12th Standard Geography

The World Population

Patterns of Population Distribution

- Population distribution means arrangement distribution of people over the earth's surface. Population is not evenly distributed as 90 percent of the world's population lives in about 10 percent of its land area.
- The 10 most populous countries of the world contribute about 60 per cent of the world's population. Out of these 10 countries, 6 are located in Asia.

Density of Population

- This means the ratio between the number of people to the size of the land. It is usually measured in persons per sq km density of population/area. Some areas are densely populated like North-Eastern USA, North-Western Europe, South, South-West and East Asia.
- Some areas are sparsely populated like near the polar areas and high rainfall zones near the equator while some areas have medium density like Western China, Southern India, Norway, Sweden, etc.

Factors Influencing Population Distribution

The population distribution is influenced by three factors i.e., geographical factors, economic factors and social and cultural factors.

Geographical Factors

Environmental or natural factors such as landforms, fertile soil, suitable climate for cultivation and availability of adequate source of fresh water are the geographical factors that affect the population distribution. Some geographical factors are:

Land Forms Flat Plains and gentle slopes are preferred by people, because these are favorable for the production of crops and to build roads and industries.

Climate Area with less seasonal variation attract more people.

Soil Area which have fertile loamy soil have more people living on them as these can support intensive agriculture.

Water People prefer to live in areas where fresh water is easily available. Because, it is the most important factor for life.

Economic Factors

Places having employment opportunities like 1 mineral rich areas, industrial units and urban centres have high concentration of population. Some economic factors are:

Industrialisation Industries provide job opportunities and attract large numbers of 'people.

Minerals Minerals deposits attract industries 1 mining and industrial activities generate employment.

Urbanisation Good civic amenities and the attention of city life draw people to the cities.

Social and Cultural Factors

Places having religious importance and cultural significance are also very densely populated areas.

Population Growth

This refers to the change in number of inhabitants of a territory during a specific period of time. When change in population is expressed in percentage, then it is called Growth Rate of Population.

When there is an increase in population by taking the difference between

births and deaths, then it is called Natural Growth of Population. There is also Positive Growth of Population which happens when birth rate is more than death rate and Negative Growth of Population when birth rate is lower than death rate.

Components of Population Change

There are three components of population change i.e., births, deaths and migration.

Crude Birth Rate [CBR]

Number of births in a year per thousand of population is expressed as Crude Birth Rate (CBR). It is calculated as:

CBR=Bi/P×100

Here, Bi= live Births during the year; P = Mid year population of the area.

Crude Death Rate (CDR)

Number of deaths in a year per thousand of population is expressed as Crude Death Rate (CDR). It is calculated as:

 $CDR=D/P\times100$

Here, D= Number of Deaths; P= Estimated mid-year population of that year.

Migration

It is movement of people across region on permanent, temporary or seasonal basis. The place they move is called place of origin and the place they move to is called place of destination.

Push and Pull Factors of Migration

The Push factors make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and socio-economic backwardness.

The Pull factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living condition

eace and stability, security of life and property and pleasant climate.

Trends in Population Growth

- Trends show that initially growth of population was very slow but after the improvement in Science and Technology, there had been tremendous growth in population which is called population explosion.
- About 8000 to 12000 years ago world population was 8 million and now it has reached to 7 billion.
- In every 12 years, 1 billion people are added. Increased agriculture and industrial production, inoculation against epidemics, improvement in medical facilities have reduced death rates.

Doubling Time of World Population

- Developed countries are taking more time to double their population as compared to developing countries.
- Oman, Saudi Arabia, Somalia, Liberia, Yemen have high population growth rates while Latvia, Estonia, Russia, Germany, etc have low growth rates.

Spatial Pattern of Population Change

- The world population growth rate is 1.4%, it is highest in Africa i.e. 2.6% and lowest in Europe i.e. 0.0% means neither grow nor decline.
- So even when a small annual rate is applied to very large population, it will lead to a large population change. There is negative correlation between economic development and population growth.

Impact of Population Change

High increase in population leads to problems like depletion of natural resources, unemployment and scarcity. Decline in population indicates that resources are insufficient to maintain a population.

Demographic Transition Theory

This theory studies the changes in the population of a region as it moves from high births and high deaths to low births and low deaths. This happens when a society progresses from rural agrarian and illiterate to urban, industrial and

literate.

There are three-staged model of Demographic Transition Theory. They are:

First Stage

- This stage is marked by high fertility high mortality rate because people reproduce more to compensate for the deaths due to epidemics and variable food supply.
- People are poor, illiterate and mostly engaged in agriculture. Life expectancy is low and population growth is slow.

Second Stage

- Level of technology increases and other facilities like medical, health, sanitation improves due to which the death rate reduces.
- But the fertility rate and birth rate remains high due to which there is huge rise in population. Population expands rapidly as there is wide gap between birth and death rate.

Third Stage

- The birth and death rate both reduces and the population moves towards stability.
- People become literate, urbanised and control the size of the family.
 There is good judicious use of technology also.

Population Control Measures

- Family planning is the spacing and preventing the birth of children.
 Thomas Malthus theory (1793) states that the number of people would grow faster than the food supply thus leading to famine, diseases and war.
- Therefore, it is essential to control the population. This is undertaken through measures like awareness for family planning, free availability of contraceptives, tax disincentives and active propaganda.