

MAJOR INDUSTRIES (MINERAL BASED)

Location and Classification of Industries

The key factor influencing all decisions about setting up a manufacturing industry, including its location, is the cost. The main costs in a manufacturing industry are for procuring raw material, producing goods and distributing finished goods in the market.

The ideal location for a factory will be a place that has easy and low-cost availability of raw material, capital, land, labour, power, transport, and market.

A manufacturing industry promotes the urbanisation of its neighbourhood. Already urbanised areas also attract industries, since they provide ready facilities for transport, banking, labour, consultancy, etc. If an urban centre offers sufficient facilities and advantages, several industries come up there together to form an industrial agglomeration. These industries together form an agglomeration economy.

Before independence, most industries in India were located in port cities to enable easy overseas trade. Manufacturing industries are classified based on their source of raw material, role, capital investment, ownership pattern, and bulk of supplies like raw material and finished products. Based on their source of raw material, manufacturing industries can be classified as agro-based industries and

mineral-based industries.

Based on their source of raw material, manufacturing industries are classified as agro-based industries and mineral-based industries. Based on the weight or bulk of the raw material used and the finished products, manufacturing industries can be classified as heavy and light industries. Based on their role, manufacturing industries can be classified as basic or key industries, and consumer industries. Based on the capital investment, manufacturing industries can be classified as small-scale and large scale-industries.

Based on ownership, manufacturing industries can be classified as public sector, private sector, joint sector and cooperative industries.

While public sector industries are owned and run by the government, private sector companies are owned by individuals or business houses. Joint sector companies are jointly owned and managed by the government and the private sector.

Cooperative industries are owned by people actually involved in the production, like raw material producers, suppliers and workers.

The total share of industries in India's GDP is 27% where manufacturing industries contribute only 17% to our GDP.

The National Manufacturing Competitiveness Council or NMCC has been set up to achieve a growth of 12% in the manufacturing industry by adopting

appropriate policies and improving productivity

Mineral Based Industries

Manufacturing industries that use minerals as raw material are called mineral-based industries. The iron and steel industry is the basic industry on which all other industries depend. The production and per capita consumption of steel is a measure of a country's economic development.

The main raw materials used in the iron and steel industry are iron ore, coal and limestone. The raw materials and finished products of iron and steel industries are quite bulky, these industries must be located near the mining areas of the required minerals and must be connected

by a good transport network.

India is the ninth largest producer of crude steel and the largest producer of sponge iron in the world. India is also a leading exporter of steel in the world.

The per capita consumption of steel in India is only 32 kilograms. There are 10 primary integrated steel plants in India. These integrated plants handle all stages of steel production, from procurement of basic raw material to producing finished rolled and shaped steel. India has many mini steel plants that produce customised alloy steel using scrap iron or sponge iron as raw material.

China has become the world's largest producer and consumer of steel, leaving India far behind. Most steel manufacturing

industries are located in the Chhota Nagpur Plateau region because of the availability of inexpensive, high-grade raw material and abundant cheap labour. The main challenges faced by the industry in realising its full potential are limited supply of expensive coking coal, erratic power supply, low output of labour and poor infrastructure. The future of India's iron and steel industry is bright due to India's liberalisation policy and foreign direct investment in the industry.

Aluminium is a lightweight, corrosion-resistant metal with excellent malleability and ductility. Aluminium is a good conductor of heat and electricity, and can be alloyed with other metals to make it stronger. Aluminium is increasingly being used as a substitute for steel, copper, zinc and lead in several industries. The process

of deriving metallic aluminium from its ore is called aluminium smelting.

Aluminium smelting is the second most important metallurgical industry in India.

Bauxite is the chief ore of aluminium.

Bauxite is refined to produce alumina, which is smelted to derive metallic aluminium.

India has 8 aluminium smelting plants located in Orissa, West Bengal, Uttar Pradesh, Tamil Nadu, Kerala, Chhattisgarh and Maharashtra. The production of aluminium requires the transport of bulky raw materials and large amounts of electricity, assured supply of power and good transport connectivity are the main criteria for the location of an aluminium smelting plant. The Indian chemical industry is the third largest in Asia and the

12th largest in the world. The Indian chemical industry contributes 3% to our national GDP.

The main inorganic chemicals produced in India include sulphuric acid, nitric acid, alkalis, soda ash and caustic soda.

Sulphuric acid is used in the production of fertilisers, plastics, synthetic fibres, adhesives, paints and dyes. Soda ash is used in manufacturing soap, glass, detergents and paper. Petrochemicals are materials derived as the by-products of petroleum refining. Petrochemicals are used to manufacture synthetic fibre, synthetic rubber, dyes and paints, fertilisers, adhesives and medicinal drugs.

