



## India's Industrial Sector

**For Prelims:** Premature deindustrialization, India's Industrial Sector, [Information technology](#), [Service sector](#), [Periodic Labour Force Survey](#), [Production-Linked Incentive](#), [PM Gati Shakti- National Master Plan](#), [Start-up India](#), [Make in India 2.0](#), [Atmanirbhar Bharat Campaign](#), [Special Economic Zones](#)

**For Mains:** Current Status of India's Industrial Sector, Manufacturing v/s Sector Sector Growth

[Source: TH](#)

### Why in News?

Despite a swift [post-pandemic recovery](#), India experiences '**premature deindustrialization**', exacerbating inequality as benefits of rapid growth favour a small minority, widening existing disparities.

### What is Premature Deindustrialization?

- **Premature Deindustrialization** refers to a phenomenon wherein the growth of an economy's manufacturing sector begins to slow down prematurely in its path towards development.
  - This concept was popularized in 2015 by Turkish Economist **Dani Rodrik**.
- Economists typically view economic development as a **transition from [agriculture](#) to [manufacturing](#) and then to services**.
  - However, some economies may experience premature shifts to the services sector, **hindering [manufacturing growth](#)**.

### What is the Current Status of India's Industrial Sector?

- **Status:** Historically, India's [industrialization](#) progress has been **inadequate**, with manufacturing consistently contributing less than 20% to output and [employment](#), except during **2003-2008** (Industrial growth during 2003-08 called as **the 'Dream Run'**).
  - Despite [LPG Reforms in 1991](#) aiming for labour-intensive industrialization, this trend persisted.
- **Factors Responsible for Stagnant Industrialization in India:**
  - **Inadequate Research and Development (R&D) Investment:** It limits innovation and technological advancement in Indian industries, hampering their competitiveness globally.
  - **Corruption and Red Tape:** Rampant corruption and bureaucratic inefficiencies in obtaining permits, licences, and clearances create bottlenecks and **add to the cost of doing business**, deterring investment in the industrial sector.
  - **Informal Economy Dominance:** Competition from the **informal economy**, which operates outside regulatory frameworks and often evades taxes, creates an uneven playing field for formal industrial enterprises, impacting their growth prospects.
  - **Skill Mismatch:** Discrepancies between the **skills demanded by industries and those possessed by the workforce** contribute to underemployment and inefficiencies in the industrial sector.
    - As per the [Skill India Report](#), only **5% of the Indian population is formally**

**skilled** compared to 68% in the UK, and 75% in Germany.

- **Supply Chain Vulnerabilities and Resilience:** Dependency on **imported raw materials makes Indian industries vulnerable to global supply chain disruptions**, requiring strategies to strengthen domestic supply chains and promote local manufacturing.
- **Approach to Boost Industrial Sector:** India needs an unconventional approach.
  - Prioritising high-skill services, particularly in **information technology (IT)**, to stimulate manufacturing growth.
  - This contradicts the traditional view that service growth relies on a strong manufacturing base.

## What are the Arguments in Favour of and Against the Service Sector Stimulating Manufacturing Growth?

- **Arguments in Favour:**
  - **Increased Consumer Demand:** A thriving **service sector** creates **jobs and disposable income**, leading to increased consumer demand for goods, potentially benefiting manufacturers.
    - For example, the demand for infrastructure development in the service sector (such as **transportation, communication, and IT**) can drive the demand for manufactured goods like **vehicles, machinery, and electronics**.
  - **Supply Chain Integration:** Services like **logistics, distribution, and supply chain management** play a crucial role in connecting manufacturers with consumers.
    - A robust service sector can enhance the efficiency of supply chains, reducing costs and improving the competitiveness of the manufacturing sector.
  - **Complementary Expertise:** Service industries can offer specialised expertise that manufacturers lack, such as **design and branding**.
    - Services can provide manufacturers with valuable data insights on **customer preferences, market trends, and supply chain** performance.
    - This data can be used to optimise production, pricing, and marketing strategies.
- **Arguments Against:**
  - **Deepening Inequality:** The service sector **demands highly skilled workers**, which India struggles to supply adequately.
    - This creates a **stark divide between college graduates and others**, leading to greater inequality in earnings compared to manufacturing-led growth.
    - The **Gini index** of inequality for regular wages in the services sector was 44 compared to 35 for manufacturing, highlighting this disparity.
  - **Limited Direct Linkages:** While the service sector may create indirect demand for manufactured goods, the **direct linkages** between services and manufacturing are still limited.
  - **Neglect of Basic Industries:** Prioritising the service sector may lead to neglect of critical infrastructure for **basic small-scale industries** essential for manufacturing growth for countries like India, impeding long-term competitiveness and resilience.

## What are the Recent Government Initiatives for the Growth of the Industrial Sector in India?

- **Production-Linked Incentive (PLI)**
- **PM Gati Shakti- National Master Plan**
- **Bharatmala and Sagarmala Project**
- **Start-up India**
- **Make in India 2.0**
- **Atmanirbhar Bharat Campaign**
- **Special Economic Zones**

## Way Forward

- **Shifting Focus to Deep Industrialization:** India needs to move beyond just increasing output of manufacturing and also focus on adoption of **Industry 4.0 technologies** such as the [Internet of Things \(IoT\)](#), **big data analytics**, and [digital twins](#) to enable smart manufacturing processes.
- **Infrastructure Development:** Improving **power generation, transmission, and distribution** infrastructure to ensure a stable and cost-effective power supply.
  - Upgrading transportation networks like **roads, railways, and ports** to improve connectivity and reduce logistics costs.
  - Expanding access to **high-speed internet** to facilitate efficient communication and data exchange.
- **Rural Industrialization Models:** Developing innovative models for rural industrialization that leverage local resources, skills, and community participation.
  - This could involve setting up **decentralised manufacturing clusters** or co-operative enterprises in rural areas, empowering local artisans and entrepreneurs.
- **Bio-based Manufacturing:** India has the potential to lead in bio-based manufacturing by utilising **renewable feedstocks, biomaterials, and biotechnological processes**, thereby becoming a frontrunner in the bio-economy.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

**Q. In the 'Index of Eight Core Industries', which one of the following is given the highest weight? (2015)**

- (a) Coal production
- (b) Electricity generation
- (c) Fertilizer production
- (d) Steel production

**Ans: (b)**

### Mains

**Q.1** "Industrial growth rate has lagged behind in the overall growth of Gross-Domestic-Product(GDP) in the post-reform period" Give reasons. How far are the recent changes in Industrial Policy capable of increasing the industrial growth rate? **(2017)**

**Q.2** Normally countries shift from agriculture to industry and then later to services, but India shifted directly from agriculture to services. What are the reasons for the huge growth of services vis-a-vis the industry in the country? Can India become a developed country without a strong industrial base? **(2014)**