ASSI GNMENT No. 01

Commercial Geography (1428) Renamed Associate degree of Commerce

Spring, 2025

Q.1 Define Geography and describe its branches & approaches used in economic Geography. (20)

The fourth edition of *Commercial Geography for Intermediate Classes* has been updated extensively and covers the new syllabus prescribed by the National Bureau of Curriculum, Ministry of Education, Government of Pakistan. It covers the commercial geography of the world and Pakistan in the same volume.

Economic Geography:

Economic Geography is the study of man and his economic activities under varying sets of conditions. Geographers are of different opinions as regarding the definition of the subject.

In fact, different authorities have defined Economic Geography in a variety of ways but their opinions converge at a common point of accord, where it means the study of the spatial distribution of man's economic activities in relation to its environment, be it physical or non-physical.

According to Dudley Stamp, Economic Geography **"involves consideration of the geographical and other factors which influence man's productivity, but only in limited depths, so far as they are connected with production and trade."**
Professor E. W. Zimmermann pointed out that, Economic Geography deals with the economic life of man with relation to environment.

R. S. Thoman in his book 'The Geography of Economic Activity' has remarked, **"Economic Geography may be defined as an enquiry into the production, exchange and consumption of goods by people in different areas of the world. Particular emphasis is placed on the location of economic activity — upon asking just why economic functions are situated where they are in this world."**
J. MacFarlane describes Economic Geography as the study of "influence exerted on the economic activity of man by his physical environment, and more specifically by the form and structure of the surface of the land, the climatic conditions which prevail upon it and the spatial relations in which its different regions stand to one another."

In the words of Hartshorn and Alexander: "Economic Geography is the study of the spatial variation on the earth's surface of activities related to producing, exchanging and consuming goods and services. Whenever possible the goal is to develop generalizations and theories to account for these spatial variations."

Surpassing all, Chisholmes says that Economic Geography is presumed to "form some reasonable estimate of the future course of commercial development," as determined by geographical factors.

Aims and Scope of Economic Geography:

We may consider the Earth as the abode of Man and its resources are his legacy. Being most dynamic, man is never satisfied with mere living. He has always tried to refine his living conditions and environment. He is; never satisfied with the simple food, nature has provided him; he has devised ways for preparing food.

His shelters are not merely designed for simple protection, but should also be comfortable in every aspect and must match with the modern style. In fact, man satisfies not only his physical needs but also his cultural needs.

These inclinations or intentions of human mind have led to the exploitation of the earth's resources in a number of ways down from days of Paleolithic society till the present time, but always within certain limits imposed by Nature. One unique feature of man is that, he understands the laws that govern the functioning of Nature and makes use of them in his own way of life.

The fundamental differences in the life-styles of various societies in different parts of the world largely stem from the diversity in the physical environment, especially climate. Climatic condition differs quite distinctly from one region to another with the resultant differences in human needs. People living in cold countries, thus, require warm clothes; those in hot countries require scanty and light clothing.

People of monsoonal countries of South-East Asia take rice and fish as their staple food, those in temperate regions prefer wheat. The inhabitants of the temperate regions are more energetic and industrious than those of the warm tropical countries. Such differences in man's basic life patterns can be explained only in terms of their varying natural conditions.

Initially, at the dawn of human civilization, man's needs were certainly very limited and so easily supplied by his habitat. Even at present, a primitive man's needs remain few. He satisfies his needs by the articles which are easily obtainable from his immediate surroundings. In contrast, a 'civilized' man's needs are great and complex. They cannot be satisfied near-at-hand; they need to be supplemented from far and wide.

In fact, none of the modern countries of the world are self-sufficient. The civilized man, therefore, depends a lot on the supplies of far-away regions. This gives rise to commerce. So, we may comment that the function of Economic Geography is to study the manner in which trade and commerce are related to the earth on which they are transacted.

'Thus, Economic Geography investigates the diversity in basic resources of the different parts of the world. It tries to evaluate the effects that differences of physical environment have upon the utilization of these resources. It studies differences in economic development in different regions or countries of the world. It studies transportation, trade routes and trade resulting from this development and as affected by the physical environment. The problem of economic resources has become more complex today with millions starving and unemployed. Such problems are more acute in the countries and among people who believe in material rather than spiritual progress. A man born and brought up under western civilization believes in creature comforts. He tries, by all means, to improve his life-style which is based on competition. This competitive attitude gives rise to socio-economic problems. Economic Geography, therefore, also aims at resolving such problems by better and efficient utilization of limited resources through rational, systematic, scientific and long-term planning.

Humboldt, a famous 19th century German geographer, remarked that, 'the diversified riches of the earth are a vast source of human enjoyment, and, therefore, man's highest development requires that we put these riches into a common world stream of understanding and use.' This can only be achieved through the study of Economic Geography.

H. H. McCarty has aptly remarked:
Economic Geography concerns with the solution of economic problems.

Hence, the student of Economic Geography must be trained along four principal lines:
ADVERTISEMENTS:

1. Recognize problems and state them in a manner.

2. Develop hypotheses that promise solutions to those problems.

3. Test the adequacy of these hypotheses in providing solutions for these problems.

4. Relate tested hypotheses to other generalizations in the body of theory.

In this way Economic Geography contributes to international understanding. It, undoubtedly, broadens our knowledge and outlook to a great extent and enables us to acquire a humanistic view-point. It is essential for the liberalization of our education system for the future citizens of the modern world, so that, with its help and under its influence, he might work for true global understanding between different nations.

Importance of the Study of Economic Geography:

The main objective of Economic Geography is, as expounded, to examine man's economic achievement in terms of production and consumption in the light of his environment. To assess the relative importance of the study of this branch of geography, we have to evaluate the purposes that it serves.

Economic Geography, fundamentally, maintains a very close relation with man's economic welfare as other social sciences do; but the approach is radically different. Through various stages of interpretation and analysis it, in the final stage, attempts to point out the potential for development of a region, occupied by a certain group of people. Disparity in the state of economic well-being and level of production is a common phenomenon. In order to eliminate such disparity, mobilization of resources is imperative. A careful study of the situation has to be undertaken before any move is initiated to mobilize resources to resolve problems. Economic Geography accomplishes this job.

Prior to the introduction of such productive system of agriculture in India a careful examination of India's agrarian infrastructure is necessary; otherwise, mere adoption of such system may not produce fruitful results.

Economic Geography serves the purpose of identifying the influence that the environment exerts on man through the preservation of the multiple geo-economic conditions of different parts of the world. Any attempt that aims at the balanced development of economy could not succeed without the complete understanding of the man-environment inter-relationship.

Without any such knowledge economic relationship is bound to end up in a fiasco. It is a fait accompli. Economic Geography, therefore, serves as an essential tool for reducing and finally eliminating world societies' disparity gaps by scientific study of their economic resources, modern needs and cultural heritages.

Q.2 Define scope of Economics Geography? Also explain theories of Economic Geography. (20)

SCOPE OF ECONOMIC AND COMMERCIAL GEOGRAPHY:

Economic and Commercial Geography is mainly concerned with the study of agriculture, minerals, and industrial resources and also means of transportation and trade centers of the world. So, more detailed study, about the factors of production and distribution are as follows:

1. STUDY OF AGRICULTURE RESOURCES:

For the study of Economic and Commercial Geography it is essential that causes for the production of various agricultural products, are to be studied, and also the factors responsible for the commerce and trade of those products cannot be neglected.

2. STUDY OF MINERALS RESOURCES:

Minerals are also an important factor of commerce and trade, because every country in the world is not self-sufficient in mineral resources. So, in economic and commercial geography we study about the production and distribution of different minerals found in the world.

3. STUDY OF INDUSTRIAL RESOURCES:

Agricultural and minerals resources are mainly responsible for the industrial progress of an area, so industrial progress cannot be studied without the study of other factors.

4. STUDY OF MEANS OF TRANSPORTATION:

Means of transportation also plays an important role for the progress of agricultural, minerals and industrial resources, so without the study of means of transportation study of other factors is not possible.

5. STUDY OF TRADE CENTERS:

Trade Centers also play an important role for the trade or commerce of certain areas, because without the study of various trade centers progress in trade and commerce is not possible.

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Inclinations or intentions of human mind

These incli-nations or intentions of human mind have led to the exploitation of the earth's resources in a number of ways down from days of Paleolithic society till the present time, but always within certain limits imposed by Nature. One unique feature of man is that, he understands the laws that govern the functioning of Nature and makes use of them in his own way of life.

The study of the manner of exploitation of the earth's resources and the limits set by physical environment is the proper scope of Economic Geography. It 'deals with the produc-tive occupations and attempts to explain why certain regions are outstanding in the produc-tion and exportation of various articles and why others are significant in the importation and utilization of these things'.

In this study of interdependence of production, emphasis should be given upon the de-gree of human initiative and the nature of physical forces enacting to shape certain life-patterns. They should be studied not in isolation but as a comprehensive system of interaction between man and Nature.

However, it is not content only with the analysis of the present pattern of productive occupations, it also studies their dynamics, for global resources change not only in response to increasing knowledge, improved skills and techniques, but also, perhaps more importantly, in relation to changing socio-political objectives. Thus, Economic Geography is a much-embracing subject.

It not only aims at the understanding of different natural phenom-ena but also takes cognizance of racial traits and customs, advantages of an early start, avail-ability of capital and labour, accumulated technical knowledge and skilled management, sta-bility of governments, government aids or hindrances in the form of tariffs, subsidies or ur-banization schemes and so on.

The fundamental differences in the life-styles of various societies in different parts of the world largely stem from the diversity in the physical environment, especially climate. Cli-matic condition differs quite distinctly from one region to another with the resultant differ-ences in human needs. People living in cold countries, thus, require warm clothes; those in hot countries require scanty and light clothing.

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Modern countries of the world are self-sufficient

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This competitive attitude gives rise to socio-economic problems. Eco-nomic Geography, therefore, also aims at resolving such problems by better and efficient uti-lization of limited resources through rational, systematic, scientific and long-term planning.

Q.3 Explain the following continents of the world:- (20)

They say money doesn't grow on trees—but you can cut trees down and sell the wood for money! Economics has always been an integral component of human civilization, and economic geography seeks to analyze what effects wealth has had in different areas of the world. An economy can be divided into a number of different sectors and numerous theories have been developed to explain economic development. Read on to learn more about Theories of Economic Geography, Economic Sectors, and more.

Because so much of our daily lives revolve around economic transactions, great and small, economic geography is a critical subset of human geography. How and why does economic wealth play a factor in the human condition? What effects does economic development have on human well-being? Studying economic geography helps answer those questions.

But there are quite literally dozens of different ways to approach economic geography. You can look into historical patterns; real estate, gentrification, and urbanization; types of economies; the concentration of wealth within cities, regions, and countries; trading philosophies and policies—the methodologies are endless. That being said, a few theories of economic geography have proven to be foundational to modern study. Let's take a look at those below.

Theories of Economic Geography

Trying to understand how and why wealth is distributed is no small task, and geographers have developed a number of different theories and hypotheses to explain overarching patterns.

Weber's Least Cost Theory

German economist Alfred Weber suggested that industries—seeking to minimize costs and maximize profits—would likely choose to locate manufacturing plants where labor and transportation would be the cheapest. This pattern is called the **Least Cost Theory**. The Least Cost Theory can be seen in action today with the many Western industries that have exported their manufacturing to developing nations where workers can be paid a lower salary.

i. Asia

Asia is the largest of the world's continents, covering around 30 percent of the earth's land area. It is also the world's most densely inhabited continent, with approximately 60 percent of the total population. Asia makes up the eastern part of the Eurasian supercontinent, Europe occupies the western part. The border between the two continents is debated. However, most geographical define Asia's western borders an indirect line that follows the Ural mountain, the causes mountains, and the caption and black seas. Asia is bordered by the Arctic, Pacific and Indian Ocean. Asia is rich in diverse races, cultures, and languages, many of the world's major religions came out of Asia as well as Christianity, Judaism, Islam, Hinduism and Buddhism. Asia has a major influence on world culture and the world's economy; countries such as Russia, China, Japan and India produce yield, and services that are used by every nation in the world. Asia is also rich in natural resource. Oil in the Middle East is a most important supplier of much of the world's energy. The superficial relationship of the continent intensifies the contrast between south-Eastern and central Asia. The Himalayas, the loftiest mountain range in the world, capture the summer monsoons of India. North of these mountains, the tableland of Tibet, varying from about 10,000 to 18,000 feet in height, spreads out northwards to the Altyn Tagh and Nan-Shan mountain ranges, which also help to avoid the southern monsoon from reaching the heart of the continent. Still more efficiently deprived of the deprived of this important of life are the lower tablelands in the North-central part of the continent changeable from about 2,200 to upwards of 4,000 feet in height, and extending to the mountain on the borders of Siberia. The Asian region of which the Suez Canal is the center has been the meeting place of national and races for lots of, years. It has provided battlegrounds for militaristic peoples for centuries. Proceeding of recent years again focused attention on the region. Little part of the world has played a larger part few in world history than has this region.

Interchange of produce

It makes the centers where for centuries the east and the west met. Humankind, always on the move, passed through have on its way between Europe and Asia, between Africa and Europe. The crossing of trade routes and the interchange of produce led to the interchange of ideas. In these lands are proofs of the earliest civilization. Here took place the easy beginning of development which made possible the advances of the present day. Here were the great empire and territory of ancient times. Here lived and emperors of Babylon, Assyria, Chaldea, Phoenicia and Egypt when these emperors laws, practically all the rest of the world except China was in a state of barbarism. The valleys of the Nile and of the Tigris and Euphrates were well fitted to support large populations and become of their central location to

play a large part in the affairs of the world as it was in those days. Early civilization developed in centers in which life was not too hard nor yet too easy. The rich river plains with abundant water for irrigation yielded to those who cultivated them returns so large that there was sufficient leisure to develop the arts of civilization. Furthermore early civilization required some measure of protection, such as that provided by mountains, seas and desert. Thus it was not necessary for the people to devote a large proportion of their time and resources to proportion for war. These areas possessed all of this advantage, and here developed the centers of most primitive culture.

Influences modern life

It would be impossible to detail all the ways in which early culture influences modern life. Here the horse was most likely first used as a help in doing man's work. The use of the wheel had its beginning among the Babylonians and the Assyrians. Like the use of fire this was one of the greatest advances man ever made. The Babylonians did much to develop the science of arithmetic, and Egypt geometry was first used to establish boundary lines after irrigation. The Chaldeans were great scholar of the heavens and learned to foretell the times of eclipses of the moon and the sun. The Phoneticians, were country bordered the eastern Mediterranean, were the "missionaries of civilization." As dealers they carried the new thoughts, the culture of the Middle East, to all the shores of the Mediterranean Sea and thus on the Western Europe. The countries of the Middle East especially since world war second, have become extra and extra sensitive to foreign control or what appears to them to be too much influence of other countries in their government or in their industries. ? This strong desire to be entirely free from exterior influence leads to the organization of collection or parties, known as nationalists. Often a nationalist party includes communists, who are usually spurred on by the Russians.

ii. Africa

Africa, the second-largest continent, is bounded by the Mediterranean Sea, the Red Sea, the Indian Ocean, and the Atlantic Ocean. It is divided in half almost equally by the Equator.

Africa's physical geography, environment and resources, and human geography can be considered separately.

The origin of the name "Africa" is greatly disputed by scholars. Most believe it stems from words used by the Phoenicians, Greeks, and Romans. Important words include the Egyptian word Afru-ika, meaning "Motherland"; the Greek word aphrike, meaning "without cold"; and the Latin word aprica, meaning "sunny."

A number of factors influence Africa's sunny climate. The Equator nearly bisects the continent into two equal parts. Climatic zones lie on either side of this line as if it were a mirror, with tropical wet climates closer to the Equator and more arid conditions closer to the tropics.

This climatic symmetry is disturbed, however, by Africa's unequal shape. The continent's narrow southern section is far more influenced by oceanic factors than the bulging northern section. Africa's northern half is more dry and hot, while its southern end is more humid and cool.

Climate and Agriculture

Climatic factors greatly influence Africa's agriculture, which is considered the continent's single most important economic activity. Agriculture employs two-thirds of the continent's working population and contributes 20 to 60 percent of every country's gross domestic product (GDP). GDP is the total value of goods and services produced in a country during one year.

Important climatic regions of agriculture include tropical wet, savanna, desert, Mediterranean, and highland.

Tropical wet conditions occur along the Equator, the Gulf of Guinea, and the east Madagascar coast. Temperatures remain near 27° Celsius (80° Fahrenheit) year-round. Annual precipitation varies from

152 centimeters (60 inches) inland to 330 centimeters (130 inches) along the coasts. Important crops to Africa's tropical wet regions include the plantain, pineapple, coffee, cocoa, and oil palms. (Oil from this palm tree is the primary cooking oil in Africa, as familiar as olive oil or corn oil in North America.)

Savanna conditions occur in much of eastern and southern Africa. Temperatures here are cooler and more variant than in tropical wet regions. Annual precipitation is between 50 and 152 centimeters (20 to 60 inches). The dry season in the savanna can last as long as six months. Important savanna crops include the cassava (related to the potato), peanuts, peppers, okra, eggplant, cucumber, and watermelon. Africa's most important grain crops, millet and sorghum, are grown here.

Desert conditions occur in northern Africa, especially in the Sahara and the Sahel. Temperatures can range from 54° Celsius (130° F) on the hottest days to freezing on the coldest nights. Annual precipitation never exceeds 25 centimeters (10 inches), and some areas go without rain for years. Important desert crops include date palms and cotton.

Mediterranean climate conditions occur along the extreme northern and southern coasts of Africa. These regions have mild temperatures, dry summers, and moderately rainy winters. Important crops include figs, olives, oranges, tomatoes, onions, and large vegetables, such as cabbage and cauliflower.

Highland conditions occur in the highest elevations of Africa, particularly in the Ethiopian Highlands. Temperatures here are much colder than the surrounding lowlands. Precipitation depends on the orientation of the mountain in relation to moisture-bearing winds. Important highland crops include alfalfa, potatoes, and wheat.

Forestry and Fishing

Forestry, the management of trees and other vegetation in forests, is an important economic activity in Africa. On average, forest products account for 6 percent of Africa's gross domestic product (GDP), more than any other continent. This is a result of Africa's abundant forest cover, with 0.8 hectares (2 acres) per person, compared with 0.6 hectares (1.5 acres) globally. In central and western Africa, where forest cover is heaviest, the forest sector contributes more than 60 percent of GDP.

The export of forest products, especially high-grade woods like mahogany and okoume, brings in significant revenue. These woods are mostly found in the countries of the Congo Basin—Cameroon, Central African Republic, Republic of the Congo, Democratic Republic of the Congo, Gabon, and Equatorial Guinea—where there is a dense rain forest. Okoume, for example, accounts for 90 percent of the trees logged in Gabon. These woods are generally exported to Japan, Israel, and the European Union. Mahogany and okoume are used to make everything from homes to musical instruments to lightweight aircraft.

Africa's forest sector, however, suffers from illegal logging and overharvesting of certain tree species. Many species of both mahogany and okoume are endangered. Experts argue that overharvesting will eventually destroy forest habitats. Saplings planted to replace the logged trees do not grow fast enough to be harvested on a regular basis, and the rain forest habitat in which these trees thrive is being destroyed for agriculture and development.

Today, Africa is torn between developing its forests to their fullest economic potential and protecting these natural landscapes from over-development. For instance, the Central African Forests Commission regulates Africa's forestry sector and promotes sustainable uses of the Congo Basin's rain forest products. The commission created the Sangha Tri-National Landscape, a reserve that covers more than 1 million hectares (2.4 million acres) of rain forest in Cameroon, the Central African Republic, and the Republic of the Congo.

Africa's fishing industry provides income to more than 10 million people and has an annual export value of $2.7 billion. Africa has fisheries on all its marine coasts, as well as inland. The Great Lakes and Nile River, for instance, support huge freshwater fisheries.

Marine fisheries are important to many coastal countries in Africa. West Africa is one of the most

economically important fishing zones in the world, producing 4.5 million tons of fish in 2000. Namibia and South Africa are also major players in the marine fish market, exporting between 80 and 90 percent of their fish annually. The Eastern African countries of Eritrea, Djibouti, Somalia, and Kenya have well-established fisheries in the Red Sea and Indian Ocean. Small fish such as herring and sardines are the most common catch on the African coastline. However, larger fish, such as tuna, cod, hake, and haddock, are the most profitable.

iii. North America

The giant redwoods that stretch over California's Redwood National Park are the tallest trees on Earth, towering to over 100 meters (328 feet). These trees are also exceptionally old. One such tree, known as "General Sherman," is the largest tree in the world by volume and is believed to be over 2,000 years old. At the time General Sherman first emerged from the ground, North America was settled by a number of indigenous groups. It would be 1,000 more years until Europeans would make contact with the Americas. Today, though many of the redwoods still remain, both the physical and human landscape of North America have profoundly changed.

Traditionally, the continent of North America extends from the Canadian Arctic through the United States and Mexico to the narrow Isthmus of Panama (see **Figure 4.1**). When considering the "region" of North America, however, that is, the area united by common physical and cultural characteristics, there are distinct similarities between Canada and the United States in terms of language and a shared history that are quite different from their Spanish-speaking neighbors to the south. Although the narrow strip of land that typically divides North and South America makes for an easy way to divide these two regions, in many ways, Middle America is largely a transition zone between more powerful economies to the north and south. Mexico, for example, culturally resembles countries like Guatemala and Honduras to the south while physiographically, it resembles the southwestern United States. Thus, the United States and Canada are discussed in the North America chapter while Mexico and Central America are considered alongside the chapter on South America.

North America has a number of significant rivers, some of which are used for shipping and others for hydroelectric power. The longest North American river is the Missouri, which forms in Montana and flows into the Mississippi River. The Mississippi River is largely considered to be the most important waterway in terms of commercial transportation. The Port of South Louisiana, located along the Mississippi, is the largest port in the United States in terms of tonnage.

Below North America lies a number of **aquifers**, or underground layers of permeable rock that hold groundwater. The largest of these aquifers is the Ogallala Aquifer located in the central United States stretching from South Dakota down to Texas. This aquifer supplies water to much of the Great Plains – it actually supplies about one-third of all groundwater used for irrigation in the United States. While aquifers are beneficial for irrigation, they replenish their water supplies relatively slowly through rainfall. Depletion of the Ogallala Aquifer has accelerated over the past few decades and currently water is being taken out of the aquifer at a faster rate than it can be replaced. Once all of the water is depleted, it will take around 6,000 years to naturally replenish. Groundwater conservation initiatives in the area have aimed to slow the depletion rate by encouraging farmers to practice sustainable irrigation methods.

While farmers have been encouraged to conserve water, groundwater depletion is just one of the many environmental concerns currently facing North America's farmers. **Sustainable agriculture** more broadly remains an important initiative. This type of agriculture looks at farming's effect on the larger ecosystem and seeks to produce agriculture in a way that doesn't negatively impact the ecosystem in the long-term. It is essentially farming that can be sustained and seeks to minimize water use, soil erosion, and harmful chemicals. Globally, over one-third of all agricultural land has become degraded due to poor land and resource management. Soil is a finite resource, and topsoil can take over 500 years to form! Traditional forms of agriculture, where you might see large

stretches of tilled land, can often lead to topsoil erosion. Through sustainable agricultural practices, soil erosion rates have slowed in the United States over the past several decades.

Many environmental problems like topsoil erosion and groundwater depletion affect a wide area and can have far-reaching effects beyond areas where the environment is not being sensitively managed. **Acid rain**, for example, formed from sulfur dioxide and nitrogen oxide emissions, can have damaging effects far beyond the areas that are emitting these gases. When cars or factories burn **fossil fuels**, those nonrenewable sources of energy formed by the remains of decayed plants or animals, they release a number of chemicals including sulfur and nitrogen. These gases react with water in the atmosphere to form a highly acidic rain that can damage plants and animals. The lower the pH value, the more acidic a substance is; pure water has a pH of 7. Acid rain can have a pH of around 5.0, or even below 4.0 in some areas. Pickles, by comparison, have a pH of around 5.20, so you can imagine the devastating effects of this acidic precipitation on the environment. The strict regulation of fossil fuel emissions since the 1970s has dramatically reduced instances of acid rain in the United States but some argue that further regulation is needed to address changes in global climate and other pollution concerns.

Q.4 Define Economic Geography of Pakistan. Explain the major industry and economic zone of Pakistan. (20)

Economic activities are the integral part of economy. In fact, organisation of these activities determines the nature of economy. Economic activities are also considered as human occupation.

Because human occupations are in a way an activity for the fulfillment of demands, i.e., gathering, hunting, fishing, livestock raising, mining, agriculture, manufacturing, etc., are human occupations and also economic activities.

The economy of a region is the reflection of economic activities and these activities have changed with the development of civilisation. Geographers are interested in spatio-temporal analysis of these activities.

Man has steadily expanded his ecumene, as we shall call the region for his habitation, by following economic pursuits, and has thus, altered the face of the earth and organised the different parts of the ecumene gradually into a complex structure of world-wide economic relationships. In doing so, man is guided by his own will as well as by the possibilities bestowed by nature. In early phase of development the emphasis was on primary occupations or economic activities but afterwards secondary activities gained importance along with tertiary activities.

Now tertiary activities are in prominence, although, primary and secondary activities are also equally important. Alexander and Gibson (1979; 51) have classified economic activities in two broad categories, i.e., subsistence and commercial. The commercial activities have been further classified as – gathering, bioculture, manufacturing, transportation and trade, and services.

In a subsistence economy, where each family performs the roles of farmer, fisherman, hunter, miner and manufacturer, there is likely to be no surplus — or a very small one. But when a family concentrates on one of these roles and becomes a full-time farmer or fisherman or miner, the usual result is an immediate surplus more of some commodity than a family can consume.

As the economy of a region tends more and more toward commercialism, producers intensify their specialisation and produce larger quantities of fewer items. Thus, there is specialisation in agriculture, fishing, forestry and mining. Specialisation appears also in secondary production, or manufacturing. With the increase in production, exchange is started. This exchange requires and gives rise to transportation and trade. With further intensification of commercialism, a new type of production arises – commercial services. Physicians, teachers, entertainers, government officials, computer

experts, lawyers, repairmen, household helpers and other service types have been developed as an economic activity. All these developments have occurred along with the growth of economy.

Industry is one of the vital sectors and makes the major portion of the economy of the country. The industry gained a great boost after the "Industrial Revolution". The countries which were previously relying solely on agriculture encouraged their industrial sector. This switch over from agricultural to industrial sector has paid the price to these countries. The examples of developed nations like America, Germany, Great Britain, Japan, Russia, China etc. are before us. On the other hand the countries which did not give weight to the industry are lagging behind. With the development of industry national income increased, the living standard improved, employment opportunities increased and the investment increased. Not only this, but there was also a great rise in agricultural production. All such developments opened new vistas for the countries. Countries of the world climbed out of the poverty and became self-dependent.

Industrialization is linked with the development of the industrial sector on a massive scale in a society i.e. changing the society from an agrarian one to an industrialized nation. This process involves technological changes, where new technology is developed and used. The Industrial Revolution was a great phenomenon in the history of the world. It started in England during the 18th century when machines began to replace manual labour in many industries. It spread through much of the world starting in the 19th century and is still continuing in undeveloped countries. The whole scenario of the production altered with the introduction of the machinery. Machines made the work faster and easier. The production exceeded the demand of the items. Resultantly the prices dropped according to the supply and demand theory. With industrial development, many other sectors of the economy also developed. In short, the Industrial Revolution brought unprecedented changes in every aspect of life.

As the 25th largest country in terms of purchasing power parity (PPP), Pakistan boasts a growing and emerging economy. The main exports from this country are textiles, rice, leather products, chemicals, carpets and sports goods. There was an estimated $30.9 billion brought in from exports in 2011, which is predicted to increase in the next 5 years as Pakistan joins forces with Bangladesh and Indonesia in the Next Eleven – which are countries which are predicted to become the leading economies in the 21st century. The following is a breakdown of the major industries in Pakistan:

A brief introduction about the major/large scale industries of Pakistan is given along the following lines.

Textile Industry

The textile industry is the largest industry of Pakistan. At the time of partition, Pakistan received only 17 textile units in its share. The production of textile was very low and a large quantity of textile had to be imported to meet the domestic, requirements. Now, Pakistan is a prominent country for the production of textile. The textile industry accounts for 17.3% of value added, 32.2% of industrial employment and 60% of total exports. There were 354 mills operating in the textile industry in 2001-02. The installed capacity of spindles was 8841 thousand and installed capacity of looms was 10 thousand in the same year. The production of cloth was 558 million square meters by the organized mills sector. Various steps have been taken by the Government for the growth of the textile industry e.g. the provision of incentives, freedom to acquire technical assistance from abroad, directly financing institutions and improvements in management and labour efficiency etc.

Vegetable Ghee and Cooking Oil Industry

At the time of independence oil industry was very poor. Now there are 150 vegetable ghee and cooking oil factories in Pakistan. Out of these 26 are in the public sector with an installed capacity of 500 thousand tonnes of ghee and cooking oil. Total production of ghee and cooking oil was 774 thousand tonnes in 2001-02. A large quantity of cooking oil is imported to meet the domestic needs.

The decline in the production of vegetable ghee is due to lower scale turnover and operational difficulties & closing down of two units in N.W.F.P.

Sugar Industry

In 1947, there were only 2 sugar factories in Pakistan, but at present there are 77 sugar factories in the industry. During the year 2001-02 total production of sugar was 3247 thousand tonnes. Revolutionary steps are required to expand the working capacity of this industry, which must be expanded and facilities should be provided to farmers for the production of better crops.

Fertilizer Industry

There are 10 fertilizer units (6 in the public sector and 4 in the private sector) in the country, having an installed capacity of 42,98,000 N. Tonnes (16,74,000 N. Tonnes in the public sector and 26,24,000 N. Tonnes is the private sector). Total production of fertilizers in 2001-02 was 5012 thousand tonnes. The low production was caused, by operational difficulties, decline in working hours and power failure/load shedding. A number of concessions are provided for the growth of this industry.

Chemical Industry

There are 12 chemical factories in the country producing, soda ash, sulphuric acid, caustic soda, chlorine gas and other chemicals. The contribution of the chemical industry towards GNP is only 3%. This industry is not fulfilling domestic requirements, so a large amount of foreign exchange is spent on the import of different chemicals every year.

Jute Industry

At the time of independence there was not a single jute factory in Pakistan. By the cooperation of PIDC, 32 factories were setup in East Pakistan and one in West Pakistan by the time of separation of East Pakistan in 1971. At present there are 12 Jute mills in the country. Total production of Jute goods was 81.7 thousand tonnes during 2001-02. Now a large quantity of Raw Jute is imported from China and Bangladesh every year to meet the domestic requirement.

Engineering Goods Industry

The engineering goods and capital goods produced domestically are very helpful for economic development of a country. This industry was given importance in the 3rd five year plan. Now we have 4 heavy engineering industries. There are

(1) Heavy Mechanical Complex, Texila

(2) Heavy Foundry Project, Taxila

(3) Pakistan Machine Tools Factory, Landhi

(4) Pakistan Steel Mills, Karachi.

All these are in the public sector. There are also a number of light and medium engineering goods industries producing a lot of items.

Ship Building Industry

Ships are constructed at Karachi. A number of small and large ships are made by Karachi yard and Engineering works. This factory was establised by PIDC. Now Pakistan is selling ships and boats abroad. In all the five year plans, this industry is given much importance.

Woolen and Worsted Textile Industry

There are 16 woolen mills in Pakistan. These are located at Karachi, Nowshera, Lawrencepur, Quaidabad and Hamai. This industry is not only meeting the worsted and woolen yam requirements of the country, but it is also exporting a large quantity of worsted cloth and carpets to foreign countries.

Cigarette Industry

At present 22 factories are producing cigarettes and Biri. Our country is self sufficient in the production of cigarettes. The raw tobacco used in the manufacturing of cigarettes is produced domestically. During the year 2001-02, 55,318 million cigarettes were produced in the country.

Automotive

As a newcomer in the automotive industry, Pakistan is stabilizing its position as one of the countries to produce durable and economical automobiles. Most cars produced in Pakistan have dual fuel options due to the natural gas reservoir in the country. CNG fares are much lower than petrol therefore it is a more favorable option for cars. Suzuki, Honda and Toyota all have vehicles which are manufactured within Pakistan.

Woollen Textile Industry

There are no industry of woollen cloth in Pakistan before partition. One difficulty is that fine woollen thread has to be imported. Country wool is not so good that it can be used in the manufacturing of good quality cloth. It is mostly used in carpet making high quality woollen cloth blanket and woollen thread in Pakistan is made in Bannu, Karachi, Lawrencepur, Hernai Multan, Noshera and Quaidabad.

Cement Industry

There was only industry of cement when Pakistan came in to being. Now many industries are working in Daud Khel, Dandkot, Hyderabad, Wah, Rohrim Jhelum, Hazara and Karachi. Calcium Carbonate, Gypsum and Special clay which is used in its manufacturing is sufficient for Pakistan. A factory is being made in Spuntungy in Balochistan with the cooperation of Iran. Second factory is under construction at Gudai in Lasbella. Factories of cement are also working in Gharibwal, Farooqui, Noshera, Kohar and Nooriabad.

Sugar Industry

Sugar factories are working in Mardan, Faisalabad, Joharabad, Bunny, Pattoki, Charsada, Larkana, Chorister, Tando Muhammad Khan, Bahawalpur, Jhung, Layyah, Darya Khan and Gujrat. Five factories in Punjab and three in Province of Sindh are being constructed. One factory is also being made in Frontier.

Leather Industry

Animal skins are the important crude material of Pakistan. Many big factories are working in Lahor, Karachi and Hyderabad. Pakistan earns enough foreign exchange by exporting new leather and leather good. Now there are eigthy factories working in Pakistan which are cleaning leather.

Paper Industry

Factories of paper making have been set up in Lahore, Noshera, Charsadda and Gharo. For newspapers need a factory is working in Hyderabad and a factory has also been set up in Shakarghar.

Card Board Industry

The needs of cardboard are also met through import. Now a factory in Noshera produces good quality of cardboard. A factory at Rahwali in Gujranwala is preparing cardboard.

Rubber Industry

The factories preparing rubber goods are working in Lahore, Sialkot and Karachi where tires and tubes of cycles. Motor cycles, scooter and heavy vehicles shoes toes, rubber seats, mats and other thins are being prepared.

Electric Goods Industry

Pakistan has progressed much in electric industry. The factories of wire making and radio circuits are progressing T.V. radio, refrigerator and air-conditioners are also being manufactured. These factories are in Lahore, Karachi, Gujrat and Gujranwala.

Iron Industry

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Machine Industry

A factory has been set up at Texilla with cooperation of China which prepares parts of engines, railway wagons, wheels and axles, road building machines etc.

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Karachi Shipyard is working in karachi which is preparing small size ships. Now it is also making big ships. A factory of ship making is also being established in Bin Qasim.

Oil Refining Industry

These industries are working Rawalpindi, Multan and Karachi.

Industry of Banaspati Ghee

In Pakistan the industry of banaspati ghee has progressed much but its production is less the need of our country. More factories are being set up. There was no ghee factory in Balochistan at the time of partition. But now two factories are working at Quetta and Temple Dera. In 1973 this industry was nationlized. Government is establishing more factories according to our needs. Two factories are located in Northern areas and one is being set up on tribal areas. Now there are 25 ghee factories in Pakistan.

Chemical Industries

In Pakistan the industries of soda ash, colour, caustic soda, sulphuric acid, insecticides and pharmacy medicines have done much progress.

Armament Industry

We are preparing Rifles, Machine Guns, Mortars and other small weapons. Pakistan is self dependent in these arms and is also exporting to other Muslim countries. At Kamra (Attock) factories are making airplanes and doing the work of their repair. Here facilities are available for repining Mirage and F-16 are also for their complete assembling. A small airplane is made at Kara to train the new pilots. Its name is Mushaak.

Miscellaneous Industries

Many other industries have also progressed much. Among them, industries of flour grinding, cigarette making, match sticks, glass making and cycle making are important.

Vital role in industry's progress

Communication plays a very important and vital role in industry's progress. If communication is in disorder, industry fails to survive. Due to lack of transportation and absence of basic infrastructure like roads, water supply, sanitation and proper disposal of waste water and solid wastes, our industry is lagging behind.

Energy crisis is further a bolt from blue for our industry. Our country is starving in electricity, oil and gas which are the most essential requirements to run industry. In spite of having vast resources of gas, oil, coal etc. our country is unable to provide uninterrupted supply of fuel to industry which is creating havoc to this sector. Last but not the least, economic restrictions imposed by donor countries and lack of effective exploitation of the World Market are also contributing to our industry's failure.

Large scale industries

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Role and production of Karachi Shipyard and Heavy Mechanical Complex

Karachi Shipyard and Engineering Works was established in mid fifties as a project of Pakistan Industrial Development Corporation (PIDC) and incorporated as a public limited company in 1957, managed by a Board of Directors with Managing Director as the Chief Executive.

Karachi Shipyard is situated at west wharf Karachi and spread over an area of 71 acres. It has a large shipbuilding hall, two block fabrication areas, three shipbuilding berths, two dry docks, a well equipped machine shop and a large grit blasting and painting facility with modern machinery for paint application under controlled environment as per international standards. A ship lift and transfer system with a lifting capacity of 7881 tons and 13 number parking stations is being installed which is planned to be completed soon. Karachi Shipyard is the only shipyard and oldest heavy engineering establishment of Pakistan, catering for shipbuilding, ship repair and general heavy engineering. It has played a historical role in transferring of technologies and broadening the industrial base of country.

Q.5 What do you mean about natural Resources of Pakistan? Explain the types of mineral resources in different regions of Pakistan. (20)

Pakistan is one of the richest countries in the world in terms of natural resources but also one of the poorest among them in their management. The country is abundant in the vital resources including that of energy, agriculture, minerals, population, and geography, but unlike the developed countries, these have not been properly exploited due to poor management. This dismayed situation is caused

due to several, both chronic and acute, flaws which have led to poor governance of country since its inception except some brief spells of economic prosperity. Prevalent political rivalry and instability, worsening law and order and rampant corruption have catalyzed the situation to resource development impasse. Contrary to economic potential of its natural resources, Pakistan is a depending on foreign aid and debt, it is facing deficit in trade, acute energy crisis to run industry, and water stress for agriculture, to name a few challenges.

However, the daunting challenges and the mounting public pressure caused due to awareness of civil society are increasingly influencing the political decision making. Eventually, there is sign of hope for devising effective strategy to exploit the natural resource wealth of the country for its self sufficiency and viable economic development. It is suffice to say that the proper exploitation of this wealth would lead to the prosperity of this nation.

Natural resources Pakistan possesses

Before discussing what natural resources Pakistan possesses, it is important to understand what constitutes natural resources. These occur naturally within environments characterised by amounts of biodiversity and geodiversity existent in various ecosystems. Some resources like water and agriculture are essential for survival of inhabitants while others like energy and minerals are secondary in nature but essential for economic development. However, efficient management of these resources is vital to achieve prosperity of nation. Natural resource management is a discipline with a particular focus on how management affects the quality of life for both present and future generations. It is interrelated with the concept of sustainable development. Pakistan is blessed with huge quantity of resources but lags in management.

Reko Diq is the name of small town situated in district Chagai, Baluchistan. It contains $270 bn proven and $3 trillion estimated gold and copper. In December, 1993, this project was given to an Australian Company BHP (Billiton) for only exploration. BHP (Billiton) sold its rights to Tethyan Copper Company, a Canadian Company. The government of Pakistan approved its license in 2006 (Musharraf government). The license is expired in Febuary2011. According to the agreement, Tethyan had 75 percent share of the profit and the government of Baluchistan had remaining 25 percent. Besides this, Tethyan Company had to pay 2 percent Royalty. Tethyan Company floated shares in European markets and earned about $60 million but nothing is given to Baluchistan Government. (Salahuddin, AG Baluchistan).

VALUE OF THE REKO DIQ MINERALS

Pakistan is rich in Natural Resources and there are uncountable resources. This can be proved by the following finding.

There is Belt of Copper, which comes from the Central Asia and passes through Pakistan (G.B, K.P and Baluchistan) and goes to Afghanistan then Iran. This is famous belt called Tethyan Copper Belt. Saindak copper and gold is also comes in this belt. This belt is so rich that you can't imagine. You can tired by mining but the resources can't be finished said by Dr Samar Mubarak Mand. The digging process will also help excavate a number of precious minerals, including zirconium and cobalt. Recently the delegation of company met with the President Asif Ali Zardari and Prime Minister Yusuf Raza Gillani and informed that, this mega project will generate only $3.5 billion for the Government of Pakistan and $ 4.5 billion for the Government of Baluchistan for the next forty years.

Being situated at one of the best geographic and geostrategic locations on the map of world, Pakistan is affluent in the natural resources. It has enormous energy surplus resource potential of both renewable and nonrenewable, which is greater than that of oil rich countries of Gulf. Among the world's 200 plus countries it has the second largest salt mines, second largest coal reserves, fifth largest copper and gold reserves, seventh largest wheat and rice production capacity. It is the sixth most populous country in the world having large share of young population. Had these resources been properly managed, this country would have been one of the richest economies of world. The detailed account of the natural wealth of Pakistan shows how such great potential has been untapped due to mismanagement.

Plenty of nonrenewable energy resources

There are plenty of nonrenewable energy resources like oil, gas and coal in Pakistan. It has more than 436.2 million barrels of oil, according to CIA World Fact Book, and 31.3 trillion cubic feet of proven gas reserves. The current oil production is 65,997 barrels per day while gas production is 4 billion cubic feet per day. Though it is not enough to meet the needs, it can save considerable outflow of currency. Moreover, there is resource potential of 27 billion Barrels of Oil and 282 TCF of gas reserves in the country which has not been explored due to lack of vision and flawed policies.

Pakistan has world's second largest coal deposits of 185 billion tons. These are estimated to be equivalent to 618 billion barrels of crude oil. This is more than twice if we compare it with oil reserves of Saudi Arabia. If it is converted into oil by gasification, it will generate 650 barrels of crude oil which at an average market rate of eighty dollars per barrel, would generate 5.2 trillion dollars. But the policy making elite of the country has not only been oblivious to the potential but also indifferent to the slow pace of efforts to harness this source for energy production and exports. The energy deficit is badly affecting the industry in country but no any serious initiative is taken for electricity production from coal. China imports its 65 percent of coal requirements but despite being 'all weather friend', this giant energy importing economy does not import coal from Pakistan.

Geography of Pakistan enriches

Besides, the geography of Pakistan enriches it with the renewable energy resources. Wind and Solar energy are other unused lifelines of Pakistan. 1046 km long coastal line gives potential of 40000 MW of electricity. The vast lands of Balochistan can be utilized for solar electricity generation. But unfortunately these resources have barely been used due to technological backwardness and lack of innovative policies.

The hydropower potential of the country is also enough to satisfy the needs of energy. Only 33 percent of around 20,000 MW generation capacity is produced from this resource which has the potential of producing 40,000 MW. No concrete steps have been taken to harness this resource mainly because of political differences and distrust prevailing in the country.

The lack of vision and policy planning in utilisation of water resource is also severely affecting agriculture. Despite having one of the largest irrigation systems of the world, Pakistan is facing water scarcity for crops. Storage capacity of water reservoirs is quickly depleting because of annual sediment inflow and a substantial quantum of available water is lost in seepage as the canals have not been cemented. Out of 77 million acres cultivable area, only 55.5 million acres have been ploughed. The country is blessed with four seasons and variety of crops but due to lack of research the productivity remains low.

Possesses tremendous scope

Being an agricultural country it possesses tremendous scope of animal husbandry. Pakistan's breeds of cow like Sahiwal cow are the best breeds of world. Due care to this area can lead to bulk of exports in dairy products. On other hand, fishing industry has an important role to play in national economy of Pakistan. The coast line of 814 km provides ample opportunity to enhance this industry, but poor performance and poor presentation of our cause in WTO have put this industry at the verge of destruction.

The minerals are also vital natural resources available in great quantity. Pakistan has fifth largest copper and gold reserves in the world. The Riko deq project, copper and gold reservoir, have been estimated to be worth of 260 billion dollars, which is ten times the all financial aid received from USA in last sixty year. But instead of exploiting own resources for economic independence, country has been dependent on foreign aid. How rich Pakistan is, and how poor Pakistanis are! There are other partially untapped resources of rock salts, Gypsum, lime stone, iron, marble, and silica sand in large quantities. These resources have not been exploited due to corruption and bottlenecks in political and bureaucratic culture.

Globalize world is human resource

The most important of the natural resources in this globalized world is human resource. Pakistan is the sixth most populous country in the world having large share of 'young population' i.e. 63 percent below age of 25 years, according to United Nations Development Programme. But the failed policies have caused mounting unemployment of 15 percent. The resource which could be used to enhance the economic activity is left to no use which is adding to the increase in poverty. The lack of opportunities leading to the brain drain of talented minds has further worsened the situation.

The above analysis reveals that Pakistan is not poor, but poorly managed country. The factors which have caused the poor management of natural resources include political instability, political indecision making / divergence, lack of vision and planning, flawed policies, bureaucratic bottlenecks and corruption, lack of human resource development, worsened law and order situation. These factors have led not only to the poor management of natural resources but also to the poor governance of country.

Political stakeholders

The political instability has been the main cause of such mayhem. Since the independence, no political group in Pakistan has been given enough time to be mature. The military interference in politics and rivalry among political stakeholders are the key features of brief history of this country. This inconsistency has kept the exploitation of natural wealth unattended. The divergence of opinion on construction of water resources has deprived the country of storing the surplus water for agriculture and electricity generation. However, this could be overcome by vision and planning, which is a scarce commodity here. Instead of controversial big dams several small reservoirs could be constructed, had a pragmatic approach prevailed among the decision making machinery.

Coupled with this, the flawed policies of successive governments have caused tremendous problems despite availability of adequate resources. The energy sector is a vivid example of such poor management. The major chunk of the electricity is produced through thermal generation for which almost 80 percent of oil is imported. Whereas the second largest treasure of coal in the world is left unexplored as it contributes only 2 percent of electricity generation. Countries like US, China and India generate electricity by almost 60 percent from coal due to its lower cost. This shows how other countries take cost of electricity generation into serious consideration.

However, it would be unfair to put all the burden of poor resource management on the political factors. The bureaucratic bottlenecks and corruption have been equally responsible for this undesirable scenario. Several hydro power projects, Thar coal project, and oil exploration projects are in doldrums due to bureaucratic bottlenecks. There is no headway in solar and wind energy projects planned by Alternative Energy Development Board. Similarly, corruption has also been extremely detrimental. The standstill in the Riko deq project is an example of this case. Pakistan is ranked at 34 in Corruption Perception Index 2010 by Transparency International, which is a discouraging factor for foreign direct investment.