



Government of Tamilnadu

Department of Employment and Training

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INDUSTRIES

It refers to the activities which converts the raw materials into finished products. This sector is called as the value addition sector. On the basis of the source of raw materials, Industries are classified into the

1. Agro based industries,
2. Forest based industries and
3. Mineral based industries.

Agro based industries

These industries draw their raw materials from agricultural sector. The following part discusses the agro based industries in India.

a) Cotton Textile Industry:

- Textile is a broad term which includes cotton, jute, wool, silk and synthetic fibre textiles. This sector in India with 3400 textiles mills with installed capacity of more than 50 million spindles and 842000 rotors is the second largest in the world. Traditional sectors like hand loom, handicrafts and small power-loom units are the biggest source of employment for millions of people in rural and semi urban areas.
- The cotton textile industries contribute about 7% of industrial output, 2% of India's GDP and 15% of the country's export earnings. It is one of the largest sources of employment generation in the country. With over 45 million employees, the total employment in this industry is well over 25million worker. At present there are 1,719 textiles mills in the country. Out of which 188 mills are in public sector, 147 in cooperative sector and 1,284 in private sector.
- Currently, India is the third largest producer of cotton and has the largest loom arc and ring spindles in the world. At present, cotton textile industry is the largest organized modern industry of India. About 16% of the industrial capital,

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14% of industrial production and over 20% of the industrial labour of the country are engaged in this industry.

- The higher concentration of textile mills in and around Mumbai, makes it as “**Manchester of India**”. Presence of black cotton soil in Maharashtra, humid climate, presence of Mumbai port, availability of hydro power, good market and well-developed transport facility favour the cotton textile industries in Mumbai.
- The major cotton textile industries are concentrated in the states of Maharashtra, Gujarat, West Bengal, Uttar Pradesh and Tamil nadu.

Textile industry of Tamilnadu:

- Tamil Nadu plays a major role in the Indian textile industry in terms of production and export of yarn, fabrics, knitwear and garments. Tamil Nadu contributes nearly 25% of India’s share in the export of cotton, yarns and fabric. Tropical climate, availability of raw materials, demand for cotton in market, power supply from numerous power projects and abundant cheap labour are favourable factors for widespread distribution of textile industries in Tamil Nadu.
- Coimbatore, Pollachi, Udumalapettai, Thiruppur, Karamadai, Erode, Bhavani, Dindigul, Thirumangalam, Madurai, Palayamkottai, Pappanasam and Theni are important centres for textile industry. Maximum units are concentrated in and around Coimbatore region. This is why Coimbatore region is known as ‘**the Manchester of South India**’.
- District of Coimbatore, Thiruppur and Erode contribute much for the state’s economy; therefore, they are referred to as ‘**Textile Valley of Tamil Nadu**’. Thiruppur alone contributes 70% of export of knitwear of Tamil Nadu. Erode specializes in garments and bedspreads. The city of Karur is known as the **Textile Capital of Tamil Nadu**.
- Coimbatore is the most important centre in Tamil nadu with 200 mills out of its 435 and called as “**Manchester of South India**”. Erode, Tirupur, Karur,

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Chennai, Tirunelveli, Madurai, Thoothukudi, Salem and Virudhunagar are the other major cotton textiles centres in the state.

Jute Textiles:

- Jute is a low priced fibre used mainly for making package materials like gunny bags. Today jute is blended with cotton and wool to produce textiles. India is the largest producer of jute goods contributing 35% of the world's total output.
- This is the second important textile industry in India after cotton textiles. Jute is the golden fibre which meets all the standards of goods packing with its natural, renewable, bio degradable and eco-friendly products.
- The first jute mill in India was established at Rishra near, Kolkata in 1854 by the English man George Auckland. India tops in the production of raw jute and jute goods and second in the export of jute goods next to Bangladesh.
- Jute production includes gunny bags, canvas, pack sheets, jute web, carpets, cordage, hessians and twines. Now jute is also being used in plastic furniture and insulation bleached fibres to blend with wool. It is also mixed with cotton to make carpet and blankets.
- The major jute producing areas are in West Bengal and concentrated along the Hooghly river within the radius of six kilometre of Kolkata. Titagarh, Jagatdat, Budge-Budge, Haora and Bhadreswar are the chief centres of jute industry. Andhra Pradesh, Bihar, Uttar Pradesh, Assam, Chhattisgarh and Odisha are the other jute goods producing areas.

Silk Industry

- India has been well known for the production of silk. Since the ancient times, India is the second largest producer of raw silk next only to China. Sericulture is a labour intensive industry and provides employment to 7.56 million people make to weaker and marginalised sections of society. Karnataka is the largest producer of silk with an average of 8200 metric tons every year which is about one third of the total silk production of India. Other major producers of silk are West Bengal, Jammu Kashmir, Bihar, Jharkhand, Chhattisgarh, Uttar Pradesh, Punjab, Assam and Tamil nadu states.

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- India exports exclusively silk fabrics, silk scarves, dress material and sarees. It exports to the principal countries like Europe, U.S.A, U.K, Russia, Saudi Arabia, Kuwait and Singapore.

Silk Industry of Tamilnadu

Tamil Nadu occupies the fourth place in silk textile production in our country. Kancheepuram silk is unique in its quality and is known for its traditional value all over the world. Arani, Rasipuram and Thriubuvanam are other silk centres of Tamil Nadu. Sericulture Training Institute in Hosur trains farmers to adopt sericulture along with farm work to accelerate rural industrialization. Mettur, Madurai, and Ramanathapuram are specialized areas for manufacturing synthetic clothes.

Sugar Industry

- Sugar can be produced from sugar cane, sugar-beets or any other crop which have sugar content. In India, sugar cane is the main source of sugar. At present this is the second largest agro based industry of India after cotton textiles.
- India is the world's second largest producer of sugar cane after Brazil. This industry provides employment to 2.86 lakh workers. Sugar industry is decentralized and located near the sugarcane growing areas as they are weight loosing and bulky to transport. Uttar Pradesh is the largest producer of sugar, producing about 50% of the country's total.
- Other major producers are Maharashtra, Uttar Pradesh, Karnataka, Andhra Pradesh, Tamil nadu, Bihar, Punjab, Gujarat, Haryana and Madhya Pradesh states.

These states account for more than 90% of the sugar mills and sugar production.

Sugar Industry of Tamilnadu:

1. Tamil Nadu produces about 10% of total sugar in India. Suitable climate and soil, for high yielding varieties, continuous irrigation facility, good transport, marketing facility and regularized co-operative sector are favourable factors for the widespread sugar mills in the state. A majority of sugar units in Tamil Nadu

are functioning under the co-operative sector. At present Tamil Nadu has 42 Sugar Mills, out of which 16 are under the co-operative sector, 3 owned by public sector and 23 as private mills.

2. Sugar factories are concentrated in Villupuram, Cuddalore, Vellore, Erode, Coimbatore, Thiruvannamalai, Thiruchirappalli, Thanjavur and Madurai districts. Jaggery, Kandasari, and sugar are products from the sugar industry. The by-product bagasse (the crushed stem of sugarcane after extracting juice) is used as a raw material for paper industry. Tamil Nadu government has set up new integrated sugar complexes with different options of co-ethanol production, tissue culture lab, soil testing lab, fuel energy and bio-composting. Names of such units are given in the table.

Forest based industries

Forest provide us with different types of material which are used as raw material for certain industries like paper, lac, sports goods, plywood etc.

a) Paper industry

- Paper Industry has emerged as a diversified and specialized industry in India that produces numerous types of papers that comes in various use such as sheet paper, paper boxes, tissues, paper bags, stationery, envelopes and printed-paper products such as books, periodicals, and newspapers.
- In India the Soft wood is the principal raw material used for making paper especially newsprint and high-class printing papers. Paper is the pre-requisite for education and literacy and its use is an index of advancement in these two fields as well as the overall well being of the society.
- The first successful effort was made in 1867 with the setting up of the Royal Bengal paper mills at Ballyganj near Kolkata. Subsequent successful efforts were made at Lucknow in 1879, Titagarh in 1882, Pune in 1887, Raniganj in 1892, Kankinra in 1892 and Naihati in 1918.
- The raw materials for paper industry include wood pulp, bamboo, salai and sabai grasses, waste paper and bagasse. West Bengal is the largest producer of paper in the country followed by Madhya Pradesh, Odisha and Tamilnadu states.

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Paper Industry of Tamilnadu:

Tamil Nadu stands second next to Andhra Pradesh in paper production in our country. The state produces about 12% of the paper in our country. Bamboo, grass, and Bagasse from sugarcane are raw materials for paper industry. Soda, sodash, chlorine, Sulphur, wood pulp, and plenty of water are other requirements for setting up of paper industries.

Mineral based industries

Mineral based industries use both metallic and non metallic minerals as raw materials. The major mineral based industry of country is the iron steel industry

Iron and steel industries:

1. Iron and steel industry is called a basic metallurgical industry as its finished product is used as raw material by host of other industries. Several industries like engineering, heavy machines and machine tools, automobile, locomotives and railway equipment industries use iron and steel as their primary raw material.
2. Due to this, the steel producing capacity of a country is generally taken as an indicator of its level of industrial development.
3. The modernization of the industry was started in 1907 with the establishment of Tata Iron and Steel Company at Sakchi, now called Jamshedpur. Iron and steel industry of India is mainly concentrated in the states of Jharkhand, West Bengal and Odisha. Proximity to the coal fields of Jharia, Raniganj, Bokaro and Karanpura and the iron ore mines of Mayurbhanj, Keonjar and Birona are responsible for this.
4. This area also has sufficient deposits of limestone, dolomite, manganese, silicon and dolomite which are required for the industry.



Automobile Industry

1. India is set to emerge not only as a large domestic market for automobile manufacturers, but also as a crucial link in the global automotive chain. It is one of the most dynamic industrial groups in India. The first automobile industry of India was started in 1947. The industry is the Premier Automobiles Ltd located at Kurla (Mumbai). It was followed by the Hindustan Motors Ltd at Uttarpara (Kolkata) in 1948.
2. At present, India is the 7th largest producer of automobile manufacturers which include two wheelers, commercial vehicles, passenger car, jeep, scooty, scooters, motor cycles, mopeds and three wheelers.
3. Major centres are at Mumbai, Chennai, Jamshedpur, Jabalpur, Kolkata, Pune, New Delhi, Kanpur, Bengaluru, Sadara, Lucknow and Mysuru.
4. Tata Motors, Maruti Suzuki, Mahindra & Mahindra and Hindustan Motors are the largest passenger car manufacturers of Indian companies in the country. Presence of foreign car companies such as Mercedes Benz, Fiat, General Motors, Toyota and the recent entry of passenger car manufacturers BMW, Audi, Volkswagen and Volvo makes the Indian automobile sector a special one.
5. Tata Motors, Ashok Leyland, Eicher Motors, Mahindra & Mahindra and Ford Motors are the major Indian companies which manufacture commercial vehicles.
6. MAN, ITEC, Mercedes-Benz, Scania and Hyundai are the foreign companies engage in the manufacture of commercial vehicles. Two wheeler manufacturing is dominated by Indian companies like Hero, Bajaj Auto and TVS.
7. The automobile industries are found in four clusters viz; Delhi, Gurgaon and Manesar in North India, Pune, Nasik, Halol and Aurangabad in West India, Chennai, Bengaluru and Hosur in South India and Jamshedpur and Kolkata in East India.



Automobile Industry in Tamil Nadu

Tamil Nadu earns 8% of its GDP from automobile industry. This industry contributes for about 21% of passenger cars, 33% of commercial vehicles produced in India. Chennai city is the base for 30% of India's automobile industry and 35% of its auto components. This industrial supremacy has resulted in Chennai being known as the '**Detroit of Southern Asia**'.

Electrical and Electronic Industries:

1. Heavy electrical industries manufacture equipment used for power generation, transmission and utilization. Turbines for steam and hydro power plants, boilers for thermal power plants, generators, transformers, switch gears etc. are the chief products of this industry. The most important company in the field of heavy electrical is Bharat Heavy Electricals Ltd (BHEL). It has its plants at Hardwar, Bhopal, Hyderabad, Jammu, Bengaluru, Jhansi and Tiruchirappalli.
2. This Industry covers a wide range of products including television sets, transistor sets, telephone exchanges, cellular telegram, computers and varied equipment's for post and railway, defence and meteorological department. Bengaluru is the largest producer of electronic goods in India; hence it is called as the "Electronic Capital of India". The other major producers of electronic goods centers are Hyderabad, Delhi, Mumbai, Chennai, Kolkata, Kanpur, Pune, Lucknow, Jaipur and Coimbatore.

Electrical and Electronics Industry

1. Electronics is a growing industry in Tamil Nadu. Many major global telecommunications like the Nokia, Flextronics, Motorola, Sony-Ericsson, Foxcon, Samsung, Cisco, Moser Baer and Dell have chosen Chennai as their South Asian manufacturing hub. Products manufactured include circuit boards and cellular phone handsets.
2. Bharat Heavy Electricals Limited located at Thiruchirappalli is one among the six large units of India. It produces boilers generators and turbines used in the production of hydro-electricity.

◆.....◆ **Software Industry**

1. India is home to some of the finest software companies in the world. The software companies in India are reputed across the globe for their efficient IT and business related solutions. The Indian Software Industry has brought about a tremendous success for the emerging economy.
2. In India, software industry began in 1970 with the entry of Tata Consultancy Services (TCS). Along with this, L & T, Infotech, i-Flex, Accenture, Cognizant, GalexE Solutions India Pvt Ltd and ITC Infotech are the major software industries in the country. At present, there are more than 500 software companies all over India. It exports software service to nearly 95 countries in the world. The main centres of IT parks are located in Chennai, Coimbatore, Thiruvananthapuram, Bengaluru, Mysuru, Hyderabad, Visakhapatnam, Mumbai, Pune, Indore, Gandhi Nagar, Jaipur, Noida, Mohali and Srinagar.

Software Industry Infosys' campus at Mahindra World City near Chennai.

1. Tamil Nadu is the second largest software exporter (by value) in India. It has the leading BPO sector in the country next to Karnataka. Major national and global IT Companies such as Verizon, Hewlett-Packard, IBM, Accenture, Ramco Systems, Computer Sciences Corporation, Cognizant Technology Solutions, Tata Consultancy Services, Infosys, Wipro, HCL, Tech Mahindra, Polaris, Aricent, Mphasis Acme Technology Pvt. Ltd., Covansys, Ford Information Technology, Xansa, Isoft, INautix, Electronic Data Systems, Bally and many other have established their branches in Chennai.
2. India's largest IT Park is in Chennai, jointly constructed and maintained by Ascendas India Ltd., a Singapore-based company engaged in providing business space solutions, with Tamil Nadu Industrial Development Corporation (TIDCO).

Other notable industries of Tamil Nadu

Perambur Integral Coach Factory (ICF) is the largest in Asia to produce railway coaches in Tamil Nadu. "Armoured Vehicles and Ammunition Depot of India"(AVADI) is about 23km northwest of Chennai. The Heavy Vehicles Factory produces battle tanks. Salem Steel Plant is a Public Sector company undertaken by the

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Government on India. Sivakasi is a big industrial centre in Virudhunagar district. It is world famous for its fireworks and safety match boxes. Sivakasi produces 90% of India's fireworks. It is also known for offset printing. Sivakasi is known as “**Little Japan**”. Neyveli, apart from the production of thermal power, has a fertilizer unit and a ceramic unit attached to it. Thanjavur and Kumbakonam are specialized in the production of bronze statues and musical instruments.

“Tamil Nadu is the first State in the country to develop a well-defined Biotechnology Policy and to set up an All Women Biotechnology Park. Chennai is second to Mumbai for its vibrant and innovative film industry.

Major challenges of Indian Industries

Industries in India face many problems. Some major problems are listed below.

- Shortage and fluctuation in Power Supply.
- Non- availability of large blocks of land.
- Poor access to credit.
- High rate of interest for borrowed loan.
- Non- availability of cheap labourers.
- Lack of technical and vocational training for employees.
- Inappropriate living conditions nearby industrial estates.

Questions

1. Write a short note on cotton textile industry.
2. Elucidate the forest based industries in India.
3. Elaborate about the automobile industry in India.