Population as a Resource – Distribution and Density

The people of a country are its real wealth. It is they who utilise natural resources, shape policies, and ultimately determine the progress of a nation.

Population is not merely a number; it is a dynamic and active resource that influences economic development, social organisation, and cultural patterns.

Therefore, it becomes essential to study various aspects of population such as its size, composition, distribution, and growth.

At the beginning of the 21st century, the world population crossed 6 billion, highlighting the magnitude and importance of human presence on earth. However, this population is not evenly distributed.

In fact, uneven distribution is one of the most striking characteristics of world population. As observed by George B.

Cressey, there are “many places where people are few and few places where people are many.” This unevenness reflects variations in physical, economic, and social conditions across regions.

Population distribution refers to the way people are spaced over the earth’s surface. It helps us understand demographic characteristics and regional differences.

A remarkable feature of global distribution is that about 90 per cent of the world’s population lives on only 10 per cent of the land area. This indicates a high concentration of people in certain favourable regions, while vast areas remain sparsely populated.

Furthermore, the ten most populous countries account for nearly 60 per cent of the global population, with a majority located in Asia.

Closely related to distribution is the concept of population density, which refers to the number of people living per unit area of land, usually expressed as persons per square kilometre.

It provides a measure of the pressure of population on land and resources. Density is calculated by dividing the total population by the total area. For instance, a region with a large population but limited land area will have high density, indicating intensive use of resources and greater competition for space.

The distribution and density of population are influenced by several factors, which can be broadly classified into geographical, economic, and social categories.

Among the geographical factors, availability of water is the most significant. Water is essential for drinking, agriculture, industries, and transport.

Therefore, regions with easy access to fresh water, especially river valleys, tend to have dense populations. Landforms also play an important role. Flat plains and gentle slopes are more suitable for agriculture, transport, and settlement, whereas mountainous regions with rugged terrain and poor accessibility tend to be sparsely populated. Climate further determines habitability.

Moderate climates with comfortable temperatures and low seasonal variation attract population, while extreme climates such as deserts and polar regions discourage settlement. Soil fertility is another critical factor. Fertile soils support agriculture and thus sustain large populations, whereas infertile soils limit population growth.

Thus, population distribution is a reflection of the interaction between human needs and environmental conditions.

Determinants and Dynamics of Population Growth

In addition to geographical factors, economic factors play a crucial role in influencing population distribution. Regions rich in mineral resources attract industries, which in turn generate employment opportunities.

As a result, people migrate to such areas in search of livelihood, leading to higher population density. Similarly, urbanisation is a major factor that shapes population patterns. Cities offer better employment prospects, educational and medical facilities, and improved transport and communication systems.

These advantages attract people from rural areas, resulting in rural-to-urban migration and the expansion of cities.

Industrialisation further accelerates population concentration. Industrial regions provide diverse job opportunities not only in factories but also in services such as banking, transport, education, and healthcare.

Consequently, such regions become densely populated hubs of economic activity.

Social and cultural factors also influence population distribution. Certain places attract large populations due to their religious or cultural significance. On the other hand, areas experiencing political instability, social unrest, or conflicts often witness population outflow.

Governments may also influence population distribution by providing incentives to encourage settlement in sparsely populated areas or to reduce congestion in overcrowded regions.

Population growth refers to the change in the number of inhabitants of a region over a specific period of time. This change can be positive or negative and may be expressed either in absolute numbers or in percentage terms.

Population growth is an important indicator of a region's economic development, social progress, and historical background.

Several basic concepts help in understanding population growth. Growth of population is simply the difference in population between two points in time. Growth rate expresses this change as a percentage.

Natural growth refers to the increase in population resulting from the difference between births and deaths, while actual growth includes the effect of migration as well.

Population growth can be either positive or negative. Positive growth occurs when the birth rate exceeds the death rate or when there is significant in-migration. Negative growth occurs when the death rate is higher than the birth rate or when out-migration reduces population size.

The change in population is governed by three main components: birth rate, death rate, and migration. The crude birth rate (CBR) is the number of live births per thousand population in a year, while the crude death rate (CDR) is the number of deaths per thousand population.

Mortality rates are influenced by factors such as healthcare, nutrition, sanitation, and overall economic development.

Migration is the third key component of population change. It refers to the movement of people from one place to another, affecting both the place of origin and the place of destination. Thus, population growth is not merely a biological process but also a socio-economic phenomenon.

Migration, Demographic Transition and Population Control

Migration is an important factor that alters population size and distribution. When people move from one place to another, the place they leave is called the place of origin, and the place they move to is called the place of destination. Migration results in a decrease in population at the origin and an increase at the destination.

Migration can be permanent, temporary, or seasonal, and it can occur in different directions such as rural to urban, urban to urban, rural to rural, and urban to rural. A person migrating is simultaneously an emigrant (leaving a place) and an immigrant (entering a new place).

The causes of migration can be understood through push and pull factors. Push factors are conditions that make the place of origin less attractive, such as unemployment, poor living conditions, political instability, natural disasters, and epidemics. Pull factors, on the other hand, make the destination more attractive, including better job opportunities, improved living standards, peace, security, and favourable climate.

To understand long-term changes in population, the demographic transition theory provides a useful

framework. This theory explains how population changes as a society progresses from a rural, agrarian, and illiterate stage to an urban, industrial, and literate stage. These changes occur in three stages.

In the first stage, both birth rate and death rate are high, resulting in slow population growth. People reproduce more to compensate for high mortality caused by diseases and uncertain food supply. Life expectancy is low, and most people are engaged in agriculture.

In the second stage, death rates begin to decline due to improvements in healthcare, sanitation, and food supply, while birth rates remain high for some time. This leads to rapid population growth, as the gap between births and deaths widens.

In the third stage, both birth and death rates decline significantly, leading to stable or slow population growth. This stage is characterised by urbanisation, higher literacy levels, technological advancement, and conscious efforts to control family size.

Population control measures become essential in the context of rapid population growth. Family planning plays a key role in regulating population by spacing or limiting births. Access to contraceptives, awareness programmes, and government policies such as incentives and disincentives help in controlling population growth and improving the quality of life.

The Malthusian theory highlights the potential dangers of unchecked population growth. According to Thomas Malthus, population increases faster than food supply, which may lead to crises such as famine, disease, and war. Therefore, preventive measures are necessary to ensure sustainable development and balanced use of resources.

In conclusion, population distribution, density, and growth are interconnected aspects that reflect the complex relationship between humans and their environment. Understanding these patterns is essential for planning sustainable development and ensuring a balanced future for humanity.