UNIT 6 PATTERNS OF INDUSTRIALISATION

Structure

6.1 INTRODUCTION

The process of Industrialisation began around 17th century in Britain and spread quickly to the other European countries. Coupled with encouraging policy of the governments, the technological innovations brought about by industrialisation facilitated rapid development in the socio-economic conditions of the continent. The effect of Industrial Revolution was felt not only in the countries where it happened but also in far flung colonies. But, in these colonies it was mostly the story of exploitation of the natural resources to fulfil the demands of the colonial powers and their industries. This persistent and irresponsible exploitation over the centuries has resulted in the depletion of biodiversity and resources. The end result is for all of us to see where the earth is weighed down with rising levels of waste, be it green house gases or other toxic effluents being discharged into the water bodies. Since the existence of the present and future generations of human beings depends upon the health of the earth and its environment, we all must endeavour to take immediate corrective measures to mitigate the problems that we face today.

The pattern of industrialisation, as we realise, has taken a destructive course owing to irresponsible policies. However, with the growing concern for the environment, the trend is shifting towards eco-friendly industrial policies. The cottage and artisan industries, which are predominantly located in the developing countries, need to be rejuvenated in this context. These enterprises are not only environment-friendly, but also make sustainable use of the available natural resources. Besides, their manufactured products are also eco-friendly.

In this unit we discuss the pattern of industrialisation, its initialisation and spread worldwide. We also discuss different types of industries, their classification and the advantages and disadvantages of industrialisation.

Objectives

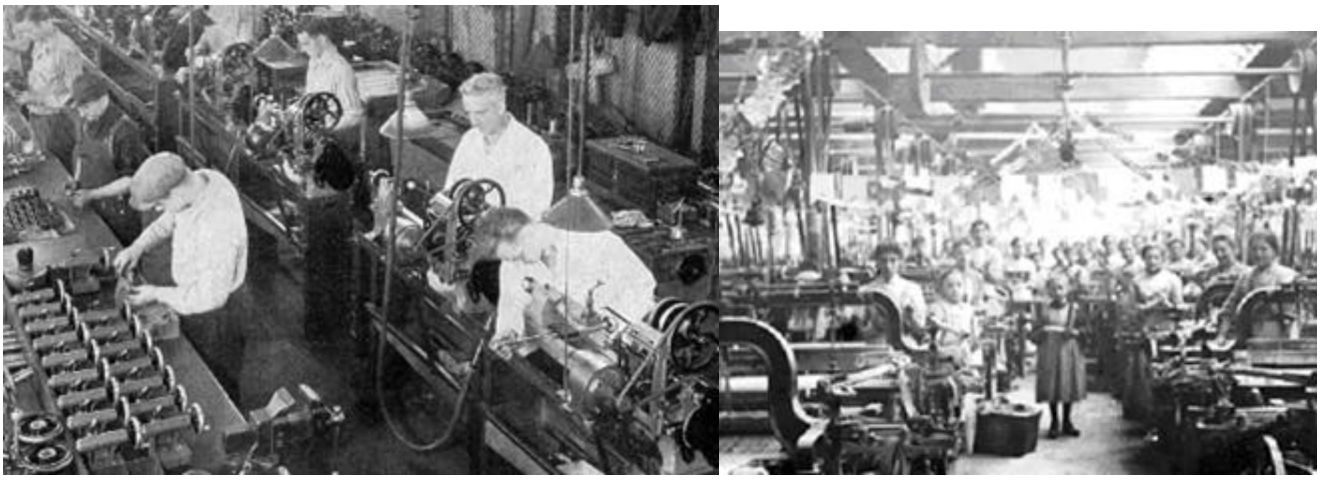
After studying this unit you should be able to:

- discuss the effects of globalisation on industrialisation;
- explain the concept and functioning of the Trans National Corporations (TNCs) and the economy of Foreign Direct Investments (FDI); and
- analyse the role of TNCs and FDI in the modernisation and spread of industrialisation.

6.2 INDUSTRIALISATION: HISTORICAL PERSPECTIVE

Around 1770, Britain made some remarkable advances in the field of manufacturing industry, mining and transport giving it a position of world economic leadership that she was to retain for well over a century. These achievements were remarkable and they came in the first place in terms of technological innovations in a cluster of industries - the Watt steam engine, the mechanisation of cotton spinning and weaving, the production of coke-smelted pig iron in blast furnaces and of large quantities of iron products by extruding and rolling, the first railway lines and so forth, which reinforced each other. Initially they were of limited importance to the whole country. However soon this became an unbroken chain of inventions and innovations leading to an irreversible improvement in the way of making things.

The rapid advances in science and technology led to development and changes in industrial organisation. The Factory-system became the dominant mode of production and it caught the eyes of contemporary observers. This system meant of course the concentration of the work force, a new discipline within the workplace, which had been unknown of in previous times. Large factories could make full use of the potential of new technologies, for example, steam driven engines; this meant large gains in productivity, on a scale never previously experienced. Factories were designed to turn out cheap mass produced goods, such as cotton and woollen yarn, cotton cloth, cast metal goods etc.



(a) **(b)**

Fig.6.1: a) Lathe assembly benches circa 1933 (Source: www.lathes.co.uk/ atlas); b) Weaving at an unknown mill, early 1900's. This picture shows the power loom which was used in factories after 1830. Weavers shown in the picture had to look after the looms and renew the yarn in the shuttles. Weavers were mostly women and young girls. A weaving shed was the most dangerous working environment in a cotton factory. The yarn sometimes broke sending the shuttles flying in any direction. Most of the children shown in this picture worked 6 and a half hours a day and went to school for up to 3 hours each day. Children between 8 and 14 worked in the Yard Works until the 1920's. (Source: www.cleo.net.uk/.../ images)

These changes, though far-reaching, did not happen all at once. In fact, recent research has shown that the Industrial Revolution in Britain was much slower than had been previously thought, and that the new technologies lived, for a long time, side by side with older pre-manufacturing technologies. For example, waterpower was still very important and prevailed over steam power in the United Kingdom (UK) well into the 19th century and craftsmen and their workshops remained for a long time far more important in aggregate terms than modern factories. A few points stand out, however. These are:

- The process of industrialisation in the UK happened in a unique and totally unplanned way; it could not have been planned, since it had never happened before.
- It was also slower to take full shape than previously believed and certainly slower than in the Continent later on, when industrialisation could be encouraged, stimulated, copied from Britain at least to some extent.
- The fact that industrialisation was slow does not mean that it was less radical and impressive.
- Initially dramatic progress took place in various scattered branches of industry and it did not affect the bulk of the country. However, with one development feeding upon another, eventually, the whole country was transformed and the changes began to show up everywhere.

The question arises, why was Britain the first? A wide range of answers has been given to this question. The unique advantages of Britain were:

- A stable, relatively open political system, which allowed for efficient public finances and encouraged the development of a capital market. Also, it made possible for Britain to fight and win wars and to keep a large, powerful navy, thus capturing vital foreign markets.
- Advanced and commercial agricultural system that was able to support the growing population by sustained rises in productivity.
- A remarkable growth in population since 1750, which provided an enormous workforce as also consumers to the economy.

Spread of the Industrial Revolution to the rest of Europe: There was not much development lag between Britain and the rest of Europe. This probably was because of the geographical proximity of Britain and the north-western corner of the continent. Considering the period between 1750 and 1820 embracing most of France, the Low Countries, part of the German States and Scandinavia, Switzerland and also Northern Italy and the most advanced parts of the Hapsburg Empire – it may be noted that a long process of capital accumulation had taken place, incomes were higher as a result of moderate economic progress throughout many decades. Capital, labour and land markets were fairly developed. The society was open and commercial and it had, largely, broken away from feudalism. Skills were widespread among the population, and there was a record of technological progress. Although the nobility was still very powerful, the influence of the bourgeoisie (merchants, investors, professionals etc) had been growing for sometime and in many towns, the bourgeoisie were the leading class. Agriculture had made important progress and there were important areas of domestic industry organised in far-reaching commercial networks. Finally, international trade was in the hands of not only the British, but also shared by Dutch, French, German and Danish merchant houses.

All this did not prevent Britain from leaping ahead in the process of industrialisation, but the gap was never so wide that the other countries could not expect to fill it in a reasonably short time. The preconditions were certainly there. In fact, the gap between Britain and North West Europe was much less than that between the most advanced areas of Europe and the more backward ones, in the South and East of the continent. When around 1800 to 1820 it was clear that Britain was forging ahead, the other advanced parts of Western Europe sought to first keep in step and then to catch up. The stage was set for a remarkable period of economic development and industrialisation across the continent.

To understand whether there was an Industrial Revolution in the whole of Europe, it is necessary to remember the great variety and variation in the continent as there were

more advanced and more backward countries in Europe which were significant for tackling industrialisation. On one side were countries like Germany, Belgium and France that were early followers of Britain and successfully industrialised by 1860-70; on the other were countries like Russia that started industrialising at the end of the 19th century while Spain hardly succeeded in industrialising at all before 1914. Countries in the South-East of Europe were even further behind. Countries like Denmark or the Netherlands had very advanced agricultural sectors while Belgium concentrated on heavy industry.

SAQ 1

What were the advantages of Britain in the initial phase of industrialisation?

Within this great diversity of paths followed and of outcomes achieved, certain common features existed and they were similar to the First Industrial Revolution. These related to:

- Technological change in manufacturing.
- Introduction of modern factories.
- Changes in demographic behaviour leading to a strong, unprecedented growth in population and urbanisation.
- Increasing mass production and rise in incomes.

In the light of diverse national and indeed regional experiences in industrialisation across Europe, the problem for economic historians has been to identify models which might help to understand and evaluate the whole process.

Along with industrialisation in the manufacturing sector, industrialisation of the agricultural sector also began and assumed great significance. Without it, advances in other sectors could not have sustained. Agriculture in itself contributes to industrialisation by:

- Providing for labour and capital
- Providing food
- Providing a market and entrepreneurship

Historically, industrialisation has also provided a rich agenda for fresh insights highlighting on some hitherto neglected factors such as social changes, demographic behaviour connected to economic change, labour skills and trading networks. These have moved the debate away from sheer measurements of industrialisation, to the wider social and institutional changes that made it possible including attention to human capital build-up as a key feature in technological import and adaptation.

The perils of industrialisation have also become apparent. It is being realised that the catastrophic effects of industrialisation, as seen today, have been due to the neglect of several issues at a time when they should have received our attention. Industrialised development has taken place in conjunction with large-scale environmental degradation and consequences of this misguided approach. The related issues are:

1. Patterns of industrialisation with global warming and its effects.
2. Rise in the incidence of respiratory diseases in certain region.
3. Emissions from units reduce rain and snow over adjoining regions, also reducing the amount of solar energy that reaches the earth.
4. The massive rise in the populations of poor countries.

5. The transfer of polluting industries from the developed West to developing countries eager to attract foreign investment.

6. The pattern of lifestyle in the West, which is based on consumerism and has little regard for non-renewable resources.

6.3 INDUSTRIALISATION: REGIONAL PERSPECTIVE

Two of the most important processes of change in South East Asia and South Asia are industrialisation and urbanisation. The Asia–Pacific region has seen unprecedented changes in economic growth and trade in the last couple of decades. This growth involves great increases in the cross–border use of resources, including energy and other materials, and has led to tremendous impacts on the regional as well as the global environment. This has affected the trade and industrialisation too. The impacts of structural transformations and environmental impacts have been felt most in three countries namely, China, Indonesia and Japan. The interdependent nature of economic activities with industrialisation can be easily appreciated as industrialising countries bear the burden of pollution as the developed countries are de–industrialising and expanding their service sectors by shifting their industrial production offshore mainly to the developing countries.

The issues to be addressed are the following:

- The interactions between the domestic economy and the environment should be addressed by constructing Systems of Integrated Environmental and Economic Accounts and green Gross Domestic Product (GDP) accounts.

- An international input–output economic model should be employed to characterise the interdependence of the economies, the international nature of the relationship between economic activity and environmental pollution within the selected countries, and the environmental consequences of different patterns of industrialisation and trade.

- The sources of economic comparative advantage should be studied including how differentials in environmental regulations across countries cause the migration of industries.

- Policies based on international economic and technological cooperation need to be evaluated for their ability to contribute towards a more sustainable development in the region.

Some regional economies, especially their industrial sectors, have grown so strongly during recent decades that they have been dubbed as 'tiger economies'. For decades, the rapid economic growth of the 'Association of South East Asian Nations' (ASEAN) economies has been led by industrial growth. Between 1970 and 1993, contribution of the industries to the ASEAN region's GDP has increased from 25% to 40% and industrial output has increased 25 times during the same period. Manufacturing contributed more than two thirds of the Gross Domestic Product in 1994 having expanded at an annual rate of 19% since 1980. Concomitant with this strong industrial growth has been an increasing concentration in large cities, most of them on or near the coast. Manila, Bangkok and Jakarta are now 'mega-cities' by world standards. Urbanisation and industrialisation have facilitated rapid increases in economic growth, consumption, material wealth and living standards although at national average levels.

South Asia is still in the early stages of industrialisation and urbanisation. Massive investment in industrial development, as part of the globalisation of economies is expected in the next 5-20 years providing an opportunity to seek and pursue industrial transformations that are more sustainable, environmentally and socially. This will

require a sound understanding of the human driving forces and possible human responses (e.g., regulation, technological and institutional change) to be able to effectively control, reduce and prevent regional marine and atmospheric pollution and the degradation of marine and land-based resources.

The economic successes of industrialisation have not been without environmental consequences. The transition from agro-processing into capital, manufacturing and then skill-intensive industries implies changes in the composition of pollutants. Typically, water-borne organic pollutants dominate emissions. Airborne pollution and solid wastes, especially in the newly forming urban centres then replace these.

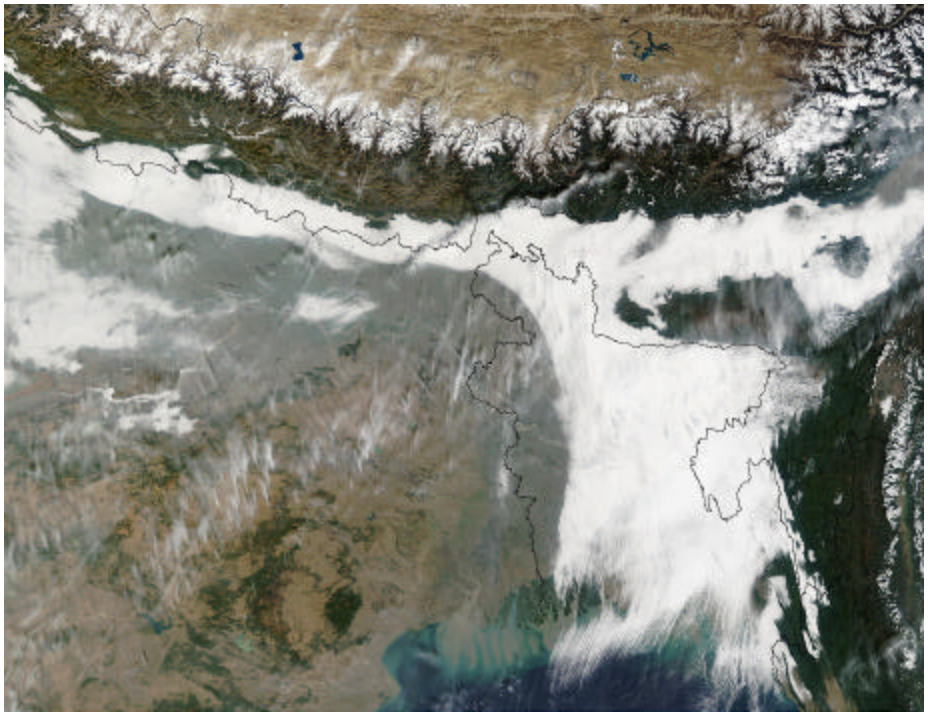


Fig.6.2: Environmental pollution due to industrialisation in SAARC countries; a satellite photo of pollution in Bangladesh and Northern India (Source: visibleearth.nasa.gov/ cgi-bin/viewrecord)

The impacts of vehicle emissions and industrial activity, for example, are already obvious with poor air quality in many of the capital cities of South Asia. Finally, there is rapid growth in hazardous wastes. Deviations from the overall pattern among individual nations reflect differences in the availability of natural resources, industry and environment policies and institutions. A cross-cutting issue is how more efficient and cleaner technologies and life-styles might reduce energy and material flows and the production of wastes. Mitigation and control of pollution of the coastal zones and continental shelf-seas as a result of industrialisation and urbanisation is a recognised important development issue.

Most countries in the region have taken a regulatory approach to pollution, for example, by setting effluent standards. Lack of technical and financial resources and institutional capacity, coupled with business and government attitudes, however, has often resulted in poor enforcement of the regulations. For this reason some governments are now turning to economic instruments, such as the "Polluter Pays principle", for environmental management. Businesses are not passive players in the changing constellation of government regulations and national agreements or the growing public concern with environmental impacts and sustainability. In this context, moving first is often good business. New technologies and products mean new business opportunities. Better cooperation between polluters, regulators and researchers is more likely to lead to self-regulation and improvement by industry. SAARC countries have adopted a Plan of Action on Environment.

At the regional level, preventing pollution of the regional seas is a common feature of a number of agreements and cooperative environmental action plans. For example, APEC's regional Action Plan for Sustainability of the Marine Environment has, as one of its three key objectives, the prevention, reduction and control of marine pollution. The APEC Cleaner Production Strategy aims to reduce environmental impacts from industrial activity through the promotion of cleaner production technologies, policies and practices.

In addition to the above, atmospheric emissions have increased rapidly with industrialisation. Various forms of air pollution problems in South Asia occur on different scales. Photochemical smog, carbon monoxide, nitrous oxide, ozone and lead are some of the unwelcome by-products of rapid industrial and urban transformation. Episodes of high levels of pollution in the mega-cities are commonplace and their health effect is an issue of major concern to governments in the region. Analysis suggests that reducing carbon dioxide emissions will require adoption of cleaner technologies and switching from fossil and other solid fuels to cleaner fuels.

These kinds of projections depend strongly on assumptions about industrialisation and the patterns of greenhouse gas and sulphur emissions. The possibility that the region could not only use more advanced emission controls, but also undertake pioneer research and development into pollution control mitigation does not seem to have been given adequate consideration. It is the health and economic cost of local airborne pollution, however, rather than concerns with global change, which is likely to act as an incentive for pollution mitigation controls and research.

SAQ 2

Describe the environmental impact of industrialisation visible in your surroundings.

6.4 FORMS OF INDUSTRIALISATION

Industrialisation takes many forms and develops at different stages through time. However, with the mention of industry, people tend to conjure up classic images such as textile mills, shipbuilding or heavy engineering. These were definitely the first areas to be industrialised. With time, the word industry in general, now encompasses many newer areas.

Broadly, industries can be of the following types depending on the raw material used and products made. They are:

1. **Manufacturing Industries:** Industries which produce goods by utilising or processing raw materials, semi-processed materials, by products or waste products or any other goods.
2. **Energy-Based Industries:** Industries generating energy from water resources, wind, solar, coal, natural oil, gas, bio-gas or any other sources.
3. **Agro and Forest-Based Industries:** Business mainly based on agriculture or forest products such as integrated sericulture and silk production, horticulture and fruit processing, animal husbandry, dairy industry, poultry farming, fishery, tea gardening and processing, coffee farming and processing, herbiculture and herb processing, vegetable seed farming, mushroom, vegetable farming or vegetable processing, tissue culture, green house, beekeeping, honey production, rubber farming, floriculture and production, and forestry related businesses such as leasehold forests, agro-forestry, etc.
4. **Mineral Industries:** Industries that excavate or process minerals.

5. **Tourism Industries:** Tourist lodging, motel, hotel, restaurant, resort, travel agency, skiing, gliding, water rafting, cable car complex, pony-trekking, trekking, hot air ballooning, para-sailing, golf-course, polo, horse-riding, etc.

6. **Service Industries:** Workshop, printing press, consultancy service, ginning and baling business, cinematography, construction business, public transportation business, photography, hospital, nursing home, educational and training institution, laboratory, air services, cold storage, IT, etc.

7. **Construction Industries:** Road, bridge, ropeway, railway, trolley bus, tunnel, flying bridge and industrial, commercial and residential complex construction and operation.

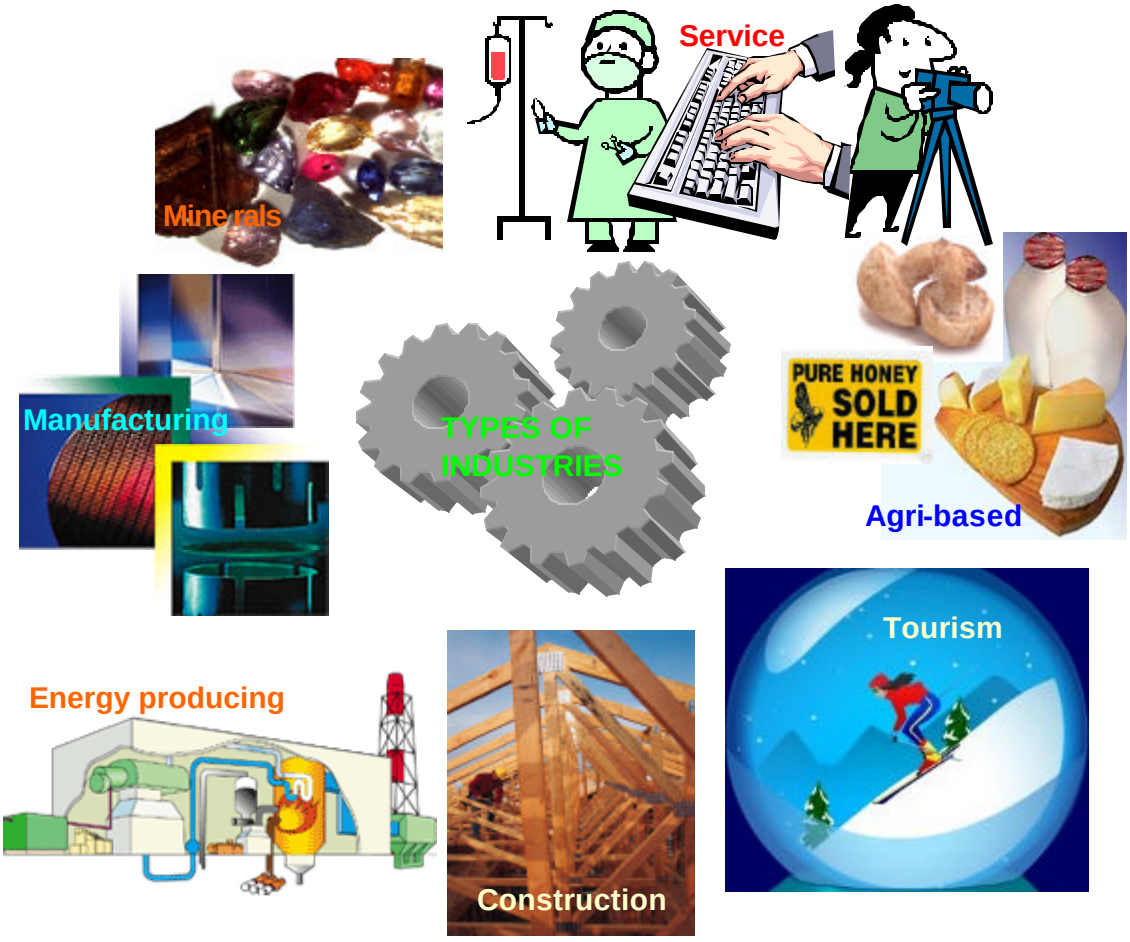


Fig.6.3: Various types of industries

While establishing an industry, its optimum size is of utmost importance to reap the maximum benefits. One of the main advantages of an industry is employment generation. Depending on the size of the industry, capital input, employment generated, technology source, sophistication of technology involved, skill involvement etc. industries are classified. The classification of an industry into types is decided for a country by its government. Different set of rules, policies, tax structure, etc. prevail for each category. One criteria of setting up an industry is the ratio of capital investment and persons employed.

On the basis of capital investment, industry is classified into:

- Cottage Industries
- Small Scale Industries
- Large Scale Industries

In India, a cottage industry is one which has an investment of up to Rs. 20 lakhs, small scale industries up to Rs. 1 crore and industries with investments above Rs. 1 crore fall under large scale industries.

6.4.1 Artisan, Craft and Cottage Industries

This category of industries mainly uses traditional skills and is related with tradition, art and culture. These industries utilise specific skills and locally available raw materials. Examples of cottage industries include units producing agriculture and forest-based goods, nurseries, and tree farms, value-added wood products (carvings and furniture). Cottage industries also include small-scale production of textiles, hand woven carpets, handicrafts (wood and metal), alcohol, household appliances, consumer durables, knitted wear, hosiery, jute products, livestock processing etc. Tourism and recreational agencies, such as outdoor guide services are also included in this category.

Rural cottage industries: Rural cottage industries are small scale industrial (manufacturing), commercial and business units that operate in rural areas and are set up in a dwelling or on the property where the residence is situated. Such units are primarily dependent on local resources and raw materials and cater to regional and local markets.

The development of cottage industries is essential for growth with equality and economic justice for all citizens. It is an informal sector and the products from home-based production and cottage industries need to achieve high growth with sound policy and institutional support. The contribution of these sectors to any economy cannot be ignored. This is especially true for countries of the SAARC region as they are important sources of employment and income for many families. In India they have 40 percent share in the total industrial output, 35 percent in exports, and over 80 percent in employment. These ventures, in spite of being based in rural or small areas, through proper marketing can attract export market tremendously due to their traditional and ethnic nature and use of natural resources which do not degrade the environment.

The employment opportunities in individual units are meagre and are mainly catered to by small groups or within the family. However, clusters of such groups are now linked through government or non-governmental organisations to the market, thus spreading their industrial nature.

6.4.2 Small Scale Industries

Small-scale industries are manufacturing units, mainly making accessories for large-scale industries, using mostly indigenous technology. They are usually situated in the vicinity of large-scale industries. However, many small scale industrial units are not doing well in this era of globalisation, and economic liberalisation. In order to avail opportunities of globalisation and economic liberalisation, the associated entrepreneurs need institutional support for technology upgradation, infrastructure support for market penetration, and adequate working capital finance from the banking sector. There is an urgent need to look into policies and programmes to improve their competitive strength with a long-term outlook. There is also a need for small entrepreneurs to keep pace with the structural and technological changes taking place in large industries.

Examples of small scale industries are soap, furniture, shoes, food processing units, textiles, light industries, construction units, vehicle parts, automobile parts etc.

6.4.3 Large Scale Industries

In India, industries with a fixed asset of more than one hundred million rupees are called large scale industries. These could be manufacturing units or others which use both indigenous and imported technologies. They cater to both the local and foreign

markets. Examples of large scale industries include fertiliser, cement, natural gas, coal, metal extraction, metal processing, petroleum, natural gas, mining, electrical, petrochemical, food processing units, tourism, banking, sugar, construction, automobile, communication equipment, cement, chemicals, earth movers, consumer durables (like television, refrigerators, etc), engineering products, vehicle assembly, beverages, gas and water and other fuels, agricultural processing, insurance and finance.

With the opening up of the market and globalisation, the effects on such industries have been mixed; some have gained by attracting foreign customers, foreign trade and technology, tie-ups, while others have lost out due to their inability to cope up with the open market competition.

SAQ 3

What are the disadvantages of unsustainable industrialisation and what steps should be initiated to overcome them?

6.5 IMPACT OF GLOBALISATION

Globalisation refers to the rising levels of economic interconnectivity in the world, increasing interdependence, the emergence of global markets, prices and production, and wider diffusion of technology and ideas. Three main components of globalisation are:

- Growth of Foreign Direct Investments (FDI) due to financial liberalisation and relatively cost-less international financial transactions.
- Growth of trade due to the emergence of global markets and the reduction of trade barriers.
- Diffusion of global technology and innovation.

6.5.1 Foreign Direct Investment

Foreign direct investment (FDI) has been one of the defining features of the world economy and globalisation over the past 20 years. It implies the creation of new enterprises abroad, or the acquisition of substantial stakes in existing foreign enterprises. FDIs had grown at an unprecedented pace for the last two decades, with only a slight interruption during the recession in the early 1990s, largely due to increased liberalisation brought about by reduced barriers to trade and investment and discriminatory subsidies.

Today, some 60,000 parent companies of multi national enterprises worldwide have established over 500,000 affiliates in countries other than their own, with the amount of inward FDI stock values at roughly $4,000 billion. These foreign affiliates are estimated to have generated total gross output of $2,600 billion and a total employment of over 35 million in host countries. For 90% of all parent companies located in the Organisation of Economic Cooperation and Development (OECD) countries, a little more than half of all their foreign affiliates are in operation in non-OECD countries. Foreign affiliates are a source of industrial production and employment in a number of emerging and developing economies.

Although foreign direct investment contributes to growth in the developing countries, the benefits are not equally shared. Although foreign owned companies tend to pay wages in developing countries, higher than and what the domestic companies pay, the skilled workers tend to gain more than un-skilled workers. Thus, while FDI may improve economy in the aggregate, more attention should be focused on the distribution of gains from FDI, particularly effects on wage inequality.

6.5.2 Trans National Corporations

Foreign direct investment (FDI) by Trans National Corporations (TNCs), and the transnational system of production and international economic transactions is now the most dominant element of the world economy, with TNCs increasingly influencing the size and nature of cross-border transactions, says a report of the United Nations Conference on Trade and Development (UNCTAD). The world's TNCs – 40,000 parent firms and 250,000 foreign affiliates – account for two-thirds of the world trade in goods and services, one-third in intra-firm transactions and the other one-third in inter-firm transactions. This means that in practice only one-third of the world trade in goods and services is 'free' under the so called free-market-free-trade theories of arms-length transactions.

With the emergence of TNCs and their involvement in national economies, we are witnessing an unprecedented transfer of power from people and their governments to such global institutions whose primary allegiance in other nations is to their corporate entities and their profitability. The growing role of FDI in changing the pattern of industrialisation and for linking national economies and improving economic forms of national economic development has to be taken into account in any sustainable development framework that provides for stability, predictability and transparency at the multilateral level.

6.6 SUMMARY

- This unit discusses the beginning and patterns of industrialisation, historical significance and mapping since its inception in Britain in 1770. Owing to industrialisation, Britain held the position of world economic leadership for over a century. Changes in industrial organisation brought about growth and far reaching impact. Other countries of Europe soon followed Britain.

- The process of industrialisation influences a number of other areas like the economy and social condition of a country and of the world at large. With the positive effects of industrialisation, there have been negative effects too as observed by the degradation of the environment. The policy of the developed countries to de-industrialise by shifting their bases to the developing countries is seen as detrimental to the environment in those regions. Although there will be short term economic gains for the poor countries, the long term sustainability of the culture of the local people will be eroded as they will follow the same path as the developed countries had done before.

- Industries are classified based on their technology, level of mechanisation, scale of operation, skill requirement, capital investment etc. These industries are set up based on the availability of the resources and skills. Accordingly, developing countries have a preponderance of cottage industries that use traditional knowledge and skills and the available natural resources. They are non-polluting and the products are eco-friendly. Therefore, the developing countries need to formulate policies based on upgrading their traditional systems and adopt less damaging forms of industrialisation.

- The impact of globalisation and opening up of Trans National Corporations spreading over the world and Foreign Direct Investment has been seen on the economic and social conditions of the developing countries. Although foreign direct investment contributes to growth in the developing countries, the benefits are not equally shared. Skilled workers tend to gain more than un-skilled workers. TNCs and the transnational system of production and international economic transactions are now the most central factor of the world economy. Keeping the growing importance of TNCs and FDI, an agenda needs to be prepared to provide stability, predictability and transparency to the system.

6.7 TERMINAL QUESTIONS

1. Map the progress of industrialisation in the world.
2. How has the Asia Pacific region benefited from industrialisation?
3. What is the effect of Foreign Direct Investment on a country's economy?
4. What are Trans National Corporations? How do they function? Compare TNCs with a national company.

REFERENCES

1. Ashworth, W. (1987) *A Short History of the International Economy*, 4th Edition, Longman.
2. Bhagwati, J., and Srinivasan, T.N. (1983) *Lectures on International Trade*., Cambridge, Massachusetts Institute of Technology Press, Massachusetts.
3. Buffie, E. (1987) *Labor Market Distortions: The Structure of Protection and Direct Foreign Investments, Journal of Development Economics*, vol. 27, pp149-163.
4. Foreman-Peck, J. (1995) *A History of the World Economy: International Economic Relations Since 1850*, 2nd Edition, Harvester Wheatsheaf.
5. Kemp, T. (1986) *Historical Patterns of Industrialization*, 2nd Edition, Longman.
6. Lairson, T., and Skidmore, D. (1997) *International Political Economy: The Struggle for Power and Wealth* (Second Edition)., Fort Worth, Harcourt Brace College Publishers, Texas.
7. Sylla, R., and Toniolo, G. (ed.) (1991) *Patterns of European Industrialization: The Nineteenth Century*, Routledge, London.