Observe the pictures given in figure 5.1. Identify the activities with which these figures are associated and complete the table 5.1

A)

B)

C)

D)

E)

F)

G)

H)

**Fig. 5.1**

• **Table. 5.1**

| Figure | Name of the activity | Raw materials required | Finished products obtained | Characteristics of raw material (weight, durability, procurement, cost price) | Characteristics of finished products (weight, durability, production, selling price) |
|---|---|---|---|---|---|
| A | | | | | |
| B | | | | | |
| C | | | | | |
| D | | | | | |
| E | | | | | |
| F | | | | | |
| G | | | | | |
| H | | | | | |

## Geographical explanation

In the previous chapter, we have learnt about the primary activities, where the product is directly obtained from the nature. Some products obtained through primary activities are utilised directly, while some are processed and made into a more durable product. The products obtained from the primary economic activities are used as raw material in secondary economic activities. Further, processing of these materials takes place and a manufactured finished product is prepared to sell it to the consumers. Secondary activities add value to natural resources by transforming raw materials into valuable products.

Secondary activities, therefore include manufacturing, processing and construction (infrastructure) industries. The place where conversion of products obtained from primary activities into final products takes place, is called 'factory'.

### Try this.

1) Look at the map of Solapur district in fig. 5.2. It shows the location of some sugar industries. Shamrao is a farmer at location A. He has just harvested his sugarcane crop. Study the map and tell where should he send his crop? What factors will Shamrao consider for this?

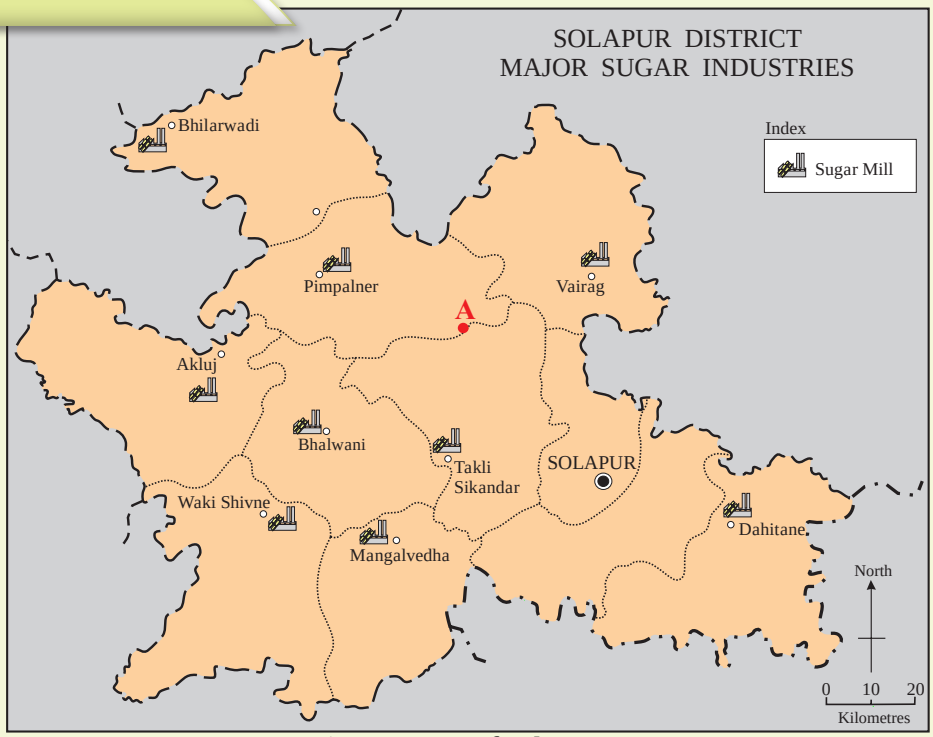


**Fig. 5.2 : Map of Solapur**

2) Firoz's son has done an advanced course in Bakery Management from the nearby city. He wants his son to start a bakery in their village but his son says it should be in the city, which is around 20 kms from their village. Who is correct? Firoz or his son? Why?

3) Shantaram is a young boy from a tribal area in Maharashtra. He wants to start a honey processing unit as he has access to good honeycombs in the forest. The city is around 35 kms away. He has his own land in the village and is also getting land in the city. Where should he establish the honey factory? In the village or in the city? Why?

## Geographical explanation

While studying all these examples, you will understand that location of an industry is dependent on many factors.

To set up an industry, one needs raw material and that has to be transported from somewhere. We know that the raw material for industry is the final product of the primary activities. The characteristics of the raw material and also the finished product affect the location of industries. For example, sugar industries need sugarcane. Sugarcane loses weight and amount of sugar after harvesting as time after harvest increases. This affects their effective use for producing sugar. Thus, sugarcane needs to be sent to nearby factories as soon as possible. Sugar industries are, therefore, located near the production of raw material. On the other hand, in bakery industries, the final output, say cake, has higher weight than raw materials. This will be costlier to transport, as transport cost will increase with weight. Therefore, bakery industries are located near the markets. Let us, look at the factors which affect the location of industries.

### Always remember

Weight-losing industries are industries where the raw materials are relatively bulky, but the resulting product is relatively lighter.

On the other hand, weight-gaining industries are industries whose raw materials are lighter but finished products are heavier and bulky. Weight-losing industries will be located near the raw material while weight-gaining will be located near the market. In earlier times, transportation costs increased with distance and weight.

### Physical Factors :

1) **Climate :** Harsh climate is not much suitable for the establishment of industries. There may not be any industrial development in extremely hot, humid, dry or cold climate. For example, the extreme type of climate of North-West India or extreme North India hinders the development of industries there. Change in climatic conditions, for example, may also affect industries. For example, chronic droughts.

In contrast to this, the moderate climate of western coastal area is quite congenial to the development of industries. Earlier, when artificial threads and mechanization were not used for making textiles, cotton thread-making required humid climate because thread breaks in dry climate. Consequently, majority of cotton textile mills were concentrated in coastal parts of Maharashtra and Gujarat. Artificial humidifiers are used in dry areas these days, but it increases the cost of production.

2) **Availability of raw material :** Raw materials used in industries mainly come from farms, mines, forests, fisheries etc. Thus, location of industries is dependent on the nature of raw material. Industries dependent on perishable, heavy, bulky

and weight-losing raw materials, such as sugarcane, are located near the raw material area. (as in example 1 in Try this). The jute mills, sugar mills, are mostly concentrated close to the sources of raw materials for this very reason. Similarly, industries processing local fruits are found near Mahabaleshwar and Nagpur. Perishable fruits need to be processed soon and hence, they are located near these cities.

3) **Water and power supply :** Almost all the industries require plenty of water for various processes like cooling, smelting, washing etc. Thus, such industries are located near the banks of rivers or near lakes. Coal, oil, electricity are indispensable energy resources in running any type of industry. Coal is heavy and bulky. Thus, industries dependent on coal as energy resource are located near the mining area. Electricity and oil can be supplied through wires and pipelines easily over long distances. Hence, industries dependent on it, need not be located near their source region.

4) **Labour :** Different types of industries require different types of labour. For example, construction, mining industries or textile industries require semi-skilled labourers, where as food-processing industries, ornament-making industries require skilled labourers. In spite of increasing mechanisation, some industries still require a large number of workers. Hence, we find that labour colonies are found near large industries.

5) **Transportation :** The cost of transportation and time required to carry goods is known as economic distance. Low cost of transportation is the key factor in the location of industries. Cost of transportation will be more for heavy, bulky, perishable raw materials and for longer distances. For example, transportation of coal. On the other hand, light-weight and non-perishable items can be brought from far distances through cheaper transportation like waterways. Such industries may be located near the ports or rivers. For example, cotton textiles or pulpwood.

6) **Site or availability of land :** Site requirements for industrial development are of considerable significance. Location should be generally flat and well served by adequate transport facilities. Large areas are required to build factories. Earlier, industries were concentrated near urban areas but now because of non-availability of land and high prices, there is a tendency to set up industries in rural areas. For example, Lote Parshuram industrial area in Chiplun and Chakan in Pune.

### Economic Factors :

1) **Proximity to Market :** The entire process of manufacturing is futile until the finished goods reach the market. Nearness to market is essential for quick disposal of manufactured goods. It helps in reducing the transport cost and enables the consumer to get things at cheaper rates. Ready market is most essential for perishable and heavy commodities. Sometimes, during the process of production, products become bulky and delicate. For such final products, industries are located towards markets. For example, cake as a final product is heavier than raw materials. That is why, such industries are located near markets i.e. cities.

**Can you tell ?**

Find examples of market-oriented industries.

2) **Capital :** Capital or huge investment is needed for the establishment of industries. Industries are located in those areas where banking and financial facilities are easily available. As a matter of fact, capital is attracted to those areas where industries

are localised which, in turn, attract more industries. Mumbai, Kolkata, Chennai and Delhi being the centres of industry have better banking and financial facilities than other cities. Now, with an expansion of better banking facilities in rural areas, industries can also be located there.

**Political Factors :**

1) **Government policies :** The government may give boost to industries producing certain goods by giving several incentives. It may provide finance, land, water, transport and communication facilities at subsidised rates. It may promote industrialisation in economically backward regions with a view of developing these regions. It also provides tax concession, marketing consultancy, export and import facilities to industrialists and entrepreneurs, who establish industries in such regions. For example, the 'D and beyond' categories of Government of Maharashtra's industrial policy.

   At the same time, government may also discourage location of industries in a particular area like coastal zones or eco-sensitive areas.

2) **Setting up of SEZs :** Many governments support establishing such zones or regions which are specially developed for industrial production. In India, they are called Special Economic Zones (SEZs). They are specially earmarked geographical zones, which can be developed by private sector or public sector or in a public-private-partnership (PPP) model. These are mainly developed to boost export–quality production in the country. Such SEZs attract many industries to be set up there. For example, SEEPZ near Santa Cruz.

**Other Factors :**

1) **Split location :** Sometimes, the different stages of production are decentralized and production is organized at different places for reducing transport costs. In mobile industries and automobile industries, various parts of a commodity are made in different areas and assembled at one place. Splitting of the production of a commodity at different places reduces costs.

2) **Economies of scale or agglomeration :** Availability of various facilities lead to establishment of industries in a region. By using the available opportunities according to 'economies of scale', the region attracts more industries with time. Consequently, concentration or agglomeration of industries occurs in this region. As a result of this, the above-mentioned physical and economic factors have no influence on location. A special characteristic of such a region is that industries that are mutually complementary to each other are established here. For example, all over the world, places where iron and steel industries were located, saw the development of industries which use steel as raw material, viz. utensils, automobile accessories, locomotives, etc. This in turn led to establishment of car-manufacturing units, packaging industries, railway engine manufacturing industries, etc.

   Due to such agglomerations, new industries get more profit as compared to low investment due to 'economies of scale'.

**Footloose industries :**

A footloose industry does not have a strong locational preference because the resources, production skills, and consumers on which it depends can be found in numerous places. Such a company may relocate anytime, hence the term footloose. The Internet and other forms of advanced communication technology have made location completely detached from both resource and market considerations. Some prominent examples of footloose industry are watch-making, diamond cutting, etc. Like the inputs, the output is

lightweight and can be easily transported to the markets. Most of the footloose industries produce low volume and high-value outputs.

In example 3, in 'Try this', honey industry is a footloose industry as its location is not related to weight of raw material or finished product.

**Use your brain power !**

Following is a list of few industries. Think about the factors of location of these industries and tell whether they are footloose industries or not. Complete the table accordingly in your notebook.

1) Cotton textile industries
2) Cement industries
3) Diamond cutting industries
4) Mobile manufacturing units
5) Paper industry
6) Sugar industry
7) Food processing industry
8) IT (Hardware) industry
9) Oil refinery
10) Hairpins industry

| Name of Industry | Raw materials required | Finished products | Factor affecting location |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |

## Industrial Regions :

Industries are unevenly distributed because the factors affecting industrial location are not the same everywhere. Industries tend to concentrate in a few pockets because of earlier mentioned favourable factors. The pockets having high concentration of industries are known as 'industrial regions'.

Study the given map in Fig. 5.3 and answer the following questions :

1) In which hemisphere do you find more concentration of industries?
2) In which part of North America has the industrial region been mainly developed?
3) In which parts of Europe is concentration of industries mainly found?
4) Why is less industrial development found in the other parts of African continent except coastal areas?
5) In which part of India do you find concentration of industries?
6) Why do you think coastal areas have higher concentration of industries?
7) Write a concluding paragraph on latitudinal distribution of industries in the world.

**Geographical explanation**

## Major Industrial regions of the world :

Industrial regions are those areas, where concentration of industries has occurred due to favourable geo–economic conditions. These are the areas within which manufacturing industry is carried out on a relatively large scale employing large proportion of working population.

Some of the characteristic features of industrial regions are :

1) Agglomeration of industries.
2) Dense population growth, large labour force.
3) Employment to large working populations.
4) Large banking and credit facilities.
5) A large network of transportation.
6) Excellent communication facilities.

## Make friends with maps!

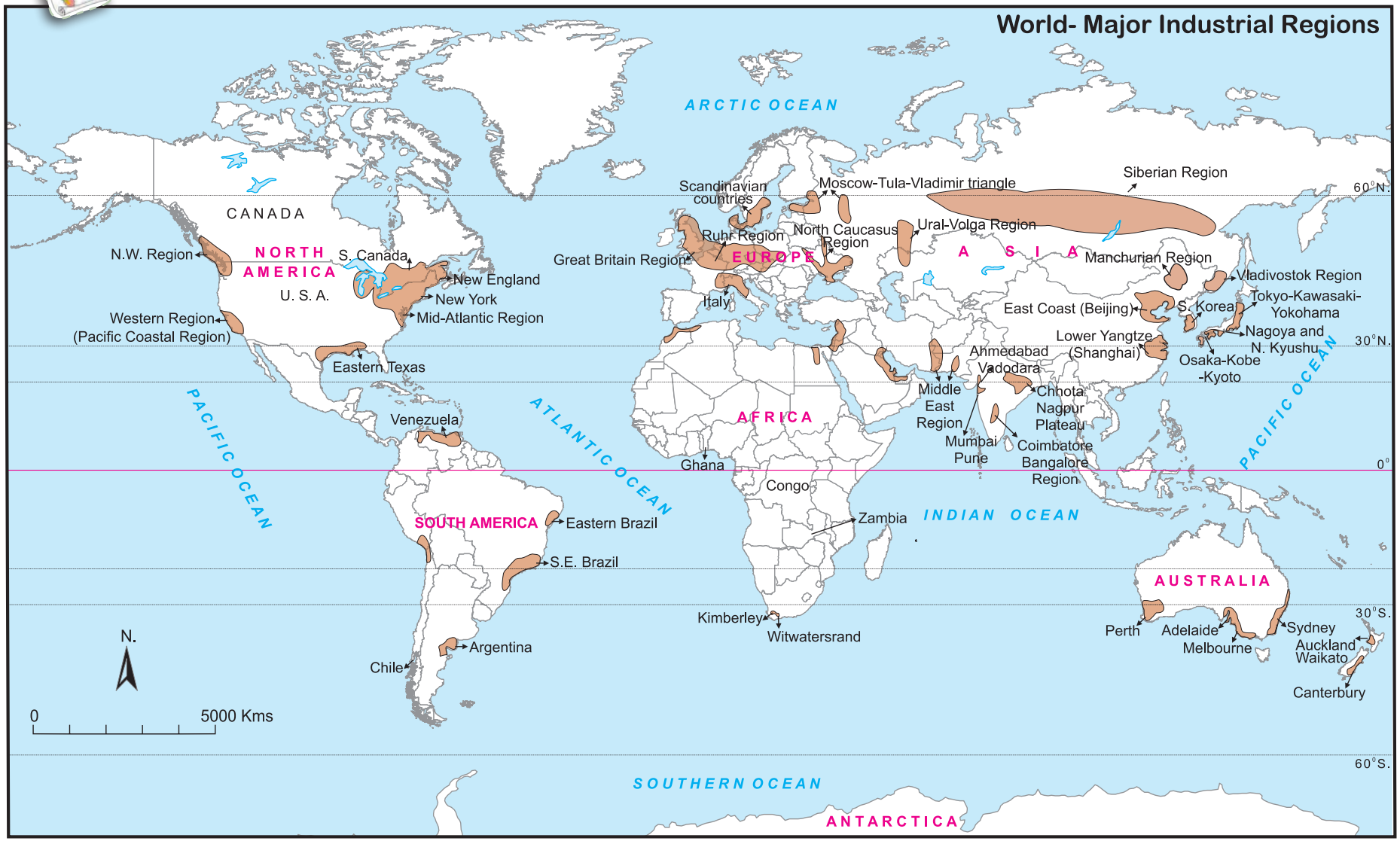


Fig. 5.3

## Continent-wise distribution of industrial regions is as follows :

| Major industrial regions in the continent | Physical factors affecting localisation | Human factors affecting localisation | Major industries |
|---|---|---|---|
| **North America :**<br>United States of America and region adjoining Canada. The New England Region, New York, Mid-Atlantic Region, Mid-Western Region, North-Eastern Region, Southern Region, Western Region. | • Varied range of relief and climate<br>• Location of North America and Europe facing each other across Atlantic ocean<br>• Rich reserves of mineral resources<br>• Agricultural products used as raw materials<br>• Large rivers and the Great Lakes<br>• Broken coastline | • Availability of huge capital<br>• Good communication<br>• Export facilities<br>• Cheap and skilled labour<br>• Vast market<br>• Development of inland water, rail transport and ports. | Food and beverages, automobiles, aircraft, metal fabrication, petrochemical, steel, telecommunications, chemicals, electronics, consumer goods, wooden industry and heavy chemicals etc. |
| **Europe :**<br>**i) Western Europe :**<br>• Ruhr region in Germany and France, parts of Great Britain and Italy. | • River Rhine<br>• Climate supporting fishing and dairy products<br>• Large coal and iron reserves<br>• Pastures and meadows<br>• Natural harbour | • Skilled labour<br>• Large market<br>• Port facilities<br>• Huge demand<br>• Development of rail and road transport<br>• Mechanisation | Ferrous and non-ferrous metal production and processing, petroleum, coal, cement, chemicals, pharmaceuticals, aerospace, rail transportation equipment, passenger and commercial vehicles, construction equipment, industrial equipment, shipbuilding, electrical power equipment, machine tools, electronics and telecommunications equipment, fishing, food and beverages, furniture, paper, textiles. |
| **ii) European Russia :**<br>• Moscow-Tula-Vladimir triangle<br>• Ural and Volga regions | • Location near oilfields<br>• Location near coalfields and iron ore mines<br>• Climate<br>• Volga river | • High Population<br>• Good communication facility<br>• Railway | Machine tools, refineries, textile, electrical, automobile etc.<br>Agricultural machinery, chemicals |
| **iii) Other regions :**<br>• Scandinavian countries, Switzerland and Poland. | • Climate<br>• Broken coastlines and rivers flowing into it.<br>• Low temperatures<br>• Coniferous forests | • Limitations in agriculture<br>• Advanced technology<br>• Less Population | Iron and steel, chemicals, textiles and zinc/lead refining, dairy, watches and other electronics |
| **Asia :**<br>**i) China :**<br>• Manchuria<br>• Northern end of the North China Plain, along the east coast and extending Westward upto Beijing.<br>• Lower Yangtze industrial region including Shanghai | • Rich in iron and coal<br>• Coalfields<br>• Broken coastline<br>• Natural harbour | • Development of ports facility<br>• Availability of cheap labour<br>• Government policies<br>• Large markets | Cotton textile mills, shipyards, oil refineries, flour mills, steel plants, metal works and a great variety of light industrial products, lubricating oil, machinery and tools, chemicals, etc. |

| Major industrial regions in the continent | Physical factors affecting localisation | Human factors affecting localisation | Major industries |
|---|---|---|---|
| **ii) Japan :**<br>• Tokyo, Kawasaki and Yokohama<br>• Osaka, Kobe and Kyoto region<br>• Nagoya and the Northern Kyushu region | • Coastal plains<br>• Rich natural resources regions<br>• Availability of hydro power<br>• Broken coastline<br>• Fast-flowing rivers. | • Abundant supply of cheap labour<br>• Relatively developed infrastructure<br>• Market availability<br>• Efficient transportation system<br>• Availability of port facilities E.g. Port city of Yokohama facilitates trade | Electrical engineering such as transistors, radio television sets, washing machines, refrigerators and computers, steel mills, machines and tools, chemicals, refineries, shipbuilding, airplane, factories of consumer goods, electrical machinery, textile and canning industries, Cotton industry, Shipbuilding, oil refining, and petrochemical industries including synthetic textile and rubber manufacture |
| **iii) India :**<br>• Chhota Nagpur Plateau, Mumbai-Pune corridor, Delhi region, Coimbatore-Bengaluru, Ahmedabad-Vadodara region, etc. | • Rich mineral resources<br>• Port facilities available<br>• Hot climate | • Large market<br>• Huge supply of labour<br>• Excellent rail network<br>• Port facility | Textiles, chemicals, food processing, steel, transportation equipment, cement, mining, petroleum, machinery, software, pharmaceutical |
| **iv) Russia :**<br>• Siberia and the North Caucasus Industrial Region<br>• Vladivostok (Far East) Industrial Region | • Nearness to coal fields<br>• Large forest reserve<br>• Natural harbour | • Government support<br>• Despite inhospitable climate developed port facilities<br>• Railway transport system | Production and transmission (by means of pipelines) of oil and gas, Chemicals, food processing, petrochemicals, iron ore, and machinery, Gold, diamonds, tin, and mercury, wood and wood products |
| **v) East Asia**<br>• South Korea, Singapore, Hong Kong, Malaysia, Taiwan | • Broken coastline<br>• Natural harbour<br>• Climate<br>• Agricultural base | • Huge population base<br>• Vast Market<br>• Port facilities<br>• Cheap labour availability | Textile, electronic, Oil and petrochemicals |
| **South America :**<br>• Argentina, Brazil, Venezuela and Chile | • Fertile plain<br>• Coastal region<br>• Grazing grounds<br>• Favourable climate<br>• Availability of mineral oil | • Availability of low cost labour<br>• Government promotions<br>• Port and dockyard facilities | Foodstuffs and beverages, metallurgy and mechanical industries, chemicals and petroleum refining, textiles, footwear and apparel, pig iron, automobiles and household appliances,Textile industry |
| **Africa :**<br>• Witwatersrand in southern region<br>• Kimberley, Congo, Ghana, Zambia | • A variety of minerals<br>• 75% of the gold in the world is found in this continent<br>• Vast land available<br>• Forests | • Market oriented production<br>• Demand<br>• Large investments | • Diamonds, gold, forest products |
| **Australia :**<br>• Eastern part<br>• Perth in the West | • Climate favourable<br>• Coastal area | • Availability of labour<br>• Port facilities, good connectivity<br>• Market | • Food, beverages, Textile and footwear, Wood and paper products, Petroleum, coal and chemical products, metallic industries, Machinery and equipment, |
| **New Zealand :**<br>• Auckland and Waikato<br>• Canterbury | • Climate favourable for agricuture<br>• Coastal area<br>• Large coniferous forests | • Mechanisation<br>• Port facilities, good connectivity | •Meat and meat products, Dairy products, Woolen products, beverages, canned fruits, timber. |

### Use your brain power!

- Refer to the lumbering map of the world in fig. 4.1 and 5.1, tell which industries will be located in Northernmost island of Japan?
- How have the Great Lakes been instrumental in development of industrial region in the USA?
- How has the Trans-Siberian Railway contributed to development of industries in Russia?

### Do you know?

Industrial/Economic corridors are special areas along the main transport routes which have been selected to give thrust to industrial/economic development in the country. The corridors involve multiple development projects including development in transport, urban development, environmental management, etc. This has been done to increase exports, growth in employment opportunities and revolutionise the industrial growth.

Currently, the following four industrial/ economic corridors are proposed to be developed :

1) Delhi – Mumbai Industrial Corridor (DMIC)
2) Amritsar – Delhi – Kolkata Industrial Corridor (ADKIC)
3) Chennai – Bengaluru Industrial Corridor (CBIC)
4) Bengaluru – Mumbai Industrial Corridor (BMIC)

## Classification of industries :

Manufacturing industries are broadly classified on the basis of size, source of raw materials, nature of products and ownership.

## Classification based on the source of raw materials :

- **Agro - based industries :** Agricultural produce is processed in this sector. For example, sugar mills, cotton textile mills, food processing units.
- **Marine-based industries :** These refer to all units involved in the processing and canning of fish, fish products and other marine produces. For example, fish oil, ornamental objects, sea-shells, etc.
- **Forest-based industries :** Products from the forests are processed in this sector. Wood is made into paper or provides timber for various uses. The manufacturing of resins, gums, colours, dyes, fragrant oils and turpentine is forest – based.
- **Mineral-based industries :** They involve industries where manufacturing is based on mineral wealth, obtained through mining. Examples are petrochemicals, iron and steel, aluminium units, etc.
- **Pastoral-based industries :** These indusries depend upon animals for their raw material. Hide, bone, horn, shoes, dairy, etc. are some of the pastoral-based industries. For example, leather bags, chappals, shoes, etc. are made from leather while cheese, curd, sweets are made from milk. Silk clothes, woollen clothes, jackets, etc. are produced in these industries.

## On the basis of capital investment :

In India, classification of industries on the basis of amount of capital investment, can be done as follows :

- **Large-scale industries :** They require huge amount of capital, equipment and other infrastructure.

In India, the industries requiring an investment of more than ₹10 crores are large-scale. Iron and steel, power, cotton

textiles, etc. are large-scale industries. (fig.5.4)

**Fig. 5.4 : Large scale industry**

- **Micro, Small and Medium Industries :** In India, the definition of MSME industries is as follows : (fig. 5.5)

| Industries | Investment in plant and machinery | Investment in equipments | Examples |
|---|---|---|---|
| Micro | Does not exceed ₹ 25 lakh | Does not exceed ₹ 10 lakh | Pens, dairy products etc. |
| Small | More than ₹ 25 lakhs but does not exceed ₹ 5 crores | More than ₹ 10 lakhs but does not exceed ₹ 2 crores | Bottles, small toys, papers, etc. |
| Medium | More than ₹ 5 crores but does not exceed ₹10 crore | More than ₹ 2 crores but ₹ 5 crores | Cycle, T.V., Radio, etc. |

**Fig. 5.5 : Small scale industry**

- **Cottage or Household industry :** It is the most basic type of manufacturing characterised by manual production, using locally available raw materials at a very small scale or at home. The goods are generally produced for consumption and for sale in the local markets. Little capital and transport cost is involved. Potters, weavers, blacksmiths, carpenters and craftspersons are some of the major groups engaged in a cottage industry. These industries require good skills. Their importance has increased in the present times. Some of these products have great demand abroad. Hence, they are exported. For example, Paithani Sarees, Indian quilts, etc.

**Fig. 5.6 Cottage industry (cane work)**

### Classification based on nature of output :

The nature of the product determines the type of industry.

- **Basic industries or Heavy industries :** These are industries that produce material, which is in turn used for other industries. The iron and steel industry, for example, makes steel for further use in the automobile, heavy machinery and other industries.
- **Consumer goods or Light industries :** These industries manufacture goods that are ready for direct consumption. Watch-making, electronic goods, textile mills and pharmaceutical plants are examples.
- **Ancillary industries :** The industries which manufacture parts and components to be used by other industries for manufacturing heavy articles like trucks, buses, railway engines, tractors, etc. The final product of these industries is the raw material for other industries. For example, nails, tyres, iron sills, iron sheets, etc.

### Classification based on ownership :

This classification is based on who owns the means of production.

- **Public sector :** Public sector industries are owned by the State. The government makes all investments and the marketing of the goods produced is through government agencies. Bharat Heavy Electrical Limited (BHEL) is an example.
- **Private sector :** Private sector enterprise is owned by a private individual or a partnership of private individuals. Profits derived from the sale of output belong to the individual, who owns the manufacturing unit and who makes all the capital investments in it. The Tata Iron and Steel Company (TISCO) is the example of private sector.
- **Joint sector :** This involves an industry owned and managed jointly by the government and an individual or individuals or between two and more governments. The amount of investment and share of the profits depends on the level of involvement of both sides example. For example, MNGL (Maharashtra Natural Gas Limited).
- **Cooperative sector :** A group of individuals pool resources to set up and manage an industrial venture on a cooperative basis. All profits and losses are shared among the members of the cooperative unit. Many textile, sugar and milk units function as cooperatives. Example, AMUL.
- **MNCs :** When operations of a privately owned industry or public-owned industry extend to more than one country, such industries are called multi-national corporation (MNCs). They have headquarters in the main country where they are registered. For example, Hindustan Lever in private-sector has it's headquarters in London. Oil and Natural Gas Corporation (ONGC) in public-sector has headquarters in Dehradun. Factors like cheap labour, technical skills, lower cost of production, availability of market in other countries lead to establishment of such industries.

**Give it a try.**

#startupindia

Digital India
Power To Empower

MAKE IN INDIA

- Look at the given logo. Find out more information about it and write a short note on it.
- Find at least 2 examples of each of the types of industries from India and write in your notebook.

**Try this.**

Now you know the factors affecting location of industries. You also know the classification of industries. Assume you want to set up an industry in future. Think about what will be the product produced in your industry? Which geographical region will you choose to set up your industry? Why? Discuss in class and share your ideas.

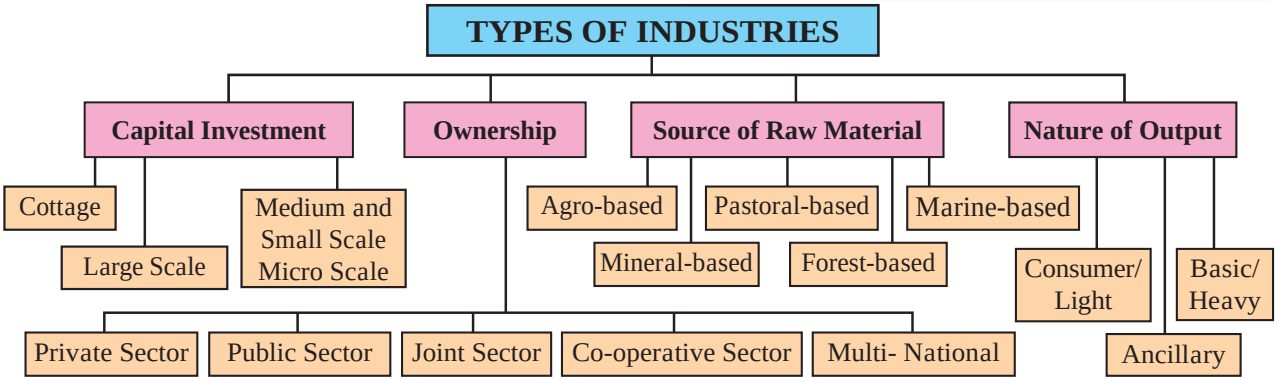


**Fig. 5.7**

**Q. 1) Complete the chain :**

| A | B | C |
|---|---|---|
| 1) Small-scale industries | 1) Manual manufacturing | 1) Ceramics |
| 2) Cottage industries | 2) Skilled crafts person | 2) Tata Iron and Steel company |
| 3) Consumer goods | 3) Individual ownership | 3) Potters |
| 4) Private sector | 4)Ready for direct consumption | 4) Pharmaceutical |

**Q. 2) Identify the correct correlation :**

A : Assertion; R : Reasoning

1) A : The humid climate of Mumbai offered great scope for the development of cotton textile industries.

   R : Industries require ample amount of water.

   1) Only A is correct
   2) Only R is correct
   3) Both A and R are correct and R is the correct explanation of A
   4) Both A and R are correct but R is not the correct explanation of A

2) A : In India, industries are found concentrated in few areas are available.

   R : India is predominantly agrarian country.

   1) Only A is correct
   2) Only R is correct
   3) Both A and R are correct and R is the correct explanation of A
   4) Both A and R are correct but R is not the correct explanation of A

**Q. 3) Give geographical reasons :**

1) Distribution of industries is uneven.
2) Iron and steel industries are found in mineral rich area of Dhanbad.
3) Fruit-processing industries are found in Ratnagiri and Sindhudurg districts of Konkan region.
4) Industrial growth in southern America is limited.

**Q. 4) Short notes :**

1) Footloose industries.
2) Public sector industries.
3) Economies of scale.
4) Role of transportation in industries.

**Q. 5) Differentiate between :**

1) Weight-losing and Weight-gaining industries.
2) Primary and Secondary activities.
3) Basic industries and Consumer industries.

**Q. 6) Answer the following :**

1) Explain the physical factors affecting location of industries.
2) Explain the factors affecting location of sugar industries.
3) Describe the factors that are responsible for less developement of industries in central Australia.

**Q. 7) Show the following on a map of the world with suitable index :**

1) Ruhr industrial region
2) An industrial region in Japan
3) An industrial region in South Africa
4) An industrial region in Australia
5) Industrial region near Great Lakes

***