

Chapter - 2

The World Population : Distribution, Density And Growth

Structure

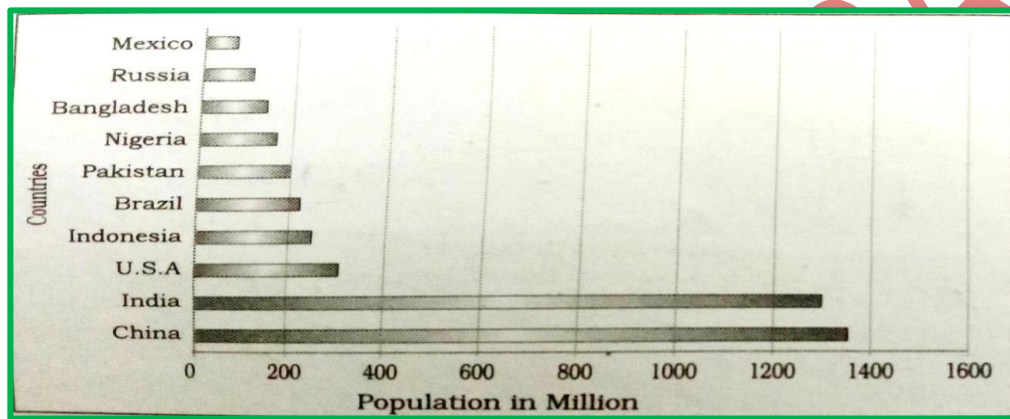
- Patterns of population distribution in the world
- Density of population
- Factors influencing the distribution of population
- Population growth
- Components of population change
- Migration
- Trends in population growth
- Doubling time of world population
- Spatial patterns of the population change
- Impact of the population change
- Demographic transition
- Population control measures.

Importance of population

- People of a country are its real wealth
- Whomakes use of its resources
- They also form the human resource base of a nation which further helps in the developmentof the economy
- World at the beginning of the 21st centuryrecorded the presence of over 6 billion population.
- The population of the world is unevenlydistributed
- George b cressy:- Asia has many places where
- people are few and few places where peopleare very many.

Patterns of population distribution in the world

- The term population distribution refers to the way people are spaced over the earth's surface.
- Broadly 90% of the world's population less than
- about 10% of its land area.
- The 10 most populous countries of the world are :



Density of population

- To understand the ratio between the number of population to the size of land
- This ratio is the density of population
- It is measured in persons per SQ. km

$$\text{Population density} = \frac{\text{total population}}{\text{total land area}}$$

Factors influencing the distribution of population

- **Graphical factors**:- availability of water, landforms, climate
- **Economic factors**:- minerals, urbanization, industrialization
- **Social and cultural factors**:- places of religious and cultural significance, health & education facilities, standard of living ETC.

Population growth

→ The population growth or population change refers to the change in number of inhabitants of a territory during a specific period of time.

→ It is an important indicator of economic development, social upliftment and historical and cultural background of the region.

Components of population change

There are three components of population change:-

- **Crude birth rate:-** expressed as number of livebirths in a year per thousand of population

$$CBR = \frac{Bi}{P} \times 1000$$

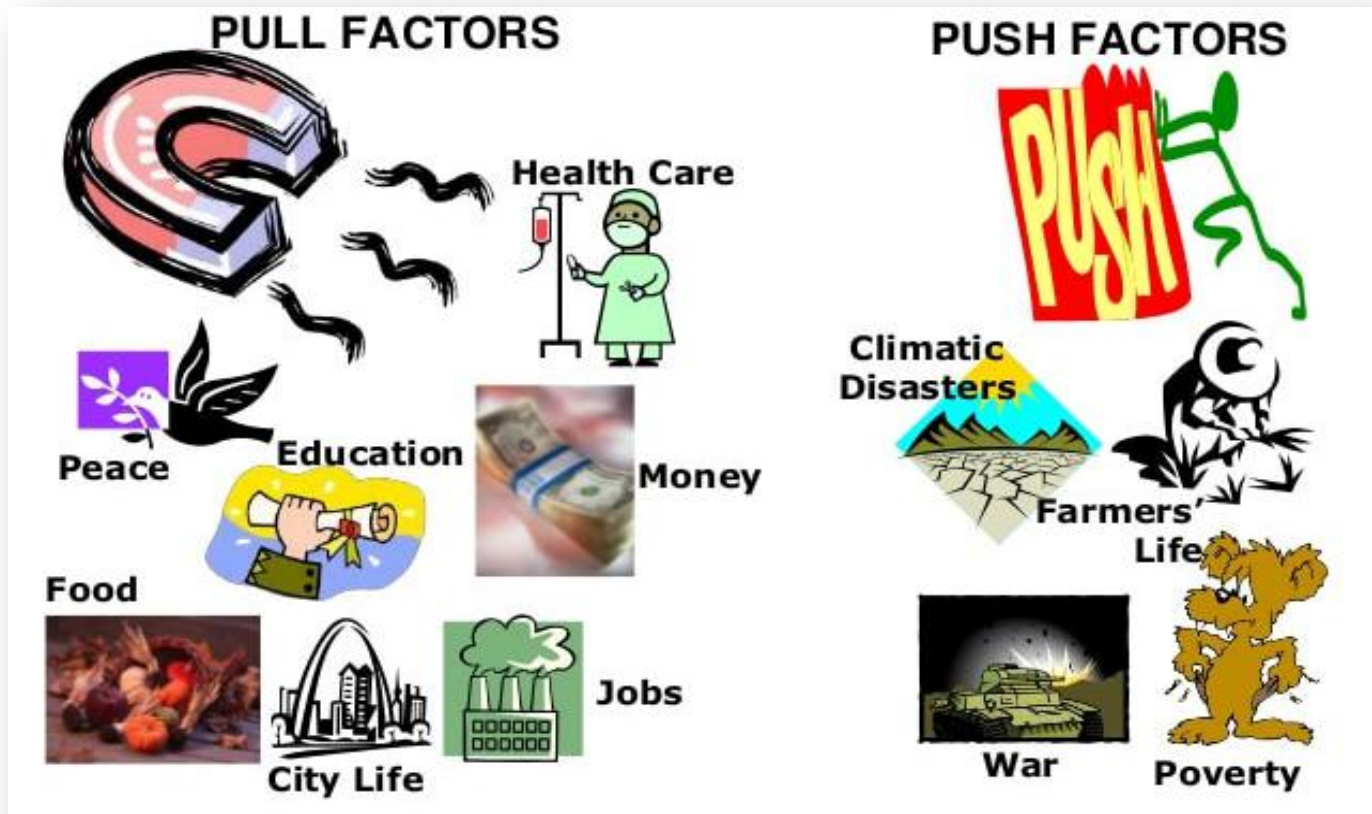
- **Crude death rate:-** It is expressed in terms of number of deaths in a particular year per thousand of population in a particular region.

$$CDR = \frac{D}{P} \times 1000$$

- **Migrations :** When people move from one place to another the place they move from is called place of origin and the place they move to is called the place of destination. It is of two types

- 1) **Immigration:-** migrants who move into a new place are called immigrants
- 2) **Emigration:-** migrants who move out of a place are called emigrants.

Reason of migration



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

Pull factor:- makes the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living condition, peace and stability, security of life and property and pleasant climate.

Trends in population growth

- Earth's population is more than 6 billion
- After the evolution and introduction of agriculture about 8,000 to 12,000 years ago, the size of population was 8 million
- In the first century A.D. it was below 300 million
- In the 16th and 17th century the population growth rate increased due to expanding world trade.
- Around 1750, at the dawn of the Industrial Revolution, the world population was 550 million.
- In the 18th century, after the industrial revolution, world population exploded.

Doubling time of world population

- It took more than a million years for the human population to attain the one billion mark
- But it took only 12 years for it to rise from 5 billion to 6 billion
- developed countries are taking more time to double their population as compared to developing countries
- Population growth rate is taking place in developing countries
- Example Yemen, Liberia, Somalia, Saudi Arabia, Oman

<i>Period</i>	<i>Population</i>	<i>Time in which Population Doubles</i>
10,000 B.C.	5 million	
1650 A.D.	500 million	1,500 years
1804 A.D.	1,000 million	154 years
1927 A.D.	2,000 million	123 years
1974 A.D.	4,000 million	47 years
2025 A.D.	8,000 million projected figure	51 years

Spatial pattern of population change

- Annual population rate change i.e. 1.6% in 1990-95 to 1.4% in 2004-05
- This is due to when a small annual rate is applied to a very large population, it will lead to a large population change
- Another main reason due to increase in infant mortality rate and increase in death rate during childbirth

Region	Growth Rate	
	1990-95	2010-15
World	1.6	1.2
Africa	2.4	2.6
Europe	0.2	0.1
North America	1.4	0.8
Latin America & Caribbean	1.7	1.1
Asia	1.6	1.0
Oceania (Australia, New Zealand and Fiji)	1.5	1.5

It shows how population is distributed over space throughout the world.

Impact of population change

Positive impact:- population change indicates economic development of a region, better opportunities and it's facilities.

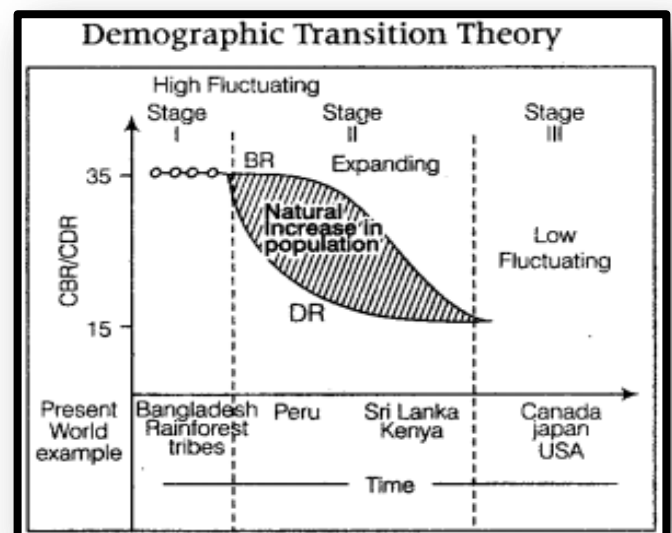
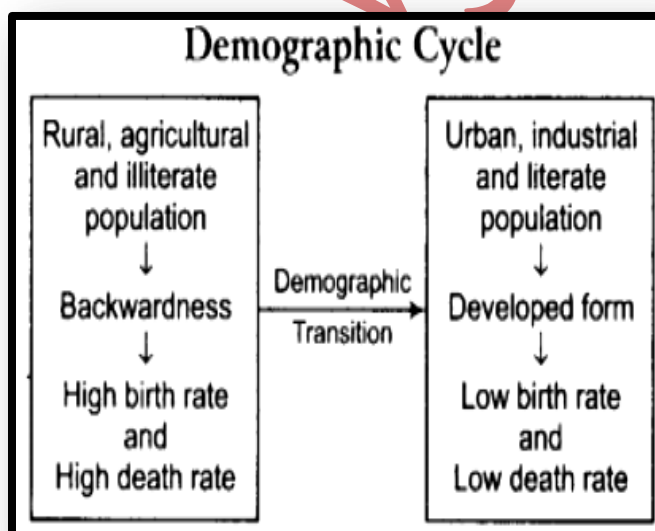
Negative impact:- population growth beyond a certain level leads to problems such as the depletion of resources due to over exploitation, It leads to increase in number of urban slums, overcrowding etc.

Demographic transition

According to this theory population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society. These changes occur in stages which are collectively known as **demographics cycle**.

There staged model of demographic transition theory

- **First stage:-** It has high fertility and high mortality rate because people reproduce more to compensate for the deaths due to epidemics and variable food supply. Population growth is slow, life expectancy is low, people are illiterate, low level of technology etc.
- **Second stage:-** fertility remains high in the beginning but it declines with time. Reduce mortality rate, improvement in sanitation and health conditions, net addition to population is high.
- **Last stage:-** both fertility and mortality declines considerably, stable population low rate of growth, urbanized, literate population and high technical knowledge controls the family size.



Population control measures

- Family planning
- Access to family planning services Is the significant factor in limiting population growth and improving women's health
- Propaganda, free availability of contraceptives and tax disincentives for large families

Thomas Malthus

In his **doomsday theory** stated that the number of people would increase faster than the food supply any further increase would result in population crash caused by famine, disease and war.

