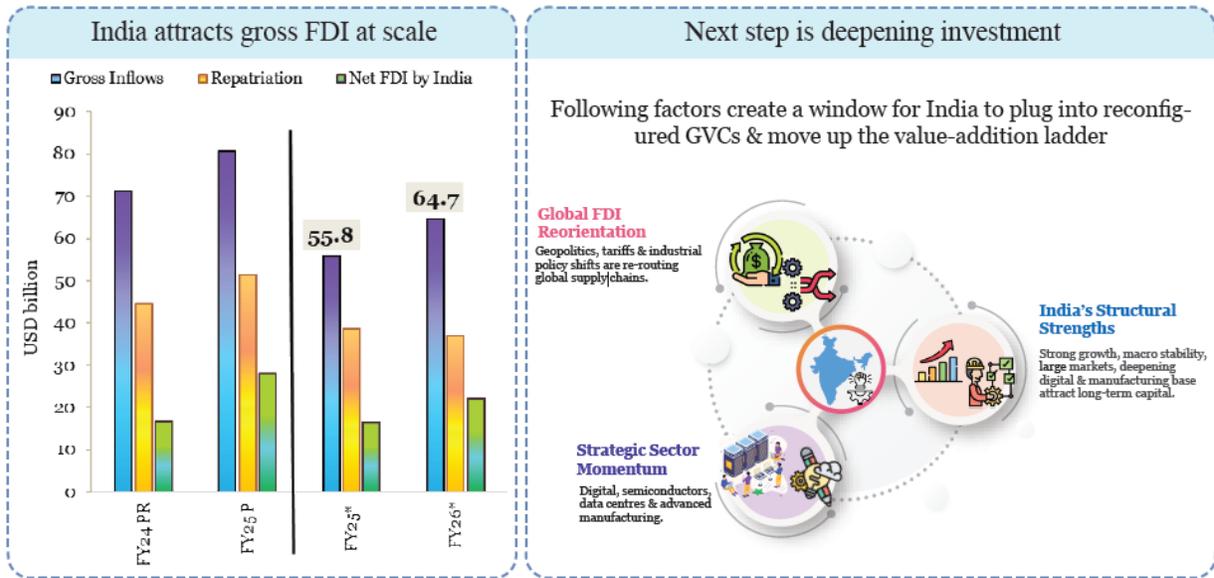
- Strong manufacturing exports are key to sustained external stability.
- East Asian economies achieved currency strength through export-led growth.
- Services exports alone are insufficient for long-term external balance.
- Industrial policy must focus on productivity and global competitiveness.

14. Policy Priorities

- Enhance manufacturing export competitiveness.
- Improve logistics and reduce cost of production.
- Promote stable and long-term FDI inflows.
- Strengthen innovation, R&D, and export complexity.
- Ensure policy stability and ease of doing business.



Turning global reorientation into sustainable foreign direct investment (FDI)



Strong external buffers anchor stability (FY15 vs FY25)

From FY15 ➔ 2025-2026*	
<p style="text-align: center;">Forex Reserves</p> <div style="display: flex; align-items: center; justify-content: center;"> <div> <p style="color: green; font-weight: bold;">\$701.4 as of 16 January 2026</p> <p style="color: blue; font-weight: bold;">\$341.6 bn in FY15</p> </div> </div> <p style="text-align: center; color: purple; font-weight: bold;">Reserves more than doubled</p>	<p style="text-align: center;">External debt to GDP</p> <div style="display: flex; align-items: center; justify-content: center;"> <div> <p style="color: blue; font-weight: bold;">23.8% in FY15</p> <p style="color: green; font-weight: bold;">➔</p> <p style="color: green; font-weight: bold;">19.2% end-Sept 2025</p> </div> </div> <p style="text-align: center; color: purple; font-weight: bold;">Lower external leverage</p>
<p style="text-align: center;">Import Cover</p> <div style="display: flex; align-items: center; justify-content: center;"> <div> <p style="color: blue; font-weight: bold;">From 8.9 months in FY15</p> <p style="color: orange; font-weight: bold;">➔</p> <p style="color: green; font-weight: bold;">To 11.1 months as of 9 January 2026</p> </div> </div> <p style="text-align: center; color: purple; font-weight: bold;">Stronger import buffer</p>	<p style="text-align: center;">Current Account Deficit/GDP</p> <div style="display: flex; align-items: center; justify-content: center;"> <div> <p style="color: blue; font-weight: bold;">-1.32% in FY15</p> <p style="color: orange; font-weight: bold;">➔</p> <p style="color: green; font-weight: bold;">-0.8% in H1 FY26</p> </div> </div> <p style="text-align: center; color: purple; font-weight: bold;">Improved external balance</p>

* As of the latest available data.

Data & Facts

- CAD: **0.8% of GDP (H1 FY26)**
- Remittances: **USD 135.4 billion (FY25)**



- Forex reserves: **USD 701.4 billion**
- External debt: **~20% of GDP**
- FDI inflows: **USD 81 billion (FY25)**
- ODI: **USD 23.6 billion (FY25)**
- INR depreciation: **~5.4% (FY26)**

Concepts

- **Current Account Deficit (CAD)**: When imports of goods/services exceed exports.
- **FDI (Foreign Direct Investment)**: Long-term investment in productive assets.
- **FPI (Foreign Portfolio Investment)**: Short-term investment in financial assets.
- **Foreign Exchange Reserves**: Assets held by central bank to manage currency stability.
- **NIIP (Net International Investment Position)**: Difference between external assets and liabilities.
- **Exchange Rate Channels**: Trade and financial pathways through which currency affects the economy.

Analysis

India's external sector reflects a structurally stable yet evolving framework. While trade deficits persist due to growth-driven imports, strong services exports and remittances provide a cushion.

The increasing importance of FDI highlights a shift toward stable capital financing, while volatile portfolio flows underscore external vulnerabilities. Exchange rate dynamics reveal a deeper structural issue—India's reliance on imports and limited export sophistication.

The long-term solution lies in strengthening manufacturing exports, enhancing productivity, and improving integration into global value chains. The emphasis on export-led growth and stable capital inflows signals a strategic shift toward building durable external resilience in a fragmented global economy.



CHAPTER 5: INFLATION

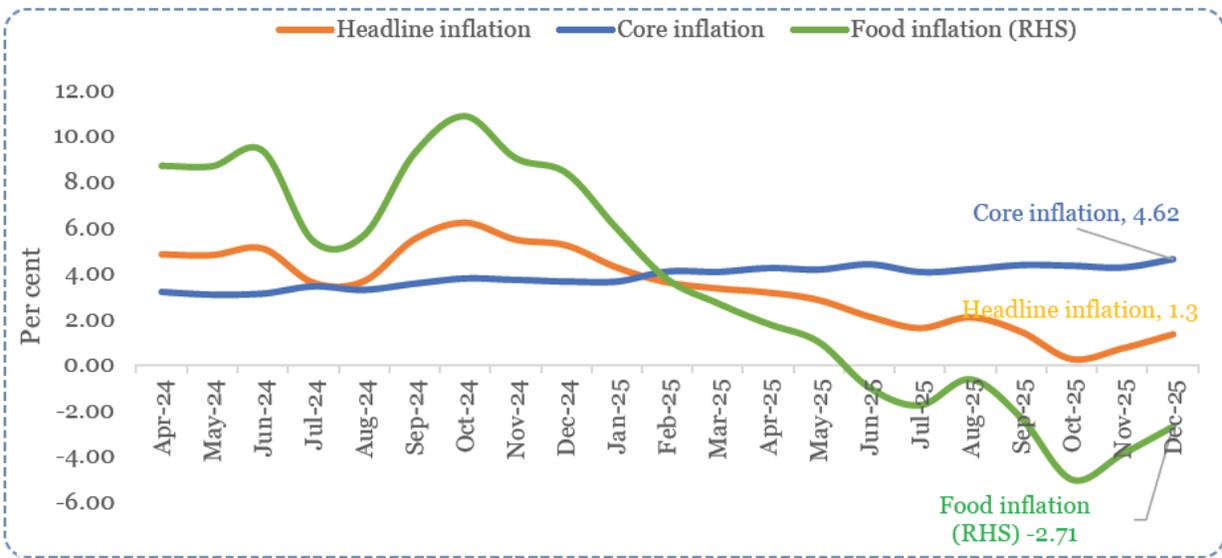
Global inflation has moderated significantly after the post-pandemic surge, driven by easing commodity prices, supply-side improvements, and tighter monetary policies. Advanced economies now exhibit stable inflation near target levels, while emerging economies show varied outcomes.

India stands out for achieving sharp disinflation alongside strong economic growth, reflecting effective macroeconomic management and credible inflation targeting. Domestically, retail inflation has declined to historic lows, primarily due to food price deflation supported by favourable agricultural conditions and proactive policy interventions.

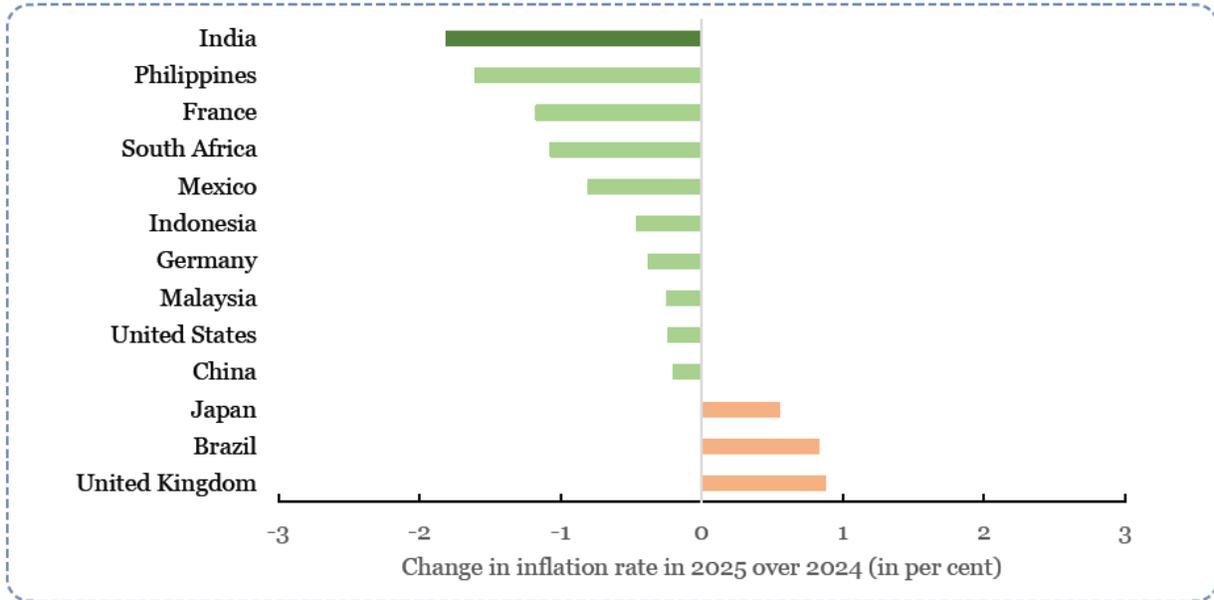
Core inflation appears sticky at first glance but is largely influenced by rising precious metal prices; underlying core pressures remain subdued. The inflation trajectory in India has been significantly shaped by base effects and supply-side factors rather than demand overheating. Structural factors such as agricultural output, trade policies, and global commodity trends play a key role in price dynamics.

Going forward, inflation is expected to rise moderately but remain within the RBI’s target range, supported by stable food prices and soft global commodity trends. Sustained inflation control will depend on maintaining supply-side efficiency, export competitiveness, and macroeconomic stability.

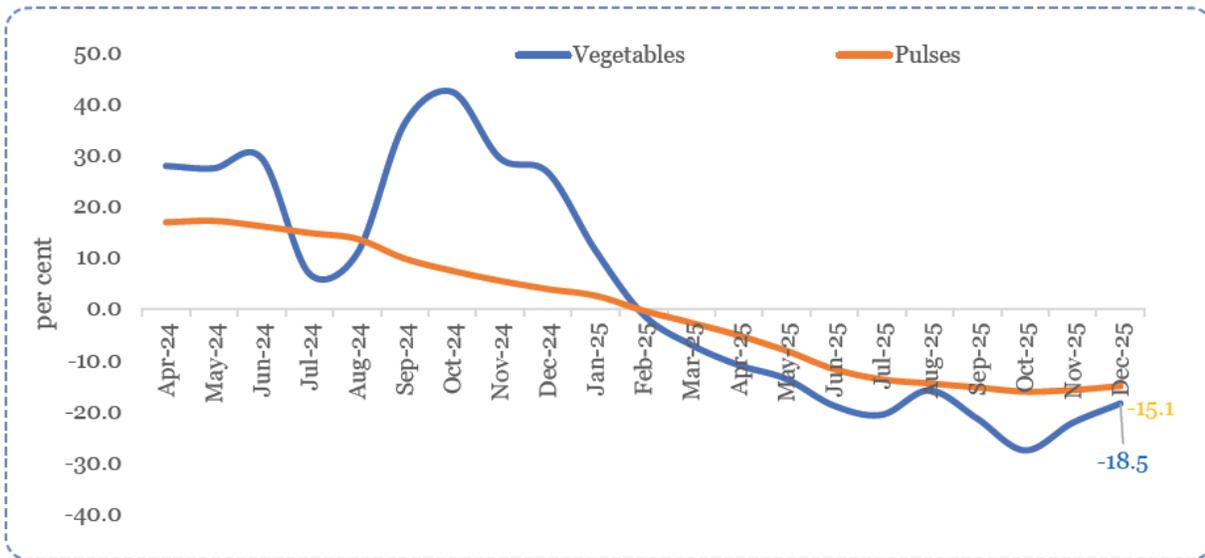
India recorded the lowest inflation rate since the beginning of the CPI series, with April-Dec ‘25 average headline inflation coming in at 1.7%; This was driven by a subdued food inflation



India has seen the highest reduction (1.8%) in headline inflation among major economies in 2025



Decline in food inflation was driven by a persistent contraction in prices of major commodities like vegetables and pulses



Key Points

1. Global Inflation Trends

- Global inflation declined from **8.7% (2022)** to **4.2% (2025)** due to easing commodity prices.



- Advanced economies stabilised around **2–3% inflation**, while EMDEs moderated to ~5.3%.
- Commodity deflation (oil, food, metals) significantly reduced input costs.
- Divergence persists across countries due to domestic factors and policy responses.

2. Monetary Policy Response Globally

- Major central banks reduced policy rates by **75–100 basis points** amid easing inflation.
- RBI reduced repo rate by **125 basis points**, supporting growth.
- Japan remains an outlier with rate hikes due to rising inflation.
- Monetary policy reflects balancing growth and inflation stability.

3. India's Inflation Performance

- CPI inflation declined sharply to **1.7% (FY26 Apr–Dec)** from 6.7% in FY23.
- Inflation reached historic lows, marking strongest disinflation phase.
- WPI inflation remained lower than CPI, reinforcing disinflation trend.
- Inflation decline occurred alongside strong GDP growth (~8%), indicating stability.

4. Food Inflation Dynamics

- Food inflation entered **deflation since June 2025**, driving overall disinflation.
- Key contributors: vegetables, pulses, cereals, and spices.
- Government interventions (buffer stocks, trade policies) stabilised prices.
- Agricultural output and favourable monsoon conditions improved supply.

5. Core Inflation Trends

- Core inflation increased to ~4.6%, appearing sticky.
- Rise largely driven by **gold and silver prices (safe-haven demand)**.
- Excluding precious metals, core inflation shows declining trend.
- Indicates absence of broad-based demand-driven inflation.

6. Base Effect Dominance

- Inflation decline mainly due to **favourable base effect**.
- Base effect dominated in 7 out of 9 months in FY26.
- Momentum (current price pressures) remained relatively subdued.
- Highlights importance of statistical factors in inflation trends.



7. Agricultural Contribution

- Strong agricultural output (record cereal production) supported price stability.
- Good monsoon and higher sowing improved food supply.
- Government policies ensured buffer stocks and market intervention.
- Agriculture played a central role in disinflation.

8. Components of Core Inflation

- Major components: housing, health, transport, clothing.
- Housing and health show stable inflation due to administered pricing.
- Clothing and transport reflect faster adjustment to market conditions.
- Overall trend shows gradual easing in core components.

9. Terms of Trade (Manufacturing vs Agriculture)

- Agricultural prices grew faster than manufacturing prices.
- Manufacturing terms of trade declined over time.
- Leads to lower manufacturing profitability and investment concerns.
- Reflects structural pricing dynamics in Indian economy.

10. Regional Inflation Trends

- Rural inflation was higher than urban due to food weight in consumption.
- Gap narrowed as food inflation declined in FY26.
- State-level inflation largely within RBI tolerance band (2–6%).
- Some states show persistent inflation differentials due to local factors.

11. Determinants of Inflation (State Level)

- Higher wage growth correlates with higher inflation.
- GSDP growth positively associated with inflation.
- Industrial share reduces inflation through supply-side efficiency.
- GST found to be broadly price-neutral.

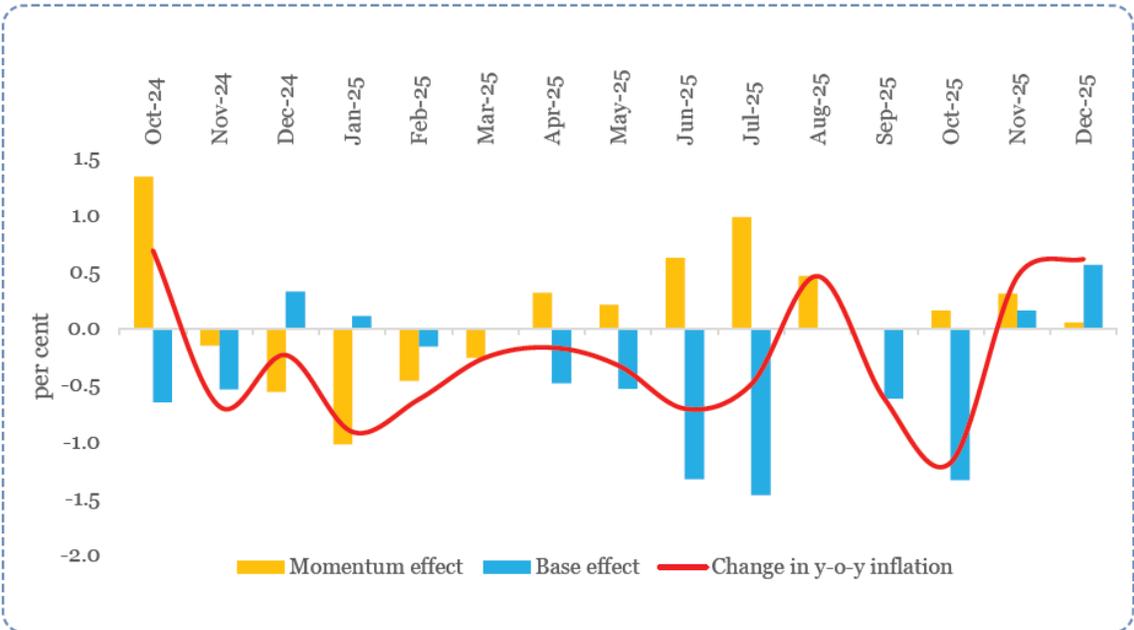
Data & Facts

- Global inflation: **4.2% (2025)**
- India inflation: **~1.7% (FY26 Apr–Dec)**
- Food inflation: **Negative since June 2025**
- Core inflation: **~4.6% (headline core)**

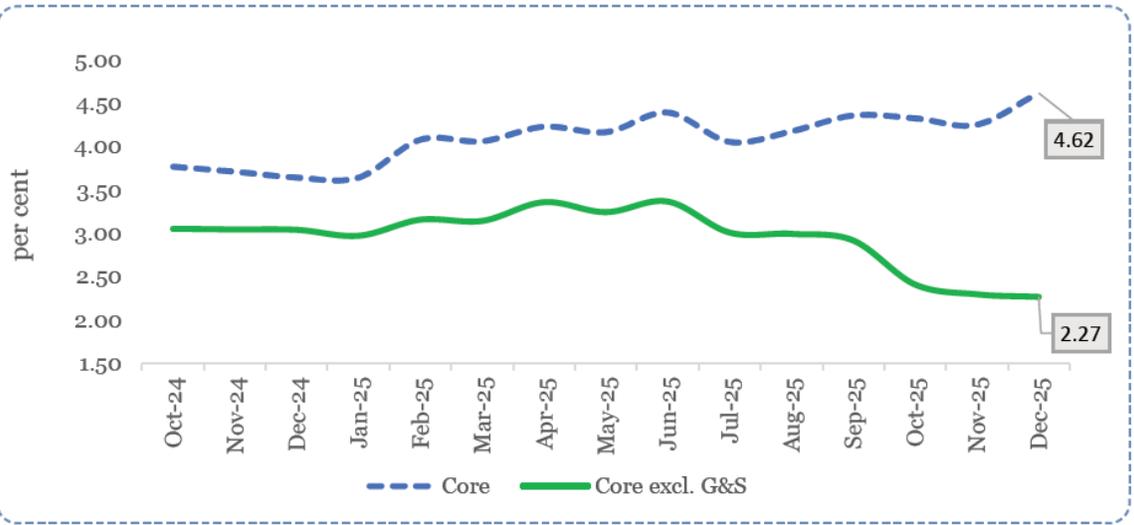


- CAD-safe inflation range: **2–6% (RBI target)**
- Remains among lowest inflation economies globally

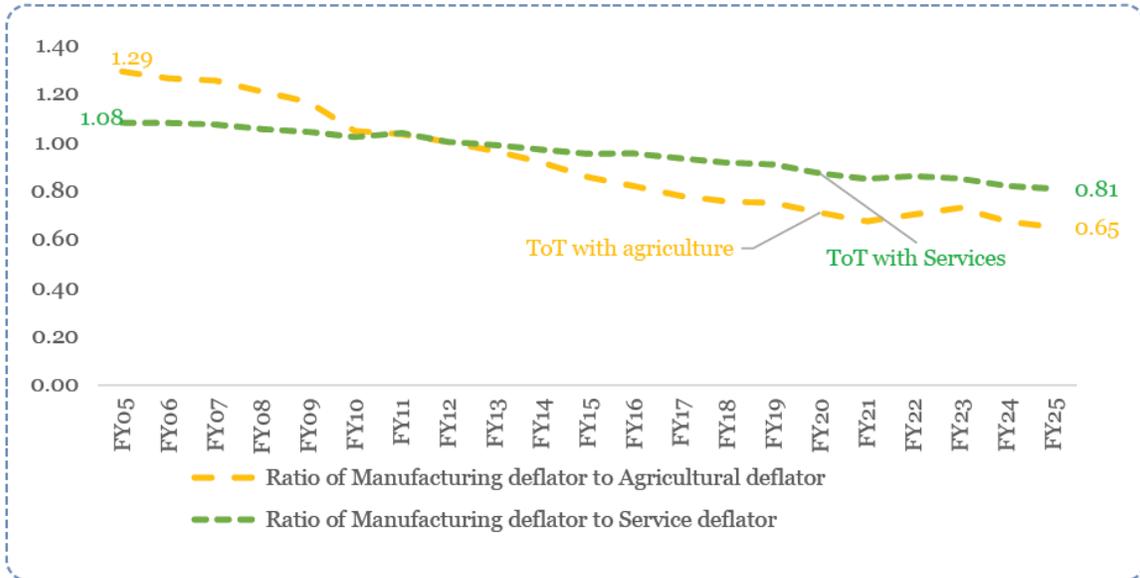
A strong base effect played a critical role in tempering headline inflation, especially in second half of 2025



Steady pace of core inflation has been largely influenced by higher inflation in the prices of precious metals like gold and silver



Terms of Trade (ToT) of the manufacturing sector has progressively declined with respect to other sectors - agriculture and services – resulting in compression in its sectoral share in GVA



Factors that made inflation benign



Moderate inflation in the global prices of key metals



Below-normal temperature coupled with above-normal monsoon created very favourable agriculture conditions in the country



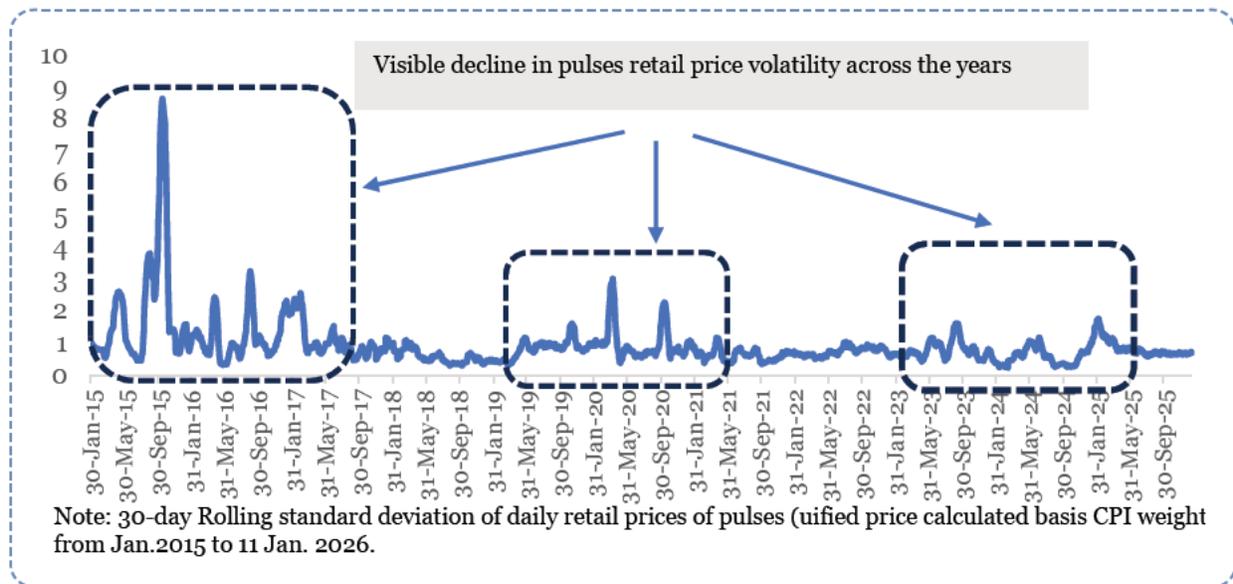
Improved stock position of foodgrains



Pass-through of GST rates rationalization into commodity prices



Timely intervention helped in reducing the volatility in the prices of pulses over the years



Concepts

- **Headline Inflation:** Overall inflation including all items.
- **Core Inflation:** Inflation excluding volatile items like food and fuel.
- **Base Effect:** Impact of previous year's prices on current inflation.
- **WPI vs CPI:** WPI measures wholesale prices; CPI reflects retail consumer prices.
- **GDP Deflator:** Broad measure of inflation across the entire economy.
- **Terms of Trade:** Relative prices between sectors (e.g., manufacturing vs agriculture).

Analysis

India's inflation story reflects a strong shift from demand-driven inflation to supply-driven stability. The dominance of food disinflation and base effects indicates that inflation control has been largely achieved through favourable supply conditions and policy interventions rather than contractionary demand policies.

The apparent stickiness in core inflation is misleading, as it is concentrated in specific components like precious metals. Structurally, the declining terms of trade for manufacturing raise concerns about long-term industrial competitiveness. Regional disparities in inflation suggest the importance of local economic structures. Going forward, sustaining low inflation will depend on agricultural stability, global commodity trends, and maintaining policy credibility.



CHAPTER 6: AGRICULTURE AND FOOD MANAGEMENT

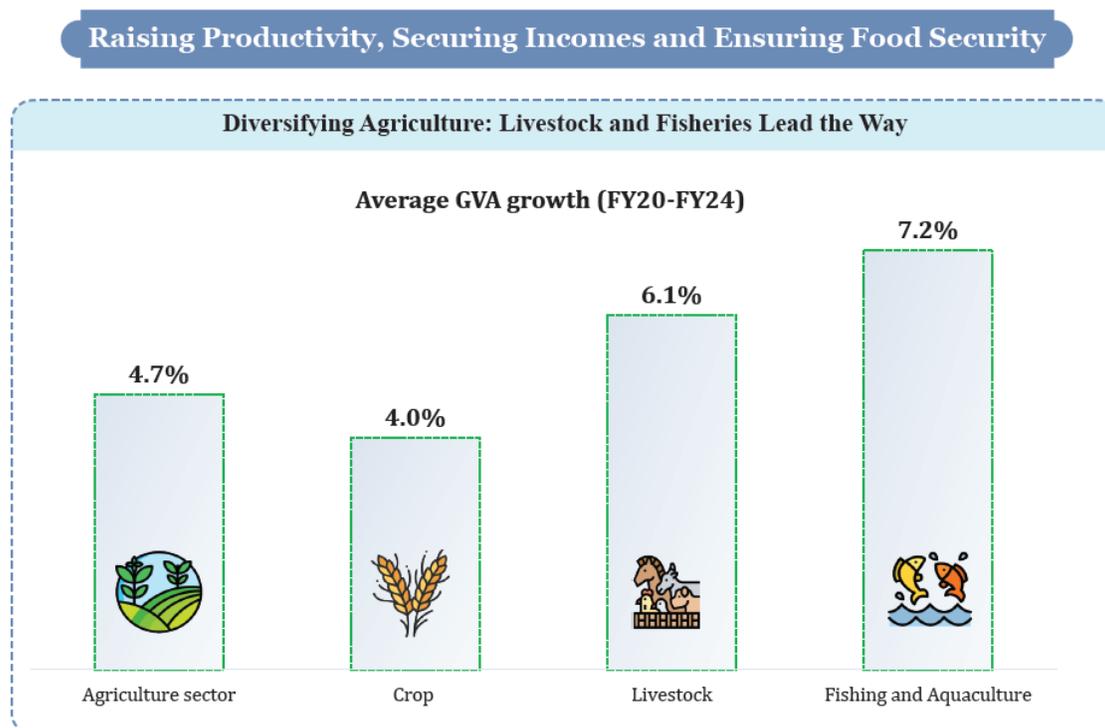
India's agriculture and allied sectors remain central to economic growth, employment, and food security, contributing nearly one-fifth of national income while supporting over 46% of the workforce. The sector has demonstrated resilience with an average growth of about 4.4% in recent years, driven largely by allied activities such as livestock and fisheries.

A structural shift is underway from traditional foodgrain production toward high-value sectors like horticulture, which now surpasses foodgrain output in volume and contributes significantly to agricultural GVA.

Despite progress, challenges such as low productivity, fragmented landholdings, climate vulnerability, and regional disparities persist. Productivity remains below global benchmarks for many crops, highlighting the need for technological interventions, better irrigation, and improved input use.

Government initiatives—ranging from seed quality improvement, irrigation expansion, digital agriculture, and credit support to market reforms—are focused on enhancing productivity, income, and sustainability.

However, emerging trade-offs, such as ethanol-driven crop shifts and imbalanced fertiliser use, raise concerns about long-term food security and soil health. Overall, the sector is transitioning towards diversification, efficiency, and sustainability, but requires calibrated policy interventions to balance growth, equity, and resilience.



Key Points

1. Structural Importance & Growth Trends

- Agriculture employs a disproportionately large workforce relative to its income share, making it critical for inclusive growth.
- The sector recorded an average **annual growth of around 4.4%** in recent years, outperforming the global average.
- Allied sectors such as livestock and fisheries have emerged as major growth drivers with higher growth rates than crops.
- Foodgrain production has increased steadily, reaching record levels due to favourable monsoons and policy support.
- Horticulture has surpassed foodgrain production, indicating diversification towards high-value agriculture.

2. Shift Towards Allied & High-Value Sectors

- Livestock and fisheries have significantly expanded, contributing to income stability and rural livelihoods.
- **Horticulture** contributes about one-third of agricultural GVA and is a major driver of value addition.
- India has emerged as a global leader in horticulture production, including fruits, vegetables, and onions.
- Diversification into high-value crops improves income but requires better infrastructure and market linkages.
- Allied sectors act as buffers against crop failure and climate risks.

3. Productivity Challenges & Regional Disparities

- Crop yields in India remain below global averages for several major crops.
- Rainfed agriculture and climate variability significantly affect productivity, especially for pulses and oilseeds.
- Regional disparities persist due to differences in irrigation, soil quality, and technology adoption.
- Climate phenomena like El Niño reduce acreage, production, and yields, particularly in pulses.
- States with better seed systems, irrigation, and crop alignment show higher productivity.



4. Policy Interventions & Government Initiatives

- Schemes like [NFSNM](#), [NMEO-OS](#), and [NMEO-OP](#) aim to improve productivity and reduce import dependence.
- [PM-KISAN](#) provides income support, while [PMKSY](#) promotes irrigation and water efficiency.
- Digital initiatives such as e-NAM and AgriStack enhance market access and information flow.
- FPOs and PACS strengthen collective action and improve farmers' bargaining power.
- [Agricultural Infrastructure Fund \(AIF\)](#) promotes investment in storage, processing, and logistics.

5. Inputs, Technology & Infrastructure

- Quality seeds, irrigation, soil health management, and mechanisation are key productivity drivers.
- Micro-irrigation and water-use efficiency measures are expanding but remain uneven across regions.
- Soil degradation and fertiliser imbalance (high nitrogen use) affect long-term productivity.
- Mechanisation is constrained by small landholdings but supported through Custom Hiring Centres.
- Digital agriculture and extension services are increasingly important for knowledge dissemination.

6. Credit, Markets & Institutional Support

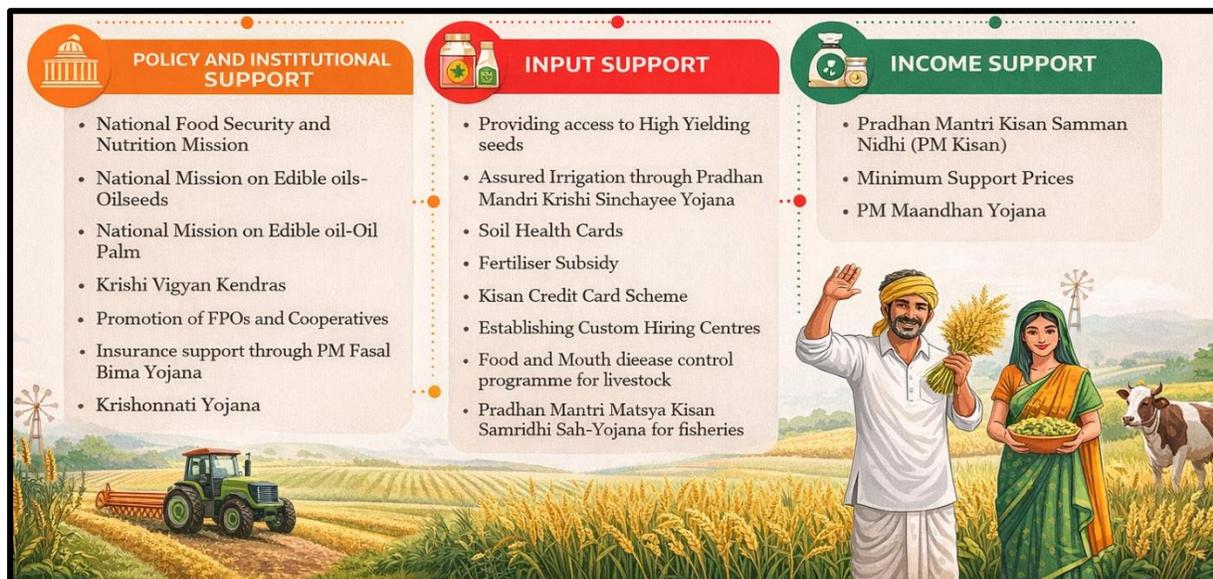
- Institutional credit has expanded significantly, with schemes like KCC improving access for farmers.
- Regional disparities in credit distribution persist despite policy efforts.
- Market reforms such as e-NAM improve price discovery and reduce intermediaries.
- Infrastructure investments in storage and cold chains reduce post-harvest losses.
- Fisheries and livestock sectors benefit from targeted financial and technological support.

7. Emerging Issues & Trade-offs

- Ethanol policies are incentivising maize cultivation, potentially reducing pulses and oilseed production.
- Fertiliser subsidy distortions lead to imbalanced nutrient use and declining soil health.



- Food security concerns arise due to shifting cropping patterns and import dependence.
- Climate change and resource constraints necessitate sustainable agricultural practices.
- Policy coordination is required to balance energy security and food security objectives.



Data & Facts

- Agriculture employs **46.1% of workforce** but contributes **~20% of GDP**.
- Average annual growth: **~4.4%** (recent years).
- Livestock GVA growth: **~195% increase (FY15–FY24)**.
- Fisheries production increased by **140% (2014–2025)**.
- Foodgrain production: **3577.3 LMT (2024–25)**.
- Horticulture production: **~362 MT**, higher than foodgrains.
- Irrigation coverage increased from **41.7% to 55.8%** of cropped area.
- Ground Level Credit: **₹28.69 lakh crore (FY25)**.
- e-NAM coverage: **1522 mandis, 1.79 crore farmers**.
- Fertiliser imbalance: N:P:K ratio deteriorated to **~10.9:4.1:1** (vs ideal 4:2:1).

Concepts

- **Allied Activities:** Non-crop agricultural activities like livestock, fisheries, and horticulture that supplement farm income.
- **Agricultural Productivity:** Output per unit of land or input, reflecting efficiency of farming practices.



- **MSP (Minimum Support Price):** Government-guaranteed price ensuring farmers receive a minimum return.
- **Micro-Irrigation:** Water-efficient irrigation methods such as drip and sprinkler systems.
- **FPO (Farmer Producer Organisation):** Collective of farmers for better input purchase, production, and marketing.
- **Nutrient Imbalance:** Disproportionate use of fertilisers (especially nitrogen), reducing soil health and efficiency.
- **Cropping Diversification:** Shift from staple crops to high-value crops like fruits, vegetables, and oilseeds.



CHAPTER 7: SERVICES

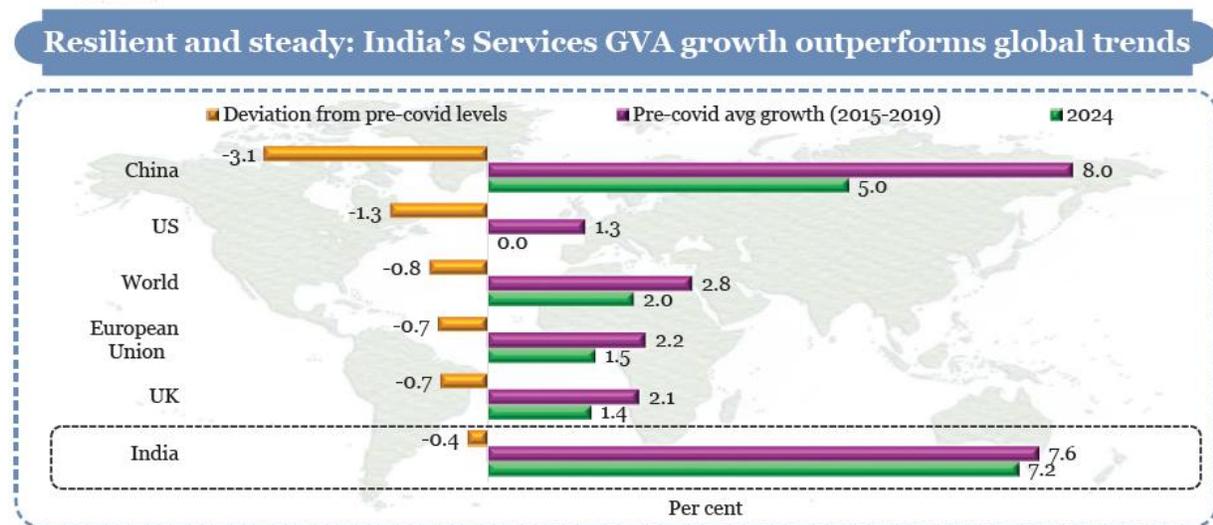
TRENDS IN SERVICES SECTOR

The global economy is undergoing a structural transformation where the services sector has emerged as the primary engine of growth, resilience, and global integration. Unlike goods trade, which has stagnated due to geopolitical tensions and supply chain disruptions, services trade continues to expand, acting as a stabilising force.

This shift has been further accelerated by the rise of digitally deliverable services, enabling economies to transcend geographical barriers and participate in global markets. India stands out in this transformation, having adopted a services-led growth model at a relatively lower level of per capita income compared to traditional manufacturing-led pathways.

The sector contributes over half of India's Gross Value Added (GVA), drives exports, and remains the largest recipient of FDI. Despite global headwinds, India's services sector has demonstrated resilience, maintaining steady growth and expanding its share in global trade.

However, emerging challenges such as skill gaps, technological disruptions, and regulatory constraints pose risks to its future trajectory. Overall, services continue to anchor both global and Indian economic stability, while also opening new frontiers of growth.



Key Points

1. Global Shift Towards Services

- The global economy is increasingly driven by the services sector as the main source of growth and stability.
- Services trade has continued to expand even when global goods trade has stagnated.
- The sector acts as a buffer against global economic shocks and volatility.



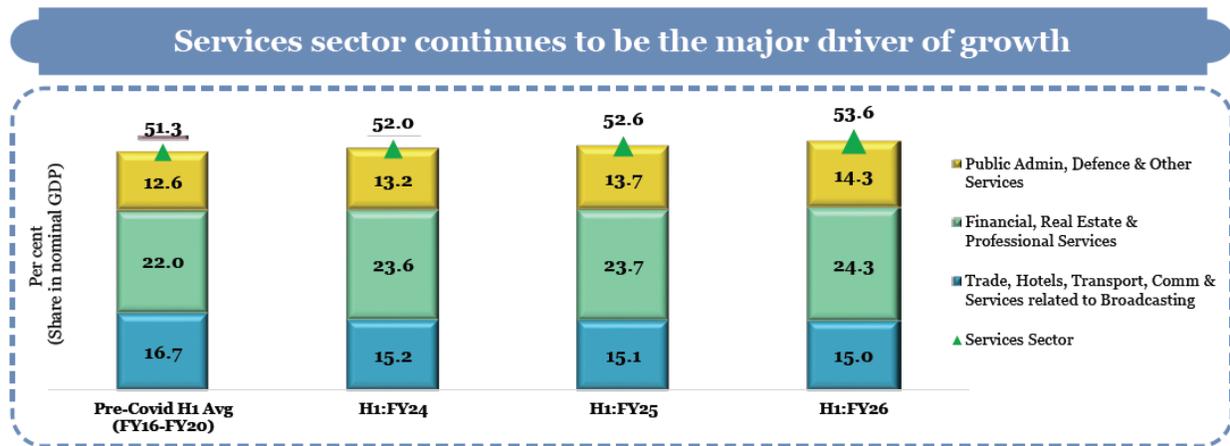
- Digitally deliverable services have enabled cross-border integration without physical constraints.

2. India’s Unique Services-Led Growth Model

- India has achieved services-led growth at a relatively low level of per capita income.
- This deviates from the traditional manufacturing-led development path followed by most economies.
- The model is supported by strong performance in IT, finance, and professional services.
- It reflects early adoption of digital and knowledge-based economic activities.

3. Contribution of Services to Indian Economy

- The services sector contributes more than half of India’s Gross Value Added (GVA).
- It is a major driver of exports and employment in the economy.
- The sector shows higher stability with lower volatility compared to agriculture and industry.
- Average annual growth has remained around 7–8 per cent over time.



4. India in Global Services Trade

- India is the world’s **seventh-largest exporter of services**.
- Its share in global services trade has increased significantly over time.
- The country has strong comparative advantage in digitally deliverable services.
- Services remain the largest recipient of foreign direct investment inflows.

5. Post-Pandemic Structural Changes

- The pandemic accelerated growth in digital, financial, and professional services.
- Contact-intensive services like tourism and hospitality were severely disrupted.



- The composition of services has shifted towards high-value, technology-driven segments.
- This shift has increased the overall share of services in global output.

6. Emerging Challenges in Services Sector

- Rapid technological advancement is creating skill gaps in the workforce.
- Firms and workers are struggling to adapt to fast-changing technologies.
- Regulatory constraints such as data localisation and immigration policies are rising.
- These factors challenge the sector's role as a stable growth engine.

7. Structural Rebalancing and Growth Dynamics

- Services share in GDP has increased globally as well as in India post-pandemic.
- India's increase in services share is higher than that of many advanced economies.
- Global services growth has moderated due to weaker trade and productivity trends.
- India remains relatively resilient compared to major economies.

Data & Facts

- Services contribute **more than 50% of India's GVA**.
- Average services growth: **~7–8% annually**.
- India's share in global services trade: **~4.3% (2024)**.
- India's global rank: **7th largest services exporter**.
- Services share in India's GDP: **~49.9% (2024, World Bank data)**.
- Services FDI share globally: **~53.5% (2022–24)**.

Concepts

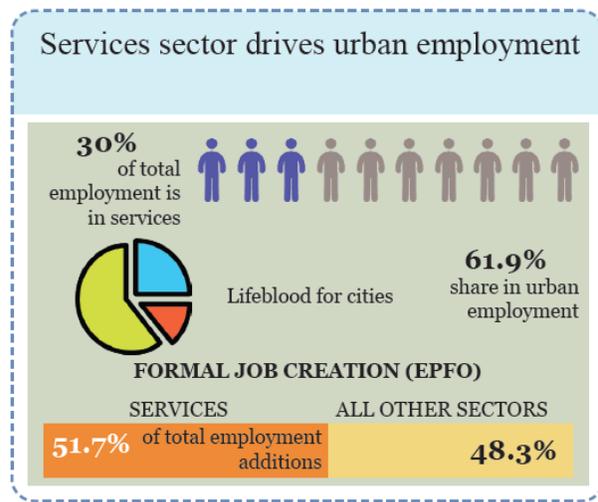
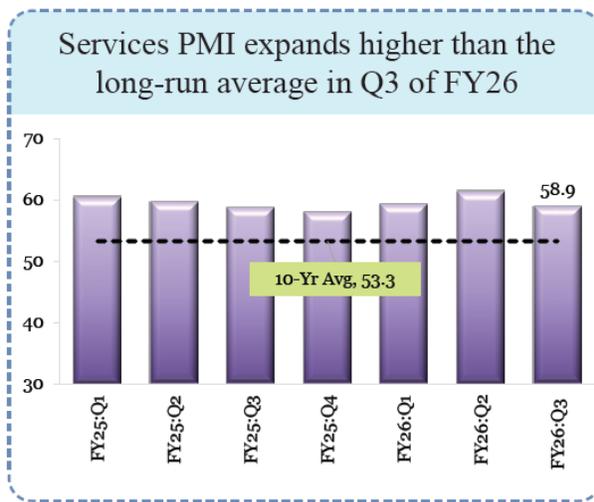
- **Services Sector:** Economic activities that provide intangible value such as IT, banking, tourism, and education.
- **Digitally Deliverable Services:** Services that can be provided remotely using digital platforms (e.g., IT services).
- **Structural Transformation:** Shift in economic activity from agriculture to industry and then to services.
- **Services Trade:** Cross-border exchange of services like IT, finance, and consulting.
- **GVA (Gross Value Added):** Measure of economic output contributed by different sectors.



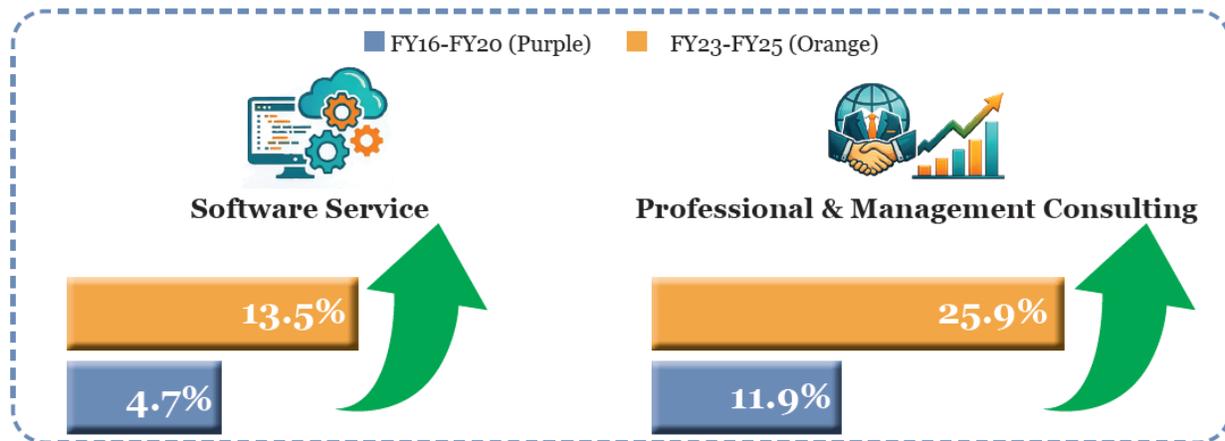
Analysis

The rise of the services sector represents a paradigm shift in economic development, especially for India. Unlike traditional industrialisation models, India’s growth is anchored in knowledge-intensive sectors, providing resilience against global shocks. However, this model also creates structural imbalances, particularly in employment generation, as high-end services are less labour-intensive.

The increasing dominance of digital services strengthens India’s global competitiveness but also exposes it to regulatory and technological disruptions. Therefore, while services-led growth has been a strength, its sustainability depends on addressing skill gaps, diversifying sub-sectors, and improving adaptability to technological change.



Services exports expand on the back of high-value software and professional services



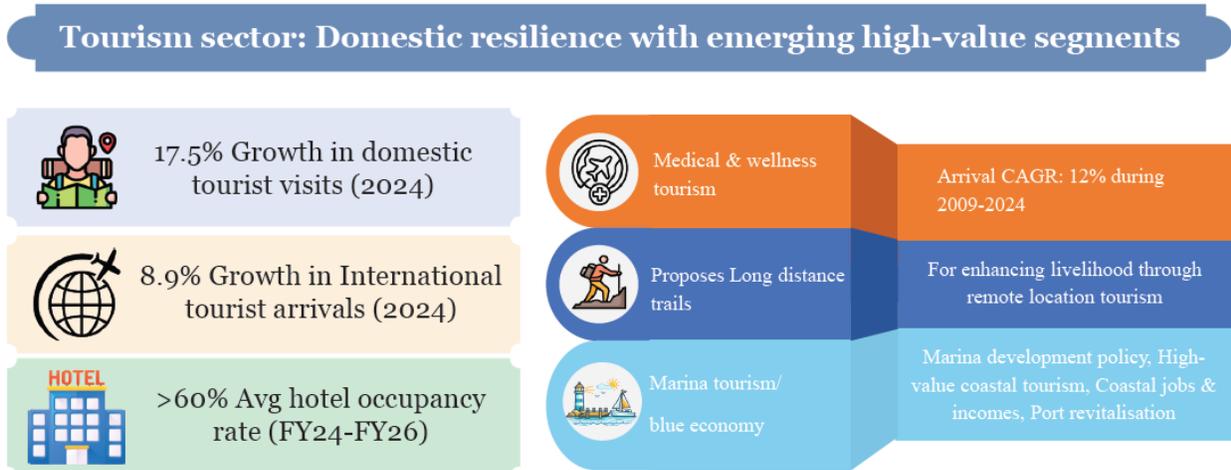
SUB-SECTORAL PERFORMANCE & WAY FORWARD

India’s services sector exhibits strong internal dynamism driven by diverse sub-sectors such as tourism, IT-ITeS, transport, telecom, real estate, media, and emerging domains like space services. Each sub-sector reflects distinct growth drivers—ranging from domestic demand in tourism to global integration in IT services and infrastructure-led expansion in transport.

The tourism sector is increasingly supported by domestic demand and niche segments like medical tourism, while IT-ITeS continues to evolve towards high-value, innovation-driven activities led by Global Capability Centres (GCCs) and AI adoption. Transport and telecom act as foundational enablers, improving connectivity and logistics efficiency across the economy.

Meanwhile, sectors like real estate and media are benefiting from formalisation, digitalisation, and rising incomes. Emerging frontiers such as space and ocean services signal a shift towards high-technology, export-oriented services.

Despite this strong performance, challenges persist in the form of skill gaps, regulatory bottlenecks, infrastructure constraints, and global competition. Going forward, sustained growth will depend on innovation, skill development, policy reforms, and enhanced coordination across stakeholders to ensure that the services sector remains resilient, competitive, and inclusive.



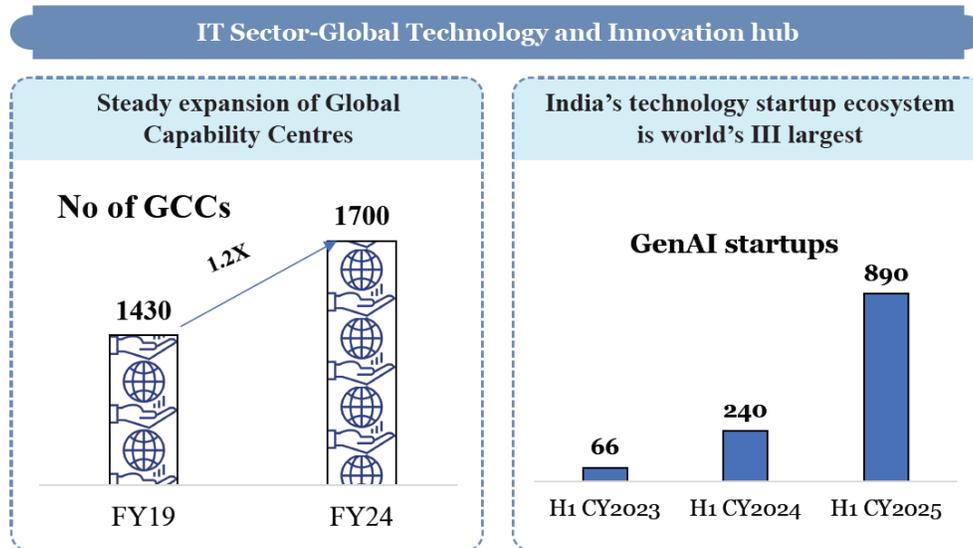
Key Points

1. Tourism Sector: Domestic Strength with High-Value Potential

- Domestic tourism has emerged as the primary driver of growth with strong post-pandemic recovery.
- International tourism is improving but remains uneven due to global uncertainties.
- Medical and wellness tourism has emerged as a high-value segment with higher spending per visitor.



- Government initiatives like [Swadesh Darshan](#) and [PRASHAD](#) promote sustainable and thematic tourism.
- State capacity and local governance play a crucial role in unlocking tourism potential.



2. IT-ITeS Sector: Moving Towards High-Value Innovation

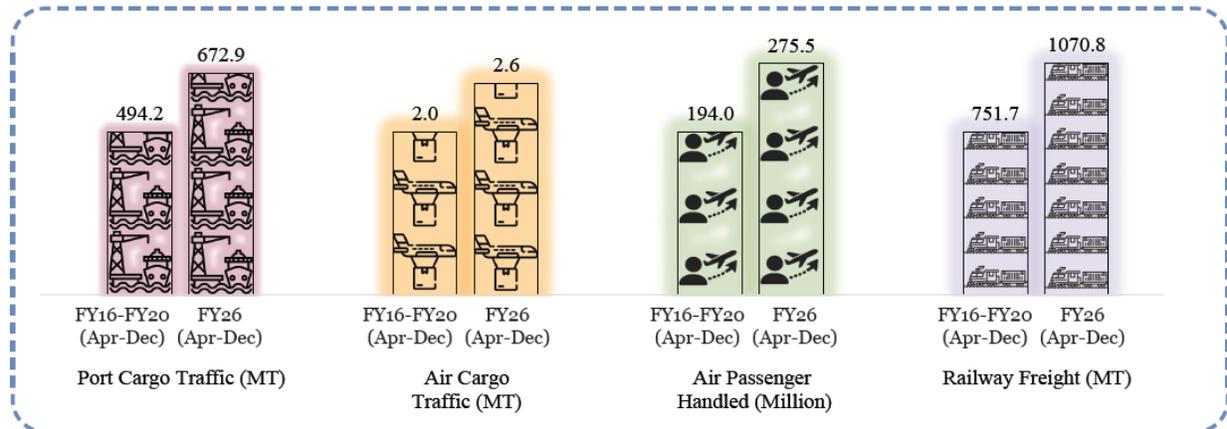
- The IT-ITeS sector remains a global leader with steady revenue growth and export performance.
- Global Capability Centres (GCCs) have become key drivers of employment and innovation.
- The sector is shifting towards advanced technologies like AI, cloud computing, and cybersecurity.
- India's startup ecosystem, especially in deep tech and GenAI, is expanding rapidly.
- Skill gaps and adaptation challenges remain critical constraints for future growth.

3. Transport Services: Backbone of Economic Activity

- Transport services contribute significantly to GVA and enable trade and industrial activity.
- Port capacity and efficiency have improved through modernisation and digitisation.
- Aviation has expanded passenger and cargo movement despite short-term fluctuations.
- Rail freight remains a cost-effective and efficient mode for bulk transportation.
- Infrastructure investments and logistics integration are key growth drivers.



Transport Services: Strengthening connectivity and logistics performance



4. Telecommunications: Digital Backbone of Economy

- Telecom connectivity has expanded rapidly, improving digital inclusion.
- Internet penetration and data consumption have increased significantly due to affordability.
- Indigenous development of 4G and 5G technologies strengthens strategic capabilities.
- Telecom infrastructure supports digital economy expansion and service delivery.
- Cybersecurity and network resilience have become increasingly important.

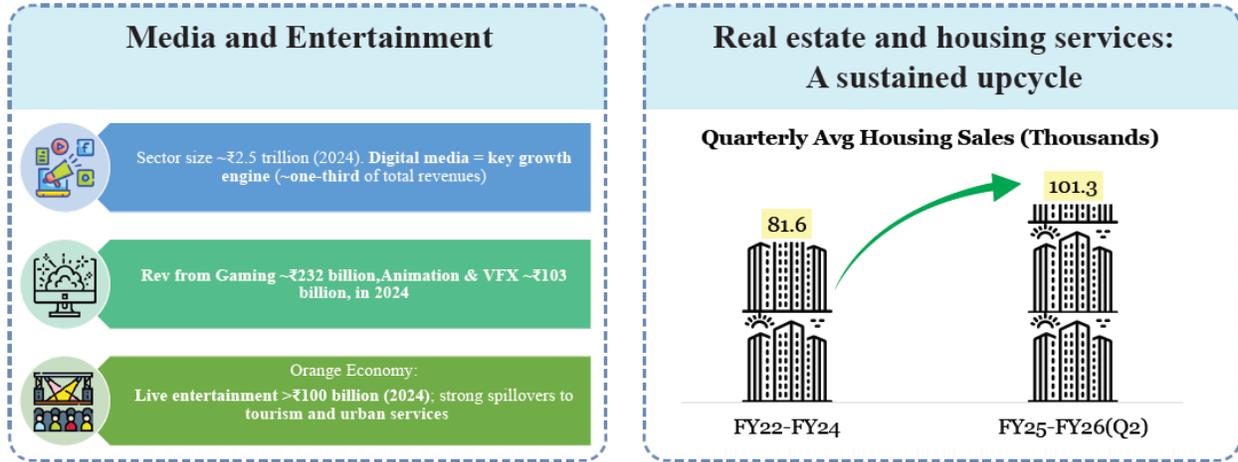
5. Real Estate and Housing: Formalisation and Financialisation

- Real estate contributes significantly to GVA and has strong linkages with other sectors.
- Policy reforms like RERA and GST have improved transparency and formalisation.
- Housing demand is supported by government schemes and urban infrastructure development.
- Household savings are increasingly directed towards physical assets like housing.
- Growth in housing finance indicates deeper financial integration of the sector.

6. Media & Entertainment: Rise of Digital and Creative Economy

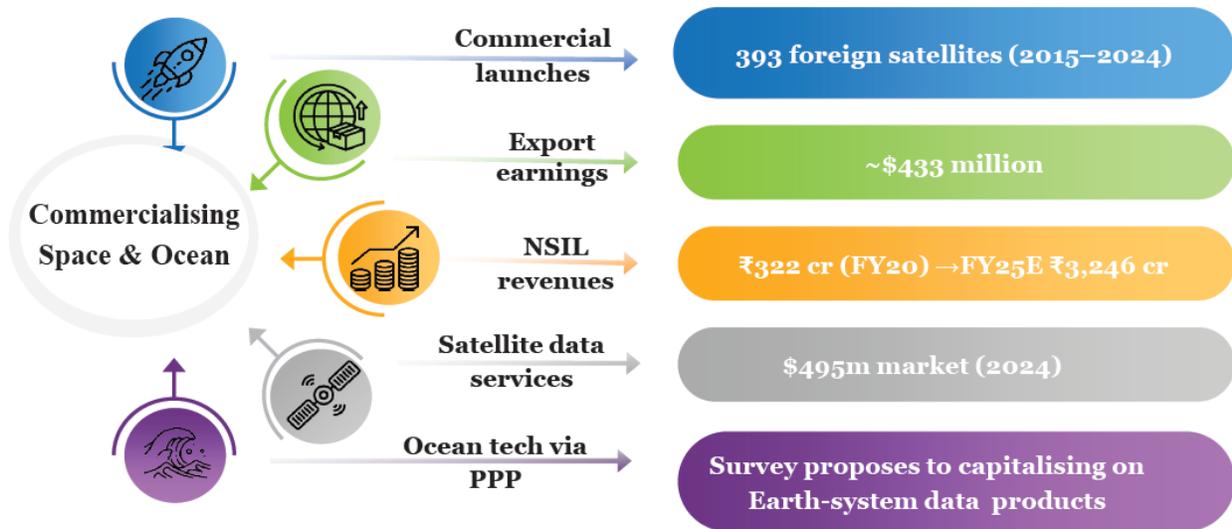
- The sector is undergoing a structural shift towards digital platforms and OTT services.
- Digital media has become the primary growth driver due to internet penetration.
- High-growth segments include animation, VFX, gaming, and live entertainment.
- The “Orange Economy” highlights the role of creativity and intellectual property.
- The sector generates strong spillovers to tourism, employment, and urban services.





7. Emerging Sectors: Space and Ocean Services

- India’s space sector is becoming a high-value, export-oriented services segment.
- Commercialisation through public-private partnerships is accelerating growth.
- Satellite services and launch capabilities are expanding global market presence.
- Ocean services and blue economy offer untapped opportunities.
- These sectors represent the future frontier of services-led growth.



Data & Facts

- Tourism contribution to GDP: **~5.2% (FY24)**
- Employment in tourism: **~8.46 crore (13.3%)**
- IT-ITeS revenue: **USD 283 billion (FY25)**
- GCCs in India: **1700+ employing ~19 lakh people**



- Data centre capacity: **1.4 GW** → **projected 8 GW by 2030**
- Telecom connections: **1.2 billion+** (2025)
- Internet subscribers: **~101.8 crore**
- Real estate share in GVA: **~7%**
- Space sector size: **USD 8.4 billion** → **projected USD 44 billion**

Concepts

- **Global Capability Centres (GCCs)**: Offshore units of multinational companies handling core business operations.
- **Orange Economy**: Economic activities based on creativity, culture, and intellectual property.
- **Blue Economy**: Sustainable use of ocean resources for economic growth and livelihoods.
- **Digital Public Infrastructure (DPI)**: Digital systems enabling services like payments, identity, and data exchange.
- **Formalisation**: Shift from informal to regulated and organised economic activity.

Analysis

The services sector's strength lies in its diversity and adaptability, with different sub-sectors responding to distinct demand drivers. High-value segments like IT and space services enhance global competitiveness, while labour-intensive sectors like tourism generate employment.

However, the sector faces a structural challenge: balancing high productivity growth with inclusive employment generation. The increasing role of technology introduces both opportunities and disruptions, particularly in skill requirements.

Additionally, infrastructure gaps and regulatory complexities can constrain growth. Therefore, future success depends on a coordinated approach integrating innovation, skills, infrastructure, and governance reforms.



CHAPTER 8: INDUSTRY

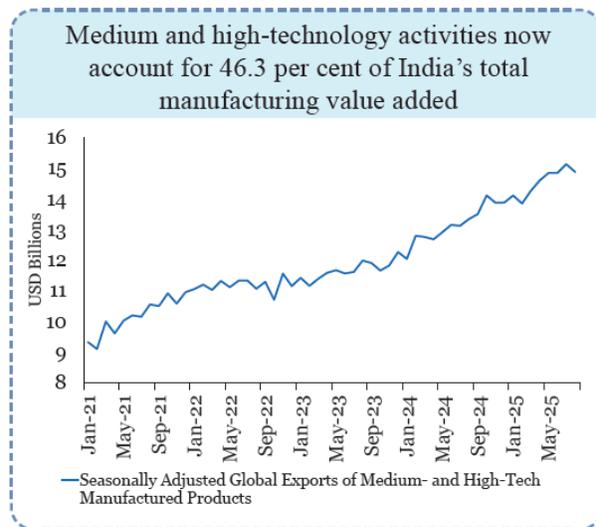
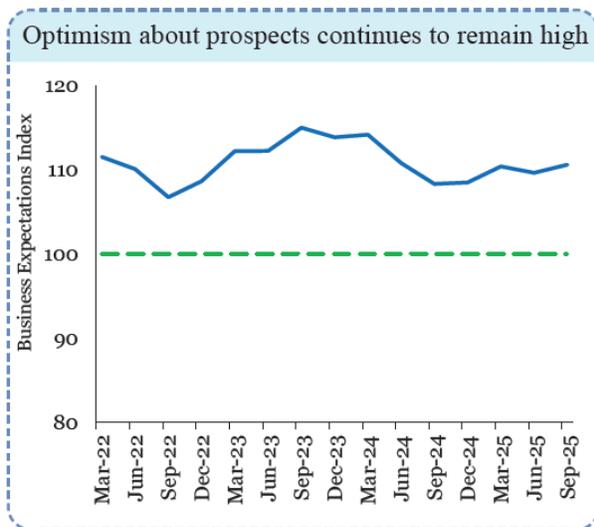
GLOBAL TRENDS & DOMESTIC DEVELOPMENTS

The global manufacturing landscape in 2025 reflects an uneven recovery marked by geopolitical tensions, inflationary pressures, and supply chain realignments. While overall growth remains subdued, a structural shift toward high-technology and innovation-driven manufacturing is evident, with medium- and high-tech industries outperforming low-tech segments.

Countries are increasingly focusing on strategic integration into Global Value Chains (GVCs) to enhance resilience and competitiveness. In this context, India’s industrial sector has demonstrated strong resilience and structural transformation.

Industrial GVA growth has accelerated, supported by manufacturing recovery, infrastructure expansion, and policy interventions such as the Production Linked Incentive (PLI) schemes. A significant transition towards high-value manufacturing is underway, with medium- and high-tech sectors accounting for a rising share of output.

Business sentiment remains positive, as reflected in strong PMI and investment indicators. Additionally, the financial landscape is evolving, with industries increasingly diversifying away from bank credit towards market-based financing. Overall, India’s industrial sector is emerging as a key growth engine, driven by technological upgrading, policy support, and improving global integration.



Key Points

1. Global Manufacturing Trends

- Global manufacturing growth remains uneven due to geopolitical tensions and supply chain disruptions.
- Manufacturing output grew modestly, with regional disparities across continents.



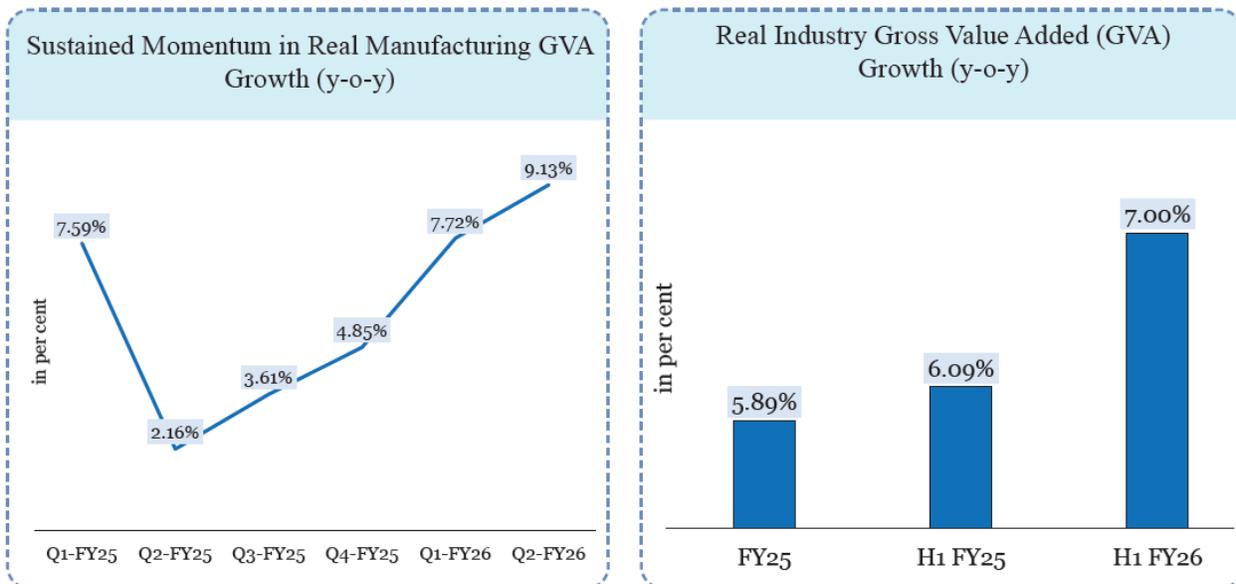
- Medium- and high-technology industries are expanding faster than low-tech sectors.
- Investment is increasingly directed towards digital and innovation-driven sectors.
- Countries are focusing on strategic positioning in global value chains (GVCs).

2. Shift Towards High-Tech Manufacturing

- Global manufacturing is transitioning from cost-based production to innovation-driven value chains.
- High-tech sectors are emerging as the primary drivers of industrial growth.
- Strategic indispensability is becoming more important than cost competitiveness.
- Countries aim to secure critical positions in supply chains to reduce vulnerabilities.

3. India’s Industrial Performance

- Industry GVA grew by **7.0% in H1 FY26**, indicating strong recovery.
- Manufacturing growth accelerated significantly in FY26 compared to FY25.
- Growth slowdown in FY25 was largely due to global demand conditions, not domestic weakness.
- Structural improvements have strengthened India’s industrial capability.



4. Structural Transformation in Manufacturing

- India is shifting towards higher-value manufacturing segments.
- Medium and high-tech sectors account for **46.3% of manufacturing value added**.
- Government initiatives like PLI and semiconductor policies are driving transformation.
- India’s global industrial ranking improved in Competitive Industrial Performance (CIP).



5. Business Sentiment and Forward Indicators

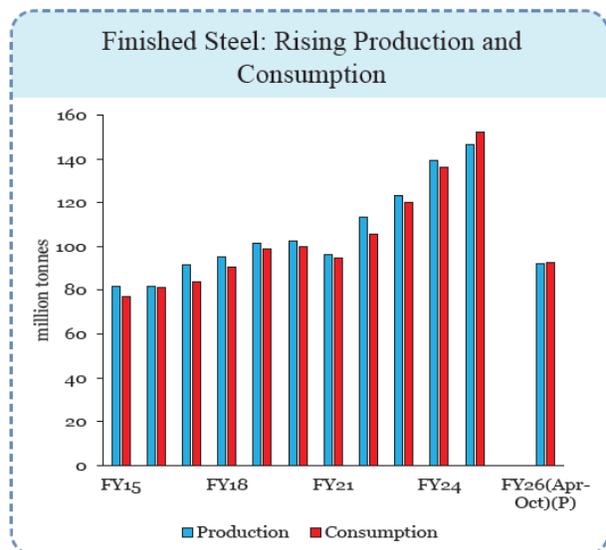
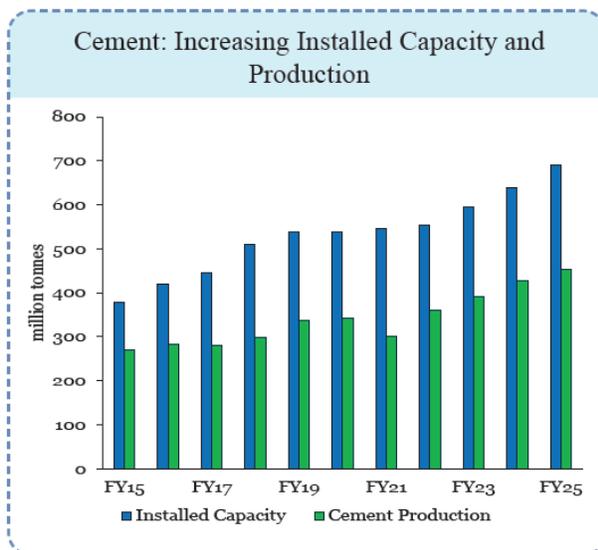
- Manufacturing PMI remains consistently above the expansion threshold of 50.
- Business Expectations Index indicates optimism in output, employment, and investment.
- Firms show confidence in demand conditions and future growth prospects.
- These indicators reflect a stable and positive industrial environment.

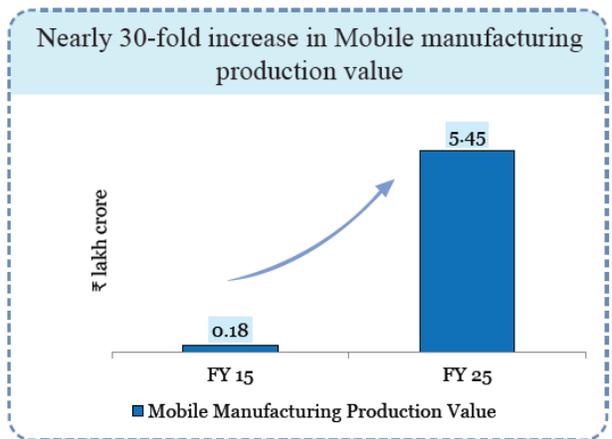
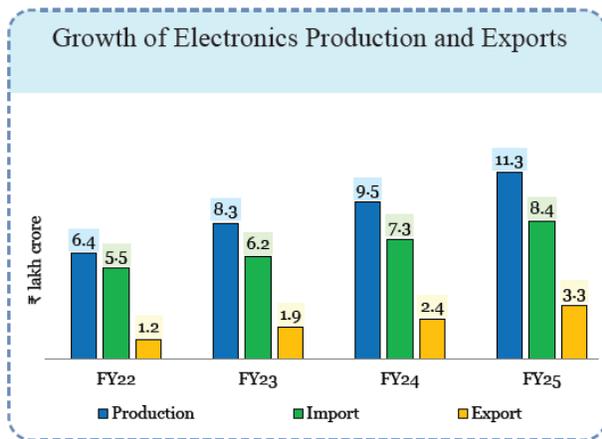
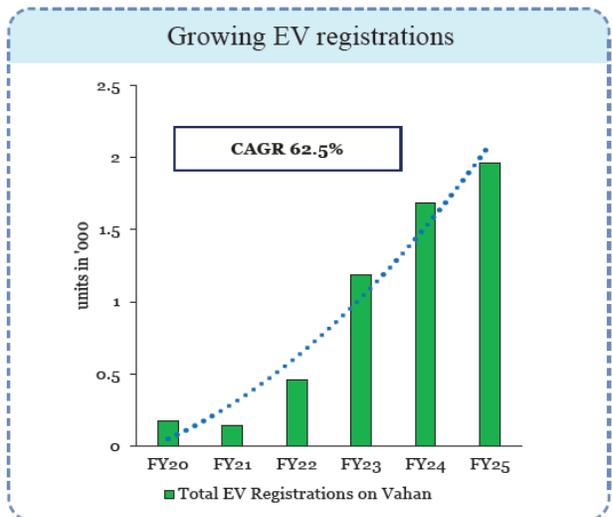
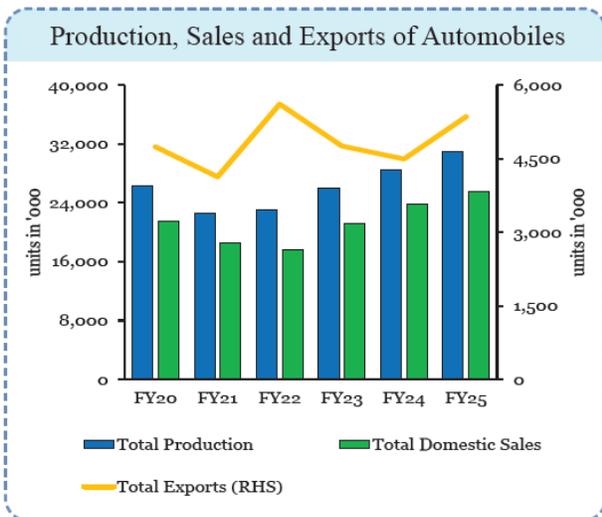
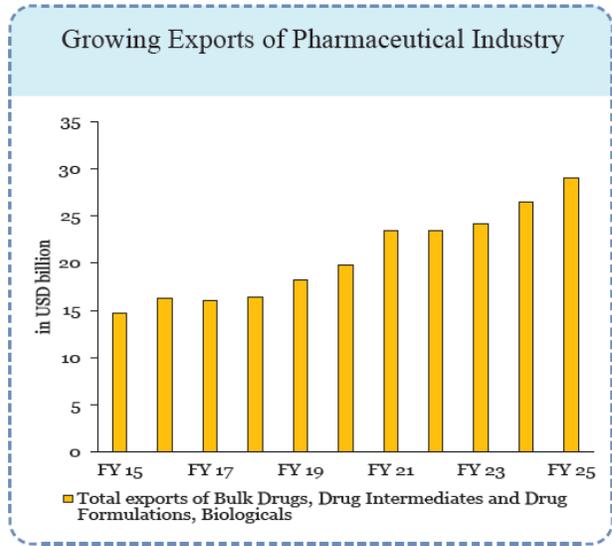
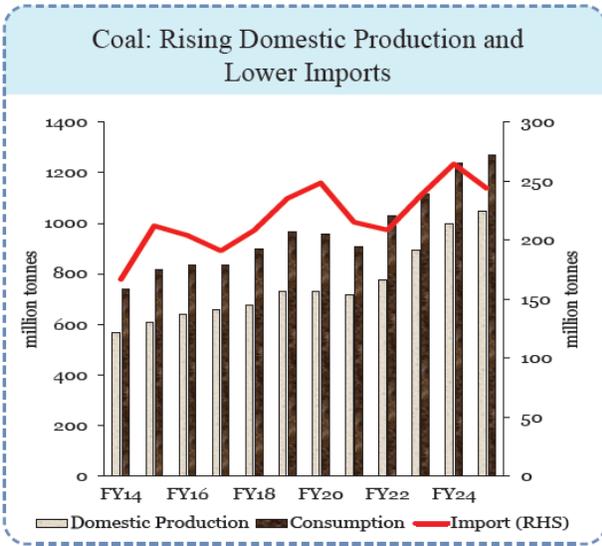
6. Structural Pillars of Industrial Competitiveness

- Improving ease of doing business is essential for industrial growth.
- Innovation and R&D investment are critical for long-term competitiveness.
- Skill development is necessary to meet future workforce requirements.
- Infrastructure and logistics improvements help reduce production costs.
- Strengthening MSMEs is crucial for integration into global markets.

7. Industrial Credit Trends

- Bank credit growth to industry moderated but remains positive.
- Industries are increasingly shifting towards market-based financing sources.
- Non-bank financial flows have grown significantly in recent years.
- Diversification of funding sources improves financial stability.
- Corporate bond markets are playing a larger role in industrial financing.





Data & Facts

- Global manufacturing growth: **~0.7% (Q3 2025)**
- Industry GVA growth (India): **7.0% (H1 FY26)**



- Medium & high-tech share: **46.3% of manufacturing value added**
- India's CIP rank: **37th (2023)**
- PMI: **Consistently above 50 (expansion zone)**
- Bank credit growth to industry: **8.24% (FY25)**
- Non-bank financial flows CAGR: **~17.3% (FY20–FY25)**

Concepts

- **Global Value Chains (GVCs)**: International production networks where different stages of production occur across countries.
- **Manufacturing PMI**: An index measuring manufacturing sector activity; above 50 indicates expansion.
- **Industrial GVA**: Contribution of industry to total economic output.
- **High-Tech Manufacturing**: Production involving advanced technology and innovation (e.g., electronics, semiconductors).
- **Corporate Bonds**: Debt instruments issued by companies to raise funds from the market.

Analysis

The global industrial landscape is transitioning from efficiency-driven globalisation to resilience-driven production systems. India's ability to sustain high industrial growth despite global slowdown reflects strong domestic fundamentals and effective policy support. The shift towards high-tech manufacturing enhances competitiveness but also raises challenges related to skills, innovation capacity, and technological adoption.

The diversification of financing sources indicates a maturing financial ecosystem, reducing systemic risks. However, sustaining this trajectory requires continuous reforms in infrastructure, regulatory frameworks, and human capital development.

POLICY INITIATIVES, MSMEs & GLOBAL INTEGRATION

India's industrial strategy is undergoing a decisive shift from protection-driven growth to competitiveness, innovation, and global integration. Flagship initiatives like the Production Linked Incentive (PLI) scheme and the National Manufacturing Mission (NMM) aim to expand manufacturing capacity, deepen value chains, and enhance technological capabilities.

Alongside, the innovation ecosystem has strengthened significantly, with improvements in research output, startup activity, and intellectual property generation, although low R&D expenditure remains a key constraint. Infrastructure and logistics reforms—especially through PM Gati Shakti and the National Logistics Policy—are reducing costs and improving efficiency.



MSMEs, forming the backbone of industrial growth, are witnessing improved credit access and digital integration, though financing gaps persist. A crucial strategic shift is toward deeper integration into Global Value Chains (GVCs), particularly through backward linkages that can enhance scale, employment, and domestic value addition.

The roadmap ahead emphasises advanced manufacturing, cluster-based development, innovation-driven growth, and a mission-oriented industrial policy framework. Overall, India's industrial sector is transitioning toward a resilient, globally competitive, and technology-driven growth model.

Key Points

1. Production Linked Incentive (PLI) Scheme

- The PLI scheme spans 14 sectors with an outlay of ₹1.97 lakh crore to boost manufacturing competitiveness.
- It has attracted investments exceeding ₹2 lakh crore and generated significant employment.
- Incremental production and exports have increased substantially, especially in electronics and pharmaceuticals.
- The scheme promotes economies of scale, efficiency, and technological upgrading.
- It has positioned India as a global hub for sectors like mobile manufacturing.

2. National Manufacturing Mission (NMM)

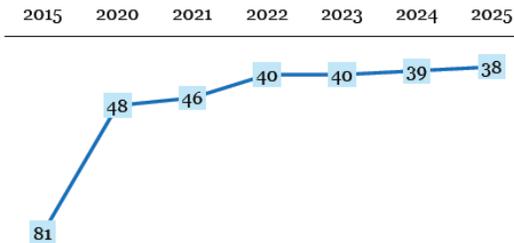
- NMM **aims to raise manufacturing share in GDP to 25%** and generate 143 million jobs by 2035.
- It adopts a cluster-based and sector-specific strategy across priority industries.
- The mission categorises sectors into Scale, Fix & Transform, and Seed segments.
- It focuses on MSME integration, innovation, and infrastructure development.
- It acts as a coordinating framework aligning Centre, States, and industry.

3. Innovation and R&D Ecosystem

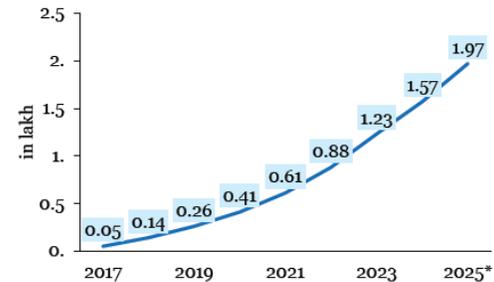
- India ranks **3rd globally in scientific publications** and **38th in the Global Innovation Index**.
- Startup ecosystem has expanded rapidly with over 2 lakh recognised startups.
- India has emerged as a global player in patents, trademarks, and design registrations.
- Critical technology capabilities have improved across AI, defence, and advanced materials.
- However, R&D expenditure remains low at around 0.64% of GDP.



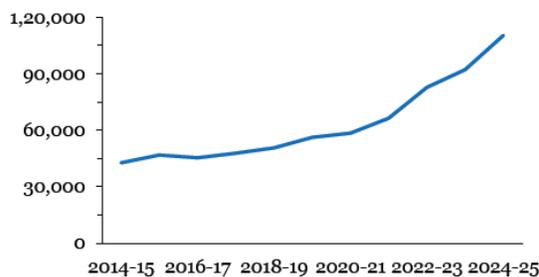
India's Ranking in the Global Innovation Index improving steadily



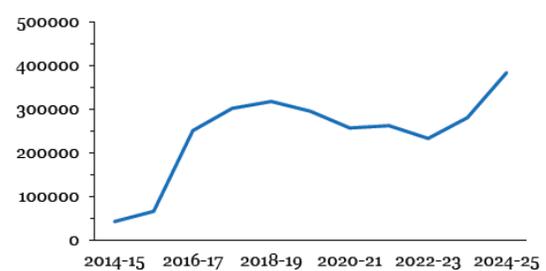
Rapid growth in DPIIT-Recognised Startups



Patent Applications nearly doubled from FY20 to FY25



Trademark Registrations grew 1.5 times from FY20 to FY25



4. Government Initiatives for Innovation

- The Anusandhan National Research Foundation (ANRF) provides strategic direction for R&D.
- The ₹1 lakh crore Research, Development and Innovation (RDI) Fund aims to boost private investment.
- National missions such as Semiconductor Mission, AI Mission, and Green Hydrogen Mission are underway.
- These initiatives aim to bridge the gap between research and commercialisation.

5. Quality Control and Standards (QCOs)

- QCOs ensure compliance with quality standards to improve global competitiveness.
- Over 700 products are now covered under mandatory quality standards.
- They help curb substandard imports and protect consumers.
- However, improper implementation can burden MSMEs and disrupt supply chains.
- A balanced and pragmatic approach is required for effective outcomes.

6. Infrastructure and Logistics Reforms

- PM GatiShakti integrates infrastructure planning through a unified digital platform.



- National Logistics Policy and ULIP improve coordination and efficiency.
- Logistics cost has reduced to around 7.97% of GDP, indicating improved efficiency.
- Industrial corridors and smart cities enhance manufacturing ecosystems.
- These reforms reduce transaction costs and improve competitiveness.

7. MSMEs: Backbone of Industrial Growth

- MSMEs contribute ~31% to GDP, ~35% to manufacturing, and ~48% to exports.
- They employ over 32 crore people, making them a key employment generator.
- Credit growth to MSMEs has outpaced large industries.
- Government schemes like CGTMSE, SRI Fund, and PMEGP support financing and growth.
- Digital platforms like ONDC and TReDS enhance market access and liquidity.

8. MSME Challenges and Reforms

- Access to formal credit remains limited, especially for micro enterprises.
- Delayed payments continue to affect liquidity and working capital.
- Informal financing remains prevalent for small-ticket loans.
- Online Dispute Resolution (ODR) and digital lending aim to address these issues.
- Expanding cash-flow-based lending is critical for inclusion.

9. Integration with Global Value Chains (GVCs)

- India's share in global manufacturing and exports remains relatively low.
- Backward GVC participation can enhance scale, employment, and domestic value addition.
- Tariff rationalisation is necessary to avoid inverted duty structures.
- Global supply chain shifts present opportunities for India.
- Export-oriented manufacturing is key for long-term growth.

10. Role of Advanced Manufacturing

- Advanced manufacturing enforces efficiency, quality, and global competitiveness.
- It drives technological capability and institutional improvement.
- It complements other growth drivers like infrastructure and services.
- It is essential for achieving strategic autonomy and resilience.

11. Industrial Cluster Strategy

- Clusters enhance productivity through agglomeration benefits.



- India needs larger, globally competitive clusters with better connectivity.
- Private sector participation and regulatory flexibility are critical.
- Tier-2 and Tier-3 cities are emerging as new manufacturing hubs.

Data & Facts

- PLI outlay: **₹1.97 lakh crore**
- Investment under PLI: **₹2+ lakh crore**
- Incremental production: **₹18.7 lakh crore**
- R&D expenditure: **~0.64% of GDP**
- MSME share: **31% GDP, 35% manufacturing, 48% exports**
- Logistics cost: **~7.97% of GDP (FY24)**
- India's global manufacturing share: **~2.9%**
- Startup ecosystem: **2 lakh+ startups**

Global Innovation Leap:

India ranks globally

- **12th in entrepreneurship policy & culture**
- **4th in trademarks;**
- **6th in patents;**
- **7th in industrial designs in global filings**

(World Intellectual Property Organization (2024))

Critical Tech Breakthrough:

- **Top-5 globally in 45 of 64 critical technologies** (up from 4 in 2003–07)

(Australian Strategic Policy Institute)

Concepts

- **PLI Scheme:** Incentive scheme rewarding firms based on incremental production.
- **GVC (Global Value Chain):** International production network with cross-border value addition.
- **Backward GVC Participation:** Importing inputs to produce exports.
- **Quality Control Orders (QCOs):** Mandatory standards ensuring product quality.
- **Advanced Manufacturing:** High-tech, innovation-driven production systems.

Analysis

India's industrial strategy reflects a transition toward a globally integrated and innovation-driven model. Policies like PLI and NMM are shifting the focus from import substitution to



competitiveness and scale. Strengthening MSMEs and improving infrastructure are critical for inclusive industrialisation.

However, challenges such as low R&D investment, credit constraints, and regulatory complexities persist. Integration into GVCs emerges as a key strategy for accelerating growth and employment. The emphasis on advanced manufacturing and clusters indicates a long-term vision of building a resilient and self-reliant industrial ecosystem.



CHAPTER 9: INFRASTRUCTURE AND INVESTMENT

Infrastructure has emerged as the central pillar of India's growth strategy, driven by sustained public capital expenditure and systemic reforms in planning, financing, and execution. Since FY20, the government has significantly increased capital outlay, recognising its high multiplier effect on economic growth.

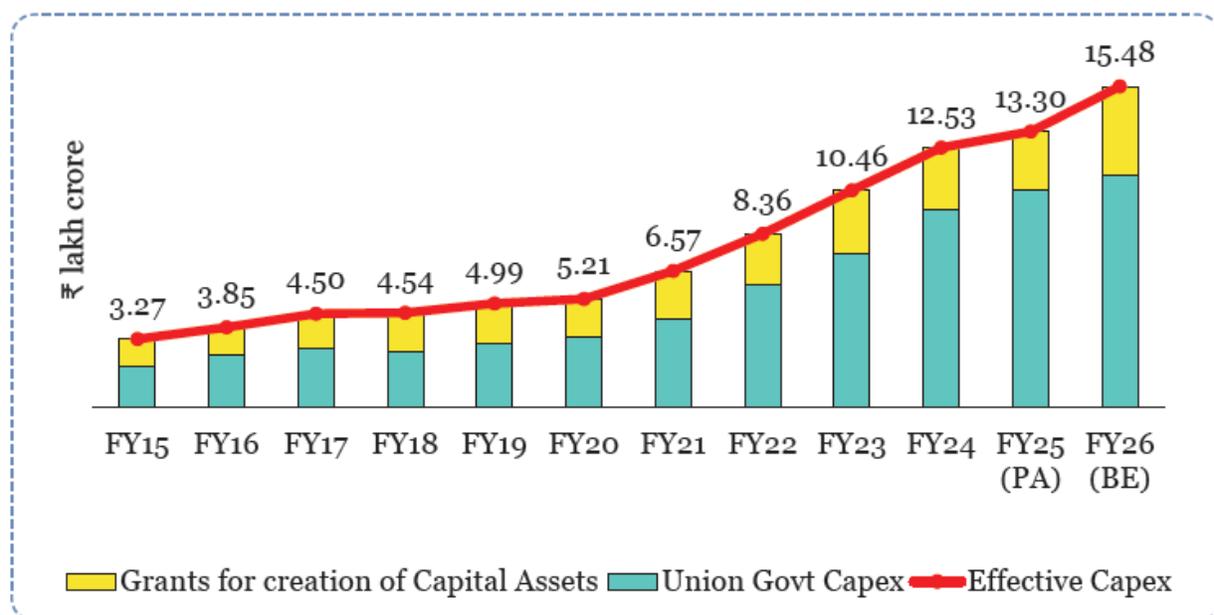
This expansion is not limited to traditional infrastructure like roads, railways, and energy but also includes digital public infrastructure and renewable energy systems, reflecting a shift towards integrated and future-ready development. Institutional innovations such as PM GatiShakti and the National Logistics Policy have improved coordination, efficiency, and logistics competitiveness.

Simultaneously, the financing landscape is evolving from bank-dominated credit to diversified sources like NBFCs, InvITs, REITs, and capital markets. Public-Private Partnerships (PPPs) continue to play a crucial role, supported by improved regulatory frameworks and project pipelines.

Sectoral progress across transport, energy, telecom, and water infrastructure highlights strong capacity expansion and technological adoption. However, challenges such as project delays, financing constraints, and the need for better institutional capacity remain.

Overall, infrastructure development is transitioning toward an integrated, technology-driven, and sustainability-oriented model, positioning it as a key enabler of India's long-term growth vision.

Effective Capex has increased steadily since FY15



Key Points

1. Infrastructure as Growth Engine

- Public capital expenditure has increased sharply, with strong multiplier effects of 2.5–3.5 times GDP.
- Government capex rose from ₹3.07 lakh crore (FY19) to ₹11.21 lakh crore (FY26 BE).
- Infrastructure expansion now includes digital and renewable components alongside physical assets.
- Focus has shifted from capacity addition to efficiency, integration, and competitiveness.

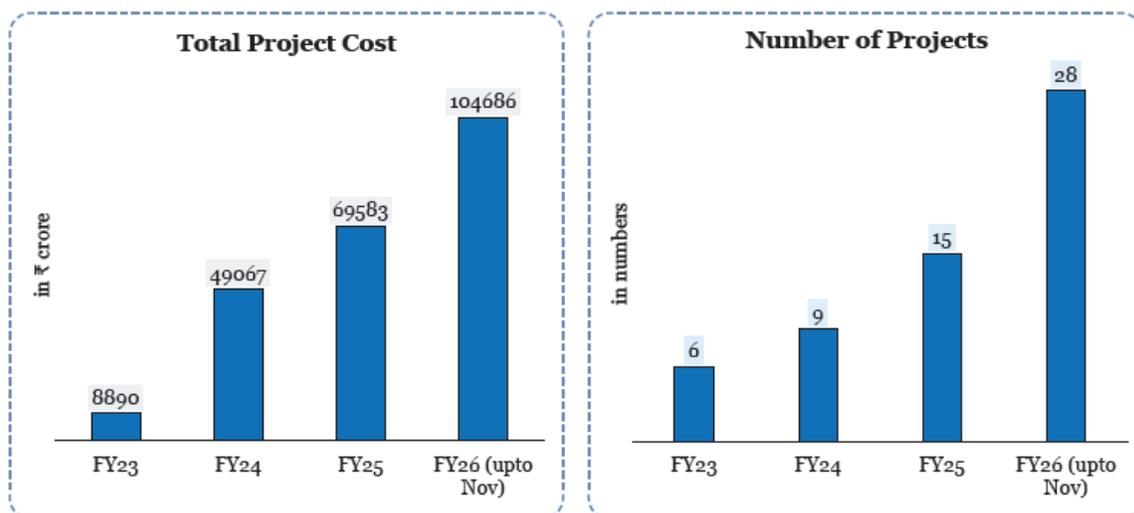
2. Institutional and Policy Reforms

- PM GatiShakti enables GIS-based integrated infrastructure planning.
- National Logistics Policy and ULIP improve logistics efficiency and coordination.
- Digital Public Infrastructure (DPI) such as UPI, Aadhaar, and FASTag acts as a force multiplier.
- Improved planning reduces project delays and execution risks.

3. Infrastructure Financing Transformation

- Financing is shifting from bank credit to diversified sources like NBFCs, REITs, and InvITs.
- NBFC credit to the commercial sector grew at ~43.3% CAGR (FY20–FY25).
- RBI Project Finance Directions (2025) standardise infrastructure lending practices.
- Capital markets are increasingly supporting long-term infrastructure funding.

Increase in Project Approvals by Public-Private Partnership Appraisal Committee

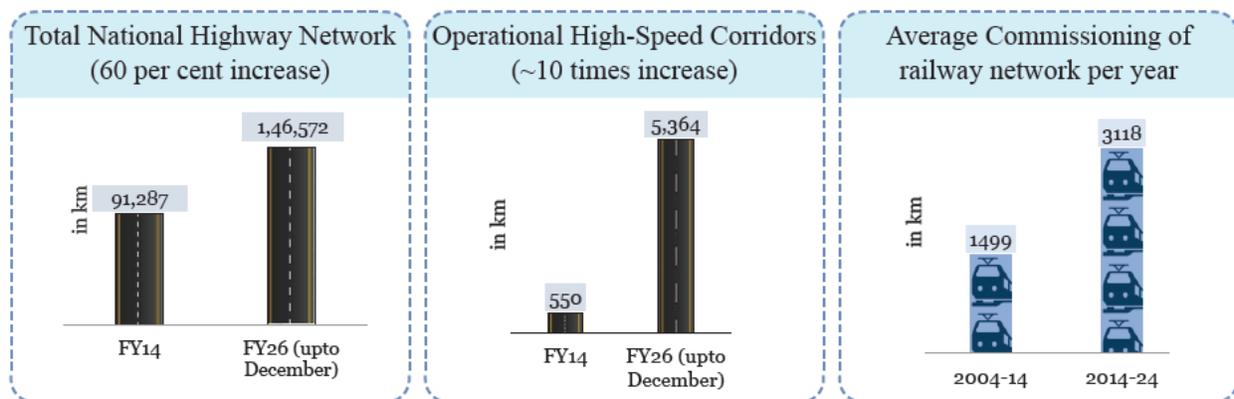


4. Public-Private Partnerships (PPP)

- PPPs enable private sector participation in infrastructure development.
- India ranks among top countries in private infrastructure investment globally.
- Multiple models exist such as BOT, HAM, DBFOT, and TOT.
- Institutional mechanisms like PPPAC and VGF strengthen PPP frameworks.
- Future PPP focus is shifting towards partnership-based models and risk-sharing.

5. Roads & Highways

- National Highway network expanded by **~60% since 2014**.
- High-Speed Corridors increased nearly 10 times.
- Focus is shifting toward logistics efficiency and multimodal connectivity.
- PMGSY has achieved ~99.7% rural connectivity.



6. Railways Transformation

- Rail network reached 69,439 route km with ~99.1% electrification.
- Dedicated Freight Corridors reduce congestion and logistics costs.
- High capital investment focuses on safety, signalling, and capacity expansion.
- Projects like high-speed rail and station redevelopment are underway.

7. Civil Aviation Growth

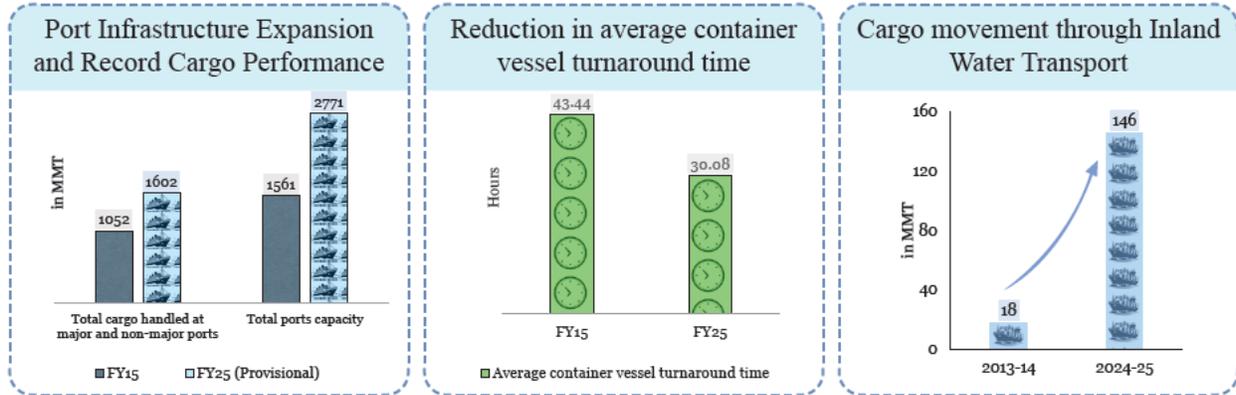
- Airports increased from 74 (2014) to 164 (2025).
- Passenger traffic expected to rise from 412 million (FY25) to 665 million (FY31).
- UDAN scheme enhances regional connectivity.
- Aviation sector shows strong future growth potential.

8. Ports, Shipping & Inland Waterways

- Ports have improved efficiency and global competitiveness rankings.

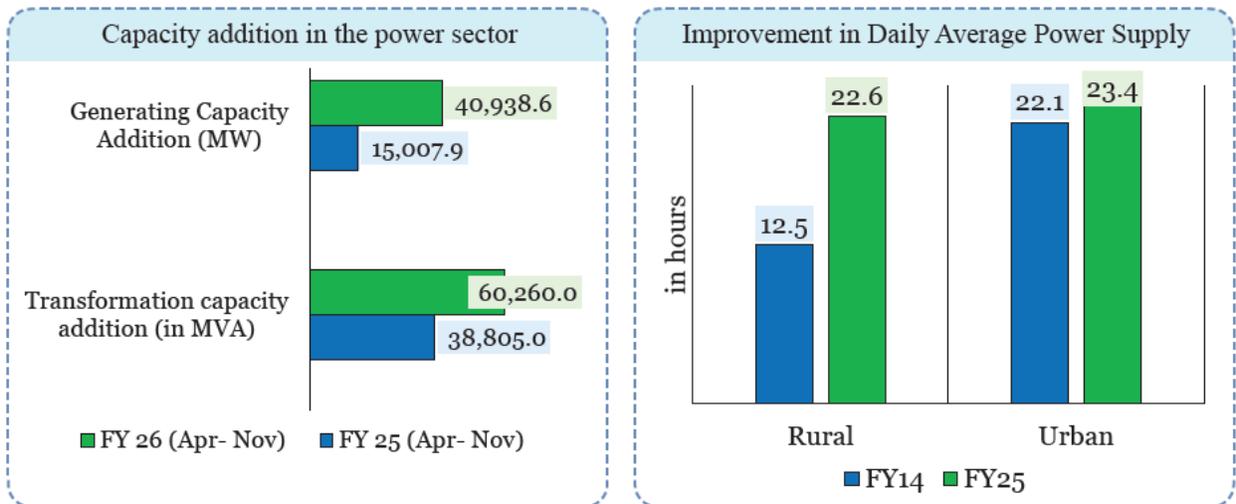


- PPP participation in ports has increased significantly.
- Inland Water Transport cargo increased from 18 MMT (2014) to 146 MMT (2025).
- Maritime Vision 2030 and 2047 guide long-term development.



9. Energy Infrastructure

- Installed power capacity reached **509.74 GW (Nov 2025)**.
- Renewable energy accounts for ~49.83% of capacity.
- Distribution sector reforms improved DISCOM finances and reduced losses.
- India Energy Stack aims to digitise and modernise the power ecosystem.



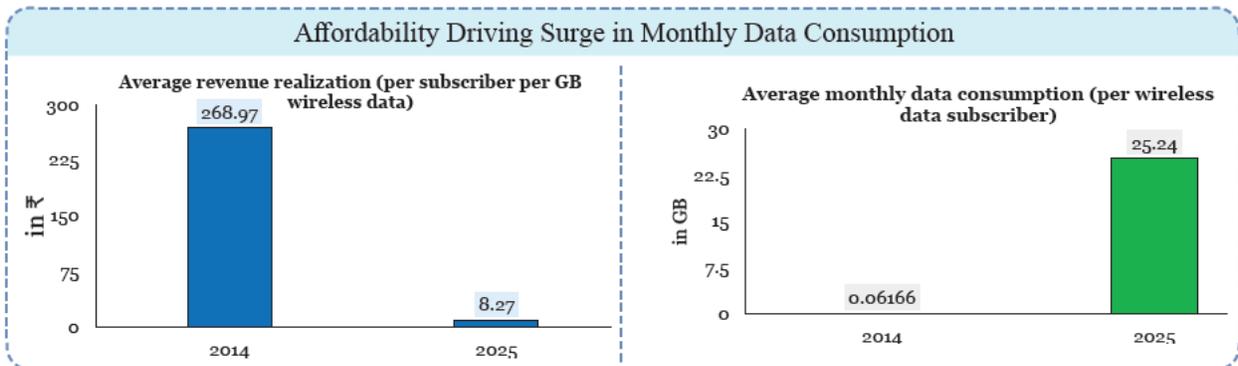
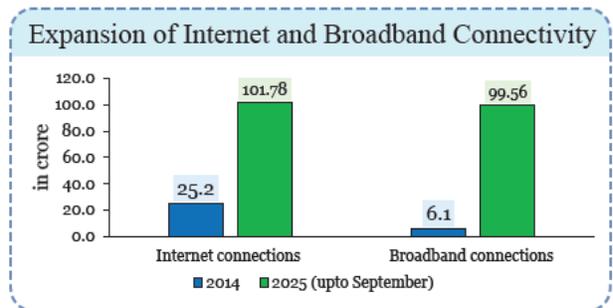
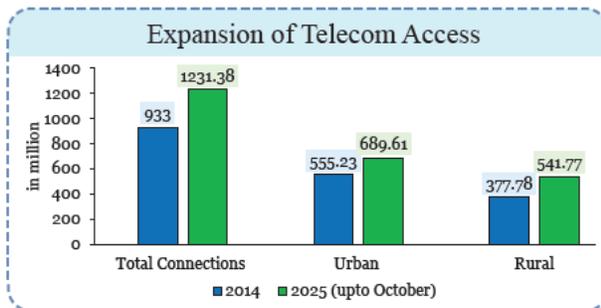
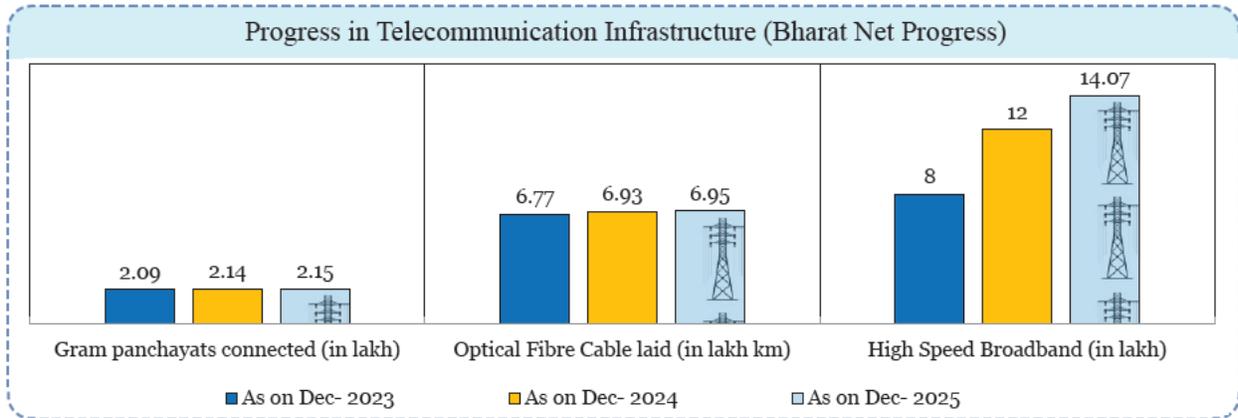
Power Distribution Turnaround:
 Profit After Tax: ₹67,962 crore loss (FY14) → ₹2,701 crore profit (FY25)
 AT&C Losses: 22.62% (FY14) → 15.04% (FY25)

10. Digital Infrastructure

- Tele-density increased to 86.76%, with strong rural growth.
- 5G rollout covers ~99.9% districts.



- BharatNet connects 2.14 lakh Gram Panchayats.
- Data centre capacity expected to expand significantly by 2030.

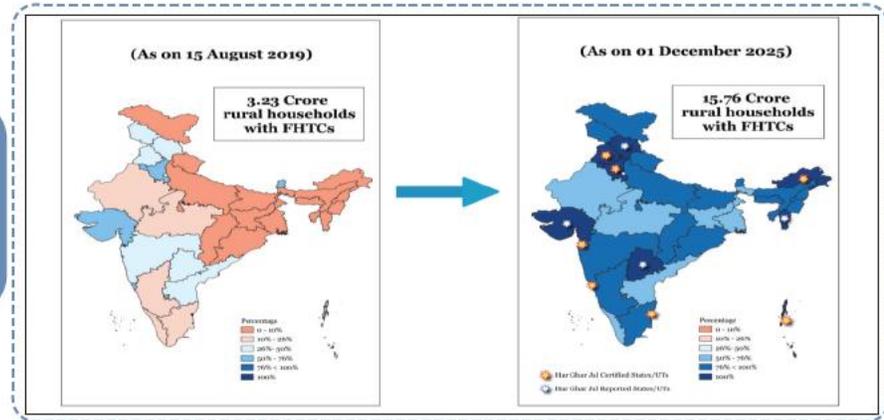


11. Social & Emerging Infrastructure

- Jal Jeevan Mission provides tap water to over 81% rural households.
- Namami Gange integrates ecological restoration with infrastructure.
- Tourism infrastructure expanded under Swadesh Darshan 2.0 and PRASHAD.
- Space sector reforms have boosted private participation and innovation.



Over 81% of rural households now have access to tap water under Jal Jeevan Mission



Data & Facts

- Capex (FY26 BE): **₹11.21 lakh crore**
- Multiplier effect: **2.5–3.5x GDP**
- NBFC credit growth: **43.3% CAGR (FY20–FY25)**
- NH network growth: **~60% increase since 2014**
- Rail electrification: **99.1%**
- Airports: **164 (2025)**
- Renewable energy share: **~49.83%**
- Inland waterways cargo: **146 MMT (2025)**
- Rural tap water coverage: **81%+ households**

Concepts

- **Infrastructure Multiplier:** The additional GDP generated from infrastructure investment.
- **PPP (Public-Private Partnership):** Collaboration between government and private sector for infrastructure projects.
- **InvIT/REIT:** Investment vehicles that pool funds for infrastructure or real estate assets.
- **DPI (Digital Public Infrastructure):** Digital platforms enabling service delivery at scale (e.g., UPI).
- **Multimodal Connectivity:** Integration of different transport modes for efficiency.

Analysis

India's infrastructure strategy reflects a transition from fragmented development to integrated and technology-driven growth. The strong emphasis on public capex has stimulated economic activity and crowding-in of private investment.



Institutional reforms like PM GatiShakti have improved coordination, reducing inefficiencies. However, challenges remain in project execution, financing sustainability, and institutional capacity, especially at sub-national levels.

The expansion of digital and green infrastructure indicates alignment with future economic priorities such as sustainability and resilience. The success of infrastructure development will depend on maintaining investment momentum, improving governance, and enhancing private sector participation.



CHAPTER 10: ENVIRONMENT AND CLIMATE CHANGE

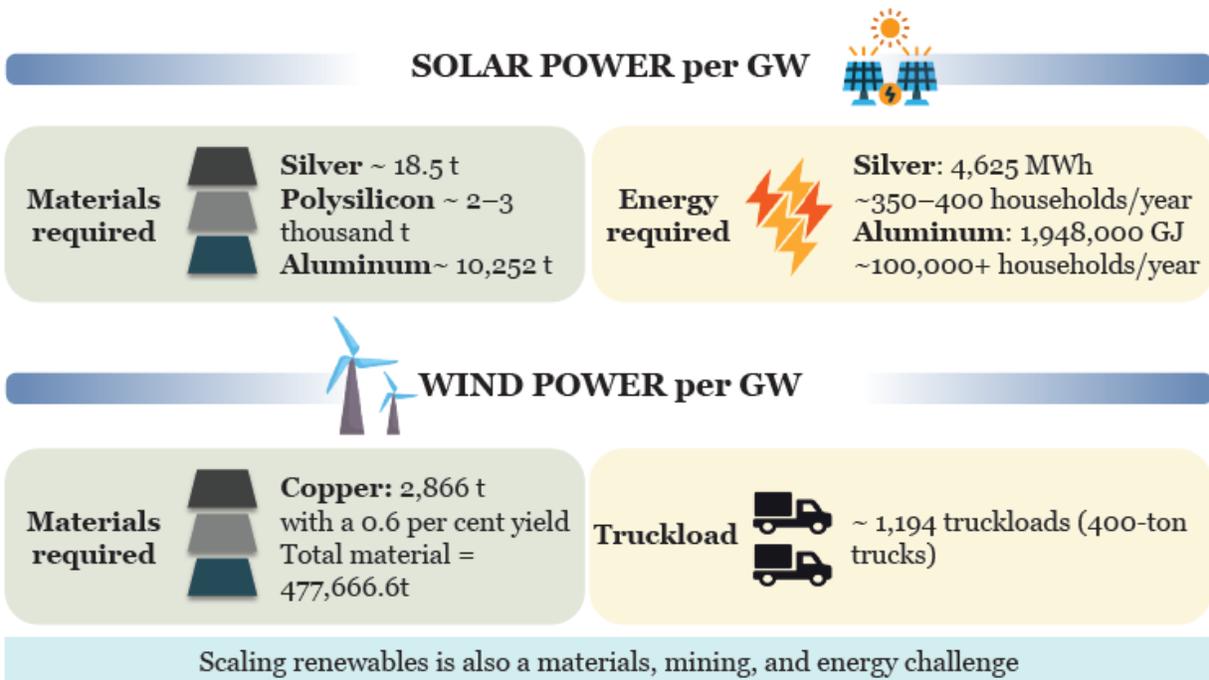
GLOBAL REALITIES, INDIA'S STRATEGY AND ADAPTATION FRAMEWORK

The global climate discourse has entered a phase of realism, where ambitious decarbonisation targets are increasingly constrained by infrastructural, financial, and institutional limitations. Experiences of advanced economies highlight that rapid renewable expansion without adequate grid readiness, storage capacity, and system resilience can lead to instability, higher costs, and inefficiencies.

This underscores the importance of sequencing and institutional preparedness in climate transitions. For emerging economies like India, climate strategy must balance growth, energy security, and resilience alongside mitigation goals. India's approach is anchored in three pillars: prioritising adaptation due to high vulnerability, pursuing mitigation through diversified and secure energy transitions, and relying largely on domestic resources amid limited global climate finance.

A key insight is that development itself acts as adaptation by enhancing resilience through better infrastructure, health systems, and livelihoods. India's strategy integrates climate action into development planning through national missions, state-level initiatives, and community-driven interventions. Public investment plays a central role in building climate resilience across sectors such as agriculture, water, and coastal ecosystems.

Overall, India advocates a pragmatic, growth-compatible, and context-specific climate pathway that ensures sustainability without compromising development priorities.



Nuclear Energy: A Pillar of India's Clean & Secure Energy Transition

Why Nuclear?

 <p>24/7 Clean Power Low-carbon</p> <p>No intermittency Energy security</p>	 <p>Supports Heavy Industry</p> <p>Reliable baseload Tech-ready power</p>	 <p>Hydrogen Production</p> <p>Transport fuel Industrial use</p>
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National Nuclear Energy Mission (2025-26)



₹20,000 cr allocation in Union Budget 2025-26

- Development of 5 indigenously designed SMRs
- Target: Operational by 2033
- Focus on Energy security & clean power

8,780 MW

Current Nuclear Capacity



100 GW by 2047

Target capacity

SHANTI Act – December 2025



- Enables **private & state participation**
- Graded **liability framework**
- Protects **victim compensation**
- **Boosts manufacturing, R&D & innovation**

India's Energy Storage Requirement & Policy Push



Energy storage is positioned as a key enabler for renewable integration, peak management, and long-term resource adequacy



Requirements

India will require around 411 GWh of energy storage by 2031-32





Policy Support

National Framework for Promoting Energy Storage Systems

Formally recognised under the Electricity Rules

Included in the Harmonised Master List of Infrastructure

A core resource in power system planning under Resource Adequacy Plans.



Market enablers and Deployment support

Waiver of Inter-State Transmission System charges

Storage assets allowed to provide ancillary services

PLI scheme - ₹18,100 crore for 50 GWh ACC manufacturing

VGF schemes targeting ~43 GWh of BESS

Key Points

1. Global Climate Transition: Emerging Realities

- The global climate agenda is shifting from idealistic targets to practical constraints involving infrastructure, finance, and institutional capacity.
- Rapid renewable deployment **without grid readiness and storage** has caused instability and inefficiencies in advanced economies.
- Energy transitions must account for system-level costs such as storage, balancing, and transmission upgrades.
- A lack of sequencing can increase systemic fragility instead of resilience.
- Policymaking is moving towards evidence-based and pragmatic climate strategies.

2. Lessons from Advanced Economies

- Countries like the Netherlands and Spain have faced grid congestion and instability due to rapid renewable expansion.
- Intermittency of renewable energy increases costs related to backup capacity and grid reinforcement.
- Storage and transmission bottlenecks remain major constraints in energy transitions.
- Overemphasis on capacity addition without system readiness can weaken reliability.
- These experiences highlight the importance of balancing ambition with feasibility.



3. Shift in Global Climate Discourse

- Climate policy is increasingly recognising uncertainties and limitations in scientific projections.
- There is a move away from alarmist narratives towards calibrated and context-specific approaches.
- Policymakers are focusing on balancing climate action with economic stability and competitiveness.
- Climate risk management requires nuanced interpretation rather than deterministic conclusions.

4. Development as Adaptation

- Economic development enhances resilience by improving infrastructure, health systems, and livelihoods.
- Growth and climate action are complementary rather than conflicting objectives.
- Investments in agriculture, health, and poverty reduction strengthen adaptive capacity.
- Climate strategies should prioritise human welfare alongside environmental goals.

5. India's Climate Strategy: Three Pillars

- Adaptation is prioritised due to India's high vulnerability to climate risks such as floods, heatwaves, and water stress.
- Mitigation focuses on renewable energy expansion, energy efficiency, and diversification into green hydrogen and nuclear energy.
- Climate finance relies heavily on domestic resources due to limited and costly international funding.
- India promotes a balanced approach combining growth, resilience, and sustainability.

6. Climate Finance and Regulatory Evolution

- High cost of capital and limited global finance constrain climate investments in developing countries.
- India is developing innovative financial instruments such as green bonds and sustainable finance frameworks.
- Regulatory approaches are shifting from command-and-control to risk-based and outcome-oriented systems.
- International reforms are needed in multilateral finance and credit rating mechanisms.



7. Adaptation: Central to Climate Policy

- Adaptation provides immediate economic benefits by reducing losses and stabilising livelihoods.
- Developing countries require **USD 310–365 billion annually by 2035**, but current flows are inadequate.
- Climate adaptation must be integrated into development planning for long-term sustainability.
- Localised and context-specific solutions are essential for effective adaptation.

8. India's Public Investment-Led Adaptation

- India's adaptation strategy is driven by domestic public investment integrated into development sectors.
- Adaptation-related spending increased from **3.7% of GDP (FY16) to 5.6% (FY22)**.
- [National Action Plan on Climate Change \(NAPCC\)](#) provides a mission-based framework.
- Missions focus on agriculture, water, health, and sustainable habitats.
- This approach ensures resilience while supporting economic growth.

9. Sectoral Adaptation Initiatives

- Agriculture initiatives promote climate-resilient farming and efficient water use.
- Water management focuses on conservation, rainwater harvesting, and equitable access.
- Coastal resilience programmes integrate ecosystem protection with livelihood security.
- Urban initiatives enhance climate-resilient infrastructure and liveability.

10. Role of States and Local Governance

- State Action Plans on Climate Change (SAPCCs) translate national strategies into local action.
- Recent SAPCCs emphasise adaptation-led development and district-level planning.
- Community participation and local institutions play a critical role in implementation.
- Climate governance is increasingly decentralised and context-specific.

11. Subnational Innovations (Case Studies)

- Meghalaya focuses on ecosystem-based water management and community participation.
- Odisha integrates irrigation, agriculture, and community governance for resilience.
- Tamil Nadu adopts coastal ecosystem-based adaptation strategies.
- Ahmedabad uses heat insurance and action plans to protect vulnerable workers.



- Urban innovations like cooling stations and early warning systems enhance resilience.

Data & Facts

- Adaptation finance requirement: **USD 310–365 billion/year by 2035**
- Current adaptation finance: **~USD 26 billion/year**
- India's per capita emissions: **~2.9 t (vs global 6.7 t)**
- Adaptation spending: **3.7% → 5.6% of GDP (FY16–FY22)**
- Mangrove restoration under MISHTI: **~540 sq km**
- Employment from **MISHTI**: **~22.8 million person-days**

Concepts

- **Adaptation**: Adjusting systems to reduce vulnerability to climate impacts.
- **Mitigation**: Efforts to reduce greenhouse gas emissions.
- **NAPCC**: India's framework for climate action through national missions.
- **SAPCC**: State-level climate action plans tailored to regional needs.
- **Climate Finance**: Funding for mitigation and adaptation activities.

Analysis

The chapter highlights a critical shift from idealistic climate narratives to pragmatic, system-oriented approaches. India's strategy stands out for integrating climate action within development priorities rather than treating it as a standalone objective. The emphasis on adaptation reflects ground realities, while mitigation is pursued in a balanced manner to ensure energy security and economic growth.

However, global inequities in climate finance and technology access remain major challenges. India's approach of combining domestic resource mobilisation, decentralised governance, and ecosystem-based adaptation offers a scalable model for other developing economies.

MITIGATION, CLIMATE FINANCE & REGULATORY REFORMS

India's climate strategy in the contemporary phase is shaped by the need to balance mitigation, energy security, and development priorities within a constrained global financial environment. While significant progress has been made in expanding non-fossil energy capacity—crossing 50% of installed capacity—challenges related to intermittency, storage, and critical mineral dependence remain.

Policy initiatives such as the Green Hydrogen Mission, Nuclear Energy Mission, and battery storage frameworks reflect a systems-based approach to energy transition. Simultaneously, climate finance



emerges as the most binding constraint, with global capital flows skewed towards developed economies and insufficient support reaching vulnerable developing countries.

India relies predominantly on domestic financing while attempting to deepen green financial markets through instruments like sovereign green bonds and regulatory reforms. Environmental governance is also undergoing a transformation from command-and-control approaches to risk-based, market-oriented, and technology-enabled systems. Mechanisms like carbon markets, emissions trading, and digital clearance platforms aim to improve efficiency and reduce compliance burdens.

Overall, India's climate pathway reflects a pragmatic, development-centric model that integrates resilience, competitiveness, and sustainability, while advocating for equitable global financial and institutional reforms.

Key Points

1. India's Mitigation Strategy

- India is pursuing a diversified energy transition including solar, wind, nuclear, green hydrogen, and bioenergy.
- The country has already achieved over **50% installed capacity from non-fossil sources** ahead of targets.
- Renewable expansion is supported by large-scale policy initiatives and capacity additions.
- However, energy transition is constrained by intermittency, storage requirements, and system integration challenges.
- A balanced approach emphasises energy security, affordability, and industrial competitiveness.

2. Challenges in Renewable Energy Transition

- Renewable energy systems are material-intensive and depend on **critical minerals** such as lithium and cobalt.
- Energy storage remains capital-intensive and technologically challenging.
- Grid stability requires backup thermal capacity and transmission upgrades.
- Rapid transition without system readiness can increase costs and reduce reliability.
- These challenges highlight the importance of system-level planning.

3. Energy Storage Ecosystem

- India requires **336 GWh storage by 2030 and 411 GWh by 2032** for renewable integration.



- Policy support includes viability gap funding, transmission charge waivers, and market participation mechanisms.
- **Battery Energy Storage Systems (BESS)** and pumped storage are being promoted.
- Storage is recognised as critical infrastructure for grid stability.
- Manufacturing is incentivised through PLI schemes for advanced battery technologies.

4. Critical Minerals & Strategic Concerns

- Energy transition depends heavily on minerals like lithium, copper, and rare earth elements.
- Supply chains are concentrated geographically, creating geopolitical risks.
- Standards-based markets may act as barriers for developing countries.
- India launched the **National Critical Mineral Mission (NCMM)** to secure supply chains.
- Recycling and domestic exploration are key strategies for resilience.

5. Carbon Market Framework

- India introduced the **Carbon Credit Trading Scheme (CCTS)** in 2023.
- It includes a compliance mechanism for industries and a voluntary offset mechanism.
- Emission intensity targets are set for sectors like cement and aluminium.
- Market-based instruments aim to improve cost efficiency and incentivise innovation.
- Lessons from global ETS highlight the need for gradual and context-specific implementation.

6. Mission LiFE (Behavioural Transformation)

- **Mission LiFE** promotes sustainable consumption and lifestyle changes.
- It integrates behavioural change with climate policy implementation.
- Programmes like LED adoption and energy efficiency reflect this approach.
- Climate action is embedded in everyday practices and community participation.

Climate Finance

7. Global Climate Finance Challenges

- Developing countries require **USD 5–6 trillion by 2030** for climate action.
- Global finance flows remain skewed toward developed economies.
- Only ~15% of private climate finance reaches developing countries (excluding China).
- High cost of capital and risk perceptions limit investment in developing economies.
- Structural issues in global finance hinder equitable climate action.



8. India's Climate Finance Landscape

- Around **83% of mitigation and 98% of adaptation finance** is sourced domestically.
- Sovereign green bonds and regulatory reforms are strengthening financial markets.
- Institutions like IREDA, NABARD, SIDBI, PFC, and REC support climate investments.
- RBI and SEBI frameworks improve transparency and investor confidence.
- Despite progress, financing gaps remain significant.

9. Domestic Financial Strengthening

- Deepening bond markets is essential for long-term infrastructure financing.
- Municipal green bonds enable local-level climate investments.
- Development finance institutions play a catalytic role.
- Insurance mechanisms help manage climate risks.
- Blended finance and risk-sharing tools are needed for scaling investments.

10. International Climate Finance Issues

- Developed countries' commitments (USD 100 billion/year) remain contested.
- Multilateral Development Banks prioritise low-risk lending, limiting impact.
- Regulatory frameworks like Basel III restrict capital flows to developing countries.
- Structural reforms are needed to align global finance with climate goals.
- Equity and differentiated responsibilities remain key negotiation principles.

Environmental Regulation

11. Evolution of Regulatory Framework

- Early regulations followed command-and-control approaches (Water Act, Air Act, EPA).
- Environmental Impact Assessment (EIA) introduced ex-ante regulation.
- Judicial institutions like NGT strengthened enforcement.
- Market-based instruments like PAT scheme introduced flexibility.
- Carbon markets represent the next phase of regulatory evolution.

12. Shift to Modern Governance

- Regulation is moving towards risk-based and outcome-oriented frameworks.
- Market-based instruments improve efficiency and innovation.
- Digital platforms enhance transparency and compliance.
- Trust-based governance reduces regulatory burden.



- Balance between environmental protection and ease of doing business is emphasised.

13. Key Reforms in India

- PARIVESH 3.0 enables single-window digital environmental clearances.
- Third-party environmental audits improve compliance credibility.
- Industry classification (Red, Orange, Green, etc.) aligns regulation with pollution risk.
- Circular economy policies and EPR frameworks promote sustainability.
- Decriminalisation of minor offences enhances ease of doing business.

14. Waste Management & Circular Economy

- Ban on single-use plastics and promotion of recycling frameworks.
- Over **300 lakh tonnes of waste recycled** under EPR systems.
- Circular Economy Action Plans cover multiple waste streams.
- Digital monitoring platforms ensure compliance and transparency.

Recent Environmental Governance Reforms



PARIVESH 3.0 – Single Window Clearances

Digital approvals & post-clearance monitoring



Nation-wide uniform guidelines

Consent to Establish/Operate through amendments in Water & Air Acts



Streamlined Mining Regulations

Critical, Strategic, and Atomic Minerals



Third-Party Environmental Audits

Environment Audit Rules, 2025





Updated Graded Industry classifications

Encourage better compliance



Promoting Circular Economy

Circular Economy Action Plans covering 10 waste categories, Extended Producer Responsibility (EPR) frameworks for multiple waste streams, ban on Single use Plastics



Decriminalisation through the Jan Vishwas Act

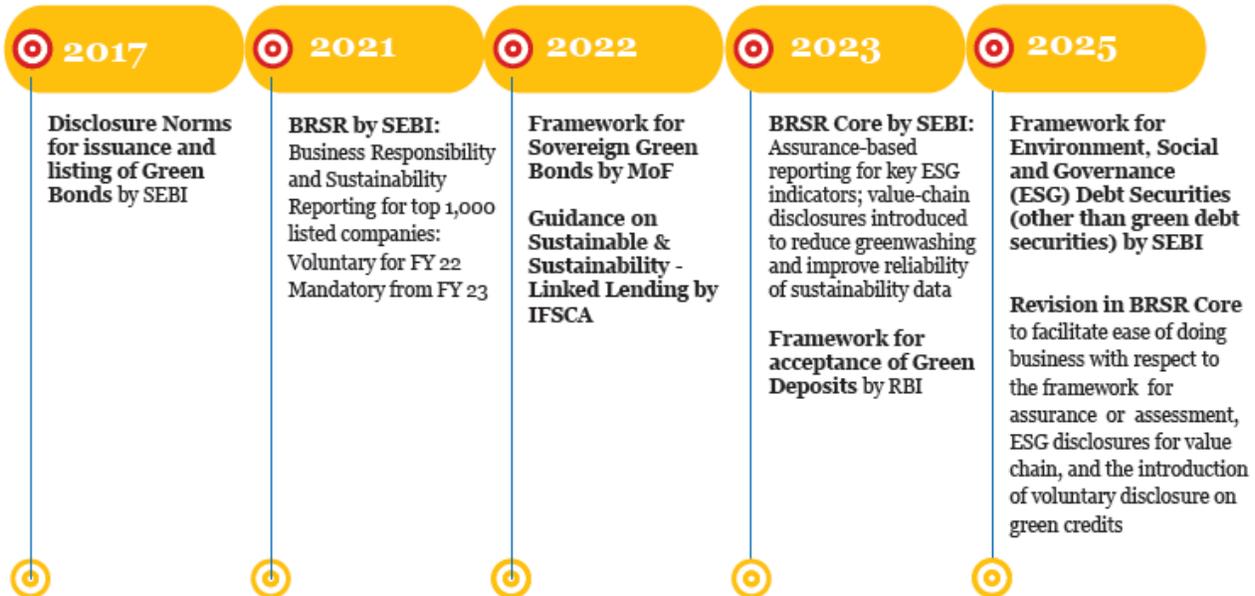
Public Liability Insurance Act, Environment (Protection) Act, 1986, Air Act, 1981 Indian Forest Act, 1927 and the Water Act, 1974



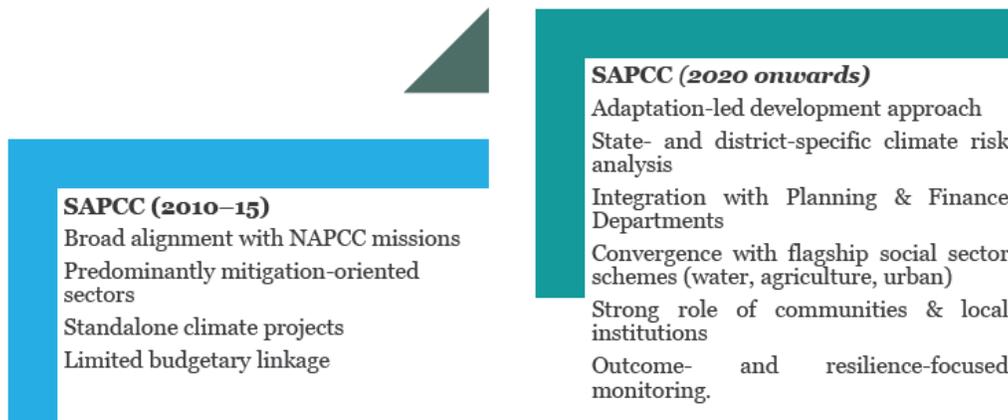
Rationalised Green belt requirements for industries

based on the pollution potential of industrial estates/parks and individual industries

Key Milestones in India's Climate and Sustainable Finance Framework



Evolution of State Action Plans on Climate Change



Data & Facts

- Climate finance requirement: **USD 5–6 trillion by 2030**
- Global climate finance: **USD 1.9 trillion (2023)**
- India's non-fossil capacity: **~51.93% (2025)**
- Storage requirement: **336–411 GWh**
- Sovereign green bonds issued: **₹72,697 crore (since FY23)**
- Domestic climate finance share: **83% mitigation, 98% adaptation**

Concepts

- **Carbon Market:** A system where emission permits are traded to reduce pollution cost-effectively.
- **Green Bonds:** Debt instruments used to finance environmentally sustainable projects.
- **Blended Finance:** Combining public and private funds to reduce investment risks.
- **EPR (Extended Producer Responsibility):** Producers are responsible for post-consumer waste.
- **Pigouvian Tax:** Tax imposed to correct negative externalities like pollution.

Analysis

India's climate approach reflects a pragmatic balance between ambition and feasibility. While mitigation efforts are significant, systemic challenges such as storage, critical minerals, and financing constraints limit rapid transitions. Climate finance emerges as the most critical bottleneck, highlighting inequities in global financial architecture.



India's emphasis on domestic capacity, regulatory reforms, and gradual transitions provides a sustainable pathway. The shift toward market-based and digital governance frameworks signals a modernisation of environmental policy, aligning sustainability with economic growth.



CHAPTER 11: EDUCATION AND HEALTH

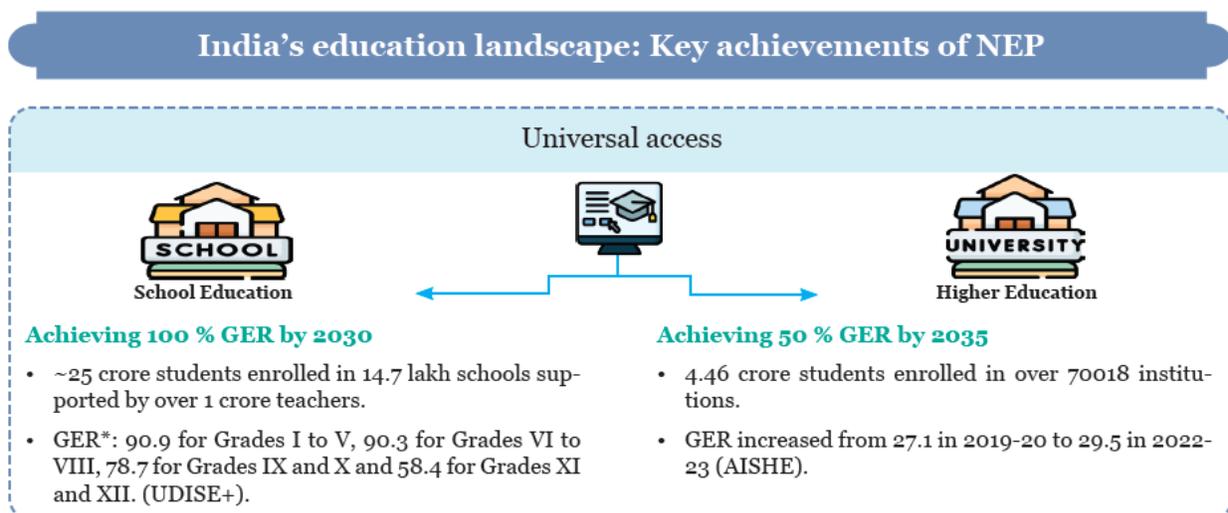
EDUCATION: ENHANCING QUALITY, ACCESS & HUMAN CAPITAL

Education is central to India's transformation into a developed economy by 2047, as it directly shapes human capital, productivity, and innovation capacity. Despite a strong demographic advantage—with nearly 27% of the population in the school-age group—India's education outcomes remain constrained by relatively low expected years of schooling (EYS) and uneven quality.

The **National Education Policy 2020 (NEP)** provides a comprehensive framework to address these challenges through a lifecycle approach, emphasising Early Childhood Care and Education (ECCE), foundational literacy and numeracy (FLN), and universal secondary education. Significant progress has been made in expanding school infrastructure, enrolment, and digital access, supported by schemes like PM SHRI, NIPUN Bharat, and DIKSHA.

However, key concerns remain in terms of low secondary enrolment, regional disparities, and learning outcomes. Assessment reforms such as PARAKH indicate post-pandemic recovery but highlight gaps in conceptual learning and student well-being. The education system is also increasingly aligned with skill development and labour market needs, although vocational training penetration remains low.

In higher education, expansion of institutions, flexible academic frameworks, and regulatory reforms aim to improve access, quality, and global competitiveness. Overall, India's education strategy is transitioning from access-centric to quality- and outcome-oriented development.



 <h3>Inclusivity & Equity</h3> <ul style="list-style-type: none"> • 500 hostels approved under PM-Janjati Adivasi Nyaya Maha Abhiyan. • 2682 Kasturba Gandhi Balika Vidyalayas upgraded. • 692 hostels sanctioned under Dharti Aaba Janjatiya Gram Utkarsh Abhiyan. 	 <h3>Multilingualism</h3> <ul style="list-style-type: none"> • Over 3000 AI-driven interactive e-content in multiple languages. • Digital study material in 22 Indian languages under Bhartiya Bhasha Pustak Scheme.
 <h3>Universal FLN* under NIPUN Bharat</h3> <p>Improved proficiency at the foundational level (Grade III) (PARAKH 2024):</p> <ul style="list-style-type: none"> • From 39 % in 2021 to 57% in 2024 in language. • From 42% in 2021 to 65% in 2024 in mathematics. 	 <h3>Academic Structure +Curriculum reforms</h3> <ul style="list-style-type: none"> • Curriculum reform undertaken as per NEP recommended 5+3+3+4 structure. • Competency-based assessments are being done under PARAKH. • Teacher capacity strengthened through DIETs* and SCERTs*.
 <h3>Learner centric education</h3> <ul style="list-style-type: none"> • APAAR* IDs track learner progress across school, higher and skill education. • Vidya Samiksha Kendra monitors learning progress for timely intervention. 	 <h3>Internationalisation</h3> <ul style="list-style-type: none"> • 100 per cent FDI allowed in higher education. • 15 foreign institutions are expected to set up campuses in India.

GER: Gross Enrolment Ratio; APAAR: Automated Permanent Academic Account Registry; DIET: District Institute of Education and Training; SCERT: State Council of Educational Research and Training; FLN : Foundational literacy and numeracy

Key Points

1. Demographic Advantage & Education Gap

- India has nearly 27% population in the 3–18 age group in 2024, which will remain above 20% by 2047.
- Despite this, India's Education Index remains low due to lower **Expected Years of Schooling (EYS)**.
- India's EYS (~13 years) lags behind developed countries (15–17 years).
- Converting demographic advantage into human capital requires improving both access and quality.

2. National Education Policy (NEP) Framework

- NEP adopts a **5+3+3+4 structure** integrating ECCE into formal education.
- It focuses on FLN, critical thinking, problem-solving, and holistic development.
- It promotes multidisciplinary learning, flexibility, and vocational integration.
- Key reforms include National Research Foundation and regulatory restructuring.
- NEP shifts focus from rote learning to competency-based education.



3. School Education System & Infrastructure

- India has **24.69 crore students, 14.71 lakh schools, and 1.01 crore teachers**.
- Government schools dominate (69%), while private schools account for 41% enrolment.
- GER is high at primary levels but declines sharply at secondary level (68.5%).
- Infrastructure improvements include sanitation, ICT, electricity, and digital access.
- Digital tracking through APAAR IDs supports enrolment monitoring.

4. Government Initiatives in School Education

- PM SHRI schools aim for holistic, NEP-aligned transformation.
- NIPUN Bharat Mission focuses on FLN achievement by Grade III.
- DIKSHA and PM e-Vidya enable digital learning access.
- ULLAS promotes adult literacy and lifelong learning.
- Schemes like PM POSHAN improve nutrition and retention.

5. Learning Outcomes & Assessment Reforms

- PARAKH Rashtriya Sarvekshan evaluates competency-based learning outcomes.
- Post-COVID recovery is visible in foundational learning (Grades III).
- Girls slightly outperform boys in language outcomes.
- Rural students and government schools show improved performance.
- However, assessments still need to focus on diagnostic insights rather than scores.

6. Structural Challenges in School Education

- Secondary Net Enrolment Ratio (NER) is low at **52.2%**, indicating retention issues.
- Rural areas lack secondary schools, causing transition losses and dropouts.
- Economic factors (44%) and domestic responsibilities (especially for girls) drive dropouts.
- Uneven distribution of schools creates accessibility challenges.
- Emotional well-being and inclusivity remain concerns.

7. Role of Community & Innovative Pedagogy

- Community participation improves enrolment, accountability, and learning outcomes.
- Parental involvement significantly enhances student performance.
- Peer-learning models and local innovations strengthen engagement.
- Teacher communities improve motivation and knowledge sharing.
- Experiential and community-based learning builds practical skills.



8. Skill Development & School-to-Work Transition

- Nearly **2 crore adolescents (14–18)** are out-of-school.
- Only **0.97% receive formal vocational training**, while ~92% lack any training.
- Economic pressures drive school dropouts, especially among boys.
- Vocational education integration is essential for employability.
- Aligning education with labour market needs is critical for productivity.

9. Higher Education Expansion

- HEIs increased from **51,534 (2014-15) to 70,018 (2025)**.
- Student enrolment increased to **4.46 crore**, with GER at **29.5%**.
- Expansion includes IITs, IIMs, AIIMS, and international campuses.
- Increased access reflects progress toward mass higher education.

10. Higher Education Reforms under NEP

- National Credit Framework enables integration of academic and skill learning.
- Academic Bank of Credits supports flexible learning pathways.
- Flexible entry-exit and multidisciplinary education are promoted.
- ANRF strengthens research ecosystem.
- MERITE scheme improves technical education quality.

Data & Facts

- School-age population: **~27% (2024)**
- Expected Years of Schooling: **India ~13 years**
- Students: **24.69 crore**
- Schools: **14.71 lakh**
- Teachers: **1.01 crore**
- Secondary NER: **52.2%**
- Out-of-school adolescents: **~2 crore**
- Formal vocational training: **0.97%**
- Higher education GER: **29.5%**

Concepts

- **EYS (Expected Years of Schooling)**: Total years a child is expected to spend in education.



- **FLN (Foundational Literacy & Numeracy):** Basic reading, writing, and arithmetic skills.
- **GER (Gross Enrolment Ratio):** Enrolment as a percentage of eligible population.
- **NER (Net Enrolment Ratio):** Age-appropriate enrolment ratio.
- **APAAR ID:** Digital academic identity for tracking student progress.

Analysis

India's education system is undergoing a structural transition from expansion to quality enhancement. While enrolment and infrastructure improvements are significant, the real challenge lies in improving learning outcomes, retention, and employability.

NEP provides a comprehensive roadmap, but implementation gaps persist, especially in secondary education and skill integration. The low penetration of vocational training and high dropout rates indicate a disconnect between education and labour markets.

Strengthening assessment systems, community participation, and digital learning can address these gaps. Higher education reforms signal a move towards flexibility, global competitiveness, and innovation-driven growth.

HEALTH, NUTRITION & DIGITAL WELL-BEING: STRENGTHENING HUMAN CAPITAL

India's progress in human capital formation is increasingly supported by improvements in public health, nutrition, and digital well-being. Over the past decades, the country has achieved remarkable reductions in maternal and child mortality, alongside rising life expectancy, driven by targeted public health interventions, immunisation programmes, and healthcare infrastructure expansion.

However, India is currently undergoing a complex epidemiological transition, characterised by the coexistence of communicable diseases and a rapidly rising burden of non-communicable diseases (NCDs). Lifestyle changes, especially the growing consumption of ultra-processed foods (UPFs) and sedentary behaviour, have led to rising obesity and associated health risks.

Simultaneously, nutrition outcomes are improving, with increased calorie and protein intake and narrowing rural-urban gaps, although issues of dietary quality and diversity persist. Another emerging concern is digital addiction, particularly among youth, which impacts mental health, productivity, and social capital.

India's response integrates healthcare expansion, digital health systems, behavioural change strategies, and regulatory reforms. Moving forward, a holistic approach combining preventive healthcare, improved nutrition, behavioural interventions, and digital wellness policies will be essential to sustain human capital development and economic growth.



Strengthening healthcare



37%

Drop in IMR over the past decade.

Life expectancy of **70.3** years in 2023 compared to 49.7 in 1976.



Source: Sample registration system 2023 & MoSPI



	Calories (Kcal/day)	
	2009-10	2023-24
Rural	2147	2212
Urban	2123	2240 ▲

	Protein (g/day)	
	2009-10	2023-24
Rural	59.3	61.8
Urban	58.8	63.4 ▲

Rising nutritional intake, life expectancy and declining Infant Mortality Rate together point to sustained improvements in population health and overall well-being.

Government Initiatives towards a healthier lifestyle



Awareness initiatives for tackling obesity

- Eat right campaign
- 10% reduction in oil consumption
- Khelo India and Fit India Movement
- Aaj se Thoda kam Campaign
- Stop Obesity & Fight Obesity Campaign



Technology driven initiatives

- Centre of Excellence for AI driven reforms at AIIMS Delhi, AIIMS Rishikesh & PGIMER, Chandigarh
- Clinical decision support system integrated with e-Sanjeevani.
- AI-based diabetic retinopathy screening.
- 14.32 crore beneficiaries registered under U-Win portal.



Mental health: Combating digital addiction

- Safe Internet Guidelines for schools
- Pragyatah Framework for screen-time planning for digital education
- NCPDR* guidelines on screen-time limits and online safety
- Online Gaming Regulation Act, 2025
- Tele-MANAS* (14416): 24x7 national mental health helpline
- Specialised treatment: SHUT* Clinic, NIMHANS



Infrastructure strengthening

1.8+ lakh Ayushman Arogya Mandir operational with footfall of **506.50 crore**.



Nearly **3.78 lakh** human resources provided to states.



42.78 crore Ayushman Bharat cards generated.

*NCPDR: National Commission for Protection of Child Rights; Tele-MANAS: Tele Mental Health Assistance and Networking Across States ; SHUT: Service for Healthy Use of Technology;



Key Points

1. Progress in Public Health Outcomes

- India has significantly improved health indicators, including reductions in maternal mortality, infant mortality, and child mortality rates.
- Maternal mortality declined by **86% since 1990**, outperforming global averages.
- Infant mortality reduced from 40 (2013) to 25 (2023), reflecting better healthcare access.
- Life expectancy increased to **70.3 years (2023)** from 49.7 years in 1973.
- These gains are driven by immunisation, neonatal care, and healthcare expansion.

2. Digital Health & Healthcare Infrastructure

- Digital platforms like ABDM and e-Sanjeevani improve healthcare accessibility and efficiency.
- ICT integration enhances transparency, reduces fragmentation, and enables evidence-based policymaking.
- AI-based tools support disease detection, surveillance, and clinical decision-making.
- Ayushman Bharat ecosystem strengthens primary, secondary, and tertiary care continuum.
- Telemedicine has expanded healthcare reach, especially in remote areas.

3. Epidemiological Transition in India

- India faces a **double burden** of communicable diseases (TB, infections) and non-communicable diseases (diabetes, cancer).
- NCDs account for **over 57% of total deaths**.
- Cardiovascular diseases are the leading cause of mortality.
- Regional disparities exist, with some states showing developed-country patterns.
- Health policy must balance infectious disease control and chronic disease management.

4. Rising Obesity & Ultra-Processed Foods (UPFs)

- Obesity is increasing due to sedentary lifestyles and dietary changes.
- UPF consumption has increased sharply, with a **40-fold rise in sales (2006–2019)**.
- Obesity prevalence is rising across adults and children.
- UPFs are linked to diabetes, heart disease, and mental health issues.
- This trend imposes long-term economic and healthcare costs.

5. Policy Responses to Nutrition & Obesity

- National Multi-sectoral Action Plan targets reduction in unhealthy diets.



- Measures include front-of-pack labelling, advertising restrictions, and awareness campaigns.
- Initiatives like POSHAN Abhiyaan, Eat Right India, and Fit India promote healthier lifestyles.
- Screening programmes identify high-risk individuals for early intervention.
- Behavioural change is central to long-term success.

6. Nutrition Trends & Food Security

- Calorie and protein intake have increased in both rural and urban areas.
- Rural-urban nutritional gap is narrowing across income levels.
- NFSA ensures food security, while POSHAN schemes focus on nutrition security.
- Dietary diversity is improving but remains uneven across regions.
- Overdependence on cereals and low intake of protective foods remain concerns.

7. Importance of Behavioural Change (SBCC)

- Social and Behaviour Change Communication improves effectiveness of welfare schemes.
- Rajasthan's Cash Plus Model shows improved utilisation of nutrition benefits.
- Community involvement enhances awareness and adoption of healthy practices.
- Behavioural interventions address myths, gender norms, and decision-making barriers.
- SBCC ensures sustainability of outcomes beyond financial support.

8. School-Based Health & Nutrition Interventions

- Schools act as critical platforms for promoting nutrition and physical activity.
- Measures include healthy food options, physical activity, and wellness policies.
- Teacher and parent involvement improves effectiveness of interventions.
- School well-being scores can incentivise holistic development.
- Early interventions shape lifelong health behaviours.

9. Digital Addiction: Emerging Challenge

- Rapid digital expansion has increased risks of excessive screen time and addiction.
- Digital addiction affects productivity, academic performance, and mental health.
- It is associated with anxiety, depression, sleep disturbances, and social isolation.
- Youth are particularly vulnerable due to high exposure and usage.
- Economic costs include reduced productivity and increased healthcare burden.



10. Policy Responses to Digital Addiction

- WHO recognises gaming disorder as a mental health condition.
- India has introduced guidelines, tele-mental health services (Tele-MANAS), and regulatory measures.
- Online Gaming Regulation Act restricts harmful gaming practices.
- Schools are encouraged to promote digital wellness and reduce screen dependency.
- International examples show regulation, awareness, and parental control approaches.

11. Way Forward: Holistic Human Capital Approach

- Integrated policies are required linking health, nutrition, and behavioural factors.
- Preventive healthcare must complement curative systems.
- Digital wellness should be incorporated into education and public policy.
- Community participation and decentralised implementation are critical.
- Data-driven policymaking is needed for targeted interventions.

Data & Facts

- Maternal mortality reduction: **86% since 1990**
- Life expectancy: **70.3 years (2023)**
- NCD share in deaths: **>57%**
- Obesity: **24% women, 23% men (NFHS-5)**
- UPF market growth: **40× (2006–2019)**
- Internet users: **96.96 crore (2024)**
- Tele-MANAS usage: **32 lakh calls**

Concepts

- **Epidemiological Transition:** Shift from infectious diseases to chronic diseases as major causes of death.
- **NCDs:** Non-communicable diseases such as diabetes, cancer, and cardiovascular diseases.
- **UPFs:** Ultra-processed foods high in sugar, fat, and additives.
- **SBCC:** Behavioural strategies to influence health-related decisions.
- **Digital Addiction:** Excessive and compulsive use of digital devices causing impairment.



Analysis

India's human capital strategy is increasingly multidimensional, integrating health, nutrition, and behavioural factors. While traditional health indicators show significant improvement, emerging challenges such as NCDs, obesity, and digital addiction reflect the changing nature of development.

The coexistence of undernutrition and overnutrition highlights structural imbalances in food systems and lifestyle patterns. Policy responses are evolving towards preventive, technology-enabled, and behaviour-driven approaches.

However, gaps remain in regulatory clarity, awareness, and implementation capacity. A balanced approach combining public health investment, behavioural change, and regulatory reforms is essential for sustaining long-term economic productivity and social well-being.



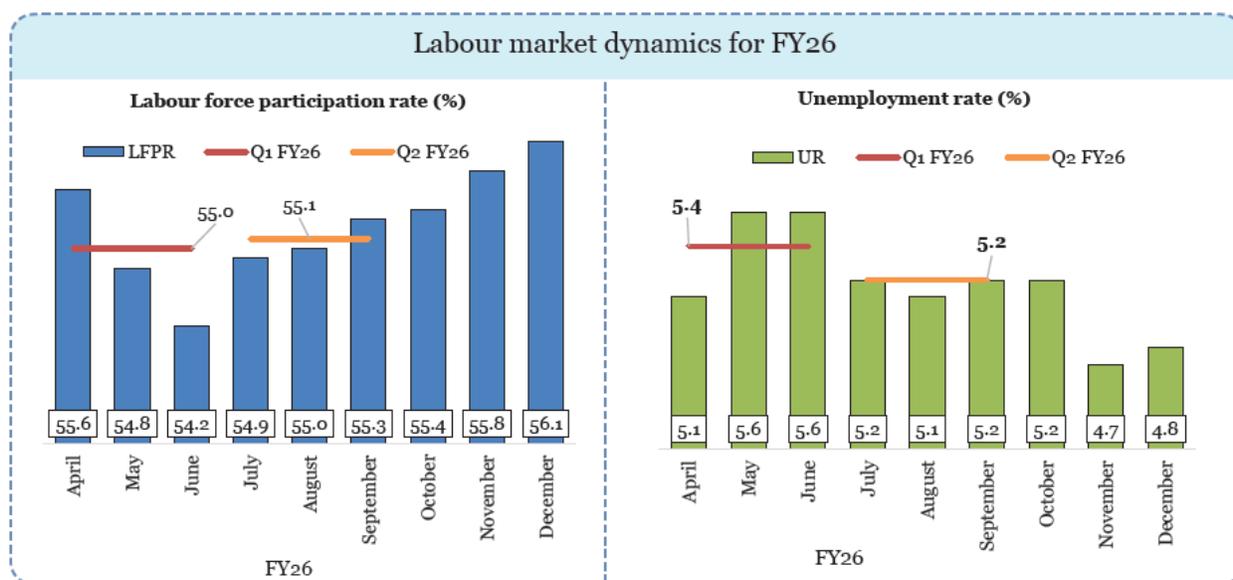
CHAPTER 12: EMPLOYMENT AND SKILL DEVELOPMENT

India's labour market is undergoing a structural transformation driven by regulatory reforms, formalisation, and targeted skill development initiatives. Recent data indicate improving employment conditions, with declining unemployment rates and stabilising labour force participation.

The implementation of Labour Codes marks a major institutional reform, simplifying compliance while extending social security coverage to a broader workforce, including gig and platform workers. At the same time, increasing formalisation, supported by digital systems and policy interventions, is improving job quality and productivity.

Skill development initiatives, along with education and apprenticeship frameworks, are enhancing employability and aligning workforce capabilities with industry needs. However, challenges remain in ensuring sustained job creation, improving female labour force participation, and addressing skill mismatches.

The evolving nature of work, particularly with the rise of gig economy and technological changes, requires continuous adaptation in policy and training systems. Overall, India's employment landscape reflects gradual strengthening, with reforms laying the foundation for a more flexible, inclusive, and productivity-driven labour market.



Key Points

1. Labour Market Trends

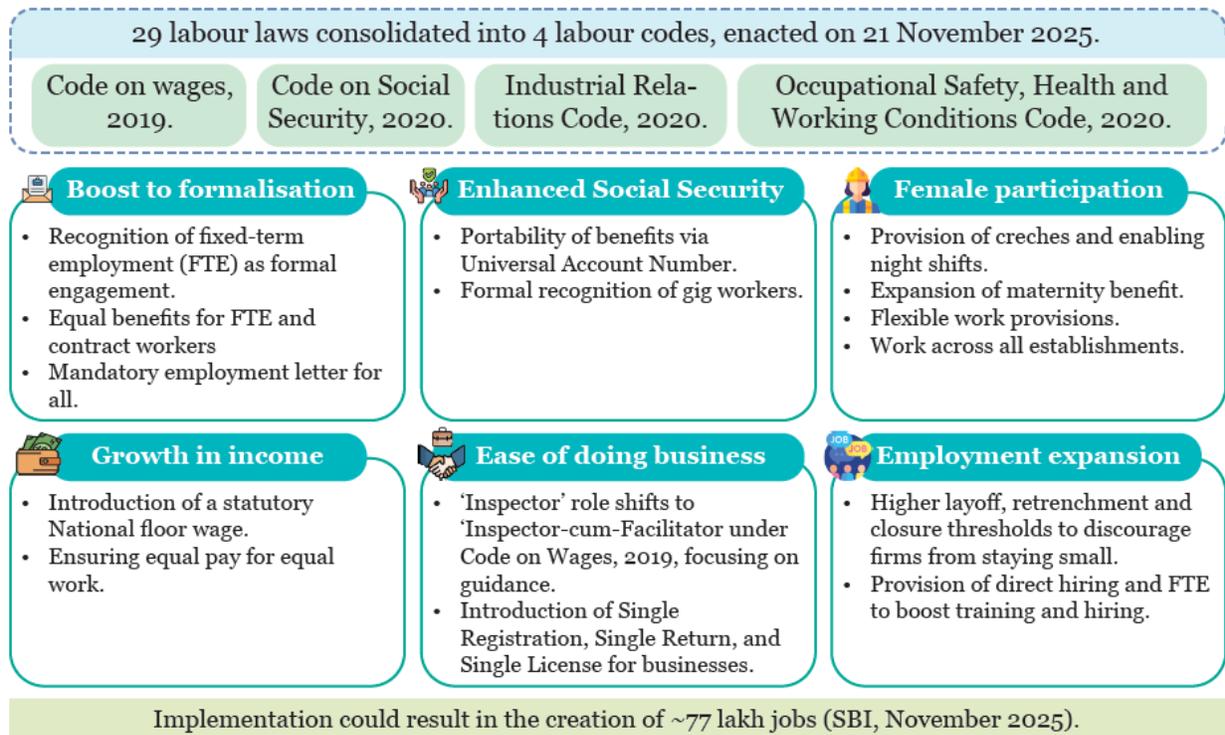
- Labour market indicators show improvement with declining unemployment rates in recent periods.
- Labour force participation rate has remained broadly stable with seasonal variations.



- Employment conditions have strengthened alongside economic growth and policy support.
- Data from PLFS suggests a steady recovery after pandemic-related disruptions.

2. Labour Force Participation and Employment Quality

- Rising participation, particularly among women, indicates gradual inclusivity in the labour market.
- Formalisation of employment has improved access to social security and job stability.
- Employment quality is improving with better compliance and structured labour frameworks.
- However, informal employment continues to remain significant in the economy.



3. Labour Codes and Regulatory Reforms

- Consolidation of 29 labour laws into four Labour Codes simplifies regulatory compliance.
- Labour Codes aim to enhance labour market flexibility while ensuring worker protection.
- Provisions include safeguards for wages, occupational safety, and social security.
- Recognition of gig and platform workers marks a shift towards modern labour frameworks.
- Implementation of Labour Codes is expected to reduce regulatory frictions and improve ease of doing business.

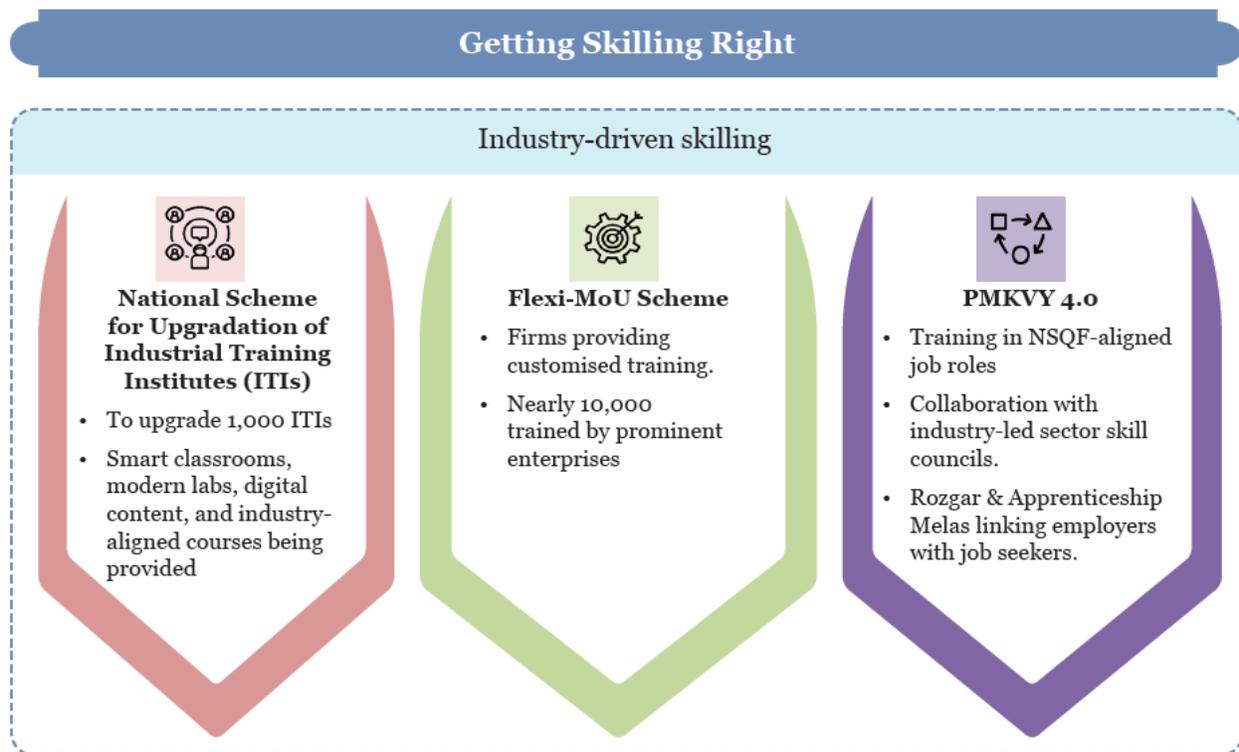


4. Formalisation of Workforce

- Increasing use of digital systems and compliance frameworks is driving formalisation.
- Expansion of social security coverage is bringing more workers into the formal sector.
- Formalisation improves productivity, tax compliance, and economic efficiency.
- However, the transition from informal to formal employment remains gradual.

5. Skill Development and Employability

- Skill development initiatives focus on improving workforce capabilities and employability.
- Apprenticeship programs and vocational training are being expanded.
- Education and training systems are increasingly aligned with industry requirements.
- Skill development plays a crucial role in supporting productivity and growth.



6. Emerging Employment Trends

- Gig and platform-based employment is expanding rapidly.
- Technological changes are reshaping job roles and skill requirements.
- Demand for high-skilled labour is increasing in sectors like services and technology.
- Structural shifts in the economy require continuous reskilling and upskilling.



Innovative financing for skill development

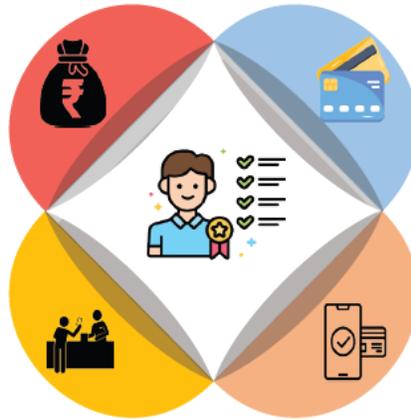
DBT under NAPS* 2.0 and NATS* 2.0

- Over 12 lakh DBT stipend transfers made under NATS 2.0.
- Under NAPS 2.0, 25% of the stipend directly transferred to apprentices via DBT.

Skill Vouchers

Demand-side financing instrument providing choice to learners.

- Maharashtra's Vikalp Skill Voucher Programme.
- Tamil Nadu skill voucher scheme.



Model Skill Loan Scheme

- Credit-based skilling expanded by raising loan limits and widening eligible lenders.
- Coverage extended to non-NSQF courses from MSDE-SIDH* registered providers.

Skill Impact Bond of NSDC*

Links funding with verified placement and retention outcomes.

*NSDC: National Skill Development Corporation; DBT: Direct Benefit Transfer; NAPS: National Apprenticeship Promotion Scheme; NATS: National Apprenticeship Training Scheme; NSQF: National Skills Qualifications Framework; SIDH: Skill India Digital Hub; PMKVY: PM Kaushal Vikas Yojana

7. Challenges in Employment Sector

- Job creation needs to keep pace with a growing workforce.
- Skill mismatch remains a significant concern.
- Female labour force participation, although improving, remains relatively low.
- Informality continues to dominate large segments of employment.
- Regional disparities in employment opportunities persist.

Enhancing female participation

Increase in female labour force participation rate

2017-18



23.3%



2023-24



41.7%

A fall in female unemployment rate

2017-18



5.6%



2023-24



3.2%





Flexible work structure

- Code on Social Security, 2020 (CSS) provides for flexible work models and gender-responsive work standards.



Affordable housing

- Sakhi Niwas, Ministry of Women & Child Development.
- Thozhi hostel, Tamil Nadu



Public-private partnership

Innovative models to enhance private participation

- Telangana's WE-Hub
- Maharashtra's *Mahila Arthik Vikas Mahamandal*
- Kerala's *Kudumbashree*



Skill development

- Aligning skilling with industry demand.
- Enhancing STEM enrolment.
- Initiatives such as 'Back to Work' and 'Returnship programme'.



Enhanced urban mobility

Extending safety infrastructure

- Kochi's Women Police Control Room
- Hyderabad's SHE Team.
- Chennai's inclusive street design manual
- Bhubaneswar's Janpath Street



Removal of statutory restrictions

- 17 States/UTs removed prohibitions on women's employment in hazardous industries.
- 22 States/UTs permit night work for women in factories.
- 33 States/UTs allow night work in commercial establishments.



Care economy

- Expanding network of Anganwadi centres.
- Provision of creches under CSS.

Data & Facts

- Unemployment rate: **Declining trend (PLFS data)**
- Labour force participation rate: **Stable with slight improvements**
- Gross NPAs (banking context affecting credit & jobs): **~2.2% (FY26)**
- Formalisation indicators: **Rising EPFO enrolments and digital compliance**
- Labour Codes: **4 codes replacing 29 central labour laws**



Concepts

- **Labour Force Participation Rate (LFPR):** Percentage of working-age population that is employed or actively seeking work.
- **Unemployment Rate:** Percentage of labour force that is without work but actively seeking employment.
- **Formalisation:** Process of shifting workers from informal to formal employment with legal and social security benefits.
- **Gig Economy:** Labour market characterised by short-term, flexible, platform-based jobs.
- **Employability:** Skills and abilities that make a person capable of getting and maintaining a job.

Analysis

India's employment landscape reflects a transition from a largely informal and rigid system to a more structured and flexible labour market. The implementation of Labour Codes and the recognition of gig workers indicate a forward-looking policy approach. Formalisation and skill development are key pillars supporting this transformation.

However, the challenge lies in generating sufficient quality jobs and ensuring that workforce skills match evolving industry demands. Bridging these gaps is essential for translating economic growth into inclusive employment outcomes.



CHAPTER 13: RURAL DEVELOPMENT AND SOCIAL PROGRESS

India's approach to rural development and social progress is increasingly centred on enhancing social mobility, reducing poverty, and fostering inclusive growth through community participation and institutional strengthening.

Significant progress has been achieved in poverty reduction, both monetary and multidimensional, supported by targeted welfare interventions, improved access to education and healthcare, and expanded social protection systems.

Rural transformation is being driven by a combination of public investment, technological integration, and active community engagement. Schemes like DAY-NRLM, SVAMITVA, and digital governance platforms are empowering local institutions and enhancing livelihoods. At the same time, rural economic indicators such as consumption, income, and credit access show improvement, alongside declining dependence on safety nets like MGNREGS.

However, structural challenges such as degradation of village commons, migration pressures, and skill gaps persist. The policy shift towards programmes like VB-GRAM G reflects an attempt to align rural employment with long-term infrastructure and sustainability goals.

Overall, India's rural development strategy is evolving from a welfare-centric model to a partnership-based, participatory framework that integrates social capital, technology, and governance reforms for sustainable and inclusive growth.



India's progress against poverty.

Extreme poverty rate down to 5.3% in 2022-23 as per the revised international poverty line of USD 3.0 per day (World Bank).

Tech-driven initiatives

- 3.28 lakh villages mapped; 2.76 crore property cards issued under SVAMITVA
- Empowering women through **Namo Drone Didi**: 500 drones provided (2023-24)
- Leverage technology, drones, solar & telemedicine for smart villages: **RuTAGe Smart Village Centre**

Participatory budgeting

- **Samarth application** for effective tax collection.
- **Meri Panchayat App** for monitoring.
- **eGramSwaraj**: Unified interface for reporting and tracking of Panchayat activities.

Infrastructure

- **Enhanced rural connectivity**: Over 99.6% eligible habitations have been provided with connectivity.
- **Har Ghar Jal**: Over 81% of rural households have a tap water connection.
- **Housing for all**: Over 2.9 crore houses constructed.

Skill Development

- **DDU-GKY**: State-led, skill programme for rural poor youth focusing on employment, retention, progression, and third-party quality certification.
- **Upskilling through RSETIs**: 629 functional centres across 616 districts in 33 States/UTs.

Harnessing social capital

- Under **DAY-NRLM** support provided for self-employment and skilled wage work via women-led SHGs.
- Over 9 lakh community resource persons work towards food security and stable incomes of households.



Key Points

1. Social Mobility and Equality of Opportunity

- Social mobility includes both inter-generational and intra-generational changes in socio-economic status.
- Key determinants include education, health, technology, employment opportunities, and social protection.
- Low mobility reinforces inequality, while higher mobility promotes inclusive growth.
- Government policies aim to break cycles of poverty through targeted interventions in social sectors.

2. Poverty Reduction and Inequality Trends

- Extreme poverty in India declined to about **5.3% (2022–23)** as per revised World Bank estimates.
- Multidimensional poverty reduced significantly from 55.3% (2005-06) to around **11.28% (2022–23)**.
- Poverty based on Tendulkar methodology declined sharply to about **2.3% (2023–24)**.
- State-level disparities in poverty are narrowing due to targeted interventions.
- Inclusive policies have improved access to basic services and opportunities.

3. Social Sector Expenditure and Welfare Expansion

- Social protection coverage increased from 22% (2016) to 64.3% (2025).
- Social sector expenditure grew at a CAGR of ~12% (FY22–FY26).
- Education and health expenditure have shown steady growth.
- Universal electrification, improved water access, and sanitation achievements highlight welfare expansion.
- Government strategy emphasises inclusive development through “Sabka Vikas” model.

4. Rural Economic Transformation

- Rural economy shows strengthening through rising consumption, income, and investment.
- Improved credit access and infrastructure have supported rural growth.
- Decline in MGNREGS demand indicates better employment opportunities outside the scheme.
- Rural unemployment declined alongside diversification of livelihoods.



5. Reform of Rural Employment (MGNREGS to VB-GRAM G)

- MGNREGS provided wage employment and income stability but faced structural inefficiencies.
- Issues included leakages, low completion of 100-day employment, and weak asset outcomes.
- [VB-GRAM G Act 2025](#) increases guaranteed employment to 125 days per household.
- Focus shifts to infrastructure creation, climate resilience, and accountability.
- Enhanced digital monitoring and decentralised planning improve transparency.

6. Community Participation and Decentralised Governance

- Panchayati Raj Institutions (PRIs) play a key role in grassroots governance.
- Participatory approaches such as Gram Sabhas and SHGs drive inclusive development.
- Concept of “Jan Bhagidari” strengthens citizen involvement in development processes.
- Community-led models like Kudumbashree demonstrate effective local governance.

7. Technology-Driven Rural Development

- Digital tools and AI are improving governance, agriculture, and service delivery.
- SVAMITVA scheme provides property rights through drone-based mapping.
- Digital land records and platforms like e-Gram Swaraj enhance transparency.
- Smart village initiatives integrate technology for holistic rural development.

8. Village Commons and Sustainability

- Village commons constitute about 15% of India’s geographical area and support rural livelihoods.
- Degradation of commons due to misuse and encroachment is a major concern.
- Restoration initiatives include Mission Amrit Sarovar and watershed programmes.
- Sustainable management requires community participation and institutional frameworks.

9. Social Capital and Livelihood Promotion

- Social capital through SHGs plays a crucial role in rural transformation.
- [DAY-NRLM](#) focuses on self-employment, financial inclusion, and women empowerment.
- Over 10 crore households have been mobilised under SHG networks.
- Community Resource Persons (CRPs) strengthen grassroots implementation.

10. Skill Development and Capacity Building

- Programmes like DDU-GKY and RSETIs enhance employability and entrepreneurship.



- Focus is on demand-driven skilling and sustainable employment.
- Capacity building of Panchayats improves governance and service delivery.
- Training institutions and digital tools strengthen local administrative capabilities.

11. Rural Infrastructure Development

- Infrastructure such as roads, housing, and connectivity drives rural transformation.
- PMGSY has achieved over 99.6% rural connectivity for eligible habitations.
- Infrastructure improves market access, employment, and quality of life.
- Innovations like plastic waste roads promote sustainable development.

Data & Facts

- Extreme poverty: **~5.3% (2022–23, WB)**
- Multidimensional poverty: **~11.28% (2022–23)**
- Social protection coverage: **64.3% (2025)**
- SSE growth: **~12% CAGR (FY22–FY26)**
- MGNREGS person-days: **389 crore (FY21) → ~184 crore (FY26)**
- Rural unemployment: **3.3% (2020-21) → 2.5% (2023-24)**
- PMGSY connectivity: **~99.6% eligible habitations**
- SHGs mobilised: **~10 crore households**

Concepts

- **Social Mobility:** Movement of individuals or groups in socio-economic status over time.
- **Multidimensional Poverty:** Poverty measured across multiple indicators like health, education, and living standards.
- **Social Capital:** Networks and relationships that enable collective action and economic benefits.
- **Village Commons:** Shared community resources such as land, water bodies, and forests.
- **Decentralisation:** Transfer of decision-making powers to local governance institutions.

Analysis

India's rural development strategy reflects a paradigm shift from welfare delivery to empowerment-driven growth. The integration of community participation, technology, and institutional reforms has strengthened rural resilience and improved socio-economic outcomes.



Poverty reduction achievements indicate effective policy targeting, while initiatives like DAY-NRLM demonstrate the power of social capital. However, challenges such as environmental degradation, migration pressures, and uneven development persist.

The transition from MGNREGS to VB-GRAM G highlights a move towards productivity-oriented employment and infrastructure creation. Sustained progress will depend on strengthening local governance, enhancing skills, and ensuring ecological sustainability alongside economic growth.



CHAPTER 14: EVOLUTION OF THE AI ECOSYSTEM IN INDIA

Artificial Intelligence (AI) has transitioned from a speculative technology to a widely adopted economic tool, with increasing integration across business functions globally. While AI adoption is expanding, the development of advanced foundational models remains concentrated among a few resource-rich firms, creating structural asymmetries in the global AI ecosystem.

For India, the challenge lies not in competing at the frontier level but in designing a development-oriented AI strategy aligned with its resource constraints and labour-rich economy. The Economic Survey advocates a bottom-up approach focused on application-specific, small models, leveraging India's strengths in data, talent, and digital infrastructure.

At the same time, AI introduces complex trade-offs involving labour markets, regulation, data governance, and resource use. A balanced approach is required to ensure productivity gains without exacerbating inequality or job displacement. The strategy emphasises human capital development, governance reforms, and data as a strategic asset, alongside ensuring AI safety and ethical deployment.

Ultimately, India's success in the AI era will depend on its ability to combine innovation with inclusivity, ensuring that AI enhances economic resilience while preserving human-centric development.

Key Points

1. Changing Nature of AI Adoption

- AI has shifted from a theoretical concept to widespread adoption, with about 88% of firms using it in at least one business function.
- Adoption is expanding beyond high-income countries into developing economies, including India.
- Despite widespread usage, advanced AI development remains concentrated among a few global firms.
- High capital, compute, data, and energy requirements create barriers to entry.

2. AI and Labour Market Dynamics

- Current evidence suggests limited immediate disruption to employment due to AI adoption.
- AI initially complements labour by enhancing productivity rather than replacing workers.
- Over time, the labour intensity of output may decline as AI adoption deepens.
- Labour-abundant economies like India face the challenge of balancing productivity with employment.



3. Key Asymmetries in the Global AI Ecosystem

(a) Frontier vs Application Development

- Advanced model development is concentrated among a few firms with high resource access.
- Most countries, including India, are better positioned in application-level innovation.

(b) Capital vs Labour Trade-off

- AI increases capital productivity, potentially reducing demand for certain labour segments.
- Rapid adoption may displace jobs, while delayed adoption risks productivity stagnation.

(c) Open vs Proprietary Models

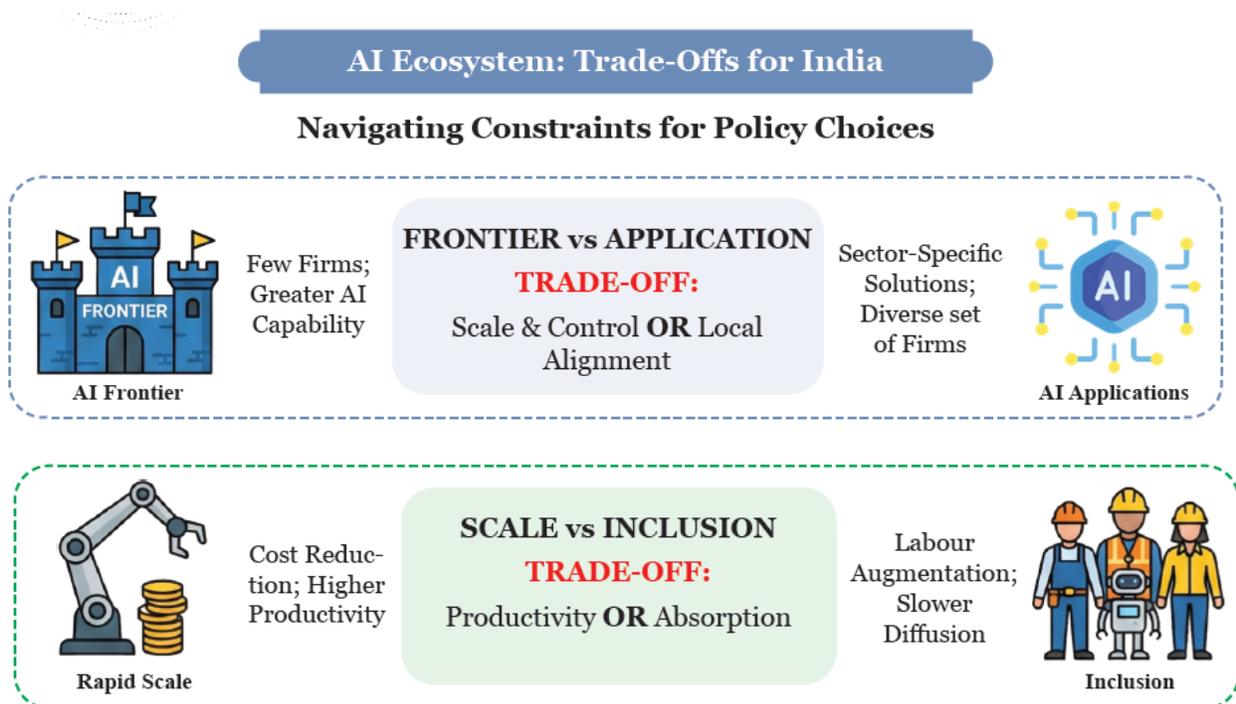
- Proprietary models offer high performance but limit transparency and control.
- Open-source models reduce entry barriers but require governance frameworks.

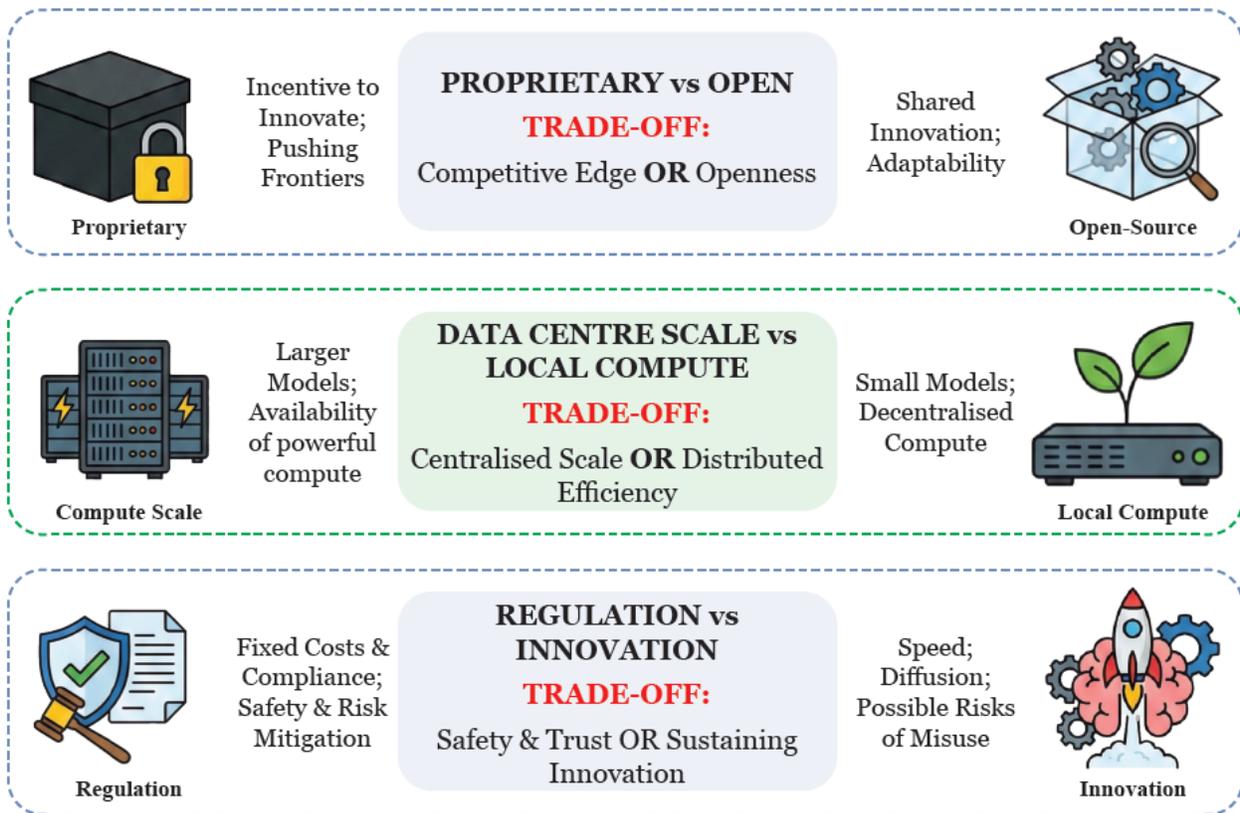
(d) Compute vs Resource Constraints

- AI infrastructure demands high energy, water, and financial resources.
- Resource constraints in India necessitate efficient and decentralised AI models.

(e) Regulation vs Innovation

- Excessive regulation may hinder innovation, while weak regulation creates risks.
- A balanced, risk-based approach is essential.





4. India's Strategic AI Approach

Bottom-Up Development Model

- Focus on small, application-specific AI models tailored to sectoral needs.
- Encourage decentralised innovation across startups, institutions, and public agencies.
- Leverage domestic data and digital infrastructure for scalable solutions.

Strengths of India

- Strong AI talent pool and research contributions.
- Large and diverse data ecosystem.
- Growing digital infrastructure and connectivity.

5. Role of Human Capital

- AI development requires expertise in both algorithms and software engineering.
- Education must integrate practical experience through "earn-and-learn" models.
- Foundational skills like problem-solving and adaptability are increasingly important.
- Human-centric jobs (healthcare, skilled trades) will gain importance in the AI era.



HUMAN CAPITAL FOR AI

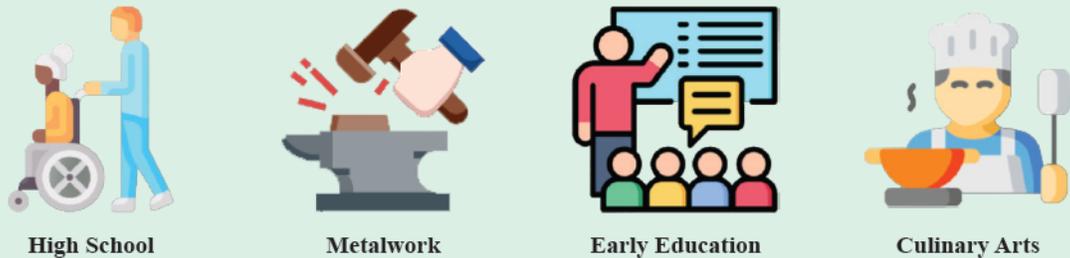
Building a Future-Ready Workforce

Redefining Education & Work



Flexible, Integrated, Credit-Bearing Pathways start early, building experience with education

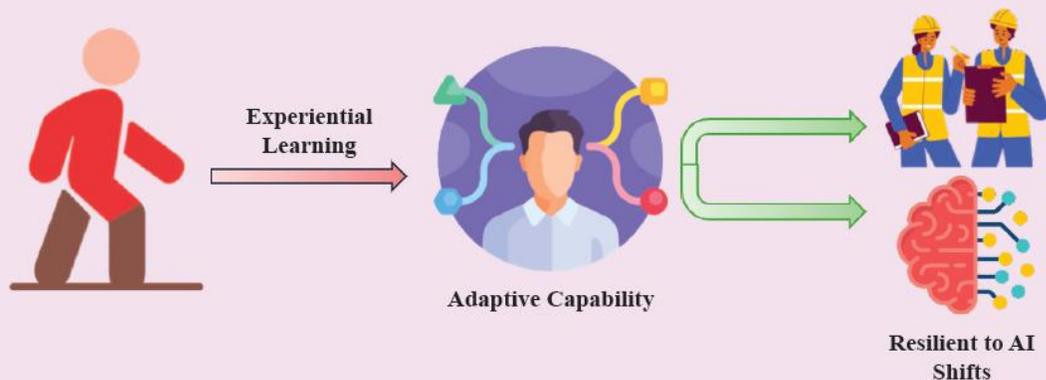
Beyond White-Collar: Filling Gaps in High-Skill, Human-Centric Jobs



HIGH POTENTIAL, UNDERSTAFFED SECTORS REQUIRING HANDS-ON EXPERTISE

Future-Ready System

Emphasising experience and flexibility over solely cognitive specialisation



6. Data as a Strategic Resource

- Data is a critical factor of production in the AI economy.
- India must balance openness to data flows with domestic value retention.
- Proposed framework emphasises:
 - Accountable cross-border data flows.
 - Risk-based data categorisation.
 - Incentive-driven localisation and value creation.
- Data governance should focus on economic value capture rather than rigid localisation.

DATA AS A STRATEGIC RESOURCE: INDIA'S AI ERA FRAMEWORK

Trusted Cross-Border Flows & Domestic Value Retention

The Context: India's Digital Scale



Three Core Objectives for the Data Localisation Framework



7. Governance and Institutional Framework

- AI governance must align with India's socio-economic realities.
- Proposal for an **AI Economic Council** to manage labour impacts and policy coordination.
- Regulation should be:
 - Risk-based

- Flexible
- Incentive-driven
- Transparency, accountability, and phased adoption are critical.

Value Retention from Domestic Data is critical

<p>Using Domestic Data to solve India’s Developmental Challenges</p> <ol style="list-style-type: none"> 1. Data from Healthcare, Education, and Agriculture are valuable factor inputs for training sector-specific models. 2. Sector-specific AI is needed to fulfil gaps in the availability of skilled talent, enhance the productivity of existing workers, and address India’s challenges from the bottom up. 	<p>Menu-based compliance options for Domestic Value Creation</p> <table border="1"> <tr> <td style="text-align: center;">  <p>Local Training of Models</p> </td> <td style="text-align: center;">  <p>Running Upskilling Programs</p> </td> </tr> <tr> <td colspan="2" style="text-align: center;">  <p>Financial Contributions towards Domestic R&D</p> </td> </tr> </table>	 <p>Local Training of Models</p>	 <p>Running Upskilling Programs</p>	 <p>Financial Contributions towards Domestic R&D</p>	
 <p>Local Training of Models</p>	 <p>Running Upskilling Programs</p>				
 <p>Financial Contributions towards Domestic R&D</p>					

Regulating via Incentives

FOCUS ON POSITIVE INCENTIVES

 <p>BENEFITS: Contribute to Domestic Capacity-> Reduced Audits, Faster Clearances</p>	 <p>STATE LEVER: Access to Govt Datasets and Incentives</p>
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8. AI Safety and Risks

- AI poses risks similar to other powerful technologies like nuclear energy.
- Concerns include misuse, ethical violations, and unintended consequences.
- Need for:
 - AI Safety Institute
 - Transparency in AI model evaluation
 - Red-teaming and risk testing
- Certain applications (e.g., surveillance misuse) require strict boundaries.

9. Phased AI Strategy for India

Short-Term

- Build institutional capacity and enable experimentation.
- Promote open-source innovation and shared infrastructure.



Medium-Term

- Scale successful applications and formalise regulations.
- Expand domestic compute and data ecosystems.

Long-Term

- Achieve resilience in hardware, talent, and infrastructure.
- Align education and labour markets with AI-driven changes.

Data & Facts

- **88% firms** globally use AI in at least one function (2025).
- AI usage share: **58.4% (high-income countries), 22.5% (upper-middle), 18.7% (lower-middle)**.
- India accounts for only **~3% of global data centres**.
- India contributes significantly to global AI talent and research output.
- AI data centres consume massive resources (electricity and water), highlighting sustainability concerns.

Concepts

- **Artificial Intelligence (AI):** Technology enabling machines to perform tasks requiring human intelligence.
- **Foundational Models:** Large-scale AI models trained on vast datasets for general-purpose use.
- **AI Augmentation:** Use of AI to enhance human productivity rather than replace it.
- **Data Localisation:** Requirement to store data within a country's borders.
- **Open-Source AI:** AI systems with publicly accessible code and models.

Analysis

India's AI strategy reflects a pragmatic understanding of global technological asymmetries. Instead of competing in capital-intensive frontier AI, the focus on application-led, decentralised innovation aligns with India's comparative advantages. The emphasis on human capital, data governance, and institutional coordination highlights a holistic approach.

However, challenges remain in balancing productivity with employment, ensuring equitable data value capture, and managing resource constraints. The success of this strategy will depend on effective policy sequencing, strong governance, and continuous adaptation to technological changes.

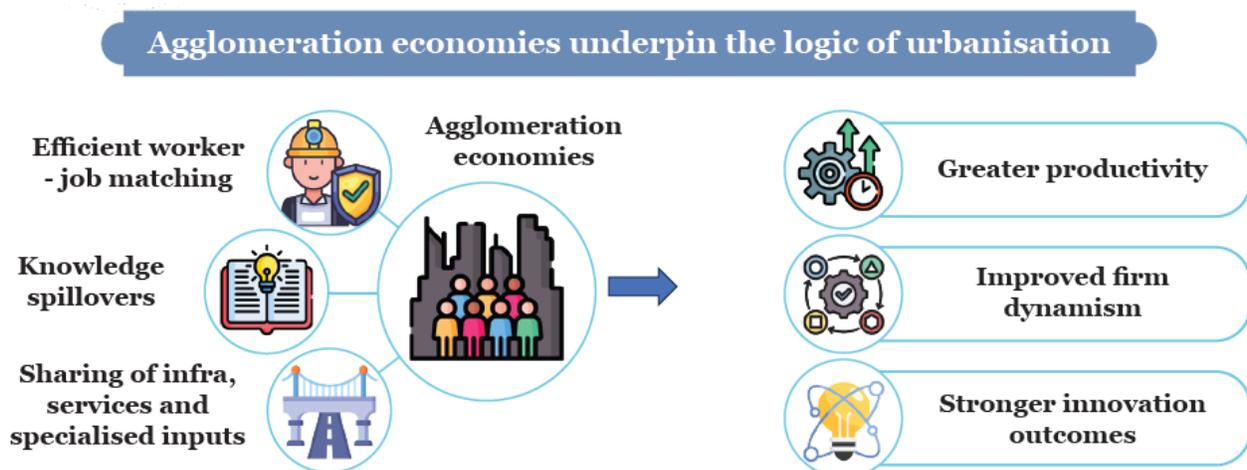


CHAPTER 15: URBANISATION

Urbanisation is a central driver of economic growth, productivity, and innovation, rooted in the concept of agglomeration economies where proximity enhances efficiency and knowledge exchange. India's urban population is expanding rapidly, yet its cities face a paradox: despite scale, they underperform in productivity, liveability, and global competitiveness. Structural constraints such as fragmented governance, weak fiscal autonomy, inefficient land use, inadequate mobility systems, and infrastructural deficits limit the realisation of urban potential.

Urban expansion in India is increasingly peripheral, with growth occurring beyond formal city boundaries, highlighting the need for metropolitan-scale planning. Informality in housing, labour, and enterprises remains a defining feature, serving as a functional response to systemic constraints rather than a temporary anomaly. While initiatives like Smart Cities Mission, AMRUT, and SBM-U have improved infrastructure access, challenges now lie in improving quality, efficiency, and behavioural compliance.

The future of Indian urbanisation depends on integrated planning, stronger governance, financial empowerment of cities, and a robust social contract between citizens and institutions. Cities must transition from being administrative units to economic engines that are liveable, inclusive, and innovation-driven.



Key Points

1. Concept and Economic Logic of Urbanisation

- Urbanisation is driven by agglomeration economies, where clustering of people and firms enhances productivity, innovation, and economic diversification.
- Cities function as economic infrastructure by enabling efficient labour-market matching, knowledge spillovers, and shared services.
- Productivity gains in India show that doubling city size can increase productivity by about **12 per cent**.



- Urban areas disproportionately host modern sectors such as services, manufacturing, and knowledge industries.
- A city emerges when demographic density, economic diversification, and institutional recognition converge.

2. Urbanisation Trends in India

- India's urban system is top-heavy, with a large share of population concentrated in metropolitan and Class I cities.
- Urbanisation appears slow by Census definition but may be underestimated due to methodological limitations.
- Alternative measures using satellite data suggest India could be significantly more urban than officially reported.
- Urban growth is increasingly occurring in peri-urban and suburban regions rather than city cores.
- Night-time light data indicates expansion of economic activity beyond traditional administrative boundaries.

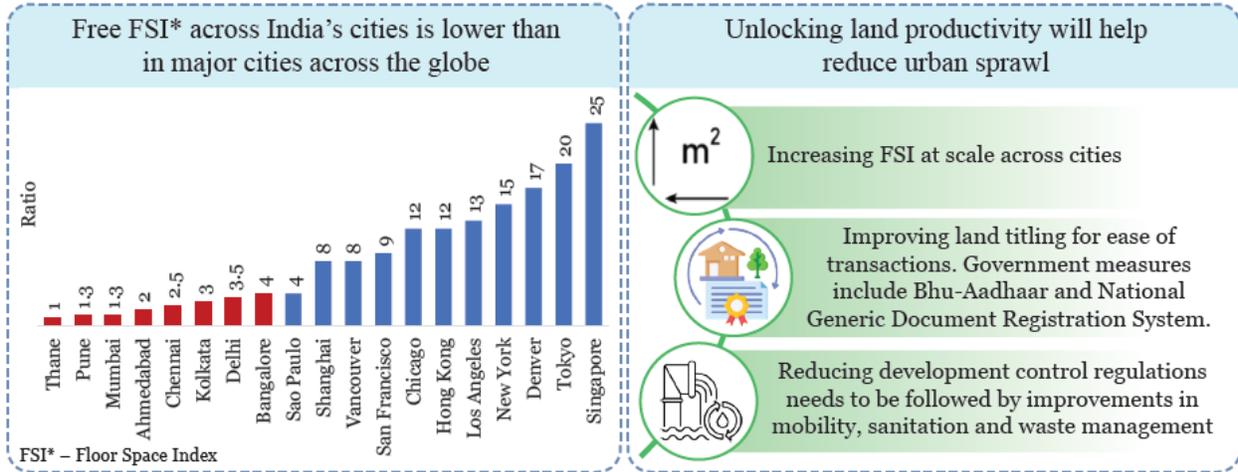
3. Governance Deficit in Indian Cities

- Urban governance is fragmented across multiple agencies, reducing coordination and accountability.
- Cities lack fiscal autonomy, with low own-source revenues and high dependence on transfers.
- Municipal revenues in India are significantly lower compared to global standards.
- Weak alignment between authority and accountability limits long-term planning and investment.
- Cities function more as administrative units rather than autonomous economic actors.

4. Land, Housing, and Infrastructure Constraints

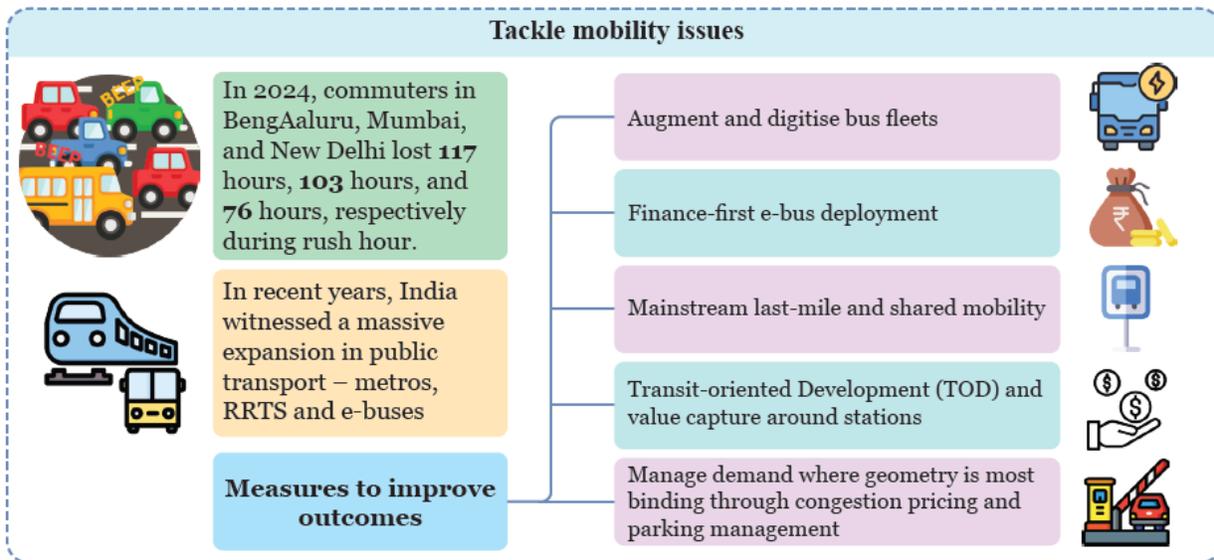
- Restrictive land-use regulations and low **Floor Space Index (FSI)** limit vertical growth and increase land prices.
- Land remains "dead capital" due to unclear titles, fragmented ownership, and inefficient markets.
- Affordable housing shortages are acute, particularly for low-income groups.
- Peripheral housing development lacks adequate infrastructure and connectivity.
- Infrastructure investments often fail to deliver productivity gains due to poor integration with land-use planning.





5. Mobility Challenges and Solutions

- Traffic congestion imposes high economic costs through productivity losses and increased travel time.
- Indian cities face inadequate public transport capacity, especially in bus systems.
- Overdependence on private vehicles reduces road efficiency and increases congestion.
- Solutions include expanding public transport, improving last-mile connectivity, and adopting transit-oriented development (TOD).
- Demand management tools such as congestion pricing and parking reforms can improve mobility efficiency.

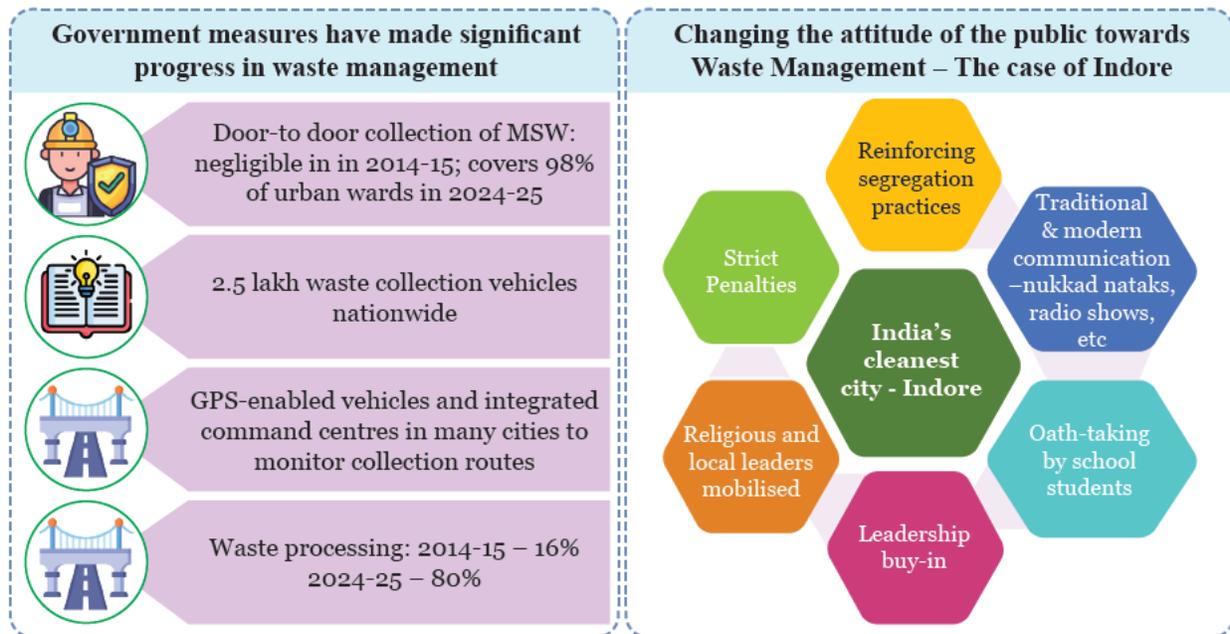


6. Urban Services: Waste, Water, and Sanitation

- Significant progress has been made in sanitation under SBM-U, including elimination of open defecation.



- Waste collection coverage has improved substantially, but segregation and processing gaps persist.
- Urban India generates large volumes of waste and wastewater, with limited treatment and reuse.
- Behavioural and institutional challenges are major constraints in achieving sustainable waste management.
- Circular water economy offers economic and environmental benefits through reuse of treated wastewater.



7. Informality in Urban Systems

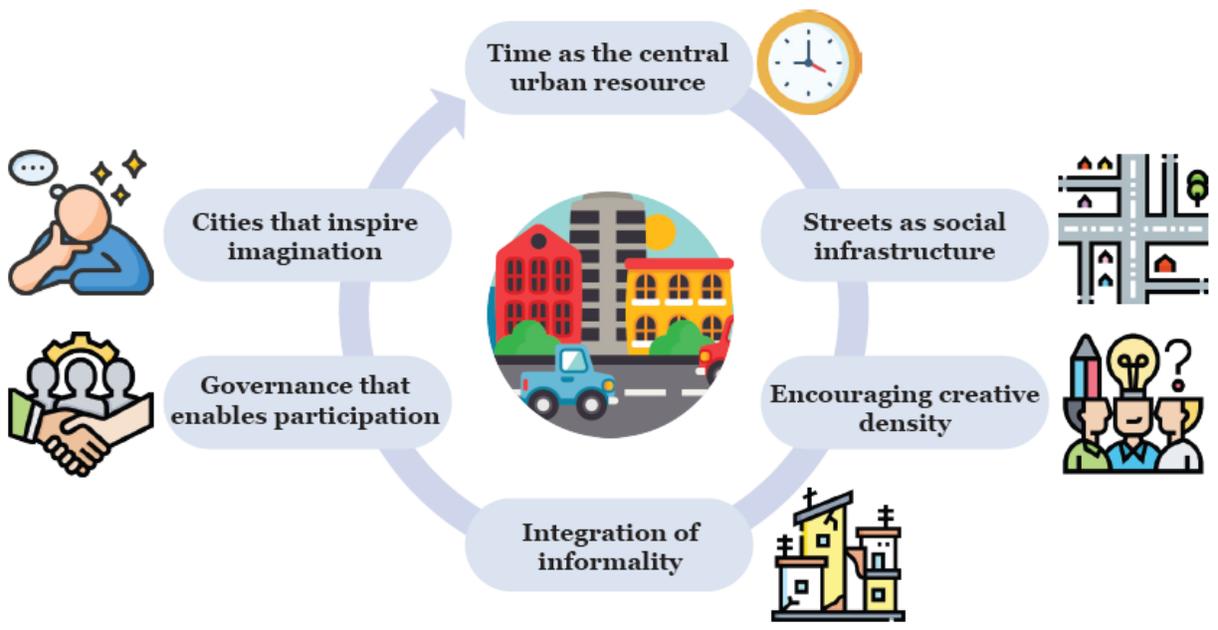
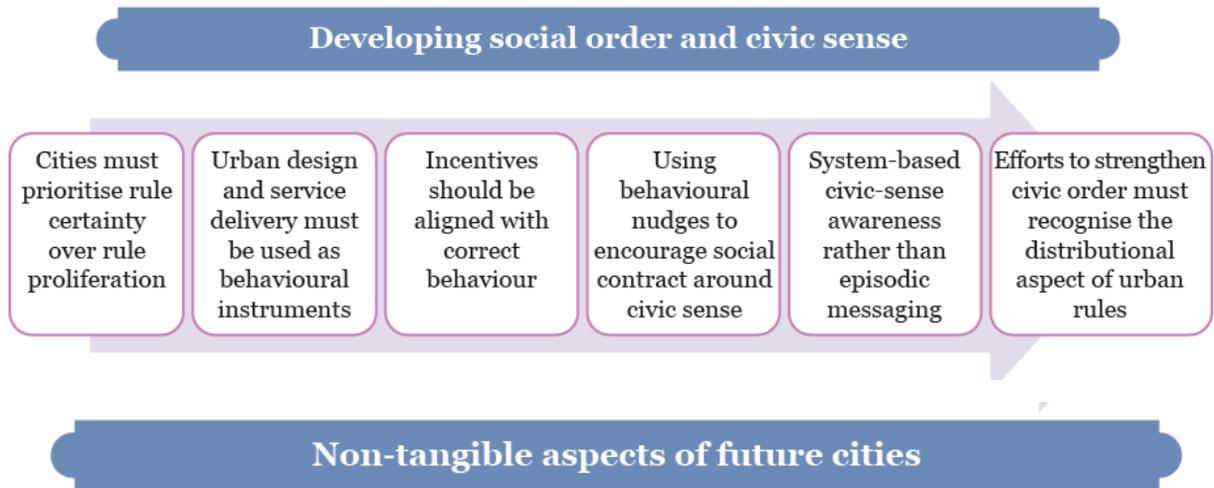
- Informality in housing, labour, and enterprises is a structural feature of Indian urbanisation.
- Slums and informal settlements provide affordable housing near employment centres.
- Informal labour markets absorb migrants and support urban economies.
- Informal enterprises contribute significantly to employment and supply chains.
- Policy shift is required from eradication to integration of informal systems.

8. Social Contract and Civic Behaviour

- Urban outcomes depend not only on infrastructure but also on citizen-institution trust and cooperation.
- Weak enforcement and inconsistent service delivery undermine civic discipline.



- Behaviour is context-dependent and improves when systems are predictable and well-designed.
- Global cities achieve compliance through clear rules, reliable services, and credible enforcement.
- Strengthening civic sense requires aligning incentives, enforcement, and service quality.



9. Future of Urbanisation in India

- Cities must prioritise liveability, creativity, and inclusiveness alongside economic growth.
- Urban planning should focus on reducing time costs and improving accessibility.
- Streets should function as social spaces, not merely transport corridors.
- Cultural and creative ecosystems must be supported to enhance urban vibrancy.



- Participatory governance and citizen engagement are essential for sustainable urban development.

Data & Facts

- Doubling city size increases productivity by approximately 12% in India.
- Over 70% of urban population lived in **Class I cities (2011 Census)**.
- India's urban population may be around 63% using satellite-based estimates.
- Urban areas contribute nearly **70% of GDP** but house about 40% of population (projected).
- Municipal own-source revenue is less than 0.6% of GDP in India.
- Waste processing improved from 16% (2014–15) to about **80% (2025–26)**.
- India generates approximately 1.6 lakh tonnes of municipal solid waste per day.
- Only about **28% of wastewater** is treated and around 8% reused.
- Urban housing shortage is estimated at around 29 million units.

Concepts

- **Agglomeration Economies:** Productivity gains arising from clustering of people and firms in cities.
- **Dead Capital:** Assets like land that cannot be productively used due to legal or market constraints.
- **FSI/FAR:** Ratio determining allowable built-up area on a plot of land.
- **Transit-Oriented Development (TOD):** Urban planning approach integrating transport with high-density, mixed-use development.
- **Peri-Urban Areas:** Transitional zones between rural and urban regions experiencing rapid growth.
- **Informality:** Economic activities operating outside formal regulatory frameworks.
- **Circular Water Economy:** System of reusing treated wastewater for sustainable resource management.
- **Congestion Pricing:** Charging vehicles for using roads during peak hours to reduce traffic.

Analysis

- India's urbanisation challenge is not merely about expansion but about efficiency and governance.



- The mismatch between infrastructure investment and institutional capacity reduces returns.
- Informality reflects systemic gaps and must be integrated rather than eliminated.
- Weak fiscal and administrative autonomy prevents cities from acting as growth engines.
- Urban planning must shift from fragmented, project-based approaches to integrated system-based frameworks.
- Behavioural and institutional reforms are as important as physical infrastructure investments.



CHAPTER 16: STATE CAPACITY AND INDIA'S PATH TO STRATEGIC INDISPENSABILITY

This chapter is highly useful for mains answer writing, therefore please internalise it by analysing the concepts thoroughly.

PART I: FROM IMPORT SUBSTITUTION TO STRATEGIC RESILIENCE AND STRATEGIC INDISPENSABILITY

India today stands on strong macroeconomic foundations, but the nature of its development challenge has fundamentally changed. The central issue is no longer just growth or stability, but the ability to build **durable economic capabilities in a fragmented and uncertain global order**.

In such a world, mere participation in globalisation is insufficient. Nations must move from being **passive recipients of global flows to active shapers of global systems**. This requires a strategic transition—from reducing dependence (import substitution), to building shock-absorbing capacity (strategic resilience), and ultimately to becoming indispensable to global economic networks.

The chapter argues that **manufacturing, exports, and disciplined indigenisation are not just economic tools, but instruments of state capability and strategic power**.

Big Picture Framework



The starting point of the argument is paradoxical: **India is doing well, but the world is not**. While India's macro fundamentals—growth, stability, reserves, and investment—are strong, the

global environment is increasingly unstable. The breakdown of the post-Cold War order, financialisation in the West, geopolitical tensions, and technological shifts like AI are creating a world where **rules are uncertain, trade is strategic, and capital is volatile**.

In such a setting, relying on traditional globalisation—where open markets and stable flows were assumed—is no longer viable. Instead, countries must build **internal capabilities that allow them to navigate uncertainty**. This is where the idea of **Swadeshi is reinterpreted**. It is no longer about isolation, but about **strategic autonomy combined with global integration**.

However, not all forms of import substitution are desirable. The chapter introduces a **disciplined, conditional approach to indigenisation**, where protection is:

- Time-bound
- Performance-linked
- Export-oriented

To operationalise this, a **tiered framework** is proposed:

- **Tier I:** Critical sectors requiring assured domestic capacity
- **Tier II:** Economically viable sectors needing scale and learning
- **Tier III:** Sectors where import dependence is acceptable

This ensures that **policy intervention builds capability rather than inefficiency**.

Another key insight is that **competitiveness is not just about final goods, but about input costs**. High input costs act like poor infrastructure, raising economy-wide inefficiencies. Hence, a **National Input Cost Reduction Strategy** is essential to make manufacturing globally competitive.

But cost competitiveness alone is insufficient. The real transformation happens through **advanced manufacturing**, which acts as a **disciplining system**. Unlike protected sectors, manufacturing:

- Exposes inefficiencies immediately
- Forces coordination across institutions
- Requires reliability, quality, and scale

Thus, manufacturing becomes a **test of state capacity and institutional quality**.

Lessons can be drawn from East Asia, not in terms of policies, but in terms of **institutional design**. Successful countries had:

- Outcome-oriented bureaucracies
- Tolerance for failure but not stagnation



- Credible withdrawal of state support

This reflects the idea of an **entrepreneurial state**—one that experiments, learns, and reallocates resources dynamically.

Finally, the argument culminates in a strategic progression:

- Import substitution builds **domestic capability**
- Strategic resilience builds **shock absorption**
- Strategic indispensability builds **global influence**

At the highest level, economic power is defined not by self-sufficiency, but by **being so integrated and reliable that others depend on you.**

Key Conceptual Distinctions

(a) Import Substitution vs Strategic Resilience vs Strategic Indispensability

- Import substitution focuses on **domestic production**
- Strategic resilience focuses on **shock absorption and continuity**
- Strategic indispensability focuses on **global relevance and influence**

☞ The shift is from **self-reliance** → **system strength** → **global leverage**

(b) Resilience vs Influence

- Resilience means the ability to **withstand shocks**
- Influence means the ability to **shape outcomes globally**

☞ A resilient nation survives

☞ An indispensable nation leads

(c) Protection vs Capability Building

- Protection without discipline → inefficiency
- Protection with export pressure → learning and competitiveness

(d) Capital Flows vs Export Capability

- Capital flows are **volatile and reversible**
- Export earnings are **stable and capability-driven**

☞ Currency strength ultimately depends on **exports, not capital inflows**

Institutional / Economic Insights

- **Manufacturing is not just a sector—it is an institutional stress test** that exposes weaknesses in governance, logistics, and regulation.
- **Input costs function like infrastructure**, affecting competitiveness across the economy.



- **Global value chains (GVCs) are controlled by a few firms**, making strategic integration more important than generic FDI inflows.
- **Economic power is shifting from openness to strategic interdependence**, where countries selectively engage based on interests.
- **State capacity is revealed through execution, not policy design**, especially under global competitive pressures.
- **Currency stability is a structural outcome of export capability**, not just monetary policy.

Synthesis

Part I presents a fundamental shift in development thinking. Growth alone is no longer sufficient; what matters is the **quality and structure of growth**. In a fragmented global economy, nations must build capabilities that allow them not only to withstand shocks but to shape global systems.

India's pathway lies in **disciplined indigenisation, competitive manufacturing, and deep integration into global value chains**. Import substitution is only the starting point; resilience is the intermediate goal; and indispensability is the ultimate destination.

At its core, the argument is simple yet profound:

👉 *A nation becomes powerful not when it reduces dependence, but when others become dependent on it.*

This part is extremely valuable for GS-3 and Essay. Try to think based on following contexts:

- "Globalisation is being replaced by strategic interdependence"
- "Role of manufacturing in economic development"
- "Import substitution vs export-led growth"
- "India's path to becoming a global economic power"
- "State capacity and industrial policy"
- "Resilience vs competitiveness in economic strategy"

Now, let's move on to Part II.

PART II: BUILDING STRATEGIC RESILIENCE AND STRATEGIC INDISPENSABILITY — THE ROLE OF STATE, FIRMS AND CITIZENS

India's challenge today is no longer about policy intent or resource availability, but about **whether institutions can act, adapt, and deliver under uncertainty**. The real constraint is

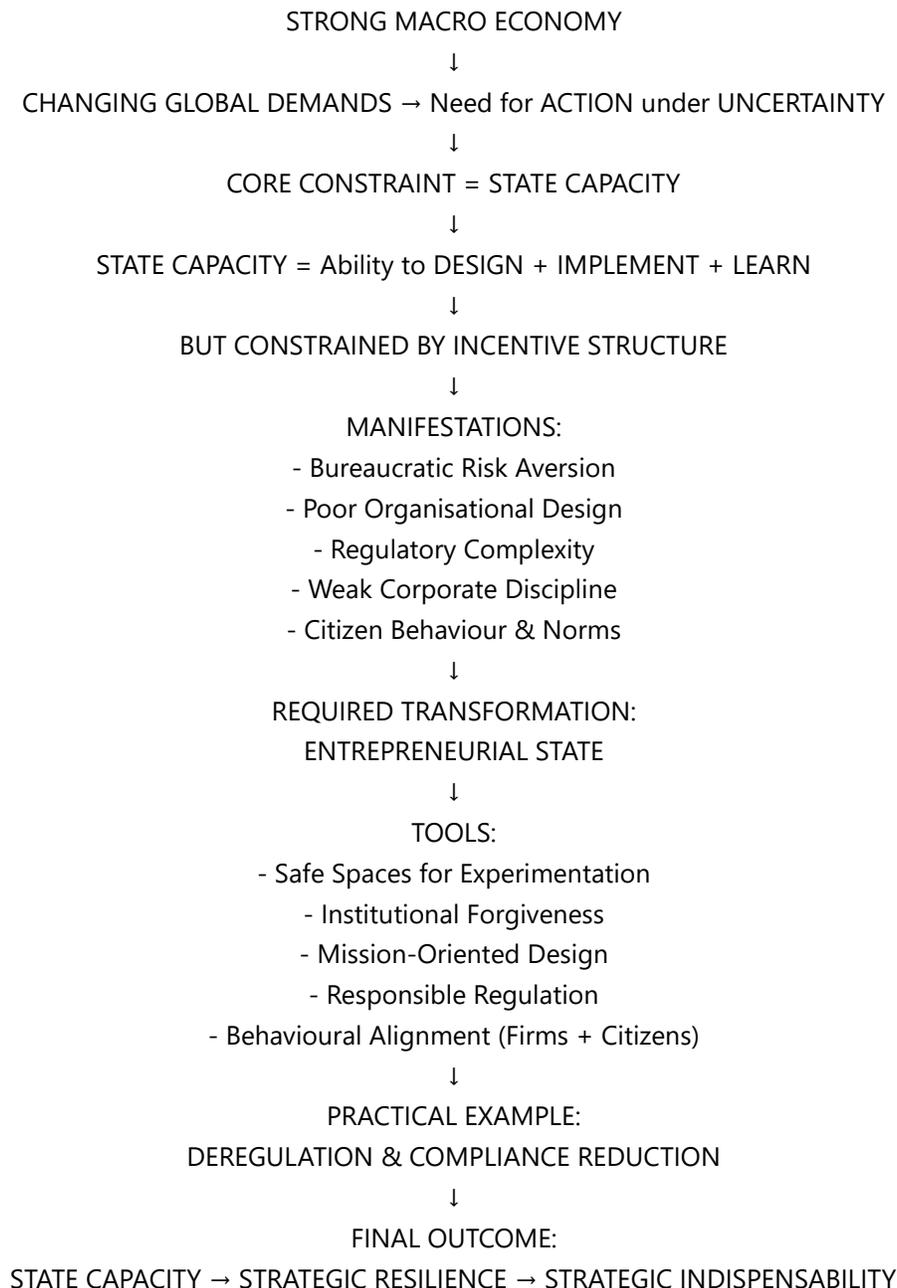


state capacity, understood not as authority, but as the ability to “get the right things done” consistently.

This capacity is not created by government alone—it is **co-produced by institutions, firms, and citizens through aligned incentives and behaviour**. The chapter shifts focus from *what policies exist* to *how decisions are made, executed, and corrected*.

Ultimately, development in the 21st century depends on whether the State can **learn faster than the environment changes**, and whether society supports or weakens this process.

Big Picture Flow



Historically, growth was constrained by lack of capital, policy clarity, or market reforms. Today, those constraints have eased. The real issue lies deeper—in **how institutions function under pressure and uncertainty**.

State capacity is defined not in terms of power, but in terms of **effective action**—the ability to design policies, implement them reliably, and sustain outcomes over time. The key insight is that **weak outcomes arise less from lack of ideas and more from inability to execute consistently**.

However, this incapacity is not random. It is rooted in **institutional incentives**. Bureaucracies tend to avoid risk because:

- Decisions are judged retrospectively
- Failure is punished more than inaction
- Procedures are valued over outcomes

This creates a system where **doing nothing is often safer than attempting something new**.

To overcome this, the chapter introduces the idea of an **entrepreneurial state**—not one that controls markets, but one that:

- Acts under uncertainty
- Experiments in bounded ways
- Learns and adapts continuously

But such a state cannot function without **institutional redesign**.

One key reform is the creation of **“safe spaces” for experimentation**—mission-based units, regulatory sandboxes, and pilot programs where:

- Risk is allowed
- Accountability is contextual
- Learning is prioritised over blame

Another major issue is **hysteresis**—when temporary policies become permanent, making reversal politically and administratively difficult. This leads to risk aversion and policy inertia. Hence, policies must be designed with:

- Sunset clauses
- Exit mechanisms
- Reversibility



Equally important is the concept of **institutional forgiveness**. High-capacity states distinguish between:

- Good-faith error
- Negligence
- Corruption

Without this distinction, fear replaces judgment, and **learning collapses**.

Now, if we look at the **organisational design**, capacity depends on how responsibilities are structured. Traditional function-based systems create fragmentation and weak accountability. Instead, institutions must move toward:

- Mission-oriented structures
- Clear outcome ownership
- Coordinated execution

Next if we look at **regulatory capacity**, where regulators act as “mini-states.” The challenge is balancing:

- Power with accountability
- Independence with democratic oversight
- Enforcement with proportionality

The chapter also highlights the need for **professionalisation of regulation**, including specialised training and institutional frameworks.

A crucial and often ignored dimension is the role of the **private sector**. Unlike East Asian models, Indian firms often:

- Avoid long-term risk
- Prefer protected markets
- Rely on regulatory discretion

This weakens demand for strong institutions. In contrast, globally competitive firms **force the State to upgrade its capacity**.

Even deeper is the role of **citizens**. State capacity is shaped daily by → Compliance behaviour, social norms, Work ethic, Attitude toward public goods

Where citizens bypass rules or prioritise convenience, the State is forced into enforcement mode, reducing its ability to focus on higher-order functions.



The chapter introduces a powerful idea:

👉 *Development is not only a policy process; it is a behavioural ecosystem.*

Concepts like **delayed gratification** become economic variables. Societies that prioritise short-term gains → Undermine institutional learning, Encourage shortcuts, Reduce system reliability

Finally, we can ground theory in practice through **deregulation and compliance reduction**. This can be presented not as withdrawal of the State, but as **reorientation of administrative effort**:

- From policing → to facilitation
- From control → to coordination
- From complexity → to clarity

The success of this initiative demonstrates that **state capacity can be built by removing friction, not just by adding controls**.

Key Conceptual Distinctions

(a) Policy vs State Capacity

- Policy = Intent
- State capacity = Execution

👉 Good policies without capacity = weak outcomes

(b) Control State vs Entrepreneurial State

- Control State → avoids risk, enforces rules
- Entrepreneurial State → experiments, learns, adapts

(c) Accountability vs Fear

- Accountability = context-aware evaluation
- Fear = hindsight punishment

👉 Fear kills innovation

(d) Regulation vs Regulatory Capacity

- Regulation = rules
- Regulatory capacity = ability to design, enforce, and adapt rules effectively

(e) Government vs Governance Ecosystem

- Government acts
- Ecosystem (firms + citizens) determines outcomes

Institutional / Economic Insights

- **State capacity is an incentive problem, not just a resource problem**



- **Execution failure is the biggest development bottleneck in modern economies**
- **Risk aversion in bureaucracy is structurally produced, not individually driven**
- **Organisational design determines performance more than individual competence**
- **Deregulation is not weakening the State—it is strengthening its effectiveness**
- **Corporate behaviour influences institutional quality (demand for discretion vs demand for rules)**
- **Citizen behaviour directly impacts administrative efficiency and enforcement costs**
- **Delayed gratification is a macroeconomic capability, not just a personal virtue**

Synthesis

Part II shifts the focus from external strategy to internal capability. It argues that India's future will not be determined by policies alone, but by **how institutions function in practice**.

State capacity emerges as the central pillar—shaped by incentives, organisational design, regulatory systems, and behavioural norms across society. It is not built through one reform, but through **alignment across systems**.

The deepest insight is that capacity is **co-created**. When institutions, firms, and citizens align toward productivity, learning, and discipline, the State becomes capable. When they do not, even strong policies fail.

Thus, the pathway to strategic power is not merely economic—it is **institutional and behavioural**.

UPSC Application

Highly valuable for GS-3, Essay, and Governance answers:

Themes you can directly use:

- "State capacity as the key constraint in India's development"
- "Why execution matters more than policy design"
- "Entrepreneurial state in a democratic setup"
- "Role of private sector in nation-building"
- "Behavioural dimension of economic development"
- "Deregulation as state capacity building"

