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**ECONOMIC &  
HUMAN  
GEOGRAPHY**

*for* **Civil Servies Examination**

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# **UNIT - I**

## **ECONOMIC GEOGRAPHY**

# 1.1

## AN INTRODUCTION TO ECONOMIC GEOGRAPHY

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### Introduction

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- Economic geography has been defined by the geographers as the study of human's economic activities under varying sets of conditions which is associated with production, location, distribution, consumption, exchange of resources, and spatial organization of economic activities across the world. It represents a traditional subfield of the discipline of geography. However, many economists have also approached the field in ways more typical of the discipline of economics.
- Economic geography has taken a variety of approaches to many different subject matters, including the location of industries, economies of agglomeration (also known as "linkages"), transportation, international trade, development, real estate, gentrification, ethnic economies, gendered economies, core-periphery theory, the economics of urban form, the relationship between the environment and the economy (tying into a long history of geographers studying culture-environment interaction), and globalization.

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### Branches of Economic Geography

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- Thematically, economic geography can be divided into these sub disciplines:
- Geography of resources
- Geography of agriculture: It is traditionally considered the branch of economic geography that investigates those parts of the Earth's surface that are transformed by humans through primary sector activities. It thus focuses on structures of agricultural landscapes and asks for the processes that lead to these spatial patterns.
- Geography of industry
- Geography of international trade
- Geography of transport and communication
- Geography of finance

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### New Economic Geography

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- With the rise of the New Economy, economic inequalities are increasing spatially. The New Economy, generally characterized by globalization, increasing use of information and communications technology, the

growth of knowledge goods, and feminization, has enabled economic geographers to study social and spatial divisions caused by the rising New Economy, including the emerging digital divide.

- The new economic geographies consist of primarily service-based sectors of the economy that use innovative technology, such as industries where people rely on computers and the internet. Within these is a switch from manufacturing-based economies to the digital economy. In these sectors, competition makes technological changes robust. These high technology sectors rely heavily on interpersonal relationships and trust, as developing things like software is very different from other kinds of industrial manufacturing—it requires intense levels of cooperation between many different people, as well as the use of tacit knowledge. As a result of cooperation becoming a necessity, there is a clustering in the high-tech new economy of many firms.

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## Basics of Economic Geography

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### Primary Activities

- ▶ Human activities which generate income are known as economic activities. Economic activities are broadly grouped into primary, secondary, tertiary and quaternary activities.
- ▶ Primary activities are directly dependent on environment as these refer to utilisation of earth's resources such as land, water, vegetation, building materials and minerals. It, thus includes, hunting and gathering, pastoral activities, fishing, forestry, agriculture, and mining and quarrying.

### Secondary Activities

- ▶ Secondary activities pertain to adding value to already existing products by changing their form via processing etc. Manufacturing industries are included in the secondary activities. We note here that sometimes commercial farming is also included in secondary activities because of use of hybrid seeds and modern technology in cultivation. The workers engaged in secondary activities are called blue collar workers.

### Tertiary activities

- ▶ Tertiary activities are concerned with providing service. The personal and business services such as clerks, barbers etc. are tertiary services. People engaged in these activities are called pink-collar workers.

### Quaternary services

- ▶ The services which are provided in special environments are called quaternary services. For example, health services are provided into hospitals, hospitality services are provided in hotels, teaching service is provided into school and institutors, entertainment services are provided into theatres, software services are provided over internet or computers. The workers engaged in such services are called white-collar workers. Researchers, legal consultants, financial advisors, professional consultants, software personnel etc. are white-collar workers. In summary, Quaternary activities are developed from of services, with specific knowledge, technical skills, and competence of communication or administration.

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## Primary Activities

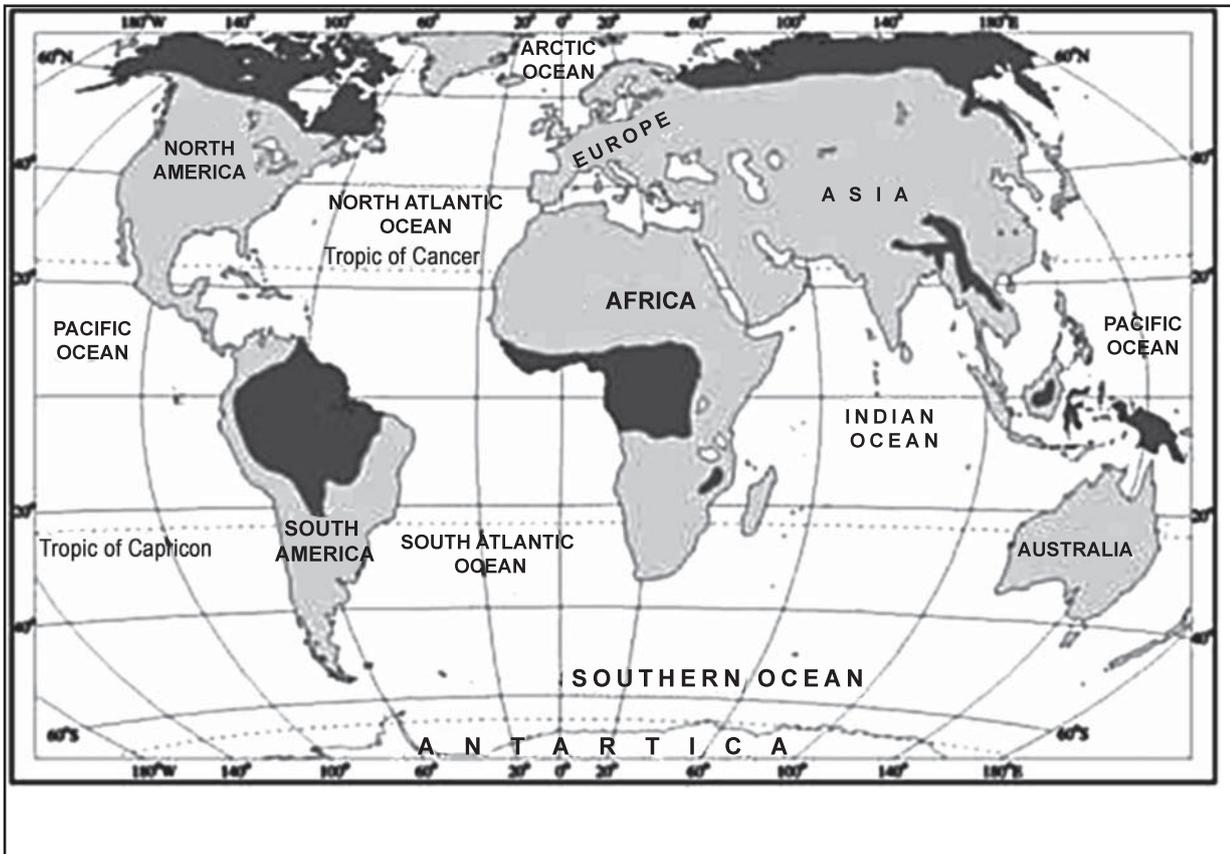
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Primary activities are directly dependent on environment as these refer to utilisation of earth's resources such as land, water, vegetation, building materials and minerals. It, thus includes, hunting and gathering, pastoral activities, fishing, forestry, agriculture, and mining and quarrying. We have already studied the physical geography. In this section, we will focus on some core concepts of economic geography.

### Hunting and Gathering

- ▶ Gathering and hunting are the oldest economic activity known.
- ▶ Gathering is practiced in regions with harsh climatic conditions.

- ▶ It often involves primitive societies, who extract, both plants and animals to satisfy their needs for food, shelter and clothing.
- ▶ This type of activity requires a small amount of capital investment and operates at very low level of technology. The yield per person is very low and little or no surplus is produced.



### **Pastoralism**

- ▶ At some stage in history, with the realization that hunting is an unsustainable activity, human beings might have thought of domestication of animals.
- ▶ Depending on the geographical factors, and technological development, animal rearing today is practiced either at the subsistence or at the commercial level.

### **Co-operative Farming**

- ▶ A group of farmers form a co-operative society by pooling in their resources voluntarily for more efficient and profitable farming. Individual farms remain intact and farming is a matter of cooperative initiative.
- ▶ Co-operative movement originated over a century ago and has been successful in many western European countries like Denmark, Netherlands, Belgium, Sweden, Italy etc.
- ▶ In Denmark, the movement has been so successful that practically every farmer is a member of a cooperative.

### **Collective Farming**

- ▶ The basic principle behind these types of farming is based on social ownership of the means of production and collective labour.
- ▶ Collective farming or the model of Kolkhoz was introduced in erstwhile Soviet Union to improve upon the inefficiency of the previous methods of agriculture and to boost agricultural production for self-sufficiency.

- ▶ The farmers used to pool in all their resources like land, livestock and labour. However, they were allowed to retain very small plots to grow crops in order to meet their daily requirements
- ▶ Yearly targets were set by the government and the produce was also sold to the state at fixed prices. Produce in excess of the fixed amount was distributed among the members or sold in the market.
- ▶ The farmers had to pay taxes on the farm produces, hired machinery etc. Members were paid according to the nature of the work allotted to them by the farm management.

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## Secondary Activities

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- The secondary sector of the economy is involved in the production of finished goods. All manufacturing, processing and construction activities lie in this sector. Some of the activities in this sector are metal working, automobile manufacturing, textile, production, ship building, etc.
- Most economies in their process of development go through the middle phase, where the secondary sector becomes the largest sector of the economy in terms of production and employment with the reduction in importance of the primary sector. However, India is an exception, where we have directly moved to services sector development without first improving the manufacturing capabilities.
- Manufacturing refers to production of goods from raw material. The literal meaning of manufacturing is to “make by hand”, however, this term today includes the manufacturing by machines also.
- The key features of modern large scale manufacturing include specialization of skills and methods of production, mechanization, technological innovation, organizational structure, uneven geographical distribution whereby most concentrations of manufacturing units is in few places.

## Manufacturing

- Manufacturing involves a full array of production from handicrafts to moulding iron and steel and stamping out plastic toys to assembling delicate computer components or space vehicles.
- In each of these processes, the common characteristics are the application of power, mass production of identical products and specialised labour in factory settings for the production of standardised commodities.

### Characteristics of Modern Large Scale Manufacturing

Modern large scale manufacturing has the following characteristics:

#### Specialisation of Skills/Methods of Production

- ▶ Under the craft method factories produce only a few pieces which are made-to-order. So the costs are high. On the other hand, mass production involves production of large quantities of standardised parts by each worker performing only one task repeatedly.

#### Mechanisation

- ▶ Mechanisation refers to using gadgets which accomplish tasks.
- ▶ Automation (without aid of human thinking during the manufacturing process) is the advanced stage of mechanisation. Automatic factories with feedback and closed- loop computer control systems where machines are developed to ‘think’, have sprung up all over the world.

#### Technological Innovation

- ▶ Technological innovations through research and development strategy are an important aspect of modern manufacturing for quality control, eliminating waste and inefficiency, and combating pollution.

#### Organisational Structure and Stratification

Modern manufacturing is characterised by:

- ▶ a complex machine technology

- ▶ extreme specialisation and division of labour for producing more goods with less effort, and lowcosts
- ▶ vast capital
- ▶ large organisations
- ▶ executive bureaucracy.

### Uneven Geographic Distribution

- ▶ Major concentrations of modern manufacturing have flourished in a few number of places.
- ▶ These cover less than 10 per cent of the world's land area. These nations have become the centres of economic and political power. Why do Large-scale Industries choose different locations?
- ▶ Industries maximise profits by reducing costs. Therefore, industries should be located at point where the production costs are minimum. Some of the factors influencing industrial location are as under:
- ▶ **Access to Market** Areas that provide large markets for finished industrial goods like developed areas of Europe, America, Japan, Australia, South Asia have huge concentration of industries.
- ▶ **Access to Sources of Energy** Coal, petroleum and hydroelectricity are main sources of energy. Industries using more power are located close to these sources.
- ▶ **Access to Raw Material** Industries based on cheap, bulky and weight-losing materials (ores) like steel, sugar are based close to sources of raw materials. Similarly, processing of dairy products, perishable foods and agro based are done near the sources of raw materials.
- ▶ **Access to Labour Supply** Industries are located where there is availability of skilled labour. Some types of manufacturing still require skilled labour.
- ▶ **Access to Source of Energy** Industries which use more power are located nearer to the source of energy supply such as iron and steel industries. Energy is most essential to run machines in industries. The main power resources are coal, petroleum, hydroelectricity, natural gas and nuclear energy.
- ▶ **Access to Transportation and Communication Facilities** Industries are located in places that have efficient transportation facilities and communication services for the exchange and management of information.
- ▶ **Access to Agglomeration Economies** Agglomeration economies refer to the benefits derived from the linkages that exist between different industries. The small industries or ancillary units like to operate near leader industries to benefit from nearness to big or basic industries.
- ▶ **Government Policy** For the balanced economic development, governments promote various regions by setting up industries in a particular link between industrial areas

### Foot Loose Industries

- Foot loose industries can be located in a wide variety of places.
- They are not dependent on any specific raw material, weight losing or otherwise.
- They largely depend on component parts which can be obtained anywhere.
- They produce in small quantity and also employ a small labour force.
- These are generally not polluting industries.
- The important factor in their location is accessibility by road network.

### Agro based Industries

- Agro processing involves the processing of raw materials from the field and the farm into finished products for rural and urban markets. Major agro-processing industries are food processing, sugar, pickles, fruits juices, beverages (tea, coffee and cocoa), spices and oils fats and textiles (cotton, jute, silk), rubber, etc.
- Agri-business is commercial farming on an industrial scale often financed by business whose main interests lay outside agriculture, for example, large corporations in tea plantation business. Agri-business farms are mechanised, large in size, highly structured, reliant on chemicals, and may be described as agro-factories

## Mineral based Industries

- These industries use minerals as a raw material. Some industries use ferrous metallic minerals which contain ferrous (iron), such as iron and steel industries but some use non-ferrous metallic minerals, such as aluminium, copper and jewellery industries. Many industries use non-metallic minerals such as cement and pottery industries.

## Chemical based Industries

- Such industries use natural chemical minerals, mineral-oil (petroleum) is used in petro- chemical industry.
- Salts, sulphur and potash industries also use natural minerals. Chemical industries are also based on raw materials obtained from wood and coal. Synthetic fibre, plastic, etc. are other examples of chemical based industries.

## Forest based Raw Material using Industries

- For furniture industry, wood, bamboo and grass for paper industry, lac for lac industries come from forests.

## Animal based Industries

- Leather for leather industry and wool for woollen textiles are obtained from animals. Besides, ivory is also obtained from elephant's tusks.

## Industries Based On Output/Product

- The industry whose products are used to make other goods by using them as raw materials are basic industries.
- The consumer goods industries produced goods which are consumed by consumers directly. For example, industries producing breads and biscuits, tea, soaps and toiletries, paper for writing, televisions, etc. are consumer goods or non-basic industries.

## Industries Based on Ownership

- Public Sector Industries are owned and managed by governments.
- Private Sector Industries are owned by individual investors. These are managed by private organisations
- Joint Sector Industries are managed by joint stock companies or sometimes the private and public sectors together establish and manage the industries.

### Traditional Large-Scale Industrial Regions

- ▶ These are based on heavy industry, often located near coal-fields and engaged in metal smelting, heavy engineering, chemical manufacture or textile production.
- ▶ These industries are now known as smoke stack industries. Traditional industrial regions can be recognised by:
- ▶ High proportion of employment in manufacturing industry. High-density housing, often of inferior type, and poor services. Unattractive environment, for example, pollution, waste heaps, and so on.
- ▶ Problems of unemployment, emigration and derelict land areas caused by closure of factories because of a worldwide fall in demand.

### The Ruhr Coal-field, Germany

- ▶ This has been one of the major industrial regions of Europe for a long time. Coal and iron and steel formed the basis of the economy, but as the demand for coal declined, the industry started shrinking.
- ▶ Even after the iron ore was exhausted, the industry remained, using imported ore brought by waterways to the Ruhr. The Ruhr region is responsible for 80 per cent of Germany's total steel production.

### Concept of High Technology Industry

- ▶ High technology, or simply high-tech, is the latest generation of manufacturing activities. It is best understood as the application of intensive research and development (R and D) efforts leading to the manufacture of products of an advanced scientific and engineering character.
- ▶ Professional (white collar) workers make up a large share of the total workforce. These highly skilled specialists greatly outnumber the actual production (blue collar) workers. Robotics on the assembly line, computer-aided design (CAD) and manufacturing, electronic controls of smelting and refining processes, and the constant development of new chemical and pharmaceutical products are notable examples of a high-tech industry.

### Iron and Steel Industry

- The iron and steel industry forms the base of all other industries and, therefore, it is called a basic industry. It is basic because it provides raw material for other industries such as machine tools used for further production.
- It may also be called a heavy industry because it uses large quantities of bulky raw materials and its products are also heavy.
- Iron is extracted from iron ore by smelting in a blast furnace with carbon (coke) and limestone. The molten iron is cooled and moulded to form pig iron which is used for converting into steel by adding strengthening materials like manganese.
- The large integrated steel industry is traditionally located close to the sources of raw materials – iron ore, coal, manganese and limestone – or at places where these could be easily brought, e.g. near ports.
- But in mini steel mills access to markets is more important than inputs. These are less expensive to build and operate and can be located near markets because of the abundance of scrap metal, which is the main input.

#### Distribution:

- ▶ The industry is one of the most complex and capital-intensive industries and is concentrated in the advanced countries of North America, Europe and Asia. It has now become the 'rust bowl' of U.S.A.

### Cotton Textile Industry

- Cotton textile industry has three sub-sectors handloom, power loom and mill sectors.
- Handloom sector is labour-intensive and provides employment to semi-skilled workers. It requires small capital investment. This sector involves spinning, weaving and finishing of the fabrics.
- The power loom sector introduces machines and becomes less labour intensive and the volume of production increases.
- Mill sector is highly capital intensive and produces fine clothes in bulk.
- Cotton textile manufacturing requires good quality cotton as raw material.
- India, China, U.S.A, Pakistan, Uzbekistan, Egypt produce more than half of the world raw cotton.
- The U.K, NW European countries and Japan also produce cotton textile made from imported yarn. Europe alone accounts for nearly half of the world's cotton imports.
- The industry has to face very stiff competition with synthetic fibres hence it has now shown a declining trend in many countries.

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## Tertiary and Quaternary Activities

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### Tertiary activities

- involve the commercial output of services rather than the production of tangible goods.
- They are not directly involved in the processing of physical raw materials. Common examples are the work of a plumber, electrician, technician, launderer, barber, shopkeeper, driver, cashier, teacher, doctor, lawyer and publisher etc.

- The main difference between secondary activities and tertiary activities is that the expertise provided by services relies more heavily on specialised skills, experience and knowledge of the workers rather than on the production techniques, machinery and factory processes.

### **Types of Tertiary Activities**

#### **Trade and commerce**

- ▶ Trade is essentially buying and selling of items produced elsewhere.
- ▶ The towns and cities where all these works take place are known as trading centres or collection and distribution points
- ▶ Trading centres may be divided into rural and urban marketing centres.
- ▶ Rural marketing centres cater to nearby settlements.
- ▶ These are quasi-urban centres. They serve as trading centres of the most rudimentary type. Here personal and professional services are not well-developed.
- ▶ Periodic markets in rural areas are found where there are no regular markets and local periodic markets are organised at different temporal intervals.
- ▶ These may be weekly, bi-weekly markets from where people from the surrounding areas meet their temporally accumulated demand.
- ▶ Urban marketing centres have more widely specialised urban services. They provide ordinary goods and services as well as many of the specialised goods and services required by people.

#### **Retail Trading**

- ▶ This is the business activity concerned with the sale of goods directly to the consumers. Most of the retail trading takes place in fixed establishments or stores solely devoted to selling. Street peddling, handcarts, trucks, door-to-door, mail-order, telephone, automatic vending machines and internet are examples of non-store retail trading.

#### **Wholesale Trading**

- ▶ Wholesale trading constitutes bulk business through numerous intermediary merchants and supply houses and not through retail stores.
- ▶ Some large stores including chain stores are able to buy directly from the manufacturers. However, most retail stores procure supplies from an intermediary source.
- ▶ Wholesalers often extend credit to retail stores to such an extent that the retailer operates very largely on the wholesaler's capital.

#### **Transport**

- ▶ Transport is a service or facility by which people, materials and manufactured goods are physically carried from one location to another.
- ▶ At every stage in this complex system, the value of the material is significantly enhanced by transportation.
- ▶ Isochrone lines are drawn on a map to join places equal in terms of the time taken to reach them.

#### **Factors Affecting Transport**

- ▶ Demand for transport is influenced by the size of population. The larger the population size, the greater is the demand for transport.
- ▶ Routes depend on: location of cities, towns, villages, industrial centres and raw materials, pattern of trade between them, nature of the landscape between them, type of climate, and funds available for overcoming obstacles along the length of the route.

## Quaternary sector

The quaternary sector of the economy is based upon the economic activity that is associated with either the intellectual or knowledge-based economy. This consists of information technology; media; research and development; information-based services such as information-generation and information-sharing; and knowledge-based services such as consultation, education, financial planning, blogging, and designing.

### Communication

- ▶ Communication services involve the transmission of words and messages, facts and ideas.

### Telecommunications

- ▶ The use of telecommunications is linked to the development of modern technology. It has revolutionised communications because of the speed with which messages are sent. The time reduced is from weeks to minutes.
- ▶ Radio and television also help to relay news, pictures, and telephone calls to vast audiences around the world and hence they are termed as mass media.
- ▶ They are vital for advertising and entertainment. Newspapers are able to cover events in all corners of the world.
- ▶ Satellite communication relays information of the earth and from space.
- ▶ The internet has truly revolutionised the global communication system

### Outsourcing

- ▶ It means contracting out or giving work to an outside agency to improve efficiency and to reduce cost. It is termed as off-shoring when work is transferred to overseas location.
- ▶ Outsourcing provides employment in developing Countries of India, China, Botswana, etc. Information technology, human resources, customer support, call centres, data processing and other IT related services are examples of outsourcing.

### BPO

- ▶ BPO stands for Business Process Outsourcing which involves customer support services, call centres and similar other processes.
- ▶ The developed countries transfer these jobs as overhead costs are much lower making it profitable to get job work carried out.
- ▶ **KPO** KPO stands for a Knowledge Process Outsourcing which involves skilled workers and enables companies to create additional business opportunities, e.g. e-learning, business research, etc.

### The Digital Divide

- ▶ Development emerging from the information and communication technology is unevenly spread across the globe. Some regions have prospered while others are lagged behind. This is known as digital divide.
- ▶ In developing countries, this kind of divide is seen more than developed countries. Here, the metropolitan cities are developed more than rural areas.

## Quinary Activities

The activities that are highly specific and specialised are placed under it. These include high level decision-makers, administrators, government officials, research scientists, etc. They are also known as gold collar professions.

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