

Chapter - 3

Population : Distribution, Density and Growth

Population is not equally distributed on the earth due to development of human civilization and its complexities. Population distribution is for regional extension from the beginning and it is difficult to study the population distribution and its density due to increasing number of political and administrative unit. It is important to study population distribution and its density in human geography. In last few decades, the importance of study of population has increased in human geography.

The analysis of patterns of population distribution and its density is the basis of demographic characteristics of a particular region. Population distribution means, What is the nature of distribution of man on the earth? Population distribution is the basic important factor for the analytical study of population.

Man : A Resource

Man is a resource and occupies a central position in natural resource because man uses its natural and cultural resources and brings changes in it. Man uses the soil, land, water, minerals, vegetables and animals. Man performs all the economic activities like production, agriculture, cattle-rearing, manufacturing industries, trade and transportation. Man develops social organization, political management and culture. Man creates culture by using natural resources.

So study of man is of great importance on the earth for a geographer.

Distribution and Density of Population

Generally, population distribution and density are understood as having the same meaning but both are different concept. In the population distribution, spatial distribution is highly emphasized i.e. it is emphasized on localization of population on the earth. On the other hand, in population density, it is emphasized on the ratio of population size and area.

Population distribution means spatial distribution of population. It shows the situational patterns of man on the surface of earth.

Population density means ratio between population and land. It is the measurement of the amount of population concentrated on some part of land, which is expressed as persons per unit area.

Distribution of population on the earth is an important subject. Population is not uniformly distributed on the earth. Nearly 80 % population of the world is concentrated only on 20 % part of land. The remaining 20 % population is distributed over 80 % area of land. The population of the world in 2001 was 6137 million or 613.71 crore. In 2013 the population of the world has increased to 714 crore. This population is unevenly distributed on 13.6 crore km² of the land surface of the earth.

Patterns of Uneven Distribution of World Population

1. Two-third of the world population resides on 14 % area. According to an other estimation, nearly 57 % of world population resides on 5 % area.
2. Two-third part of the world is uninhabited. Only 10 % population resides on 90 % part of land. 90 % of total population is concentrated on 10 % land surface.
3. 85 % population of the world resides in northern hemisphere, while 15 % population resides in southern hemisphere.
4. Three fourth population of the world resides in Asia and European continent. More than 60 % population of the world resides only in Asian continent. Only half percent population of the world lives in Oceania.
5. Approximately 80 % of the world's populations reside between 20° to 60° north latitude. Less than 1 % of the world's population lives in the north of 60° latitude.
6. About 75 % of the world population is settled on the coastal areas of the continents. The concentration of population goes on decreasing towards the interior parts of the continents.
7. Approximately 80 % of the world's population lives in areas of less than 500 meters above mean sea level.

From the above stated facts, it is clear that many large pockets of the world are having low concentration of population and some comparatively small pockets of land have very high concentration of population.

World Population Distribution

Presently the population of the world in 2001 was 613.7 crore out of which more than 75 % resides in developing countries and rest in developed nations.. According to data published by Population

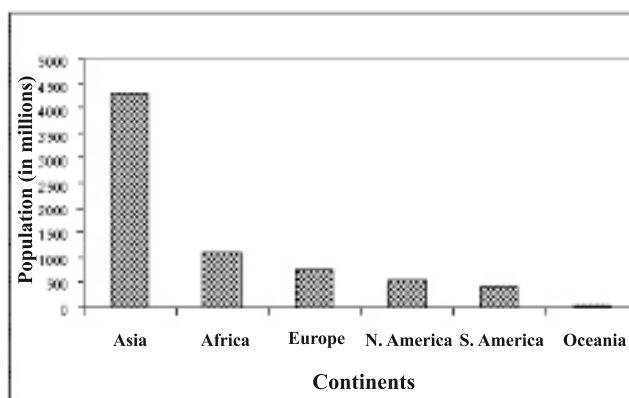
References Bureau, Washington in 2001, the population of Asia was 372 crore, Africa 81.8 crore, Europe including Russia 72.7 crore, South America 35.0 crore, North America 49.4 crore and Oceania 3.1 crore.

According to the United Nations report, the total population of the world in 2013 is 714 crore. Asia is the world's most populous continent. In Asia 60.27 % population of the world is found. 15.41 % and 10.37 % population lives in Africa and Europe. After this, North America (7.8 %) South America (5.62 %) and Oceania (10.53 %) The population distribution according to continents in the world is shown in Table 3.1 and in Graph 3.1

Table 3.1 : Population distribution Continentwise (2013)

S. No.	Continent	Population (in million)	% in world population
1.	Asia	4302	60.27
2.	Africa	1100	15.41
3.	Europe	740	10.37
4.	North America	557	7.80
5.	South America	401	5.62
6.	Oceania	38	0.53
	Total	7138	100.0

Graph 3.1 : World Population (2013)



If we see the population distribution according to countries we find great differences in their areas and their population. Some largest nations of the world have less population as compared to their

areas. Some small countries of the world have high concentration of population. According to population, some largest countries of the world are shown in the Table 3.2.

Table 3.2 : Population of major countries

S.No.	Country	Population	
		2001	2013
1.	China	1273	1357
2	India	1027	1276
3.	U.S.A.	285	316
4.	Indonesia	206	248
5.	Brazil	172	196
6.	Pakistan	145	191
7.	Russia	140	144
8.	Bangladesh	134	157
9.	Japan	125	127
10.	Nigeria	127	174
	World	6137	7138

It is clear from the Table 3.2 that China is the most populous country in the world whose population in 2013 is 1357 million. On the basis of population size India (1276 million) is at second place and U.S.A. (316 million) is at the third place. After that comes Indonesia (248 million) and Brazil (196 million).

The growth rate of population in the world is more in developing countries and less in developed countries. As per spatial distribution of population in the world 90 % population is found in Northern Hemisphere.

According to the population distribution, world can be divided into the following parts, The spatial distribution of population has been shown on map 3.1.

(1) Densely Populated Regions

There are five regions of dense population in the world. Population density is high here. These regions include China, Japan, South Korea, Taiwan and Hong Kong in East Asia, In South Asia Pakistan,



Map 3.1 : Distribution of World Population

Sri Lanka, Bangladesh and Nepal, whole South East Asia, in North-West Europe, Germany, Holland, Belgium, France, Ireland, Denmark, Spain and Italy and north-east U.S.A., South-east Canada of North America. In North America, population increased rapidly after industrial revolution of 1779.

(2) Average Populated Regions

In such geographical regions, circumstances provide general conditions for population to live. Here, man has adapted to nature. In many places, people live in adverse conditions like Andes mountain though prevailing adverse physical conditions in chilled weather due to availability of copper. In uranium town of Canada, there is dense population due to availability of uranium, In Western Australia, there is dense population due to mining of gold.

(3) Low Populated Region

This region is spread over 70 % of the world's

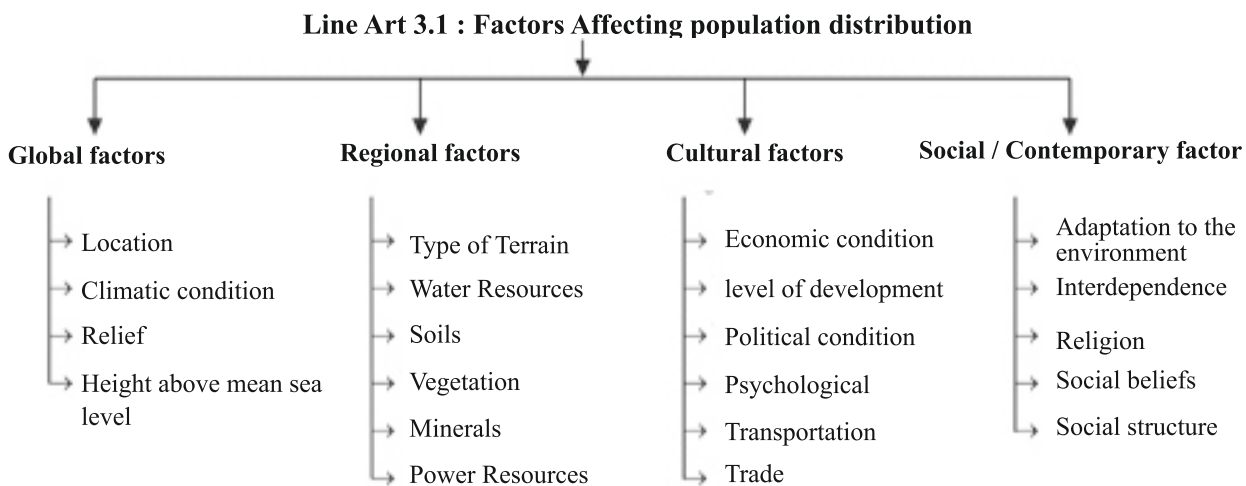
land area. Only 5 % world population resides here. Due to harsh climatic conditions, location and relief, low population is found in this region.

(4) Very low Populated Regions

Due to harsh climate and undulating surface, very low population is found in this region. Regions like very cold area, hot desert, equatorial forests, mid latitude deserts and highlands have very low population. Very low population of tribes is found here.

Factors Affecting Population Distribution

Distribution of population on earth had been changing from time to time. The main characteristic of present distribution is uneven distribution of population on the earth surface. There are many reasons for disparity in population distribution. Factors affecting population distribution are shown in Fig. 3.1



Agglomeration of Population

It is clear from the geographical analysis of population distribution in the world that 80 % of total population is found in between 20° to 60° Northern latitude. Nearly 50 % area is uninhabited because land is not favorable for human settlement. The major part of population resides in four large parts of the world. These parts are suitable for human settlement from geographical point of view.

These inhabited regions are called Agglomeration of population. These large agglomerations of population are (i) Asiatic agglomeration (ii) European agglomeration (iii) American agglomeration (iv) African agglomeration.

(i) Asiatic agglomeration :

The world's largest population is found in the Asiatic agglomeration. This agglomeration extends

from Pakistan to India, Japan, Thailand, Indonesia, Vietnam to China, Japan and Korea. Monsoon type of climate is found here, so this region is called Monsoon Asia. Asiatic agglomeration is divided in three sub region. (i) Eastern Asia- China, Japan, Korea. (ii) South East Asia- Thailand, Myanmar, Indonesia, Philippines, Vietnam. (iii) South Asia- India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka.

This agglomeration is mainly situated between 10° N to 40° North latitude. There are many fertile plains formed by rivers, which are the best agricultural regions. In this region all countries are agricultural country except Japan.

The main problem of Asiatic agglomeration is rapid population growth, which is more than 2 % per year. The rapid growth in population has increased the problem like unemployment, housing, food, poverty medical care and education etc.

(ii) European Agglomeration

It is the second largest agglomeration after Asia in the world. 740 million population is centered throughout Europe, including Russia. 75 % of which resides in the European agglomeration. (Table 3.4) The largest populous country after Russia is Germany, where 8.20 crore people reside. European agglomeration is found between 40° North latitude to 60° North latitude. Its highest density is in between 45° north to 55° north latitude, along coal belt. Here modern industries and cities have highly flourished. In the second half of 19th century after industrial revolution the accumulation of population is in the cities. Before this, the main source of livelihood in Europe was agriculture. Both birth rate and death rate are lowest in the countries of European mass, so the growth rate is stable. Even after high density of population there is no problem of excess of population. Some countries are laying stress on population growth.

More than 70 % part of European country resides in cities and are involved in manufacturing,

trade, transportation and other services. Per capita income and standard of living of these countries is high. All the countries of this group are developed.

(iii) American Agglomeration

The main extension of America agglomeration is in the north-eastern part of the Northern America in which north-east part of USA and coastal region of Canada are included. This is the third largest population agglomeration in the world. This is the newest and developed mass, whose development took place after European population migration. 80 % of this population resides in the east of 100° west longitudes and in between 30° N to 45° N latitude. 90 % of total population of American community has come from Europe. This region was endowed with transportation facilities and mineral wealth. Together with the migration of European population developed technical knowledge also got transferred whose effect fell on the development of this place. Nearly 70 % people live in cities. This group of people is more developed and well to do than European.

Population growth is controlled in American community because birth rate and death rate are totally controlled and there is strictness on migration from other countries.

(iv) African agglomeration

The population of African continent in 2001 was 81.8 crore. In 2013, the population of Africa was 110 crore which is 15.4 % of the world population. In terms of size, Africa is second after Asia. Its 70 % part is desert and uninhabited due to presence of deserts and conditions and presence of humidity in dense forest. Only 30 % part is inhabited. The population concentration is found in three regions. First is Nile river valley region, second is Guinea coast located between Zambia and Niger river valleys and the third region is southern and east coastal region of South Africa.

Population Density

The population density is the ratio of the

number of people residing in a region and area of the region. This is the main basis for estimating the progress and future development of the region. The natural resources of a region such as the area, soil, minerals, aquatic resource, forest etc. are limited. How many humans use those resources, that is, how much population is based on those resources for their livelihood. This fact determines the standard of living of that population and the extent of their economic and cultural development. So preparing plans of economic, social and cultural progress, density of population of that region is necessary to be known.

Types of Population Density

To study the various aspects of the population, density is considered as the main basis. Population density is of many types. Every aspect is helpful in its own way in analysing population. So their brief description is as follows -

1. Mathematical Density : The ratio of human and land is considered in this density. It is calculated by following formula-

$$\text{Total Population} \div \text{Total area}$$

2. Economic Density : The productive capacity of resources of that region and people living on the region is considered in economic density. The formula to calculate it, is -

$$\text{Population} \div \text{Resources}$$

3. Physiological Density or Cultivated Area Density : Land used for agriculture and people living on that land is considered in it.

$$\text{Population} \div \text{Cultivated Area}$$

4. Agricultural Density : Area of land used for farming and people living in that area is considered in it. Total population of that area is not considered but only that population is considered which is engaged in farming.

$$\text{Population engaged in Agriculture} \div \text{Area of land under farming}$$

5. Nutrition Density : In this area of land producing food crops and total population of that land is considered.

$$\text{Population} \div \text{Area of land producing food crops.}$$

Every type of population density is used for fulfilling different aims. In geography mostly mathematical density is used. It is generally calculated about the people residing per square kilometre.

$$\text{Population density} = \text{Population} / \text{Area}$$

For example Area of 'n' region is 100 square Km and population is 150,000.

Density of population will be calculated as below-

$$\text{Density} = 150,000 / 100$$

$$\text{Density} = 1,500 \text{ persons} / \text{km}^2$$

Distribution of Density of Population in the World-

Distribution of density of population in the world is also of uneven nature as the distribution of population. In the world, where population is more, high density of population is found. There is enough variation in population density in the world. The place like Sahara,, Greenland, Siberia and Mongolia have low density, less than one person per square kilometre, on the other side the density of population in Singapore is 7797 person per square kilometre. According to World Population Bureau, Washington, the population density of the world in 2015 is 47 persons per square kilometre. But due to regional differentiation, the density in Asia was 116 person, in Europe 32 person, Africa 27 person, North America 16 person, South America 20 person and in Oceania are 3 person per square kilometer. In Table 3.3, the countries having high, medium, and low density are shown.

Table : 3.3 : The population Density of Selected Countries in the World, 2013

S.No.	Country	Persons per square km
1.	Bangladesh	1088
2.	South Korea	506
3.	Rawanda	422
4.	Netherlands	405
5.	India	388
6.	Belgium	367
7.	Japan	337
8.	Sri Lanka	312
9.	Philippines	321
10.	Al- Salvador	299

Source : Population Reference Bureau, Washington D.C. 2013

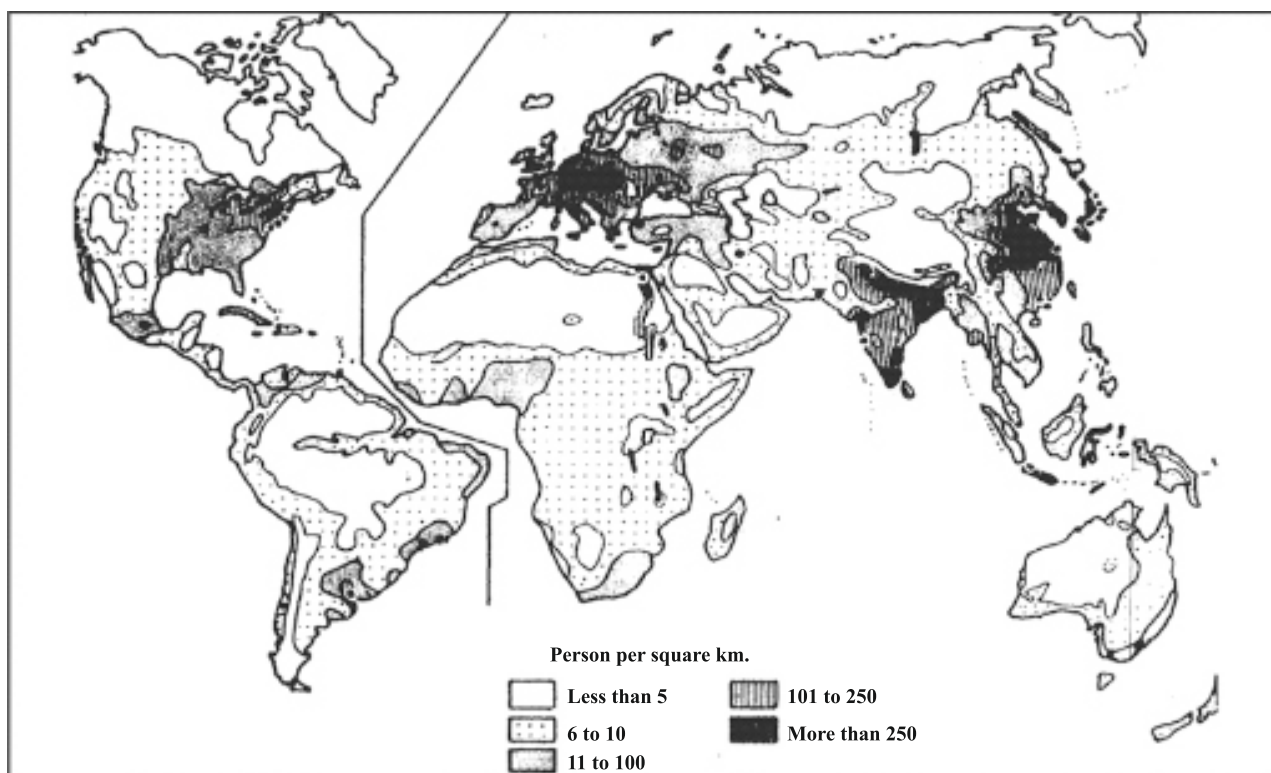
In terms of population density the world can be divided into five major parts.

(1) Areas of Very High Density- All those

countries where the population density is more than 250 people per square kilometre in the world, belongs to the areas of very high population density. It includes three population groups of the world. (i) Eastern, Southern and South East Asia (ii) Western and Middle Europe and (iii) North-Eastern America.

In these region salubrious climate, plain land, fertile soil, water, minerals, industrial development, transportation system and favorable conditions are found. Due to these conditions very high density of population is found here. Coastal region of Asia, industrial belt of Europe and industrial and trade Centre have population density of 1500, 2500 and 4000 person per square kilometre respectively.

(2) Areas of High Density- Region having population density of 100-150 persons per square kilometre belong to this group. Generally, in the marginal part of the region having very high population density, region of medium population density is spread Southern, South-east and eastern



Map 3.2 : Density of World Population

Europe, middle part of North-America, Coastal region of South America, Coastal part of Africa, internal part of North-America, Coastal region of South America, Coastal part of Africa, internal part of Asia, South-West China, Central India and South Australia belongs to this group.

(3) Areas of Average Density- Region of the world where population density is 10-100 person per square kilometre belong to this group. Temporary agriculture, pasture, forestry agricultural regions near deserts have normal population density. The grassland of Asia, Africa and north South America belong to this group.

(4) Areas of Low Density- This region of the world where population density is between 1-10 persons per square kilometre belong to this group. Sudan in Africa, Libya, Malagasy, Canada in North America, Argentina, Peru, Ecuador in South America, Western Siberia, Borneo and the gulf countries in Asia have low population density.

(5) Areas of Very Low Density or Uninhabited Populated Region - Those places of the world where population density is found less than 1 person per square kilometre belong to this group. Seventy percent land of the earth belong to this group. Very cold region, very hot region, very dry region of the world and the mountainous region situated at high altitude are almost uninhabited.

Factors Affecting Population Density

After understanding the distribution and density of the world population, it comes to mind that there are some factors that govern human settlement. These are some of the following factors that affect the availability of population and its accumulation.

(A) Physical Factors

(1) Location- Population distribution is highly affected by the location of different places of the world. Most of the world population resides in temperate zone. People like to live in plain region or less steep land. Mountain and hilly regions are

obstructive for transport development. Such regions are not favorable for agriculture and industrial development. Therefore, low concentration of population is found in such hilly and mountainous regions.

2. Availability of water- People want to settle on those places where water is easily available. This is the reason that the famous river valleys of the world are densely populated.

3. Climate- The extreme climate of hot or cold desert and areas of very high rainfall are not suitable for human settlement. Population is found to be rare in harsh climate. Mediterranean region is highly populated for its pleasant climate since ancient times.

4. Soil - Fertile soil is essential for agriculture and related activities. That is why a large number of people reside in the region having loamy soil because this soil is the base of intensive farming.

(B) Economic Factors

1. Minerals - The region rich in minerals attracts industries. Mining and industrial activities create employment. So trained and untrained workers reach to these places and make the population dense. Katanga copper belt of Africa is a good example of this.

2. Urbanization - Towns provide good opportunity for employment, better educational, medical facilities and means of transport and communication. Better urban facilities and urban life attract people towards the cities.

3. Industrialization - Industrialization attracts people on large scale. It constitutes not only the labourers for industries but also drivers, shopkeepers, workers of banks, doctors, teachers and other service sectors workers. The Osaka Kobe region of Japan is densely populated due to presence of a large number of industries.

4. Social and Cultural Factor- Some places attract people for religious and cultural importance.

In the same way people go to other places leaving their native place because of social and political unrest. Many times the government encourages people to settle in sparsely populated areas and encourage people to move away from crowded places.

Population Growth

The change in the size of the population of a geographic area in a given interval of time is called population growth. At present, mainly the population growth is visible at the national level. Due to which population change is considered to be synonymous with population growth. Population change does not pay attention to positivity and negativity of the population growth. On the other hand it is measured in term of total population. Population growth can be expressed by both as total number or percent.

For determining total growth or absolute growth of population, the last census year's population is subtracted from the population of present census year.

Table 3.4 : Population of India (in crore)

Census Year		Absolute growth
2011	2001	
121.01	102.7	18.3

To know percentage growth of population, absolute growth is divided by population of the last census and then multiplied by 100. As for example -

$$\frac{18.3}{102.7} \times 100 = 17.81\%$$

In this way, annual growth rate $17.81 / 10 = 1.781$ percent or nearly 1.78 percent growth.

World population Growth

There has been a steady increase in the population with the spatial relation. In pre historic time population growth was very slow because of harsh climatic condition, nomadic life and minimum nutrition supply. With the animal rearing

and domesticating plants, a period of growth started. Due to agricultural development, food supply increased there by enough nutrition could be obtained. In course of time, human life began to adapt themselves with various climatic conditions. As a result, humans developed the ability to withstand the extreme climate conditions.

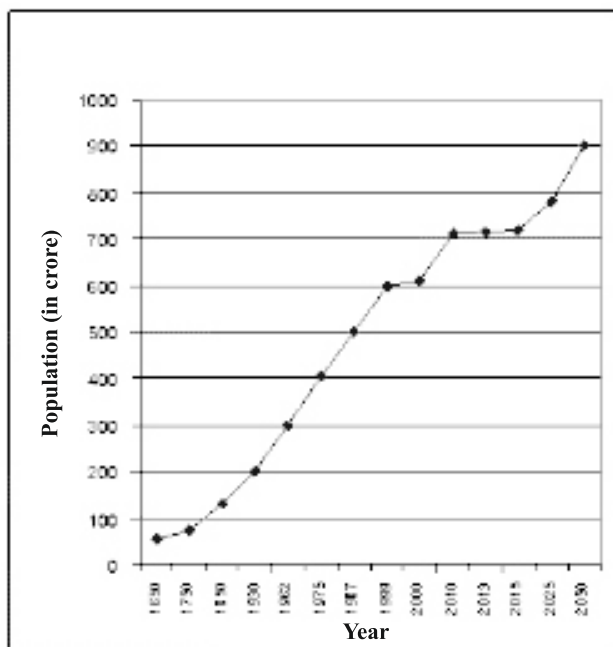
Trends of population Growth

The time of origin of humans on the earth is not much authentic. There is no direct proof of population and population growth in pre historic period. Before 18th century, the calculation of population was based on estimation. It is supposed that the origin of human on earth had happened ten lakh year's ago and at that time the population of human was only a few thousand on the earth. The time period of study of population growth can be divided into the following divisions.

(1) Pre-historic Period : The beginning of this period is considered from the age of food gathering and hunting. The food gathering and hunting was done only on the land part in the pre historic age. After the decrease of ice on continents, It is imagined that human extension took place on Africa, Australia, South Europe, South west and east Asia. Before presence of human on American land, 33 lac people lived on the earth and in course of time after 15 thousand years, increased to 53 lacs. It is estimated the average population density was 0.04 person per square kilometre of the world during this period.

(2) Ancient Period : Man started agriculture and cattle rearing at some limited part of earth before six thousand years ago from present. In this way, human civilization flourished in many parts of the world. Alongwith agriculture, development of towns started. In the beginning of Christ time the total population of the world is estimated to be 20-30 crore. In this way in Indian sub-continent, East Asia, Greek and Roman empire Mesopotamia and along with Sindhu-Saraswati civilization and Egypt were regions having large group of people.

Graph 3.2 : World Population Growth



(3) Medieval Period : According to history, it is the time period between 700 AD to 1650 AD. In 1650 AD, the total population of the world was 55 crore. In this time growth rate was very slow but in the some countries it was high. After this time, there was decrease in population due to floods, famines, epidemics and wars etc.

(4) Modern Period : From the middle of the 17th century, it is considered to be the beginning of modern time. In 1650 AD the total population of world was 55 crore. In 1750 it increased to 72 crore. In 1850 AD it doubled and increased to 133 crore. In 1950 AD, the total population of the world was 251 crore. In 2000 AD the population was 610 crore and in 2013 it increased to 714 crore. The growth of world population has been shown in Table 3.9 and Graph 3.2

Factors affecting Population Growth

The trend of population growth in the world shows that the population growth has taken place in all the continents but the rate of growth of population is not uniform in all the continents. During 99 percent period of human existence on earth, the population growth is extremely low and

growth rate is very slow. But in last 350 years, the population of the world has increased with high growth rate. In last 50 years, many countries of the world are in the population explosion state. The following factors are responsible for population growth.

(i) Decline in Death Rate : The most important cause of population growth in the world is death control. In last fifty years, due to the scientific achievement and expansion of health and medical facilities, man has controlled the contagious diseases and epidemics. This has decreased the death rate to a great extent.

(ii) Certainty in Supply of Food : The population growth rate is affected by the certainty and regular supply of food grains and other food items in the world. Mechanical and intensive farming, expansion of irrigation facilities, use of hybrid seeds and high quality manure etc. have increased agricultural production. Number of famines have also decreased.

(iii) Industrial Development : Due to industrial revolution, mining, energy, production, industries, transportation, trade, technology etc. have brought all round development in every field. This has increased the opportunity of employment. The normal standard of living of people has improved.

(iv) Development of Scientific and Technical Knowledge : New inventions have made human life easier and comfortable. This has also increased the population growth rate.

(v) Peace and Security : Due to establishment of peace and security in the world has extended and boosted up the development and hence population growth.

(vi) Migration : Due to the high birth rate compared to death rate, the population began to increase. Europeans began to migrate to North America, South America and Australia at a large scale, Therefore the population has increased in

these continents due to migration.

As far as the population growth is concerned. It has taken place in all the continents. But it is faster in one continent, while it is slower in other. The main Characteristics of population growth are as follows.

- (i) From 1650 A.D. to 1750 AD normal population growth had taken place in Asia and Europe and the population in Africa had decreased. Till then, there was very less population found in North and South America.
- (ii) From 1750 to 1900 AD population growth had taken place in all the continent but more growth was in Asia, Europe and north America.
- (iii) In 20th century, the population growth rate has increased at a very high rate. The highest population growth rate has taken place in North America and Asia. In the last 80 years the population of Asia has doubled and population in North America has increased to four times. Population growth rate have come down in Europe.
- (ic) Population growth is not uniform in all the continents. The population of the world in last three centuries has increased to nearly seven times. Before three centuries, nearly three-fourth population lived in Asia and Europe and even now too it is about three- fourth.
- (v) Population growth has taken place very rapidly in North and South America. The population of North America during three centuries has increased by 364 times. It has increased by 14 times in South America. The least growth has taken place in Africa which is only three times.

Population Problem and Solutions

The problem of population is becoming more serious in the world every day. All developed countries are beginning to get worried about this issue.

(i) Extremely High and Rapid Growth : In present times, the population of world is increasing rapidly. And if the world population remains growing at this rate than it will become 1400 crore by 2040 AD.

(ii) Limited Resources : The quantity of natural resources that feed the population is limited.

(iii) Concentrated Distribution : Distribution of population on earth is not uniform. Population is concentrated at small part of land. 90 percent population of world lives at one third part of land. The burden of population is increasing day by day. Due to increase in population the standard of living in China, India, Korea, Pakistan, Indonesia is very low.

(iv) Discouragement in the Uninhabited Land : The area of uninhabited land is nearly 70 percent part of total area of the earth. It is not hoped for human to be inhabited on such land in future.

(v) Natural and Human Restrictions : Famine generally spreads in such areas where physical resources do not bear the burden of population. Due to poverty standard of living goes so much down that death rate increases due to illness and epidemic and population begins to decrease.

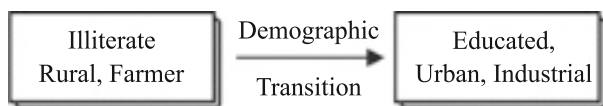
Solution to Population Problem

- (1) Increasing economic output by optimizing geographical resources.
- (2) Control on industrialization, transportation, means of communication, mining progress of industries and manufacturing industries, mechanisation, maximum production of coal, petrol and electricity etc. is essential.
- (3) Spread of awareness through education, science and technical training.
- (4) Renewal of agriculture
- (5) Use of Oceanic resources
- (6) Migration of population to uninhabited area.

- (7) Late marriage, family planning and birth control.

Demographic Transition Theory

This theory is used to describe the population of any area and the estimation of future population. This theory of population change tells us that as soon as a society, village, farmer and untrained persons step up towards developed stage and become literate, urban and industrial stage then population of any region changes from high birth rate and high death rate to low birth rate and low death rate. This change in population takes place in different stages is called Demographic Transition Cycle. This can be shown by the following flow chart.

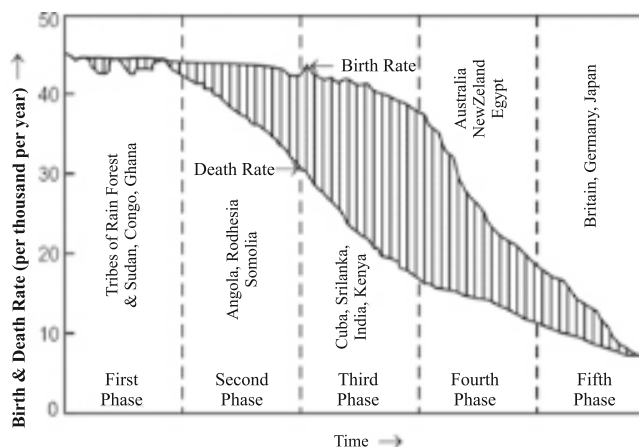


By studying the history of population growth in the world we see different stages of population growth. The United Nations has also expressed its views on various stages of population growth in its population reports. It has been divided in five stages.

- (i) High birth rate, high death rate
- (ii) High birth rate, high death rate but decreasing gradually.
- (iii) High birth rate, medium death rate
- (iv) Medium birth rate, low death rate.
- (v) Low birth rate, low death rate.

Many world famous analysts have expressed their views on these stages of Demographic Transitional Theory like Blacker, Simon, Bergedorfer.

These five stages of this theory are shown in Graph 3.2



Graph 3.2 : Demographic Transition Theory

We can understand the five stages of the above diagram at global level.

- (i) At first stage both birth and death rate are at high level. Therefore, in these countries or regions, growth of population is very slow. Countries belonging to this stage depend on agriculture. In Africa, Sudan, Congo, Ghana, Angola, Rhodesia, Nigeria and Guatemala belong to this group.
- (ii) At second stage, both birth and death rate are high but due to the development of health services, death rate appear to be decreasing. In most of the countries of African continent, the country that was at first stage up to 2000 AD are now in this stage due to literacy and urbanisation.
- (iii) At third stage, there is high birth rate and medium death rate. Hence rapid growth in population takes place. All the northern states of India, Pakistan, Afghanistan, Nepal belong to this group.

- (iv) At fourth stage, birth rate is medium and death rate is low. Newzealand, Australia, Chili, Argentina, U.S.A., Malaysia, Thailand, China, and Bangladesh belong to this group.
- (v) In the fifth stage, there is low birth rate and low death rate, in such a situation there is constant fear or decrease in the population. All the countries of western Europe and Japan have reached to this stage. In this stage, human power of the nation becomes weak. For example, the population of Russia in 1990 was 1480 Lakhs that decreased to 1420 lakh in 2007. The possibility is that it will diminish to 1330 lakhs in 2020.

IMPORTANT POINTS

1. Two-third part of the world is almost uninhabited and on 90 percent land part only 10 percent population resides.
2. 85 percent population of the world is found in northern hemisphere and 15 percent population is found in southern hemisphere.
3. Nearly 80 percent population of the world resides in areas of less than 500 meter above mean sea level.
4. Average density of world population is 44 person per square kilometre.
5. The main types of population density are mathematical density, physiological density and Agricultural density.
6. Nearly 60.3 percent of world population lives in Asia.
7. On the basis of population, the largest three countries of the world are China, India and the U.S.A. respectively.
8. In 1650 AD, the world population was 55 crore that increased to 80 crore in 1750 AD.
9. There is consistent decrease in the duration of doubling time of world population and addition of one billion population.

10. It is essential to limit the size of population to solve the problems related to population.
11. Growth rate can be expressed in the form of percent of total population.

EXERCISE

Multiple Choice Type Questions

1. Which one is second most populated country in the world?
(a) China (b) India
(c) Indonesia (d) U.S.A.
2. The largest group of people resides in-
(a) Europe (b) Asia
(c) Africa (d) South America
3. Which country has the highest population density in the world?
(a) Bangladesh (b) India
(c) China (d) Taiwan
4. Physiological density in population density is-
(a) Total Population / Total Area
(b) Total Population / Cultivated Area
(c) Farmer population / Agriculture Land Area
(d) Population / Resources
5. From which continent North America's largest population migration is -
(a) Asia (b) Europe
(c) South America (d) Africa
6. According to 2015 AD, the population density of the world is -
(a) 57 (b) 42 (c) 47 (d) 55
7. Estimated population in the year 2025 in the world will be -
(a) 781.8 Crore (b) 903.6 Crore
(b) 886.9 Crore (d) 960.6 Crore

Very Short Answer Type Questions

8. What was the population of the world in the

year 2013 ?

9. In which region of North America, the highest concentration of population is found?
10. How much percent of the world population live in northern hemisphere?
11. In which continent the population growth rate is highest due to migration.
12. How many times the population of world increased in last 350 years?
13. According to Demographic Transitional theory, India is in which stage?

Short Answer Type Questions

14. Describe briefly the economic factors that affect the population distribution.
15. Write the formula or main methods of calculation of population density?
16. Name the main regions of population concentration in the world?
17. What do you mean by population growth?
18. Describe the stages of Demographic Transition Theory.

Essay Type Questions

19. Describe the factors that affect the population distribution in the world?
20. According to population density, classifies the world population.
21. Analyse the population growth of world.

Map / Skill Based Questions

22. Show the world population growth from 1650 to 2000 AD by graph.
23. Show the density of population on map of world.