

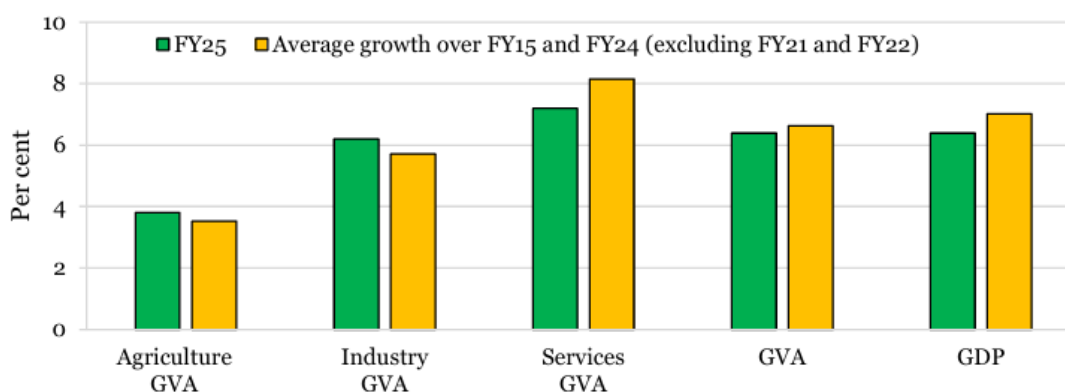


# Gist of Economic Survey 2024-25

## 01: State of the Economy: Getting Back into the Fast Lane

- **Global Economy:** The global economy in 2024 experienced moderate but uneven growth, with the [International Monetary Fund \(IMF\)](#) projecting **3.2% growth** for 2024 and **3.3% for 2025**, with a slowdown in manufacturing due to **supply chain disruptions** while the services sector remained strong.
  - [Inflation](#) eased globally, yet [services inflation](#) remained persistent, leading to divergent monetary policies across central banks.
- **India's Economy:** India's [Gross domestic product \(GDP\)](#) is projected to grow between 6.3-6.8% in FY26 (2025-26).
  - India's **real GDP** is estimated to grow by 6.4% in FY25 (2024-25), driven by **agriculture and services**, while manufacturing faces challenges.
  - [Retail Inflation](#) averaged at 4.9% in 2024, down from 5.4% in FY24, but remained near the **upper limit of the Reserve Bank of India's (RBI) tolerance band** (inflation target of 4%, with a tolerance band of +/- 2 percentage points).
    - [Food Inflation](#) increased to 8.4%, primarily driven by vegetables and pulses, due to supply disruptions and erratic weather patterns.
    - [Core Inflation \(excludes food and fuel prices\)](#) declined, reflecting easing cost pressures in goods and services.
- **Sector-Wise Performance:**
  - **Agriculture:** 3.8% growth in FY25, driven by record [Kharif production](#) and strong rural demand.
  - **Industry & Manufacturing:** The industrial sector is expected to grow **6.2% in FY25**, driven by construction and utilities, while manufacturing slows due to weak global demand.
  - **Services:** Fastest-growing sector at **7.2% in FY25**, led by Information technology, finance, and hospitality.
  - **External Sector:** Overall exports (merchandise+services) grew by 6% (YOY) in the first nine months of FY25. Services sector by 11.6% during the same time.
    - Merchandise exports grew 1.6%, while imports rose 5.2%, widening the [trade deficit](#).
    - India remained the top global recipient of [remittances](#), helping contain the [current account deficit \(CAD\)](#) at 1.2% of GDP, supported by strong job markets in [Organisation for Economic Cooperation and Development \(OECD\)](#) economies.
    - Overall, India's economic outlook **remains positive**, driven by domestic resilience and structural reforms, though risks from global uncertainties persist.

## India's growth remains close to the decadal average despite global uncertainties

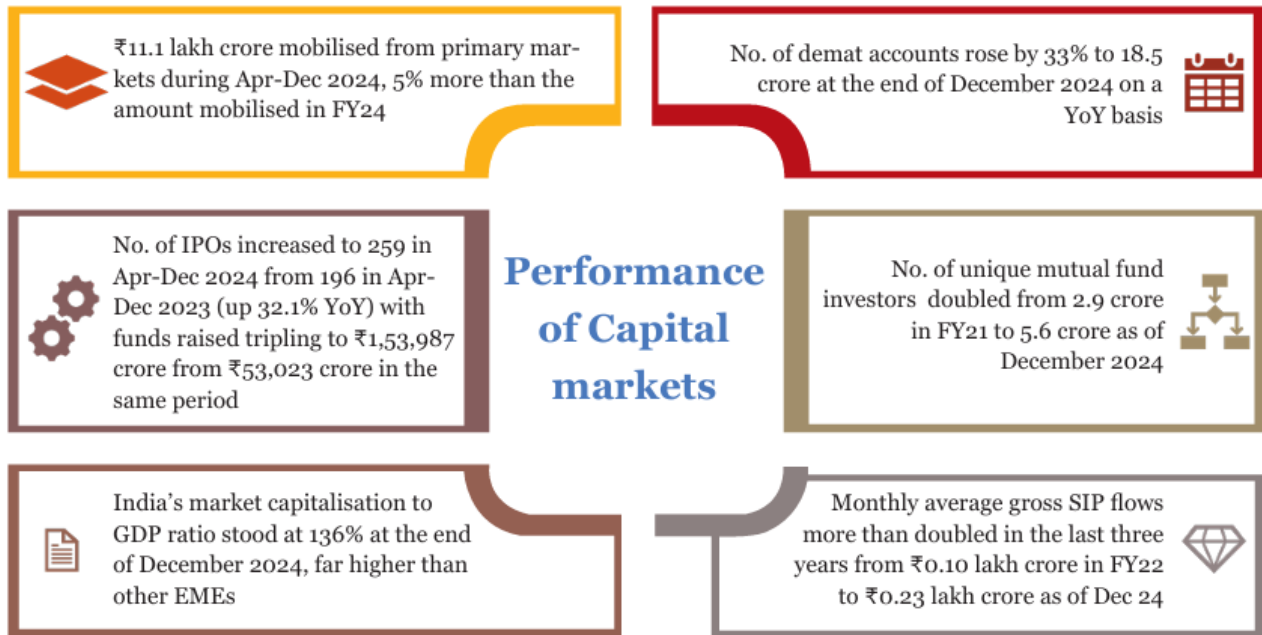


- **Challenges Facing India's Economy:** Geopolitical tensions ([Russia-Ukraine](#), [Israel-Hamas](#)) have disrupted trade, energy security, and inflation. [Suez Canal issues](#) increased freight costs and delivery times.
  - Food prices remain volatile due to weather and supply disruptions.
  - Financial risks include [state fiscal stress](#) from rising [subsidies](#) and [lower tax revenues](#) and increasing dependence on [central transfers](#).
  - **India's manufacturing sector remains under pressure from weak global demand .**
- **Way forward:** Strategic fiscal and monetary policies are essential to navigate global uncertainties while fostering domestic growth.
  - **Deregulation** through governance **reforms, tax simplification, labor law rationalization, and decriminalizing business laws** boosts industrialization and **grassroots-level reforms** will enhance India's competitiveness and investment climate.
  - Managing inflation through **stable agricultural output and external sector stability remains crucial**. Effective execution of [Union Budget 2025-26](#) initiatives will drive sustainable economic expansion.

## 02. Monetary and Financial Sector Developments: The cart and the Horse

- **Banking Sector Growth:** Credit growth remains steady, aligning with deposit growth, while [gross non-performing assets \(GNPAs\)](#) fell to a **12-year low of 2.6%**, with net NPAs at 0.6%.
- **Financial Inclusion:** The [RBI Financial Inclusion Index](#) increased from **53.9 (2021) to 64.2 (2024)**, reflecting significant progress in access to financial services.
- **Monetary Policy:** The **RBI kept the repo rate at 6.5%**, shifting its stance from "withdrawal of accommodation" to "neutral" in late 2024 to support growth.
  - The [cash reserve ratio \(CRR\)](#) was reduced to **4%**, injecting approximately Rs. 1,16,000 crore into the banking system.
- **Capital Markets:** India's [Initial Public Offerings \(IPOs\)](#) surged **sixfold** between FY13 and FY24, ranking **first globally in listings**.
  - [India's stock market](#) performed well despite **global uncertainties and election-driven volatility**. **Young investors** now make up **40% of the equity market**.

## Developments in capital markets



- **Development Financial Institutions (DFIs):** [India Infrastructure Finance Company Limited \(IIFCL\)](#) co-financed Rs. 13.9 lakh crore in projects, supporting highways, energy, and ports.
  - [National Bank for Financing Infrastructure and Development \(NaBFID\)](#) sanctioned Rs. 1.3 lakh crore in loans, targeting Rs. 3 lakh crore by FY26.
- **Challenges:**
  - **Consumer Debt Rise:** Increased [unsecured lending](#) by [digital lending](#), [Non-Banking Finance Companies \(NBFCs\)](#) and high retail participation in equity markets pose regulatory concerns .
  - **Global Headwinds:** **Geopolitical tensions** (Russia-Ukraine, Middle East ([Iran- Israel Conflict](#))) and **financial market volatility** may impact India's financial stability.
  - **Banking Risks:** Expanding NBFCs requires **stricter oversight** to prevent financial imbalances .
- **Future Outlook:**
  - **AI in Banking:** Increased use of [Artificial Intelligence \(AI\)](#) and [machine learning](#) in risk assessment, fraud detection, and customer service can improve financial efficiency .
  - **Insurance Sector Growth:** India projected to be the fastest-growing insurance market among [G20 nations](#) over the next five years (2024-2028).
  - **Pension Market Expansion:** Expected to grow as India transitions from a lower-middle-income to an upper-middle-income economy.

## 03. External Sector: Getting FDI Right

- **Trade Performance:** Total exports (merchandise + services) grew 6% in FY25 to **USD 602.6 billion**, while imports rose 6.9% to **USD 682.2 billion**, widening the trade deficit to **USD 79.5 billion**.
- **Foreign Exchange Reserves:** India's [forex reserves](#) reached **USD 640.3 billion**, covering **90% of external debt (USD 711.8 billion)** as of December 2024 .
- **Sectoral Highlights:**
  - **Textiles & Apparel:** India is the [6th largest exporter of Textiles and Apparel](#), contributing **2.3% to GDP**, 13% to **industrial production**, 12% to exports and employs over **45 million people**, with **USD 34 billion** in exports (2023).
  - **Services Exports:** Grew **11.6%**, with net receipts rising to **USD 131.3 billion** in FY25.
- **FDI:** The [Foreign direct investment \(FDI\)](#) rose by **17.9%**, reaching **USD 55.6 billion** in FY25;

cumulative gross FDI surpassed **USD 1 trillion** (2000- 2024), but, but **net FDI declined due to increased repatriation** .

- **Current Account Deficit (CAD):** Moderated to **1.2% of GDP** in Q2 FY25, with private **transfers (remittances)** rising to **USD 31.9 billion**.
- **Challenges:**
  - **Rising Protectionism:** Rising **global protectionism** and **geopolitical tensions** pose a significant challenge to India's trade growth. **Increasing tariff and non-tariff barriers (NTMs)** limit India's ability to expand its trade opportunities.
    - Protectionism refers to **government policies** that restrict international trade to help domestic industries.
  - **Export Competitiveness: High trade costs, inefficient supply chains, and compliance challenges** hinder India's ability to integrate into global supply chains.
- **Future Outlook and Way Forward:**
  - **E-commerce Export Growth: Business-to-consumer (B2C)** market projected to expand from **USD 83 billion (2022)** to **USD 150 billion (2026)** and exports to rise to **USD 200-300 billion by 2030**, driven by **digital trade policies** .
  - **Strengthening FDI Climate:** Policy reforms in **investment facilitation, trade agreements, and ease of doing business** will attract foreign capital .
  - **Sustainability Compliance:** India can consider aligning **exports with global carbon regulations (Carbon Border Adjustment Mechanism (CBAM), European Union Deforestation Regulation (EUDR))** to maintain competitiveness .
  - **Ease of Doing Business Reforms (EoDB):**



## 04. Prices and Inflation - Understanding the Dynamics

- **Global Inflation Trends:** Declined to **5.7% in 2024**, aided by **monetary policy** tightening by central banks .
  - **Food inflation globally eased** but remained high in **some economies, including India**.
- **India's Inflation Trends:** Retail inflation **moderated from 5.4% (FY24) to 4.9% (FY25)** .
  - **Core inflation** dropped to its lowest level in a decade. **Food inflation remains high**, driven by extreme weather, supply chain issues, and reduced production of key items like onions, tomatoes, and pulses.
  - **Vegetables and pulses accounted for 32.3% of total food inflation**, despite having only an 8.42% weight in the **Consumer Price Index (CPI)**.
- **Government Measures to Control Inflation:** Maintained **Buffer stocks** of onions, price

stabilization funds, and subsidized sales of vegetables.

- **Ensured stock limits and import easing** on pulses to balance supply, and led **Open Market Sale Scheme (OMSS)** to release **wheat and rice** into markets to control cereal prices .
- **Challenges:**
  - **Extreme Weather Events:** **Heatwaves** and unseasonal rains damaged crops, leading to **supply chain disruptions and price spikes** in vegetables.
  - **Structural Issues in Food Supply:** India remains a **top producer of onions and tomatoes**, limiting import options during shortages.
    - **Post-harvest losses, inefficient storage, and transportation bottlenecks** exacerbate food inflation.
  - **Global Commodity Price Uncertainty:** India's dependence on **pulses and edible oil imports** remains a risk factor .
- **Future Outlook and Way Forward:**
  - **Projected Inflation Trends:** RBI forecasts **headline inflation** at **4.2% in FY26**, assuming normal monsoons and stable commodity prices.
  - **Commodity Prices Expected to Ease:** **Global prices** expected to decline by **5.1% in 2025**, with oil and metals seeing the largest drops. **Lower import costs** could help stabilize domestic inflation.
  - **Agriculture and Price Stability Measures:** Expansion of **vegetable clusters, farmer cooperatives, and digital market linkages** can reduce price volatility.
    - Develop **climate-resilient crop varieties** and post-harvest infrastructure to minimize losses .
  - **Control Food Inflation:**

### Administrative measures to control food inflation

#### CEREALS

- ❖ Stock Limits on Wheat
- ❖ Open Market Sale Scheme: Wheat and Rice
- ❖ Sale Under Bharat Brand: Wheat Flour and Rice

#### PULSES

- ❖ Sale Under Bharat Brand: Chana, Moong and Masur Dal
- ❖ Duty-Free Import: Desi Chana, Tur, Urad, Masur and Yellow Peas
- ❖ Imposition of Stock Limits: Tur and Desi Chana

#### VEGETABLES

- ❖ Subsidised Sale of Onion and Tomato
- ❖ Buffer Stock of Onion



## 05. Medium-Term Outlook - Deregulation Drives Growth

- **India's Growth Aspirations:** To become a **USD 5 trillion economy by FY28** and **USD 6.3 trillion by FY30**, with a nominal GDP growth rate of 10.2% (FY25-FY30). India must maintain

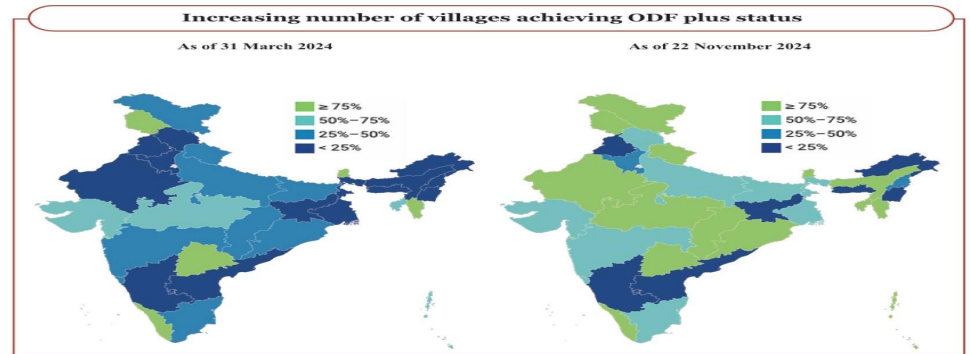
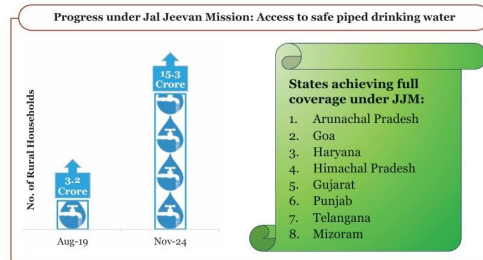
a sustained GDP growth rate of 8% annually .

- **Investment & Employment:** Achieving high growth requires **raising investment from 31% to 35% of GDP** and creating **7.85 million non-farm jobs annually** .
- **Structural Reforms:** India has implemented **Goods and Services Tax (GST)**, and increased recovery under the **Insolvency and Bankruptcy Code (2016)** , and led to digital inclusion under the **digital public infrastructure (DPI)**, but **regulatory burdens continue to hinder Micro, Small and Medium Enterprises (MSME) growth** .
- **Challenges:**
  - **Rising Trade Barriers:** Global **trade restrictions rose to USD 887 billion in 2024**, limiting India's export potential .
  - **Dependence on China:** India imports **75% of lithium-ion batteries and key solar panel components** from China, creating vulnerabilities in the **clean energy transition** .
  - **Regulatory Bottlenecks:** Complex compliance requirements **discourage firm expansion**, limit employment growth, and stifle innovation .
  - **Climate Change Risks:** **Extreme weather events and energy security concerns** necessitate policy shifts in manufacturing and transportation .
- **Way Forward:**
  - **Deregulation for Growth:** Systematic **simplification of business laws, rationalization of compliance, and** reducing licensing burdens will enhance economic freedom .
  - **Boosting Domestic Investment:** Policies should focus on **raising investment efficiency**, improving ease of doing business, and incentivizing MSME expansion .
  - **Green Energy & Manufacturing:** Strengthening **domestic battery production, Electric Vehicles (EVs) supply chains, and renewable energy sectors** will enhance self-reliance .
  - **State-Level Reforms:** Competitive **federalism** should drive **ease of doing business reforms at the state level**, mirroring global best practices to boost GDP growth .

## 06. Investment and Infrastructure - Keeping It Going

- **Investment Trends:** Union government **Capital Expenditure (Capex)** on major infrastructure sectors grew at a rate of 38.8% (FY20-FY24).
  - The **National Infrastructure Pipeline (NIP)** targets Rs 111 lakh crore investment from **FY20-FY25**, covering 9,766 projects across 37 sub-sectors .
  - The **National Monetisation Pipeline (NMP)** identified core assets worth **Rs 6 lakh crore (FY22-FY25)** for private sector participation, with Rs 3.86 lakh crore transactions completed till FY24 .
- **Sectoral Developments:**
  - **Railways:** Expansion continued with 17 new **Vande Bharat trains, freight corridors, and railway station modernization under the Amrit Bharat Station Scheme**.
    - The **Mumbai-Ahmedabad High-Speed Rail project** achieved **47.17% physical progress** .
    - Key initiatives to enhance railway services include the **Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs)** and the **One Station One Product Scheme**.
  - **Roads & Highways:** **Bharatmala Pariyojana** advanced, with 76% of the 34,800 km highway projects awarded (projects covering a total length of 26,425 km have been awarded and 18,714 km has been constructed).
    - The **Char Dham project** completed 620 km of its planned 825 km .
  - **Civil Aviation:** **UDAN (Ude Desh ka Aam Nagrik) regional connectivity scheme** operationalized 619 routes connecting 88 airports, increasing air connectivity and cargo handling capacity .
  - **Ports and Shipping:** **Vadhavan Mega Port** was launched under the **Sagarmala Programme**.
    - Dedicated Freight Corridors improved logistics efficiency, reducing **container turnaround time** .
  - **Power & Renewable Energy:** India's **total installed power capacity reached 456.7 GW (FY25)**, with **renewable energy** forming **47% of total capacity** .
  - **Digital Connectivity:** **5G services** expanded to **779 districts**, while the **Bharat Net project** connected 2.14 lakh Gram Panchayats with broadband .

- **Rural and Urban Development:** [Pradhan Mantri Awas Yojana \(PMAY\)](#) sanctioned 1.18 crore houses, and [Jal Jeevan Mission](#) reached 15.3 crore households (79.1%).
  - 18,374 villages electrified and 2.9 crore households connected under [Deen Dayal Upadhyaya Gram Jyoti Yojana \(DDUGJY\)](#) and [SAUBHAGYA](#).
  - Under [Swachh Bharat Mission \(Phase II\)](#) in 2024, 1.92 lakh villages declared [Open Defecation Free \(ODF\) Plus](#), making a total of 3.64 lakh ODF Plus villages by 2024.



- **Space assets:** India operates 56 active [space assets](#), with [Space Vision 2047](#) targeting missions like [Gaganyaan](#) and [Chandrayaan-4](#).

#### ▪ Challenges:

- **Funding Gaps:** While public spending on infrastructure has increased, **private sector participation remains limited** due to risk concerns and project delays .
- **Regulatory & Policy Barriers:** **Complex approval processes, land acquisition challenges**, and financing bottlenecks hinder infrastructure growth .
- **Climate Change Risks:** Extreme weather events impact **rail, road, and power sector expansion**, necessitating greater resilience in infrastructure planning .
- **Election Disruptions:** The [Model Code of Conduct](#) by [Election Commission of India \(ECI\)](#) slowed Capex in **Q1 FY25**, but spending picked up between **July-November 2024** .

#### ▪ Future Outlook and Way Forward:

- **Public-Private Partnerships (PPPs):** PPP models in highways, railways, and **urban infrastructure need further expansion** to bridge the investment gap .
- **Increase Infrastructure Investment:** A continued rise in infrastructure investment is needed for sustained growth, focusing on multi-modal transport, modernising assets, and improving efficiency.
- **Sustainability Focus:** Emphasize **sustainable practices** in infrastructure projects, especially in highways, waterways, power, and waste management.

## 07. Industry - Business Reforms and Manufacturing Growth

- **India's Rising Manufacturing Share:** India's **manufacturing sector holds a 2.8% global share**, significantly behind China's **28.8%**, but presents a major opportunity for expansion .
  - Growth in **steel, cement, chemicals, automobiles, electronics**, and pharmaceuticals has stabilized industrial output .
  - **Industrial growth in FY25 reached 6.2%**, driven by **electricity and construction**, although it slowed to **3.6% in Q2 FY25** due to weak export demand and weather disruptions .
  - **MSME Sector** employs 23.24 crore people, with 2.39 crore businesses formalized under Udyam Assist.
- **Government Initiatives:** [National Logistics Policy](#) and [Production-Linked Incentive \(PLI\) schemes](#) have improved industrial competitiveness .

- **PLI** in electronics manufacturing led to a **17.5% [Compound Annual Growth Rate \(CAGR\)](#) growth in domestic production**, reducing **mobile imports from 78% in FY15 to 4% in FY23** .
- **State-wise business reforms** have significantly influenced industrial performance, with **Tamil Nadu emerging as a leader in footwear manufacturing** .
- **Challenges:**
  - **Global Headwinds: Geopolitical tensions**, trade restrictions, and supply chain disruptions have slowed India's **manufacturing exports** .
    - **Rising protectionist policies by major economies** threaten India's global market access .
  - **Structural Barriers: MSMEs** face difficulties in scaling up due to regulatory burdens, **limited financial access**, and **high logistical costs** .
    - **Industrial [Research and Development \(R&D\)](#)** spending is low (0.64% of GDP), compared to China, the US, and South Korea, limiting innovation-driven growth .
  - **Sector-Specific Challenges: Textile sector** struggles due to reliance on cotton, while **global markets favor [man-made fibers \(MMF\)](#)** .
    - **Steel exports declined in FY25** due to lower international prices and high domestic production costs .
- **Way Forward:**
  - **Deregulation & Business Reforms:** Simplifying **regulatory compliance, labor laws, and taxation policies** will encourage industrial expansion .
    - Strengthening **EoDB** will promote competitive industrial growth .
  - **Investment & Infrastructure Growth:** Expanding **PLI schemes in [high-tech manufacturing \(quantum\)](#)** to enhance self-reliance .
    - **Public-private partnerships (PPPs) in infrastructure and logistics** to improve manufacturing competitiveness .
  - **Sustainable Manufacturing:** Enhance **[Steel Scrap Recycling Policy](#)** to reduce carbon emissions and improve resource efficiency .
    - **Adoption of energy-efficient technologies in cement, steel, and chemicals** to align with global sustainability standards .

## 08. Services Sector – New Challenges for the Growth Engine

- **Global Services Growth:** The **Global Services [Purchasing Manager's Index \(PMI\)](#) reached 53.8 in December 2024**, marking 23 months of expansion, but faces risks from **geopolitical uncertainties and protectionism** .
- **Services as the Key Growth Driver:** The services sector contributed **55% to India's [Gross Value Added \(GVA\)](#) in FY25**, up from **50.6% in FY14**, and employs **30% of the workforce** .
  - India ranked **7<sup>th</sup> in global services exports (4.3% share)**, growing at **12.8% YoY** in FY25, led by **IT and business services** .
- **Sectoral Performance:**
  - **IT & Business Services:** India's tech industry revenue reached **\$254 billion in FY24**, with **tech exports nearing USD 200 billion**. The sector added **60,000 new jobs**, despite global economic headwinds.
  - **Financial Services:** Bank credit to the services sector reached **RS 48.5 lakh crore (2024)**, growing **13% YoY**, led by **computer software (22.5%) and professional services (19.4%)** .
  - **Logistics and Connectivity:** **Indian Railways' passenger and freight traffic grew by 8% and 5.2%, respectively in (FY24)**, with digital ticketing adoption at **86% in reserved categories** .
  - **Telecom sector:** With **1.18 billion subscribers**, leads in global mobile data consumption.
  - **Tourism:** In FY23, the tourism sector created **7.6 crore jobs**, earned USD 28 billion in foreign exchange, and contributed **5% to India's GDP**. **India secured 14th rank globally in [tourism](#) receipts in FY23**.
    - Key schemes like **[Pilgrimage Rejuvenation And Spiritual Augmentation Drive \(PRASHAD\)](#)** and **[Swadesh Darshan 2.0](#)** focus on enhancing tourism infrastructure and promoting domestic tourism in India.



- **Challenges:**
  - **Service Inflation & Wage Pressures:** High **nominal wage growth** globally has **kept service inflation elevated**, affecting cost competitiveness .
  - **Regulatory Barriers:** **Offshore audit** and regulatory scrutiny in global markets pose risks to **India's IT and** financial services exports .
  - **Uneven State-wise Growth:** Maharashtra, Karnataka, Tamil Nadu, Gujarat, and UP contribute over **50% to India's service sector GVA**, while 19 other states collectively account for just **25%** .
- **Future Outlook and Way Forward:**
  - **Digital & AI Integration:** Banking, retail, telecom, and logistics are driving AI adoption, with automation improving service efficiency .
  - **Public-Private Investment in Logistics:** Expansion of **highways, railways, waterways**, and airport infrastructure under **PM Gati Shakti** and **National Logistics Policy** will improve trade and services efficiency .
  - **Real Estate Growth:** Rising demand in **commercial real estate and REITs**, along with regulatory reforms, is strengthening the sector .
  - **Expanding Financial & Insurance Services:** FDI inflows in insurance grew by **62% in FY25**, reflecting investor confidence in India's financial sector .

## 09. Agriculture and Food Management - Sector of the Future

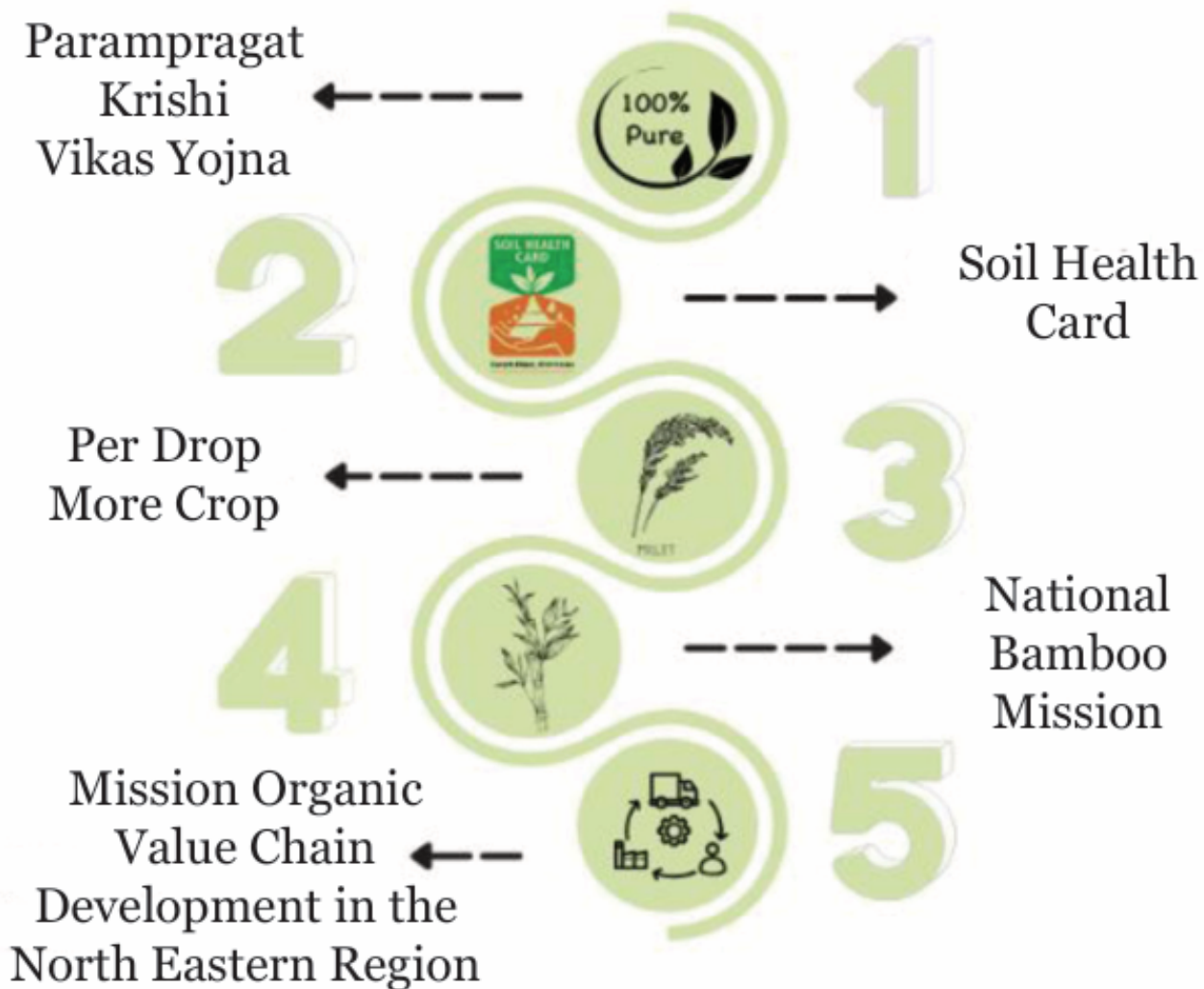
- **Agriculture's Role in the Economy:** The sector contributes **16% to India's GDP** and employs **46.1% of the population**.
  - Growth has been steady, averaging **5% annually from FY17 to FY23** .
- **Income Growth:** Agricultural income grew at 5.23% annually over the past decade, compared to 6.24% for non-agriculture and 5.80% for the overall economy.
- **Crop Production & Diversification:** Kharif foodgrain production for 2024 projected at **1,647.05 LMT**, an increase of 124.59 LMT over the 5-year average.
  - India accounts for **11.6%** of the **world's cereal production**, but productivity lags behind global averages .
  - **Floriculture:** With a **100% export orientation**, floriculture is emerging as a profitable alternative for small farmers, exporting **Rs 717.83 crore worth of products in FY24** .
  - **High-Value Sectors:** Horticulture, livestock, and fisheries drive agricultural growth. Fisheries led with a 13.67% CAGR (FY15-FY23), followed by livestock at 12.99%.
- **Support to Farmers:** 7.75 lakh crore operational **Kisan Credit Cards (KCC)** accounts with loans outstanding of Rs. 9.82 lakh crore as of March 2024.
  - Over 110 million farmers benefited from the **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme**, and 2.36 million enrolled in the **Pradhan Mantri Kisan Maandhan Yojana (PM-KMY)** pension scheme.
  - **Pradhan Mantri Fasal Bima Yojana (PMFBY)** insured **600 lakh hectares in FY24**, reducing farmers' risks .
  - **e-NAM** platform linked 1.78 crore farmers, 2.62 lakh traders (Oct 2024) for better price discovery.
  - **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)** provides free food grains to 80 crore people.
    - **Food processing** exports reached USD 46.44 billion (FY24), with 23.4% share in agri-food exports (11.7 % of India's total exports).
- **Challenges:**
  - **Climate Change: Erratic monsoon patterns and extreme weather events** increase vulnerability.
    - Only **55% of net sown area is irrigated**, with drought risk affecting two-thirds of agricultural land .
    - **Soil degradation and declining organic carbon levels** threaten long-term productivity.
  - **Structural Constraints: Small farm sizes (85% are below 2 hectares)** limit economies of scale.
    - **Yield gaps compared to global averages** highlight the need for better agricultural practices .
    - **Low oilseed productivity (1.9% CAGR)** increases dependence on edible oil

imports .

▪ **Way Forward:**

- **Addressing Challenges:** Promote **climate-resilient farming practices**, alongside investment in R&D for **climate-resistant crops** and **micro-irrigation**.
- **Market Efficiency and Infrastructure:** Strengthen market infrastructure, enhance e-NAM platform utilization, and support **Farmers Producer Organisations** and **cooperatives** for inclusive and efficient agricultural markets.
- **Policy Reforms & Sustainability:** Implement policies for balanced crop production, improve soil fertility, and adopt mechanisms for price risk hedging to ensure sustainable agriculture growth.

## Promoting sustainable farming: major measures



## 10. Climate and Environment - Adaptation Matters

- **Carbon Emissions:** India's [per capita carbon emissions](#) are **one-third** of the global average.
- **Adaptation Expenditure:** Increased from **3.7% of GDP in FY16 to 5.6%** in FY22, highlighting growing investment in climate adaptation.
  - [Climate Action Financing](#) is largely domestic, international finance remains insufficient.
- **Climate Finance & International Cooperation:** [Conference of Parties 29](#) failed to secure adequate climate funds, with a **USD 300B annual goal vs. USD 5.1 to 6.8T needed by 2030.**
- **Sustainable Development:**
  - **MISHTI Program:** The [Mangrove Initiative for Shoreline Habitats & Tangible Incomes \(MISHTI\)](#) a [Mangrove restoration](#) programme targeting 540 sq. km, generated **22.8 million man-days of employment**, and a [carbon sink](#) of 4.5 million tons of **carbon dioxide (CO<sub>2</sub>)**.
  - **Energy Mix (2024):** Coal (46.2%), Solar (20.6%), Wind (10.5%), Hydro (10.3%), Nuclear (1.8%).
  - **Green Hydrogen Mission:** The [Green Hydrogen Mission](#) aims to achieve **5 million metric tons of green hydrogen production by 2030**, supported by 125 gigawatts (GW) of renewable energy capacity.
    - It is expected to **create over six lakh jobs**, reduce **fossil fuel imports** by over Rs 1 lakh crore, and cut annual [greenhouse gas emissions](#) by nearly 50 MMT (50 million tons of CO<sub>2</sub>).
  - **PM-Surya Ghar:** Aims for 30 GW residential [rooftop solar capacity](#) by 2027.
  - **Sovereign Green Bonds:** India issued Rs. 20,000 crore in FY24, with a FY25 target of Rs. 21,697 crore.
  - **RBI Green Deposits Framework:** Promotes lending to renewable energy projects.
  - **LiFE initiative:** The [Lifestyle for Environment \(LiFE\) initiative](#), launched at [COP26 in Glasgow \(2021\)](#), aims to **mobilize one billion Indians and global citizens to adopt pro-environmental lifestyles**.
    - A **13% shift in global lifestyles** can reduce emissions by 20%. Changes like reducing food waste (**90 kg per person annually**) and carpooling could save substantial fuel.
  - [Green Credit Programme](#): Incentivizes environmental conservation efforts, including tree plantation.
  - [Jal Shakti Abhiyan \(2019\)](#): Water conservation and rainwater harvesting; [Smart Laboratory on Clean Rivers \(SLCR\)](#) rejuvenates Varuna River.
  - [Swachh Bharat Mission](#): Focuses on Waste management and promoting sanitation for sustainability.
  - [Circular Economy](#): Aimed at reducing waste, recovering valuable materials, and promoting resource efficiency.
  - [National Clean Air Programme \(NCAP\)](#): launched to address air quality issues in cities.
  - [Net-Zero Emissions by 2070](#): India's long-term goal to balance low-carbon development with economic growth.

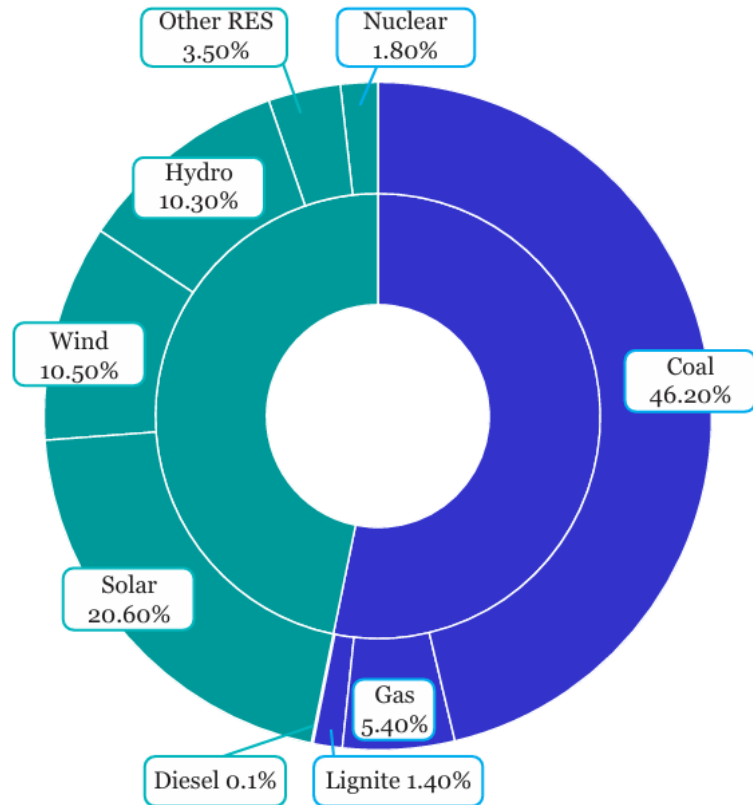
## Progress towards India's NDCs

### Renewable energy

Against the updated NDC target of 50 per cent by 2030, installed electricity generation capacity from non-fossil fuel sources has reached 46.8 per cent as on 30 November 2024

### Forest cover

As per the latest Forest Survey of India 2024, an additional carbon sink of 2.29 billion tonnes CO<sub>2</sub> eq. has been created between 2005 and 2023 against the NDC target of creating an additional carbon sink of 2.5 to 3 billion tonnes CO<sub>2</sub> eq. by 2030



### Challenges:

- **Climate Vulnerability:** India ranks **7th most vulnerable** to climate change, experiencing extreme weather events, biodiversity loss, and water insecurity .
- **Renewable Energy Deployment:** Key issues include **lack of storage technology, access to critical minerals**, and the **high costs of green hydrogen**.
- **Insufficient Global Climate Finance:** The estimated climate finance requirement is **USD 5.1 - 6.8 trillion by 2030**, but current mobilization targets remain far lower (with USD 300 Billion annual goal) .
- **Energy Transition Challenges:** Premature shutdown of **thermal energy** without viable alternatives may lead to energy instability.
  - Expansion of **nuclear energy** faces challenges due to **fuel supply monopolies and public safety concerns** .
- **Urban Sustainability:** Rapid urbanization requires enhanced climate resilience to address **heat stress, urban flooding, and groundwater depletion**.

## Challenges and priorities for India

### Challenges

High economic growth to achieve the status of a developed country by 2047 and also become net zero by 2070

International support on finance and technology is highly inadequate. India meets its requirements largely from its own budgetary sources. A small NCQG of USD 300 billion has been set

Follow a low-carbon development path while ensuring job creation and affordable energy security for all, given the limitation of renewable energy

### Priorities

Bringing adaptation to the forefront given higher vulnerability to climate change

Reducing emission intensity of its indispensable thermal power through adoption of super-critical (SC), ultra-super-critical (USC) and Advanced Ultra Super Critical (AUSC) technologies

Also focus on environmental sustainability through moderation of consumption and production habits as envisaged under Mission LiFE

#### Future Outlook and Way Forward:

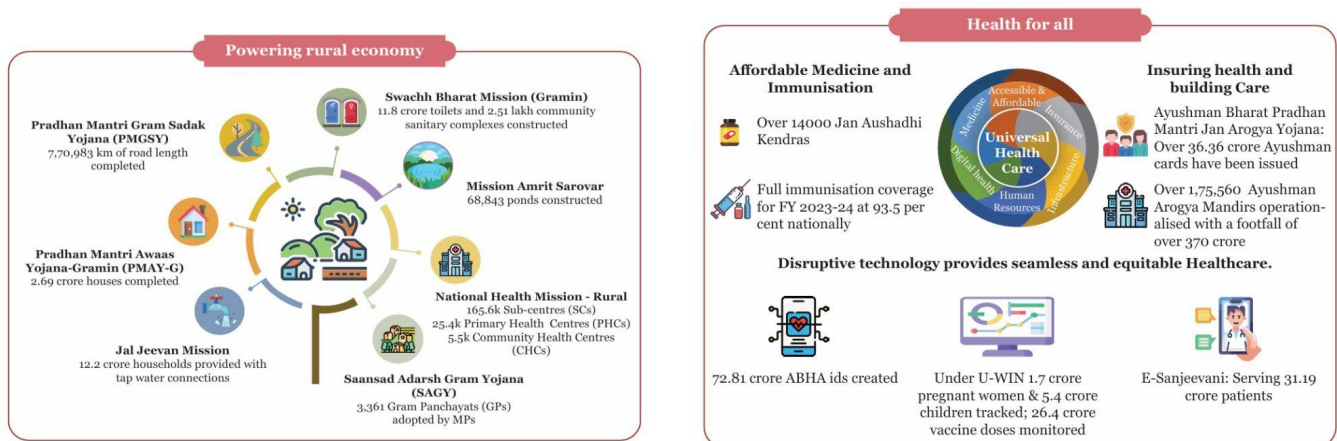
- **Renewable Energy Investments:** India's efforts in **solar power, wind energy, and green hydrogen** can accelerate the energy transition. Investments in **battery storage, carbon capture, and grid modernization** are crucial .
- **Green Finance and Market-Based Incentives:** Policies like **Green Credit Rules 2023, Perform Achieve and Trade (PAT) scheme, and electric vehicle subsidies** can incentivize low-carbon choices .
- **Energy Storage Solutions:** Invest in the R&D of battery storage technologies to support renewable energy supply reliability.
- **Carbon Capture Technologies:** Develop and deploy **carbon capture, utilization, and storage (CCUS) technologies** to reduce emissions from existing thermal plants.

## 11. Social Sector - Extending Reach and Driving Empowerment

- **Social sector spending has risen significantly**, with government expenditure on social services increasing from **Rs 14.8 lakh crore in FY21 to Rs 25.7 lakh crore in FY25** (CAGR of 15%) .
  - **Household Consumption Expenditure Survey (HCES) 2023-24** shows a **narrowing urban-rural consumption gap**, with rural MPCE (Rs 4,122) and urban MPCE (Rs 6,996) reflecting improved rural living standards .
- **Inequality Reduction (Gini Coefficient):**
  - **Rural (2023-24):** 0.237 (down from 0.266 in 2022-23).
  - **Urban (2023-24):** 0.284 (down from 0.314 in 2022-23).
- **Education & Health Focus:** Education expenditure grew by 12% annually, reaching Rs 9.2 lakh crore in FY25. **Government school enrollment rose to 69%**.
  - **Key Digital Education Initiatives:** **Digital Infrastructure for Knowledge Sharing (DIKSHA), Study Webs of Active Learning for Young Aspiring Minds (SWAYAM), Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), and PM e-Vidya.**
  - **Healthcare spending surged 18% to Rs 6.1 lakh crore in FY25**, with **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)** saving Rs 1.25 lakh crore in medical expenses.
- **Welfare & Inclusion Initiatives:** **84% of households have ration cards**, ensuring food security through the **Public Distribution System** and **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)**.
  - **Direct Benefit Transfers (DBTs)** and **self-help group (SHG) loans empower low-**

income households, with 77% of surveyed rural households receiving cash transfers .

- **Deendayal Antyodaya Yojana (DAY-NRLM)** expanded SHG financing, with **78% of SHG members receiving loans** for income generation.



### ▪ Challenges:

- **Education & Skill Gaps:** **Dropout rates** remain high at 14.1% at the secondary level, and **higher education Gross Enrolment Ratio (GER) needs to reach 50% by 2035 (currently at 28.4%)**.
  - **Digital divide persists**, with lower internet access in rural areas (55%) compared to urban (69%) .
- **Affordability:** Despite progress, **Gini coefficient remains higher in urban areas (0.284) than rural (0.237)** .
- **Health:** **Mental health issues** are rising due to social media overuse and work stress, requiring targeted interventions .
- **Gender & Social Inclusion:** **Women's workforce participation** remains low despite financial inclusion efforts.

### ▪ Way Forward:

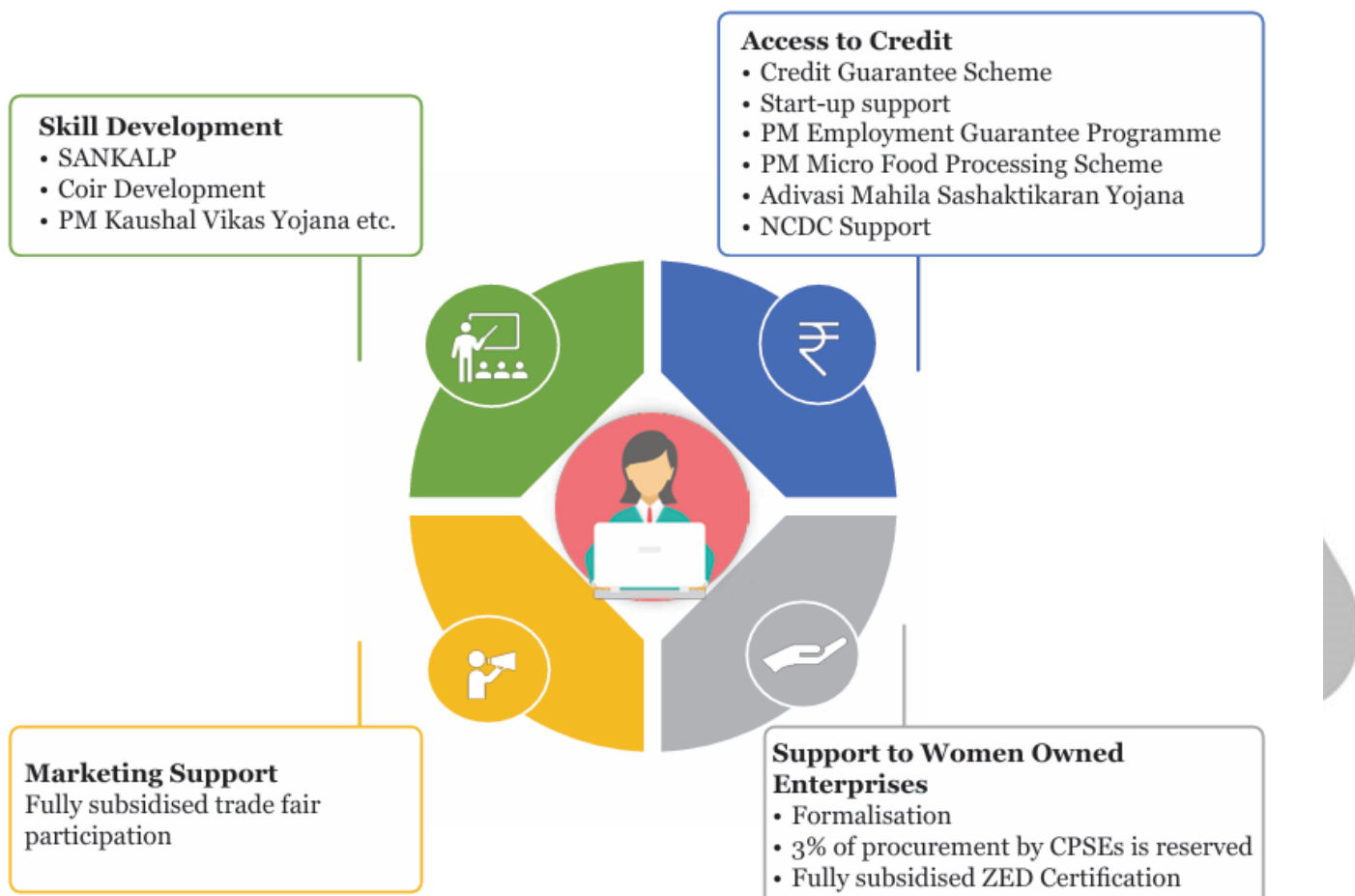
- **Education and Skilling:** Expanding vocational education, AI-driven learning tools, and teacher training. **Improving higher education affordability** and **bridging the rural-urban digital divide** .
- **Healthcare and Well-being:** Strengthening **affordable medical education and rural health infrastructure**. Promoting **mental health awareness and lifestyle-based interventions** .
- **Women and Rural Empowerment:** Expanding **SHG networks, rural entrepreneurship programs**, and targeted subsidies . Enhancing **gender-focused financial literacy and employment programs**.

## 12. Employment and Skill Development: Existential Priorities

- **Unemployment Trends:** Overall **Unemployment Rate** decreased by 3.2% in 2023-24, showing improvement in the labor market.
  - **Urban Unemployment** slightly dropped from **6.6%** in Q2 FY24 to **6.4%** in Q2 FY25, indicating steady recovery.
  - The working-age population (15-59 years) reached 923.9 million (2026 projection), offering a **demographic dividend** (26% of the population aged 10-24).
- **Female Labour Force Participation:** Increased from **23.3%** in 2017-18 to **41.7%** in 2023-24, particularly in rural areas. Represents significant female engagement in the workforce.
  - **Platformization and remote work opportunities** boost female workforce participation

## Boosting female labour force participation

### Harnessing the power of women entrepreneurs



- **Gig Economy Growth: Projected Gig Workers by 2029-30** expected to reach **23.5 million**, comprising **6.7%** of the non-agricultural workforce (up from **2.6%** in 2020-21).
- **Formal Employment Growth: 9.56 million** net payroll additions under the **Employees' Provident Fund Organisation (EPFO)** in FY24, reflecting growth in **formal employment**.
- **Wage and Rural Employment Trends: Rural wages** have grown faster than urban wages, reflecting broader economic shifts.
- **Skill Development & Education:** Government initiatives focus on **early vocationalization, upskilling and reskilling**, and **Industry 4.0 training** in areas like AI and machine learning.
  - Participation of women in the **National Apprenticeship Promotion Scheme (NAPS)** increased from **7.7%** in 2016-17 to **22.8%** in 2024-25 (up to October 31, 2024).
  - **Entrepreneurship Support:** **Skill India** and **Mudra Yojana** aid in entrepreneurship and vocational training.
  - **Job Creation:** Driven by the growing **digital economy** and **renewable energy sectors**, crucial for **Viksit Bharat**.
- **Challenges:**
  - **Skill Mismatch: 90.2% of the workforce** has only secondary-level education or below, with **88.2% engaged in low-competency occupations**.
  - **Gender Gap:** While female labour force participation has increased, **gender-based challenges** in skill acquisition and employment remain significant.
  - **Technological Disruptions:** Rapid automation and **AI adoption threaten job**

**displacement**, requiring constant adaptation .

- **Global Competition:** India's skilling initiatives must align with **international labour market requirements** to enhance global employability.

#### ▪ **Way Forward**

- **Strengthening Industry-Academia Collaboration:** Bridging the skill gap through **public-private partnerships**, training infrastructure upgrades, and **demand-driven curriculum** .
- **Vocational Training Expansion:** Ensuring **early vocational exposure** at the school level, in alignment with [National Education Policy \(NEP\) 2020](#) .
- **AI and Digital Skilling:** Implementing a **tiered skill framework** focusing on foundational, intermediate, and advanced AI training .
- **Global Workforce Integration:** Aligning skilling programs with **international demand-supply trends**, improving mobility for skilled Indian workers .

### 13. Labour in the AI Era: Crisis or Catalyst?

- **AI in Decision-Making:** Outperforming humans in healthcare, criminal justice, education, and finance.
- **Job Risk: 300 million jobs** at risk of AI-driven automation (Goldman Sachs).
- **AI Automation Impact:** AI presents both opportunities and risks, with **75 million jobs at risk globally** and 300 million roles exposed (Goldman Sachs).
  - **India's AI market is set to grow at 25-35% CAGR by 2027** ([National Association of Software and Services Companies \(NASSCOM\)](#)), making workforce upskilling, regulatory oversight, and human-AI collaboration essential for a balanced transition.
- **Environmental Impact:** AI data centers require over **1 billion liters of water daily, straining resources**.
- **Challenges:**
  - **Job Displacement & Inequality:** AI adoption threatens entry-level jobs and could exacerbate social and economic divides.
    - Indian IT, [Business process outsourcing \(BPO\)](#), and banking sectors face high AI disruption, particularly in low-value service jobs.
  - **Infrastructure Deficits:** Widespread AI adoption requires significant investments in digital infrastructure, computing power, and high-quality data management .
  - **AI Reliability & Accountability:** AI models can produce biased results, leading to ethical and governance concerns in areas like hiring, law enforcement, and healthcare .



## Challenges to scaling AI



### Practicality

Translating breakthroughs into practical, widely adopted applications remains challenging, as AI currently shows experimental and uneven utility



### Reliability

Ensuring AI reliability is critical for real-world applications, as failures in key industries like autonomous vehicles or healthcare can prove problematic



### Infrastructure

AI at scale requires substantial investments in infrastructure, including data centres, clean data pipelines, and computational resources



### Resources

Large Models are resource intensive, requiring high energy consumption, dependency on scarce minerals for hardware, and finance, making sustainable innovation essential

#### Way forward:

- **Building Social Infrastructure:** Institutions must be developed to minimize **AI-induced labor disruptions** and provide necessary support systems .
- **Regulatory & Ethical Frameworks:** AI regulations must be updated to ensure fairness, transparency, and accountability in AI-driven decision-making .
- **Balancing Automation & Human Workforce:** AI should be seen as an augmentation tool rather than a substitute for human labor, ensuring a cooperative model for productivity growth .

## Conclusion

India's Economic Survey 2024-25 highlights resilient growth, fiscal prudence, and structural reforms driving the nation towards **Viksit Bharat 2047**. Despite global uncertainties, climate risks, and technological disruptions, **India's strong domestic demand**, infrastructure push, and digital advancements ensure stability. **Sustained investment in human capital, regulatory simplification, and green growth** strategies will be key to long-term progress with a balanced policy approach, **innovation-driven economy, and inclusive development** will help India maintain its **high-growth trajectory** in the coming decades.