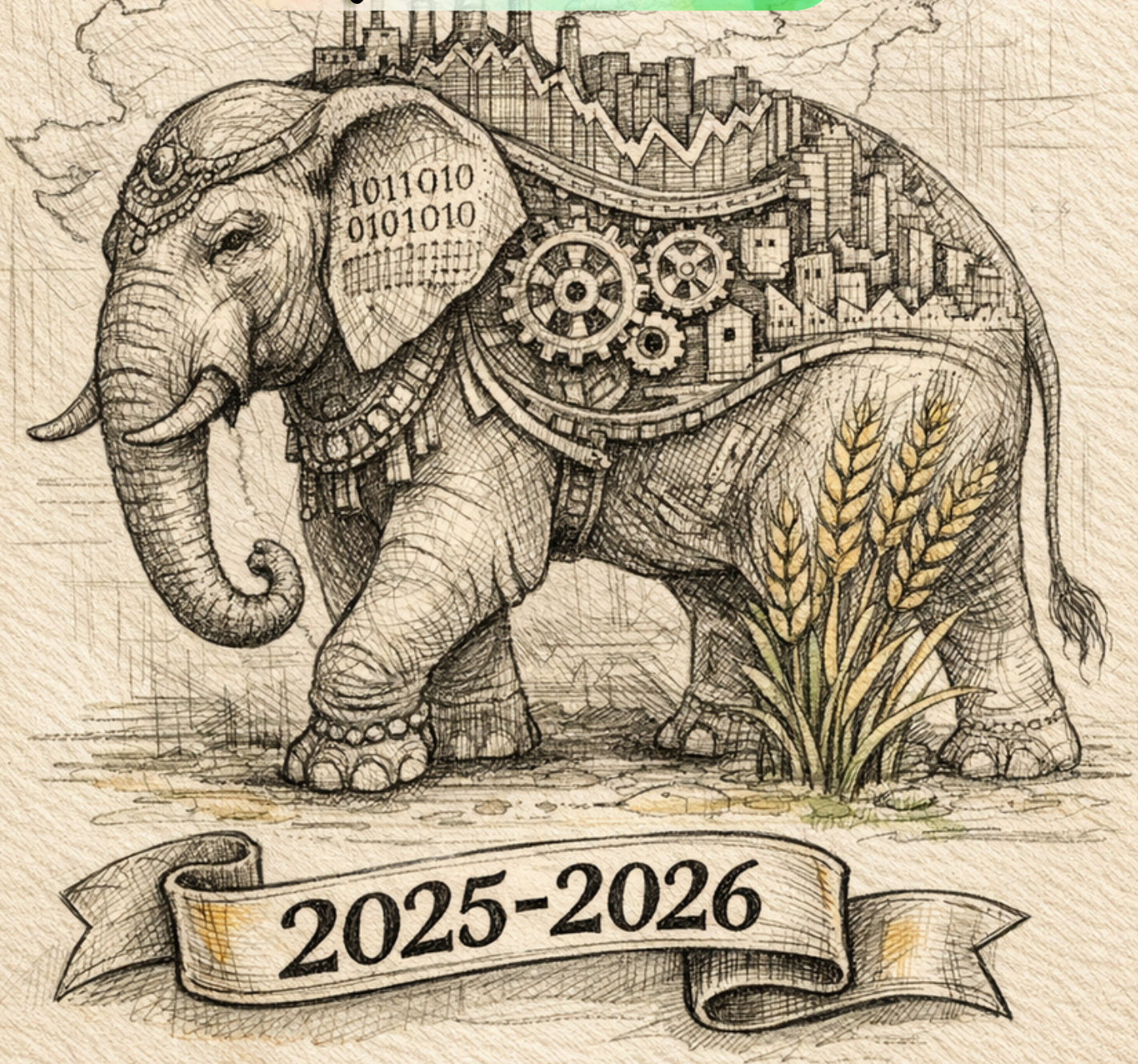
Economic Survey of India

by UPSCTREE



2025-2026

1. India's Economic Performance in 2025

- India maintained strong macroeconomic performance despite global uncertainty.
- Real GDP growth accelerated and is expected to be over 7%, continuing into the next year.
- Inflation remained contained, banks stayed healthy, credit growth was stable, and liquidity conditions were comfortable.
- Fiscal consolidation improved: Fiscal deficit achieved was 4.8% of GDP, better than the target.
- India received credit rating upgrades from major global agencies, including S&P.

2. Policy Reforms and Government Action

Major reforms implemented:

- GST overhaul
- Opening nuclear power to private sector
- 100% FDI in insurance
- Notification of four labour codes
- Rationalisation of environmental norms
- Pause on excessive Quality Control Orders

Emphasis on **policy dynamism, governance reforms, and deregulation**.

3. Global Challenges and the Rupee Paradox

- Despite strong fundamentals, the Indian rupee underperformed due to:
  - Persistent trade deficit in goods
  - Dependence on foreign capital inflows
- Global geopolitics no longer rewards macroeconomic success with currency stability.
- India is described as "punching below its weight" in strategic influence.

4. Three Global Scenarios for 2026

1. **Managed Global Fragility (40–45%)**
   - Continued volatility, trade frictions, geopolitical tension without collapse.

2. **Disorderly Multipolar Breakdown (40–45%)**
    - Intensified geopolitical rivalry, sanctions, fragmented trade and finance.
3. **Systemic Global Shock (10–20%)**
    - Combined financial, AI-related, and geopolitical crises *worse than 2008*.

5. India's Strategic Response:

- India must:
    - Sustain high growth
    - Build buffers, resilience, and shock-absorption capacity
- Focus areas:
    - Export competitiveness
    - Capital flow stability
    - Policy credibility and administrative discipline

6. Manufacturing, Exports, and Cost of Capital

- Services exports help but cannot replace manufacturing for long-term currency stability.
- High cost of capital in India is structural, linked to current account deficits.
- Manufacturing competitiveness requires:
    - Lower logistics and energy costs
    - MSME scaling
    - Innovation and skill development
- Trade agreements (e.g., EU FTA) are opportunities *only if domestic competitiveness improves*.

7. Entrepreneurial State and Institutional Capacity

- The Survey calls for an "Entrepreneurial State":
    - Proactive policymaking
    - Risk-taking under uncertainty
    - Mission-mode governance
- Growth requires alignment between:
    - State

  - Private sector
  - Citizens
- Deregulation and trust-based compliance are highlighted as crucial.

8. Structural Transformation and Long-Term Vision

- India's potential growth rate revised upward to 7%.
- Infrastructure expansion and state-level reforms are improving productivity.
- Core message: ***Choose long-term resilience over short-term populism.***
- India must embrace **delayed gratification** to achieve *Viksit Bharat*.

9. Overall Message of the Survey

- India stands at a historic inflection point.
- Strong fundamentals exist, but success depends on:
  - Institutional reform
  - Strategic resilience
  - Manufacturing-led growth
  - Smart regulation and governance

Chapter 1: State of the Economy

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1. Global Economic Context

- The global economy remains uncertain due to:
  - Geopolitical tensions
  - Trade disruptions and tariffs
  - Divergent growth and inflation trends across countries
- Short-term global growth has shown resilience, but structural vulnerabilities persist, such as:
  - High fiscal deficits
  - Fragmented supply chains
  - Greater use of economic policy for strategic purposes

2. India's Growth Performance in FY26

- India maintained strong growth momentum despite global headwinds.
- Real GDP growth in FY26 (First Advance Estimates): 7.4%
- India remains the fastest-growing major economy for the fourth consecutive year.
- Growth is largely driven by domestic demand rather than external factors.

3. Demand-Side Drivers of Growth

a) Private Consumption

- Private Final Consumption Expenditure (PFCE):
  - Share in GDP rose to **61.5%**, the *highest since FY12*.
- Strong consumption supported by:
  - Low inflation
  - Stable employment
  - Rising real incomes
  - Strong rural demand and improving urban consumption

b) Investment

- Gross Fixed Capital Formation (GFCF):
  - Share in GDP around 30%
- Investment supported by:
  - High public capital expenditure
  - Revival in private corporate investment
  - Capacity utilisation above long-term average

c) External Demand

- Services exports provided stability amid volatility in goods exports
- Export share in GDP remained broadly stable

4. Supply-Side Performance

a) Agriculture and Allied Activities

- Agriculture and allied sectors grew by 3.1%
- Growth supported by:
  - Favourable monsoon
  - Strong performance of allied activities (livestock, fisheries)
- Crop production remains volatile due to structural productivity constraints

b) Industrial Sector

- Industry growth in FY26: 6.2%
- Manufacturing:
  - Grew by 8.4% in H1 FY26
  - Capacity utilisation above long-term average
- Construction activity remained strong, supported by public infrastructure spending
- Decline in manufacturing share in nominal GDP is due to price effects, not output decline

c) Services Sector

- Services sector grew by 9.1%, the *fastest among all sectors*
- Services share in GDP increased to 53.6%
- Growth driven by:
  - Trade, transport, and hospitality
  - Financial, real estate, and professional services
  - Public administration and defence

5. Inflation Trends

- Inflation moderated significantly in FY26:
  - Headline CPI inflation fell to 1.7%
- Decline mainly due to:
  - Sharp fall in food prices (vegetables, pulses)
- Core inflation remains subdued after *excluding gold and silver*

- Inflation outlook remains benign, supported by supply-side factors and GST rationalisation

6. Fiscal Policy and Public Finances

- Fiscal policy balanced growth support with consolidation
- Key features:
  - Strong tax revenue mobilisation
  - Rising capital expenditure
  - Contained revenue expenditure
- Capital expenditure share in total expenditure rose sharply
- Government remains on track to achieve fiscal deficit target of 4.4% of GDP
- India received sovereign credit rating upgrades reflecting fiscal credibility

7. Monetary Policy and Financial Conditions

- Monetary easing undertaken as inflation moderated:
  - Policy repo rate cut by **125 basis points**
- Effective transmission to lending rates
- Banking sector balance sheets strengthened:
  - Gross NPAs at multi-decade lows
- Credit growth remained healthy, supporting investment and consumption

8. Medium-Term Outlook

- India's medium-term growth potential revised upward to 7%
- Growth supported by:
  - Strong domestic demand
  - Infrastructure expansion
  - Manufacturing revival
  - Services-led momentum
- Economy is well-positioned to sustain growth amid global uncertainty

Overall Summary :

Global conditions were uncertain. Even then, India remained the fastest-growing major economy. GDP growth was around 7.4% in FY26. Growth was driven mainly by strong domestic demand. Private consumption reached its highest share of GDP in ten years. This was supported by low inflation and rising incomes. Rural demand also remained stable. Investment stayed strong. This was due to high public capital spending. Private sector confidence also improved.	Services led overall growth. Agriculture remained resilient despite long-term problems. Industry showed signs of recovery. Inflation fell sharply. Fiscal discipline improved. Financial conditions stayed stable. India is well placed for steady medium-term growth.

Chapter 2: Fiscal Developments

1. Overall Fiscal Strategy

- At a time of high global public debt, India stands out for combining:
  - Fiscal consolidation
  - High public capital expenditure
- Focus areas:
  - Deficit reduction
  - Strong revenue mobilisation
  - Reorientation of spending towards **capital formation**
- Result: Improved macroeconomic stability and investor confidence.

2. Recognition by Global Rating Agencies

- India received three sovereign credit rating upgrades in 2025:
  - Morningstar DBRS

  - S&P Global Ratings
  - R&I
- Upgrades attributed to:
  - Prudent fiscal management
  - Improved revenue buoyancy
  - Capital-expenditure-led growth
  - Transparent fiscal framework

3. Fiscal Deficit and Consolidation Path

- Fiscal deficit reduced sharply:
  - 9.2% of GDP (FY21) → 4.8% (FY25)
  - Budgeted at 4.4% in FY26
- Revenue deficit declined to its lowest level since FY09
- Primary deficit also narrowed, showing reduced reliance on fresh borrowing.
- Indicates better quality of expenditure

4. Strengthening of Government Revenues

a) Tax Revenues

- Revenue receipts increased from 8.5% of GDP (pre-pandemic) to 9.1% post-pandemic
- Growth driven mainly by direct taxes
- Share of direct taxes in total taxes rose to 58.8% in FY25
- Personal income tax and non-corporate taxes showed strong buoyancy

b) GST Performance

- GST collections reached multiple all-time highs in absolute terms
- Growth aligned with nominal GDP
- GST taxpayer base expanded from 60 lakh (2017) to over 1.5 crore
- **GST 2.0 reforms:**
  - Simplified rate structure
  - Lower GST on essentials, agriculture, MSMEs, autos, health and renewables
  - Expected to boost consumption, formalisation, and competitiveness

c) Non-Tax Revenues

- Non-tax revenue remained stable at ~1.4% of GDP
- Boosted by:
  - Higher RBI surplus transfer (₹2.68 lakh crore in FY26)
  - Improved performance of CPSEs
- CPSE profits and dividends rose sharply between FY20–FY25

5. Expenditure Reorientation and Quality Improvement

a) Revenue Expenditure

- Revenue expenditure declined:
  - 13.6% of GDP (FY22) → 10.9% (FY25)
- Subsidies reduced without compromising food security
- Direct Benefit Transfer (DBT) reduced leakages by ₹3.48 lakh crore over a decade

b) Capital Expenditure

- Capex scaled up from 1.7% of GDP (pre-pandemic) to ~3% post-pandemic
- **Effective capex** (including grants for asset creation) reached 4% of GDP
- Major focus areas:
  - Roads and highways
  - Railways
  - Housing and urban infrastructure
  - Telecommunications

6. Centre–State Fiscal Relations

- Transfers from Centre to States more than *doubled* between FY20 and FY26:
  - From 5.7% to 6.9% of GDP
- Includes:
  - Tax devolution
  - Finance Commission grants
  - Centrally Sponsored Schemes

- Fifteenth Finance Commission grants focused on:
  - Revenue deficit correction
  - Local bodies
  - Health and disaster management

7. State Government Finances

- Combined State fiscal deficit remained around 2.8% of GDP
- Revenue deficits have risen in many States due to:
  - Slower revenue growth
  - Expansion of unconditional cash transfers
- Capital expenditure of States maintained at ~2.4% of GDP
- Protected by Special Assistance to States for Capital Investment (SASCI):
  - 50-year interest-free loans
  - High multiplier impact on growth

8. Key Structural Concerns Highlighted

- Rising revenue deficits in States
- Risk of crowding out capex due to cash transfer schemes
- Cross-subsidisation issues in:
  - Railways (freight subsidising passengers)
  - Power sector (industry subsidising households)
- Need for tariff rationalisation and cost-reflective pricing

9. Core Message of the Chapter

- India's fiscal consolidation is:
  - Deliberate, credible, and growth-friendly
- Emphasis on:
  - Capital expenditure
  - Revenue efficiency
  - Technology-led governance
- Long-term goal:

- Debt-to-GDP ratio of 50 ± 1%

- Fiscal discipline is seen as a key pillar of Viksit Bharat 2047

Overall Summary :

India followed a disciplined fiscal strategy. It reduced the fiscal deficit steadily. At the same time, it increased capital expenditure. The fiscal deficit fell sharply from pandemic levels. Tax collection improved, especially from direct taxes and GST. Spending quality improved. Subsidies declined. Capital spending increased.	Centre–State transfers increased. States continued spending on infrastructure despite pressures. Technology reduced leakages in welfare schemes. This strengthened fiscal credibility. It also supported long-term debt sustainability.

Chapter 3: Monetary Management

1. Global Financial Environment

- 2025 witnessed high global financial uncertainty due to:
  - Geopolitical tensions
  - Trade policy shocks
  - Technology-driven volatility (AI, digital assets)
- Uncertainty impacts financial markets by:
  - Delaying investments ("wait and see" behaviour)
  - Raising borrowing costs
  - Increasing risk of market corrections and contagion
- AI-led trading and concentration of investments in tech stocks increase systemic risk.

2. Impact of Uncertainty on Investment (India-focused Study)

- Study of 811 listed Indian firms (2010–2024) shows:

- Uncertainty shocks reduce capital formation by ~0.5% of net fixed assets on average.

- Impact varies by:
  - **Firm size:** Mid-sized firms most affected
  - **Export orientation:** Exporters cut investment more
  - **Sector:**
    - Services and traditional manufacturing more resilient
    - High-tech manufacturing more vulnerable
- Policy lesson: Predictable regulations and stable policy frameworks are crucial for private investment revival.

3. Monetary Policy Actions by RBI

- RBI responded to falling inflation with monetary easing:
  - Repo rate cut by 100 basis points (to 5.25% by Dec 2025)
  - Monetary policy stance shifted from accommodative to neutral
- CRR reduced by 100 bps (to 3.0%), injecting ₹2.5 lakh crore liquidity
- Liquidity supported through:
  - Open Market Operations (OMOs)
  - USD-INR buy-sell swaps

4. Liquidity and Monetary Conditions

- System liquidity remained in surplus throughout FY26
- Broad money (M3) growth rose to 12.1%
- Credit growth strengthened, indicating:
  - Effective transmission of monetary policy
  - Improved financial intermediation
- Lending rates declined:
  - Weighted Average Lending Rate on fresh loans fell to 8.71%

5. Banking Sector Performance

- Banking system fundamentals improved significantly:
  - Gross NPAs at multi-decade lows

- NPA recovery improved through:
  - Insolvency and Bankruptcy Code (IBC)
  - SARFAESI mechanism

6. Credit Deployment Trends

- Personal loans showed highest growth (12.8%), driven by gold loans
- **MSME credit** remained strong:
  - Micro & small enterprises credit grew 24.6%
- Large corporates increasingly rely on:
  - Corporate bonds
  - External commercial borrowings
  - Internal accruals
- MSMEs continue to depend primarily on **bank credit**

7. Regional Rural Banks (RRBs)

- Major reform: *One State–One RRB*
  - Number reduced from 196 to 28
- Performance improved:
  - Record profits in FY24 and FY25
- RRBs exceeded 75% priority sector lending target

8. Regulatory Reforms in Banking

- RBI introduced:
  - Transparent framework for regulation-making
  - Consolidation of 9,000+ circulars into 238 Master Directions
- Public Sector Banks launched:
  - Digital Credit Assessment Model (CAM) for MSMEs
- Creation of:
  - Regulatory Review Cell
  - External Advisory Group on Regulation
- Objective: Reduce compliance burden and improve ease of doing business

9. Artificial Intelligence in Finance

- AI adoption in Indian finance still at early stage (≈21% institutions)
- RBI introduced FREE-AI Framework for responsible AI:
  - Seven guiding principles ("Seven Sutras")
  - Focus on trust, fairness, accountability, safety
- Balances:
  - Innovation
  - Risk management
  - Data protection
- Positions India as a global leader in responsible AI governance

10. Microfinance and Financial Inclusion

- Microfinance sector:
  - 95% women borrowers
  - 80% rural clients
- Emphasis on:
  - Responsible lending
  - Household welfare
  - Avoiding over-financialization

11. Key Message of the Chapter

- India's monetary and financial system is:
  - Stable
  - Inclusive
  - Increasingly sophisticated
- Future priorities:
  - Managing uncertainty
  - Regulating AI and fintech
  - Strengthening private investment confidence
- Regulation must remain light-touch, predictable, and adaptive.

Overall Summary :

Global financial conditions were uncertain. India's monetary policy remained flexible and credible. It supported economic growth. Falling inflation allowed gradual interest rate cuts. Liquidity remained sufficient. Credit growth improved. Borrowing costs declined.	Banking sector health improved. NPAs remained low. MSME lending increased strongly. Regulatory reforms simplified compliance. Responsible use of AI in finance was encouraged. Overall, the financial system remained stable and inclusive.

Chapter 4: External Sector

1. Changing Global Trade Environment

- The world is moving away from hyper-globalisation towards:
  - Protectionism
  - Geopolitical realignments
  - Trade driven by national security and strategic autonomy
- Trade Policy Uncertainty (TPU) and Global Economic Policy Uncertainty (GEPU) reached *historic highs in 2025.*
- Global trade is now shaped by:
  - Friend-shoring and near-shoring
  - Strategic decoupling
  - Fragmented global value chains (GVCs)
- This phase is described as "geostrategic globalisation."

2. Global Trade Performance

- IMF projection:
  - Global trade growth: 3.6% in 2025, falling to 2.3% in 2026

- Trade growth in EMDEs (emerging market and developing economies) remains higher than in advanced economies, but **EMDEs are more vulnerable** to trade uncertainty.

3. India's Overall Trade Performance

- India's total exports (goods + services):
  - USD 825.3 billion in FY25 (highest ever)
- Services exports grew strongly (13.6% YoY in FY25) and continue to offset the merchandise trade deficit.
- Total trade deficit in FY25: USD 94.7 billion.

4. Merchandise Trade Trends

- Merchandise exports in FY25: USD 437.7 billion (broadly stable).
- Non-petroleum, non-gems & jewellery exports (≈79% of total):
- Strong growth sectors:
  - Electronics and telecom instruments
  - Pharmaceuticals
  - Electrical machinery
  - Automobiles and garments
- Merchandise imports rose due to:
  - Higher demand for capital goods and intermediates
  - Rise in gold and electronics imports
- Merchandise trade deficit widened to USD 283.5 billion in FY25.

5. Agricultural Exports

- Agricultural exports rose from USD 34.5 bn (FY20) to USD 51.1 bn (FY25).
- India is the 2nd largest agricultural producer, but:
  - Share in global agricultural exports is only ~2.2%.
- Frequent export bans and policy changes:
  - Disrupt supply chains
  - Reduce credibility in global markets

- India has potential to achieve USD 100 billion agricultural exports in the next few years through stable policies.

6. Performance of PLI Sectors

- Production-Linked Incentive (PLI) sectors showed strong export momentum:
- High-performing sectors:
  - Electronics
  - IT hardware
  - Solar PV
  - ACC batteries
  - Specialty steel
- Imports also rose, indicating:
  - Deeper integration into global value chains
  - Scaling of domestic manufacturing
- Telecom sector showed import substitution (*exports up, imports down*).

7. Diversification of Export Destinations

- Despite higher US tariffs, India:
  - Diversified exports to UAE, Europe, Africa, Latin America, and Asia
- Labour-intensive sectors (textiles, leather, gems, marine products):
  - Decline in US exports
  - Growth in alternative markets
- Import sources for crude oil also diversified, reducing dependency on few suppliers.

8. Economic Complexity and Structural Challenge

- India ranks **44th** in Economic Complexity Index (ECI).
- Export basket dominated by:
  - Petroleum products
  - Gems & jewellery
  - Low- to mid-technology goods
- However, India ranks **2nd globally** in Economic Complexity Outlook Index:

  - Indicates strong future potential for diversification
- Structural shift needed towards:
  - High-tech manufacturing
  - Electronics, machinery, chemicals, and advanced services

9. Case Study: Pharmaceutical Sector and TRIPS

- TRIPS agreement was a major external shock.
- Indian pharma responded by:
  - Investing in R&D
  - Market diversification
  - Contract manufacturing and global partnerships
- Result:
  - India became the *largest supplier of generic medicines globally*
- Lesson:
  - External shocks can become opportunities through *capability building and diversification.*

10. Trade Agreements and Future Strategy

- India is actively pursuing:
  - India-UK CETA
  - India-Oman CEPA
  - FTAs with US, Chile, Peru, New Zealand
- Focus areas:
  - Labour-intensive exports
  - Services mobility
  - Market access in Middle East and Africa

11. Core Message of the Chapter

- India's external sector is **resilient but structurally constrained.**
- Long-term success requires:
  - Export diversification

- Manufacturing upgrading
- Stable trade policy
- Strategic global integration

- India must **"play the long game"** in global trade.

Overall Summary :

Global trade became more geopolitically driven. India's external sector remained resilient. Merchandise exports stayed broadly stable. Imports increased. This widened the trade deficit. Services exports grew strongly. They helped offset the trade deficit.	Export diversification improved. PLI schemes supported manufacturing exports. Sectors like pharmaceuticals performed well. Long-term competitiveness needs stable trade policy. Manufacturing capability must improve. India must move into higher-value global value chains.

Chapter 5: Inflation

1. Global Inflation Scenario

- Global headline inflation declined from 8.7% (2022) to 4.2% (2025).
- EMDE inflation fell to 5.3%, while India recorded 2.8%.
- Moderation driven by:
  - Fall in oil and food prices
  - Tight but responsive monetary policies
- Exception cases:
  - **Japan**: wage-driven inflation
  - **UK**: services-led inflation pressures
  - **China**: deflation due to weak demand

2. India's Inflation Performance

- Retail inflation (CPI):
  - Fell from 6.7% (FY23) to 1.7% in FY26 (Apr–Dec).
  - Lowest average inflation in the current CPI series.
- Wholesale inflation (WPI):
  - Remained lower than CPI and reinforced disinflation.
- India managed high growth without overheating.

3. Role of Food Prices in Disinflation

- Food inflation entered deflation from June 2025.
- Major contributors:
  - Sharp fall in vegetables, pulses, cereals, spices
  - Stable prices of milk and protein foods
- Government measures:
  - Buffer stocking
  - Timely imports and export controls
  - Market interventions for TOP crops (Tomato, Onion, Potato)
- Result: Reduced food price volatility compared to earlier years.

4. Core Inflation

- Headline core inflation appeared sticky (~4.6%).
- However, this was mainly due to surging gold and silver prices.
- No broad-based inflationary pressure in the economy

5. Agriculture and Inflation Control

- Favourable monsoon and weather conditions.
- Record cereal production.
- Higher rabi sowing and improved buffer stocks.
- Increased oilseeds and pulses output helped stabilise prices.
- Agriculture created a *benign inflation environment.*

6. Rural–Urban Inflation Trends

- Rural inflation was higher earlier due to:
  - Higher food weight in consumption basket
- As food prices eased:
  - Rural inflation fell below urban inflation
- Core inflation patterns are similar across rural and urban areas.

7. State-Level Inflation Patterns

- Most states' inflation stayed within RBI's 2–6% band.
- Exceptions:
  - Kerala and Lakshadweep (above 6%)
- Inflation across states shows:
  - Increasing convergence
  - Persistence influenced by wage levels and growth rates
- GST found to be price-neutral at state level.

8. Inflation Outlook

- RBI and IMF project inflation to remain within target range.
- RBI forecast:
  - FY26: 2.0%
  - FY27: ~4%
- Upside risks:
  - *Currency depreciation*
  - Rising base metal prices
  - *Geopolitical tensions*
- Food inflation expected *to remain contained* due to strong supply.
- Overall assessment: Inflation unlikely to pose a major risk.

9. Core Message of the Chapter

- India's inflation is:
  - Well-managed
  - Anchored
  - Growth-compatible
- Strong institutions, agricultural resilience, and policy coordination ensured success.
- Inflation control has become a structural strength of the Indian economy.

Overall Summary :

India achieved high growth with very low inflation. CPI inflation fell to multi-decade lows. Food prices moderated. Agricultural output was favourable. Buffer stocks were managed well. Policies were well coordinated.	Core inflation remained under control. Inflation differences across states reduced. Future inflation outlook remained stable. Inflation control became a structural strength

Chapter 6: Agriculture

1. Importance of Agriculture in India

- Agriculture and allied activities contribute ~20% of national income and employ 46.1% of the workforce.
- The sector is critical for:
  - Rural livelihoods
  - Food security
  - Inclusive growth
- Growth in recent years has been driven mainly by **allied sectors** like livestock and fisheries.

2. Performance of Agriculture and Allied Sectors

- Average annual growth (last 5 years): ~4.4%
- Decadal growth (FY16–FY25): 4.45%, the *highest among previous decades*.
- Growth drivers:
  - Livestock (7.1%)
  - Fisheries & aquaculture (8.8%)
  - Crop sector growth remained modest (~3.5%).

3. Foodgrain and Horticulture Production

- Horticulture contributes ~33% of agricultural GVA.
- India:
  - Largest producer of *onions*
  - Second largest producer of fruits, vegetables, and potatoes globally
- Indicates diversification towards high-value crops.

4. Productivity Trends and Regional Disparities

- India's agricultural growth rate exceeds global average, but yields remain below global standards for many crops.
- Yield gaps observed in:
  - Cereals, pulses, maize, soyabean
- Constraints:
  - Fragmented landholdings
  - Rain-fed cultivation
  - Climate shocks (El Niño, heat stress)
  - Low seed replacement rates
- Better performance seen where:
  - Crop choice matches agro-climatic conditions (e.g., *pulses in MP & Gujarat*)
  - Irrigation and quality seeds are available

5. Key Drivers of Productivity Improvement

a) Seeds and Technology

- Sub-Mission on Seeds and Planting Material created:
  - 6.85 lakh seed villages
- National Mission on High-Yielding Seeds announced in Budget 2025–26

b) Irrigation and Water Use

- Gross irrigated area increased to 55.8% of gross cropped area.
- PMKSY and Per Drop More Crop promote:
  - Micro-irrigation
  - Water-use efficiency
- Large *inter-crop* and *inter-state disparities* persist.

c) Soil Health and Fertiliser Use

- Over 25.5 crore Soil Health Cards issued.
- Major concern: imbalanced fertiliser use (*excess urea*).
- N:P:K ratio worsened due to price distortions.

6. Crop Diversification and Ethanol Trade-offs

- Ethanol blending has improved energy security but:
  - Incentivised maize over pulses and oilseeds
- Risk:
  - Reduced food crop diversity
  - Higher import dependence for pulses and edible oils
- Need to balance energy security with food security.

7. Allied Sectors: Livestock and Fisheries

- Livestock:
  - Strong growth supported by AI, FMD vaccination, breed improvement
  - Major challenge: feed and fodder shortages

- Fisheries:
    - India exports seafood to 130+ countries

8. Infrastructure, Marketing and Digital Agriculture

- Agriculture Infrastructure Fund mobilised ₹1.23 lakh crore.
- e-NAM:
    - 1.79 crore farmers
    - 1,522 mandis across 23 states
- 10,000 FPOs registered nationwide.
- Digital Agriculture Mission aims to build:
    - AgriStack
    - Digital crop and soil databases

9. Price, Income and Risk Support

- MSP announced for 22 crops, fixed at 1.5 times cost of production.
- PM-KISAN:
    - ₹4.09 lakh crore transferred since launch.
- Crop insurance (PMFBY):
    - 4.19 crore farmers covered in 2024–25
    - ₹1.9 lakh crore claims paid since inception
- Insurance and income support stabilise farm incomes and reduce risk.

10. Core Message of the Chapter

- Indian agriculture has shown resilience and diversification, led by allied sectors.
- Key priorities:
    - Raise productivity
    - Improve soil and water management
    - Promote diversification
    - Strengthen markets and institutions
- Long-term food security requires productivity-led growth, not area expansion.

Overall Summary :

Agriculture showed resilience and diversification. Growth came mainly from livestock and fisheries. Crop productivity faced structural problems. Horticulture expanded. Irrigation coverage improved. Digital and institutional support increased.	Challenges remain. Yield gaps persist. Climate risks are rising. Fertiliser use is imbalanced. Future growth needs higher productivity. Market reforms are essential. Efficient use of resources is critical.

Chapter 7: Services

1. Role of Services in the Economy

- Services sector is the main engine of India's growth, resilience, and structural transformation.
- Contributes over 50% of Gross Value Added (GVA).
- Acts as a *high-growth*, *low-volatility* anchor, unlike agriculture and industry.
- India is the 7th largest exporter of services globally.
- Services sector is the largest recipient of FDI and a major source of employment.

2. Global Context and Structural Shift

- Globally, growth in goods trade has slowed, while services trade continues to expand.
- Digitally deliverable and knowledge-intensive services (IT, finance, professional services) are driving global growth.
- India has experienced services-led growth at a much lower per capita income compared to other countries.

3. Employment and Urban Dynamics

- Services employ about 30% of India's workforce, more than manufacturing.
- Account for over 60% of urban employment.

- Services added nearly 40 million jobs in the last six years.
- Job quality in services is higher:
  - Over 50% regular wage employment
- However, employment growth is concentrated in **low-value segments**, while high-end services are skill-intensive and less labour-absorbing.

4. Artificial Intelligence and Services Exports

- AI is transforming global services trade.
- AI-intensive services in India recorded ~40% higher export growth than non-AI services.
- Strong gains in:
  - Software services
  - Business and professional services
- India has the fastest-growing AI talent base globally, strengthening future competitiveness.

5. Services and State Capacity Debate

- Services exports:
  - Generate foreign exchange and growth
  - But do not force system-wide institutional reform
- Unlike manufacturing, services:
  - Can bypass weak infrastructure
  - Are less dependent on logistics, ports, and land
- Conclusion:
  - Services are valuable but cannot substitute manufacturing for deep institutional upgrading.

6. Sub-Sector Highlights

a) Tourism

- Domestic tourism is the backbone:
  - Domestic visits rose 17.5% in 2024
- Tourism contributes:
  - 5.2% of GDP

- 13.3% of total employment

- Medical tourism is a major strength:
  - India's market: USD 8.7 billion (2025) → USD 16.2 bn by 2030

b) IT and IT-Enabled Services

- IT-ITeS revenues: USD 283 billion (FY25).
- India hosts 1,700+ Global Capability Centres (GCCs).
- Strong growth in:
  - AI
  - Cloud computing
  - Cybersecurity
  - Deep-tech startups
- India ranked Tier-1 in Global Cybersecurity Index (2024).

c) Transport Services

- Transport contributes ~4.5% of GVA.
- Improvements in:
  - Port cargo handling
  - Rail freight
  - Aviation connectivity
- Rail freight remains 50% cheaper than road transport.

d) Telecommunications

- Over 1.2 billion telephone connections.
- Internet subscribers crossed 100 crore.
- Data costs fell sharply, boosting digital inclusion.

e) Real Estate and Housing

- Contributes ~7% of GVA.
- Formalisation through:
  - RERA

- GST
- PMAY

10. Key Challenges

- Skill gaps due to rapid technological change.
- Uneven regional and sectoral growth.
- Limited employment generation in high-end services.
- Need for better state and local implementation capacity.
- Energy and infrastructure constraints for data centres.

11. Core Message of the Chapter

- Services sector is India's *growth stabiliser and export backbone.*
- Future growth lies in:
  - Digital, AI-enabled, and knowledge-intensive services
  - Deeper integration with manufacturing
- For sustained development:
  - Services must complement, not replace, manufacturing
  - Skill development and institutional capacity are critical.

Overall Summary :

Services remain the backbone of India's growth. They contribute more than half of GDP. They provide major urban employment. IT and digital services performed strongly. AI-enabled services boosted exports. India's global position improved.	However, services cannot replace manufacturing. Manufacturing is needed for large-scale jobs. It also builds institutional capacity. Services and manufacturing must grow together. Skill development is essential. Strong state capacity is required.

Chapter 8: Industry

1. Central Idea of the Chapter

- India's industrial sector is moving from cost-based manufacturing to technology-driven and GVC-integrated manufacturing.
- Future competitiveness depends on strategic indispensability in Global Value Chains (GVCs), *not cheap labour.*
- Focus areas:
  - High-technology manufacturing
  - Innovation and R&D
  - MSME scaling
  - Infrastructure and logistics
- Industry is positioned as a key engine of growth for Viksit Bharat @2047.

2. Global Manufacturing Context

- Global manufacturing recovery remains uneven and fragile.
- Medium- and high-technology industries are growing faster than low-tech sectors.
- Countries are reshaping industrial strategies to:
  - Reduce supply chain vulnerability
  - Secure critical technologies
- Manufacturing success now depends on *technology depth, resilience,* and *policy stability.*

3. India's Industrial Performance

- Medium- and high-technology manufacturing now forms 46.3% of total manufacturing value added.
- India's Competitive Industrial Performance rank **improved to** 37th globally.

4. Shift Towards High-Technology Manufacturing

- Strong growth in:
  - Electronics
  - Pharmaceuticals
  - Chemicals
  - Automobiles
- Exports of medium- and high-tech manufactured products have risen steadily.
- Government initiatives like PLI schemes and India Semiconductor Mission are driving this transition.

5. Core Input Industries

a) Cement

- India is the 2nd largest cement producer globally.
- Demand driven by infrastructure, housing, and urbanisation.

b) Steel

- India is the 2nd largest crude steel producer.
- Strong growth in production and consumption.
- PLI for Specialty Steel promoting high-value products.
- Key challenge: dependence on imported coking coal.

c) Coal

- Coal remains critical:
  - 55% of energy mix
  - 74% of power generation
- Coal imports declined due to higher domestic output.

6. High-Growth Sectors

a) Electronics

- Electronics became the 3rd largest export sector.
- India is now the 2nd largest mobile phone manufacturer globally.

b) Pharmaceuticals & Medical Devices

- India:
  - 3rd largest pharma producer by volume
  - Supplies ~20% of global generics
- Exports to 190+ countries.
- Shift underway from volume-based to value-based and innovation-driven pharma.

c) Textiles

- Textile & apparel sector:
  - ~11% of manufacturing GVA
  - 6th largest exporter globally
- Challenges:
  - Fragmentation
  - Cotton-heavy focus vs global MMF demand
- Policy support:
  - PM-MITRA parks
  - Revised PLI for MMF and technical textiles
  - Rationalisation of Quality Control Orders (QCOs)

7. Manufacturing Promotion Framework

a) Production Linked Incentive (PLI)

- Covers **14 sectors** with ₹1.97 lakh crore outlay.
  - Achievements:
    - ₹2 lakh crore investment

        - ₹18.7 lakh crore production
        - Over 12.6 lakh jobs
- Major success sectors:
    - Electronics
    - Pharma
    - Automobiles

b) National Manufacturing Mission (NMM)

- Announced in Budget 2025–26.
- **Targets by 2035:**
    - Manufacturing share of GDP: 25%
    - Employment: 143 million
    - Exports: USD 1.2 trillion
- Focus on:
    - Clusters
    - MSMEs
    - Skilling
    - Infrastructure
    - Ease of Doing Business

8. Innovation and R&D Ecosystem

- India's Global Innovation Index rank improved to 38th (2025).
- Rapid rise in:
    - Startups (over 2 lakh recognised)
    - Patents, trademarks, industrial designs
- Institutions strengthening innovation:
    - Anusandhan National Research Foundation (ANRF)
    - ₹1 lakh crore RDI Fund
- India among *top 5 countries in 45 critical technologies*.

9. Semiconductors and Strategic Technologies

- Semiconductor supply chains are highly concentrated globally.
- **India Semiconductor Mission** aims to:
  - Build domestic design, fabrication, and packaging capacity
  - ₹76,000 crore incentive framework.
  - 10 major semiconductor projects approved across 6 states.
- Seen as critical for economic security and strategic autonomy.

10. Infrastructure and Logistics

- Shift from project-based to system-based planning.
- PM GatiShakti integrates:
  - 57 ministries
  - 1,700+ data layers
- National Logistics Policy, ULIP, LEADS improving predictability and cost efficiency.
- Industrial corridors creating plug-and-play manufacturing ecosystems.

11. Core Message of the Chapter

- India's industry is entering a *decisive transformation phase*.
- Long-term success depends on:
  - High-tech manufacturing
  - Innovation and R&D
  - MSME scaling
  - Logistics efficiency
  - Stable, pragmatic regulation
- Industry must anchor India's rise as a globally integrated manufacturing power.

Overall Summary :

Industry is undergoing a major transition. It is moving from low-cost to technology-driven manufacturing.	Electronics, pharmaceuticals, and semiconductors showed progress. Specialty steel also performed well.

Medium- and high-tech sectors now dominate output. PLI schemes supported this shift. Infrastructure and innovation ecosystems improved.	Long-term success depends on MSME growth. Logistics efficiency must improve. R&D spending needs to increase. Regulation must remain stable.

Chapter 9: Investment and Infrastructure

1. Infrastructure as the Engine of Growth

- Infrastructure is central to India's vision of Viksit Bharat @2047
- Focus has shifted from only asset creation to:
  - Integrated planning
  - Network efficiency
  - Multimodal connectivity
- Infrastructure investment has a *high GDP multiplier (2.5–3.5),* making it a powerful growth driver

2. Surge in Public Capital Expenditure

- Central government capital outlay:
  - ₹3.07 lakh crore (FY19) → ₹11.21 lakh crore (FY26 BE)
  - Nearly 89% increase since FY22
- Public capex has become the cornerstone of growth strategy, crowding in private investment.
- Emphasis on quality project preparation and timely execution.

3. PM GatiShakti and Integrated Planning

- PM GatiShakti National Master Plan institutionalised GIS-based, multimodal planning.
- PM GatiShakti Public platform expanded access to geospatial data.
- Complemented by:
  - National Logistics Policy (NLP)
  - Unified Logistics Interface Platform (ULIP)

  - LEADS framework
- Result: Lower logistics costs, reduced execution risks, and better coordination.

4. Infrastructure Financing and Private Participation

- Shift from bank-dominated financing to diversified funding sources:
  - NBFCs
  - Capital markets
  - InvITs and REITs
- NBFC credit to infrastructure grew faster than bank credit.

5. Public–Private Partnerships (PPPs)

- India ranks among the top 5 globally for private participation in infrastructure.
- Strong institutional mechanisms:
  - PPP Appraisal Committee (PPPAC)
  - Viability Gap Funding (VGF)
  - India Infrastructure Project Development Fund (IIPDF)

6. Roads and Highways

- National Highway network expanded by ~60% since 2014.
- High-Speed Corridors increased nearly **10 times.**
- Average annual road construction more than doubled.
- PMGSY achieved **near-universal rural connectivity (99.7%).**

7. Railways

- Rail network expanded to 69,439 route km; electrification at 99%.
- Record capital expenditure focused on:
  - New lines, doubling, multi-tracking
  - Dedicated Freight Corridors (DFCs)
- Economic Rail Corridors under PM GatiShakti improving freight efficiency.

8. Civil Aviation

- India is the 3rd largest domestic aviation market.
- Number of airports doubled since 2014.
- Passenger traffic and air cargo volumes rising rapidly.
- Key initiatives:
  - UDAN (regional connectivity)
  - Greenfield airports
  - DigiYatra and drone reforms
- Significant headroom for future growth due to low airport density.

9. Ports, Shipping and Inland Waterways

- Ports modernised under Maritime India Vision 2030 and Maritime Amrit Kaal Vision 2047.
- Cargo handling and turnaround times improved to near-global standards.
- PPP share in ports rising; private operators expected to handle 80% cargo by 2030.
- Kochi Water Metro showcased as a scalable, green urban transport model

10. Energy Infrastructure

Power Sector

- Installed power capacity crossed 500 GW.
- Universal electrification achieved; demand–supply gap reduced to near zero.
- Proposed *Electricity (Amendment) Bill, 2026* aims to enhance competition and efficiency.

Renewable Energy

- Renewables form ~50% of installed capacity.
- India ranks among global leaders in solar and wind.
- Challenges:
  - Land, financing, grid integration
- Focus on storage solutions (BESS, pumped hydro).

11. Digital Infrastructure

- Telecom sector transformed through:
  - 5G rollout
  - BharatNet
  - Sharp fall in data prices
- Rapid rise in internet penetration and data consumption.
- India Energy Stack (IES) proposed as digital public infrastructure for power:
  - Enables consumer participation
  - Supports energy markets, innovation, and livelihoods
- Digital infrastructure seen as a force multiplier across sectors.

12. Core Message of the Chapter

- Infrastructure investment is no longer just about building assets, but about:
  - Efficiency
  - Integration
  - Sustainability
  - Competitiveness
- Continued public capex, strong PPP frameworks, diversified financing, and digital integration are essential.
- Infrastructure remains the foundation of India's growth strategy and global competitiveness.

Overall Summary :

Infrastructure is the backbone of growth. Public capital expenditure remained high. This encouraged private investment. PM GatiShakti improved planning and coordination. Financing options expanded. PPP frameworks strengthened.	Roads, railways, ports, and energy expanded rapidly. Aviation and digital infrastructure also improved. The focus shifted from building assets to improving systems. Efficiency, connectivity, and sustainability gained priority.

Chapter 10: Environment and Climate Change

1. Core Message of the Chapter

- India's climate strategy is development-first, resilience-oriented, and pragmatic.
- Climate action must:
  - Protect growth and livelihoods
  - Ensure energy security
  - Build institutional and infrastructural resilience
- **Development itself is a form of climate adaptation.**
- India rejects alarmism and focuses on sequenced, feasible transitions.

2. Global Climate Transition: Lessons for India

- Advanced economies (Europe, Spain, Netherlands) show that:
  - Rapid renewable expansion without grid readiness causes:
    - Grid congestion
    - Power outages
    - Higher system costs
- Key lesson:
  - Climate transitions fail if complexity runs ahead of institutional capacity.
- Energy transition is not just moral or technological—it is:
  - Engineering-intensive
  - Capital-intensive
  - Institution-intensive

3. India's Climate Reality

- India's per-capita emissions: ~2.9 tCO_2/person, far below global average.
- Climate risks for India:
  - Heatwaves
  - Floods and droughts

  - Water stress
  - Coastal vulnerability
- Therefore, adaptation is the centrepiece of India's climate strategy.

4. Three Pillars of India's Climate Strategy

a) Adaptation (Top Priority)

- Focus on:
  - Livelihood protection
  - Infrastructure resilience
  - Water and food security
- Largely financed through domestic public investment.
- Adaptation spending rose from 3.7% of GDP (FY16) to 5.6% (FY22).

b) Mitigation (Balanced Path)

- Gradual expansion of:
  - Renewable energy
  - Energy efficiency
  - Green hydrogen
  - Nuclear energy
- Objective:
  - Reduce emissions without harming affordability or competitiveness.

c) Domestic Climate Finance

- Global climate finance flows to developing countries remain inadequate.
- India relies on:
  - Sovereign green bonds
  - Green deposits
  - Domestic financial reforms
- Calls for reform of global financial institutions and credit rating systems.

5. Adaptation Through Development Planning

- Climate adaptation is embedded in:
  - National Action Plan on Climate Change (NAPCC)
  - Nine national missions (water, agriculture, health, habitat, Himalayas, etc.)
- State Action Plans on Climate Change (SAPCCs):
  - Shifted from mitigation-heavy to adaptation-led development
  - Integrated with finance, planning, and district-level priorities

6. Examples of Local Adaptation Success

- **Kerala (KERA Project)**: Climate-resilient agri-value chains, higher farm incomes.
- **Meghalaya**: Spring rejuvenation and watershed protection using GIS.
- **Odisha**: Pani Panchayats and climate-resilient irrigation.
- **Tamil Nadu**: Coastal restoration and blue economy projects.
- **Ahmedabad**: Heat insurance for informal women workers.
- **Jodhpur**: Net-zero community cooling stations.
- **Uttarakhand**: Community radio for disaster preparedness.

Shows that *adaptation works best when locally designed and community-led.*

7. Energy Transition: India's Pragmatic Approach

- India crossed 50% non-fossil installed power capacity (Dec 2025).
- Ranked 4th globally in renewable energy capacity.
- However:
  - Solar and wind are intermittent.
  - Grid stability and storage are critical.
- India emphasises:
  - Storage (battery & pumped hydro)
  - Grid strengthening
  - Dispatchable power (hydro + nuclear)

8. Role of Nuclear Energy

- Nuclear seen as:
  - Clean
  - Reliable
  - Non-intermittent
- **SHANTI Act, 2025:**
  - Allows private and state participation
  - Enables small modular reactors (SMRs)
- Target: **100 GW nuclear capacity by 2047.**

9. Energy Storage and Grid Stability

- India needs:
  - 336 GWh storage by 2030
  - 411 GWh by 2032
- Policy support:
  - Viability Gap Funding (VGF)
  - PLI for battery manufacturing
  - Market access for storage services
- Storage recognised as core power infrastructure, not an add-on.

10. Critical Minerals: Strategic Challenge

- Clean energy depends on:
  - Lithium, cobalt, copper, rare earths
- Risks:
  - Supply concentration
  - Price volatility
  - Standards becoming trade barriers
- India's response:
  - National Critical Mineral Mission (NCMM)
  - Overseas mineral assets (Argentina, Australia, Chile)
  - Recycling incentives

- Emphasis on resilience + global cooperation, not dependency.

11. Carbon Credit Trading Scheme (CCTS)

- India launched Carbon Credit Trading Scheme (2023).
- Two components:
  - Compliance market (energy-intensive industries)
  - Voluntary offset market
- Uses emission-intensity targets, not absolute caps.
- Learning from EU, China, Korea:
  - Gradual rollout
  - Avoid excessive free allowances
  - Align with national development needs

12. Mission LiFE (Lifestyle for Environment)

- Focuses on behavioural change, not just technology.
- Promotes:
  - Responsible consumption
  - Resource efficiency
  - Citizen participation
- Integrated into India's NDC commitments.
- Climate action seen as a people's movement, not only a policy agenda.

13. Core Takeaways of the Chapter

- Climate action must be:
  - Realistic
  - Sequenced
  - Development-compatible
- For India:
  - Growth strengthens resilience
  - Adaptation is urgent
  - Energy security is non-negotiable

- India advocates a climate pathway that is:
  - Technologically feasible
  - Financially affordable
  - Socially just

Overall Summary :

India follows a practical climate strategy. Development remains the priority. India has low per-capita emissions. Climate vulnerability is high. The focus is on adaptation and resilience. Mitigation is gradual. Domestic climate finance is emphasised.	Grid stability and energy storage are important. Nuclear energy and critical minerals are prioritised. Mission LiFE promotes sustainable lifestyles. Growth and sustainability are balanced.

Chapter 11: Education and Health

1. Core Idea of the Chapter

- Education and health are the two pillars of human capital and inclusive growth.
- India's development vision of **Viksit Bharat @2047** is based on:
  - Leaving no one behind
  - Improving quality, access, and outcomes
- The chapter highlights:
  - What has worked well so far
  - Remaining gaps
  - Practical pathways for the future

2. Importance of Education for India

- Nearly 27% of India's population (2024) is in the school-going age group (3–18 years).
- Even by 2047, over **20%** will be school-age.

- India has improved enrolment, but learning outcomes and years of schooling remain low compared to global peers.
- Key challenge: converting demographic advantage into high-quality human capital.

3. School Education: Progress So Far

- India runs one of the **largest school systems globally**:
  - ~14.7 lakh schools
  - ~24.7 crore students
  - ~1 crore teachers
- Government schools dominate in number and enrolment.
- Gross Enrolment Ratio (GER):
  - High at primary and middle levels
  - Drops sharply at secondary level, especially in rural areas

4. National Education Policy (NEP) 2020

- First major education reform in 34 years.
- Focus areas:
  - Early Childhood Care and Education (ECCE)
  - Foundational Literacy and Numeracy (FLN)
  - Reduced dropouts
  - Flexible curriculum and assessment
  - Equity and inclusion
- Target:
  - 15 years of schooling under the 5+3+3+4 structure.

5. Key School Education Initiatives

- PM-SHRI Schools
- PM POSHAN (mid-day meals)
- NIPUN Bharat Mission (FLN)
- DIKSHA digital platform
- PARAKH (national assessment)

- ULLAS (adult literacy)
- Kasturba Gandhi Balika Vidyalayas
- Tribal education schemes (PM-JANMAN, Dharti Aaba Abhiyan)

6. Learning Outcomes and Assessments

- **PARAKH Rashtriya Sarvekshan 2024:**
  - Learning levels in Grade III have recovered strongly after COVID.
  - Girls slightly outperform boys in language.
  - Rural and government schools show strong gains.
- Learning outcomes are improving, but:
  - Many schools lack trained teachers.
  - Emotional well-being and motivation remain concerns.

7. School-to-Skill Pathways

- Major challenge:
  - Nearly 2 crore adolescents (14–18) are out of school.
- Main reasons for dropouts:
  - Need to *supplement household income*
  - *Domestic responsibilities* (especially for girls)
- Only ~1% of adolescents receive formal skill training.
- Need to:
  - Integrate vocational education in secondary schools
  - Align education with labour-market needs
  - Reduce dropouts through skill-linked education

8. Higher Education: Expansion and Reforms

- Number of HEIs increased sharply since 2014:
  - Universities, colleges, IITs, IIMs, AIIMS expanded
- Higher education GER:
  - Increased to ~29.5%
- Major reforms under NEP:

  - Academic Bank of Credits
  - Flexible entry-exit
  - Multidisciplinary education
  - National Research Foundation
- Proposed Viksit Bharat Shiksha Adhishthan Bill, 2025:
  - Simplifies regulation
  - Improves autonomy and quality
  - Creates a single-window system

9. Industry–Academia Linkages

- Major gap between:
  - Industry needs
  - Graduate skills
- Aim:
  - Improve employability
  - Strengthen innovation and R&D ecosystem

10. Internationalisation of Higher Education

- India is the largest source of international students, but attracts very few inbound students.
- Policy measures:
  - Foreign university campuses
  - Joint and dual degree programmes
  - Study in India initiative
- Opportunity:
  - Education tourism
  - Global South partnerships
  - Retain talent and earn forex

Health Sector

1. Health Achievements

- Major improvements since 1990:
  - Maternal Mortality Rate reduced by 86%
  - Under-five mortality reduced by 78%
  - Infant Mortality Rate fell from 40 (2013) to 25 (2023)
- Several states now have *IMR comparable to developed countries.*

2. Public Health Interventions

- Key drivers of success:
  - National Health Mission
  - Ayushman Bharat
  - Expanded immunisation
  - Neonatal and maternal care facilities
- Focus on first month of life has reduced infant deaths.

3. Digital Health and Technology

- Digital initiatives:
  - Ayushman Bharat Digital Mission
  - e-Sanjeevani (telemedicine)
  - Hospital Management Information Systems
- AI-based tools for:
  - Disease screening
  - Clinical decision support
  - Surveillance and diagnosis
- Digital health has improved access, efficiency, and policy planning.

4. Emerging Health Challenges

- Rising concerns:
  - Obesity
  - Non-communicable diseases
  - Mental health issues
  - Digital addiction among youth
- Need to shift from curative to preventive healthcare.
- Behavioural change and lifestyle interventions are essential.

5. Key Takeaways of the Chapter

- Education and health reforms must focus on:
  - Outcomes, not just access
  - Equity and regional balance
  - Accountability and data-driven governance
- Community participation, digital tools, and institutional reforms are crucial.
- Investing in human capital is central to India's long-term growth and competitiveness.

Overall Summary :

Education and health shape long-term growth. Access and infrastructure have improved. Focus is shifting to learning outcomes. Employability is prioritised. Preventive healthcare is encouraged. NEP reforms are progressing. Health coverage expanded. Digital platforms improved delivery.	Challenges remain. Skill gaps persist. School dropouts remain an issue. Lifestyle diseases are increasing.

Chapter 12: Employment and Skill Development

1. Core Theme of the Chapter

- India has a large workforce (56+ crore) and a strong demographic dividend.
- The focus has shifted from number of jobs to quality of jobs.
- Employment growth must ensure:
  - Decent wages
  - Social security
  - Skill alignment with industry needs
- Skilling is essential to realise the vision of Viksit Bharat @2047

2. Demographic Opportunity and Challenge

- Working-age population (15–59 years) will exceed 98 crore in the next decade.
- Demographic dividend expected to peak around 2030.
- Simultaneously, India is witnessing:
  - Falling fertility
  - Rising life expectancy
  - Gradual ageing of population
- This creates scope for a longevity dividend, if health, skills, and productivity improve.

3. Overall Employment Situation

- Labour market indicators show improvement:
  - Rising Labour Force Participation Rate (LFPR)
  - Declining Unemployment Rate (UR)
- Employment growth seen in both:
  - Organised sector
  - Unorganised sector

4. Sectoral Distribution of Employment

- **Agriculture:**
  - Still dominant in rural areas
  - *Seasonal* and *informal* in nature
- **Services:**
  - Main employer in urban India
  - Higher share of regular wage jobs
- **Manufacturing:**
  - About 11.4% of total employment
  - Crucial for productive, large-scale job creation

5. Nature of Employment

- *Self-employment* remains dominant, especially in *rural areas*.
- Regular wage employment is higher in urban areas.
- Casual labour share is declining slowly.
- Employment structure is highly diverse, reflecting India's informal economy.

Women & Employment

6. Female Labour Force Participation (FLFPR)

- FLFPR has improved significantly:
  - 23.3% (2017–18) → 41.7% (2023–24)
- Women are concentrated in:
  - Self-employment
  - Household enterprises
  - Flexible work arrangements
- Time Use Survey (2024) shows:
  - Women carry a dual burden of paid and unpaid work.

7. Key Barriers for Women

- Care responsibilities
- Limited mobility and safety concerns
- Lack of affordable housing and childcare
- Lower participation in STEM and formal jobs

8. Policy Measures to Boost Women's Employment

- Labour Codes allow:
  - *Night shifts* with safeguards
  - *Work-from-home*
  - Equal wages and maternity benefits
- Focus on:
  - Care economy (crèches, Anganwadis)
  - Safe urban transport
  - Working women hostels
  - Skill training aligned with industry
- Goal: Women-led development under Viksit Bharat.

Unorganised and Gig-Workers

9. Unorganised Workforce

- Large share of workers remain informal.
- **e-Shram portal**:
  - Registered **31+ crore unorganised workers**
  - 54% registrants are women
  - Provides Universal Account Number (UAN)
- Enables access to:
  - Social security
  - Welfare schemes
  - Job and skill opportunities

10. National Career Service (NCS)

- Digital platform connecting:
  - Job seekers
  - Employers
  - Training providers
- Over:
  - 5.9 crore job seekers
  - 53 lakh employers
- Integrated with Skill India Digital Hub and other portals.

11. Gig and Platform Economy

- Gig work is:
  - Task-based
  - Flexible
  - Digitally mediated
- Gig workforce:
  - 77 lakh (FY21) → 1.2 crore (FY25)
- Expected to:
  - Form *6.7% of workforce by 2030*
  - Contribute ₹2.35 lakh crore to GDP
- Challenges:
  - Income volatility
  - Lack of credit access
  - Algorithmic control
  - Limited social security

12. Labour Codes and Gig Workers

- Labour Codes formally recognise:
  - Gig workers
  - Platform workers
- Code on Social Security provides:

  - Welfare funds
  - Insurance and pensions
  - Benefit portability
- Balance between flexibility and protection.

Manufacturing & Job Quality

13. Organised Manufacturing Employment

- Employment grew by 6% in FY24.
- Over 57 lakh jobs added in the last decade.
- Larger factories:
  - Pay higher wages
  - Have higher productivity
- Employment quality improves as firms scale up.

14. Geographic and Industry Concentration

- 7 states account for ~60% of manufacturing employment:
  - Tamil Nadu, Gujarat, Maharashtra, UP, Karnataka, Haryana, Telangana
- Major employing industries:
  - Food products
  - Textiles
  - Basic metals
  - Automobiles
  - Chemicals

Labour Code and Job Creation

15. Four Labour Codes

- Consolidated 29 labour laws into 4 Codes:
  - Wages
  - Industrial Relations

  - Social Security
  - Occupational Safety
- Objectives:
  - Simplify compliance
  - Promote formalisation
  - Protect worker rights
  - Improve ease of doing business

16. Expected Impact of Labour Codes

- Increase in:
  - Formal employment
  - Female participation
  - Worker mobility
- Reduction in:
  - Compliance costs
  - Informality
- Potential to create ~77 lakh jobs in medium term.
- Expansion of social security to gig and migrant workers.

Skill Development

17. Skill Mismatch Problem

- Major gap between:
  - Education outcomes
  - Industry requirements
- Skilling must focus on:
  - Manufacturing
  - Digital services
  - Green jobs
  - Care economy

18. Way Forward on Skilling

- Expand vocational education at all levels.
- Align training with local and sectoral demand.
- Promote lifelong learning.
- Integrate skilling with employment platforms.
- Improve quality, not just quantity, of training.

19. Key Takeaways of the Chapter

- Employment quality is as important as job quantity.
- Women's participation is critical for growth.
- Manufacturing and skilling are central to productive employment.
- Labour Codes can transform India's labour market if implemented well.
- Skilling is the bridge between demographic potential and economic growth.

Overall Summary :

India's demographic advantage needs quality jobs. Employment indicators improved. Women's workforce participation increased sharply. Gig and informal workers are better integrated. Digital platforms and labour codes helped.	Manufacturing expansion is essential. MSMEs must scale up. Skills must match industry needs. This will ensure inclusive employment growth.

Chapter 13: Rural Development and Social Progress

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1. Core Idea of the Chapter

- Rural transformation is central to:
  - Poverty reduction

  - Social mobility
  - Inclusive and sustainable growth
- Development approach is shifting from government-led schemes to community-driven partnerships.
- Focus is on participation, dignity, empowerment, and local ownership

Poverty Reduction & Social Mobility

2. Progress in Poverty Reduction

- World Bank revised International Poverty Line (IPL) to *USD 3/day (2021 PPP).*
- With revised IPL (2022–23):
  - Extreme poverty: 5.3%
  - Lower-middle-income poverty: 23.9%
- Multidimensional Poverty Index (MPI):
  - Declined from 55.3% (2005–06) to ~11.3% (2022–23).
- Poverty reduction has been broad-based across states, rural and urban areas.

Social Sector Expenditure

3. Expansion of Social Protection

- Population covered by social protection:
  - 22% (2016) → 64.3% (2025)
- Rural access improvements:
  - Drinking water: 94.6% → 99.6%
  - Universal electrification achieved
  - ODF districts achieved by 2019–20

4. Social Sector Expenditure Trends

- Social Services Expenditure (Centre + States):
  - Education spending CAGR: 11%
  - Health spending CAGR: 8%

- Indicates sustained commitment to human development and welfare.

Transforming Rural Economy

5. Improving Rural Economic Conditions

- NABARD report shows:
  - Rising rural incomes and consumption
  - Better credit access and repayment
  - Improved infrastructure satisfaction
- Rural consumption is high.
- Dependence on MGNREGS declining:
  - Person-days: 389 crore (FY21) → ~184 crore (FY26)
- Rural unemployment declined to 2.5% (2023–24).

6. Reimagining Rural Employment: VB G-RAM G Act, 2025

- Viksit Bharat – Guarantee for Rozgar and Ajeevika Mission (Gramin) replaces MGNREGS.

Key changes:

- Guaranteed employment increased:
  - 100 → 125 days
- Focus on 4 priority areas:
  - Water security
  - Rural infrastructure
  - Livelihoods
  - Climate & disaster resilience
- Stronger accountability, digital monitoring, social audits
- Bottom-up planning through Viksit Gram Panchayat Plans
- Integrates local works with national infrastructure goals.

Community Participation

7. Jan Bhagidari and Panchayati Raj

- 73rd Constitutional Amendment institutionalised grassroots democracy.
- Programmes like:
  - DAY-NRLM
  - SBM
  - Jal Jeevan Mission
- Strengthen local institutions, SHGs, and Gram Sabhas.
- Development is increasingly people-centred and participatory.

8. Technology-Driven Rural Inclusion

- **SVAMITVA Scheme:**
  - Drone mapping of village land
  - Property cards issued in **3.28 lakh villages**
- **Namo Drone Didi:**
  - Empowers rural women through drone-based services
- **Digital Land Records (DILRMP):**
  - 99.8% rural RoRs digitised
  - ULPIN/Bhu-Aadhaar for land parcels
- Smart village models show how AI, IoT, telemedicine, and solar tech improve rural life.

Village Commons

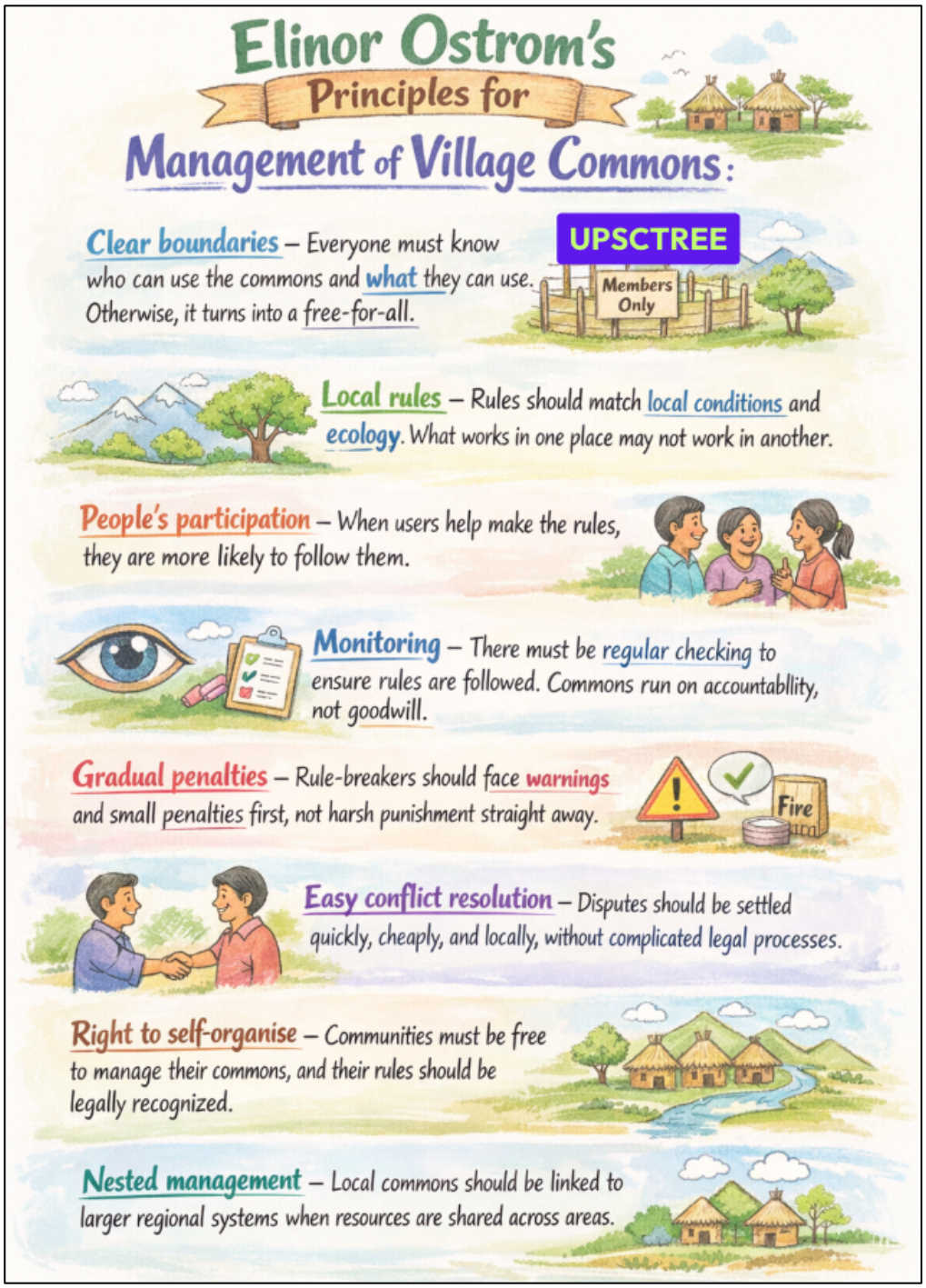
9. Importance of Village Commons

- Commons cover ~15% of India's geographical area.
- Support livelihoods of ~35 crore rural people.
- Provide ecosystem services:
  - Water security
  - Soil protection
  - Carbon sequestration

- Degradation rising due to encroachment and misuse.

10. Reviving Village Commons

- Initiatives:
  - Mission Amrit Sarovar
  - Jal Shakti Abhiyan
- Guided by *Elinor Ostrom's principles*.



Social Capital

12. DAY-NRLM and Women-Led Livelihoods

- Over 10 crore rural households mobilised into SHGs.
- Key outcomes:
  - Financial inclusion
  - Entrepreneurship
  - "Lakhpati Didi" movement
- Strong role of Community Resource Persons (CRPs).

13. Skill Development in Rural Areas

- **DDU-GKY:**
  - Skilling and placement of poor rural youth
  - Focus on retention and career progression
- **RSETIs:** (Rural Self Employment Training Institutes)
  - 629 institutes across districts
  - Promote rural entrepreneurship
- Skill development seen as key to reducing distress migration.

Rural Infrastructure

14. Rural Connectivity and Housing

- **PMGSY:**
  - 99.6% eligible habitations connected
- **PMAY-G:**
  - ~3.7 crore rural houses completed in last 11 years
- **JJM (Har Ghar Jal):**
  - Rural tap water coverage: **17% (2019)** → *81% (2025)*
  - Major health and time-saving benefits for women.

15. Tribal Development and Green Livelihoods

- **PM-JANMAN & Dharti Aaba Abhiyan:**
  - Target PVTGs and tribal villages
- **Van Dhan Vikas Kendras** promote MFP-based livelihoods.
- Tribal areas hold large potential for:
  - Green economy
  - Biodiversity-based growth
- Integration of traditional knowledge + modern technology is key.

16. Core Message of the Chapter

- Rural development succeeds when communities become partners, not beneficiaries.
- Key pillars:
  - Poverty reduction
  - Community participation
  - Technology use
  - Local governance capacity
  - Sustainable livelihoods
- India's rural transformation is moving from participation to partnership, making growth more inclusive, resilient, and sustainable.

Overall Summary :

Rural development is becoming participatory. Poverty declined sharply. Social protection coverage expanded. Rural infrastructure improved.	Digital inclusion increased. Women-led livelihoods expanded. Commons and tribal development gained focus. Technology and local governance worked together. Rural growth became more inclusive and resilient.

Chapter 14: Evolution of the AI Ecosystem in India

1. Central Message of the Chapter

- Artificial Intelligence (AI) is a strategic economic choice, not just a technology.
- India should not copy the capital-intensive, frontier-model race of advanced economies.
- Instead, India must adopt a bottom-up, application-led, inclusive AI strategy.
- AI should generate dignified employment, improve productivity, and serve social needs

Global Ai Realities & India's Context

2. Global AI Landscape

- AI adoption is widespread, but AI power is highly concentrated.
- Training large foundational models requires:
  - Massive capital
  - Advanced chips (GPUs)
  - Huge energy and water resources
- A few firms and countries dominate:
  - Compute
  - Data
  - Standards
- Most countries will remain AI users, not AI shapers.

3. What Has Changed Since 2025

- AI is no longer experimental:
  - *88% of firms globally use AI in at least one function*.
- However:
  - Labour disruption has been less severe than feared so far.
  - AI mostly augments labour initially, not replaces it.

- Still, risks remain:
    - Declining labour intensity of growth
    - Skill mismatches
    - Long-term displacement risks

4. Key Uncertainties Around AI

- Employment effects in services and IT
- Concentration of AI capabilities
- Dependence on foreign chips and models
- Rising energy, water, and financial costs
- Governance and regulation under uncertainty

Asymmetries & Trade-Offs in AI

5. Frontier Models vs Applications

- Frontier AI models are:
    - Extremely expensive
    - Resource-intensive
    - Controlled by a few firms
- India faces a choice:
    - Chase frontier scale (high cost, low feasibility)
    - Focus on domain-specific applications (high impact, low cost)
- Survey strongly favours application-led AI.

6. Scale vs Employment

- AI raises productivity of capital faster than labour.
- Risk for India:
    - Output growth without enough jobs
- Policy challenge:
    - Pace of AI adoption to allow labour augmentation and reskilling.

7. Open Models vs Proprietary Models

- Proprietary AI models:
  - Opaque
  - Vendor lock-in
  - Dependence on foreign firms
- Open and open-weight models:
  - Lower cost
  - Greater adaptability
  - Shared innovation
- India should balance openness with national stewardship.

8. Compute Expansion vs Resource Constraints

- AI data centres consume:
  - Massive electricity
  - Large quantities of water
- Global experience shows:
  - Grid instability
  - Financial stress
- For India:
  - Blind expansion of data centres is risky.
  - Better option: *small, efficient, decentralised AI models.*

9. Why India Needs Its Own AI Path

- AI affects:
  - Labour markets
  - Strategic autonomy
  - Foreign policy
  - Cultural narratives
- Dependence on foreign AI weakens:
  - Economic resilience
  - Policy sovereignty

- Indigenous AI is necessary for long-term competitiveness.

10. Bottom-Up AI Approach

- India's strengths:
  - Large AI-literate workforce
  - Strong IT ecosystem
  - Diverse and rich domestic data
- Constraints:
  - Limited capital
  - Limited advanced compute
- Therefore:
  - Focus on small, task-specific AI models
  - Run on local devices (phones, PCs)
  - Encourage innovation across sectors

11. Frugal and Local AI in Practice

- Examples of bottom-up AI:
  - AI-based cancer screening in low-resource healthcare
  - AI water management in cities
  - Landslide early-warning systems
  - AI tools for farmers and classrooms
  - Language AI (Bhashini, AI4Bharat)
- These show:
  - AI can scale with inclusion, not exclusion.

12. Role of the State: Enabler, Not Controller

- Government should:
  - Coordinate
  - Standardise
  - Provide shared infrastructure
- Proposal:

  - AI-OS / AI as public infrastructure
  - Shared compute, datasets, platforms
  - Similar to Aadhaar or UPI
- IndiaAI Mission to anchor this ecosystem.

Human Capital for AI Era

13. Skills Needed for AI

- Two key capabilities:
  - Algorithms and model understanding
  - Software engineering and deployment
- Emphasis on:
  - Hands-on experience
  - Tacit knowledge
  - Industry-academia collaboration

14. Reforming Education and Training

- Flexible education pathways needed.
- Early exposure to:
  - Work experience
  - Apprenticeships
  - Earn-and-learn models
- Focus on:
  - Foundational skills
  - Reasoning and judgement
  - Problem-solving
- AI raises the value of human judgement, not rote knowledge.

15. Approach to AI Regulation

- India should avoid:
  - Over-regulation that kills innovation

- Under-regulation that creates risks

- Guiding principles:
  - Experiment first
  - Scale next
  - Regulate where risks are high
- Goal:
  - AI should *serve humans, not replace them*.

16. AI Economic Council

- Proposed institution to:
  - Align AI adoption with labour markets
  - Assess job impacts
  - Sequence AI deployment
- Core principles:
  - Human primacy
  - Labour sensitivity
  - Ethical safeguards
  - Skill and technology co-evolution

17. Data as a Strategic Resource

- India has:
  - Over 100 crore digital users
  - Huge volumes of domestic data
- Policy approach:
  - Avoid rigid data localisation
  - Ensure accountability and auditability
  - Retain value from Indian data
- Cross-border data flows allowed, but:
  - With regulatory oversight
  - With domestic value retention

18. Core Takeaways of the Chapter

- AI is not a race to scale, but a choice of direction.
- India's best path is:
  - Bottom-up
  - Open
  - Application-led
  - Employment-friendly
- With the right sequencing, governance, and skills:
  - AI can boost productivity
  - Create dignified jobs
  - Strengthen strategic autonomy

Overall Summary :

AI is a strategic choice for India. It is not a race for global dominance. India focuses on application-based AI. The approach is inclusive and job-friendly. Local data and frugal innovation are used. Public digital infrastructure plays a key role.	Skills and governance are prioritised. Indigenous capability is strengthened. Productivity improves without social exclusion.

Chapter 15: Urbanisation

1. Core Idea of the Chapter

- Cities are not just places to live, but critical economic infrastructure.
- Urbanisation in India is a story of unfinished promise:
  - Cities generate most of India's GDP
  - But suffer from congestion, housing shortages, poor mobility, and weak governance
- The goal is to make cities *productive, liveable, inclusive*, and *citizen-centric*, not merely bigger

2. Cities as Engines of Growth

- Cities enable:
  - Productivity through density
  - Larger labour markets
  - Innovation and knowledge spillovers
- Doubling city size can raise productivity by ~12% in India.
- Most high-value sectors (services, advanced manufacturing) are urban-centric.

3. The Urban Paradox

- India has some of the world's largest cities, but:
  - They are *not globally competitive* like New York, London, or Shanghai
- High density has led to:
  - Congestion
  - Informality
  - Infrastructure stress
- Reason: economic importance of cities is not matched by investment and governance capacity.

4. How Urban Is India?

- New methods (satellite data, night-time lights) suggest:
  - India may already be 60%+ urban in functional terms.
- Urban growth is:
  - Highly top-heavy
  - Concentrated in large cities and metropolitan regions

5. Peri-Urban Expansion

- Cities are expanding *outward, not upward.*
- Growth is strongest in:
  - Urban fringes
  - Transport corridors

- This creates:
  - Housing–job mismatch
  - Higher commuting costs
  - Infrastructure gaps
- Planning must move from city limits to metropolitan and regional scale.

6. Weak Urban Governance

- Indian cities lack:
  - Fiscal autonomy
  - Planning authority
  - Unified metropolitan governance
- Responsibilities are fragmented among:
  - ULBs
  - State departments
  - Development authorities
- Cities raise less than 0.6% of GDP as own revenue.

7. Administration vs Governance

- Indian cities are administered, not governed.
- Global cities:
  - Align authority, accountability, and finance
- Indian cities:
  - Have *responsibility without power*
- Result:
  - Infrastructure without productivity
  - Projects without coordination

8. Land as "Dead Capital"

- Urban land remains underused due to:
  - Low FSI (Floor Space Index)
  - Unclear land titles

  - Fragmented land markets
- Low density forces cities to sprawl outward.
- Solution:
  - Higher FSI
  - Clear land titles
  - Transit-Oriented Development

9. Housing Shortage

- Urban housing shortage:
  - ~30 million units
  - Mostly among low-income groups
- Affordable housing pushed to city outskirts:
  - Poor connectivity
  - Weak services
- Need:
  - Compact cities
  - Housing near jobs
  - Infrastructure-linked densification

10. Urban Mobility Crisis

- Major cause of congestion:
  - *Over-dependence on private vehicles*
- Productivity losses due to congestion are huge.
- Principle:
  - *Move people, not vehicles*
- Key solutions:
  - High-capacity public transport
  - Better bus systems
  - First- and last-mile connectivity
  - Demand management (parking policy, congestion pricing)

11. Urban Cleanliness and Waste Management

- Swachh Bharat Mission–Urban achieved:
  - Universal ODF status
  - 98% door-to-door waste collection
- Challenges now are:
  - Waste segregation
  - Processing quality
  - Behavioural change
- Indore example shows:
  - Citizen participation + leadership can transform cities

12. Urban Water Stress

- India produces huge wastewater, but:
  - Only ~28% treated
  - Very little reused
- Circular water economy:
  - Reuse treated water for industry, construction
  - Can create jobs and save freshwater
- AMRUT 2.0 and "Jal hi Amrit" support this shift.

13. Smart Cities and Technology

- Smart Cities Mission:
  - Over 90% projects completed
  - ICCCs operational in all 100 cities
- Technology improved:
  - Traffic management
  - Water supply
  - Waste collection
- Impact depends on institutional capacity, not tech alone.

14. Informality: From Eradication to Integration

- Informality is structural, not temporary.
- Slums and informal work:
  - Provide affordable housing near jobs
  - Absorb migrant labour

15. Core Message of the Chapter

- Urbanisation must be people-centric, not project-centric.
- Key priorities:
  - Strong city governance
  - Land and housing reform
  - Public transport-led mobility
  - Citizen participation
  - Metropolitan-scale planning
- If cities are empowered, urbanisation can become a visible source of productivity, dignity, and everyday ease of life.

Overall Summary :

Urbanisation drives productivity. But cities face many constraints. Governance remains weak. Land use is inefficient. Housing shortages persist. Transport systems are stressed. Cities generate most economic output. Yet, they lack fiscal autonomy.	People-centric urbanisation is needed. Metropolitan governance must improve. Land and housing reforms are essential. Public transport should lead mobility planning.

Chapter 16 (Part I): From Import Substitution to Strategic Resilience & Strategic indispensability

1. Core Argument of the Chapter

- India has achieved macroeconomic stability and strong growth, but the development challenge has changed.
- The key constraint now is state capacity, not just macroeconomic management.
- Future strength depends on moving:
  - from strategic resilience (ability to absorb shocks)
  - to strategic indispensability (becoming essential to global systems).

2. India's Macroeconomic Strength

- Post-COVID, India has performed exceptionally well:
  - Growth close to 7% potential
  - Healthy banking system
  - Capital formation above 30% of GDP
  - Comfortable current account deficit
  - Strong forex reserves and remittances
- Agriculture performed well due to good monsoons.
- Rural consumption stronger than urban consumption.

3. Major Recent Reforms

- Continued high public capital expenditure and support to states.
- Structural reforms:
  - Four Labour Codes
  - GST simplified to two slabs
  - Income tax threshold raised to ₹12 lakh
  - Insurance sector opened further

  - Nuclear power opened to private participation
- Focus on critical sectors:
  - Semiconductors
  - Critical minerals
  - Shipbuilding
- Export promotion intensified after tariff shocks.

4. Breakdown of the Old Global Order

- Post-Cold War globalisation architecture no longer hold true.
- Key disruptions:
  - China's rise as a manufacturing powerhouse
  - Global Financial Crisis (2008)
  - COVID-19 shock
- Developed economies relied heavily on ultra-loose monetary policy, leading to:
  - Asset bubbles
  - Financial fragility
  - Social discontent

5. The "QE Infinity Trap"

- Prolonged quantitative easing reduced incentives for productive investment.
- Liquidity flowed into assets, not manufacturing.
- Result:
  - Lower productivity
  - Higher inequality
  - Political instability
- Global economy has entered a phase of uncertainty, fragmentation, and conflict.

6. Geopolitics, AI and Resource Stress

- AI boom is resource-intensive:
  - Huge electricity demand from data centres
  - Rising demand for copper and critical minerals

- Power grids strained; energy costs rising.
- Trade is becoming:
  - *Bilateral*
  - *Strategic*
  - *Restrictive* (export controls, licensing)

7. New Strategic Risks for India

- Capital flows are *volatile* and *reversible*.
- India runs a goods trade deficit, financed by capital inflows.
- When capital flows slow:
  - Currency comes under pressure
- New risks:
  - US tariffs
  - Stablecoins (GENIUS Act)
  - Geopolitical realignments
- Conclusion:
  - Macroeconomic stability alone is not enough.

8. Rethinking Swadeshi

- Swadeshi is no longer ideological—it is *strategic necessity*.
- However:
  - Not all import substitution is good
  - Poorly designed protection breeds inefficiency
- Swadeshi must be:
  - Time-bound
  - Performance-linked
  - Export-oriented

9. Intelligent Import Substitution

Import substitution is justified when:

- Domestic production is feasible but blocked by coordination failures

- Temporary protection enables learning and scale
- Industry faces export discipline
- The product is strategically critical

It is *not justified* when:

- India is already competitive
- Inputs are widely used across industries
- Protection raises economy-wide costs

10. Three-Tier Framework

Tier I: Critical Vulnerabilities (High Urgency)

- Goods where *denial* would cause severe *national harm.*
- Objective:
  - Assured domestic capacity, not efficiency
- **Examples:**
  - *Fertilisers*
  - *APIs*
  - *Power electronics*
  - *Telecom equipment*

Tier II: Economically Feasible Capabilities

- Domestic production viable but delayed due to scale or coordination issues.
- Objective:
  - Learning, scale, and export readiness
- Support must be:
  - Time-bound
  - Conditional
  - Performance-linked

Tier III: Low Strategic Urgency

- Import dependence does not create vulnerability.

- Domestic substitution may raise costs.
- Better handled through:
  - Diversified sourcing
  - Stockpiling
- Restraint itself is strategic discipline.

11. Input Costs as Economic Infrastructure

- High input costs act like poor infrastructure.
- Tariff inversion harms downstream industries.
- National Input Cost Reduction Strategy proposed:
  - Lower costs of energy, logistics, intermediates
- Lower input costs:
  - Improve exports
  - Boost employment
  - Strengthen GVC integration

12. Why Manufacturing Builds State Capacity

- Advanced manufacturing:
  - Exposes weaknesses in logistics, regulation, skills
  - Forces reliability, quality, and coordination
- Unlike sheltered sectors, manufacturing:
  - Cannot survive through negotiation
  - Survives only through execution
- Manufacturing therefore creates discipline for both firms and the state.

13. Lessons from East Asia

- Success was not due to protection alone.
- Common features:
  - Outcome-oriented bureaucracy
  - Tolerance for failure, but not stagnation
  - Credible withdrawal of support

- Key idea: Entrepreneurial State, *not micromanaging state.*

14. Three Stages of Economic Strategy

- **Import Substitution**: Reduce dependence
- **Strategic Resilience**: Withstand shocks
- **Strategic Indispensability**: Become globally essential
- Final goal:
    - Others depend on India by choice, not compulsion.

15. Exports, Manufacturing and Currency Strength

- Hard currencies are built on export capability, not capital inflows.
- Services exports are valuable but:
    - Less employment-intensive
    - Do not anchor supply chains
- Manufacturing exports:
    - Create ecosystems
    - Generate durable forex earnings
    - Strengthen the currency

16. Route to Strategic Indispensability

- Integration into Global Value Chains is essential.
- Attracting major multinational producers:
    - Brings suppliers
    - Raises standards
    - Makes exports self-sustaining
- When the world moves from:
    - "Thinking about buying Indian" to "Buying Indian without thinking"
    - India becomes strategically indispensable.

17. Core Message of the Chapter

- India must simultaneously pursue:

  - Import substitution
  - Strategic resilience
  - Strategic indispensability
- This requires:
  - Institutional reform
  - Disciplined industrial policy
  - Export-led manufacturing
  - Strong, learning-oriented state capacity
- State capacity is the real economic infrastructure of the future.

Overall Summary :

India must move beyond macro stability. Strategic Indispensability is the next goal. The global order is fragmented. Industrial policy must be disciplined. Import substitution should be selective.	Manufacturing competitiveness is essential. Global value chain integration must deepen. Manufacturing strengthens exports. It builds state capacity. It supports currency stability.

Chapter 16 (Part II): Building Strategic Resilience and Strategic Indispensability

1. Central Theme of the Chapter

- India's biggest constraint today is state capacity, *not lack of ideas or intent*.
- In a fragmented, uncertain global order, success depends on:
  - Ability to *act under uncertainty*
  - Capacity to *learn, adapt, and course-correct*
- Strategic resilience must evolve into strategic indispensability.
- This requires aligned action by:
  - The State
  - The private sector
  - Citizens

2. What is State Capacity?

- State capacity is the ability to *"get the right things done"*, not just make policies.
- It includes:
  - Policy design
  - Implementation
  - Execution under uncertainty
- Weak outcomes arise mainly from:
  - Risk-averse institutions
  - Poor incentive structures
  - Fear of failure and hindsight punishment

3. Why State Capacity Is the Binding Constraint

- India has shown resilience and democratic continuity.
- But the global environment is now:
  - Geopolitically fragmented
  - Technology-driven
  - Less forgiving of delays and mistakes
- Stability and prudence are no longer enough.
- The State must be able to experiment, learn, and revise.

4. Why Entrepreneurial Governance Is Difficult

- Indian institutions penalise:
  - Visible action
  - Experimentation
- Decisions are judged retrospectively through:
  - Audits
  - Vigilance
  - Courts
- This creates:
  - Risk aversion
  - Policy inertia

- Preference for inaction over learning

5. Need for "Safe Spaces" for Experimentation

- Successful countries created bounded spaces for experimentation.
- Examples:
  - Mission-based cells
  - Regulatory sandboxes
  - Time-bound pilots
- Key features:
  - Legal protection for good-faith decisions
  - Accountability focused on learning, not blame
- Failure must be reversible, not career-ending.

6. Learning Without Fear

- High-capacity states distinguish clearly between:
  - Good-faith error
  - Design failure
  - Malfeasance
- India often blurs this distinction.
- Result:
  - Officials delay decisions
  - Institutions stop learning
- **A state that cannot forgive error cannot adapt.**

7. Why Organisational Design Matters

- Many public institutions mix:
  - Regulatory roles
  - Developmental roles
  - Supervisory roles
- This fragments *responsibility* and *accountability*.
- Capability improves when:

- Institutions are organised around missions and outcomes
- There is clear ownership of results

8. Mission-Oriented Structures

- Mission or cluster approaches work when:
  - One agency owns outcomes
  - Others contribute through defined roles
- Accountability must be:
  - Visible
  - Reviewable
  - Outcome-focused

9. Strengthening Cooperative Federalism

- **State Support Mission (NITI Aayog)** helps states:
  - Build institutional capacity
  - Use data and analytics
  - Share best practices
- State Institutions for Transformation (SITs):
  - Established in 32 States/UTs
  - Act as state-level think tanks

10. State Capability as a Human System

- Institutions function through people.
- Governance quality depends on:
  - Judgment
  - Ethics
  - Citizen engagement
- Citizens now expect:
  - Responsiveness
  - Fairness
  - Empathy

11. Mission Karmayogi

- Focuses on:
  - Continuous learning
  - Competency-based roles
  - Citizen-centric service
- Emphasises:
  - Values
  - Duty
  - Professional pride
- Shifts bureaucracy from:
  - Rule-following → problem-solving

12. Regulation as Core State Capacity

- Regulators exercise:
  - Rule-making
  - Enforcement
  - Adjudication
- Problems arise when:
  - Power is concentrated without checks
  - Rules are unclear or excessive
- Regulatory capacity depends on:
  - Institutional design, not intent alone

13. Principles of Good Regulation

- Clear separation between:
  - Law
  - Guidance
- Proportional enforcement
- Due process and transparency
- Democratic anchoring through Parliament
- Fixed timelines and *deemed approvals*

14. Reducing Regulatory Uncertainty

- Delays impose real economic costs.
- Approvals should:
  - Be time-bound
  - Be final once granted
- Accountability must apply to:
  - Regulators as well as businesses

15. Role of the Private Corporate Sector

- Indian corporates often operate in a hybrid system:
  - Partial protection
  - Regulatory discretion
- This reduces pressure for:
  - Productivity
  - Innovation
  - Institutional reform
- Strong states emerge when firms:
  - Compete globally
  - Demand predictable rules

16. Lessons from Global Experience

- In US, Germany, Japan, Korea:
  - Firms linked profit with national purpose
  - Accepted long investment horizons
  - Invested in skills and technology
- Successful private sectors acted as:
  - Partners in national transformation

17. Citizens as Co-Creators of State Capacity

- Enforcement costs rise when:

- Rules are not internalised

- Everyday behaviour matters:
  - Queue discipline
  - Care for public spaces
  - Respect for time and quality

18. Delayed Gratification and Development

- Development requires:
  - Short-term sacrifice for long-term gain
- Shortcuts weaken:
  - Capability
  - Trust
  - System reliability
- Reliability, not ingenuity, sustains complex systems.

19. Comfort, Discipline and the Commons

- Private discipline often does not extend to public spaces.
- Strong societies treat:
  - *Commons like extensions of the home*
- Citizens who value:
  - Learning
  - Health
  - Patience
  - Responsibility reduce pressure on the state.

20. Core Message of the Chapter

- Strategic indispensability requires:
  - A learning-oriented state
  - A responsible private sector
  - Mature, disciplined citizens
- Capability is **co-produced** by institutions and society.

- India's strength will come from:
    - Judgment over fear
    - Learning over blame
    - Responsibility over convenience

Overall Summary :

State capacity is India's biggest challenge. It is also India's biggest opportunity. The state must encourage experimentation. Institutions should be mission-oriented. Regulation must be predictable. Compliance should be trust-based.	Private sector responsibility is essential. Citizen discipline matters. Strategic strength will not come from policy alone. It will come from collective effort and long-term discipline.