

14. Industry



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Chapter 14 Industry

The industrial sector, also known as the manufacturing sector is involved in the production of goods, such as machinery, chemicals, textiles, and automobiles. It also includes industries that provide infrastructure, like power and transportation.

Historical Evolution of the Manufacturing Sector in India

Pre-independence Era:

Prior to India's independence in 1947, the manufacturing sector was predominantly centered around traditional industries, such as textiles, handicrafts, and agro-processing. Industrialization was limited, and the country largely relied on agriculture for its economic sustenance.

Post-independence Industrialization:

After independence, India adopted a planned economy model, and industrialization became a key focus of the government's development strategy. The introduction of five-year plans aimed to accelerate industrial growth and reduce dependency on imports. The public sector played a dominant role in manufacturing, with the establishment of large-scale industries in steel, heavy machinery, and capital goods.

The Second Five-Year Plan (1956-1961) witnessed the establishment of the Indian Institutes of Technology (IITs) and the Indian Institutes of Management (IIMs), which contributed to a skilled workforce in the engineering and management fields.

Liberalization and Economic Reforms in the 1990s:

In response to a balance of payments crisis in the early 1990s, India initiated a series of economic reforms in 1991 to liberalize its economy. The manufacturing sector witnessed significant changes during this period. Key reforms included:

- 1. Reduction of industrial licensing and delicensing of various industries, allowing for increased private sector participation and foreign direct investment (FDI).
- Introduction of foreign trade reforms to encourage exports and boost competitiveness.
- 3. Dismantling of import controls and tariff reductions to promote import competition and efficiency.
- 4. Creation of Special Economic Zones (SEZs) to attract foreign investment and boost manufacturing exports.



Industrial sector's contribution to India's Economy

According to the World Bank, in 2020, the industrial sector accounted for around 26% of India's GDP. That means that roughly a quarter of the value of all goods and services produced in India comes from the industrial sector.

According to the Ministry of Statistics and Programme Implementation, the industrial sector employed around 28% of India's workforce in 2019.

High-frequency indicators to track the growth momentum of the industrial sector

High-Frequency		
Indicator	Definition	Calculation
		The index is calculated based on surveys of
		purchasing managers who report changes
	A monthly survey-based	in key factors like new orders, production,
	index that measures the	employment, supplier deliveries, and
	level of confidence of	inventories. The PMI value is derived from
	purchasing managers in	a weighted average of these components.
PMI	the manufacturing	A score above 50 indicates expansion,
Manufacturing	sector	while below 50 indicates contraction.
		IIP is calculated using the Laspeyres
		formula, which compares the current
		period's industrial production with a base
	A monthly index that	period. The index represents the
	tracks the production of	percentage change in production volume
	different industries in	for a basket of industrial products over
IIP	India	time.
		Refinery Products Industry: 28.04%
		Electricity Industry: 19.85%
		Steel Industry: 17.92%
	A monthly index that	Coal Industry: 10.33%
	tracks the performance	Crude Oil Industry: 8.98%
	of key industries that	Natural Gas Industry: 6.88%
Index of Core	make up the core of the	Cement Industry: 5.37%
Industries	industrial sector in India	Fertilizers Industry: 2.63%
	The loans given by	
	banks to industries for	
Bank Credit to	their operations and	
<u>Industry</u>	expansion	
	The investment made by	
	foreign companies in	
FDI in	the manufacturing	
Manufacturing	sector of India	



Government Policies and Initiatives to Support Manufacturing

- 1. Make in India: Launched in 2014, the Make in India campaign is one of the flagship initiatives to promote manufacturing and transform India into a global manufacturing hub. The campaign aims to attract both domestic and foreign investment in various industries by offering a favorable business environment, easing regulatory norms, and providing incentives for manufacturing activities.
- 2. National Manufacturing Policy (NMP): The NMP provides a comprehensive roadmap for the growth and development of the manufacturing sector. It focuses on enhancing the sector's contribution to GDP, increasing employment opportunities, and promoting sustainable manufacturing practices. The policy emphasizes the need for skill development, technology upgradation, and efficient infrastructure.
- 3. Special Economic Zones (SEZs): SEZs are designated geographical areas that offer various tax incentives, customs benefits, and simplified regulatory procedures to attract foreign direct investment and promote exports. SEZs have played a significant role in boosting manufacturing exports and creating employment opportunities.
- 4. Industrial Corridors: The government has identified and developed industrial corridors, such as the Delhi-Mumbai Industrial Corridor (DMIC) and Chennai-Bengaluru Industrial Corridor (CBIC). These corridors aim to create industrial clusters with state-of-the-art infrastructure, better connectivity, and investor-friendly policies.
- 5. Goods and Services Tax (GST): The introduction of the GST in 2017 brought about significant tax reforms and streamlined the indirect taxation system. The unified tax regime has reduced tax complexities and improved the ease of doing business, benefiting the manufacturing sector.
- 6. Intellectual Property Rights (IPR) Policy: India has formulated a National IPR Policy to promote innovation and protect intellectual property. The policy aims to foster an environment conducive to research, development, and technology transfer in the manufacturing sector.
- 7. Technology Upgradation Fund Scheme (TUFS): TUFS provides financial support to textile and jute industries for the modernization of machinery and technology upgradation. The scheme aims to enhance productivity, quality, and cost-competitiveness in these industries.
- 8. Export Promotion Schemes: Various export promotion schemes, such as the Merchandise Exports from India Scheme (MEIS) and the Service Exports from India Scheme (SEIS), provide incentives to manufacturers for promoting exports and expanding their global footprint.
- 9. Investment Facilitation: The government has set up single-window clearance mechanisms and investment promotion agencies at the central and state levels to facilitate investment in the manufacturing sector. These agencies help investors with necessary approvals and clearances, thus reducing bureaucratic hurdles.
- 10. Ease of Doing Business Reforms: The Indian government has undertaken significant reforms to improve the ease of doing business in the country. These reforms include simplifying business registration processes, reducing compliance burdens, streamlining tax procedures, and enabling faster dispute resolution. The World Bank's "Doing Business" report has recognized India's efforts, leading to improved rankings in the ease of doing business index.
- 11. Production-Linked Incentive (PLI) Schemes: The government has introduced PLI schemes in specific sectors to encourage domestic manufacturing and enhance India's competitiveness in global markets. Under these schemes, manufacturers receive incentives based on their incremental production and investment.



- 12. Atmanirbhar Bharat Abhiyan: The Atmanirbhar Bharat Abhiyan (Self-Reliant India Campaign) was launched in 2020 to promote self-reliance and reduce dependency on imports. It encourages domestic manufacturing, R&D, and innovation in key sectors to make India self-sufficient and globally competitive.
- 13. National Capital Goods Policy: The National Capital Goods Policy aims to enhance the competitiveness of India's capital goods sector and strengthen the manufacturing ecosystem. It focuses on increasing domestic production, exports, and technology upgradation in the capital goods industry.
- 14. Pradhan Mantri Mudra Yojana (PMMY): PMMY provides financial assistance to small and micro-enterprises, including those in the manufacturing sector, by offering collateral-free loans. This initiative helps in promoting entrepreneurship and supporting small-scale manufacturing units.
- 15. Start-up India: The Start-up India initiative fosters a conducive ecosystem for startups, including those in the manufacturing sector. It provides various benefits such as tax incentives, self-certification compliance, and access to funding and mentorship to promote entrepreneurship and innovation.
- 16. PM Gati Shakti National Master Plan: PM Gati Shakti is a transformative infrastructure development initiative launched by the Government of India. It aims to create a unified and integrated multimodal logistics network across the country. The National Master Plan under PM Gati Shakti focuses on enhancing transportation connectivity, including roads, railways, ports, and airports, to facilitate efficient movement of goods and reduce logistics costs for the manufacturing sector.

Challenges Faced by the Manufacturing Sector in India

- 1. Infrastructure Deficiency: Inadequate and outdated infrastructure, including transportation, logistics, and power supply, pose significant challenges for manufacturers. Poor roads, congested ports, and unreliable power supply lead to increased production costs, delays in delivery, and hamper overall efficiency.
- 2. Skilled Labor Shortages: The manufacturing sector in India grapples with a shortage of skilled and trained labor. The disparity between the demand for skilled workers and the availability of suitable talent creates challenges in adopting advanced manufacturing technologies and hampers productivity.
- 3. Labor Reforms: The rigid labor laws in India have been a longstanding challenge for the manufacturing sector. The existing labor laws often hinder flexibility in hiring, firing, and labor deployment, making it difficult for companies to adjust their workforce according to changing market conditions and demand fluctuations. The complex labor regulations also discourage businesses from scaling up their operations and investing in labor-intensive industries.
- 4. Complex Regulatory Environment: Manufacturers face complex and time-consuming regulatory procedures, including licensing, permits, and compliance requirements. This bureaucratic burden increases administrative costs and delays business operations.
- 5. Access to Finance: Small and Medium-sized Enterprises (SMEs) in the manufacturing sector often encounter challenges in accessing affordable credit and working capital. High interest rates and stringent lending norms limit their growth and expansion opportunities.
- 6. Low R&D and Innovation: The level of research and development (R&D) expenditure in the manufacturing sector remains relatively low compared to global standards. Lack of innovation and



technology adoption hinders the industry's ability to produce high-value products and compete in international markets.

- 7. Global Competition: Indian manufacturers face intense competition from other countries, particularly from low-cost manufacturing hubs like China. Price competitiveness becomes challenging due to economies of scale and lower production costs in competitor countries.
- 8. Inefficient Supply Chain Management: Inefficient supply chain management results in inventory management challenges, increased lead times, and higher costs. Manufacturers often struggle to optimize supply chain processes, affecting their ability to meet market demands efficiently.
- 9. Import Dependency: India's manufacturing sector still depends on imports for certain critical raw materials, components, and machinery. This reliance on foreign supplies makes the industry vulnerable to fluctuations in global markets and exchange rate volatility. Eg. Electronics Industry
- 10. Environmental Regulations: Stricter environmental regulations and compliance requirements impact manufacturing processes and necessitate additional investments in environment-friendly technologies and waste management systems.
- 11. Lack of Industry-Academia Collaboration: Limited collaboration between industry and academia hampers innovation and technology transfer in the manufacturing sector. Bridging this gap is essential to foster R&D, skill development, and technology upgradation.

Opportunities for the Manufacturing Sector:

Rising Domestic Demand and Demographic Dividend:

- India's large and growing population presents a significant domestic market for manufactured goods. The rising middle-class population and increasing disposable income drive demand for consumer durables, electronics, automobiles, and other products.
- The country's young and aspiring workforce offers a demographic dividend, providing a skilled labor pool for the manufacturing sector and supporting overall economic growth.

Leveraging Technology for Industry 4.0:

- Industry 4.0, characterized by automation, data exchange, and IoT integration, offers immense opportunities for the manufacturing sector. Adoption of advanced technologies enhances productivity, quality, and efficiency in manufacturing processes.
- India can become a leader in technology-driven manufacturing and leverage its IT expertise to drive innovation and digital transformation in industries.

Focus on Sustainable and Green Manufacturing:

- The increasing global emphasis on sustainability and environmental responsibility presents an opportunity for Indian manufacturers to adopt eco-friendly practices and green technologies.
- By producing environmentally conscious products and adopting sustainable manufacturing processes, Indian companies can gain a competitive edge and appeal to eco-conscious consumers globally.



Export Potential and Market Diversification:

- India's manufacturing sector has significant export potential, particularly in sectors like pharmaceuticals, textiles, engineering goods, and automotive components.
- Diversifying export markets reduces reliance on specific regions and enhances the sector's resilience to global economic fluctuations.

Government Initiatives and Incentives:

- The Government of India's initiatives like Make in India, Production-Linked Incentive (PLI) schemes, and Atmanirbhar Bharat Campaign provide incentives and support to promote domestic manufacturing and attract foreign investments.
- These initiatives create an enabling environment for manufacturers, facilitating technology adoption, R&D, and innovation.

Infrastructure Development:

- Investment in infrastructure development, such as transportation networks, logistics hubs, and industrial corridors, can improve supply chain efficiency and reduce manufacturing costs.
- Access to modern infrastructure enhances connectivity and accessibility to markets, attracting more investment in the manufacturing sector.

Shift in Global Supply Chains:

- The COVID-19 pandemic and geopolitical tensions have led to a reevaluation of global supply chains. Many companies are exploring alternative manufacturing destinations like India to reduce dependency on a single country or region.
- This presents an opportunity for India to attract investments and enhance its role in global supply chains.

By capitalizing on these opportunities, the Indian manufacturing sector can position itself as a major player in the global market, drive economic growth, create jobs, and contribute significantly to India's journey towards becoming globally competitive economy.

Key sub-sectors in India's Industrial Sector

Micro, Small and Medium Enterprises (MSMEs)

The Micro, Small, and Medium Enterprises (MSMEs) sector includes a wide range of businesses, such as small manufacturers, service providers, and artisans. MSMEs play a crucial role in the Indian economy by contributing to employment generation and economic growth.

Challenges:

- 1. Limited access to finance and credit
- 2. Difficulty in adopting new technology and innovation
- 3. Lack of skilled labor and training programs
- 4. Regulatory compliance and bureaucratic hurdles



Government Initiatives:

- 1. The government has launched several initiatives to support MSMEs, such as the Prime Minister's Employment Generation Programme (PMEGP) and the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE).
- 2. The government has also introduced measures to promote innovation and entrepreneurship, such as the Startup India initiative and the Atmanirbhar Bharat Abhiyan.
- 3. The government has simplified regulatory compliance for MSMEs by introducing a single-window system for approvals and registrations.

Examples:

- Chumbak, a Bangalore-based company, is a successful MSME that designs and manufactures quirky lifestyle products such as bags, wallets, and home decor items. Chumbak has expanded rapidly in recent years, with over 70 stores across India and a strong online presence.
- Fabindia, another well-known MSME, is a retail chain that specializes in handcrafted products such as clothing, accessories, and home furnishings. Fabindia works closely with artisans and weavers in rural areas, providing them with a platform to showcase their products and earn a livelihood.

Electronics Industry

The electronics industry in India is involved in the manufacturing and production of electronic products, such as smartphones, laptops, televisions, and more. It is a rapidly growing industry in India, with many global and domestic companies investing in the country.

Challenges:

- 1. Lack of a strong supply chain ecosystem
- 2. Limited availability of skilled labor and technical expertise
- 3. High import dependence for raw materials and components
- 4. Intense competition from other Asian countries such as China and Taiwan

Government Initiatives:

- 1. The government has launched several initiatives to promote electronics manufacturing in India, such as the Make in India campaign and the National Policy on Electronics.
- 2. The government has also established special economic zones (SEZs) and industrial parks to attract foreign investment and promote manufacturing.
- 3. The government has implemented measures to improve the availability of skilled labor, such as the Skill India initiative and the Pradhan Mantri Kaushal Vikas Yojana.

Examples:

- Foxconn, a Taiwanese multinational electronics contract manufacturer, has set up a manufacturing facility in India to produce smartphones for companies such as Apple and Xiaomi.
- Samsung, the South Korean electronics giant, has a large manufacturing presence in India, with factories producing smartphones, televisions, and home appliances.



Coal Industry

The coal industry plays a crucial role in the country's energy mix. India is the third-largest producer of coal in the world, and the coal industry provides employment to millions of people across the country.

Challenges:

- 1. Limited availability of high-quality coal reserves in certain regions
- 2. Environmental concerns related to coal mining and usage, such as air pollution and greenhouse gas emissions
- 3. Increasing competition from renewable energy sources like solar and wind power
- 4. Technological challenges in the exploration and extraction of coal

Government Initiatives:

- 1. The government has launched several initiatives to improve the efficiency and sustainability of the coal industry, such as the Coal Mitra portal, which facilitates the transfer of coal reserves from one company to another, and the Ujjwal Discom Assurance Yojana, which aims to ensure the financial viability of power distribution companies.
- 2. The government has also introduced measures to promote the use of clean coal technologies and reduce emissions, such as the National Clean Energy Fund and the Clean Energy Cess.
- 3. The government is also investing in research and development to improve the exploration and extraction of coal, such as the development of new mining technologies and the use of artificial intelligence and big data analytics.

Examples:

• Coal India Limited is the largest coal mining company in India and operates several mines across the country. It produces around 83% of the country's coal output and employs over 300,000 people.

Steel Industry

The steel industry plays a critical role in the growth and development of the Indian economy. It includes the production of iron and steel products, which are used in various industries, such as construction, automotive, and infrastructure.

Challenges:

- 1. High dependence on imported raw materials, such as coking coal and iron ore
- 2. Intense competition from low-cost steel producers in other countries
- 3. Environmental concerns related to emissions and waste disposal
- 4. Fluctuations in demand and prices due to global economic conditions

Government Initiatives:

1. The government has launched several initiatives to support the growth and development of the steel industry, such as the National Steel Policy and the Make in India campaign.



- The government has also implemented measures to reduce dependence on imported raw materials and encourage domestic production, such as the auction of mineral resources and the introduction of the Steel Scrap Recycling Policy.
- 3. The government has also provided financial and technical assistance to steel companies for modernization and capacity expansion, such as the Steel Development Fund and the Technology Upgradation Fund Scheme.

Examples:

- Tata Steel, one of the leading steel producers in India, has several plants and facilities across the country. Its flagship plant in Jamshedpur, Jharkhand is one of the largest and most advanced steel plants in the world.
- Steel Authority of India Limited (SAIL), another major player in the Indian steel industry, has several integrated steel plants and is involved in the production of a wide range of steel products, including long and flat products.

Textile Industry

The textile industry includes the production of various textiles, such as cotton, silk, wool, and synthetic fibers, as well as the manufacturing of apparel, home textiles, and technical textiles.

Challenges:

- 1. Competition from other countries like Bangladesh with lower labor costs
- 2. High cost of raw materials, such as cotton and silk
- 3. Lack of modernization and technological advancements in certain regions
- 4. Environmental concerns related to water usage and pollution

Government Initiatives:

- 1. The government has launched several initiatives to promote the textile industry, such as the Technology Upgradation Fund Scheme (TUFS) and the Integrated Skill Development Scheme (ISDS).
- 2. The Make in India campaign also focuses on promoting the textile industry by attracting foreign investment and facilitating ease of doing business.
- 3. The government has also implemented measures to address environmental concerns, such as the Zero Liquid Discharge (ZLD) policy for textile dyeing and printing units.

Examples:

- The city of Surat in Gujarat is known as the "Textile City of India" and is one of the largest centers for textile production and manufacturing in the country.
- The traditional textile art of handloom weaving is still practiced in certain regions of India, such as Varanasi and Kanchipuram. These handloom textiles are renowned for their intricate designs and high-quality craftsmanship.



Pharmaceuticals Industry

The pharmaceuticals industry is involved in the production and distribution of drugs, medicines, and other healthcare products. India is known as the "Pharmacy of the World" due to its large and growing pharmaceuticals industry.

Challenges:

- 1. Increasing competition from other countries
- 2. High costs of research and development for new drugs
- 3. Complex regulatory environment and intellectual property issues
- 4. Dependence on imports of raw materials and active pharmaceutical ingredients (APIs)

Government Initiatives:

- The government has launched several initiatives to promote the growth and development of the pharmaceuticals industry, such as the Pharmaceutical Promotion Development Scheme (PPDS) and the Make in India campaign.
- 2. The government has also established the National Pharmaceutical Pricing Authority (NPPA) to regulate drug prices and ensure affordable healthcare for all.
- 3. The government has also taken steps to boost domestic production of APIs and reduce dependence on imports, such as the Production Linked Incentive (PLI) scheme for the pharmaceuticals industry.

Examples:

- The Serum Institute of India, based in Pune, is the world's largest vaccine manufacturer by volume. It produces vaccines for a wide range of diseases, including COVID-19, and exports them to countries around the world.
- The company Cipla, based in Mumbai, is one of the leading pharmaceutical companies in India.
 It produces a wide range of drugs and medicines, including treatments for cancer, HIV/AIDS, and respiratory illnesses.

Automobile Industry

The automobile industry includes the manufacturing and sale of automobiles such as cars, trucks, buses, motorcycles, and more. It is a significant contributor to India's economy, providing employment to millions of people and generating significant revenue.

Challenges:

- 1. High competition among domestic and international players
- 2. Fluctuations in demand due to economic factors and changes in consumer preferences
- 3. Rising raw material costs and inflation
- 4. Environmental concerns and pressure to adopt cleaner technologies

Government Initiatives:

1. The government has implemented several initiatives to support the automobile industry, such as the Automotive Mission Plan and the National Electric Mobility Mission Plan.



- 2. The government has also announced incentives and tax breaks for manufacturers who invest in clean energy technologies and electric vehicles.
- 3. The introduction of the Goods and Services Tax (GST) has streamlined the tax system and reduced the overall tax burden on the industry.

Examples:

- Tata Motors is one of the leading automobile manufacturers in India, producing a wide range of vehicles such as cars, trucks, and buses. Its Nano car, marketed as the world's cheapest car, was launched in 2008 and aimed at providing affordable transportation to the masses.
- Maruti Suzuki is another prominent automobile manufacturer in India, known for its popular compact cars such as the Swift and the Alto. It has a strong presence in the Indian market and has expanded its operations to other countries in the region.

Telecommunications Industry

The telecommunications industry includes businesses involved in the production and distribution of telecommunications equipment and services, such as mobile phones, internet services, and cable TV.

Challenges:

- 1. High competition among telecom service providers
- 2. The need for constant innovation to keep up with rapidly evolving technology
- 3. Difficulty in providing reliable and affordable services in rural and remote areas
- 4. Regulatory challenges, such as spectrum allocation and licensing issues

Government Initiatives:

- The government has launched several initiatives to promote the growth and development of the telecom industry, such as the Digital India campaign and the National Optical Fibre Network project.
- 2. The Telecom Regulatory Authority of India (TRAI) has implemented measures to promote fair competition and ensure quality services for consumers, such as the Telecom Consumer Protection Regulations.
- 3. The government has also taken steps to address the issue of connectivity in rural areas, such as the BharatNet project, which aims to provide broadband connectivity to all gram panchayats (village councils) in the country.

Examples:

- Reliance Jio, a subsidiary of Reliance Industries, is a major player in the Indian telecom market. It
 offers affordable 4G data plans and has disrupted the industry with its aggressive pricing
 strategies.
- Bharti Airtel, another leading telecom service provider in India, has a wide range of services, including mobile, broadband, and digital TV. It has a strong presence in both urban and rural areas of the country.



Previous Years Prelims Questions

1.	Recently, India's first 'National Investment and Manufacturing Zone' was proposed to be set up in	2016
	(a) Andhra Pradesh	
	(b) Gujarat	
	(c) Maharashtra	
	(d) Uttar Pradesh	
2.	On which of the following can you find the Bureau of Energy Efficiency Star Label?	2016
	(1) Ceiling fans	
	(2) Electric geysers	
	(3) Tubular fluorescent lamps	
	Select the correct answer using the code given below.	
	(a) 1 and 2 only	
	(b) 3 only	
	(c) 2 and 3 only	
	(d) 1, 2 and 3	
3.	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	



Previous Years Mains Questions

1.	Account for the failure of the manufacturing sector in achieving the goal of labour-intensive exports rather than capital-intensive exports. Suggest measures for more labour-intensive rather than capital-intensive exports.	2017
2.	"Industrial growth rate has lagged behind in the overall growth of Gross-Domestic-Product(GDP) in the post-reform period" Give reasons. How far the recent changes is Industrial Policy are capable of increasing the industrial growth rate?	2017
3.	"Success of 'Make in India' programme depends on the success of 'Skill India' programme and radical labour reforms." Discuss with logical arguments.	2015
4.	There is a clear acknowledgement that Special Economic Zones (SEZs) are a tool of industrial development, manufacturing and exports. Recognizing this potential, the whole instrumentality of SEZs requires augmentation. Discuss the issues plaguing the success of SEZs with respect to taxation, governing laws and administration.	2015

Answers

1.	А	2.	D
3.	В		



16. Service



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Chapter 16 Service

The service sector of the economy refers to those parts of the economy that are involved in the production and distribution of services rather than tangible goods. This sector includes a wide variety of businesses, such as restaurants, banks, healthcare providers, entertainment companies, transportation services, and many others.

Historical evolution of the service sector in India:

Pre-Independence Era:

Prior to India's independence in 1947, the economy was primarily agrarian. Limited services existed, mainly consisting of traditional services like retail, trade, and transportation.

Post-Independence Era:

After independence, India adopted a planned economy model, emphasizing industrialization and the public sector's role in economic development. The service sector initially played a secondary role in the economy. Basic services like banking, insurance, and government services began to develop during this period. The early stage of service sector development was driven by state-owned enterprises and public sector entities.

Economic Reforms and Liberalization (1990s):

The liberalization policies allowed foreign direct investment (FDI) in various service sectors, which facilitated the entry of multinational companies. The Information Technology (IT) and Information Technology Enabled Services (ITeS) industry saw significant growth during this period, becoming a major contributor to the services sector. The banking and financial services sector also experienced significant reforms, including the entry of private banks and the establishment of the Securities and Exchange Board of India (SEBI).

Services-Led Growth (2000s-Present):

In the 21st century, India experienced robust services-led economic growth, with the service sector becoming the largest contributor to GDP.

- The IT and ITeS industry, along with business process outsourcing (BPO) services, witnessed exponential growth, leading to the rise of India as a global outsourcing hub.
- The healthcare, education, and hospitality sectors also expanded rapidly to meet the growing demands of a rising middle class.
- E-commerce emerged as a disruptive force, transforming the retail and logistics landscape.



- India's tourism industry flourished, attracting both domestic and international travelers, contributing significantly to the services sector's growth.
- The government focused on skill development and encouraged entrepreneurship to further boost the services sector.

Digital Revolution and Service Innovation:

- The digital revolution in the 21st century further accelerated the growth of the service sector in India.
- Technological advancements, such as mobile internet and smartphone penetration, enabled the rapid expansion of digital services, including e-commerce, fintech, and online entertainment platforms.
- Online service delivery and digital payment systems witnessed widespread adoption, promoting financial inclusion and access to services for a larger population.

Contribution of Service Sector to India's Economy

According to the World Bank, the service sector contributes around 54% of India's gross domestic product (GDP).

According to the National Statistical Office of India, the service sector employed around 34% of India's workforce in 2019-20.

High-frequency indicators to track the growth momentum of India's services sector:

High- Frequency Indicator	Definition	Interpretation
Services PMI	of activity in their industry, such as new orders.	expansion, while below 50 indicates contraction. A higher reading suggests that the services sector is
Bank Credit to Services Sector	services sector	A higher bank credit to the services sector indicates that banks are confident about the sector's growth prospects and are willing to lend more money to it.
World Services Trade		An increase in world services trade can indicate a growing demand for India's services sector, which can translate into higher growth.



High- Frequency Indicator	Definition	Interpretation
FDI in Services	either in the form of equity or debt	An increase in FDI in the services sector can indicate that foreign investors are bullish about the sector's growth prospects, which can lead to more investment and growth.

Government policies and initiatives to promote the service sector

Services Exports from India Scheme (SEIS):

- SEIS provides financial incentives to service exporters to promote trade in services. It offers exporters rewards in the form of duty credit scrips based on their foreign exchange earnings.
- The scheme supports various service sectors, including IT/ITeS, financial services, logistics, healthcare, and tourism.

Make in India:

- The 'Make in India' initiative aims to boost manufacturing and promote India as a global manufacturing hub. However, the services sector is also critical for the success of this program, as services provide essential inputs to the manufacturing process.
- The initiative identifies thrust areas in both manufacturing and services sectors, encouraging growth and investment in these sectors.

Start-up India and Stand-up India:

- 'Start-up India' and 'Stand-up India' initiatives aim to promote entrepreneurship and innovation in the country, fostering the growth of start-ups across various service sectors.
- The initiatives provide various benefits and incentives to start-ups, such as tax exemptions, easier regulatory compliance, access to funding, and incubation support.

Digital India:

 'Digital India' aims to transform India into a digitally empowered society. It encourages the use of technology and digital platforms to enhance service delivery and improve access to digital services across various sectors.



Skill India:

• The 'Skill India' initiative focuses on skill development and vocational training to create a skilled workforce in various service sectors, meeting industry demands and enhancing employability.

Smart Cities:

 The Smart Cities Mission aims to develop modern and sustainable cities that provide efficient and quality services to residents. It involves technology-driven initiatives and services to improve urban living.

Ease of Doing Business:

 The government has taken several measures to improve the ease of doing business in India, simplifying regulatory processes, reducing bureaucratic hurdles, and facilitating a conducive business environment for service providers.

International Agreements and Trade Promotion:

- The government negotiates and signs international trade agreements to enhance market access for Indian service providers in foreign countries. These agreements aim to promote trade in services and create opportunities for service exporters.
- India participates in international fairs and exhibitions to showcase its service capabilities and attract foreign investments and collaborations.

Challenges faced by the service sector in India:

- 1. Infrastructure Deficiencies: Inadequate and outdated infrastructure, including transportation networks, ports, and communication facilities, can lead to delays, inefficiencies, and higher operational costs for service providers.
- 2. Skills Mismatch and Talent Retention: There may be a disconnect between the skills possessed by the workforce and the skills required by the rapidly evolving service sectors. Additionally, retaining skilled talent in the face of competition can be a challenge.
- 3. Regulatory and Bureaucratic Hurdles: Complex and cumbersome regulatory processes, along with bureaucratic inefficiencies, can hinder ease of doing business and pose challenges for service providers, especially for start-ups and small businesses.
- 4. Financing Constraints: Access to adequate financing can be a challenge for service providers, especially for small and medium-sized enterprises (SMEs), leading to limited growth opportunities and expansion.
- 5. Security Concerns: The service sector, particularly IT and financial services, faces cybersecurity risks, data breaches, and other security concerns that can undermine customer trust and confidence.
- 6. Policy and Taxation Issues: Inconsistent policies, changes in regulations, and complex tax structures can create uncertainty and affect business planning and investment decisions in the service sector.



Opportunities for the service sector in India:

- 1. Growing Domestic Market: India's large and rapidly growing population presents a vast domestic market for various services, including healthcare, education, financial services, retail, and entertainment.
- 2. Rising Middle Class and Urbanization: The expanding middle-class population and increasing urbanization are leading to greater consumer spending on various services, creating opportunities for retail, hospitality, healthcare, and entertainment sectors.
- 3. Digital Transformation: The increasing adoption of digital technologies and internet penetration is driving the demand for digital services, such as e-commerce, fintech, IT/ITeS, and digital entertainment.
- 4. IT and IT-Enabled Services (ITeS): India's strong presence in the IT and ITeS sector provides opportunities for software development, business process outsourcing, and IT consulting services for global clients.
- 5. Healthcare and Pharmaceuticals: The healthcare sector offers opportunities for medical services, diagnostic centers, telemedicine, medical tourism, and pharmaceutical research and manufacturing.
- 6. Education and Training: The growing demand for quality education and skill development presents opportunities for educational institutions, vocational training centers, and e-learning platforms.
- 7. Financial Services: India's banking and financial services sector has significant potential for growth, including digital banking, insurance, asset management, and financial inclusion initiatives.
- 8. Tourism and Hospitality: India's diverse cultural heritage and natural attractions offer opportunities for tourism and hospitality services, including hotels, tour operators, and travel agencies.
- 9. Start-up Ecosystem: The government's initiatives to promote entrepreneurship and start-ups create opportunities for innovative service providers in various sectors, including technology, healthcare, and logistics.
- 10. Skill Development and Human Capital: India's young and growing population provides a skilled workforce for various service industries, attracting global companies seeking cost-effective talent.

Key sub-sectors in India's Services Sector

Tourism and Hotel industry

The tourism and hotel industry in India is an important sub-sector of the service sector, which includes a wide range of businesses, such as hotels, resorts, tour operators, travel agencies, restaurants, and more.

Challenges:

- 1. Limited infrastructure and facilities in certain regions
- 2. Seasonal fluctuations in demand due to weather and holidays
- 3. Safety concerns for tourists in certain areas



Government Initiatives:

- 1. The government has launched several initiatives to promote tourism and improve infrastructure, such as the Swadesh Darshan scheme and the Incredible India campaign.
- 2. The Ministry of Tourism has also established the Incredible India Tourist Helpline, which provides 24/7 assistance to tourists in multiple languages.
- The government has also implemented measures to improve safety and security for tourists, such as the introduction of Tourist Police and the adoption of the e-Visa system for easier and faster visa processing.

Real Estate

The real estate sector refers to the buying, selling, renting, and leasing of properties such as land, buildings, and homes.

Challenges:

- 1. Lack of transparency and accountability in the sector
- 2. High cost of borrowing and limited access to financing
- 3. Delayed regulatory approvals and complicated land acquisition processes
- 4. Inadequate infrastructure such as transportation and utilities
- 5. Lack of skilled labor and workforce training

Government Initiatives:

- 1. Real Estate (Regulation and Development) Act (RERA) This act aims to regulate the real estate sector and improve transparency by requiring developers to register their projects and provide timely updates to buyers.
- 2. Pradhan Mantri Awas Yojana (PMAY) This scheme aims to provide affordable housing to all and offers subsidies and incentives for developers and buyers.
- 3. Smart City Mission This mission aims to develop 100 smart cities across India with modern infrastructure and amenities to attract investment and spur economic growth.
- 4. Real Estate Investment Trusts (REITs) This allows investors to invest in income-generating real estate assets and provides an alternative source of funding for developers.
- 5. Digital India This initiative aims to improve digital infrastructure and connectivity, which can help the real estate sub-sector by enabling online transactions, reducing paperwork, and improving communication.

IT-BPM industry

The IT-BPM industry is a key sub-sector of India's service sector that includes information technology (IT) services, business process management (BPM), and software development. This industry plays a significant role in India's economy and has been a major contributor to the country's growth in recent years.



Challenges:

- 1. Competition from other countries like China, the Philippines, and Vietnam
- 2. Rising costs of skilled labor and infrastructure
- 3. Regulatory issues and policy uncertainty in some markets
- 4. The need to adapt to new technologies and changing customer preferences

Government Initiatives:

- 1. Digital India: A program aimed at promoting the use of technology and digital infrastructure in the country.
- 2. Skill India: A program to train and upskill the Indian workforce, including those working in the IT-BPM industry.
- 3. Make in India: A program to promote manufacturing and investment in India, including in the IT-BPM sector.
- 4. Startup India: A program aimed at promoting entrepreneurship and startups in India.

The IT-BPM industry has played a major role in India's economic growth and development.

- Tata Consultancy Services (TCS): A multinational IT services company based in Mumbai, India.
 TCS is one of the largest employers in the IT-BPM sector and has a presence in over 46 countries.
- 2. Infosys: A global leader in IT and BPM services based in Bangalore, India. Infosys has a presence in over 50 countries and employs over 270,000 people.
- 3. Wipro: A multinational IT services company based in Bangalore, India. Wipro provides services in areas such as IT consulting, software development, and business process outsourcing. It has a presence in over 50 countries and employs over 185,000 people.

E-commerce

E-commerce involves buying and selling goods and services over the internet. It has become increasingly popular in recent years due to the convenience and accessibility it provides to consumers and businesses alike. E-commerce in India can take many forms, including online marketplaces, social media platforms, and individual websites.

Challenges:

- 1. Infrastructure: The lack of reliable internet connectivity and logistics infrastructure can make it difficult for e-commerce companies to deliver goods and services to customers in a timely and efficient manner.
- 2. Payment methods: Many consumers in India still prefer to pay for goods and services in cash, which can make it difficult for e-commerce companies to facilitate transactions online.
- 3. Competition: The e-commerce market in India is highly competitive, with many domestic and international players vying for market share. This can make it difficult for smaller companies to compete and succeed.
- 4. Regulatory environment: E-commerce in India is subject to a complex regulatory environment that can make it difficult for companies to operate and expand.



Government Initiatives:

- 1. Digital India: The Digital India program aims to transform India into a digitally empowered society and economy by improving internet connectivity and digital infrastructure.
- 2. Startup India: The Startup India program aims to promote entrepreneurship and innovation in India by providing support and incentives to startups, including those in the e-commerce sector.
- National E-Commerce Policy: The government is currently working on a national e-commerce
 policy that aims to create a regulatory framework that is conducive to the growth of ecommerce in India.
- 4. FDI in e-commerce: The government has allowed 100% FDI in e-commerce marketplaces, which has helped to attract investment and promote competition in the sector.

Digital Financial Services

Digital financial services refer to financial services that are delivered through digital channels, such as mobile apps, internet banking, and digital wallets. In India, digital financial services have been growing rapidly in recent years, driven by factors such as the rise of smartphones, increasing internet penetration, and the government's push towards a cashless economy.

Challenges:

- 1. Lack of digital infrastructure in rural areas: Many people in rural areas do not have access to the internet or smartphones, which can limit their ability to use digital financial services.
- 2. Low levels of financial literacy: Some people may not understand how to use digital financial services or may be hesitant to use them due to security concerns.
- 3. Cybersecurity risks: Digital financial services are vulnerable to cyber attacks, which can put customers' personal and financial information at risk.

Government Initiatives:

- 1. Digital India: The Digital India initiative aims to provide digital infrastructure and services to all citizens, including those in rural areas.
- 2. Jan Dhan Yojana: This scheme aims to promote financial inclusion by providing bank accounts to all households in India, with a focus on those in rural areas. This has helped to increase the adoption of digital financial services among previously unbanked populations.
- 3. UPI and BHIM: The Unified Payments Interface (UPI) and Bharat Interface for Money (BHIM) are digital payment systems that allow users to transfer money between bank accounts using their mobile phones.
- 4. Cybersecurity initiatives: The government has also taken steps to improve cybersecurity, such as launching the Cyber Swachhta Kendra to provide free antivirus software to citizens and setting up a National Cyber Coordination Centre to monitor cyber threats.

Space Sector

The Indian Space Research Organisation (ISRO) is the primary agency responsible for space exploration, satellite technology, and other related activities. The space sector plays an important role in



various industries, including telecommunications, navigation, agriculture, defense, and disaster management.

Challenges:

- 1. Limited funding and resources for space exploration and research
- 2. Intense competition from other countries in the space industry
- 3. Complex regulatory environment and bureaucratic procedures
- 4. Technological advancements and innovation require significant investments

Government Initiatives:

- The establishment of the Indian National Space Promotion and Authorization Centre (IN-SPACe)
 to provide a one-stop-shop for all space-related activities, including licensing, clearances, and
 authorizations.
- 2. The launch of the Space Technology Incubation Centres (S-TIC) program to support startups and entrepreneurs in the space sector by providing funding, mentorship, and access to resources and facilities.
- 3. The government's "Make in India" initiative aims to encourage domestic manufacturing and production of space-related technologies and equipment, to reduce dependence on foreign imports and strengthen the country's self-reliance in this sector.

Examples:

- India's Mars Orbiter Mission, launched in 2013, was a major achievement for the country's space sector, making it the first nation in the world to successfully enter Mars' orbit on its first attempt.
- The Indian Regional Navigation Satellite System (IRNSS), also known as NavIC, is a navigation system developed by ISRO that provides accurate positioning and timing services to users in India and the surrounding regions, supporting various applications such as transportation, disaster management, and location-based services.
- ISRO's commercial arm, Antrix Corporation, has signed agreements with various international clients to provide satellite launch services, including the launch of 104 satellites in a single mission in 2017, setting a new world record.

Shipping and Port Services

Shipping and port services involve the transportation of goods and people by sea, as well as the management and operation of ports that facilitate such transportation. The shipping and port industry is an important contributor to India's economy, as it enables international trade, creates employment opportunities, and generates revenue.

Challenges:

1. Infrastructure: One of the major challenges faced by the shipping and port industry in India is the lack of adequate infrastructure, including ports, terminals, and transportation networks, which can lead to delays and inefficiencies in the system.



- 2. Competition: The shipping and port industry is highly competitive, with many players vying for market share. This can lead to price wars and reduced profitability for some businesses.
- 3. Technology: The industry is also facing challenges related to the adoption of new technologies, such as automation, digitalization, and blockchain, which can improve efficiency and reduce costs.

Government Initiatives:

- Sagarmala: The Indian government has launched the Sagarmala initiative to modernize the
 country's ports and shipping infrastructure. The initiative aims to develop new ports, improve
 existing ones, and create a seamless transportation network that connects ports to the
 hinterland.
- National Maritime Development Program: The government has also launched the National Maritime Development Program to promote the development of the shipping and port industry. The program provides financial support for infrastructure projects, technology adoption, and skill development.
- 3. Ease of Doing Business: The government has taken steps to improve the ease of doing business in the shipping and port industry. This includes simplifying regulatory processes, reducing paperwork, and introducing digital initiatives such as e-billing and e-payment systems.

Examples:

- The Mundra Port in Gujarat is one of the largest ports in India, handling over 200 million tonnes of cargo annually. The port is operated by the Adani Group, which has invested heavily in developing its infrastructure and facilities.
- The Maersk Line, a Danish shipping company, is one of the leading players in the Indian shipping industry. The company operates over 20 vessels in India and has a significant presence in the country's major ports.
- The Cochin Shipyard in Kerala is a government-owned shipbuilding and repair facility that has built over 200 vessels for domestic and international customers. The shipyard has recently launched a new facility to manufacture LNG carriers, which is expected to boost its revenue and competitiveness.

Banking and Financial Services

The Banking and Financial Services sector includes various services related to banking, such as deposit-taking, lending, and investment, as well as insurance and other financial services. This subsector is a critical part of the Indian economy, as it facilitates economic growth by providing businesses and individuals with access to capital and financial services.

Challenges:

- 1. Non-performing assets: This refers to loans that are not being repaid by borrowers, which can create financial difficulties for banks and other financial institutions.
- 2. Lack of financial inclusion: Many people in India, particularly those in rural areas, do not have access to basic financial services like banking and insurance.



3. Cybersecurity risks: As financial transactions increasingly move online, there is a growing risk of cyber attacks that could compromise the security of financial systems.

Government initiatives:

- 1. Pradhan Mantri Jan Dhan Yojana: This initiative aims to promote financial inclusion by providing every household in India with a bank account.
- 2. Digital India: This initiative seeks to promote the use of technology in various sectors, including banking and financial services, to improve efficiency and reduce costs.
- 3. Insolvency and Bankruptcy Code: This law provides a framework for the timely resolution of non-performing assets and helps to strengthen the financial system by promoting accountability and transparency.



Previous Years Prelims Questions

1.	With reference to foreign-owned e-commerce firms operating in India, which of the following statements is/are correct?	2022
	 They can sell their own goods in addition to offering their platforms as market-places. 	
	The degree to which they can own big sellers on their platforms is limited.	
	Select the correct answer using the code given below:	
	(a) 1 only	
	(b) 2 only	
	(c) Both 1 and 2	
	(d) Neither 1 nor 2	

Previous Years Mains Questions

1.	National urban transport policy emphasizes on moving people instead of	2014
	moving vehicles. Discuss critically the success of various strategies of the	
	government in this regard.	

Answers

1.	В	