

# CHAPTER 1

## **Economic Geography**

### *Scope, Content, and Objectives*

#### **1.1 Definition, Scope and Content**

Geographers define geography in several ways. Some believe that the way man lives in a place is greatly influenced by landforms, climate and soils. A few believe that human activities are determined by geographic factors. In spite of differences of opinion, all geographers will probably agree that geographical study may well include an examination of spatial patterns of on the surface of the earth. Spatial pattern and their variation have profound significance in human life.

Geography analyses and explains variations in activities over space. Economic Geography is the study of the spatial variation of activities related to production, exchange and consumption of goods and services. Whenever possible the goal is to develop generalizations and theories to account for these spatial variations. This definition was given jointly by Hartshorn and Alexander. Prof E.W. Zimmermann pointed out that "Economic Geography deals with the economic life of man with relation to environment." 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".

In pursuit of its aims, the economic geographer answers to three questions (a) where is the economic activity located? (b) What are the characteristics of the economic activity? (c) To what other phenomenon is the economic activity related? The first question relates to the location. Map provide the answer to the question "where". If no such map exists, the Geographers will have to construct



one because maps are basic tools and are essential in understanding of real relationship. The idea of pattern or distribution may facilitate the concept of location. A pattern is arrangement of an element over the surface of the earth. The world pattern of population, for example, reveals some densely populated areas in China and India, some areas of less density in U.S.A. and Russia and some sparsely settled areas in North Africa and central Australia. The second question decides the significant characteristics of the economic activity and their description. For example, what are the characteristics of tea plantation that distinguish the regions devoted to it? How many areas do the plantation farms occupy? What kind of buildings are on them? How much tea is produced? In what respects are these regions different from rice or wheat growing areas? Careful observation of the various aspects will enable the geographer to distinguish the tea producing regions both from regions of contrasting activities and from other regions of tea production. Then in terms of these characteristics a geographer finally decides where to draw the boundary of the distinctive region of his map. In answer to the third question there are four ways to investigate the relationship. [A] One useful approach is through an analysis of cause and effect. [B] Some geographers concentrate on relationship with physical and cultural phenomena. [C] An alternative approach is to consider relationship within a region and those between regions. [D] Finally, some geographers prefer to study relationship in terms of co-relationship.

Different types of economic activities like primary, secondary, tertiary, quaternary and quinary are included in this subject. Besides these, detailed study on different industrial activities, locational theories, developmental policies etc. are dealt with. Transport and communication, trade and commerce emphasize on economic development of a country. Now study on multi-dimensional aspect like economic inequality or disparity, unemployment, poverty, urbanization related with industrialization etc. also enter into periphery of economic geography.

## **1.2 Objectives**

Different points of view are held as to the meaning, approach and objectives of the subject. Economic Geography deals with the



problems of making a living. It belongs more to the field of human than to physical geography. Special emphasis is laid on economic production and trade. According to Ellsworth Huntington, "Economic Geography deals with the distribution of all sorts of material, resources, activities, institutions, customs, capacities and types of ability that play a part in the work of getting a living. Farming, manufacturing and trade are the main methods of getting a living. Hence, Economic Geography combines three main phases—agricultural, industrial and commercial—but mining, lumbering and fishing must also be considered. Economic Geography, like other branch of Geography cannot be separated from physical geography. Its main problem is to discover ways in which the distribution of physical conditions influences the distribution of the methods by which people satisfy their needs for food, clothing, shelters, tools and other products."

The study of the manner of the exploitation of the earth's resources and the limits set by physical environment is the proper scope of Economic Geography. According to Jones and Darkenwald, "Economic Geography deals with the productive occupations and attempts to explain why certain regions are outstanding in the production and exportation of various articles and why others are significant in the import and utilization of these things."

In this study of interdependence of production emphasis should be given upon the degree of human initiatives and the nature of physical forces enacting to shape certain life pattern. They should be studied as a comprehensive system of interaction between man and nature. It is not only content with the analysis of the present pattern of production and productive occupations, it also studies their dynamics. Global resources pattern change not only in response to increasing knowledge, improved skill and techniques but also, perhaps more, in relation to changing socio-political scenario. Thus, Economic Geography is much embracing subject. It not only aims at the understanding of different natural phenomena but also takes cognizance of racial traits and customs, advantages of an early start, availability of capital and labour, accumulated technical knowledge and skilled managements, stability of Governments, Governments' aids or hindrances in the form of tariffs, subsidies or urbanization schemes and so on.



Economic Geography investigates the diversity in basic resources of the different parts of the world. It tries to evaluate the effects of physical environment upon the utilization of these resources. It studies differences in economic development in different regions or economy of the world. It also studies transportation and trade resulting from this development.

The problems of economic resources have become more complex today with millions of starving and unemployed. Population disparity in the state of economic well-being and competitive attitude of many countries give rise to socio-economic problems. Economic Geography also aims at revolving such problems by better and efficient utilization of limited resources through rational, systematic, scientific and long-term planning. Economic Geography serves as an essential tool for reducing and finally eliminating world society's disparity gaps by scientific study of their economic resources, modern needs and cultural heritages.

### 1.3 Approaches to Economic Geography

Among the several methods of studying Economic geography, the four most important approaches are:

- (a) Regional Approach
- (b) Systematic or Community Approach
- (c) Activity Approach
- (d) Principal Approach

(a) **Regional Approach:** In considering this popular approach, the world, a continent or even a country or a state may be divided into geographic regions. The basic advantage of this approach is that it gives a better and comprehensive knowledge of the different parts of unit, their relationship to each other and to the units as a whole.

(b) **Systematic or Community Approach:** This approach provides a systematic description and interpretation of the distributional pattern of individual resources or commodity (e.g. wheat, rice, tea) or an industry (e.g. Iron and steel industry, cotton textile). As observed by W. Smith "it analyses the whole sequence of their development and catches them or their march to progression or retrogression."



(c) **Activity Approach:** This approach aims at dividing man's basic economic activities into three categories—Primary, Secondary and Tertiary; Primary activity is connected with nature and includes agriculture, forestry, fishing, hunting etc. Secondary activity depends on the process of converting the primary products into more usable ones like all branches of manufacturing industries. Tertiary activity sets up a link between primary and secondary activities such as trade and transportation.

(d) **Principal Approach:** In this approach generalizations are made about man and his environment on the basis of analysis of facts at a specific time point. Generalizations like "plains invite occupancy, mountain repel settlement" are made. This approach enhances the clarity of reasoning and depth of analysis. All these approaches have their own merits and limitations. Any single approach is therefore incompetent to give a complete picture of the economy of a country or a region.

#### **1.4 Innovation in Economic Geography**

Economic geography emphasizes spatial interaction among places of production and consumption. Understanding an economy requires that the fundamental economic activities as production, consumption and distribution be treated as integrated parts of a system. Economic geography, as a field of study, focuses on the flows in the economic activities of distribution. Economists are interested in the aggregate such as national totals. The supply and demand for goods or services are markets. Government policy can affect the economic characteristics of a place or region or it can directly modify patterns of spatial interaction. Innovation may be defined by technological upliftment and theoretical advancement as well.

A review of research in Economic geography and planning would be incomplete without the consideration of recent developments, research techniques and tools employed by regional planners. There is a strong case for experimenting with the application of techniques like multiple factors analysis, grouping techniques such as nearest neighbor techniques, cluster analysis to problems in spatial planning.

The review of the work done by the Indian Geographers in the field of Economic geography reveals that few geographers have been



able to free themselves from the theories of industrial location and produce a really geographical analysis of locational aspects. However, the contributions of some Indian geographers are pleading for a careful planning of industrial location with distinct regional bias refreshing expectations.

**Location Theories:** The major work on industrial location theory has been carried out by economists attempting to analyze location into the main body of economic theory. Location is concerned with spatial relationships and this has also attracted the attention of numerous geographers. The theoretical approaches are by Ricardo, John Heinrich, Von Thunen (1783-1850), Mill, Smith (1966) etc. The analysis is structured around different approaches of industrial location theory.

(a) The least cost approach (Weber-1909, Hoover-1948), (b) Market area analysis (Losch 1954), (c) recent theorists Isard *et al.* (1956) in particular have attempted to remould the Loschian approach into a more profit-maximizing approach. Loria, an Italian, suggested that industrialist seek locations that give them maximum profits considering both markets and costs in 1884, (d) modernization theory is one of the leading theories of economic development. Two models are drawn from modernization: (i) The model of the demographic transition; and (ii) The model of sectoral shifts—primary to secondary to tertiary that take place with economic growth. The basic premise of modernization theory is that historical processes are predictable and hold into the future. The past experience of some countries can be used to predict the future experiences of other countries. With respect to the demographic transition, some countries can expect a decline in their population growth rate in the future because other countries have experienced such declines in the past, sectoral shifts can be expected in some countries because they have already happened in others. The most comprehensive version of modernization theory is presented by W.W. Rostow (1978) in his description of the five stages of economic development. The first stage is 'Traditional Society' characterized by limited technology, an economy consisting of primary sector activities and low levels of capital investment. The second stage establishes the 'Precondition for Takeoff'. These preconditions come about because of increased agricultural productivity. The productivity improvements in agriculture ultimately



provide output surpluses that can be sold. These earnings become the capital surpluses needed for infrastructural development which in turn improves productivity in the economy because it serves to integrate the regions of the developing country. The third stage of development is called the 'Takeoff' and as the name implies it is period of rapid economic growth. It is brought about in response to the demands of a single growth demand of labour and capital. The single growth industry has a multiplier effect on the whole economy. The fourth stage is the 'Derived to Maturity'. At this point, the economy is broadened as the production processes that were once employed only in the dominant growth industry are now used in other industries. The final stage of development is that of 'high mass consumption' in which manufacturing becomes oriented toward the production of consumer goods and the service sectors becomes the dominant one in economy.

As historical account, Rostow's version of modernization theory is a very interesting one. It provides particular years when different countries entered the various stages of development and describes particular events that were pivotal in the progress of national economic conditions. It describes particular events that were pivotal in the progress of national economic conditions. Its general applicability as a theory of development with respect to currently developing economics is questionable, however, if only because the relevance of eighteenth and nineteenth century European history appears to be rapidly declining in the contemporary global economy. The decade of the 1980s has shown that the path of economic growth and progress is not as smooth and predictable as modernization theory implies.

**Agricultural technology and diffusions:** It is difficult to define technology. Sometimes, it is considered to simply as applied science, implying that produces developed in laboratories constitute technology when they are used in the more practical situations of the outside world. The word is used as a synonym for a set of techniques. Terms such as primitive technology and modern technology imply ways of doing things in historical context. Computer technology implies the general use of computers as a set of tools and automotive technology indicates the set of techniques that are used in building motor cars and trucks. The term agricultural technology implies a whole series of techniques and processes that are linked by their



applications to a particular type of production. In general, agricultural technology consists of a series of tools and techniques that effectively enhance the two major factors of agriculture production, land and labour, or even provides substitutes for the ways that cause agricultural productivity to increase. Not all technological advances in agriculture are embodied in machines. Advances in irrigation and drainage practices, are improvement in agricultural technology. Mechanization was in fact the primary area of technological change in agriculture from about 1800 to 1930, since that time scientific changes seem to have been more important than engineering changes. The development of chemical fertilizers and pesticide, for example, is the result of increased knowledge of biochemistry. Biotechnology is being used to improve agricultural productivity in a number of ways. All technology has some geographical source from which it spreads to other places in a form of spatial interaction called spatial diffusion. Diffusion is actually in temporal process as well as spatial one, contagious diffusion is marked by distance decay. Actual implementation of an innovation takes more time, but knowledge of the innovation is a necessary first step in its diffusion. Distance is less of a barrier to the spread of information in hierarchical diffusion.

**New Agricultural Strategy and Green Revolution:** Since the mid 1960s, the traditional agricultural practices are gradually being replaced by modern technology and farm practices in India and variable renovation is taking places in our country. As a result of new agricultural strategy, area under improved seeds has gone up from about 15 million hectares during 1970-71 to nearly 75 million hectares in 1995-96. The new varieties are of short-term duration and consequently, instead of growing one crop, two crops and sometimes even three crops are grown. In the case of wheat, unprecedented enthusiasm has prevailed among farmers in Punjab, Haryana, Delhi, Rajasthan and western Uttar Pradesh for the New Mexican varieties like Lerma Rajo, Sonara 64, Kalian and P.V. 18 and a situation developed in which the demand for the seeds by the farmers exceeded the supply. But in the case of rice, the new varieties like TN1, IR8, ADT17, which were tried and found successful on a laboratory scale could not be successful applied on the field.

Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds, simple ploughs, primitive



agricultural tools, bullocks, etc. Modern technology, consists of chemical fertilizers, pesticides, improved varieties of seeds including hybrid seeds, agricultural machinery, extensive irrigation, use of diesel and electric power, etc. Since 1966, the use of modern agricultural inputs has increased at a compound rate of 10 per cent per annum in contrast to the traditional inputs rising at the rate of only one per cent per annum during the same period. Industries supplying the modern farm inputs are growing at a rapid rate. Massive programmes of farm mechanization and irrigation have also led to an increase in the consumption of electricity and diesel in rural areas.

Increased agricultural production in a certain region would produce secondary and tertiary effects. For instance, the availability of more food in the country would decrease dependence on food imports and thereby releases scarce foreign exchange resources for other sections of the economy. Similarly, increased production of commercial crops would lead to the expansion of agro-based industries.

Achievement of the new agricultural strategy include: (a) boost to the production cereals, (b) increase in production of commercial crops, (c) significant change in crop pattern, (d) boost to agricultural production and employment, and (e) forward and backward linkages strengthened.

The new agricultural technology has made the subsistence farmers market oriented. The farmers are dependent on the market for the supply of inputs and for the demand of their output. Modern technology has definitely proved its superiority over the traditional technology only in those areas where appropriate conditions prevail only in certain selected areas. There is a requirement for the evolution of a low cost technology which can be adopted by all small farmers and which can use and exploit the local resources. A study of this aspect of economic activity is an area that requires exploration.

### **1.5 Recent Trend in Economic Geography**

Economic Geography of the world changed a lot in the last 25 years. During this period, the World economy mushroomed in size and complexity. At the same time, greater independence among nations added new dimensions to the World system. Major new work forms



emerged as the post-industrial economy revolutionized the job market. The propelling force in economic growth became information and technology in the place of traditional raw materials and smokestack industries. New forms of management and organization develop to shape and lean these changes. The World becomes particularly aware of Japanese business practices in the 1980s. The most visible and influential institution associated with business activity remained the multinational corporation, much larger than before. Governments became more actively involved in promoting economic development.

World inflation rates accelerated in the 1970s, an energy crisis emerged and a crisis of finance gained momentum as the disparities between the developed and developing countries increased in the mid-1980s. Several newly influential groups of countries became important in the global market place. These included the Organization of Petroleum Exporting Countries (OPEC) block, the Newly Industrializing Countries (NICs), the Organization of Economic Cooperation and Development (OECD) group and the European Economic Community (EEC).

World trade became a crucial factor in the development process. More and more goods were 'international' in the sense that complex combinations of management, raw materials, technology, and semi-processed goods, from many countries interacted to create them. As the less developed countries climbed the technology ladder, they began producing products at home to substitute for previously imported items and eventually began exporting more sophisticated products as well. In turn, the more developed nations moved to knowledge-intensive activities such as electronics integrated circuits, robots, aerospace, telecommunications and biogenetics.

To finance this process, nations bought and sold one another's products at an accelerating and unprecedented pace. Unfortunately, aberrations in the process have declining activities in some nations. The more developed nations generally financed the expansion of activity in less developed areas by extending credit, leading to growing dependency on the major powers by the Third World countries.

The comprehensive measures called for in the NIEO (New International Economic Order) will dominate the agenda of economic geographers in developing countries throughout the world. The measure of NIEO are grouped under the five heading in the UN



resolution-international trade, transfer of real resources, science and technology, industrialization and food and agriculture. The concern of economic geography in the 1990s and beyond must also include the heartland problems at a hierarchy of scales from local to global. The way in which economic geographers perceive these problems of growth and distribution reflects the development of the discipline over the country. Although a history of the subject is of interest for its own scale, it is also important if we are to understand the context in which economic geographers view the issues of current global concern.

**Classification of Economies:** The economy is the system of production and consumption, including the means of decision making and the allocation of resources in a particular country. Economic categorization can be made (A) by per capita propensity to exchange, (B) by level of economic development, and (C) by political-economic affiliation.

**(A) Classification by per capita propensity to exchange:** It can be approximately measured by (1) money income, and (2) real income. Money income indicates the average amount of money actually received by each member of an economy over a given period. The real income indicates the actual value of average money income of which he is member. Using this per capita real income as the master criterion, the world economies can be classified into three categories: (1) commercial, (2) commercial-subsistence, and (3) subsistence-with-some-commerce. This represents a declining order of propensity to exchange.

The commercial Economies account for nearly one-fifth of the world's people. The countries with the highest per capita propensity to exchange, nearly all of which are politically independent, are the manufacturing and commercial nations of NW Europe and their younger offshoot in North America, South Africa and Oceania.

Commercial-subsistence economies, involving about one-third of the world's population, are particularly conspicuous in Latin America, countries of West Asia, Northern Africa, Eastern Europe, Russia and the island nations of the Far East. Politically they tend to be either entirely or partially independent. Few of them are controlled completely by foreign capitals.

Nearly one-half of the world's people living under subsistence or subsistence-with-some-commerce conditions are found largely in



the low latitude of Africa and in eastern and southern Asia. Recent world trends towards nationalism are affecting many of these countries. Among the large countries that contain the basic ingredients for raising their levels of economic activity are Communist China, India, Indonesia and Pakistan. They make up the lion's share of the world's most underfed, ill-clothed, ill-housed and yet rapidly multiplying inhabitants.

**(B) Classification by level of economic development:** Following this method economy can be classified in two levels of development (i) those which are economically and technically advanced, and (ii) those which are economically and technically underdeveloped.

A multitude of criteria have been employed to determine level of economic development. Of these, two appear to generalize the results—(a) the percentage of a country's labour force in agriculture, and (b) the per-capita gross national product.

Accordingly Chile, Argentina, Uruguay are placed into the underdeveloped category while Poland, Venezuela, and Kuwait are grouped into the technically advanced ones.

**(C) Classification by political-economic affiliation:** The degree of public and private ownership is the key features of economies under this category. Accordingly there are two types: (i) economies of subordinate affiliates, and (ii) economics of sovereign nations.

Economies of subordinate affiliates are controlled mainly by their mother countries, with the rigidity and degree of that control varying with the status of the dependency. There are two affiliates of non-communist countries and affiliates of communist countries. The first category includes colonies and overseas territories. All communist nations operating independently, namely Russia belong to the second category.

Among the world's sovereign states, ownership of the means of production and exchange is primarily public or semi-public. The USA alone stands as a major nation where private ownership is outstandingly championed. The non-communist European nations are characterized by government ownership and government policy is dominant in formulating and executing economic arrangements.

Although they contain less than one-third of the world's people, the technically advanced countries tend to dominate economic affairs,



using their methods and instrument of scientific and technological know-how of capital accumulation, of a higher standard of living of outright political ownership.

Spatial organization of economic activities: Beginning in the 1950s, Economic Geography made new attempts in creating a theoretical approach and in building on the workshop economics and in relying heavily on quantitative methods to understand the 'spatial organization' of economic system. Spatial organization is the aggregate pattern of use of space by a society. It refers to the relative internal location of the elements in a spatial distribution: the location of each element relative to each other element and location of each element relative to all the other elements together.

In order to explain the spatial structure and national economic development, J. Friedmann suggested a simple model. The model shows the stages of spatial organization, a national economy passes through a primitive pre-industrial society to industrial maturity. The four stages in its progress are illustrated as—

- (i) A spatial pattern of separate cities, each in an enclave isolated from the others.
- (ii) At the time of incipient industrialization, the pattern is dominated by a single strong centre or core, surrounded by an extensive periphery.
- (iii) The core-periphery situation is gradually transformed as strong peripheral sub-centres emerge alongside the single national centre. Inter-metropolitan peripheries now replace the previous national periphery. The sub-centres bring further resources into the national economy, thus enhancing the growth potential of the economy.
- (iv) Finally, a functionally interdependent system of cities appears. Inter-metropolitan peripheries are completely absorbed and full integration of the economy is achieved, thus minimizing regional imbalances and maximizing the nation's growth potential.