

Population

People are the nation's most valuable resource. A well-educated healthy population provides potential power to the nation. The people are important to develop the economy and society; they make resources and use them.

In India, the census provides us with the information relating to the population of our country. A census is an official enumeration (numbering) of population done periodically. The first census in India (Partial) was done in 1872, but, the first complete census was taken in 1881. The census is done every ten years in India. The Indian census is the most comprehensive source of demographic (relating to population), social and economic data. The three major aspects concerned about population are as follows:

- (i) **Size and Distribution of Population** It refers to the total number of people in the country and where they are located.
- (ii) **Population Growth and Processes of Population Change** It refers to how the population has grown and changed in its composition in a period of time.
- (iii) **Characteristics or Qualities of the Population** It refers to age, sex ratio, literacy levels, occupational structure, health conditions of people.

Population Size and Distribution

The arrangement or a spread of people of a country in different places is called population distribution. Size of population and its distribution can be studied by absolute numbers and population distribution according to the density.

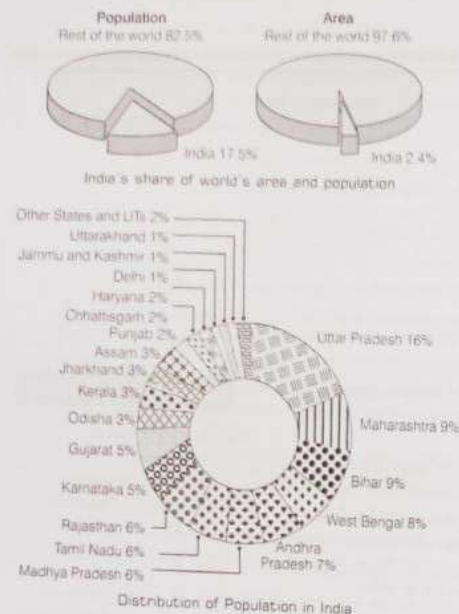
India's Population Size and Distribution by Numbers

- As per 2011 Census, population of India stood at 1,210.6 million, which is 17.5 per cent of the total world population. It is unevenly distributed over the country's vast area of 3.28 million sq km, which is 2.4% of the world's area.
- In India, Uttar Pradesh with 199 million people has the highest population (about 16 per cent of the country's population) and Sikkim with 0.6 million people has the lowest population (about 0.05 per cent of the country's population).

Chapter Syllabus

- Population Size and Distribution
- Population Growth and Processes of Population Change

- Almost half of India's population lives in just five states comprising Uttar Pradesh, Maharashtra, Bihar, West Bengal and Andhra Pradesh.
- Rajasthan which is the largest state in terms of area accounts for only 5.5 % of the total population of India.



India's Population Distribution by Density

The number of people living per unit area (sq km) in an area (state or country) is called population density of that area.

After Bangladesh and Japan, India is the third most densely populated country.

India's population density in 2011 was 382 persons per sq km. Bihar has the highest density of 1102 persons per sq km and Arunachal Pradesh has the lowest density of 17 persons per sq km.

On the basis of population density whole country is divided into three regions

- High Population Density States** These states are characterised by flat plains with fertile soils and abundant rainfall. For example, states of the

Northern plains like Uttar Pradesh Bihar, West Bengal and Kerala in the South.

- Moderate Population Density States** These states are characterised by hilly dissected and rocky nature of terrain, moderate to low rainfall, shallow and less fertile soil. For example, Assam in the North-East and most of the Peninsular states such as Maharashtra, Andhra Pradesh and Karnataka.
- Low Population Density States** These states have low population density below 250 persons per sq km. These states are characterised by rugged terrain (mountainous and desert) and unfavourable climatic conditions. For example, Arunachal Pradesh, Sikkim, Jammu and Kashmir etc.

Check Point 01

- The first complete census in India was held in the year
- India accounts for % of world's population.
- The population density of India in 2011 was person/sq km.
- Name a state of India having very high density of population.

Population Growth and Processes of Population Change

The characteristics of population such as the number of people, distribution and composition change consistently.

Population Growth

The change in the number of people of a country or state during a specific period of time is called growth of population.

Population growth is calculated at an interval of 10 years in India. The change in population growth can be expressed either in terms of absolute numbers or in terms of annual growth rate. These are discussed below

- Absolute Increase of Population** It is the absolute number of people added each year or in each decade in the population. It is obtained by simply subtracting the earlier population (e.g. that of 2001) from the later population (e.g. that of 2011).
- Annual Growth Rate of Population** It is the rate at which the number of individuals in a population increase in an year as compared to the population of the previous year (base year). It is expressed in terms of per cent per annum. For example, a rate of increase of 2% per annum means that there was an increase of 2 persons for every 100 persons in the base population.

Population Growth in India Since Independence

- India's population has increased from 361 million in 1951 to 1210 million in 2011.
- Since the year 1981, the rate of growth of population started declining gradually (2.22% in 1981 to 2.16% in 1991 and 1.97% in 2001). During this period, the birth rates declined rapidly.
- Despite declining growth rate of population 182 million people got added to the population from 1990-1999. This was the largest annual addition of people in Indian population.
- India has a very large population and even when a low annual rate is applied to a very large population, it still leads to a large increase in the number of people.
- At this growth rate, India may overtake China in 2045 to become the most populous country in the world.

Processes of Population Change/Growth

The three processes that influence the change of population are birth rate, death rate and migration. The natural increase of population is determined by the difference between birth rates and death rates. It is also known as growth rate of population. The three processes are discussed below

Birth Rate

- The number of live births per thousand persons in a year is called birth rate.
- In India, birth rate has been always higher than the death rate.

Death Rate

- The number of deaths per thousand persons in a year is called death rate.
- In India, there has been a rapid decline in death rates which led to increased rate of growth of the Indian population.

Trend of Population Growth Due to Birth Rate and Death Rate

- Till 1980, high birth rates and declining death rates resulted into high rate of population growth.
- Since 1981, due to government efforts and increased awareness, the birth rate also started to decline, resulting in gradual decline in the population growth rate.

¹ Million plus cities Cities in India with population of one million (10 Lakhs) or more included in this category.

Migration

- It is the movement of people across regions and territories.
- The movement of people within the country (from one place to another) is called internal migration.
- Internal migration does not change the population size of a country but it changes the population distribution of an area.
- The movement of people from one country to other is called international migration.
- International migration changes population size of the country as well as population distribution.

Migration Pattern in India

- In India, most of the migrations have been from rural areas to urban areas. This is due to the following factors
 - Push Factors** These include poverty and unemployment in rural areas.
 - Pull Factors** These include increased employment opportunities and better living conditions in urban places.
- Migration is also an important factor contributing to population change. It changes the population size.
- It also changes the composition of population in urban and rural areas in terms of age and sex-composition.
- Rural-urban migration has resulted in a continuous increase in the percentage of population in cities and towns.
- The urban population has increased from 17.29% of the total population in 1951 to 31.80% in 2011.
- There has been a significant increase in the number of million plus cities¹ from 35 to 53 in just one decade, i.e. from 2001 to 2011.

Check Point 02

- Population change is influenced by births, deaths and
- Change in the number of inhabitants in a country during specific period is known as
- What kind of migration takes place when a poor farmer from Bihar moves to Delhi in search of work?
- Internal migration leads to change in the of population in a country.

Characteristics of the Population

The characteristics of population are determined by age composition, sex composition, occupation structure, literacy levels and health conditions of the population.

Age Composition

The number of people in different age groups in a country is called its age composition. It is one of the most basic characteristics of a population.

A person's needs and his/her capacity to perform is influenced by age composition.

The number and percentage of population in the following three age groups is important in determining the social and economic structure of a population.

Children (Generally below 15 years)

- They are economically unproductive and need to be provided with food, clothing, education and medical care.
- This group comprises of about 34.4% of the total population of India.

Working Age (15-59 years)

- They are economically and biologically reproductive. They comprise the working population.
- This group comprises of 58.7% of the total population of India.

Aged (Above 59 years)

- They can be economically productive though they may have retired.
- They may be working voluntarily but they are not available for employment through recruitment.
- This group comprises of 6.9% of the total population of India.

Sex Ratio

The sex ratio is the number of females per 1000 males in the population.

In India, sex ratio has always been unfavourable to females due to reasons of tradition and unethical actions of people.

The sex ratio is an important social indicator to measure the level of inequality between the males and females in a society at a given time.

As per Census 2011, average sex ratio for India is 943 females per 1000 males which was 946 in 1951. As per Census 2011, the sex ratio of Kerala is 1084 females per 1000 males.

Puducherry has sex ratio of 1038 females for every 1000 males, Delhi has sex ratio of 866 females per 1000 males and Haryana has sex ratio of 877 females per 1000 males.

Literacy Rate

According to Census 2011, person aged 7 years or above, who can read and write with understanding, in any language, is treated as a literate.

The number of literates as a percentage of total population determines the literacy rate of a country. Literacy is an important quality of a population. If a citizen is literate, he/she can make more intelligent choices and also engage in research and development for his/her country. Low levels of literacy is a barrier for economic development of a country.

Although there has been a regular increase in literacy rates in the country but, rural literacy still significantly lags behind urban literacy. Female literacy in the country is still lower than male literacy.

According to Census 2011, literacy rate in the country is (74.04%) female literacy rate is 64.6% and male literacy rate is 80.9%.

Occupational Structure

It is the distribution of population according to various types of occupation. The occupations are usually categorised into primary, secondary and tertiary occupations. These are discussed below.

- **Primary occupations** are those which are based on the use of natural resources. These include agriculture, fishery, forestry, mining, quarrying, etc.
- **Secondary occupations** are those in which the extracted natural resources are processed into products for use. These include manufacturing, refining, building and construction, etc.
- **Tertiary occupations** are those which support the primary and secondary occupations by providing services. These include transportation, communications, commerce, administration, legal services, etc.
- The percentage of population that is engaged in any occupation and economically active is an important measure of development in a country.

Pattern of Working Population

- The proportion of people working in different activities vary in developed and developing countries.
- The most of the population of developing countries are working in primary occupations, whereas the most of the population of developed countries are working in secondary and tertiary occupations.
- In India, about 64% of the total population is engaged in agriculture.

- The proportion of population dependent upon secondary and tertiary sector is 13% and 20%, respectively.
- Due to industrialisation and urbanisation in recent times, a significant shift towards secondary and tertiary occupations has occurred.

Health

It is an important component of population. It affects the process of development in a country.

Life expectancy at birth² has improved from 36.7 years in 1951 to 67.9 years in 2012.

The death rate has declined from 25 per 1000 persons in 1951 to 7.2 in 2011.

The improvements in healthcare is the result of

- Improvement in public health
- Prevention of infectious diseases
- Modern medical practices to diagnose and treat ailments.

Despite these measures, healthcare and nutrition are still major issues for the Indian population in the following ways

- Availability of safe drinking water and proper sanitation are major problems in rural areas and need urgent action. Only one-third of the rural population has these basic amenities.
- The level of nutrition and per capita calorie consumption is much below the recommended level.
- Malnutrition in children is still a problem of a large percentage of our population.
- These problems can be tackled and solved by an appropriate population policy.

Adolescent Population

Adolescents are generally those people which are in the age group of 10 to 19 years. They are the most important resource for the future.

In India, adolescents constitute a large percentage of population. The adolescent form about 20% of the total population of India.

The Nutritional requirements of adolescents are much higher than those of a normal child or adult.

In India, the diet available to adolescents is inadequate in most of the nutrients. Poor nutrition may lead to deficiencies and stunted (inferior quality) growth among the adolescents.

Many adolescent girls suffer from anaemia. Awareness among adolescents can be improved through the spread of literacy and education.

National Population Policy

Family planning is regarded as an important way to improve individual health and welfare. Therefore, the Government of India initiated a Family Planning Programme in 1952.

This program aimed at promoting responsible and planned parenthood on a voluntary basis. In the year 2000, the government formulated the National Population Policy (NPP 2000), which had the following major objectives

- Providing a policy framework for providing free and compulsory school education up to 14 years of age.
- Reducing infant mortality rate to below 30 per 1000 live births.
- Achieving universal immunisation of children against all vaccine preventable diseases.
- Promoting delayed marriage for girls.
- Making family welfare a people-centered programme.

NPP 2000 and Adolescents

- National Population Policy (NPP) 2000 has greater emphasis on the important needs of adolescents including nutritional requirements, and other important needs such as protection from unwanted pregnancies, Sexually Transmitted Diseases (STDs) and education about the risks of unprotected sex.

NPP 2000 focused on programmes that aim towards

- encouraging delayed marriage and child bearing.
- making contraceptive services accessible and affordable.
- providing food supplements and nutritional services.
- strengthening legal measures to prevent child marriage, etc.

Check Point 03

1. The adolescent population in India is of the total population of the country.
2. Name two states where there are more females than the number of males.
3. Life expectancy at Birth in India is years.
4. The first National Population Policy was launched in India in which year?

² Life expectancy at birth: The average number of years a newborn child is expected to live.

SUMMARY

- People are the Nation's most valuable resource. The people are important to develop the economy and society; they make resources and use them.
- In India, the census provides us with the information relating to the population of our country. A census is an official enumeration (numbering) of population done periodically.
- As per 2011 census, population of India stood at 1,210.6 million, which is 17.5 percent of the total world population.
- Almost half of India's population lives in just five states comprising Uttar Pradesh, Maharashtra, Bihar, West Bengal and Andhra Pradesh.
- After Bangladesh and Japan, India is the third most densely populated country in the world.
- India's population density in 2011 was 382 person per sq. km.
- States of the northern plains like Uttar Pradesh, Bihar, West Bengal and Kerala in the South have high population density.
- Assam, in the North-East and most of the Peninsular states such as Maharashtra, Andhra Pradesh and Karnataka have moderate population density.
- Arunachal Pradesh, Sikkim, Jammu and Kashmir have low population density.
- The change in the number of inhabitants of a country during a particular period of time is called **growth of population**.
- Absolute increase of population is the absolute number of people added each year or in each decade in the population.
- Annual growth rate of population is the rate at which the number of individuals in a population increase in an year as compared to the population of the previous year (base year).
- The three processes that influence the change of population are birth rate, death rate and migration.
- The natural increase is determined by the difference between birth rates and death rates.
- The number of live birth per thousand persons per year is called **birth rate**.
- The number of deaths per thousand of persons per year is called as **death rate**.
- **Migration** is the movement of people across regions and territories.
- In India, most migration have been from rural to urban areas due to push and pull factors.
- The number of people in different age group in a country is called its age composition. Age composition includes three age groups such as Children (below 15 years), working age (15-59 years) and aged (above 59 years).
- Sex ratio is the number of females per 1000 males in the population. It is an important social indicator to measure the level of inequality between males and females in a society at a given time.
- As per census 2011, average sex-ratio for India is 943 females per 1000 males. As per census 2011, the sex ratio of Kerala is 1084 females per 1000 males.
- According to census 2011, a person of age 7 years or above who can read and write and understand in any one language is termed as **literate**.
- Occupational structure is the distribution of the population according to different types of occupation. The occupations are usually categorised as primary, secondary and tertiary occupations.
- Health is an important component of population. It affects the process of development in a country. Life expectancy at birth has improved from 36.7 years in 1951 to 67.9 years in 2012.
- Adolescents are generally those people which are in the age group of 10 to 19 years. The adolescent form about 20% of the total population of India.
- Family planning is regarded as an important way to improve individual health and welfare. Therefore, the Government of India initiated a Family Planning Programme in 1952.
- National Population Policy (NPP) 2000 has greater emphasis on the important needs of adolescents.

NCERT FOLDER

On Page 54

1 What could be the reason of uneven distribution of population in India?

Ans. The reason for this uneven distribution of population are

- Relief** Mountains, deserts and plateaus are sparsely populated, due to rugged terrain and infertile soil. Plains are thickly populated due to flat features and availability of fertile soil.
- Climate** The region of high rainfall have very high population whereas regions of extreme climatic conditions like very cold, very hot and dry areas have sparse population.

On Page 56

3 Consider the following table.

Year	Total Population (in millions)	Absolute Increase in the Decade (In million)	Annual Growth Rate (%)
1951	361.0	42.43	1.25
1961	439.2	78.15	1.96
1971	548.2	108.92	2.20
1981	683.3	135.17	2.22
1991	846.4	163.09	2.16
2001	1028.7	182.32	1.97
2011	1210.2	181.46	1.64

Population

The above decline in growth rate is being added increasing.

Ans. The number of people is increasing every year. A very large population is applied to a very large increase when a low growth rate is added.

On Page 59

4 Kerala has 1000 males for every 1000 females per 877 female such variable

Ans. Kerala and

(a) In India

(a) In India

1. Choose

alternative

(i) Migration

distribution

population

the