Summary of
The Economic Survey 2024-25

Index

Chapter 1 - State of the Economy: Getting Back into the Fast Lane

Introduction

In 2024, the global economy faced uneven growth due to supply chain disruptions, geopolitical tensions, and volatile commodity prices. Despite these challenges, India demonstrated resilient economic growth, with its real GDP estimated to grow by 6.4% in FY25, closely aligning with its decadal average. This growth was underpinned by strong performances in agriculture and services and stable private consumption, despite pressures on manufacturing from weak global demand and domestic seasonal conditions.

Key Highlights of India's Economic Performance:

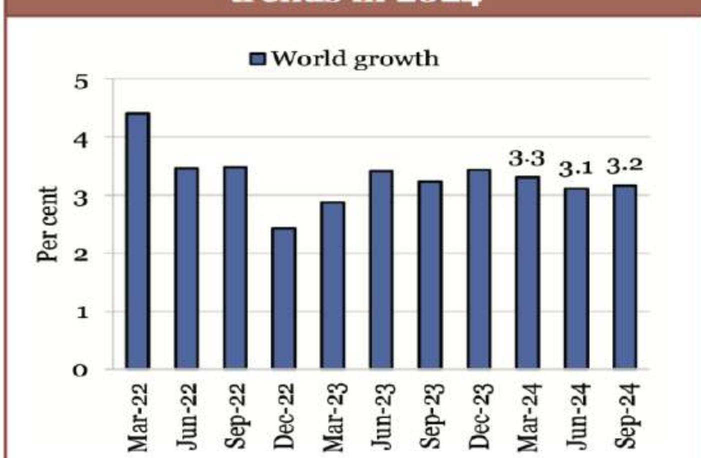
- Real Gross Value Added (GVA) is also projected to grow by 6.4% in FY25, showing broad-based economic stability.
- Agriculture and services sectors have been pivotal, with record Kharif production boosting rural demand.
- Private consumption remained robust, indicating steady domestic demand and consumer confidence.
- Fiscal discipline and a strong external balance, supported by a services trade surplus and robust remittance growth, have contributed to macroeconomic stability.
- Manufacturing faced challenges due to global demand slowdowns and seasonal domestic factors.

Looking ahead to FY26, GDP growth is expected to range between 6.3% and 6.8%, influenced by global economic uncertainties, domestic policy measures, investment dynamics, and inflation trends. The need for grassroots-level structural reforms and deregulation has been emphasized to enhance India's medium-term growth potential and boost its global competitiveness.

Global Economic Trends: A Mixed Recovery

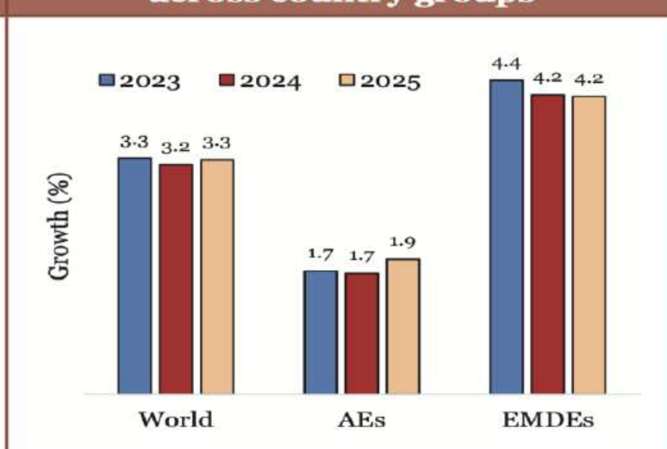
1. *Global Growth Trends*
    a. Global GDP Growth: The global economy grew by 3.3% in 2023, with the IMF projecting 3.2% for 2024 and 3.3% for 2025. Over the next five years, global growth is expected to average around 3.2%, which is modest by historical standards.
    b. Advanced Economies (AEs):
        i. United States: Growth projected at 2.8% in 2024, slightly slowing to 2.5% in 2025 due to moderating consumption and exports.
        ii. Eurozone: Growth expected to improve from 0.4% in 2023 to 0.8% in 2024 and 1.0% in 2025, with services driving recovery despite manufacturing slowdowns.
        iii. China: Growth weakened after Q1 2024, impacted by muted private consumption and real estate sector challenges

Chart I.1: Resilient global growth trends in 2024



Source: OECD Economic Outlook, Volume 2024 Issue 2.

Chart I.2: Steady growth outlook across country groups



Source: IMF WEO (January 2025)
Note: AEs- Advanced Economies, EMDEs- Emerging market and developing economies

2. *Sectoral Performance: Services Strong, Manufacturing Weak*
    a. Global manufacturing PMI reached an index value of 50.0 in November 2024, indicating a stabilization after months of contraction.
    b. Services sector continued to expand, with the Global Services PMI rising to 53.8 in December 2024, marking 23 consecutive months of growth.
3. *Inflation and Policy Trends*
    a. Global inflation trends showed moderation, with headline rates nearing central bank targets by the end of 2024.
    b. Monetary policies: Major central banks, including the Federal Reserve and ECB, initiated cautious rate cuts in response to stabilizing inflation.
    c. Geopolitical risks and trade tensions contributed to volatility in global financial markets, with persistent uncertainties in energy and commodity prices.

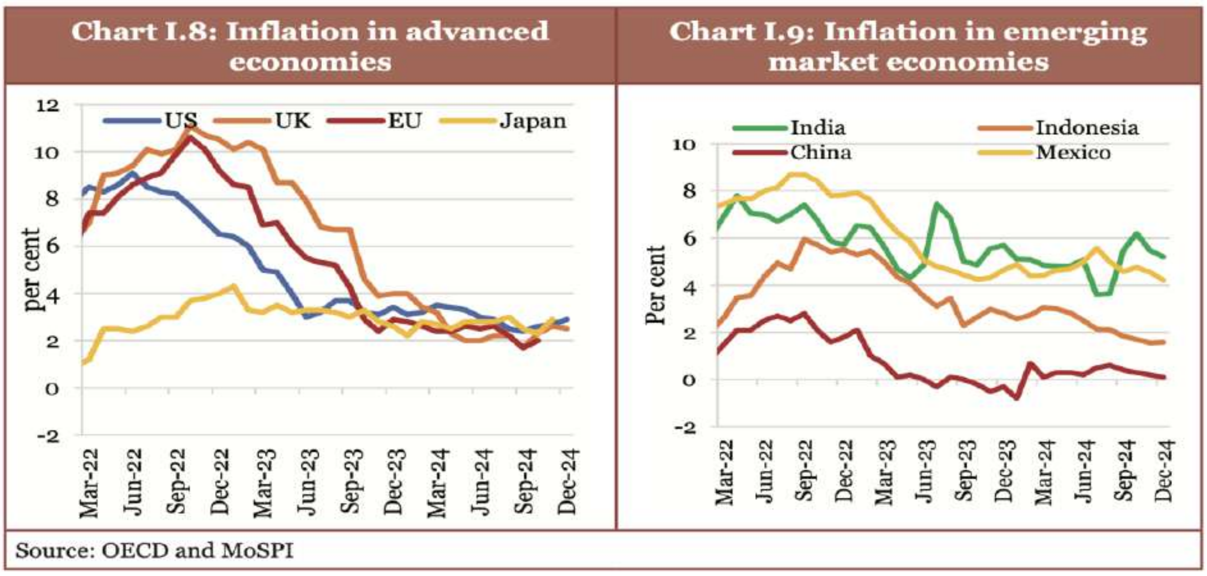


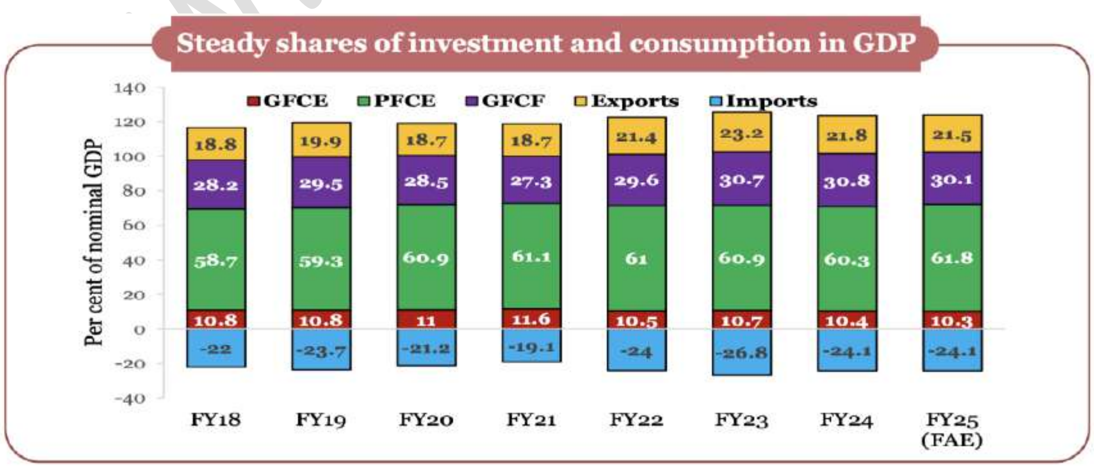
Chart I.8: Inflation in advanced economies

Chart I.9: Inflation in emerging market economies

Source: OECD and MoSPI

India's Economic Performance: A Resilient Growth Story

1. *GDP Growth & Economic Resilience*
    a. India's real GDP growth for FY25 is estimated at 6.4%, supported by strong domestic consumption and a thriving services sector.
    b. Real GVA growth is also projected at 6.4%, driven by contributions from agriculture, services, and public spending.
    c. Private Final Consumption Expenditure (PFCE) expanded by 7.3%, marking a significant rise in



Steady shares of investment and consumption in GDP

household spending.
    d. Gross Fixed Capital Formation (GFCF) grew by 6.4%, underscoring robust investment activities, particularly in infrastructure and manufacturing.

2. *Sectoral Performance - Agriculture & Allied Activities*
    a. Agricultural growth rebounded to 3.8% in FY25, bolstered by a record Kharif production of 1,647.05 LMT, marking a 5.7% increase compared to the previous year.
    b. Rabi sowing increased by 1.4% for wheat and 0.8% for gram as of January 2025, supported by favorable monsoon conditions and improved water reservoir levels.
3. *Sectoral Performance - Industrial & Manufacturing Sector*

a. Industrial sector growth slowed to 6.0% in H1 FY25, compared to 8.3% in Q1 FY25, affected by weak global demand and seasonal disruptions.
b. PMI for manufacturing remained in the expansionary zone, reflecting positive business expectations for Q4 FY25 and Q1 FY26.

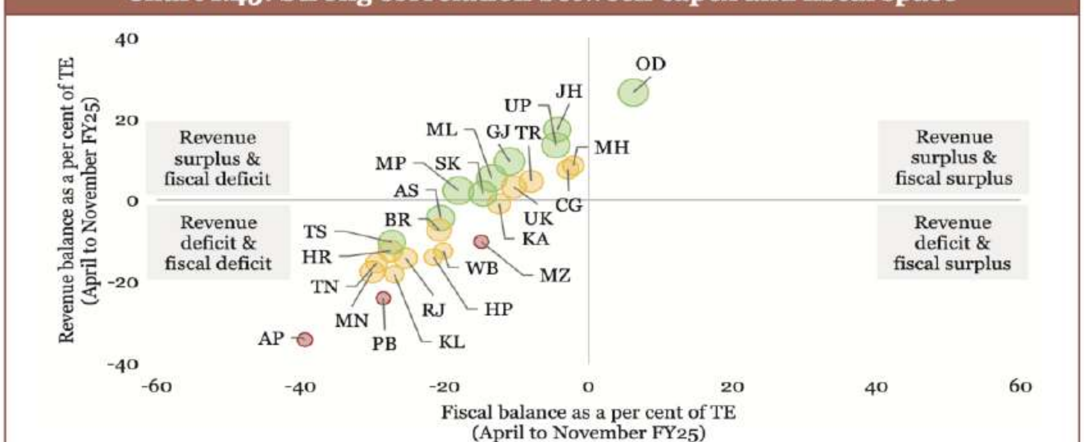
4. *Sectoral Performance - Services Sector*
    a. Services sector growth stood at 7.1% in H1 FY25, driven by finance, real estate, hospitality, and IT services.
    b. India emerged as the 7th-largest global services exporter, highlighting its competitive strength in the international market.

Macroeconomic Stability: Inflation, Fiscal Health, and External Balance

1. *Inflation Trends*
    a. Retail inflation (CPI) softened to 4.9% in April-December FY25, compared to 5.4% in FY24.
    b. Food inflation (CFPI) increased to 8.4% from 7.5% driven by higher prices in vegetables and pulses.

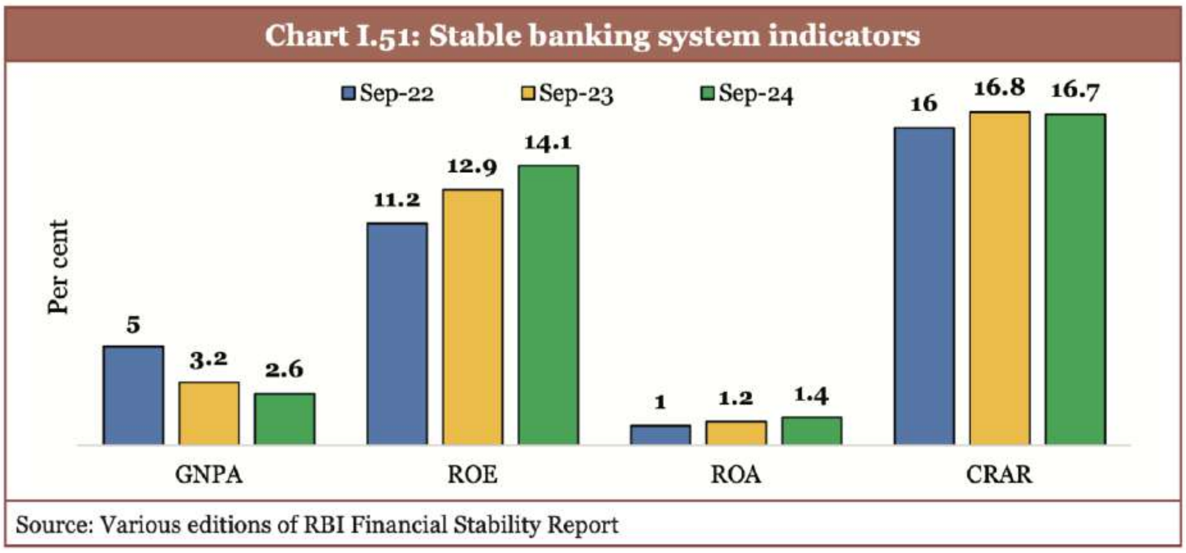
2. *Fiscal Performance & State Finances*
    a. Gross Tax Revenue (GTR) increased by 10.7% YoY (April-November 2024), indicating robust tax collection and GST efficiency.
    b. Government capital expenditure grew by 8.2% YoY during July-November 2024, focused on infrastructure, defense, and public transport.
    c. State tax revenues grew by 10.8%, with 11 states maintaining a revenue surplus.
    d. Higher tax devolution from the center to states improved fiscal space for development programs

Chart I.45: Strong correlation between capex and fiscal space

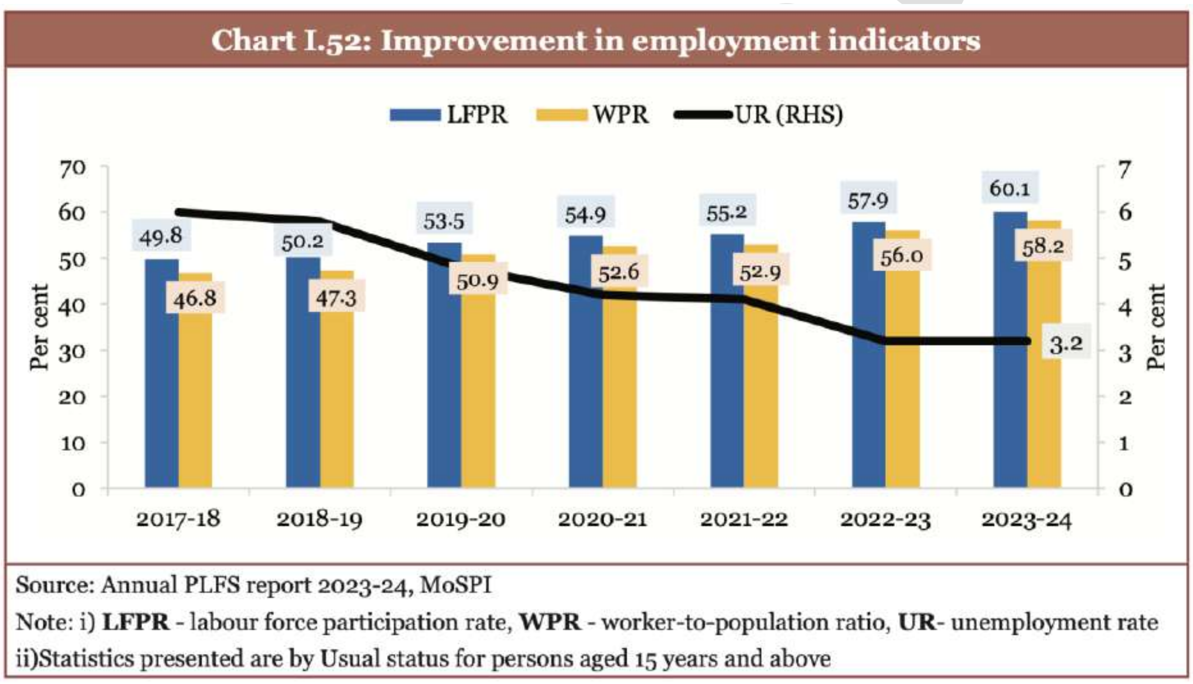


Source: CAG monthly provisional accounts. Excludes Arunachal Pradesh and Nagaland.
Note: The size and colour of the bubble represents capital expenditure as a per cent of total expenditure (TE) - red for less than 7 per cent, yellow for 7 to 14 per cent and green for 14 to 21 per cent.

3. *Banking Performance & Concern*
    a. Gross NPA ratio for banks fell to 12 year low of 2.6% of gross loans and advances.
    b. Another area of concern within the banking system is the stress on unsecured credit, i.e., personal loans and credit cards. As of September 2024, 51.9 per cent of the fresh addition to the stock of NPAs in the retail loan portfolio emanated from the slippages in the unsecured loan book.



4. *Employment Trends*
    a. Urban unemployment rate fell to 6.8% in Q3 FY25, reflecting strong post-pandemic recovery.
    b. Rural employment improved, with demand for MGNREGA jobs declining due to stronger farm incomes.
    c. Formal employment generation saw an uptick, with EPFO adding 8.2 million new subscribers in Apr-Dec 2024.



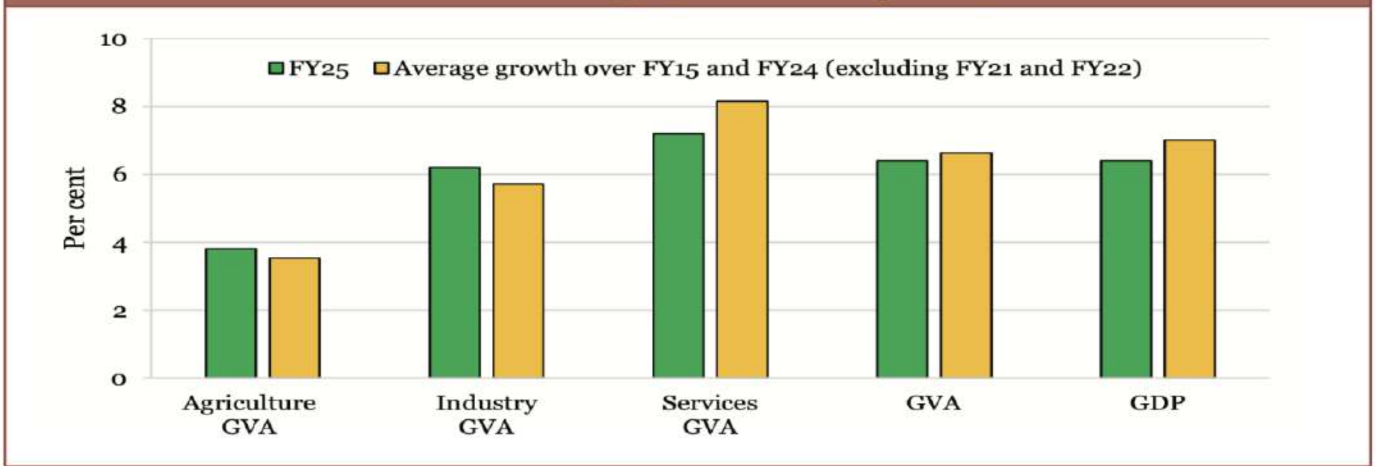
5. *External Trade & Balance of Payments*
    a. Merchandise exports increased by 1.6% YoY, while non-petroleum exports grew by 7.1% during April-December 2024.
    b. Non-Petroleum & Non-Gems & Jewellery exports surged by 9.1%, demonstrating resilience amid global trade volatility.
    c. India remained the world’s top remittance recipient, aiding external stability.
    d. Current Account Deficit (CAD) stood at 1.2% of GDP in Q2 FY25, maintained through strong services exports and remittances.

Economic Outlook for FY26

1. GDP growth forecast between 6.3% - 6.8%, driven by continued investment in infrastructure, stable inflation, and a resilient services sector.
2. Geopolitical tensions, global trade policy risks, and commodity price volatility remain key challenges.

3. Structural reforms and deregulation are essential to enhance long-term growth prospects.

Chart I.20: Despite global uncertainty, India's growth remains close to decadal average (at constant prices)



Source: Calculations based on Statement 13: Annual and Quarterly Estimates of GDP at constant prices, MoSPI
Note: FY25 values are First Advance Estimates.

Chapter 2 - Monetary and Financial Sector Developments: The Cart and the Horse

Introduction

Financial institutions play a crucial role in economic growth by facilitating savings, investments, and credit. Monetary policies influence financial intermediation and economic growth, affected by global factors such as inflation, economic activity, and interest rate movements in major economies.

This chapter is divided into two parts:

1. Monetary Policy Developments: Trends in Reserve Money (M0), Broad Money (M3), and Money Multiplier (MM).
2. Financial Sector Developments: Banking sector performance, capital markets, insurance, pension sector, and regulatory framework.

The monetary and financial sector of India remained resilient and growth-oriented in FY25 (April – December 2024) despite global economic uncertainties.

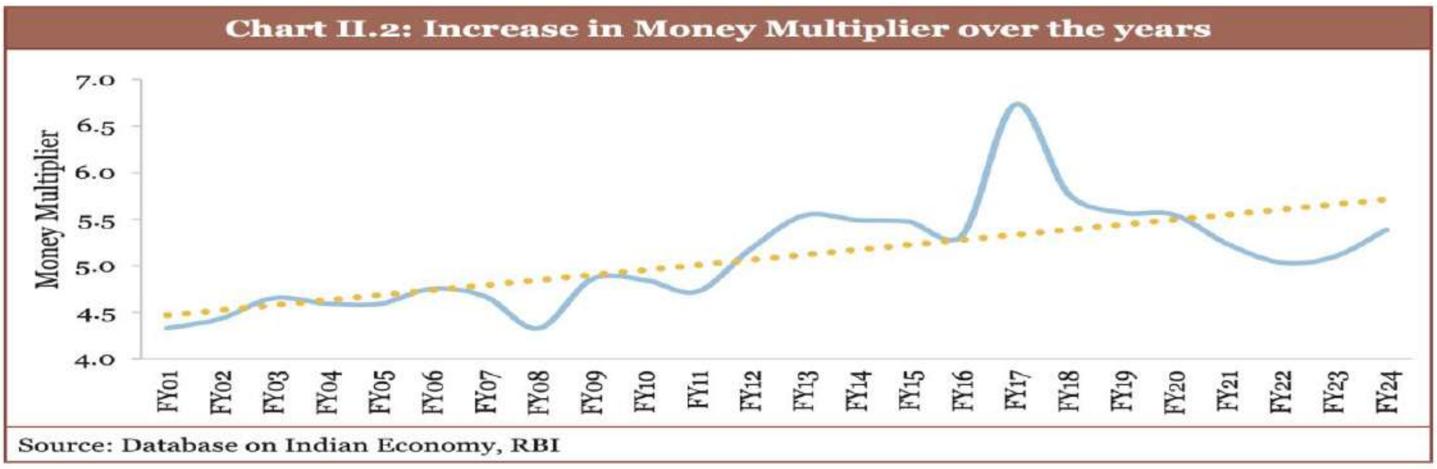
Key developments in FY25:

- Credit growth aligned with deposit growth, ensuring banking system stability.
- SCBs 'profitability improved, with a decline in GNPAs and rise in CRAR.
- Credit growth outpaced nominal GDP growth for two successive years, and the credit-GDP gap narrowed to (-) 0.3% in Q1 FY25 from (-) 10.3% in Q1 FY23, indicating sustainable credit expansion.
- Banking sector exhibited improved asset quality, strong capital buffers, and robust operational performance.
- Stock markets outperformed Emerging Market peers despite election-driven volatility.
- Primary market fundraising (equity & debt) stood at ₹11.1 lakh crore (Apr-Dec 2024), a 5% increase from FY24.
- India's financial inclusion index improved, indicating deeper banking penetration.

Monetary Developments

1. Monetary Policy and Liquidity Management
    a. Objective: The RBI's Monetary Policy Committee (MPC) aims to maintain inflation control while supporting growth and liquidity stability.
2. Key monetary policy changes in FY25:
    a. Repo rate remained unchanged at 6.5% throughout April – December 2024.
    b. Policy stance shifted from "withdrawal of accommodation" to "neutral" (October 2024) to stabilize inflation expectations.
    c. Cash Reserve Ratio (CRR) reduced from 4.5% to 4% (December 2024), injecting ₹1.16 lakh crore liquidity into the banking system.

3. Money Supply Growth
    a. Growth in monetary aggregates:
        i. Reserve Money (M0): Increased 3.6% YoY as of January 2025, down from 6.3% YoY in January 2024.
        ii. Broad Money (M3): Expanded 9.3% YoY as of December 2024, compared to 11% YoY in December 2023.



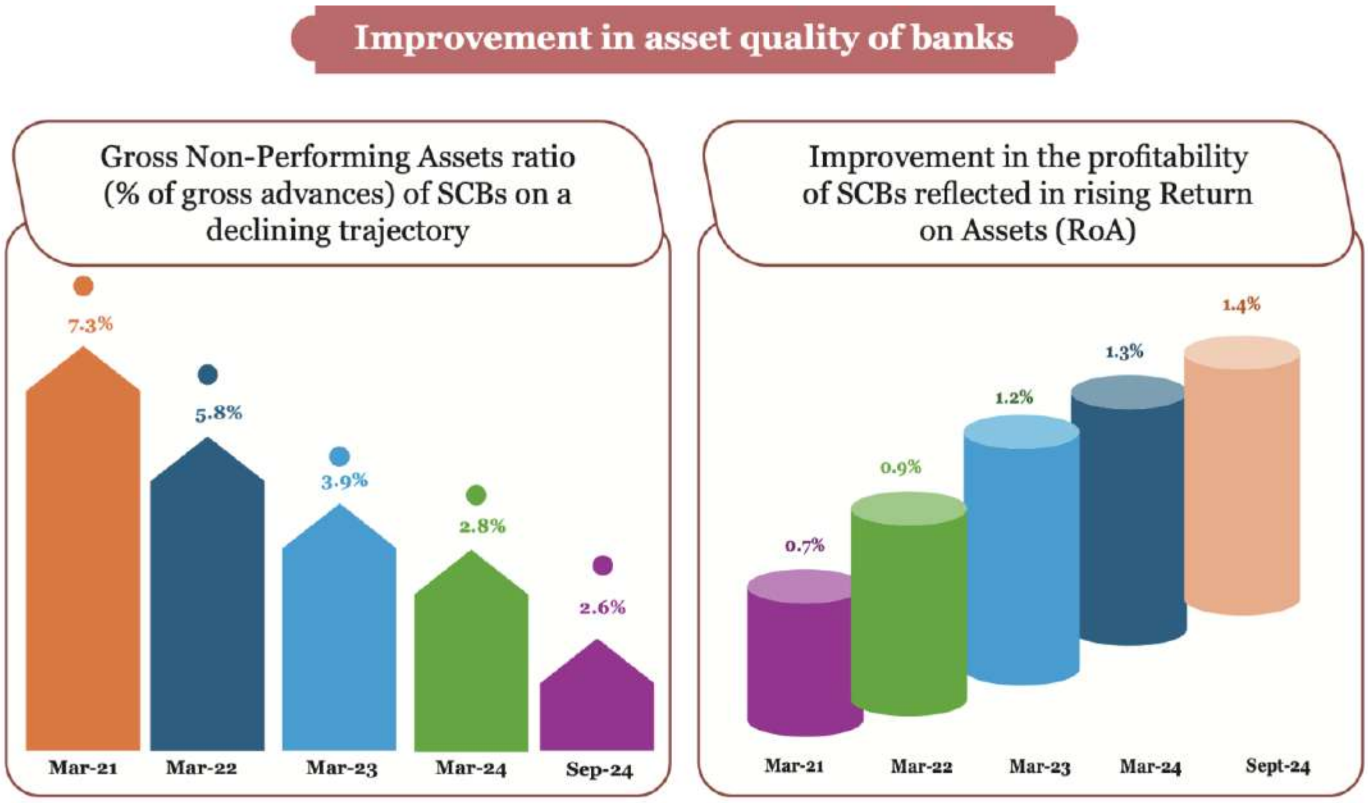
        iii. Money Multiplier (MM): Increased from 5.5 (December 2023) to 5.7 (December 2024), indicating higher banking efficiency.'

4. Global comparison of money supply growth:
    a. India's M3 growth (9.3%) is lower than China (10.4%) and Brazil (9.8%) but higher than the US (6.1%) and Eurozone (5.3%).
    b. India's MM (5.7) is lower than the US (6.8) and Japan (7.2), indicating further financial deepening potential.

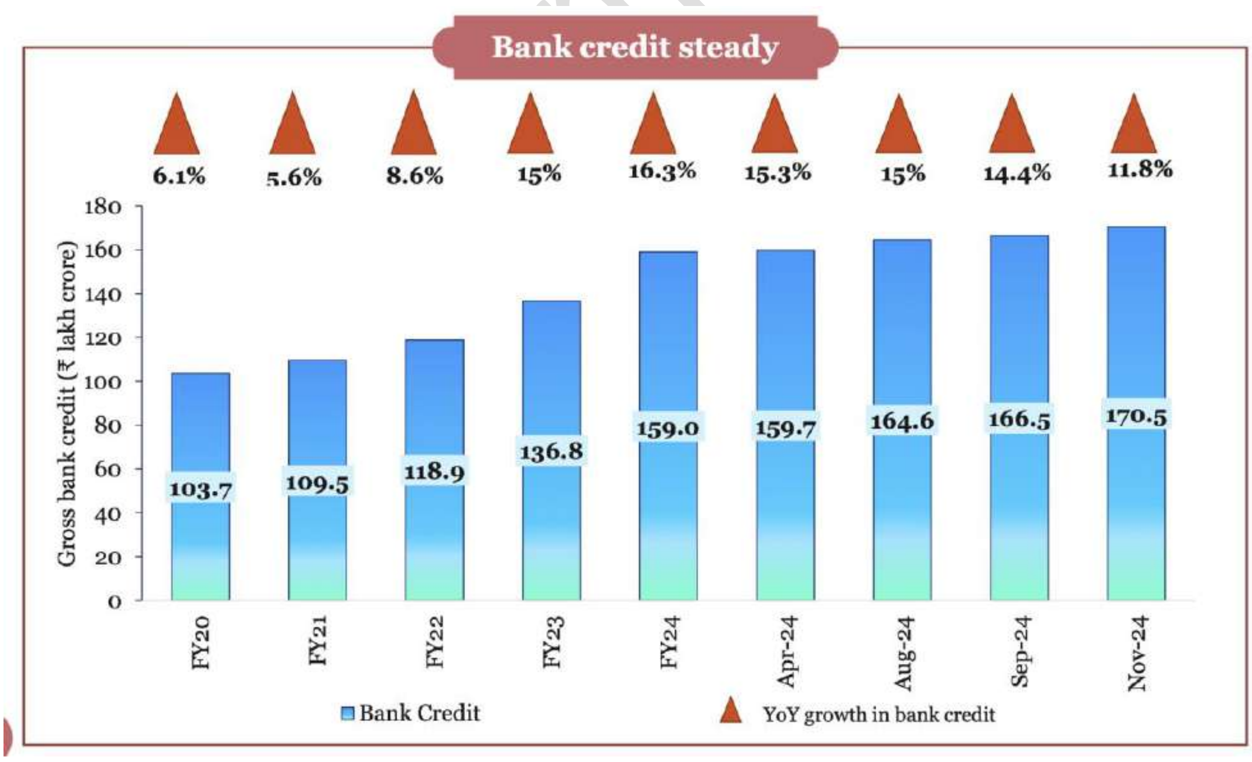
Financial Intermediation

1. Banking Sector Performance
    a. India's banking sector has shown significant improvement in asset quality, profitability, and capital buffers.
2. Key indicators of banking health:
    a. Gross Non-Performing Assets (GNPA) Ratio: Declined to a 12-year low of 2.6% (September 2024), down from 9.3% in March 2017.
    b. Reduction in GNPAs was driven by lower slippages, strong recoveries, asset upgrades, and strategic write-offs.
    c. Net NPA Ratio: Improved to 0.6% (September 2024), indicating a healthier loan book.
    d. Provision Coverage Ratio (PCR): Increased to 77% (September 2024), up from 74.9% in March 2023, showing higher provisioning against bad loans.
    e. Capital Adequacy:
    f. Capital to Risk-Weighted Asset Ratio (CRAR): 16.7% (September 2024), significantly above Basel III norms (10.5%).

3. *Profitability of Scheduled Commercial Banks (SCBs)*
    a. Banks recorded strong financial performance in FY25:
        i. Return on Assets (RoA): Increased to 1.4% (September 2024), reflecting stronger profitability.
        ii. Return on Equity (RoE): 14.1% (September 2024), demonstrating improved shareholder returns.
        iii. Profit After Tax (PAT): Grew 22.2% YoY in H1 FY25, driven by lower NPAs, higher credit demand, and improved cost efficiency.



4. Trends in Bank Credit
    a. Bank credit growth remained strong but moderated slightly due to higher interest rates:
        i. Total bank credit growth: 11.8% YoY (November 2024), compared to 15.2% a year ago.
        ii. Deposit Growth: 11.1% YoY (November 2024), converging with credit growth.
        iii. Non-Food Credit Growth: 7.5% YoY (December 2024), lower than 11% last year.



5. Sector-Wise Credit Growth
    a. Agriculture Credit: 5.1% YoY (November 2024).
    b. Industry Credit: 4.4% YoY (November 2024), up from 3.2% a year ago.
    c. MSME Credit: 13% YoY growth (November 2024), significantly higher than large enterprises (6.1%).
    d. Credit to Services Sector: 5.9% YoY (November 2024).
    e. Retail Loans: 8.8% YoY (November 2024), mainly driven by vehicle and housing loans.
6. Cross-Country Comparison of Bank Credit to GDP Ratio
    a. India's bank credit-to-GDP ratio remains lower than Advanced Economies (AEs) but higher than some Emerging Market Economies (EMEs):-

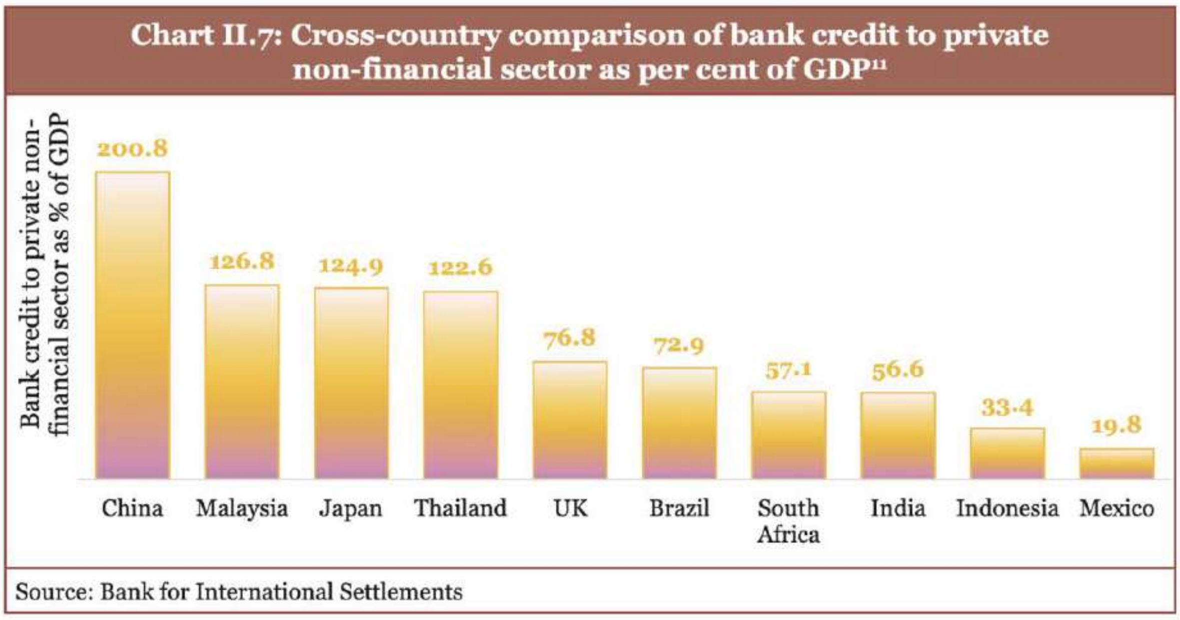
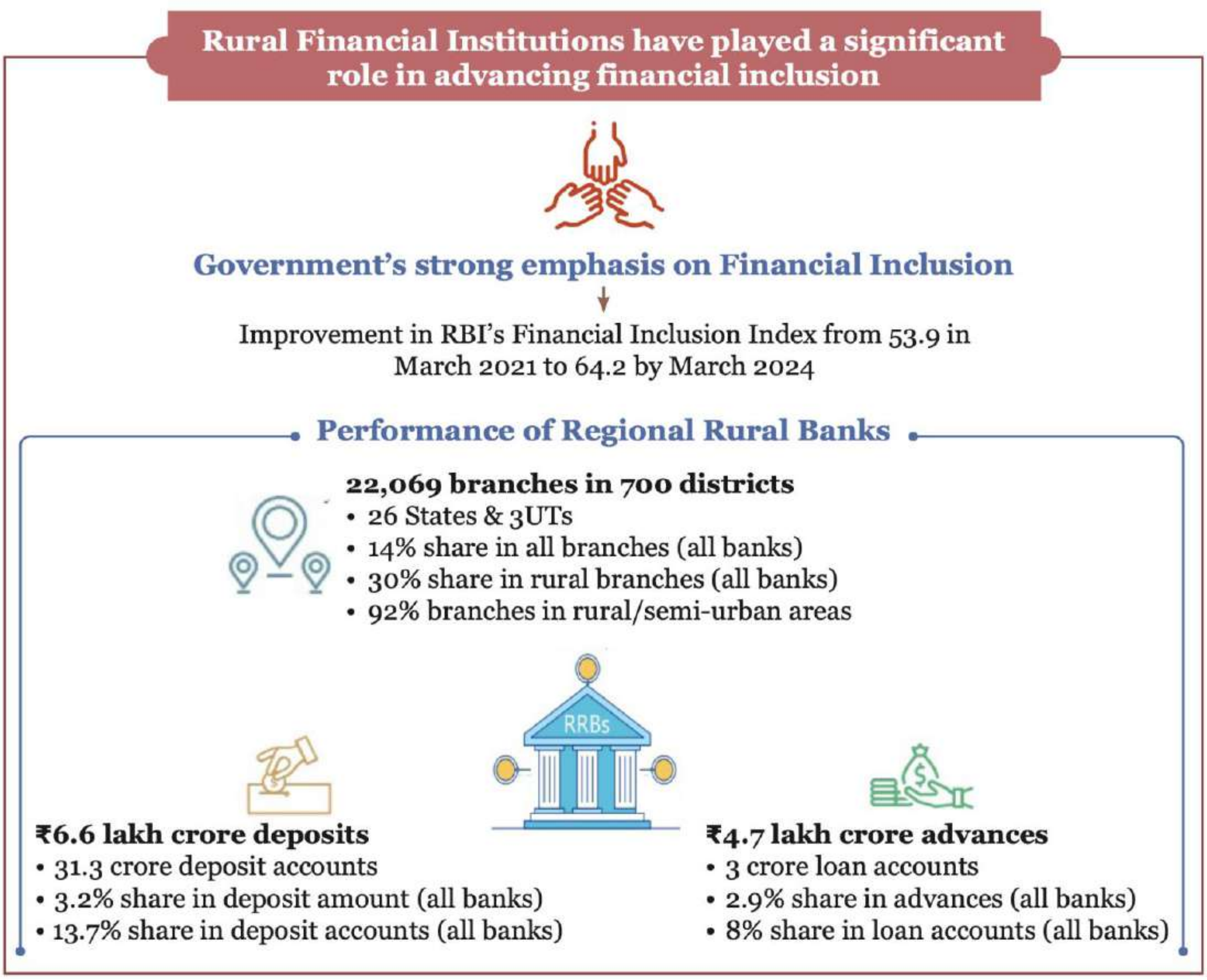


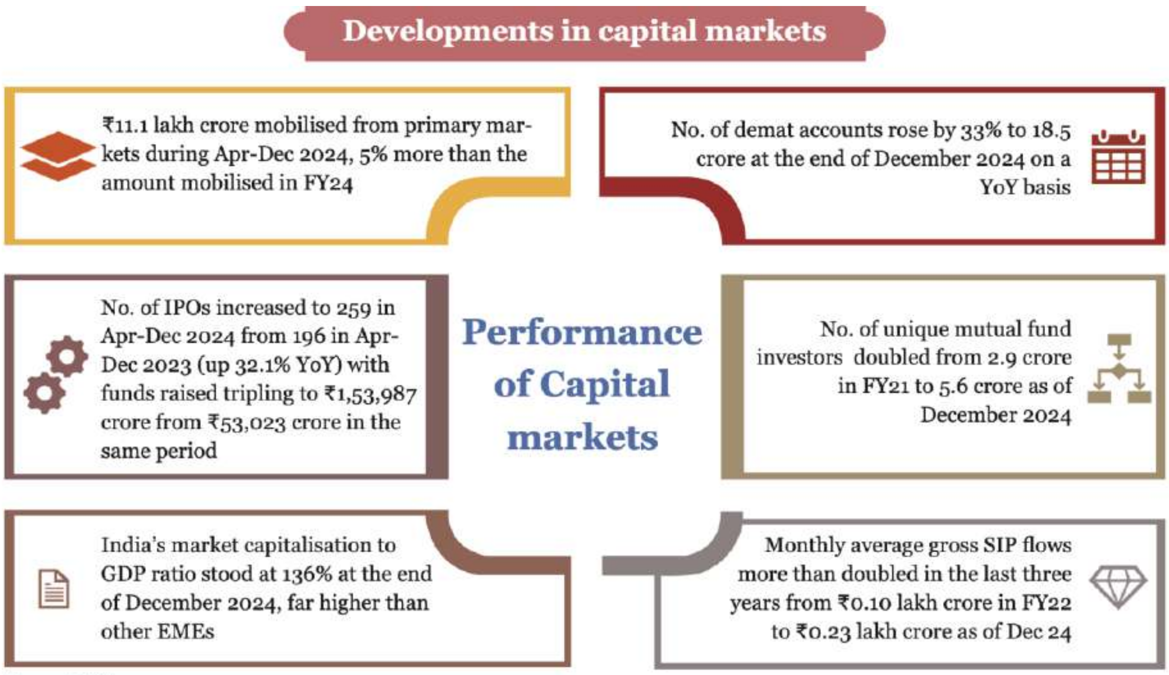
Chart II.7: Cross-country comparison of bank credit to private non-financial sector as per cent of GDP[11]

Source: Bank for International Settlements

7. Rural Financial Intermediation
    a. Rural Financial Institutions (RFIs) such as Regional Rural Banks (RRBs), Cooperative Banks, Small Finance Banks, and Microfinance Institutions (MFIs) continue to play a crucial role in rural credit accessibility.
    b. Expansion of Regional Rural Banks (RRBs):
        i. Number of districts covered increased from 523 (2006) to 696 (2024).
        ii. Total deposit accounts: 31.3 crore; Loan accounts: 3 crore as of March 2024.
        iii. Government recapitalization of ₹10,890 crore (FY22-FY23) has strengthened financial viability and improved credit disbursement.



8. Government Measures to Enhance Credit Availability
    a. RBI Policy Measures:
        i. CRR reduction from 4.5% to 4% (December 2024), injecting ₹1.16 lakh crore liquidity into the banking system.
        ii. Increase in risk weights for unsecured loans, credit cards, and lending to NBFCs to control excessive credit growth.
        iii. Relaxation in foreign deposit norms, including an increase in the interest rate ceiling on FCNR(B) deposits, to attract foreign inflows.
9. Financial Inclusion Progress:
    a. RBI's Financial Inclusion Index rose from 53.9 (March 2021) to 64.2 (March 2024), indicating improved access to financial services.
    b. Expansion of the Unified Lending Interface (ULI) for MSME financing has simplified loan accessibility.
10. Stock Market Performance



Source: SEBI

    a. The Indian stock market has continued its growth trajectory, achieving new all-time highs in 2024, despite geopolitical tensions, election-driven volatility, and currency fluctuations.
    b. Nifty 50 delivered a return of 4.6% (April – December 2024).
    c. India's weight in the MSCI-EM index peaked at 20% in July 2024 before stabilizing at 19.4% in December 2024.
    d. Total market capitalization of BSE-listed stocks crossed the USD 5 trillion mark on May 23, 2024.
    e. BSE market capitalization to GDP ratio rose to 136% in December 2024, significantly higher than:
        i. China (65%)
        ii. Brazil (37%)
        iii. Japan (157%)
        iv. United States (213%)

Table II.1: Market capitalisation to nominal GDP ratio (percentage)

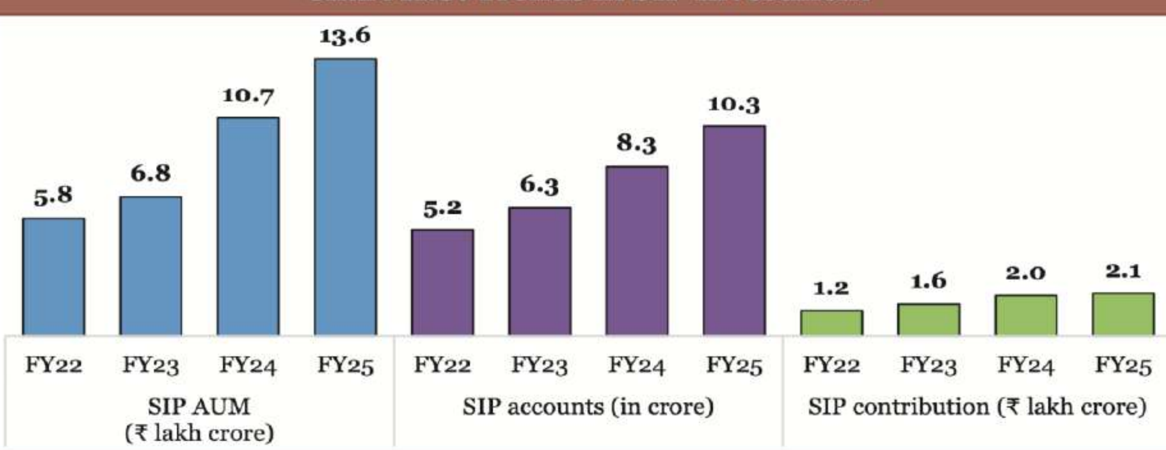
	India	China	Brazil	Japan	South Korea	United Kingdom	United States
Dec-19	77	60	65	121	89	106	158
Dec-20	95	79	68	129	122	92	195
Dec-21	113	80	50	136	127	108	206
Dec-22	105	65	42	126	96	91	157
Dec-23	124	61	44	147	114	71	179
Dec-24*	136	65	37	157	90	84	213

Source: CEIC Database, IMF and WFE
Note: The data has been revised based on the 1st advance estimate of GDP released on 7 January 2025. Projected figures: GDP figures are taken from IMF projections, and market capitalisation is taken as at the end of Q2 of FY25 (i.e., Sep-24 end) for the US, India, Japan, Korea, and China, the UK and Brazil market cap figures are as on the end of December 2024. Market capitalisation was taken country-wise as Brazil (Brasil, Bolsa, Balcão), China (Shanghai and Shenzhen Stock Exchange), All India, Japan (Japan Exchange Group Inc.), South Korea (Korea Exchange), United Kingdom (London Stock Exchange) and USA (NYSE and NASDAQ)

11. Investor Participation and Market Deepening
    a. Rise in retail and household participation in stock markets has driven capital formation and wealth creation.
    b. Demat accounts increased by 33% YoY to 18.5 crore in December 2024.
    c. Unique investors in mutual funds surged to 5.6 crore by December 2024.
    d. Systematic Investment Plan (SIP) accounts crossed 10 crore, with cumulative inflows of ₹10.9 lakh crore.
    e. Mutual funds' assets under management (AUM) rose to ₹66.9 lakh crore as of December 2024, reflecting a 25.3% increase since March 2024.
    f. Retail investors held mutual fund units worth ₹18.6 lakh crore.
    g. The share of mutual funds in the Indian stock market reached a record high of 9.5% in September 2024, up from 8.7% in FY24.

12. Primary Market (IPOs and Bonds)
    a. India became the leading contributor to global IPO listings, accounting for 30% of global IPOs in 2024, up from 17% in 2023.
    b. Total funds raised from primary markets (equity and debt) stood at ₹11.1 lakh crore (April – December 2024), a 5% YoY increase.
    c. Number of IPOs increased by 32.1% to 259 in 2024, with the amount raised nearly tripling from ₹53,023 crore to ₹1,53,987 crore.
    d. Mainboard IPO deal size increased to ₹2,124 crore from ₹814 crore in FY24.
    e. Small and Medium Enterprises (SME) IPOs' average deal size rose to ₹39 crore from ₹31 crore.
    f. Qualified Institutional Placements (QIPs) accounted for 11.4% of total capital raised in FY25.
    g. ₹16,881 crore was raised through rights issues (April – December 2024), compared to ₹6,538 crore in the previous year.
    h. The mutual fund segment presently has more than 10 crore Systematic Investment Plan (SIP) accounts, with cumulative SIP inflows of ₹10.9 lakh crore since inception. Monthly average gross SIP flows have more than doubled in the last three years, from ₹0.10 lakh crore in FY22 to ₹0.23 lakh crore in FY25.

Chart II.8: Trends in SIP Investment



Source: Association of Mutual Fund Industry
Note: Outstanding SIP accounts and SIP AuM are reported at the end of the financial year
SIP contribution pertains to yearly gross contribution through SIP accounts
Data for FY25 is as of December 2024

13. Corporate Bond Market Performance
    a. The domestic corporate bond market remains underdeveloped, accounting for only 18% of GDP, compared to:
        i. 80% in Korea
        ii. 36% in China
    b. Corporate bond issuances totaled ₹7.3 lakh crore (April – December 2024), with a monthly average of ₹0.8 lakh crore.
    c. Private placements dominated, making up 99.1% of total bond market resources.
    d. High-rated bonds (AAA, AA+, AA) accounted for 97% of corporate bond issuances, limiting access for lower-rated issuers.
    e. Public placements of corporate bonds were ₹19,000 crore, while private placements stood at ₹8,38,000 crore in FY24.
    f. ₹16,456 crore was raised by Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) in 2024.

g. Financial services dominated corporate bond issuances, comprising nearly 60% of total issuances.

14. Challenges in the Corporate Bond Market
    a. Retail investor participation remains low due to high entry costs and lack of liquidity.
    b. Insurance and pension funds are not allowed to invest in bonds rated below AA, limiting funding options for smaller firms.
    c. Provident funds cannot invest in corporate bonds for more than three years, restricting liquidity.
    d. Private companies' debt instruments remain ineligible for investment by insurance funds.

15. Risks and Market Volatility
    a. Indian stock markets showed resilience amid global uncertainties but remain susceptible to foreign capital flows and US market trends.
    b. In October 2024, despite Foreign Portfolio Investor (FPI) outflows of USD 11 billion, Nifty 50 corrected by only 6.2%, supported by strong domestic investor participation.
    c. The asymmetric relationship between Nifty 50 and S&P 500 indicates that Indian markets are highly sensitive to US market movements.
    d. Historical data suggests that in 22 instances when S&P 500 fell more than 10%, Nifty 50 declined in 21 cases, averaging a 10.7% drop.
    e. India's stock market valuation, while strong, faces risks from potential US corrections and changing global liquidity conditions.

16. Growth of GIFT City as a Financial Hub
    a. GIFT-IFSC (Gujarat International Finance Tec-City) has emerged as a key international financial hub, attracting over 720 financial institutions.
    b. India’s International Financial Services Centres Authority (IFSCA) aims to make GIFT City a leading global financial hub by 2047.
    c. GIFT IFSC improved its global ranking by five places to 52nd in the ‘Global Financial Centres Index 36.’
    d. GIFT City’s FinTech ranking also improved, climbing four places to 45th.
    e. Its regulatory framework, allowing unrestricted currency convertibility and alignment with global financial norms, has made it attractive for foreign firms.

17. Insurance Sector Growth
    a. India’s insurance industry experienced steady expansion, driven by both life and non-life segments.
    b. Total insurance premiums grew by 7.7% in FY24, reaching ₹11.2 lakh crore.

18. Life Insurance Segment:
    a. Life insurance penetration (premiums as % of GDP) was 3.2% in FY24, higher than China (2.4%) and Brazil (1.8%) but lower than the UK (8.2%) and South Korea (6.4%).
    b. New business premiums in life insurance rose by 9.1% YoY, reflecting increased awareness and demand for long-term financial security.
    c. LIC continues to dominate with over 59% market share in first-year premium collection.

19. Non-Life Insurance Segment:
    a. Non-life insurance penetration stood at 1.0% of GDP, significantly lower than developed economies.
    b. Health insurance premiums grew by 13.2% YoY, reflecting increased demand for medical coverage post-COVID-19.
    c. Motor insurance, which accounts for 38% of non-life premiums, grew by 10.5% in FY24.

20. Pension Sector Growth
    a. India’s pension sector witnessed rapid expansion as more individuals sought post-retirement financial security.
    b. Total pension subscribers increased by 16% YoY as of September 2024.
    c. Growth in pension funds was driven by two key schemes:
        d. Employees ’Provident Fund (EPF):
            i. Subscribers increased by 8.2% YoY.
            ii. Total corpus under EPF exceeded ₹18 lakh crore.

   e. National Pension System (NPS):
      i. Total AUM under NPS surpassed ₹10.8 lakh crore.
      ii. State Government employee participation grew by 14.6% YoY.

21. Comparison with Global Pension Systems:
    a. India's pension assets to GDP ratio (12%) is significantly lower than the US (131%), UK (108%), and Australia (135%).
    b. Need for further pension reforms to improve coverage and returns.

22. Insolvency and Bankruptcy Code (IBC) Performance
    a. India's IBC framework continued to play a vital role in improving credit discipline and debt resolution.

23. Key Performance Indicators (Till September 2024):
    a. Total resolved cases: 1,068 corporate insolvency cases.
    b. Total amount realized: ₹3.6 lakh crore.
    c. Recovery as % of liquidation value: 161% (i.e., recovery is higher than the value of assets under liquidation).
    d. Recovery as % of fair value of assets: 86.1%.

24. Sectoral Performance in IBC Resolutions:
    a. Manufacturing and real estate sectors accounted for over 50% of cases resolved under IBC.
    b. Financial creditors realized an average of 38% of their claims in FY24, higher than 32% in FY23.

25. Challenges in IBC Implementation:
    a. Average resolution time: 582 days (target: 180 days).
    b. Backlog of cases: 2,593 pending for admission, 4,723 cases under resolution.

26. Comparison with Global Insolvency Systems:
    a. India's recovery rate (34%) is lower than the US (81%), UK (64%), and China (46%).
    b. Need for process simplification to improve efficiency.

Chapter 3 – External Sector Getting Right FDI

Introduction

India's external sector displayed resilience in FY25 amid global uncertainties, including geopolitical conflicts, supply chain disruptions, and economic policy unpredictability.
Global policy unpredictability in 2024 (due to elections in over half the world's economies) further contributed to economic instability.
According to the IMF, a 1 standard deviation increase in uncertainty reduces global output growth by 0.4% to 1.3%.
Uncertainty raises risk premia, financing costs, and borrower default risks, impacting trade and capital flows.
Key indices measuring global trade and economic uncertainty:

- Geopolitical Risk (GPR) Index – captures geopolitical conflict-driven risks.
- Trade Policy Uncertainty (TPU) Index – measures trade policy-related uncertainties.
- Global Economic Policy Uncertainty (GEPU) Index – tracks global economic policy instability.

As of November 2024, GEPU & TPU indices remain high, reflecting ongoing global trade policy risks.
India's policy uncertainty index, developed by the Reserve Bank of India (RBI), uses Google Trends data to monitor fiscal, monetary, and trade policy uncertainty.

Global Trade Dynamics

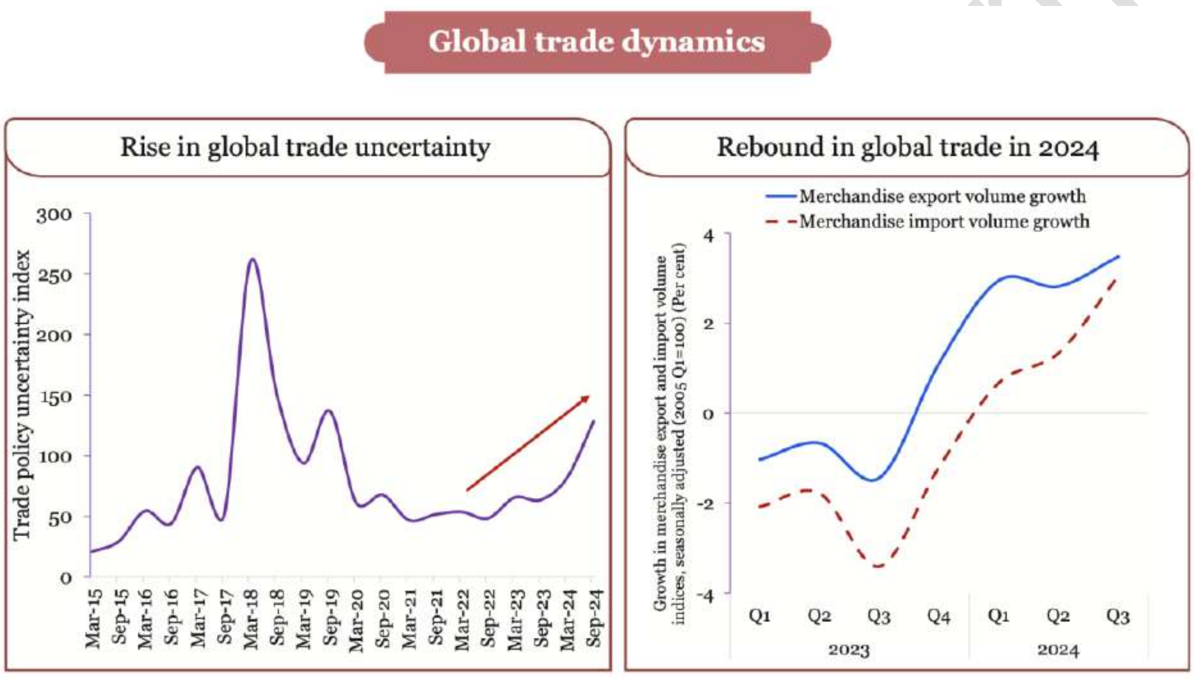
1. Rising Global Trade Uncertainty & Supply Chain Disruptions
   a. Key global disruptions affecting trade:
      i. Red Sea crisis (since Nov 2023) – Increased shipping costs and delivery delays for 40% of Asia-Europe trade.

ii. Strait of Hormuz tensions – Disrupted 21% of global petroleum trade, impacting energy prices.
iii. Panama Canal drought – Affected 5% of global maritime trade, causing supply chain delays.

2. Trade realignments and shifting supply chains:
    a. Friend-shoring – Preference for trade with geopolitical allies.
    b. Nearshoring – Relocation of supply chains closer to key consumer markets.
    c. Key impact: China and Russia's trade dependency on the US & EU declined, while Vietnam and Russia grew more reliant on China.

Global Trade Performance in 2024

1. Global trade crossed USD 33 trillion in 2024, supported by:
    a. 3.5% YoY growth in global merchandise exports.
    b. 7% YoY growth in services trade, led by IT and business services.
2. Developed economies outperformed emerging markets in Q3 2024, while East Asian trade growth slowed.



3. Increasing Non-Tariff Measures (NTMs)
    a. Over 26,000 new trade & investment restrictions imposed globally (2020-2024).
    b. Major NTMs impacting global trade:
    c. Technical Barriers to Trade (TBTs): Affect 67.1% of global trade.
    d. Export-related measures: Impact 31.2% of global trade.
    e. Climate-driven NTMs (CBAM & EUDR) impact 26.4% of global trade (USD 6.5 trillion).
    f. India's exports to the EU face compliance challenges under CBAM and EUDR.

India's Trade Performance

1. Total exports (merchandise + services) grew by 6% YoY (Apr-Dec FY25).
2. Services sector exports grew by 11.6% during the same period.
3. Trade deficit widened from USD 69.7 billion (Apr-Dec 2023) to USD 79.5 billion (Apr-Dec 2024).
4. Sector-wise export growth (Apr-Dec 2024, YoY basis):
    a. Electronic goods: +28.6%
    b. Engineering goods: +9.9%
    c. Pharmaceuticals: +6.4%
    d. Textiles: +7.6%
5. Textile Exports: Challenges & Opportunities
    a. India's 2023 textile exports: USD 34 billion (6th largest globally).
    b. Key markets: EU & US (66% of apparel exports).

c. Challenges:
   i. Fragmented supply chains lead to higher costs.
   ii. Tariff disadvantages: US imposes 11.3% tariff on Indian silk scarves, while Korea faces 0% tariff.
   iii. Shift in global demand towards synthetic (MMF) fibers (77% of global fiber consumption is MMF-based).

d. Government Support Initiatives:
   i. PLI Scheme (₹10,683 crore) for MMF & technical textiles.
   ii. PM-MITRA parks for textile sector vertical integration.
   iii. RoSCTL scheme extended till March 2026 to support export competitiveness.

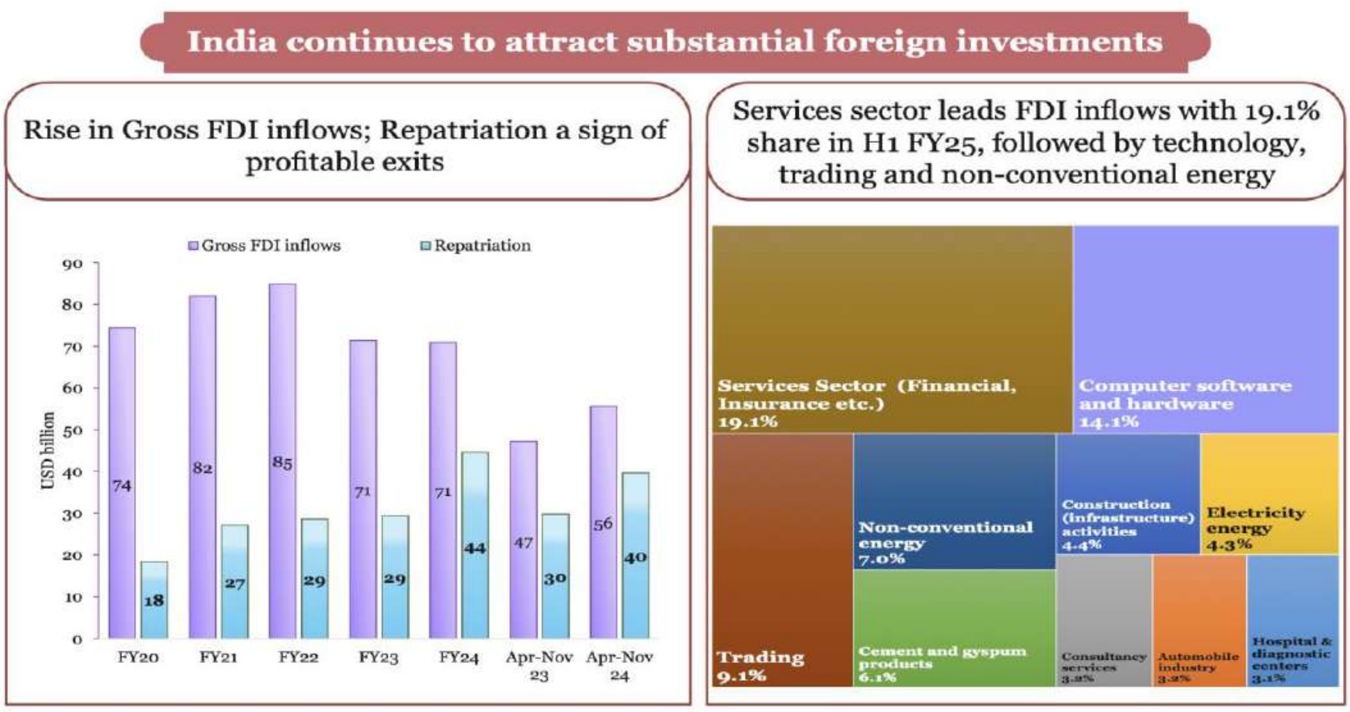
6. Export Diversification: Entry into New Markets
   a. India expanded into new global markets in FY25, including:
      i. Optical items: Exported to 14 new countries (e.g., Vietnam, Qatar).
      ii. Cranes & Lifts: Exported to 12 new markets (e.g., Taiwan, Lithuania).
      iii. Medical instruments: Exported to 9 new markets.

7. India's Services Trade
   a. India's services exports reached USD 341 billion (Apr-Dec FY25), growing 11.6% YoY.
   b. Net services receipts increased to USD 131.3 billion (Apr-Dec FY25).
   c. India's global market share in services exports doubled from 1.9% (2005) to 4.3% (2023).

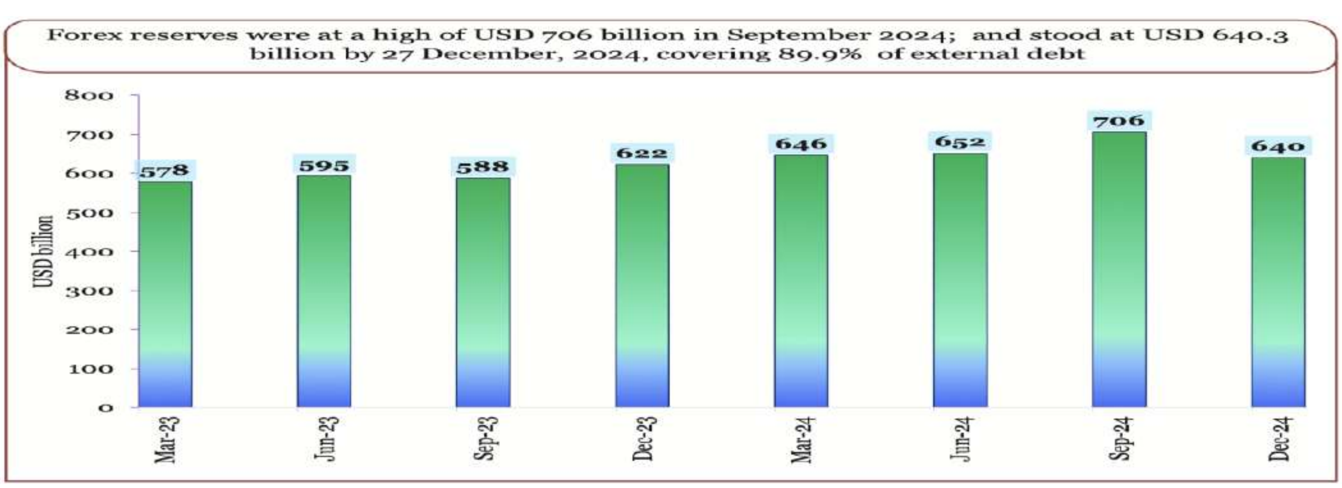
   d. Sector-wise global rankings:

i. Telecommunications, Computer & IT Services: 10.2% global market share, ranking 2nd globally (UNCTAD).
ii. Other Business Services: 7.2% global market share, ranking 3rd globally.

8. E-Commerce Exports
    a. India’s e-commerce exports (FY23): USD 4-5 billion.
    b. Projected growth to USD 200-300 billion by 2030.
    c. Key initiatives:
        i. E-Commerce Export Hubs (ECEH) for MSMEs.
        ii. GST refunds & zero-rated supplies for exporters.
        iii. Integration with ONDC & GeM platforms to boost cross-border trade.
9. India’s Balance of Payments & Capital Flows
    a. Current Account Deficit (CAD)
    b. India’s CAD stood at 1.2% of GDP in Q2 FY25, supported by:
    c. Rising net services receipts.
    d. Increase in private transfer receipts (remittances).
10. Foreign Direct Investment (FDI)
    a. Gross FDI inflows surged in FY25:
    b. Increased from USD 47.2 billion (Apr-Nov FY24) to USD 55.6 billion (Apr-Nov FY25), a YoY growth of 17.9%.



11. Foreign Exchange Reserves & External Debt
    a. India’s FOREX reserves (Dec 2024): USD 640.3 billion.
    b. Covers 10.9 months of imports.
    c. Sufficient to cover 90% of external debt.
12. India’s external debt remained stable.
    a. External debt-to-GDP ratio stood at 19.4% (Sep 2024).



Chapter 4 – Price and Inflation: Understanding the Dynamics

Introduction

Inflation is a key economic indicator, affecting consumers, businesses, and government policy.
Global inflation peaked at 8.7% in 2022 but fell to 5.7% in 2024 due to policy tightening.
In India, retail inflation declined from 5.4% (FY24) to 4.9% (FY25, April-December) despite food price fluctuations.
The Consumer Food Price Index (CFPI) plays a major role in inflation, as food has a large weight in the Consumer Price Index (CPI).

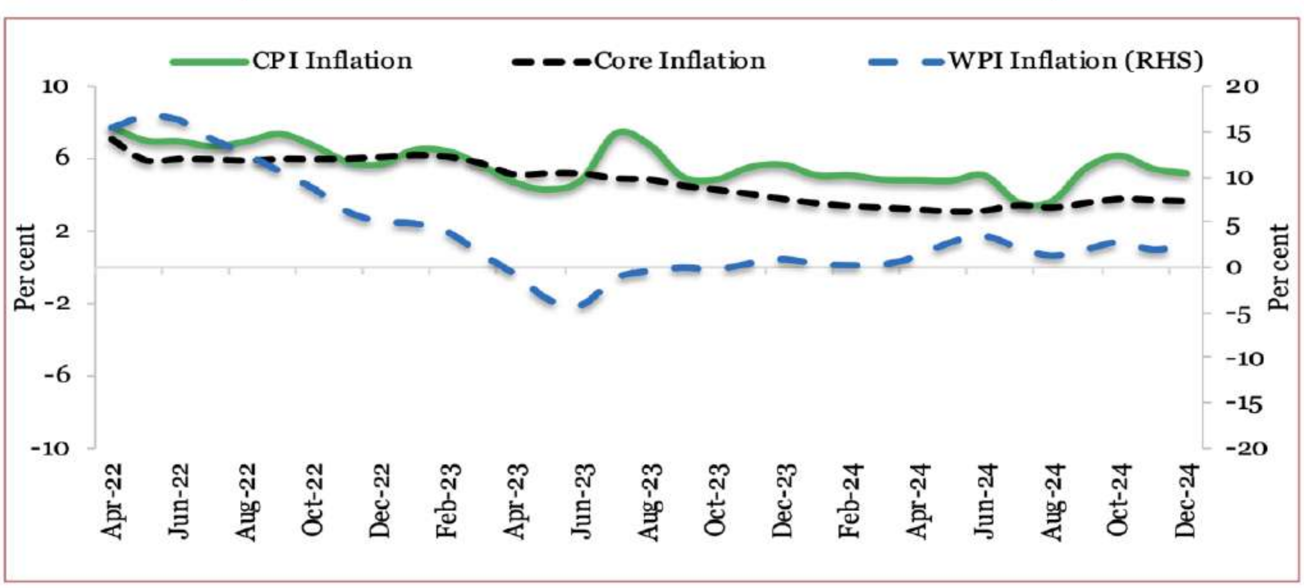
Global Inflation

1. Global Resilience Amid Synchronized Monetary Policy Tightening
   a. Despite aggressive interest rate hikes by central banks, the global economy remained resilient, preventing a sharp downturn.
   b. Headline inflation declined steadily across major economies due to monetary tightening, fiscal measures, and supply chain stabilization.
2. Decline in Core Inflation
   a. Core inflation, which excludes volatile food and energy prices, also fell across most economies.
   b. The drop in international commodity prices contributed significantly to reducing inflationary pressures.
3. Global Food Inflation Trends
   a. Food economies like Brazil, India, and China, food inflation remained high due to local supply disruptions.

Domestic Inflation

4. Softening Core Inflation Cools Headline Inflation
   i. inflation, reducing consumer spending burdens.
   b. Deflationary trends in wholesale price inflation (-0.7% in FY24).

Softening core inflation cools headline inflation



Source: Consumer Price Indices released by CSO, MoSPI

5. Food Inflation Driven by a Few Key Items
   a. Despite a decline in global food inflation, India's food inflation remained elevated due to supply chain disruptions and extreme weather.
   b. A small number of food items accounted for a large share of inflation:
   c. Vegetables & pulses (8.42% weight in CPI) contributed 32.3% to total inflation in FY25.
   d. Excluding vegetables and pulses, food inflation was 4.3% (4.1 percentage points lower than actual food inflation).
   e. Excluding only tomato, onion, and potato (TOP items), food inflation was 6.5% (1.9 percentage points lower than actual inflation).

6. Extreme Weather Impacts Vegetable Production & Prices
    a. Vegetable prices remained volatile due to climate disruptions such as heatwaves, unseasonal rains, and floods.
    b. India experienced heatwaves on 18% of days between 2022-2024, up from 5% in 2020-21, significantly affecting crop yields.

7. Trends in Onion and Tomato Production & Prices
    a. Onion:
        i. 70% of India's onion production occurs in the Rabi season, influencing prices the following year.
        ii. Production declined in 2022-23 and 2023-24, leading to inflation in FY24 & FY25.
    b. Tomato:
        i. Highly perishable crop with short shelf life (1-2 weeks), causing seasonal supply fluctuations.
        ii. Production concentrated in a few states (Madhya Pradesh, Andhra Pradesh, Karnataka, Gujarat, Odisha), making it vulnerable to climate shocks.
        iii. 65% of tomato production occurs in the Rabi season, leading to cyclical shortages and price volatility.

8. Trends in Production and Inflation of Pulses (Tur Dal)
    a. Tur production declined by 13.6% in 2022-23 and 10.8% in 2023-24, leading to high price pressures.
    b. Strong negative correlation (-0.8) between production and inflation, meaning low production leads to higher inflation the following year.
    c. India imported 7.7 lakh tonnes of Tur in FY24 from Mozambique, Tanzania, Malawi, and Myanmar to meet domestic demand.

Government Measures to Control Food Inflation

1. Cereals:
    a. Stock limits imposed on wheat (24 June 2024 – 31 March 2025).
    b. Open Market Sale Scheme (OMSS): Government released wheat and rice from its central reserves.
    c. Subsidized sale under Bharat brand to curb inflation in essential food grains.
2. Pulses:
    a. Chana dal, moong dal, and masur dal were sold under Bharat brand at subsidized rates.
    b. Stock limits on tur and desi chana (21 June 2024 – 30 September 2024) to prevent hoarding.
    c. Duty-free imports of tur, urad, and masur dal were extended until 31 March 2025.
    d. Yellow peas were allowed for duty-free imports until 20 February 2025 to stabilize pulse prices.
3. Vegetables:
    a. Onion Buffer Stock: Government procured 4.7 lakh MT of Rabi onion under the Price Stabilization Fund.
    b. Export Duty on Onion: Imposed 20% export duty since 13 September 2024 to maintain domestic supply.
4. Subsidized Onion & Tomato Sales:
    a. Onion sold at ₹35/kg (September-December 2024).
    b. Tomato sold at ₹65/kg (October 2024).

Outlook and Long-term policy Recommendations

1. Inflation Projections
    a. RBI: Headline inflation projected at 4.8% in FY25 and 4.2% in FY26 (assuming normal monsoons).
    b. IMF: Inflation forecast at 4.4% in FY25 and 4.1% in FY26.
2. Commodity Price Trends
    a. World Bank projects a 5.1% decline in commodity prices (2025) and 1.7% (2026).
    b. Oil prices expected to fall, while natural gas and agricultural commodities remain stable.
3. Long-Term Policy Recommendations
    a. Address Pulses & Oilseeds Deficit:
    b. Develop climate-resilient crop varieties to reduce supply shocks.
    c. Expand pulses cultivation in rice-fallow regions.
    d. Enhance Supply Chain & Storage Capacity:
    e. Strengthen buffer stocks for essential food items.
    f. Improve cold storage and logistics to prevent post-harvest losses.
    g. Develop High-Frequency Price Monitoring Systems:
    h. Real-time tracking of inflation trends.
    i. Use data-driven policy interventions for better price stability.

Chapter 5 – Medium Term Outlook: Deregulation Drive Growth

Introduction

India is undergoing a significant economic transformation driven by structural reforms, globalization trends, and deregulation efforts. With ambitious growth targets and a rapidly evolving international trade environment, India must focus on reducing regulatory burdens, enhancing investment efficiency, and leveraging domestic economic strengths to sustain its growth trajectory.

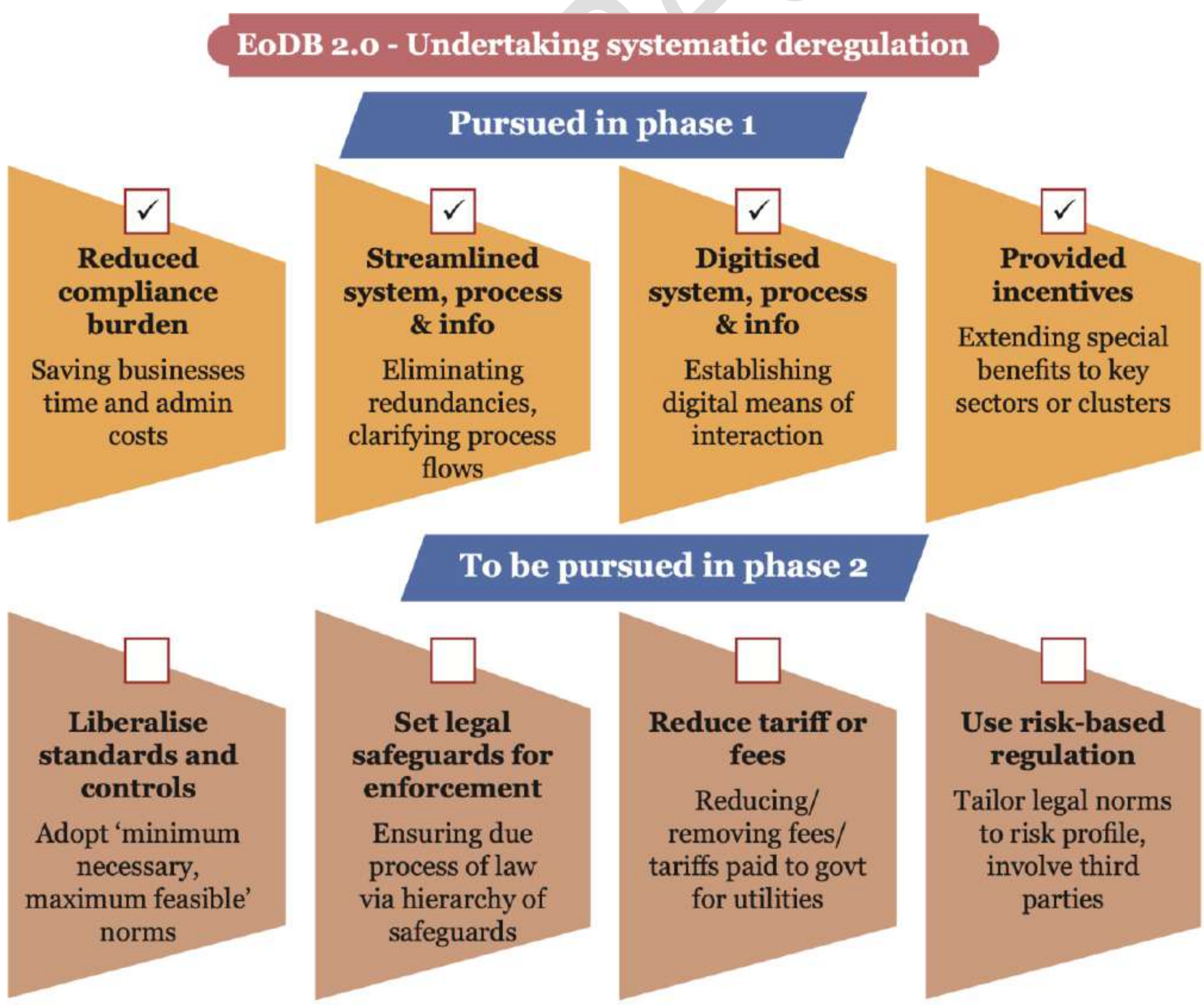
India's Medium-Term Outlook

1. Growth Aspirations and Challenges
    a. India aims to sustain an 8% growth rate at constant prices to achieve its vision of Viksit Bharat by 2047.
    b. Global factors, including geo-political uncertainties and economic shifts, will influence India's trajectory.
2. IMF Projections and Economic Trends
    a. According to the World Economic Outlook (WEO) by IMF, India's economy is projected to:
    b. Reach USD 5 trillion by FY28 and USD 6.3 trillion by FY30.
    c. Grow at an annual nominal rate of 10.2% in USD terms from FY25 to FY30.
    d. Experience mild rupee depreciation of 0.5% per annum, significantly lower than the 3.3% annual depreciation seen in the last three decades.
    e. Maintain a current account deficit of around 2.2% of GDP by FY30.
3. Government Growth Estimates
    a. The Ministry of Statistics and Programme Implementation projects:
    b. 6.4% growth at constant prices in FY25.
    c. Growth between 6.3% and 6.8% for FY26, aligning with IMF projections of 6.5% average growth between FY26 and FY30.

Geo-Economic Fragmentation – This Time May Be Different

1. The Era of Hyper-Globalization
    a. Since the 1980s, globalization fueled economic expansion:
    b. Global trade as a share of GDP rose from 39% in 1980 to 60% in 2012.
    c. FDI inflows surged from USD 54 billion in 1980 to USD 1.5 trillion in 2019.
    d. Extreme poverty fell from 42% (1981) to 8.4% (2019).
    e. Urbanization increased from 39% (1980) to 57% (2022).
    f. Internet penetration grew to 5.3 billion users (66% of the world population).
2. Fragmentation and Trade Barriers
    a. Rising protectionism and strategic realignments are reversing globalization trends:
    b. 169 new trade-restrictive measures introduced between October 2023 and October 2024, covering USD 887.7 billion in trade.
    c. Global trade fragmentation now poses higher risks than during the Cold War due to the increased integration of global economies (trade-to-GDP ratio: 16% in 1980, 45% today).
    d. The IMF estimates trade fragmentation could lead to global output losses of up to 7%, and 8-12% if technological decoupling is factored in.
3. The Elephant and the Dragon in the Room - Structural Shifts in Global Trade
    a. Over 24,000 trade and investment restrictions were imposed globally between 2020-24, slowing global trade growth and increasing economic uncertainties.
    b. China's manufacturing dominance is reshaping the global economic order:
    c. China's share of global manufacturing is projected to reach 45% by 2030, up from 6% in 2000.
    d. China is the leading producer of electric vehicles, critical minerals (Copper, Lithium, Nickel, Cobalt, Graphite), and clean energy equipment.
    e. This dependence creates supply chain vulnerabilities for the rest of the world.
4. Climate Transition, China, and Geopolitics
    a. China, the US, and the EU collectively produce over 50% of global greenhouse gas emissions.
    b. Global renewable energy and electric vehicle investments depend on critical mineral trade, mainly dominated by China.
    c. China supplies 80%+ of solar PV components and nearly 80% of global battery production.
    d. India's Panchamrit strategy aims to boost renewable energy and reduce coal dependency by 2030.
    e. Key Statistics
        i. India currently imports 75% of lithium-ion batteries from China.
        ii. China invested USD 546 billion in 2022 towards solar, wind, EVs, and battery technology, compared to USD 321 billion by the US and EU combined.
        iii. The IMF estimates that supply chain disruptions in critical minerals could reduce global renewable energy investments by 30% by 2030.
5. Implications for India's Growth Prospects
    a. India aims for 8% annual GDP growth with an investment rate of 35% of GDP (currently 31%).

6. Key reforms in the last decade include:
    a. GST Implementation – A unified tax system improving ease of doing business.
    b. Insolvency and Bankruptcy Code (IBC) – Faster resolution of NPAs.
    c. Real Estate Regulation Act (RERA) – Increased transparency in real estate.
    d. Digital Public Infrastructure (UPI, Aadhaar, DBT) – Enhanced financial inclusion.
    e. Challenges remain in MSME growth, which is hindered by regulatory burdens, limiting employment and productivity.
7. Reinvigorating Growth - Enhancing Economic Freedom through Deregulation
    a. Economic policies globally are becoming inward-looking.
    b. India must continue attracting investments and boosting exports while relying on domestic growth drivers.
    c. The focus must shift towards deregulation to enhance investment efficiency rather than just increasing the investment rate.
8. Key Deregulation Priorities
    a. MSME Growth: Compliance costs affect small businesses disproportionately.
    b. SME: Focus of reforms and economic policy must now be on systematic deregulation under Ease of Doing Business 2.0 and creation of a viable Mittelstand, i.e. India's SME sector.
    c. State-Level Reforms:
    d. Haryana & Tamil Nadu relaxed building regulations.
    e. Punjab revised labour & fire safety norms.
    f. Andhra Pradesh, Karnataka & Haryana relaxed women's night shift restrictions.
9. Labour Laws:
    a. Factory regulations discourage scaling up operations.
    b. Current overtime payment laws reduce formal employment opportunities.
10. Policy Recommendations for Deregulation
    a. Phase 2 of EoDB (Ease of Doing Business)



11. Global Lessons on Deregulation
    a. USA: The Office of Management & Budget assesses cost-effectiveness of regulations.
    b. UK: One-in, two-out rule – removing two regulations for every new one introduced.
    c. New Zealand: Ministry of Regulation actively reviews laws for compliance ease.

Chapter 6 – Investment and Infrastructure: Keeping it Going

Introduction

Infrastructure is central to India's economic growth, requiring large-scale investment over the next decade. Capital expenditure (capex) on infrastructure has grown significantly, with Union Government capex increasing at a trend rate of 38.8% per year (FY20-FY24).

Key initiatives supporting infrastructure growth:

- National Infrastructure Pipeline (NIP):
    - ₹111 lakh crore investment (FY20-FY25).
    - 9,766 projects across 37 sub-sectors.
- National Monetisation Pipeline (NMP):
    - ₹6.0 lakh crore target for FY22-FY25 (monetizing public assets).
    - ₹3.86 lakh crore completed (FY22-FY24) out of ₹4.30 lakh crore goal.
    - FY25 target: ₹1.91 lakh crore.

Challenges:

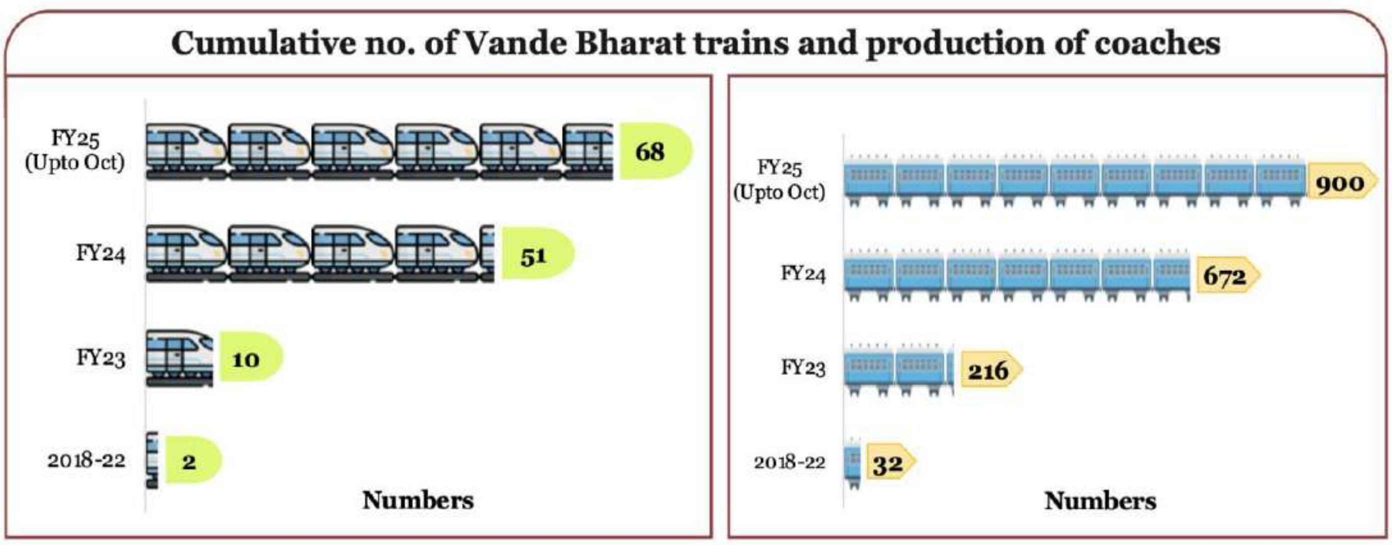
- Public investment alone is not enough; private sector participation is needed.
- Sustainable construction is a growing focus area.

Infrastructure Spending: Post-Election Recovery

1. Slowdown in Q1FY25 due to:
    a. Election Model Code of Conduct delaying approvals.
    b. Extended monsoon season affecting project execution.
2. July-November 2024 Capex Recovery:
    a. Infrastructure ministries utilized 60% of budgeted capex.
    b. Faster spending compared to FY20 (previous election year).

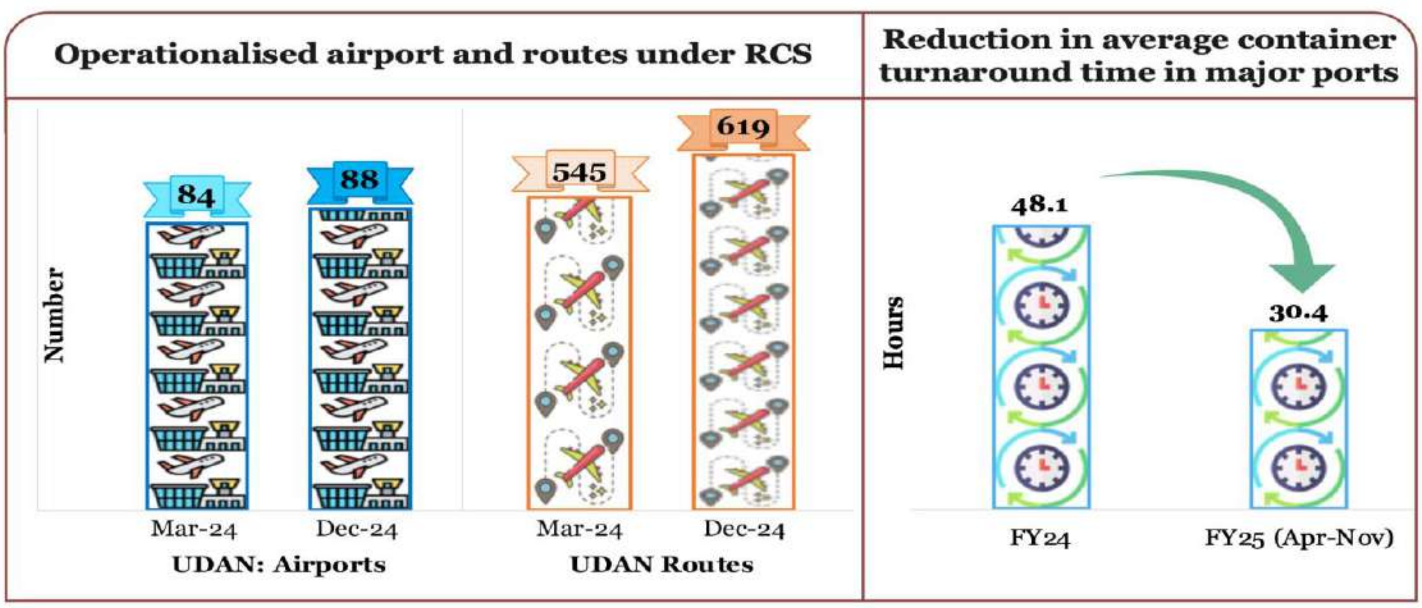
Physical Connectivity: Rail, Roads, Aviation, Ports

1. Railways
    a. Network Expansion & Rolling Stock (Apr-Oct 2024):
    b. 17 new pairs of Vande Bharat trains added.
    c. 228 Vande Bharat coaches manufactured.
2. Key Projects & Investments:
    a. Gati Shakti Cargo Terminals: 91 terminals completed, 234 approved.
    b. Mumbai-Ahmedabad Bullet Train (508 km):
    c. ₹1.08 lakh crore project cost.
    d. 47.17% progress achieved (₹67,486 crore spent as of Oct 2024).
3. Dedicated Freight Corridors (DFCs):
4. 2,741 km (96.4%) completed (out of 2,843 km planned) (Nov 2024).



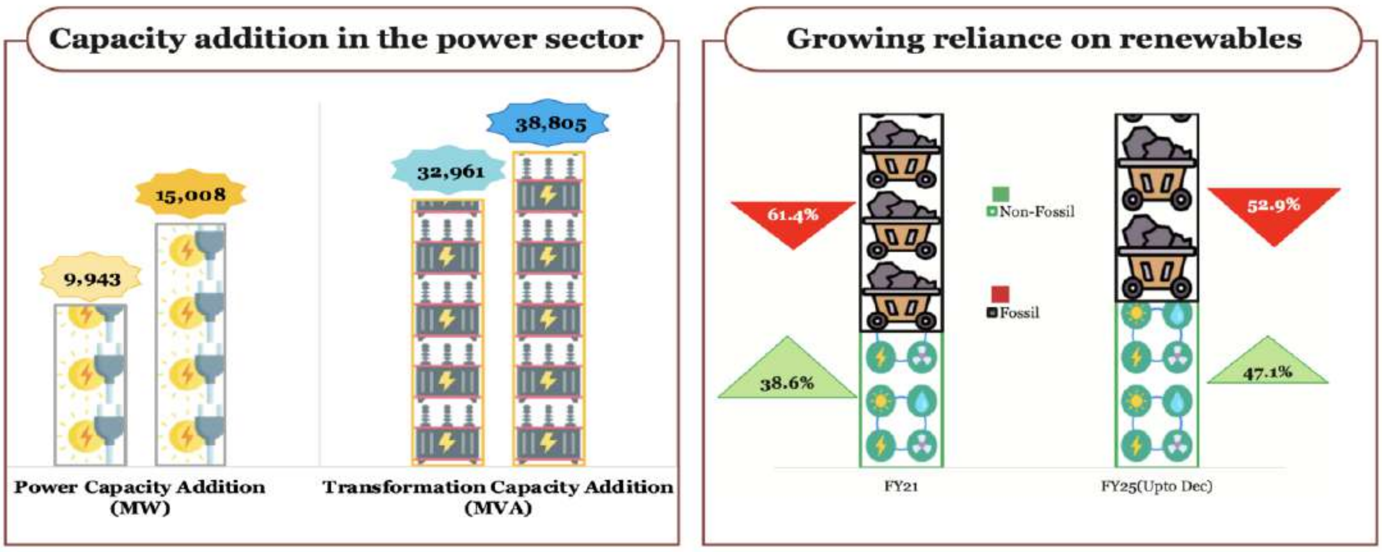
Source: Ministry of Railways

5. Road Transport
    a. India’s road network: 63.4 lakh km, including 1.46 lakh km of National Highways (NHs).
    b. NH construction (Apr-Dec 2024):
    c. 5,853 km built in FY25 (vs 6,215 km in FY24).
    d. Key Highway Projects (2014-2024):
        i. NH length increased from 91,287 km → 1.46 lakh km.
        ii. Bharatmala Pariyojana: 18,926 km completed.
        iii. Char Dham Mahamarg: 620 km completed (out of 825 km planned).
6. Civil Aviation
    a. Total Capex (FY20-FY25): ₹91,000 crore, 91% completed (Nov 2024).
    b. UDAN Scheme Progress:
    c. 619 regional air routes operational.
    d. 88 airports, 2 water aerodromes, 13 heliports connected.
    e. Airport Cargo Capacity (FY24): 8.0 million MT.
7. Ports & Shipping
    a. Port Capacity Addition (FY25 Apr-Nov): 21 MTPA.
    b. Container Turnaround Time: Reduced from 48.1 hours (FY24) → 30.4 hours (FY25, Apr-Nov).
    c. Key Port Development Projects:
    d. Vadhavan Mega Port: ₹76,000 crore investment.
    e. Tuticorin International Terminal:
    f. 6 lakh TEU capacity, can handle 10,000 TEU vessels.
    g. Chabahar Port (Iran):
    h. 43% increase in vessel traffic.
    i. 34% rise in container traffic (FY24).



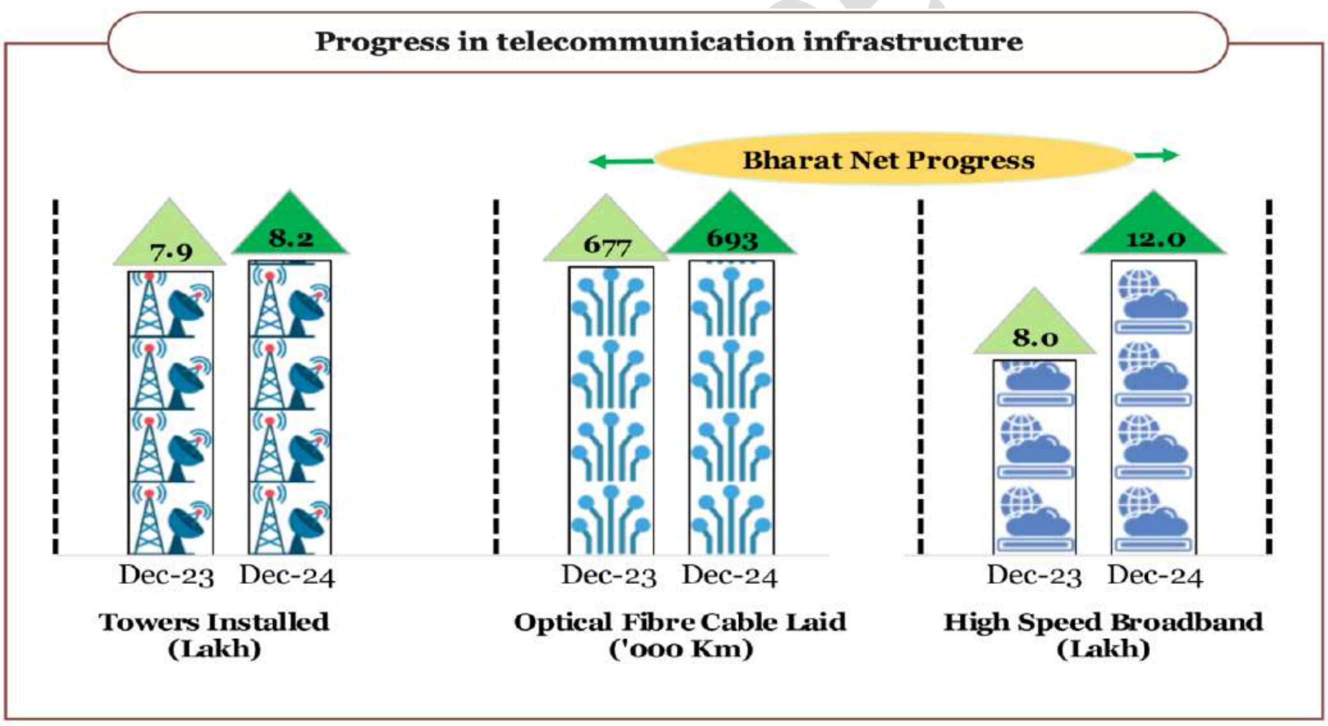
Source: Airport Authority of India Airport and JV/PPP airports, Ministry of Ports, Shipping and Waterways

8. Power Sector: Expanding Energy Access
    a. Total Installed Capacity (Nov 2024): 456.7 GW (7.2% YoY growth).
    b. Renewable Energy Share: 209.4 GW (47% of total capacity).
    c. Breakdown:
        i. Solar: 97.8 GW
        ii. Wind: 48.2 GW
        iii. Hydro: 52.1 GW
        iv. Bioenergy: 11.3 GW
9. Rural Electrification Progress:
    a. Saubhagya Scheme: 2.9 crore households electrified.
    b. Deen Dayal Upadhyaya Gram Jyoti Yojana: 18,374 villages electrified.
    c. Daily Power Supply:
    d. Urban: 23.4 hours (FY24) vs 22.1 hours (FY14).
10. Rural: 21.9 hours (FY24) vs 12.5 hours (FY14).



Source: Executive Summary Report, Central Electricity Authority

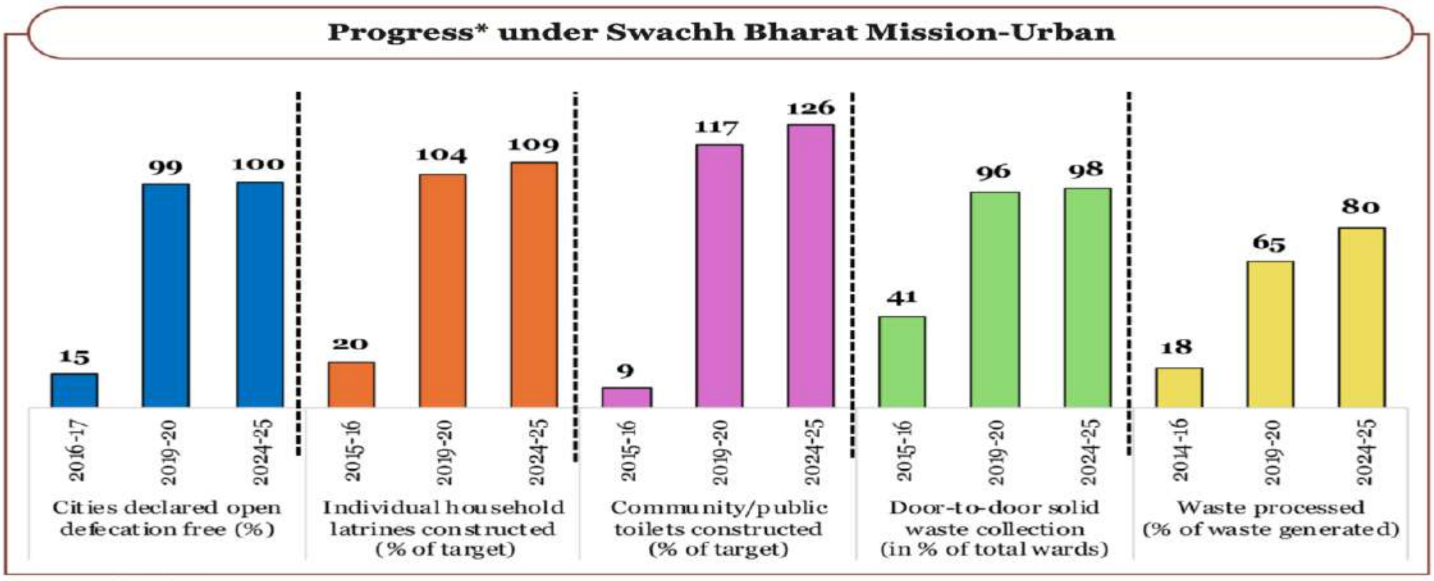
11. Digital Connectivity: Expanding Telecom & IT Infrastructure
    a. Telecom & Internet Expansion
    b. 5G Rollout (Oct 2024): Available in 779 out of 783 districts.
    c. BharatNet Progress:
        i. 6.92 lakh km Optical Fiber Cable laid.
        ii. 2.14 lakh Gram Panchayats connected.



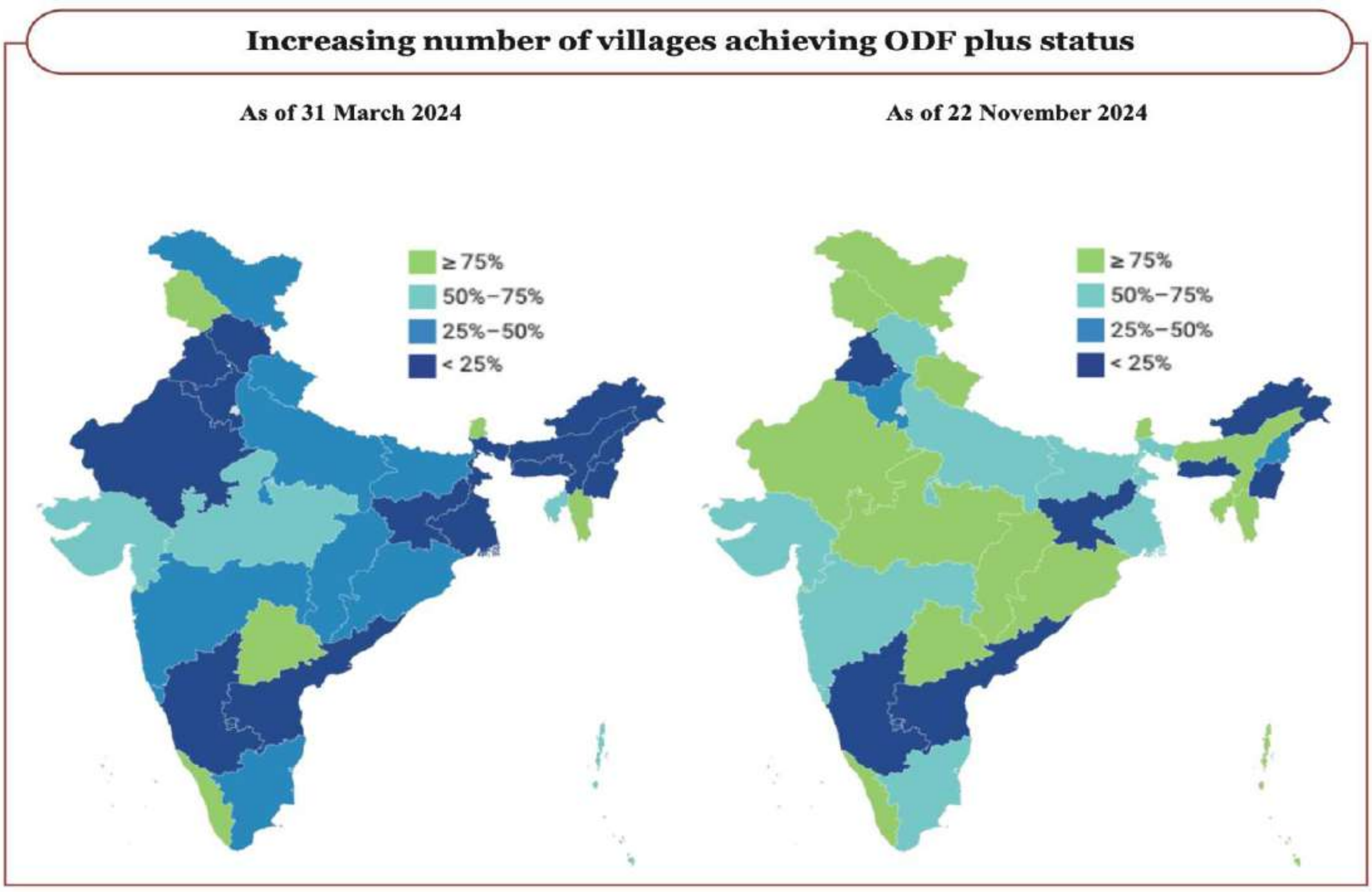
12. Rural & Urban Infrastructure: Housing, Water, and Sanitation
    a. Jal Jeevan Mission
        i. Households with Tap Water (Nov 2024): 15.30 crore (79.1%).

Source: Ministry of Jal Shakti

b. Swachh Bharat Mission (Rural & Urban)
   i. ODF Plus Villages: 3.64 lakh villages.
c. Urban Waste Management: 100% waste collection in 93,756 wards.



Source: M/o H&UA
* Note: As on 31st December 2024



13. Metro Rail & Urban Transport
    a. Metro Rail Network: 1,010 km operational, 980 km under construction.
    b. Daily Ridership (FY25): 10.2 million passengers.
14. Space Infrastructure & Future Missions
    a. Active Satellites: 56 (19 communication, 9 navigation, 4 scientific, 24 Earth observation).
    b. Key Upcoming Missions:
       i. Gaganyaan (India's first human spaceflight mission).
       ii. Chandrayaan-4 (Lunar Sample Return Mission).
       iii. Venus Orbiter Mission.

Chapter 6 – Investment and Infrastructure: Keeping it Going

Introduction

Progress under various initiatives

Pradhan Mantri Awas Yojana – Urban: 1.18 crore houses have been sanctioned as of 25 Nov 2024

Urban transport: Metro rail systems: 1010 kilometres currently operational in 23 cities and an additional 980 kilometres underway

Atal Mission for Rejuvenation and Urban Transformation: tap water coverage increased to 70%, and sewerage coverage risen to 62%

Smart Cities Mission: 93% projects completed as of 13 Jan 2025

Chapter 7 – Industry: All About Business Reforms

Introduction

The global manufacturing landscape has shifted, with high-income countries losing market share to China and India.

India's share in global manufacturing (2.8%) remains much lower than China's 28.8%, but presents an opportunity for growth.

The IMF notes that manufacturing is shifting toward emerging markets, especially China and India.

Challenges affecting global manufacturing:

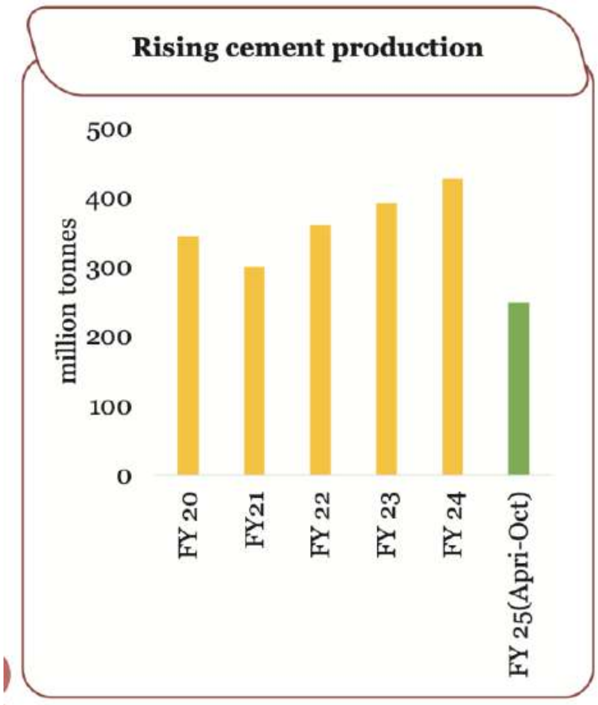
- Geopolitical tensions and trade restrictions
- Supply chain disruptions
- Rising logistics costs
- Increased preference for services over manufactured goods

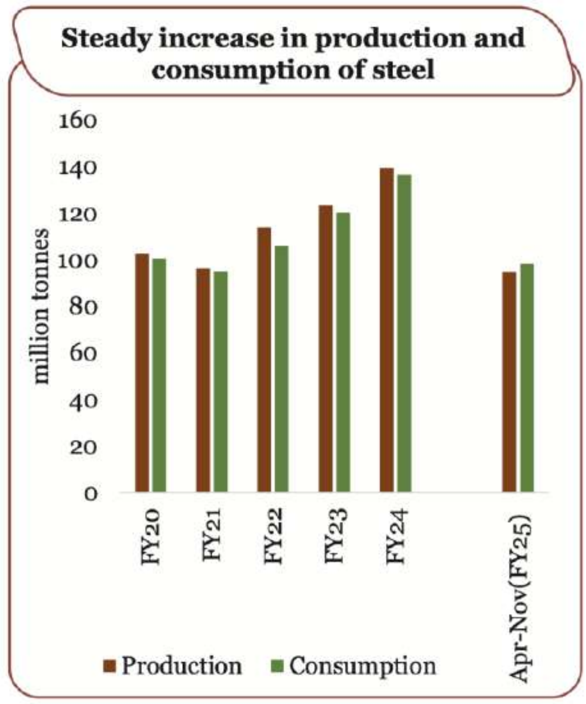
Global manufacturing output grew only 0.4% in Q3 2024, compared to 1% in the previous quarter, highlighting economic uncertainties.

To capitalize on emerging opportunities, India requires coordinated efforts from government, private sector, academia, and R&D institutions.

Recent Domestic Developments

1. Industrial sector growth (FY25):
    a. Expected at 6.2% (First Advance Estimates), driven by electricity and construction.
    b. Q2 FY25 industrial growth slowed to 3.6% due to:
    c. Export demand slowdown
    d. Monsoon-related disruptions
    e. Shift in festive season timing affecting consumer demand
2. Optimistic indicators:
    a. PMI Manufacturing and Business Expectation Index (BEI) signal a positive outlook for the industry.
3. Core Input Industries
    a. Cement
        i. India is the second-largest cement producer globally (after China).
        ii. Installed capacity: 639 million tonnes | Production (FY24): 427 million tonnes.
        iii. 87% of cement production is concentrated in key states like Rajasthan, Andhra Pradesh, Telangana, and Tamil Nadu.
        iv. Per capita cement consumption: 290 kg, much lower than the global average of 540 kg.
        v. Government projects in housing, highways, and railways are boosting cement demand.





b. Steel
   i. Crude steel production (April-Nov FY25): Grew 3.3%, while finished steel grew 4.6%.
   ii. Key demand drivers: Infrastructure projects, housing, urbanization, and the National Steel Policy.
   iii. Steel Scrap Recycling Policy:
   iv. Total domestic scrap consumption: 30 million tonnes
   v. Imported scrap: 5 million tonnes
   vi. Environmental benefits: 58% reduction in greenhouse gas emissions, 40% lower water consumption.

c. Chemical and Petrochemical Sector
   i. The sector contributes 9.5% of India's manufacturing GVA (FY23).
   ii. 45% of petrochemical intermediates are imported, highlighting a need for domestic capacity expansion.

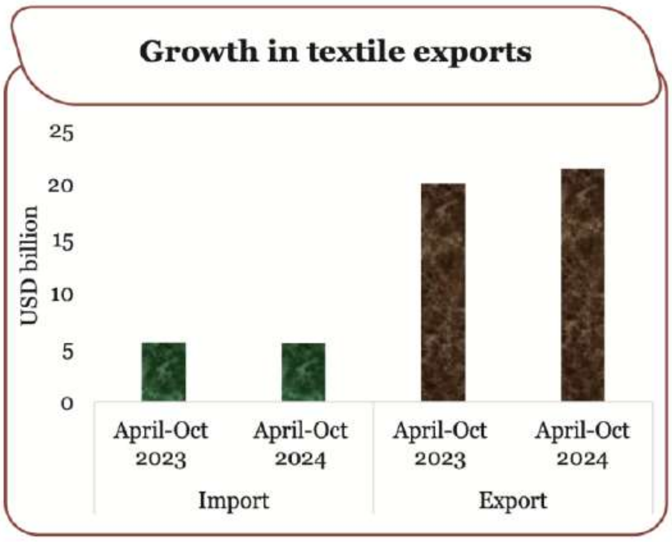
d. Performance of Capital Goods and Consumer Goods Industries
   i. Capital Goods
   ii. FY24 saw a resurgence in capital goods production, but dependency on high-end imported machinery remains a challenge.
   iii. Government initiatives:
      1. Phase II of the Capital Goods Competitiveness Scheme to strengthen manufacturing capabilities.
      2. Smart Manufacturing & Industry 4.0 supported through SAMARTH Udyog centres.

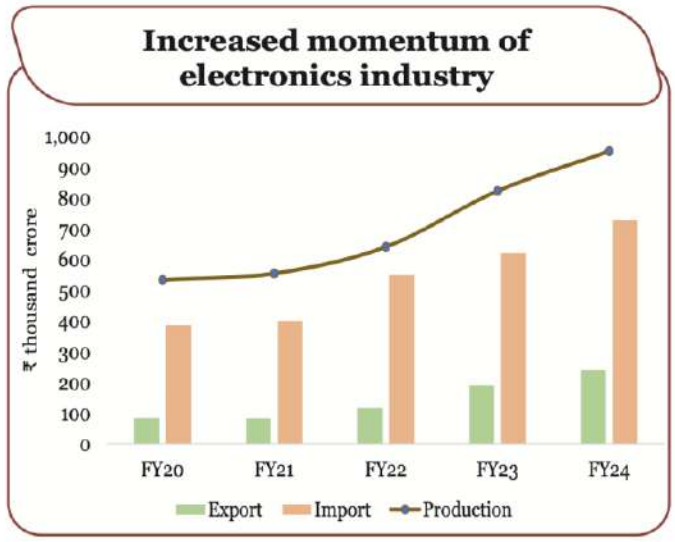
e. Automobile Industry
   i. Domestic sales growth in FY24: 12.5%.
   ii. PLI Scheme extended by one year to boost local manufacturing and exports.

f. Electronics Industry
   i. Electronics production CAGR (FY15-FY24): 17.5%.
   ii. 99% of smartphones now domestically manufactured, reducing dependence on imports.
   iii. 33 crore mobile phones produced in FY24, with 75% being 5G-enabled.
   iv. PLI Scheme impact:
      1. Mobile phone imports fell from 78% (FY15) to 4% (FY23).
      2. Mobile exports grew to ₹88,726 crore in FY23.

g. Textiles
   i. Textile industry contribution: 11% of India's manufacturing GVA.
   ii. FY24 textile exports: $35.87 billion.
   iii. India's global textile export share: 4%.
   iv. Key growth areas:
      1. Expansion in man-made fiber (MMF) to align with global trends.
      2. Technical textiles market is $26.8 billion, ranking India 5th globally.

3. PLI scheme introduced to enhance textile manufacturing.





h. Pharmaceuticals
    i. India ranks 3rd globally in pharmaceutical production by volume.
    ii. Annual turnover (FY24): ₹4.17 lakh crore (10.1% CAGR).
    iii. Exports: ₹2.19 lakh crore (50% of total pharma sales).
    iv. PLI Scheme for Pharma:
        1. Focus on Active Pharmaceutical Ingredients (APIs) & Drug Intermediates.
        2. Strengthens MSMEs & cluster-based pharma manufacturing.
        3. Flourishing Innovations & R&D Challenges
        4. India ranks 6th in global patent filings (WIPO 2022).
        5. Government initiatives for IP growth:
        6. Expedited patent processing
        7. Fee reductions for start-ups & MSMEs
        8. Digitalization of patent filing
        9. R&D spending (FY21): ₹1.27 lakh crore (0.64% of GDP), significantly lower than global leaders.
        10. Private sector R&D spending remains low compared to China, USA, and Japan.
        11. Sectoral concentration: Pharma, IT, Transport, Defense dominate R&D spending.

4. Micro, Small, and Medium Enterprises (MSME)
    a. MSMEs employ 23.24 crore people (as of November 2024).
    b. Udyam Registration Portal: 2.39 crore informal enterprises formalized.
    c. Credit Guarantee Scheme (CGTMSE):
        i. ₹9,000 crore corpus to facilitate ₹2 lakh crore in additional credit.
        ii. Guarantee coverage raised to ₹5 crore.
    d. Self-Reliant India (SRI) Fund:
        i. ₹50,000 crore corpus for MSMEs.
    e. MSME Cluster Development Programme fosters industry-specific clusters.
    f. TReDS platform ensures timely payments to MSMEs, reducing financial stress.
5. State-Wise Industrial Development
    a. Top 4 industrial states: Gujarat, Maharashtra, Karnataka, Tamil Nadu (43% of total industrial GSVA).
    b. Northeastern states (excluding Assam & Sikkim) contribute only 0.7%.
    c. Ease of Doing Business Reforms (BRAP 2020) linked to stronger industrial activity.
        i. Tamil Nadu's proactive industrial industrial policies have attracted global investors.

Chapter 8 – Service: New Challenge for the Old War Horse

Introduction

The services sector continues to be the primary driver of India's economic growth, contributing significantly to GDP, employment, and exports.
In FY25, the sector played a crucial role in sustaining GDP growth, compensating for weaker global merchandise trade.
The 'servicification 'of manufacturing, wherein industrial production increasingly relies on services, is further strengthening the Indian economy.

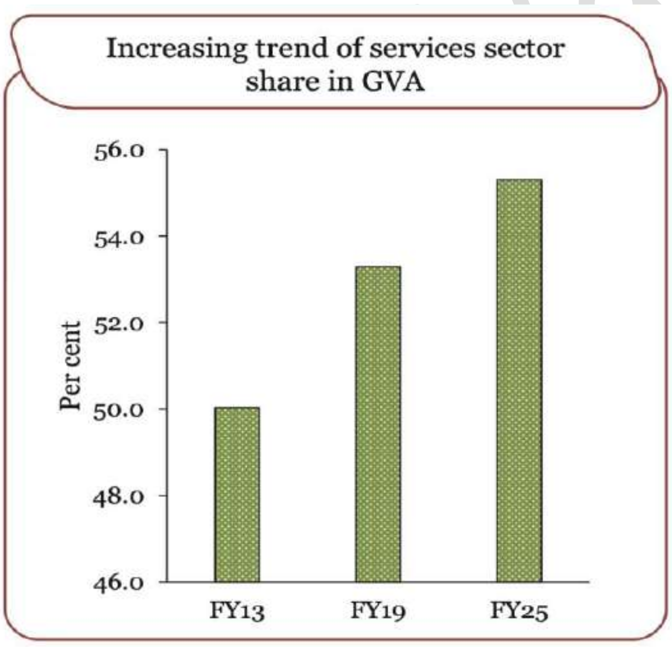
Digitization and initiatives like the Open Network for Digital Commerce (ONDC) are making transformations in the services sector more inclusive.
Major challenges include workforce skill development, regulatory complexities, and external geopolitical risks.

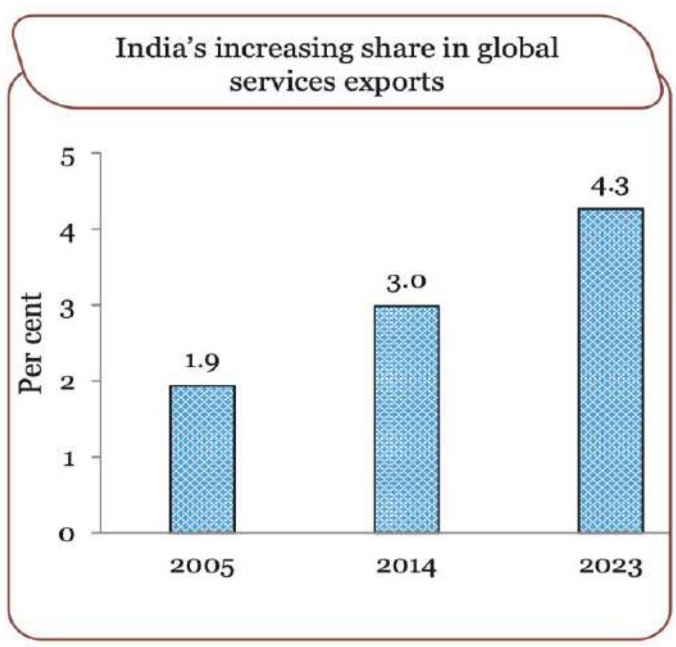
Global Context: Services Sector Growth Trends

1. The services sector accounts for 62% of global GDP and has been a key growth driver for middle-income countries like China, Thailand, and India.
2. Global service inflation remains high due to post-pandemic wage growth.
3. The Global Services PMI Business Activity Index stood at 53.8 in December 2024, marking 23 consecutive months of expansion.
4. India's Global Services Export Share:
    a. 4.3% in 2023, ranking 7th globally.
    b. The United States led with 13%, followed by UK (7.4%), Germany (5.5%), and China, Ireland, and France (~5% each).

Services Sector Performance in India

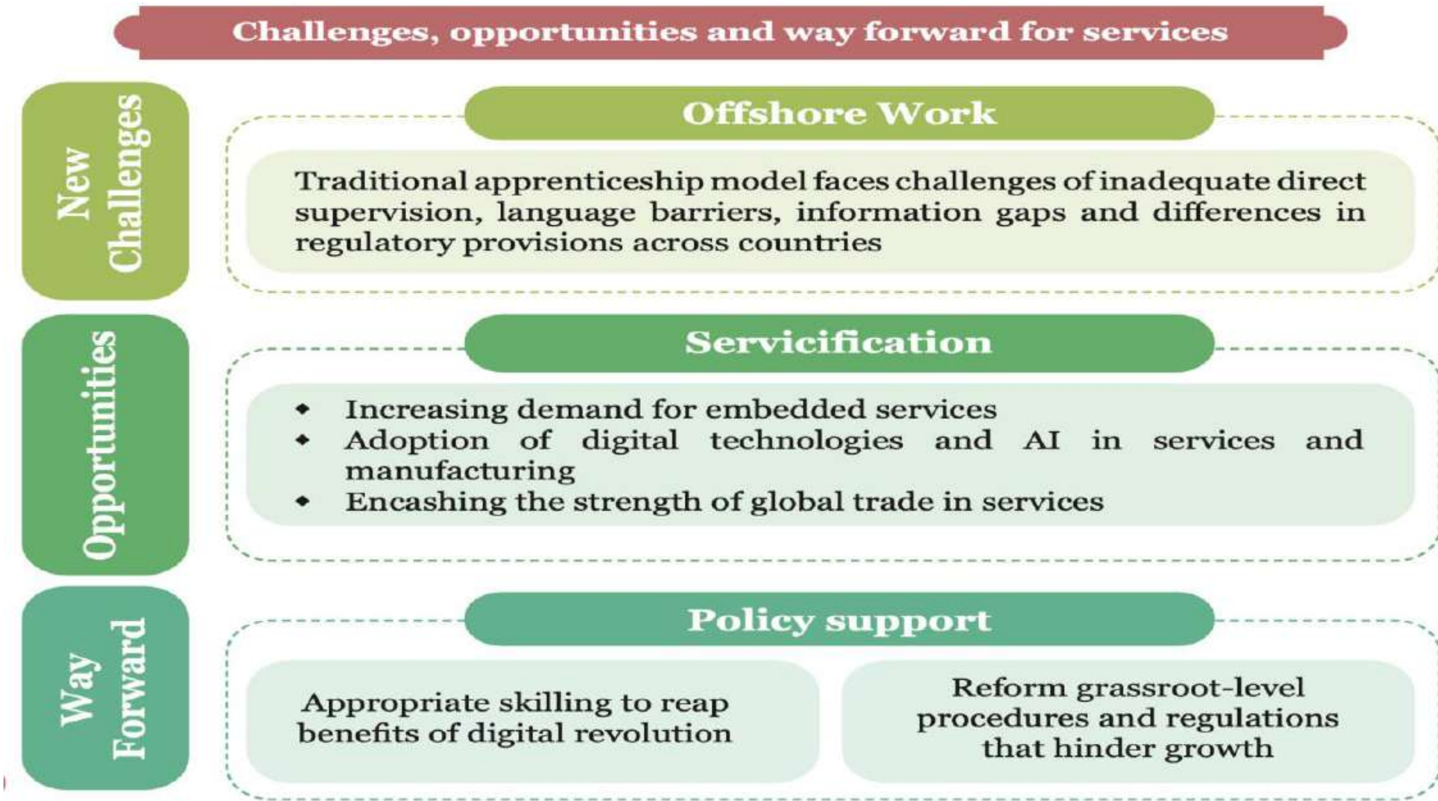
1. Steady contribution to GVA:
    a. Increased from 50.6% in FY14 to 55.3% in FY25 (First Advance Estimates).
    b. Employs 30% of India's workforce.
    c. Growth in services sector real GVA:
    d. Pre-pandemic (FY13–FY20): 8% per year.
    e. Post-pandemic (FY23–FY25): 8.3% per year.
2. Information & Computer-related Services:
    a. Grew at a trend rate of 12.8% (FY13–FY23).
    b. Share of total GVA increased from 6.3% to 10.9%.
    c. Key Sub-sectors:
        i. Trade, repair, hotels & restaurants
        ii. Transport, storage, communication & broadcasting
        iii. Financial services
        iv. Real estate, professional services
        v. Public administration and other services





3. Purchasing Manager's Index (PMI) - Services
    a. India's services PMI remained in expansion for 41 consecutive months since August 2021.
    b. Finance & insurance sub-sectors recorded the strongest increases in new orders and business activity.
4. Trade in Services
    a. Trend growth of 11% (FY14-FY23) at constant prices.
    b. Computer & business services account for ~70% of total exports.
    c. April–November FY25:
        i. Services exports grew by 12.8% (vs. 5.7% in FY24).
        ii. Services imports grew by 13.9% (vs. a 2.9% decline in FY24).

5. Sources of Financing: Bank Credit and FDI
    a. Total bank credit to services sector: ₹48.5 lakh crore (Nov 2024).
    b. YoY Credit Growth:
        i. Computer software: 22.5%.
        ii. Professional services: 19.4%.
    c. FDI Inflows:
    d. $29.8 billion in FY25 (April-September).
    e. $5.7 billion directed toward services sector.
    f. Insurance sector received 62% of total service sector FDI.
6. Logistics & Physical Connectivity-Based Services - Indian Railways
    a. 4th largest rail network globally.
    b. Passenger traffic grew by 8% in FY24.
    c. Revenue-earning freight grew by 5.2% in FY24.
    d. Digitalization efforts:
        i. E-ticketing penetration: 86% (reserved sector).
        ii. QR-code based payments enabled at all counters.
        iii. 24-hour refund process in 98% of eligible cases.
    e. Tourism focus:
        i. 325 Bharat Gaurav train trips, carrying 1.91 lakh tourists.
        ii. Road Transport
        iii. 78% of transport services GVA (FY23).
7. Logistics & Physical Connectivity-Based Services - FASTag tolling:
    a. Reduced average wait time from 734 sec to 47 sec.
    b. Barrier-free tolling targeted by FY29.
8. Logistics & Physical Connectivity-Based Services - Aviation
    a. Fastest-growing aviation market globally.
    b. 140 remote pilot training organizations.
    c. 26,659 registered drones.
    d. 32 aircraft leasing entities in GIFT-IFSC.
9. Logistics & Physical Connectivity-Based Services - Ports, Waterways & Shipping
    a. Cargo handled at ports: 622 MT (Dec FY25).
    b. Maritime India Vision 2030 aims to make India a top-5 shipbuilding nation by 2047.
10. Other Services - Tourism and Hospitality
    a. Tourism's contribution to GDP returned to 5% in FY23 (pre-pandemic level).
    b. Foreign exchange earnings from tourism: $28 billion (FY23).
    c. India ranked 14th globally in tourism receipts.
11. Other Services - Real Estate
    a. India ranked 31st in Global Real Estate Transparency Index 2024.
    b. Housing demand expected to reach 93 million units by 2036.
    c. Outstanding housing loans: ₹28.7 lakh crore (FY25).
12. Business Services - IT and ITeS
    a. Industry revenue: $254 billion (FY24).
    b. IT exports: $200 billion.
    c. Workforce: 5.43 million employees.
13. Business Services - Telecommunications
    a. 1.18 billion telecom subscribers.
    b. 941 million broadband users.
    c. Fastest 5G rollout globally.
    d. Open Network for Digital Commerce (ONDC)
        i. 14 million transactions (Nov 2024).
        ii. 7 lakh+ sellers & service providers onboarded.
14. State-wise Analysis
    a. Karnataka & Maharashtra account for >25% of total services GSVA.
    b. Maharashtra, Tamil Nadu, and Gujarat dominate financial services.
    c. Karnataka and Telangana lead in IT and fintech.
    d. Northeastern states rely heavily on public administration.



Chapter 9 – Agriculture and Food Management: Sector of the Future

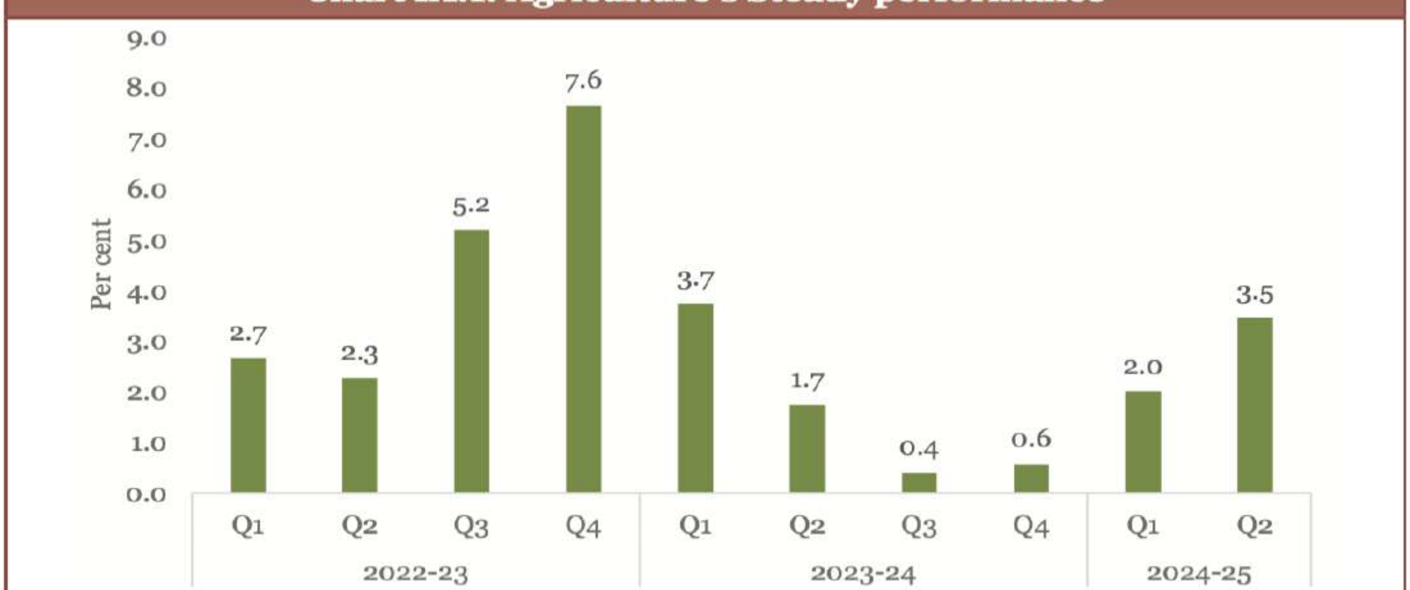
Introduction

The Agriculture and Allied Activities sector contributes 16% of India's GDP (FY24 PE) at current prices and provides livelihoods to 46.1% of the population.

The sector recorded an average annual growth rate of 5% (FY17-FY23), showcasing its ability to withstand external pressures.

In Q2 of FY25, the agriculture sector grew at 3.5%, recovering from previous quarters where growth ranged between 0.4% and 2.0%.

Chart IX.1: Agriculture's Steady performance



Source: National Accounts Statistics, MOSPI

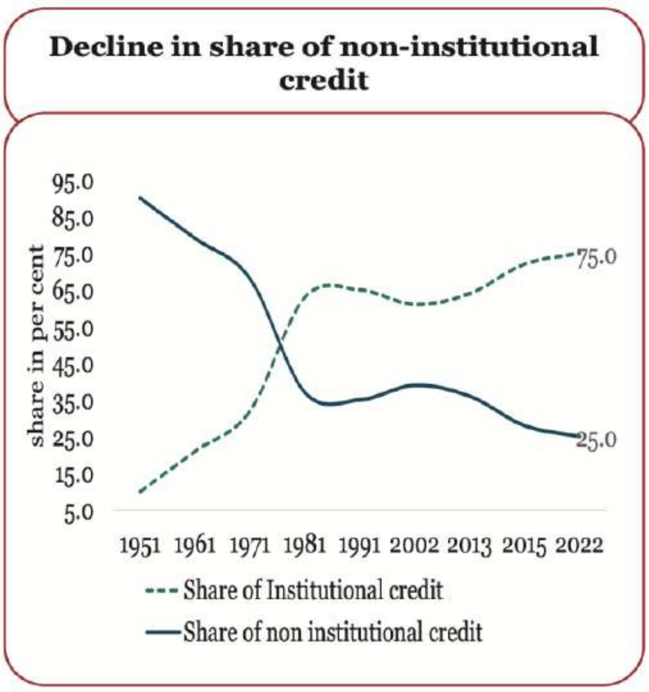
Growth has been driven by:

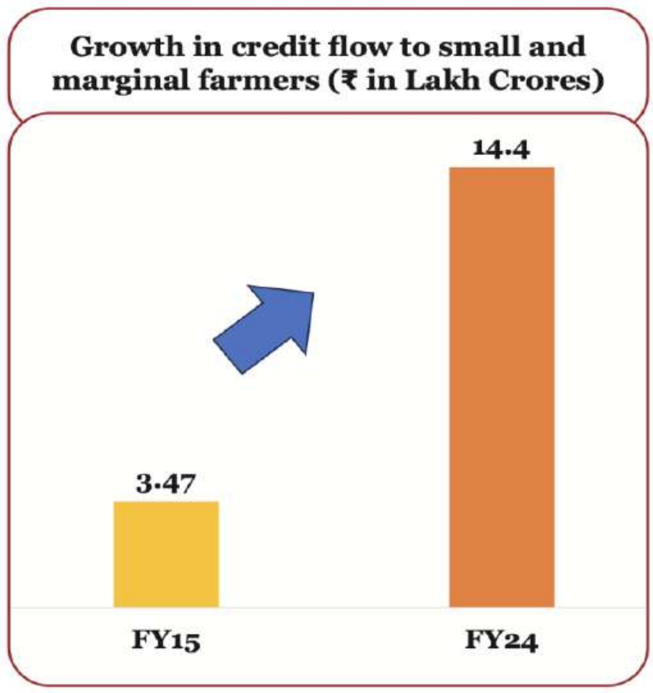
- Assured remunerative prices.
- Institutional credit expansion.
- Crop diversification.
- Government support for sustainable agricultural practices.
- Technological advancements.

Kharif foodgrain production (2024) is estimated at 1,647.05 LMT, an increase of 89.37 LMT from the previous year, and 124.59 LMT above the average output.
Agricultural income has grown at 5.23% annually, compared to 6.24% for non-agricultural income and 5.80% for the overall economy.

Crop Diversification and Agriculture Performance

1. India is a leading global cereal producer, contributing 11.6% of the world's total output.
2. Despite this, crop yields remain lower than those of other major producers, indicating the need for productivity improvements.
3. The crop sector has grown at a CAGR of 2.1% (FY13-FY22), largely driven by increased production of fruits, vegetables, and pulses.
4. Oilseeds have shown slow growth (1.9% CAGR), raising concerns due to India's heavy reliance on imports for edible oil.





15. Floriculture: A Sunrise Industry
    a. India's floriculture industry is emerging as a high-value export sector, classified as a "sunrise industry" with 100% export orientation.
    b. Floriculture land coverage (FY24): 297 thousand hectares.
    c. Production (FY24):
        i. 2,284 thousand tonnes of loose flowers.
        ii. 947 thousand tonnes of cut flowers.
    d. Floriculture exports (FY24):
        i. 19,678 metric tonnes valued at ₹717.83 crore (USD 86.63 million).
        ii. Major destinations: USA, Netherlands, UAE, UK, Canada, and Malaysia.

16. Inter-State Agricultural Growth Variations (2011-12 to 2020-21)
    a. Andhra Pradesh: 8.8% CAGR, focusing on jowar.
    b. Madhya Pradesh: 6.3% CAGR, expanding moong cultivation.
    c. Tamil Nadu: 4.8% CAGR, shifting towards maize.
    d. Growth disparities highlight the potential for productivity enhancements and yield improvements.

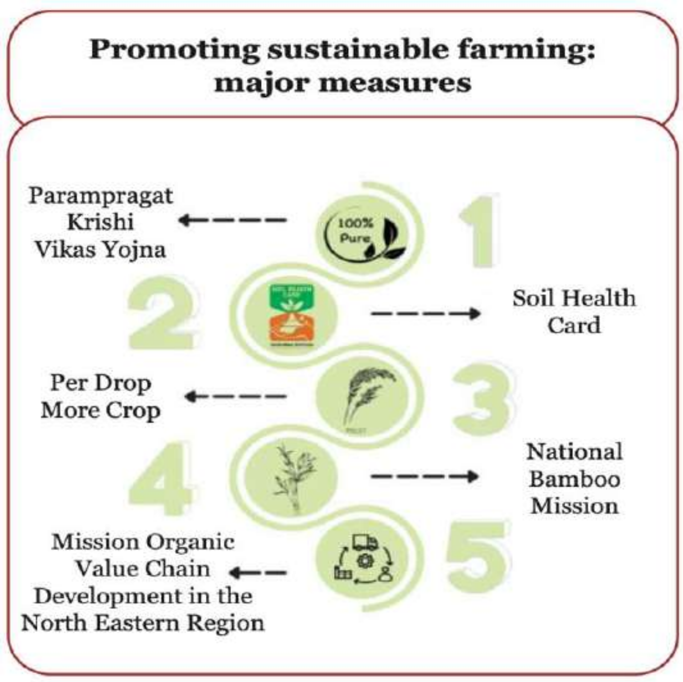
17. CROP PRODUCTION AND INCENTIVES
    a. Agricultural productivity growth depends on:
        i. Quality seeds and soil health management.
        ii. Efficient water use and irrigation facilities.
        iii. Enhanced market access and price stability.
    b. Minimum Support Price (MSP) increases (FY25):
        i. Arhar MSP: +59% above production cost.
        ii. Bajra MSP: +77% increase.

    iii. Masur MSP: +89% rise.
    iv. Rapeseed MSP: +98% increase.

18. SEEDS AND FERTILISERS
    a. ICAR (2023-24) produced 1.06 lakh quintals of breeder seeds.
    b. 2,177 of 2,593 new seed varieties (since 2014) are climate-resilient.
    c. Sustainable fertiliser adoption:
        i. 'Urea Gold': Combines urea with sulphur for better efficiency.
        ii. Nano Urea, Nano DAP, and fertigation techniques.
        iii. PM-PRANAM scheme promotes alternative fertilisers.

19. FISHERIES AND LIVESTOCK: HIGH-GROWTH SECTORS
    a. Fisheries sector has demonstrated the highest CAGR of 13.67%. (FY15-FY23).
    b. Livestock sector follows with a CAGR of 12.99% (FY15-FY23).
    c. Fish production (FY23): 184.02 lakh tonnes (up from 95.79 lakh tonnes in FY14).
    d. Seafood exports (FY24): ₹60,523.89 crore, reflecting 29.7% growth.

20. FOOD SECURITY AND STORAGE INFRASTRUCTURE
    a. National Food Security Act (NFSA) 2013 and PMGKAY signify a major shift in food security policy.
    b. PMGKAY extended for another five years to ensure food and nutrition security.
    c. Over 11 crore farmers have benefitted under PM-KISAN (as of 31st October 2024).
    d. PM-Kisan Mandhan: 23.61 lakh farmers enrolled.
    e. One Nation, One Ration Card (ONORC) enables Aadhaar-based access.
    f. Modern storage infrastructure includes:
        i. Steel silos under PPP.
        ii. Smart Warehouses (real-time monitoring).
        iii. Flospan mobile storage units (pilot project in 6 states).



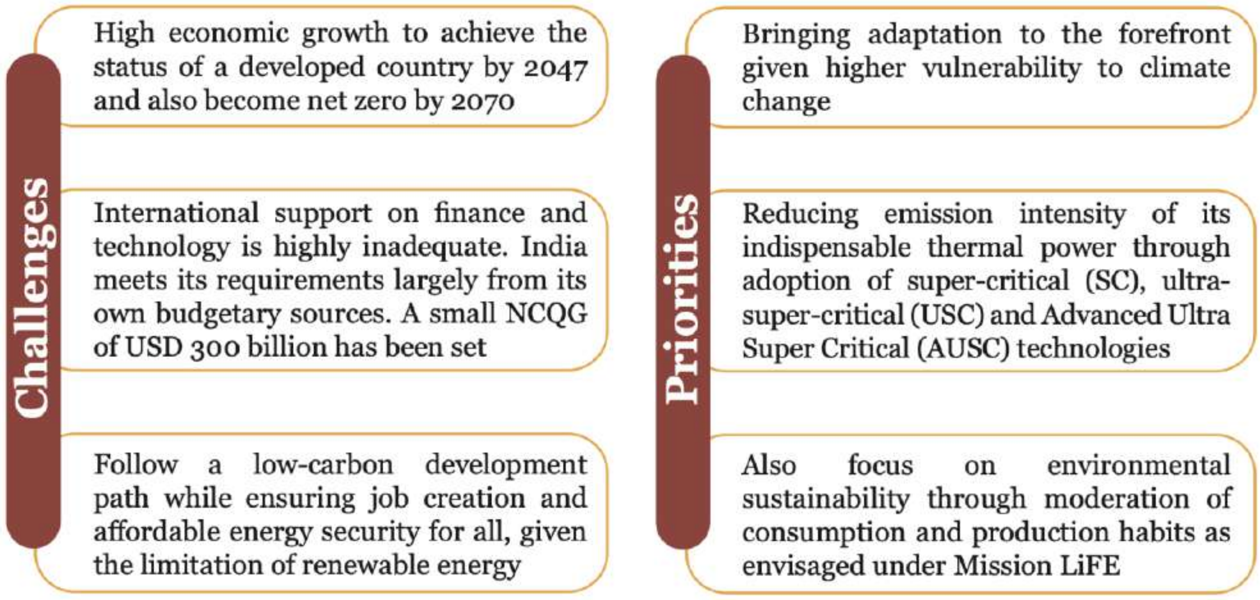
Chapter 10 – Climate & Environment: Adaptation Matters

Introduction

India's vision for becoming a developed nation by 2047 is deeply rooted in inclusive and sustainable economic growth. The country has one of the lowest per capita carbon emissions globally, approximately one-third of the global average, but it faces several challenges in transitioning toward low-carbon economic growth.

- Challenges in renewable energy expansion: Lack of viable storage technology and limited access to critical minerals.
- Growing climate adaptation expenditure: Increased from 3.7% of GDP in FY16 to 5.6% in FY22, showing the rising importance of climate resilience in India's economic strategy.
- International climate finance remains insufficient: Developed nations have not met their commitments, with funds largely focused on mitigation rather than adaptation.
- India's leadership in sustainability:
    - Lifestyle for Environment (LiFE) initiative: Encourages sustainable consumption and production.
    - Circular economy and waste reduction measures being implemented at scale.
- CoP29 Conference (Baku, 2024):
    - Developed countries missed their Nationally Determined Contributions (NDCs) by 38%, failing to provide adequate climate finance.

- The New Collective Quantified Goal (NCQG) on finance set at $300 billion per year by 2035, falls significantly short of the $5.1 - 6.8 trillion required by 2030.



Bringing Adaptation to the Forefront

21. India's Climate Vulnerability
    a. India is ranked as the 7th most vulnerable country to climate change, facing extreme weather events, biodiversity loss, and water insecurity. As a developing nation, India bears disproportionate costs of historical emissions and must focus on climate adaptation for its economic stability.
22. National Adaptation Plan (NAP):
    a. Being developed by MoEFCC to align with sustainable development goals (SDGs).
    b. Focuses on sector-specific adaptation strategies, infrastructure resilience, and financial resource mobilization.

23. Adaptation in Agriculture
    a. Impact of climate change:
        i. Heat stress and erratic rainfall patterns threaten crop yields, impacting food security.
        ii. Groundwater depletion worsens agricultural distress.
    b. Adaptation Strategies:
        i. Development of climate-resilient seeds.
        ii. Improved irrigation techniques & soil health management.
        iii. Crop diversification & agroforestry initiatives.
        iv. Integration of digital tools to predict climate risks.

24. Building Resilience in Urban Areas
    a. National Mission on Sustainable Habitat (NMSH) (2010):
    b. Promotes low-carbon urban growth, focusing on waste & water management, energy efficiency, and green infrastructure.
25. AMRUT & AMRUT 2.0:
    a. Stormwater projects: 785 completed, addressing 3,631 urban flooding points.
    b. Water conservation: 3,078 water bodies rejuvenated.
    c. Green urban spaces: 2,438 parks covering 5,070 acres developed.
26. Smart Cities Mission & Urban River Management Plan:
    a. River Cities Alliance (RCA) launched in 2021 to promote sustainable river-centric development in 145+ cities.

27. Adaptation in Coastal Regions
    a. Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI):
        i. 540 sq km of mangrove restoration planned.
        ii. Expected to sequester 4.5 million tons of CO_2 and create 22.8 million employment days.
    b. Other Coastal Adaptation Strategies:

    i. Sea walls, artificial reefs, dune planting, & beach nourishment to combat erosion.
    ii. Enhancing Climate Resilience of Coastal Communities Project:
    iii. Restored 4,955 hectares of coastal ecosystems.
    iv. Sequestered 40,617.8 tons of CO_2.

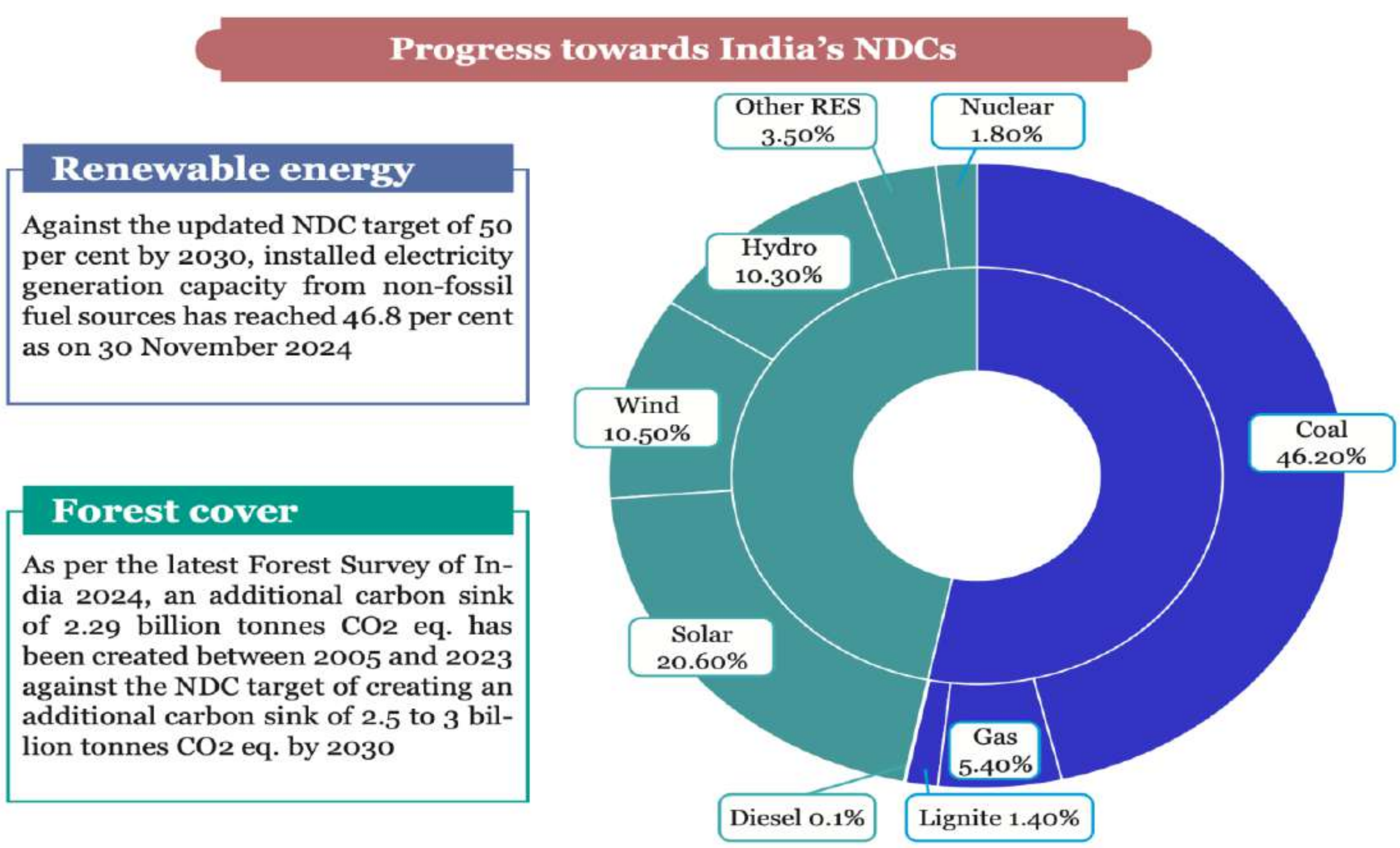
28. Water Resource Management
    a. Jal Shakti Abhiyan (2019) & Catch the Rain – 2024 (focus on women-led water conservation).
    b. National Aquifer Mapping Project (NAQUIM):
        i. Completed 25 lakh sq km of groundwater mapping.
    c. Bhu-Neer Portal (2024):
        i. Real-time groundwater monitoring for sustainable use.
    d. FloodWatch India App (Version 2.0):
        i. Covers 592 flood monitoring stations for early warning systems.

29. Energy Transition: Learning from Developed Countries
    a. Energy Transitions in History:
        i. 18th century: Wood → Coal (Industrial Revolution).
        ii. 20th century: Coal → Oil & Gas.
        iii. Developed nations still dependent on fossil fuels, with slow renewable adoption.
    b. Current Global Energy Realities:
        i. EU's REPowerEU Plan (2022): €10 billion invested in gas infrastructure.
        ii. US largest oil drilling project (2023): 628.9 million barrels projected.
    c. Challenges in Renewable Energy Expansion
        i. Grid congestion & high integration costs.
        ii. Limited availability of critical minerals (rare earth metals for batteries).
        iii. High land & infrastructure requirements.

30. India's Energy Needs
    a. Human Development Index (HDI): Currently 0.644 (Target: 0.9 for developed status).
    b. Per capita energy requirement: Needs to rise from 16.7 gigajoules (FY23) to 45.7-75 gigajoules.

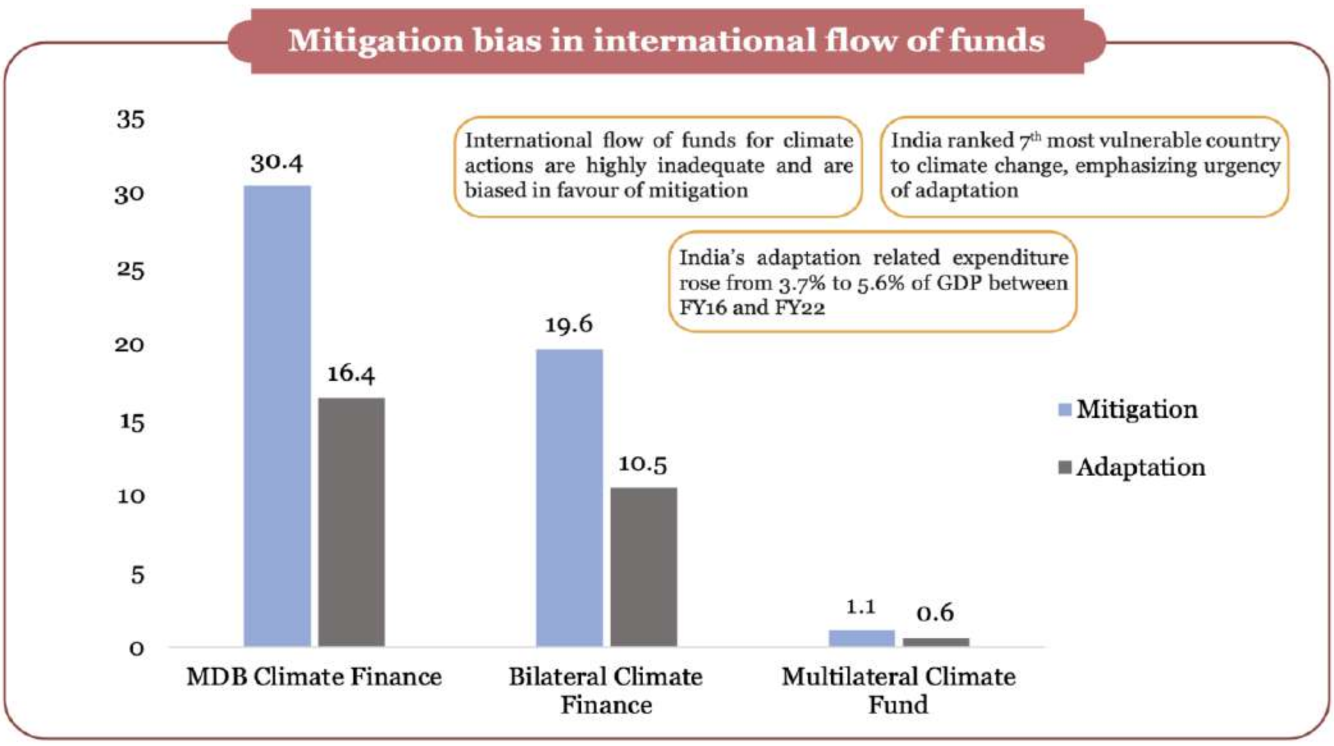
31. Coal as India's Energy Backbone
    a. Coal accounts for 46.2% of India's installed capacity.
    b. Supercritical & ultra-supercritical coal plants being deployed for efficiency.
    c. Advanced Ultra Super Critical (AUSC) plants: Reduce emissions by 11%.

32. India's Progress in Energy Transition

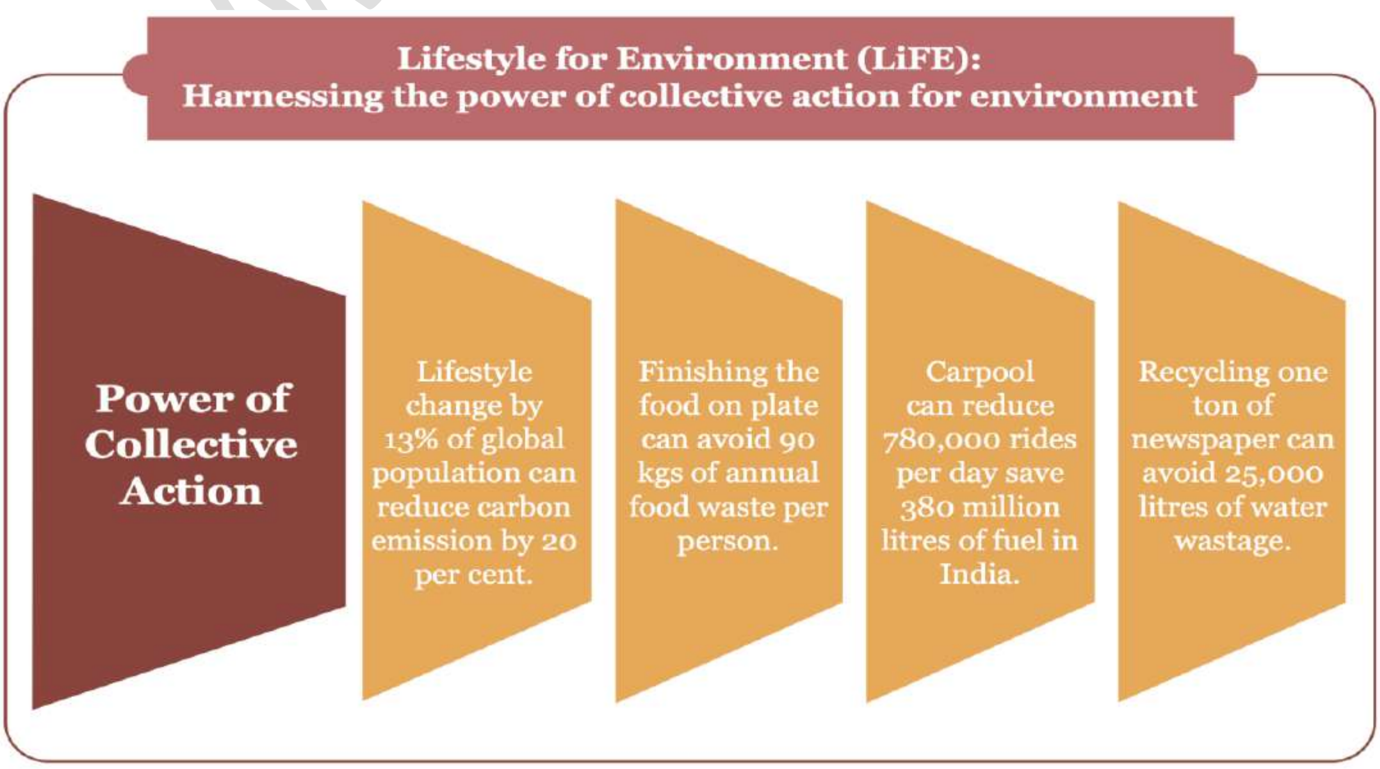


a. Installed non-fossil fuel capacity: 46.8% (Target: 50% by 2030).
b. Renewable Energy Progress:
    i. Green Energy Corridor: Upgrading the grid.
    ii. PM Surya Ghar: Muft Bijli Yojana: 1 crore rooftop solar installations planned.
c. National Green Hydrogen Mission:
    i. 5 MMT production goal by 2030.
    ii. Potential 50 MMT CO_2 annual reduction.

33. Financial Regulations & Green Investments
a. SEBI's ESG Framework & Green Debt Securities:
    i. ₹6,128 crore raised in green bonds.
    ii. Sovereign Green Bonds: ₹20,000 crore issued in FY24.
b. RBI's Green Finance Measures:
    i. Green Deposits Framework (2023).
    ii. ₹30 crore priority lending for renewable energy projects.



34. Lifestyle for Environment (LiFE)
a. Global impact:
    i. 17% of all food is wasted, contributing 8% to global CO_2 emissions.
    ii. 80% of Indian villages & urban areas targeted to become eco-friendly by 2028.



iii. Estimated global savings: $440 billion by 2030.

b. Green Credit Programme (GCP):

i. Tree plantation projects on degraded lands.

Chapter 11 – Social Sector: Extending Reach and Driving Empowerment

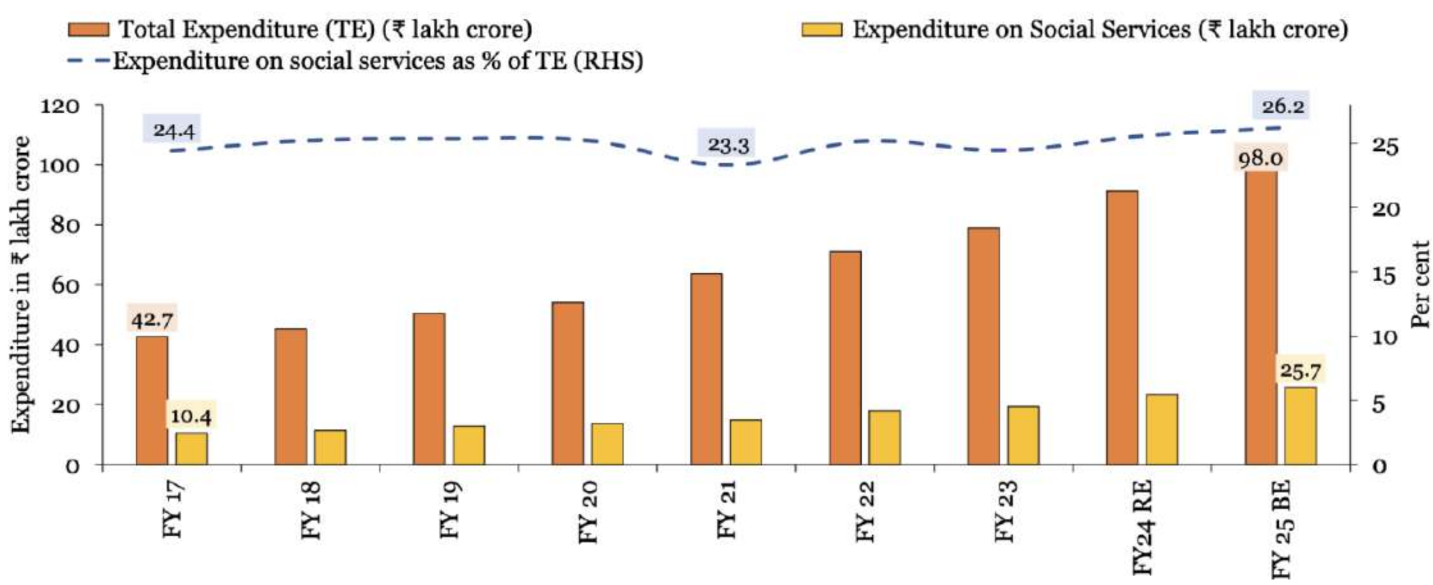
Introduction

India's economic growth strategy focuses on inclusive development, ensuring welfare through education, healthcare, skill development, and social infrastructure. The government aims to enhance delivery mechanisms through innovation and technology, promoting cost-effective and transparent governance. The vision of Viksit Bharat 2047aligns with inclusive growth, ensuring equitable opportunities for all citizens.

Trend in Social Services Expenditure

1. Government social services expenditure (SSE) has grown at a compound annual growth rate (CAGR) of 15% from FY21 to FY25.
    - i. SSE as a percentage of total expenditure (TE) has increased steadily:
        1. FY21: 23.3% → FY25 (BE): 26.2%.
    - ii. Absolute increase in SSE allocation:
        1. FY21: ₹14.8 lakh crore → FY25 (BE): ₹25.7 lakh crore.
    - iii. Sector-wise growth in expenditure (FY21–FY25 CAGR):
        1. Education: ₹5.8 lakh crore → ₹9.2 lakh crore (12% CAGR).
        2. Health: ₹3.2 lakh crore → ₹6.1 lakh crore (18% CAGR).
    - iv. This consistent increase highlights the government's commitment to strengthening human capital, social equity, and economic resilience.

Increase in social services expenditure (Union+States)



2. Household Consumption and Inequality Trends
    1. Narrowing Urban-Rural Consumption Gap
    2. The Household Consumption Expenditure Survey (HCES) 2023-24 indicates rising rural consumption, reducing inequality:
        - i. Monthly Per Capita Expenditure (MPCE):
        - ii. Rural: ₹4,122 → ₹4,247 (including free benefits).
        - iii. Urban: ₹6,996 → ₹7,078 (including free benefits).
        - iv. Urban-rural MPCE gap: 2011-12: 84% → 2023-24: 70%.

3. Reduction in Inequality (Gini Coefficient Trends)
    1. Gini coefficient, a measure of inequality in consumption expenditure, has declined, reflecting improved income distribution:
        - i. Rural: 0.266 (2022-23) → 0.237 (2023-24).

   ii. Urban: 0.314 (2022-23) → 0.284 (2023-24).

4. Government Fiscal Policies Reshaping Income Distribution
   1. Various fiscal policies such as subsidies, social security schemes, direct benefit transfers (DBTs), and public spending on essential services have helped reduce inequality and improve the financial stability of low-income households.
   2. These trends reaffirm the impact of welfare schemes in uplifting financially weaker sections and reducing income disparities.

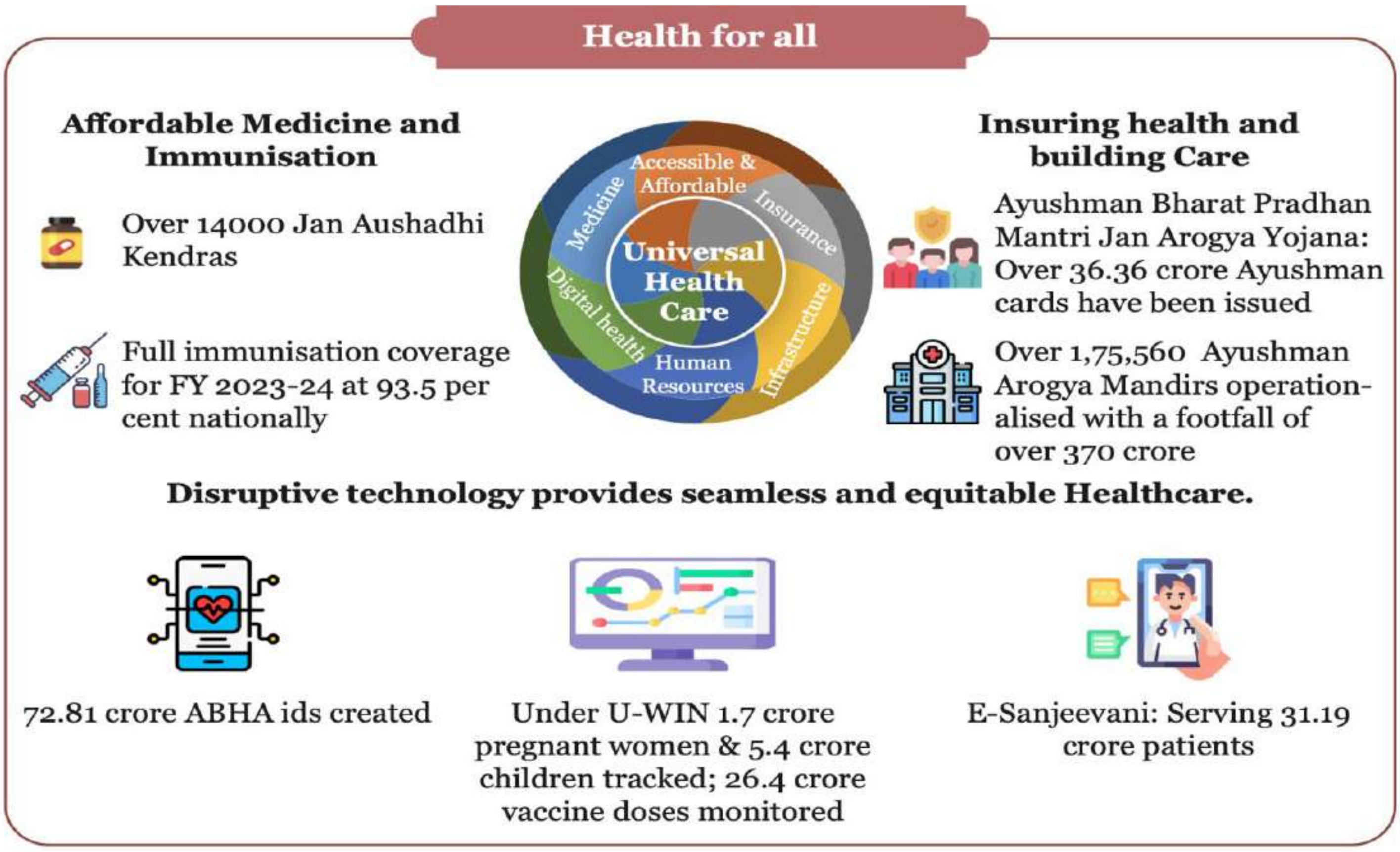
5. Public Distribution System (PDS) & Direct Benefit Transfers (DBTs)
   1. PDS: Strengthening Food Security and Welfare
   2. 84% of the population holds ration cards, ensuring food security.
   3. PDS/PMGKAY benefits as a percentage of Monthly Per Capita Expenditure (MPCE):
      i. 7% of MPCE (rural bottom 20%).
      ii. 2% of MPCE (urban top 20%).
   4. Rural households benefit more from food subsidies:
      i. 4% of MPCE subsidy in rural areas vs. 2% in urban areas.

6. Direct Benefit Transfers & Self-Help Groups (SHGs)
   1. 59% of surveyed rural households reported improved quality of life due to DBTs.
   2. Cash benefits are widely used:
      i. 44% for food consumption.
      ii. 31% for non-food expenses, savings, or loan repayments.
      iii. SHG loans impact livelihood sustainability:
      iv. 34% used for household expenses.
      v. 22% for healthcare.
      vi. 19% for business investment.
      vii. 19% for agriculture-related spending.
   3. These findings highlight the effectiveness of direct cash transfers in empowering economically vulnerable groups, enabling consumption growth and financial stability.

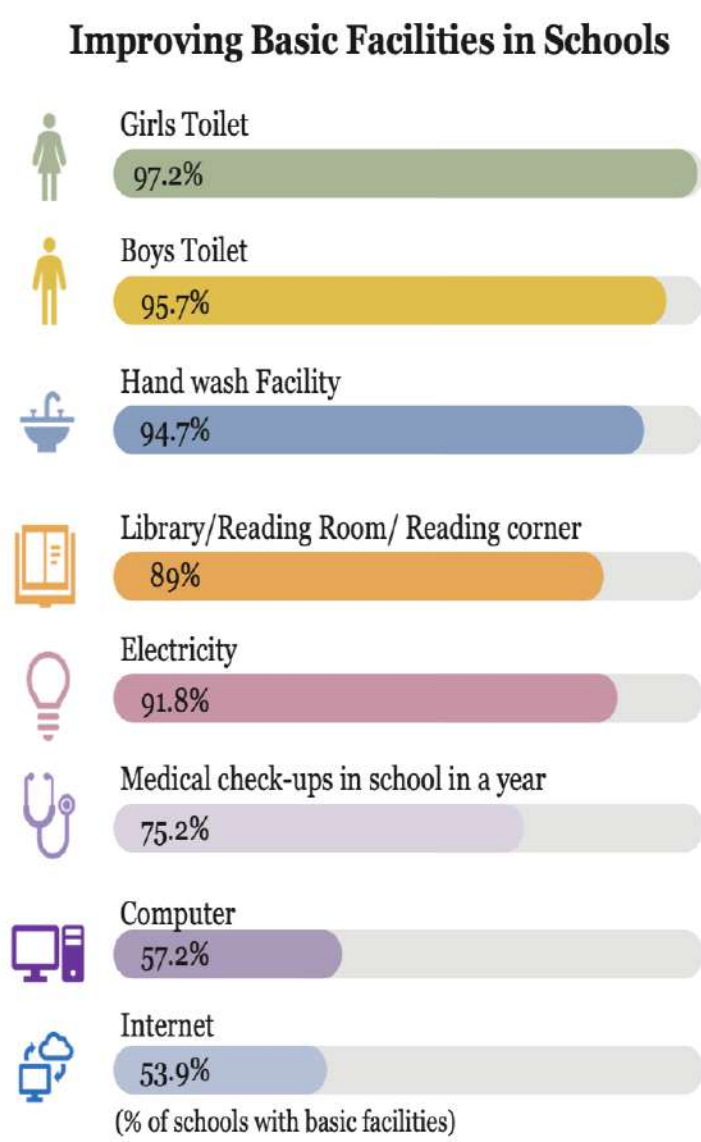
7. Healthcare: Rising Public Spending & Reducing Financial Burden
   1. Increase in Public Health Expenditure & Decline in Out-of-Pocket (OOP) Costs
   2. Government health expenditure increased significantly:
      i. 29.0% → 48.0% of total health expenditure.
      ii. Out-of-pocket expenditure as a share of total health spending fell:
      iii. 62.6% → 39.4%, reducing financial hardship on households.

8. Impact of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)
   1. AB PM-JAY has played a pivotal role in healthcare affordability.
   2. Total savings under the scheme exceeded ₹1.25 lakh crore, significantly reducing medical expenses for beneficiaries.

3. These trends highlight the government's success in improving healthcare access, affordability, and financial protection for households.



9. Education: Strengthening Infrastructure and Learning Outcomes
   1. School Education: Expanding Access and Reducing Dropouts
      i. 24.8 crore students in 14.72 lakh schools (UDISE+ 2023-24).
   2. Government schools: 69% of total schools, enrolling 50% of students.
   3. Dropout Rates:
      i. Primary: 1.9%, Upper Primary: 5.2%, Secondary: 14.1%.
      ii. Retention Rates (Class I to last grade of level):
      iii. Primary: 85.4%, Elementary: 78%, Secondary: 63.8%, Higher Secondary: 45.6%.
   4. Key Educational Reforms
      i. Foundational Literacy & Numeracy (FLN):
      ii. NIPUN Bharat Mission aims to achieve universal FLN by Grade 3 by 2026-27.
   5. Digital Learning:
      i. DIKSHA, SWAYAM, PMGDISHA expanding digital access.
   6. Skill Development:
      i. Frontier Technology Labs (FTLs) for AI, IoT, and Robotics training.

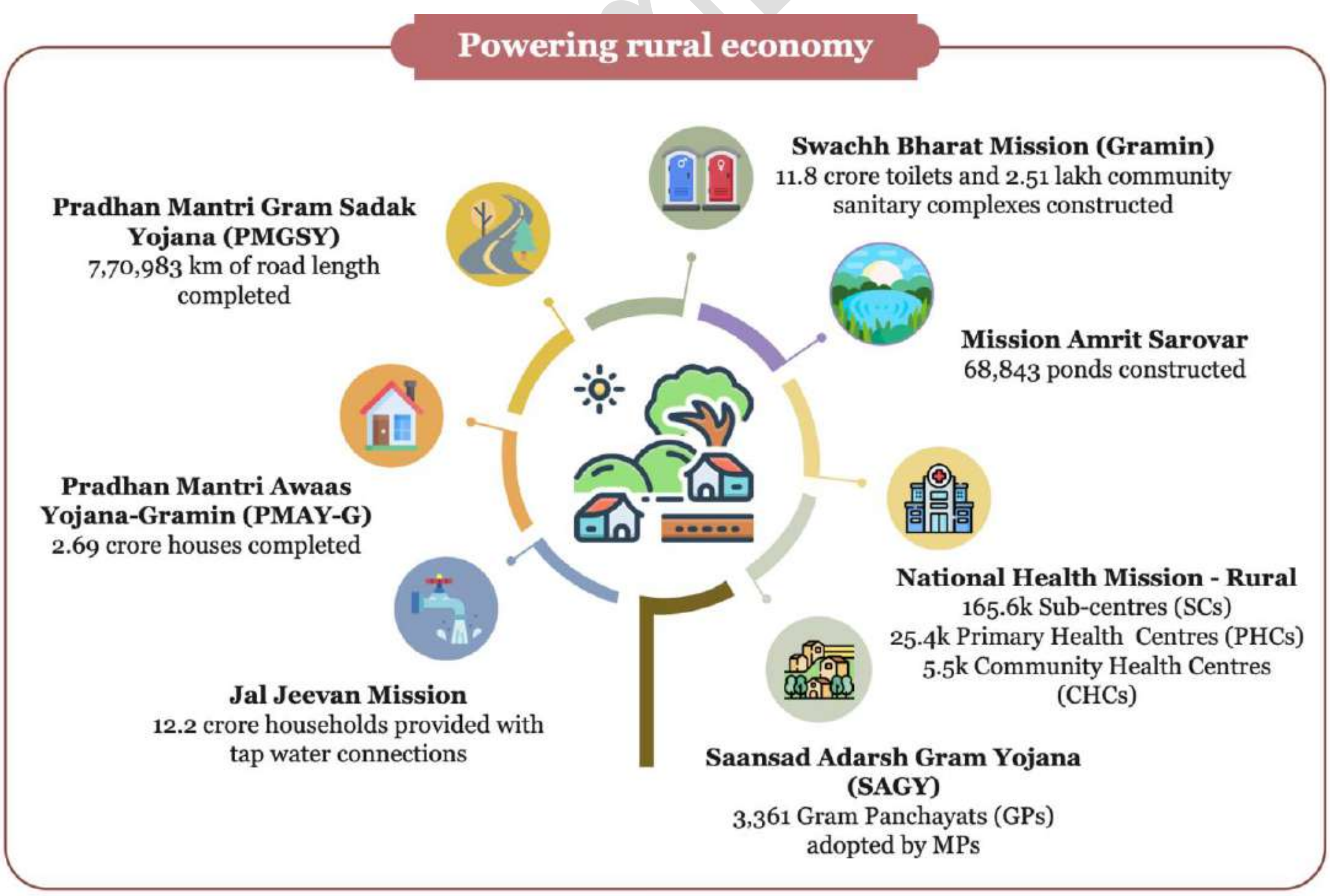


10. Higher Education: Expanding Access & Governance Reforms
    1. Total students in Higher Education (2021-22): 4.33 crore (+2 6.5% since 2014-15).
        i. GER in Higher Education: 28.4% (target: 50% by 2035).
    2. Expansion of Institutions:
        i. IITs: 16 → 23.
        ii. IIMs: 13 → 20.
        iii. Medical Colleges: 387 → 780.

11. Regulatory & Institutional Reforms
    1. NEP 2020 promotes:
        i. Multidisciplinary learning, skill-based education, industry collaborations.
        ii. UGC's 50+ regulations hinder autonomy; a 'light but tight' framework is needed.

12. Medical Education: Expanding Capacity & Reducing Costs
    1. MBBS Aspirants: 16 lakh (2019) → 24 lakh (2024).
    2. Medical Seats Expansion (FY19–FY25):
    3. MBBS: 70,012 → 1,18,137.
    4. Postgraduate: 39,583 → 73,157.
    5. Doctor-to-population ratio: 1:1263 (target: 1:1000 by 2030).
        i. Challenges:
            1. High MBBS fees in private colleges (₹60 lakh – ₹1 crore) push students abroad.

13. Localisation of Sustainable Development Goals (SDGs)
    1. Localisation of SDGs ensures that Gram Panchayat-level budgets are aligned with SDG objectives.
    2. This strategy enhances grassroots-level planning and implementation of welfare schemes.



Chapter 12 – Employment and Skill Development: Existential Priorities

Introduction

India's labour market has significantly improved due to post-pandemic economic recovery and formalisation efforts. Indicators such as unemployment, labour force participation, and worker population ratio have shown positive trends. However, to fully leverage the demographic dividend, the focus must be on creating high-quality, sustainable jobs, reskilling, and regulatory simplifications.

Key Demographic and Economic Insights

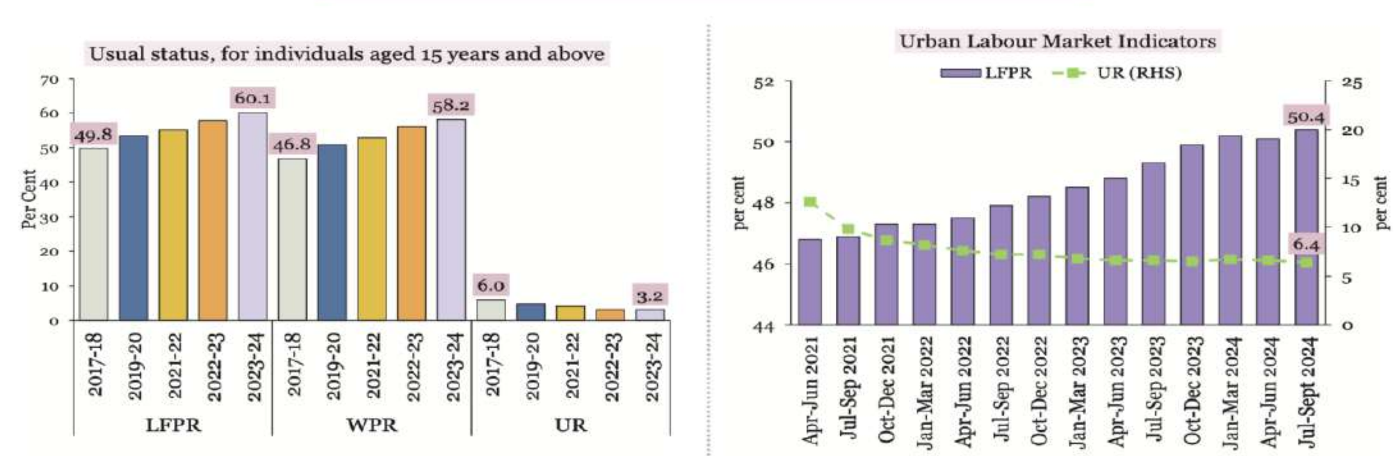
- India's Young Workforce: With 26% of the population aged 10-24 years, India has a unique demographic advantage as one of the youngest nations globally.
- Declining Dependency Ratio: The total dependency ratio fell from 64.6% (2011) to 55.7% (2021) and is projected to decline further to 54.3% by 2026.
- India's Economic Growth: From being the 10th largest economy in 2014, India became the 4th largest by 2024and is expected to be the third largest by 2030.
- Employment Generation Need: The economy must create 7.85 million (78.5 lakh) non-farm jobs annually until 2030 to ensure productive workforce engagement.

State of Employment

India has witnessed a strong post-pandemic employment recovery, with declining unemployment rates and rising labour force participation.

1. Labour Market Indicators (2017-18 to 2023-24)
    1. Unemployment Rate (UR): Dropped from 6.0% to 3.2% (July-June).
    2. Labour Force Participation Rate (LFPR): Increased from 49.8% to 60.1%.
    3. Worker-Population Ratio (WPR): Rose from 46.8% to 58.2%.
2. Urban vs Rural Employment Trends
    1. Urban unemployment declined from 6.6% (Q2 FY24) to 6.4% (Q2 FY25), while LFPR increased from 49.3% to 50.4%, and WPR improved from 46% to 47.2%.
    2. State-level improvements: 14 states recorded a 10+ percentage point increase in WPR, and 11 states in LFPRsince 2017-18.
3. Sectoral Employment Trends (2017-18 to 2023-24)
    1. Agriculture: Employment share rose from 44.1% to 46.1%, mainly due to rising female participation.
    2. Manufacturing: Declined from 12.1% to 11.4%, reflecting slower industrial job growth.
    3. Services: Decreased from 31.1% to 29.7%, indicating sectoral shifts.
    4. Women in Agriculture: Female participation increased from 57.0% to 64.4%, while male participation fell from 40.2% to 36.3%.

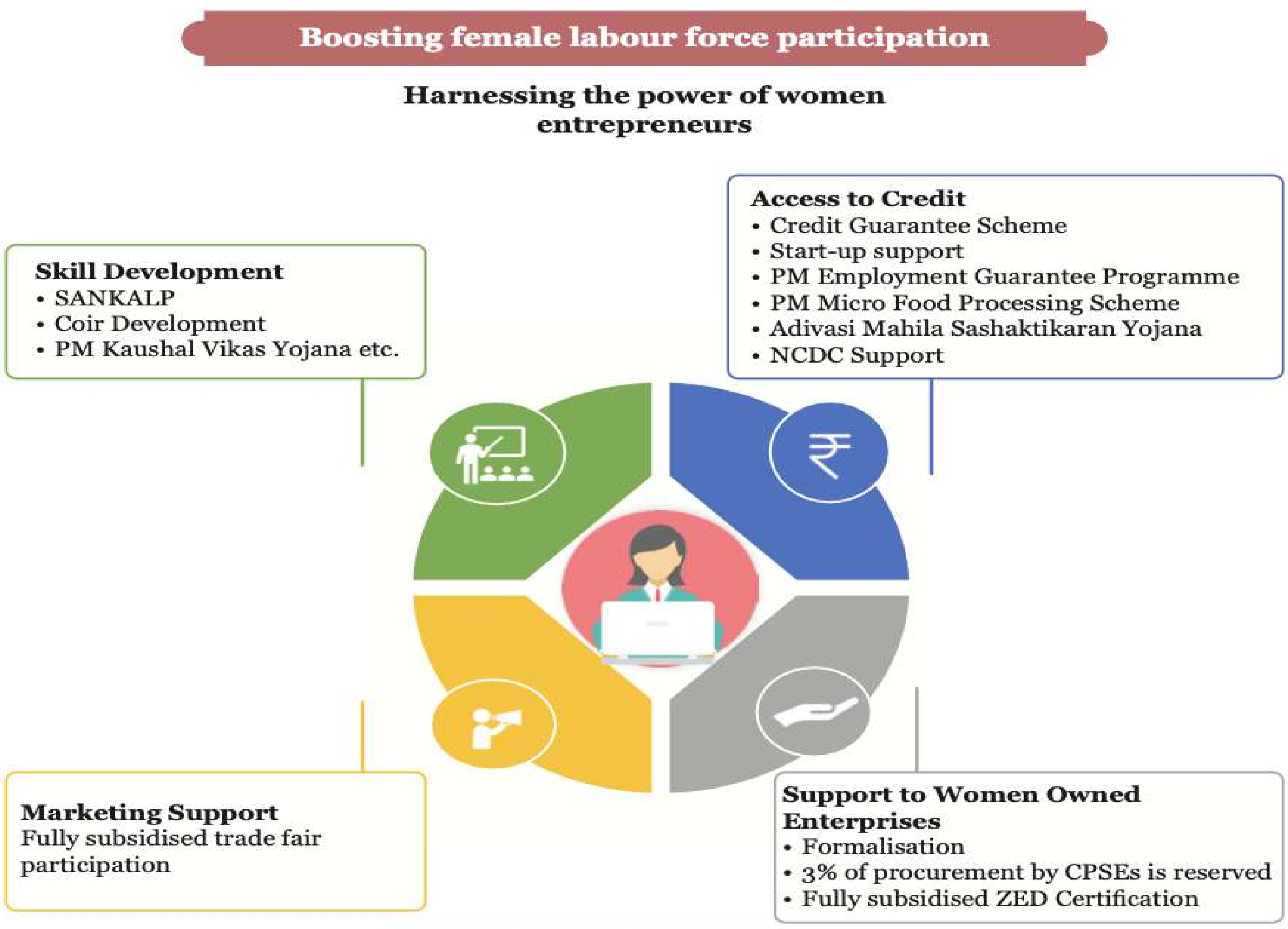
Improving labour market indicators



Source: Periodic Labour Force Survey (PLFS) annual reports. *MoSPI*
Note: LFPR: labour force participation rate
WPR: worker population ratio
UR: unemployment rate

Source: Periodic Labour Force Survey (PLFS) Quarterly reports. *MoSPI*

4. Trends in Employment Types
    1. Self-Employment vs Regular Jobs
        i. Self-employment rose from 52.2% (2017-18) to 58.4% (2023-24), driven by entrepreneurship and flexible work preferences.
        ii. Casual labour share declined from 24.9% to 19.8%, reflecting a shift towards structured employment.
        iii. Regular salaried jobs slightly declined from 22.8% to 21.7%, though stabilised post-pandemic.
    2. Gender-Specific Employment Trends
        i. Women in rural areas are moving toward own-account work or contributing to household enterprises instead of salaried jobs.
        ii. Rural female self-employment increased from 19% (2017-18) to 31.2% (2023-24).
        iii. Unpaid family labour among women rose from 38.7% to 42.3%, showing greater reliance on household enterprises.



5. Government Initiatives Supporting Employment
    1. Key Policies and Programs
        i. Pradhan Mantri Mudra Yojana: Financial aid for micro-enterprises.
        ii. Skill India & Start-Up India: Focus on workforce skilling and entrepreneurship.
        iii. Deendayal Antyodaya Yojana – NRLM: Support for women's self-employment and credit access.
        iv. PM-Internship Scheme: A newly launched initiative acting as a transformative catalyst for employment generation.
6. Labour Law Reforms and Job Creation
    1. The Four Labour Codes simplify laws and improve worker welfare.
    2. Threshold for retrenchment approvals raised from 100 to 300 workers in 14 states.
    3. Night shifts for women approved in 15 states under safety conditions.
7. Factory Employment Growth
    1. Factory employment increased by 7% in FY23, adding over 2.2 million jobs.
    2. Large factories employing 100+ workers now account for 22% of all factories but provide 80% of employment.
8. Trends in Wages and Earnings

1. Earnings Growth (2018-19 to 2023-24)
    i. Regular workers' monthly earnings: Grew from ₹15,885 to ₹20,702.
        1. Casual workers' daily wages: Increased from ₹277 to ₹418.
        2. Self-employed earnings: Increased from ₹10,323 to ₹13,279.
2. Real wages (inflation-adjusted) have grown slower than nominal wages.
    i. Rural Wage Growth (FY25 – April-September 2024)
        1. Agriculture: Male wages increased 5.7%, female wages 7%.
        2. Non-agriculture: Male wages grew 5.5%, female wages 7.9%.
        3. Real wages (adjusted for inflation) increased 0.6% for men, 1.8% for women.
3. Wages in Unincorporated Enterprises
    i. The average annual wage per worker in unincorporated enterprises grew 13%, from ₹1,24,842 to ₹1,41,071.

9. Employment Formalisation and Workforce Inclusion
    1. EPFO payroll additions have more than doubled in the past six years, growing from 6.1 million (FY19) to 13.1 million (FY24), signalling a robust formal job market.
    2. e-Shram portal has registered over 305 million unorganised workers, enabling better social security coverage.

10. Women Entrepreneurship and Economic Growth
    1. Women-Led Business Growth
        i. 73,151 startups have at least one woman director under Start-Up India.
        ii. ₹3,107 crore invested in 149 women-led startups via AIFs.
        iii. Handloom & handicrafts sector: Over 72% of workers are women.
    2. Women MSME ownership:
        i. Micro-enterprises: 22% owned by women.
        ii. Small enterprises: 12% owned by women.
        iii. Medium enterprises: 7% owned by women.
    3. Key Government Support Initiatives
        i. PM Employment Guarantee Programme: 41% of loans sanctioned to women.
        ii. SANKALP Initiative: 32,262 women trained in entrepreneurship.
        iii. WE Hub Telangana: 6,376 startups incubated, ₹177 crore raised.

Reskilling & upskilling

- **CTS at ITIs**: 1.24 Cr enrolled for long-term training
- **PMKVY**: 1.57 Cr trained; 1.21 Cr certified (STT, SP, RPL)
- **JSS**: 27L trained; 26L certified

Women participation

- **PMKVY**: Women's participation is 58 % (FY25)
- **JSS**: Women form 82% of total beneficiaries
- **ITI/NSTI**: Women's participation increased from 9.8% (FY16) to 13.3% (FY24)
- **NAPS**: Women's share grew from 7.7% (FY17) to 22.8% (FY25)

11. Future Job Creation: Digital and Renewable Sectors
    1. Growing digital economy and renewable energy sectors are emerging as key sources of high-quality job creation, critical for achieving the Viksit Bharat vision.

2. The government is building a skilled workforce to match global trends in automation, AI, digitalisation, and climate change adaptation.

Industry partnerships

- **NAPS Portal**: Registered establishments reached 2.38L; 37.94L apprentices engaged
- **New ITI Upgradation Scheme (2024)**: Upgrade 1,000 ITIs in hub-and-spoke
- 20L youth to be trained over 5 years in industry-aligned courses

Digital public infrastructure for skilling

- **Skill India Digital Hub Portal**: A transformative platform to empower the skill ecosystem.
- **Democratising Skills**: Easy access to industry-aligned courses.

International mobility

- Bilateral partnerships
- G2G Memorandums of Understanding
- Skill India International Centers
- Pre-Departure Orientation Training

New age & future skills

- **NCVET**: 200+ new-age & future skill courses approved
- **PMKVY**: 4.65L enrolled; 3.02L completed; ~98K in training
- **ITIs**: 29 new-age courses added under CTS

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Chapter 13 – Labour in AI Era: Crisis or Catalyst?

Introduction

The rapid advancements in Artificial Intelligence (AI) have raised concerns over its impact on labor markets. AI is expected to outperform humans in key sectors such as healthcare, education, and financial services, leading to potential job displacement. However, AI adoption barriers such as reliability, infrastructure constraints, and regulatory challenges provide policymakers with a window to prepare for its implications. India's demographic and economic diversity presents an opportunity to leverage AI for growth, provided significant investments are made in education and workforce skilling.

- AI is evolving rapidly, raising concerns over its impact on labor markets, particularly entry-level jobs.
- AI is expected to excel in decision-making across various sectors, raising concerns about economic displacement and widening social divides.
- Barriers such as resource inefficiencies, infrastructure deficits, and regulatory challenges hinder mass adoption and give India time to prepare for the transition.
- India must focus on skilling, strategic AI integration, and institutional frameworks to maximize AI's benefits while ensuring social inclusivity.

Revolutions and Ripples

Historical technological revolutions have often led to economic disparities. AI presents similar risks of job displacement, particularly in emerging markets. Several global institutions and studies highlight the risks:

- The International Labour Organization (ILO) estimates that 75 million jobs worldwide are at complete risk of automation due to AI-driven transformations.
- The International Monetary Fund (IMF) warns that emerging economies will struggle to leverage AI, compared to advanced economies, due to structural limitations.
- McKinsey predicts that up to 30% of current work hours could be automated by generative AI by 2030, particularly in routine, cognitive, and repetitive jobs.
- India's services sector, particularly IT and BPO jobs, is highly vulnerable, with many roles at risk of automation.
- A survey by IIM Ahmedabad indicates that 68% of white-collar workers believe their jobs will be partially or fully automated by AI within the next five years.
- NASSCOM estimates the Indian AI market will grow at 25-35% CAGR by 2027, signaling increased AI adoption across sectors.
- Lessons from past industrial revolutions highlight the need for strong institutions to mitigate economic inequality and ensure smooth workforce transitions.

1. The Need for Robust Institutions
    1. Institutions play a critical role in minimizing the negative effects of AI-driven disruption. The report categorizes them into:
    2. Enabling Institutions – Focus on skilling and education to equip workers for new AI-augmented roles. They ensure workers are retrained and transitioned into high-value jobs.
    3. Insuring Institutions – Provide financial and social safety nets, such as unemployment benefits and labor protection policies, to those displaced by AI.
    4. Stewarding Institutions – Oversee ethical AI use, regulatory oversight, and public accountability to prevent monopolization of AI benefits and mitigate risks like bias and discrimination.
    5. Building such institutions requires time, making it imperative to start developing them now to create an adaptive and resilient labor force.
2. Vision to Viability: AI's Real-World Challenges
    1. Despite AI's breakthroughs, several challenges limit its practicality and large-scale deployment:
    2. Reliability Issues – AI models often generate errors or hallucinate, making them unsuitable for critical applications without human oversight. Liability concerns arise when AI makes faulty decisions in healthcare, finance, and criminal justice.
    3. Infrastructure Deficiency – AI adoption depends on high-quality data, computing power, and supporting digital infrastructure, all of which require significant investment and are currently insufficient in India.
    4. Resource Challenges – AI models demand massive energy, computing resources, and rare minerals, raising concerns about sustainability and accessibility.
    5. Economic Viability – High training and operational costs limit AI's widespread adoption, and cost-cutting measures such as synthetic data introduce further reliability issues.

    6. Workforce Readiness – The labor force must be equipped with digital literacy and problem-solving skills to transition effectively into AI-augmented roles.
3. AI and India: Opportunities Ahead
    1. While AI poses risks, it also presents opportunities for India:
    2. AI can augment human intelligence rather than replace it, leading to enhanced productivity in knowledge-based industries.
    3. Sectors such as financial services, healthcare, retail, and business services have high demand elasticity, meaning AI-driven productivity gains could create new jobs.
    4. AI can improve efficiency in education, healthcare, and financial services, leading to economic benefits and higher accessibility.
    5. Human-AI collaboration can enhance scientific research, customer service, and policy planning, leading to a smarter workforce and improved decision-making.
4. The Labour Market Evolution
    1. Historically, automation has led to job modifications rather than outright job losses. AI adoption is expected to:
    2. Shift low-skilled workers to higher-value tasks by augmenting human effort with AI-powered tools.
    3. Improve service efficiency in industries like banking, customer support, and retail by automating routine tasks while creating demand for AI management roles.
    4. Create new employment opportunities in AI-driven industries such as data analytics, machine learning, and cybersecurity.
    5. Reduce skill inequalities by enabling low-skilled workers to operate at higher efficiency with AI assistance.
    6. Drive demand for interdisciplinary roles requiring a mix of human judgment, creativity, and AI-driven decision-makin