CBSE Class 10 Social Science Geography Notes Chapter 6: Manufacturing is the process of producing items in big quantities from raw materials after processing. Workers in secondary activities include those employed in bakeries, automobile factories, breweries, textile industries, and steel mills.

You will mainly learn about the manufacturing industries, which are part of the secondary sector, in CBSE Class 10 Social Science Geography Notes Chapter 6 Manufacturing Industries.

CBSE Class 10 Social Science Geography Notes Chapter 6

Large-scale production of goods from raw materials is referred to as manufacturing. The labourers engaged in the manufacturing process are considered additional tasks in this context, with the production itself being the primary activity.

Manufacturing businesses include everything from steel factories to bakeries. Here we have provided detailed CBSE Class 10 Social Science Geography Notes Chapter 6 to help the students in a better understanding of the chapter.

Importance of Manufacturing

For the following reasons, the manufacturing sector is regarded as the foundation of progress.

- Because manufacturing creates jobs in the secondary and tertiary sectors, it aids in the modernization of agriculture.
- It contributes to the elimination of poverty and unemployment.
- Exporting manufactured items generates much-needed foreign exchange while promoting trade and commerce.
- It stimulates the economy, which contributes to the nation's prosperity.

Contribution of Industry to National Economy - Over the past ten years, the manufacturing sector has grown at a rate of about 7% annually.

Industrial Location

Industrial locations are complicated by nature. The accessibility of raw resources, labour, capital, power, and markets, among other things, has an impact on them. It is rare to be able to locate all of these relevant components in one place.

Manufacturing therefore typically takes place at the best site wherever all industrial location needs can be met or where it can be done most affordably. Cities offer labour, banks, insurance, transportation, consultants, financial advising services, and other markets and services.

The grouping economies, which benefit from the advantages provided by metropolitan areas, are a common reason for many industries to collaborate. A significant industrial cluster is developing gradually.

Before independence, the majority of manufacturing facilities were situated in areas that were advantageous for international trade, including Mumbai, Kolkata, Chennai, etc. As a result, there are now isolated areas of industrially advanced urban centres encircled by vast rural agricultural backcountry.

Agro-Based Industries

The raw materials used in the production of cotton, jute, silk, Woollen textiles, sugar, edible oil, and other industries. Let's examine each of them individually.

Textile Industry - It contributes to industrial output, employment creation, and foreign exchange profits. It is the only industry in India that is self-reliant and comprehensive in the value chain, i.e., from the beginning to the highest products with added value.

Cotton Textiles - In addition to providing a living for cotton boll pickers, farmers, and workers in ginning, spinning, weaving, dying, designing, packaging, tailoring, and sewing, this industry is closely related to agriculture.

It provides support to a wide range of other industries, including engineering, chemicals and dyes, and packaging materials.

Jute Textiles - The world's biggest producer of both raw and finished jute is India. West Bengal is home to the majority of the mills, which are mostly situated along the Hugli River's banks.

Sugar Industry - While it is the world's second-largest producer of sugar, India leads the world in its manufacturing of gur and khandsari. The nature of this industry is seasonal.

Mineral-Based Industries

Mineral-based businesses are those that rely on metals and minerals as their primary raw materials. Let's talk about a few of the industries that fit this description.

Iron and Steel Industry - All other industries, including heavy, medium, and light industries, rely on iron and steel for their machinery, making it the foundation of all industries.

The industry is categorized as heavy due to the heavy and bulky nature of both the raw materials and final goods, which results in elevated transportation expenses.

India is a significant producer of iron and steel in the globe, but for the following reasons, we are not able to reach our full potential.

- High costs and limited availability of coking coal
- Lower productivity of labour
- Irregular supply of energy

- Poor infrastructure

Aluminium Smelting

In India, the second-largest metallurgical sector is aluminium smelting. It is employed in the production of cables, kitchenware, and aircraft. The raw ingredient that the smelters use is bauxite.

Smelting aluminium has become more and more common as an alternative to lead, steel, copper, and zinc in various industries. It displays the following characteristics:

- lightweight
- resistant to rust
- an efficient heat conductor
- Adaptable
- strengthens when combined with other metals.

Chemical Industries

There are both large and small-scale manufacturing facilities in the chemical sector.

Both the organic and inorganic industries have shown growth.

Sulfuric acid, nitric acid, alkalis, soda ash, and caustic soda are examples of inorganic compounds.

Petrochemicals are organic chemicals that are utilized in the production of synthetic rubber, textiles, plastics, dyes, medications, and pharmaceuticals.

Fertilizer Industry

The production of nitrogenous fertilizers (mostly urea), phosphatic fertilizers, ammonium phosphate (DAP), and complex fertilizers—which combine nitrogen (N), phosphate (P), and potash (K)—is the main focus of the fertilizer businesses.

Punjab, Kerala, Uttar Pradesh, Gujarat, and Tamil Nadu account for half of the world's fertilizer production.

Cement Industry

For construction projects including constructing homes, factories, bridges, highways, airports, dams, and other commercial buildings, cement is necessary.

Large and heavy raw minerals including gypsum, silica, and limestone are needed for this sector.

Automobile Industry

The production of automobiles, trucks, buses, motorbikes, scooters, three-wheelers, and multipurpose vehicles is the focus of this industry.

Delhi, Gurugram, Mumbai, Pune, Chennai, Kolkata, Lucknow, Indore, Hyderabad, Jamshedpur, and Bengaluru are the areas in where these enterprises are situated.

Information Technology and Electronics Industry

Transistor sets, televisions, phones, cellular telecom, telephone exchanges, radars, computers, and other equipment needed by the telecommunications sector are only a few of the many goods that fall within the broad category of the electronics business.

India now has jobs thanks to this industry. India's capital of electronics is Bengaluru.

Industrial Pollution and Environmental Degradation

Four different forms of pollution are caused by industries:

1. Air
2. Water
3. Land
4. Noise

Air Pollution

A high concentration of unwanted gases, such as carbon monoxide and sulphur dioxide, results in air pollution. Fossil fuel combustion results in air pollution, and smoke is released by brick kilns, smelting facilities, chemical and paper manufacturers, and refineries.

It hurts the health of people, animals, plants, buildings, and the atmosphere overall.

Water Pollution

Industrial effluents and pollutants, both organic and inorganic, that are dumped into rivers can contaminate water supplies.

Paper, pulp, chemical, textile, and dyeing industries, as well as petroleum refineries, tanneries, and electroplating businesses, are the primary sources of water pollution.

Thermal Pollution

When hot water from thermal plants and factories is dumped into rivers and ponds before cooling, it can pollute the water with heat.

Noise pollution

The spread of noise that negatively affects animal or human activity is known as noise pollution. It causes irritation, rage, hearing loss, elevated blood pressure, and chest pain.

Control of Environmental Degradation

The following are some strategies for lowering industrial pollution:

- Minimizing water use through recycling and reuse.
- Collecting rainfall to fulfil water demands.
- Treating wastewater and hot water before dumping them into ponds and rivers.
- By installing smokestacks in industries equipped with fabric filters, scrubbers, electrostatic precipitators, and inertial separators, the amount of particulate matter in the air can be decreased.
- In factories, replacing coal with gas or oil helps cut down on smoke.
- It is possible to redesign machinery to make it quieter and more energy efficient.