

# **Industrial Development**

## **Secondary Industry**

- The secondary industry is responsible for creating finished or semi-finished products from the primary sector or secondary products.
- The inputs, outputs, and processes shown in the image above can be grouped into:

### Capital:

- It is the money or finance that is used to manage and establish factories.

### Enterprise:

- It is business skills that are required to come up with new ideas for products as well as to market and manufacture these products successfully.

### Land:

- The physical location where industry/factory is located.

### Raw Material:

- It is the material required to be transformed by industry processes.

### Power:

- Industry requires power to perform their processes. E.g. Stitching requires less power while smelting consumes more power.

### Labor:

- The workforce numbers and skills required.

## **Factors Affecting Industrial Location:**

- There are many physical and human factors that must be considered while choosing a location for the Industry.

### Physical Factors:

- Site requirements i.e. the land selected is usually cheap, has the correct area or can be altered according to needs.
- Natural routes i.e. to have cheap transportation for the supply of industrial goods and raw

materials.

#### Human Factors:

- Easy access to the market.
- Capital – is there enough financial resources for the development of the industry.
- The government offers many benefits and incentives for starting a new industry or not.
- Power supply.
- The skilled workforce is available or not.
- Raw material.
- Industrial linkage.

### **Types of Secondary Industry**

- There are three types of secondary industries:

#### **1. Small-Scale Cottage / Craft Industry:**

- It is a traditional industry that does not utilize modern/advanced technology.
- It is usually handled or run by families.

#### **2. Small and Medium Scale Factory:**

- This type of industry utilizes modern technology.
- It is transformed into firms/companies that operate workshops, factories or plants.

#### **3. Large-Scale Factory:**

- It has standardized methods for mass production and automation.
- It produces greater output per worker.
- It transforms raw materials like rubber, cotton, timber, copper, limestone, and bauxite.
- This type of industry varies greatly in size and complexity.
- It may work as a small-scale industry or may run like a multinational company. E.g. I.C.I.

#### **Cotton Textile Industry:**

- It is the biggest industry in Pakistan.
- It provides 50% of the employment to the labour force.
- It accumulates to 60% of the total export of Pakistan.
- It utilizes local raw materials, therefore, no need for imports.

#### Location:

- Faisalabad, Hyderabad, and Karachi have the biggest textile industries.

#### Importance:

- It accumulates to a total of 60% of Pakistan's exports.
- It offers mass employment.
- It contributes to Pakistan's GDP by around 7%.
- Cotton textiles are value-added products.
- The cotton textiles increase farmers' income and promote raw cotton production.
- The required labour workforce is available to work in the cotton textile industry.
- Pakistan's cotton textile has high international demand.
- It also meets the local demands of cotton products.

### Problems:

- The leaf curl virus in four consecutive years has reduced the raw cotton production greatly.
- The international market has faced a recession.
- Pakistan's cotton textile industry is facing great competition from Egypt, Thailand, Hong Kong, South Korea, and Taiwan.
- It needs to use modern technology to face international competition.
- Pakistan has faced export restrictions because of child labour and environmental issues.
- Pakistan has scanty water that is depleting, and cotton production is affected by it.

### **Sugar Industry:**

- It is one of the important industries of Pakistan.
- Sugar is produced from sugar-cane juice.
- Sugar mills are required to be close to the sugarcane fields because it loses its sugar content continuously with time and because it is costly to transport.
- There are two important by-products of the sugar industry namely, bagasse and molasses.
- Bagasse is used as animal feed, the raw material to make paper and chipboard as well as it can be used as a fuel in sugar mills.
- Molasses is used in the manufacturing of various acids.

### Location:

- KPK, Punjab, and Sindh have sugar mills.

### **Fertilizer Industry:**

- In 1960 after the Green Revolution the consumption of chemical fertilizers increased.
- It is an integral chemical mixture that increases the output of agricultural products.
- Various fertilizers are made using raw materials like gypsum, phosphate, and Sulphur.
- Natural gas is now the main raw material for fertilizer production.
- The soil in Pakistan is deficient in nitrogen, as a result, nitrogenous fertilizer is widely used and produced.

### Location:

- Dharki in Upper Sindh, Faisalabad, Daud Khel, and Haripur have Fertilizer Industries.

### **Cement Industry:**

- The raw materials for cement production are locally available e.g. Sulphur, limestone, and gypsum.
- As a cheap fuel option, natural gas is utilized in cement industries.
- It has a high demand for the development of cities e.g. construction of barrages, bridges, dams,

houses, etc.

#### Location:

- Karachi, Salt Range, and Hyderabad have cement industries.

#### Importance:

- It is high in demand because of the increase in population and the need for development.
- It is used in the improvement of infrastructure e.g. roads, bridges, etc.
- It is a firm material for construction as it offers durability and modern appearance.

### **Steel Industry:**

#### Pakistan Steel Mill Corporation:

- It is at Pipri.
- It was established with the help of Russia.
- It produces raw steel, galvanized products, coke, rolled billets, cast billets and pig iron/hot metal.
- It supplies raw material to the construction and engineering industries.

#### Heavy Mechanical Complex Ltd (HMC):

- In 1979, with the help of Chinese, it was established at Taxila.
- It is the main heavy engineering center in the country.
- It manufactures and designs the machinery and industrial plants.
- It also has a Heavy Force Factory (HFF) that caters to the country's defense production needs.
- HMC is also manufacturing equipment for gas and oil processing plants, hydro-electric power plants, petrochemical plants, chemical plants, sugar mill machinery, and thermal power plants.
- All products made at the complex are of international standards.

#### Importance:

- It contributes greatly to Pakistan's GDP.
- It is providing raw materials to many industries including the construction industry and

agricultural industry etc.

- It provides cheap steel because of no custom duty.
- It promotes industrialization.
- It provides industrial employment.

#### Problems:

- It requires few imported raw materials like manganese, iron ore and manganese.
- It requires the setting up of infrastructure.
- It lacks skilled labours.
- It is contributing to the pollution.
- It requires a constant power supply.

#### **Industrial States:**

- They are special reserve areas for the establishment of industries.
- The government offers special infrastructure facilities.
- They are reserved to promote industrialization and entrepreneurship.

#### **Special Industrial Zones:**

- It can be developed where infrastructure facilities are not available.
- The government assists investors to develop special industrial zones.

#### **Nationalization of Industries:**

- In 1972, Bhutto transferred industries from public to private sector i.e. nationalization.
- The nationalization slowed down the industrial development in the country.
- In 1977, Zia-ul-Haq denationalized the industries i.e. transferred them back to their owners.
- In 1991, privatization of industries was done, and it is still possible i.e. industries are allowed to be owned by private companies.

#### **Formal and Informal Sectors:**

##### Importance:

- They assist by providing industrial goods and fulfilling domestic market needs.
- They create employment.
- The informal sector utilizes local raw materials.
- The formal and informal sectors' many products are exported.
- The informal sector does not need imported machinery.

#### **Differences in Formal & Informal Sector:**

- The informal sector is self-employed while the formal sector is employed by the institution.
- The informal sector does not use modern machines and most work is done manually while the formal sector is mechanized, requires capital and uses less manual labour.
- The informal sector has irregular work hours and wages while the formal sector has regular working hours and wages.
- The informal sector often produces low-quality goods while the formal sector produces a high

standard of goods.

- The informal sector is usually non-registered while the formal sector is registered and legal.
- The informal sector mostly employs women and children while the formal sector employs males.

### **Importance of Cottage/Craft & Small-Scale Industry:**

- It creates employment.
- It employs women as labour.
- It fulfills local demands as a result saves foreign exchange and restricts imports.
- It exports goods like carpets.
- It prevents rural to urban migration.
- It contributes to the development of rural areas.
- It does not require heavy machinery.
- It utilizes waste from large-scale industries.
- It contributes to Pakistan's GDP.

### Examples:

- Embroidery, carpets, wood carving, sports goods, jewelry, and surgical goods are examples of

cottage/craft and small-scale industries.

#### Problems:

- It generates limited revenue.
- It is failing to achieve the economy of scale.
- It lacks quality.
- It utilizes outdated methods and machinery.
- The middleman makes the profit.
- Lack of electricity in villages; villagers only in daylight.
- It lacks proper finance and marketing.
- It is using child labour.

#### **Government Policies for Cottage & Small-Scale Industries:**

- The governmental organizations are carrying out the following duties:
- They are establishing small industrial estates.
- They are providing marketing facilities.
- They have established technical centers.
- They are providing pre-investment guidance and counseling.
- They are providing easy installment loans.
- They are working for rural electrification.
- They are providing provisions for roads.
- They have established handcraft development centers.
- They are providing better communication facilities.

#### **Industrial Pollution:**

- It is affecting people's health in the form of diseases.
- It has contaminated the sub-soil water which is affecting crop production and people's health.
- It is a threat to marine habitats.
- It is a threat to mangrove forests and the reproduction of fish.
- It is also contributing to the noise pollution that is resulting in deafness.

#### **Steps to Control Industrial Pollution:**

- An effective disposal mechanism should be in place for industrial waste and smoke.
- Waste treating machines should be imported and utilized.
- Massive tree plantation must be conducted to control and reduce the effects of industrial pollution.
- Industries should be far from localities.
- Awareness programs must be started regarding pollution hazards.
- In 1997, the Pakistan Environmental Protection Act was passed to check environmental pollution.

### **Tertiary Industry**

- It is also known as the service industry.
- It provides services.
- Tourism is a major example of tertiary industry.

#### **Tourism:**

- It is an industry that deals with accommodation and recreational facilities for people who come

to visit or stay for a limited period.

#### Advantages:

- It generates greater income as compared to exports.
- It creates employment and is labour intensive e.g. guides.
- It promotes cottage and craft industries.
- It promotes the local food market.
  
- It allows locals to enjoy tourism facilities too.
- It promotes cultural linkage.
- Tourism is a sustainable industry.

#### Disadvantages:

- Tourism industry is affected by economic and political situations.
- After 9/11, Pakistan experienced a sudden decline in tourism.
- The employment created by the tourism industry is seasonal.
- Six months, from May to October is the peak season.
- Tourism opens a need for hotels that can negatively affect local people and their livelihood.
- It can destroy the local culture.
- During the peak tourism season, necessities' prices increase.
- For the construction of hotels, the environment can take a toll e.g. deforestation in Kalam.

#### **Factors Affecting Tourism Development:**

- Security for tourists.
- The number of tourist attractions.
- Capital for the development.
- Provision of infrastructure facilities.
- Marketing.

#### International Visitors:

- Different types of foreign visitors come to Pakistan.
- These visitors include corporate visitors, visitors to attend trade delegations, diplomatic delegation members, UNO officials, foreign tourists and people visiting family.

#### Natural Tourist Attractions:

- Swat Valley – It has rushing torrents, flower-bedecked slopes, and fruit-laden orchards.
- Skardu - the capital of Baltistan. It is the starting point if you wish to begin your journey towards K2.
- Gilgit Valley – It has beautiful scenery all over.
- Hunza Valley – Snow covered mountains in the background and wheat field are the highlight.
- Chitral – The Kalash valleys are the highlight.

#### Cultural Attractions:

- The salt mines at Khewra.
- Harappa, Taxila and Moen-jo Daro are archeological sites.
- Khyber Pass, Shalimar garden, the Tomb of Chaukhandi, the Tomb of Ranjit Singh and the



Tomb of Iqbal, and the Badshahi Mosque are historic sites in Pakistan.

### **Call Centers:**

- It is also a tertiary (service) industry.
- It is responsible for handling inbound and outbound calls (telephone mostly).
- Inbound calls are from customers to the company while outbound calls are from company to customers.
- It can handle a huge amount of calls simultaneously using a computer system.
- It also helps large organizations and telemarketing companies to handle their calls at cheap rates.