2

Demographic Structure of the Indian Society

In this chapter we will learn :

- *Meaning and Definition of Demography*
- *Main Elements of Demography*
- *Scope and Subject Matter of Demography*
- *Beginning of Modern Census and its Importance*
- *Role of Major Theoretical Approaches to the Study of Population in India*
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The scientific study of human population is called demography. As a matter of fact, demography concentrates on three population variables:

(1) Variation in the size of population (increase or decrease)

(2) Composition of population

(3) Distribution of population in the hemisphere

This way, demography is related to five population variables, namely, birth, death, migration, marriage and social mobility. All

the five variables remain continuously in progress and determine the size, composition and distribution of population. These variables are related to changes in population and other changes, such as social, economic, political, biological, genetic, geographic etc. On the other hand, demography is taken to mean a mathematical and statistical study of size, composition and distribution of human population and changes therein.

The term *'Demography'* was first used by a French Scholar, **U. Gulliard,** in 1885, in his book, *'Elements Destatique Human on Demographic Camparce'*. But its foundation as a distinct and independent science had been laid in England by **John Grant** in 1662. **John Grant** had authored his important book, *'Natural and Political Observation Made Upon the Bills of Mortality,'* in 1662. That is why he is called the Father of Demography.

Meaning and Definition of Demography

The origin of the word *'Demography'* is from the Greek word, *'Demos'* and *'Graphy'*. *'Demos'* means 'people' and *'Graphy'* means 'descriptive science'. These two root words combined together refer to a systematic, descriptive and scientific study of the people. Thus, demography means a science of the logical and systematic study of people and various related aspects.

According to **U. Gulliard,** "*Demography is a mathematical knowledge that studies the general trends of physical, social, intellectual and moral conditions and somewhere in a broader sense it is the natural and social history of the human race.*" Thus **Gulliard** has defined demography as a mathematical science; in other words, he has considered demography to be 'the science that studies the number of human beings.' Hence, demography is the science that studies all the aspects related to population.

Main Elements of Demography

(1) In short, demography is the branch of human knowledge that is related to population distribution.

(2) It studies the following two aspects of population— (i) the qualitative aspect of population, (ii) the quantitative aspect of population.

(3) The following elements are included in its scope— (i) size of human population, (ii) structure of population, (iii) local distribution of population, (iv) fertility rate, (v) mortality rate, (vi) marriage, (vii) migration, (viii) unemployment, and (ix) social mobility.

Scope and Subject Matter of Demography

Actually, the deductive method was used to study the subject matter of demography and formulate theories. However, now the inductive method is becoming more and more popular. Similarly, both the micro demography and macro demography are being used to understand the real nature of population, which is definitely more appropriate and useful. For example, if we study death in population through macro demography, we will study the injections given to control diseases and improve health and hygiene, whereas in micro demography we will study only medical individual decisions. In this sense, it is more appropriate to say that a study of combined methods produces better results and presents a more authentic picture of the reality concerning population.

The science of demography can be divided into two basic parts—(1) Formal Demographic Processes and (2) Informal Demographic Processes. In the formal demographic processes are included processes such as birth, death and migration etc. Similarly, in the informal demographic processes are included various age groups, male-female ratio, size of population on the basis of region or state and social infusion of population. In othe words demographic processes come under formal demography in which events like birth, death, migration, marriage and divorc are studied. Whereas demographic compositions are studied i social demography which is known as informal demography. Th economic and sociological problems related to population com under informal demographic processes.

The recent developments in the field of demography hav marked a shift from formal demography which takes into accou not only the demographic components but also the nor demographic components, such as, economic, social and cultur factors. The shift in demography has made this science mor relevant and meaningful because demographic changes can b explained not only from the demographic angle but also from socic economic and cultural viewpoints. Social demography as a nev branch of knowledge exists at the margin of demography an sociology.

Social demography is based on the premise that social processes and social structures regulate demographic processes and structures. This premise highlights the relevance of sociology in demographic studies. Since demographic trends are socially conditioned, social determinants need to be identified and

examined. A student equipped with sociological knowledge tries to examine how demographic variables are regulated and determined by social factors.

For example for a new born child, it is the family that provides the social context to the process of birth of children. The family, its structures, its cultural ethos and its normative order regulate the birth of the child and the fertility rate.

Social processes and social structures include a number of variables such as socialisation, communication, cultural transformation, values, beliefs, customs, mobility, education, family structure, caste, class, occupations, kinship, ethnicity, forms of marriage etc. All these procedural and structural components, in which sociologists are interested, directly or indirectly affect demographic variables and are, in turn, affected by them. Thus, the relationship between demographic and sociological variables becomes reciprocal. This reciprocity and interdependence among them become the central focus of social demography.

Beginning of Modern Census and its Importance

The beginning of modern census can be traced back to 1790 in America. In Europe, the first census is said to have been taken in the first few years of the 18th century. The first census in India took place during 1867-72 during the British rule and continued every decade after 1881. **The first census in independent India was held in 1951 and the latest and 15th census of India is held in 2011. This is a 2nd census of 21st centuary. India occupies the second place in the world in terms of population. China has the first place though census cannot be taken regularly in China. Demographic data are important for the planning and implementation of state policies, especially the policies for economic development and general public welfare.**

Is demography useful in obtaining scientific knowledge about relationships between the individual and society? The importance of demography rests in the answer to this question. Demography is the systematic study of population. Population is an important unit of society. In this sense, systematic knowledge of population is useful from both social and individual perspectives.

In the recent decades population has been growing very rapidly. Population growth has affected all walks of life; especially modern world population has affected the social and economic aspects of life. Population policy is the most important program of

the modern world. In this context, it is extremely important to have information about population.

As a matter of fact, without demographic study and knowledge, no state can determine the right direction of development and progress nor can it achieve the desired goals. **Today's age is the age of planning. And population is both the end and means of planning. Until we know the population of the country, its structure, size, distribution, age, sex, birth rate, death rate, emigration and immigration, occupational distribution and the rise and decline in numbers, we cannot make and implement plans, programs and policies related to any sphere of life. In this respect, demography has a special significance in the economic, political, administrative, socio-cultural and social welfare fields. In view of the increasing importance of demography it is apt to say that no study is complete without the study and knowledge of demography.**

The importance of demography can be summed up as follows:

(1) Demography is the branch of human knowledge that makes a systematic study of population.

(2)Today, population is the world's biggest problem and the focal point of socio-economic program.

(3) In demography we study the rate of population growth, which is the base of any development program. Therefore, none of our policies or plans can succeed unless they take into consideration all the aspects related to population.

(4) Today's children are tomorrow's leaders and nation-builders. All development programs have to be made keeping the next generation in mind. Therefore the study of demography becomes extremely important as it shows the trends in all aspects of population.

(5) Study of demography is important because it includes the study of levels of education, health, and standard of living, which is an important part of balanced development of a society.

(6) Population plays an important role in formulating national policy of a country.

(7) Employment is a basic need of human society. Demography studies employment, therefore it is important from that angle as well.

(8) Population and food are inter-related. Our food policy cannot succeed unless it takes into consideration all the aspects of population. Demography is an important source for providing inputs about population and food supply.

(9) Study of demography is important for knowing the trends in population for social organization as well.

(10) Population is one of the problems of modern life. It gives rise to many other problems that cause social disintegration and imbalance. Therefore demography is very important.

(11) Demography determines the speed of social mobility, which maintains social integration, balance and stability.

(12) Demography helps in the choice of professions as well.

(13) Demography has a special significance in establishing international peace and prosperity.

(14) Demography is an important foundation for developing social relationships. Demography has given a scientific form to the institutional and structural components of population. Consequently, it is seen as an important measure for correcting mistakes made on the way to human civilization.

Role of Major Theoretical Approaches to the Study of Population in India

If we look at the trends of population growth in India, we find that the rate of growth is very high. Since the size of population has gone beyond the available resources, scholars are concerned to view the problems of overpopulation from different perspectives. To them, this problem is closely related to with the problem of underdevelopment. The dominant view is that population growth in India is adversely affecting development and, therefore, population has to be controlled at the earliest. It is because of this reason that the **National Population Policy** (2000) aims at stabilising population at a level consistent with the requirements of the national economy. The problems of over-population and of under-development have been examined from various perspectives. They may be classified into four broad categories:

1. Demographic Perspective
2. Economic Perspective
3. Sociological Perspective
4. Historical Perspective

1. Demographic Perspective

This perspective is concerned mainly with the ideas of Malthus and New-Malthusian thinkers.

- ***Malthusian Theory of Population***

Thomas Robert Malthus (1766-1834) was an economist who looked at the problems of population from the demographic point of

view. In 1798, he expounded his theory on population in his article, *An Essay on the Principle of Population*. This perspective is based on the empirical work conducted by **Malthus** and others after an in-depth study of the various contemporary conditions, prevalent optimistic views mainly in European countries. The essence of those studies is known as ***'Malthusian Theory of Population'.***

• ***Main Aspects of the Principle***

◆**Assumptims—Malthusian theory of population** is based on the following assumptions:

(i) The sex urge in men and women is not just inherent, but permanent; its direct outcome is reproduction.

(ii) Food products are essential for human subsistence.

(iii) Reproduction and economic prosperity have a direct and strong relationship.

(iv) The means of production, mainly land, has a limited capacity for producing subsistence.

◆**Population increases in Geometric Ratio—Malthus** believes that population increases in a geometric ratio. He says that there has always been and will remain an attraction between men and women. The sex urge is inherent and irresistible, hence reproduction is natural. If population is not controlled it will double in 25 years. The geometric ratio means– 2, 4, 8, 16, 32, 64, 128, 256 and so on. It is shown in diagram (i).

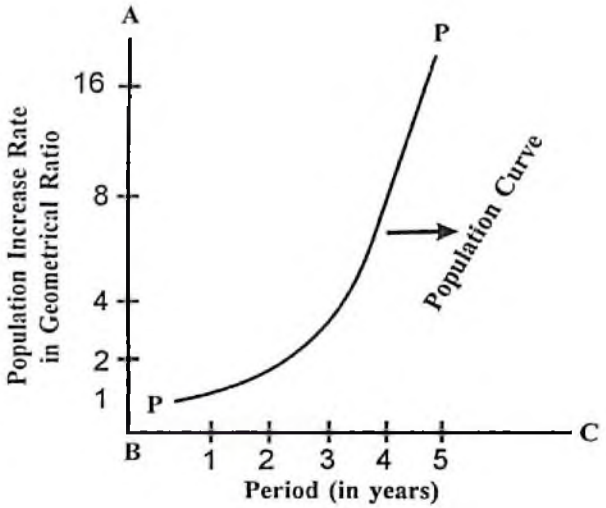


DIAGRAM (i) : POPULATION INCREASES IN GEOMETRIC RATIO

Population has a natural tendency to increase faster than the level of subsistence.

◆ **Food Production increases in Arithmetic Ratio**—Food production tends to increase in arithmetic ratio due to the diminishing return from the sources of production, mainly land. By arithmetic ratio is meant–1, 2, 3, 4, 5, 6, 7, 8, 9 and so on. In agriculture the principle of diminishing returns apply, because land has limited capacity to produce. There is an antagonism between the power of population and the power of the earth. Population increases in geometric ratio and subsistence increases in arithmetic ration, leaving a wide gap in between. It is shown in diagram (ii).

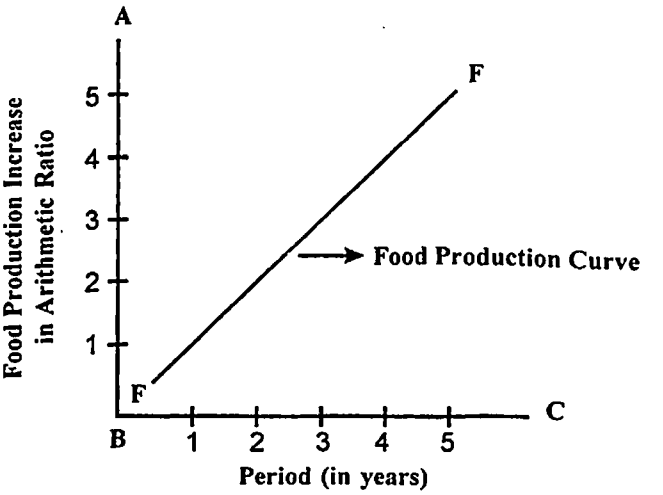


DIAGRAM (ii) : FOOD PRODUCTION INCREASE IN ARITHMETIC RATIO

◆ **Imbalance between Population and Food Production**—Although population and food production increase, there is a big difference in the rate of growth of the two. Because population increases in geometric ratio and food products increase in arithmetic ratio. In other words if food products increase in five years at the ratio of 1, 2, 3, 4, 5, which means in five years they increase five times. On the other hand population increases 16 times in five years 2, 4, 8, 16. Thus it leaves a wide gap in between.

Malthus said that this gap leads to drastic consequences. He has written, *"Prosperity was not depend on population, but population was to depend on prosperity."*

◆ **Population Control**—Malthus has suggested two kinds of checks on the increasing growth of population: Positive checks and Preventive checks.

(A) Positive Checks—These are checks imposed by nature. If population goes on increasing, nature itself imposes positive checks such as war, epidemic, plague and famine, floods, earthquakes, which tend to shorten human life. According to **Malthus,** *"The table of nature is laid for guests, hence those who come uninvited will have to go hungry."* He has described the natural checks as extremely painful and difficult. Although it helps to achieve a balance between population and subsistence by increasing the death rate, after some time population increases again and the same imbalance occurs. This situation moves like a wheel and some scholars have termed it **'The Malthusian Wheel.'**

According to **Malthus,** *"Because of difficulty of livelihood, there is a constant check and force on population."*

(i) Although natural forces keep a check on population, they are miseries, and should be avoided.

(ii) He was of the opinion that if the natural checks are being applied in a country, it implies that subsistence level of that country has gone far below the population of the country. This state should not be allowed to happen. This is reflected in diagram (iii).

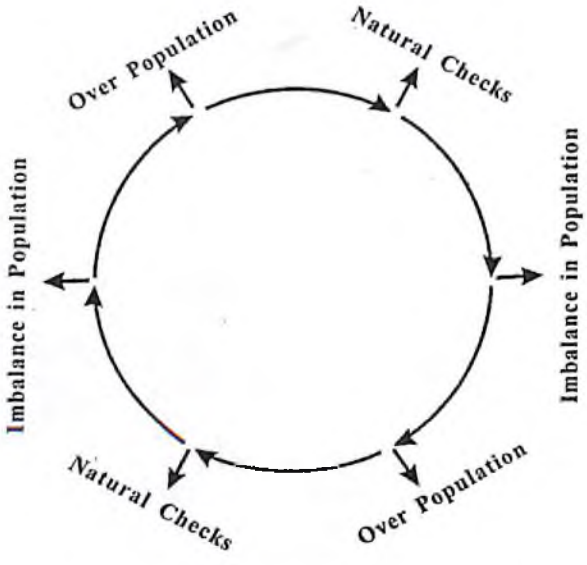


DIAGRAM (iii) : IMBALANCE IN POPULATION

(B) Preventive Checks—Malthus believes that human effort to control population is far more effective and lasting. These checks are of two types:

(i) Moral Checks—As a matter of fact, **Malthus** considers moral checks as the only way to prevent the increase in population. These checks include moral restraint like celibacy, delayed marriages and other methods of birth control. According to him moral restraints is the only way humanity can be saved from natural calamities, which occur to maintain a balance between population and subsistence. Knowing that men are more sexual he had appealed to women to exert more restraint and not marry till the age of 28.

(ii) Artificial Means of Control—This includes all the means of birth control popular in the present times. But Malthus considered these means to be sins and irreligious. Being a Christian priest he professed population control by moral restraints rather than artificial means. He said people should be made aware and interested in moral restraints.

2. Economic Perspective

Marxian approach as an economic perspective on population is perhaps the most important. **Karl Marx** (1818-1883) and Marxist writers do not support the Malthusian perspective because they say certain economic conditions create the problem of over-population. Those conditions are created by the capitalist mode of production.

The main features of the economic perspective are:

(i) Population growth depends on the economic state of the people.

(ii) There is no universal law of population and food production. If there is any law, it is historically determined in accordance with the changes in the mode of production.

3. Sociological Perspective

Under this perspective various demographic processes and structures are viewed as integral parts of the larger social system. This suggests that social institutions and social processes determine demographic processes. This perspective lays special emphasis on social determinism. The demographic processes and structures are conditioned by a number of socio-cultural factors and forces. No single factor is the most determining factor. The main features of this perspective are as follows:

(i) From the sociological perspective there are limitations in the Malthusian and Marxist perspectives.

(ii) It is a holistic approach because it takes into account the problem of population in its totality in which a number of socio-economic and cultural factors interact with demographic factors. Therefore certain institutional patterns become responsible for high or low rate of population.

(iii) According to this perspective the problem of over-population is also linked with the traditional norms in favour of high fertility and large family size.

In fact, the sociological perspective seems to be more appropriate for understanding the Indian situation. India is, by and large, a semi-traditional society where socio-cultural factors have deep roots in the organic structure of Indian society. If we examine the cultural ethos of Indian society, it seems that the people of this country have always been in favour of large family size. Children are regarded as social and cultural assets. Such a traditional base still influences the modern trends. Appropriate changes in our socio-cultural system may facilitate the acceptance of small family size. For that fast economic development is the only solution.

4. Historical Perspective

This perspective is also known as the three-stage model of demographic transition. This perspective gives a generalised explanation of socio-demographic changes passing through three well defined stages of transition from 'ancient' to 'medieval' to the 'modern' stage. These three stages indicate an evolutionary sequence of changes from simple to complex and from a high to a low fertility-mortality rate.

The main features of this perspective are as follows:

(i) It signifies a clear sequence of evolutionary socio-economic and demographic changes.

(ii) The changes follow an identical pattern of change from simple to complex and from a high to low fertility-mortality rate.

However, the historical perspective makes generalisations based on limited empirical supports and is based on the western experiences to a large extent. Therefore it may not be very relevant to the Indian conditions.

Theory of Demographic Transition

An important theory of demography is the theory of demographic transition. According to this theory population growth is associated with all the stages of economic development and each society adopts a particular pattern of development related to its population growth. There are three basic phases of population growth—the first stage is of low population growth in a society that is underdeveloped and technologically backward. The second stage is when population growth rates are low because the death rate and the birth rate are very high, which keeps the net growth pretty low. The third phase is also one of low growth in a developed society where both death rate and birth rate are low and the difference between them remains small.

This is the state of population explosion, which happens when death rates are brought down relatively quickly through advanced methods of disease control, public health and better nutrition. On the other hand, society cannot bring down the birth rate Western Europe went through this phase of population explosion in the last decades of the 19th century and beginning of 20th century. More or less similar patterns have been followed by the less developed countries that are struggling to reduce the birth rate.

Table 1: Demographic Transition in India

Census Year	Birth Rate (per 1000)	Death Rate (per 1000)	Population growth rate (per 1000)
1901	49.2	42.6	6.6
1911	48.1	47.6	0.5
1921	46.4	36.3	10.1
1931	45.2	31.2	14.0
1941	39.9	27.4	12.5
1951	41.7	22.8	18.9
1961	37.9	15.8	22.0
1971	36.0	14.8	21.2
1981	29.2	10.1	19.1
1991	25.0	8.0	17.0
2001	21.3	8.0	13.3
2011	22.5	7.3	15.8

In India the theory of demographic transition was adopted but so far no success has been achieved. Death rate has been reduced but the birth rate is continuously rising, which is causing the condition of population explosion. This is explicit from Table 1 and diagram (iv).

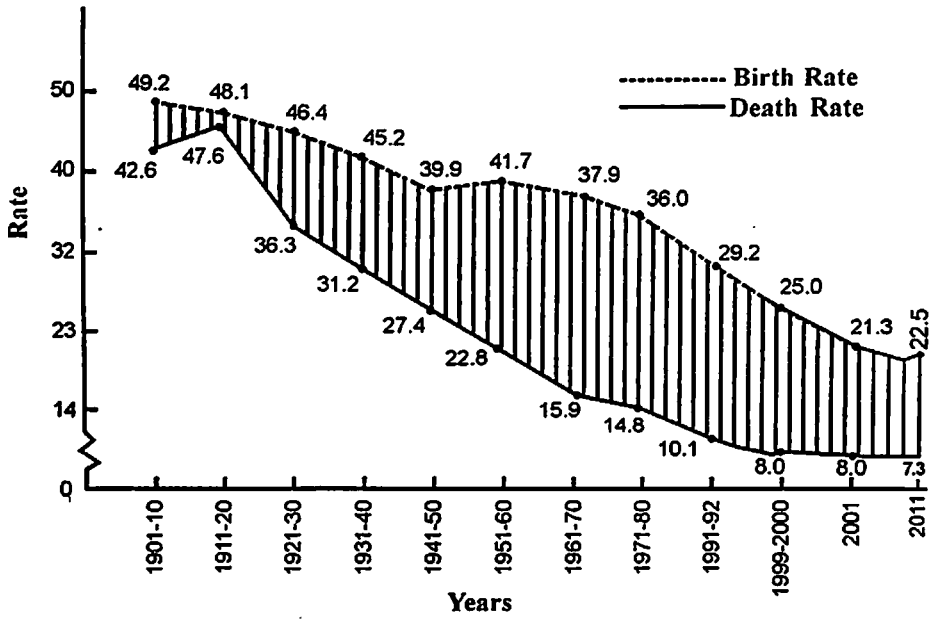


DIAGRAM (iv) : DEMOGRAPHIC TRANSITION IN INDIA

After 1871 the third phase of the theory of demographic transition has started. Birth rate has started to fall. By 2011 birth rate had come down to 22.5 per thousand and the death rate has further come down to 7.3 per thousand, which has led to the natural growth rate to 15.8 per thousand annually. Infant mortality rate has come down from 110 in 1981 to 50 in 2011.

Some Fundamental Concepts in Demography

- ***Birth Rate***

Birth rate is the total number of births in a particular area, which can be the entire country, a state or any other territorial unit during a specific period. It is mostly used in demographic analysis. It takes the mid-year mark for calculation. It is crude birth rate because it does not include the ratio of bearing age. Birth rate refers to the number of live births per thousand. Various methods

are adopted to calculate the birth rate, out of which the common method is this —

Crude birth rate is expressed through the following method:

B/P × 1000

B – number of births

P – entire population

The main factors that affect birth rate are: atmosphere, age of marriage, social and health conditions, infertility, social and religious beliefs.

- ***Death Rate***

Death rate is also calculated like birth rate. Death rate is the total number of deaths per thousand in a particular area, which can be the entire country, a state or any other territorial unit during a specific period. These statistics depend upon the reporting. It is mandatory to inform births and deaths in India as it is most countries. In the cities the municipalities keep a record of births and deaths. In the villages this work is done by the primary health centers.

- ***Natural Growth Rate***

The natural growth rate of population refers to the difference between the birth rate and the death rate. When this difference is zero or very small, then it can be said that the population has stabilized or has reached the replacement level, which is the growth rate required for new generations to replace the older ones that are dying. Sometimes, societies can experience a negative growth rate, which means that their fertility levels are below their replacement rate. This can be seen in many countries like Japan, Russia, Italy, and Eastern Europe. On the other hand, India and many countries are experiencing very high growth rate especially when they are going through the demographic transition period.

- ***Fertility Rate***

In simple words, fertility means a woman's capacity to give birth to children. However, many times women conceive but cannot bring it to its full period and it is aborted. In such cases the woman has the child-bearing capacity but not of fertility.

Fertility rate refers to the number of live births per one thousand women in the child-bearing age group, which is generally considered between the age of 15 and 49 years. But this is a crude rate, which means it is a rough average for an entire

population and does not take into consideration the differences across age groups. The fertility rate of a country is related to the following facts:

(1) The number of women in the child-bearing age group.

(2) The number of women in the child-bearing age group who have the capacity to give birth to children.

(3) The number of married women among them.

(4) The period of their sexual contact.

(5) The capacity of fertility among them.

- ***Total Fertility Rate***

Total fertility rate refers to the total number of live births that a hypothetical woman would have if she lived through the reproductive age group giving birth to children all through this period. In other words, the number of children she could have borne as determined by the age specific fertility rates for that area.

- ***Infant Mortality Rate and Maternal Mortality Rate***

Infant mortality rate is the number of deaths of babies before the age of one year per thousand live births. Similarly, maternal mortality rate refers to the number of women who die in childbirths per one thousand live births. High rates of infant and maternal mortality are indicative of the poverty in the country. When medical facilities are provided there is a sharp fall in the infant and maternal mortality rate. People are becoming aware of this and as a result prosperity is increasing.

- ***Life Expectancy***

Life expectancy refers to the estimated number of years that an average person is expected to live. It is calculated on the basis of data on age-specific death rates in a given area over a period of time.

- ***Sex Ratio***

Sex ratio refers to the number of females per thousand males in a given area at a specified period of time. Historically, it has been found that there are more females than males in most countries of the world. And yet the fact is that slightly more male babies are born than female babies. The ratio between male babies and female babies is roughly 1000:943 to 952. If despite this fact the sex ratio is in favour of females, it is perhaps because of two reasons: (i) girl babies seem to have an advantage over boy babies in infancy in terms of resistance to disease, and (ii) women

live longer than men in most societies. These two facts lead to a sex ratio of roughly 1050 women for every 1000 men.

However, sex ratio seems to be declining in many countries like China, South Korea and especially India. India is considered a male dominated society, and has the son preference mindset. That is why female foeticide has been seen increasing in recent times.

- ***Age Structure of the Population***

The age structure of the population refers to the proportion of persons in different age groups relative to the total population. Age structure in a country changes with development levels in the country. In the beginning, poor medical facilities, prevalence of disease and other factors reduce the life expectancy. Besides, high infant mortality rate and maternal mortality rate have an adverse effect on the age structure of the population. On the other hand, economic development and improvement in quality of life improve life expectancy and consequently, change the age structure of the population. This can be seen as smaller proportions of population are found in younger age groups and larger proportions in older age groups. This is also called the aging of the population.

- ***Dependency Ratio***

Dependency ratio is the measure comparing the portion of a population which is composed of dependents with the portion of population that is working, generally in the age group of 15 to 64 years. The dependents include the elderly and the children. The formula to find out the dependency ratio is given below:

$$\text{Dependency ratio} = \frac{\text{Population of below 15 + population of above 64}}{\text{population of 15 – 64 age group}}$$

Dependency ratio is expressed as a percentage. A rising ratio of dependency is a matter of concern for countries that are facing the problem of an aging population because it becomes difficult for the working population to carry the additional burden. It is also called the demographic dividend which changes the age structure. Dependency ratio is not a permanent concept; it keeps increasing and decreasing.

Profile of India's Demographic Structure

India is the second most populous country in the world. India's population is roughly around 17.5% of the total population of the world while China's population is 19.4%. But China has almost attained demographic stability, which has not yet been achieved in India.

The qualitative and quantitative aspects of India's population can be understood on the following bases:

1. Size and Growth of India's Population

Population of India is growing continuously. It is a matter of concern because India's population was 23.8 crores in 1901, 36.1 crore in 1951, which increased to 54.8 crores in 1971, 84.3 in 1991, 102.8 crores in 2001 and is latest 121 crores in 2011. In the last decade it has increased by 18.92 crores, which is the total population of Brazil, the fifth largest country in the world. Table 2 shows the size and growth of population in India and diagram (v) shows India's share in World Population.

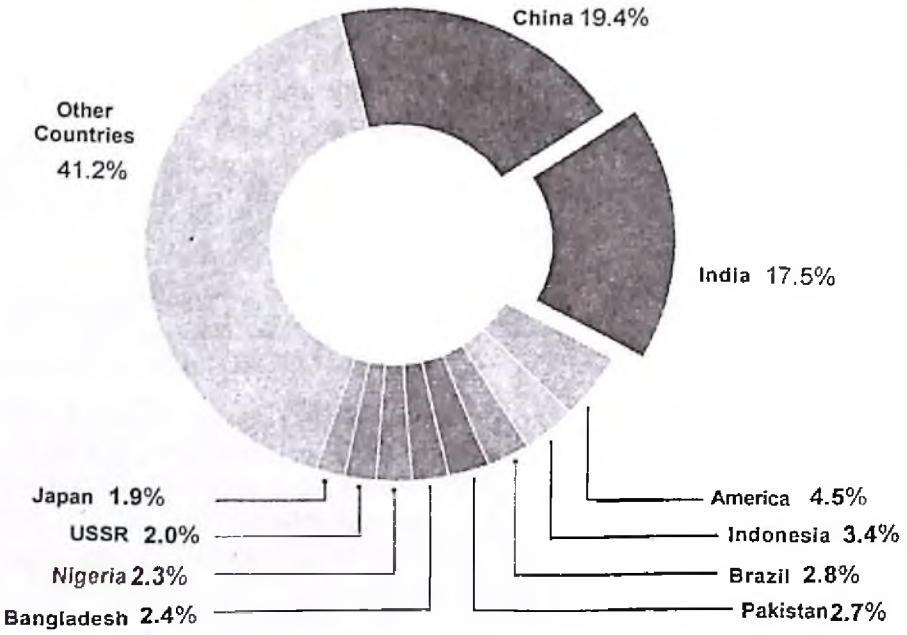
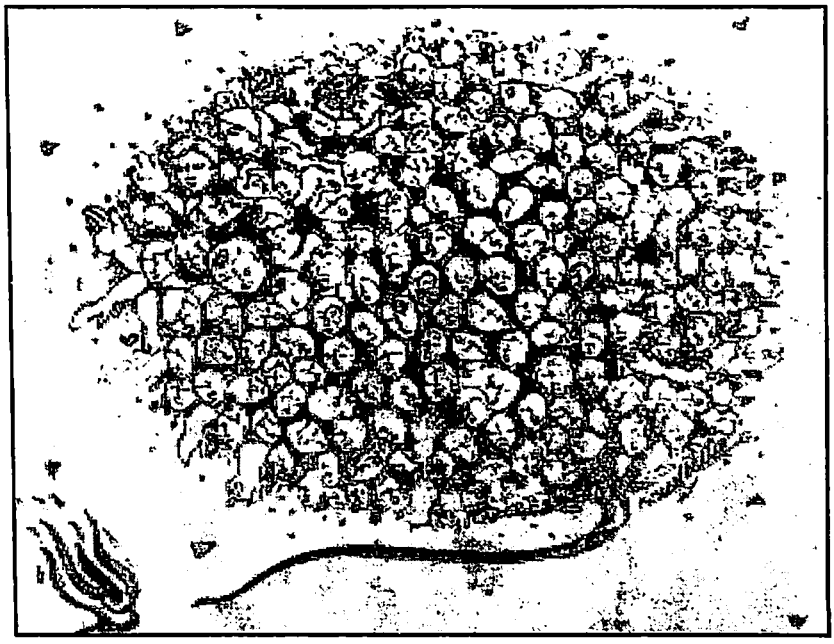


DIAGRAM (v) : INDIA'S SHARE IN WORLD POPULATION

Table 2 : The Population of India and its Growth during 1901-2011

Year	Total Population (in crores)	Decadal Growth (%)	Average Annual Growth (%)
1901	23.8	—	—
1911	25.2	5.75	0.56
1921	25.1	−0.31	−0.03
1931	27.9	11.00	1.04
1941	31.9	14.22	1.33
1951	31.6	13.31	1.25
1961	43.9	21.64	1.96
1971	54.8	24.80	2.20
1981	68.3	22.66	2.22
1991	84.6	23.87	2.14
2001	102.8	21.54	1.95
2011	121.0	17.70	1.64

(Source : Census of India 2011)



SITUATION OF POPULATION EXPLOSION

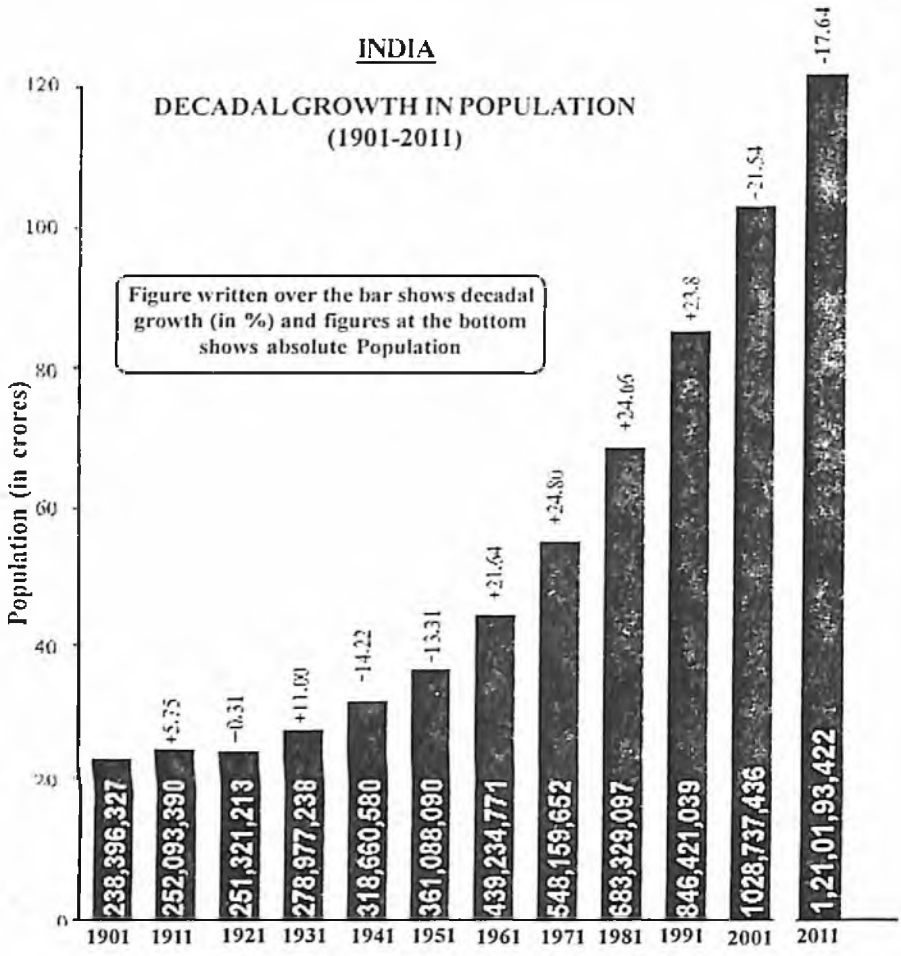


DIAGRAM (vi) : DECADAL GROWTH OF POPULATION (1901-2011)

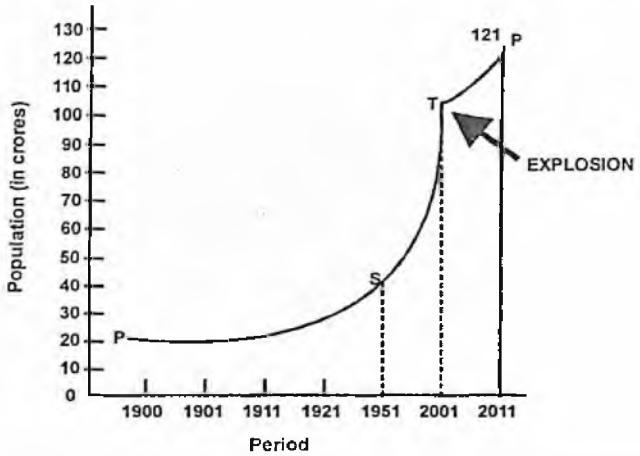


DIAGRAM (vii) : SITUATION OF POPULATION EXPLOSION

2. Birth Rate and Death Rate

The infant mortality rate was 146 per thousand in 1951, which came down to 73 per thousand live births in 2017.

According to the NITI Aayog data of 2016, the highest infant mortality rate was in Orissa that was 44 per thousand and lowest in Kerala that was 10 per thousand.

According to the available statistics, the number of couples adopting family planning measures has increased. Couple Protection Rate (CPR), which was 10.4% in 1951 increased to 48.2% in 1998-99 according to the 2004-05 economic survey. As per 2015 data available with NITI Aayog, Crude Birth Rate in India was 21.8, with UP/Bihar highest at 26.5 and Kerala reporting lowest CBR at 14.8.

Table 3: Birth Rate and Death Rate in Prominent States

State	Life expectancy in years birth at 2010-14	Infant mortality rate per 1000 live births 2016	Death rate per 1000 population 2011	Birth rate per 1000 population 2011
Andhra Pradesh	68.5	34	4.3	15.6
Assam	63.9	44	8.2	23.2
Bihar	68.1	38	6.8	28.1
Gujarat	68.7	30	6.7	21.8
Haryana	68.6	33	6.6	22.3
Karnataka	68.8	24	7.1	19.2
Kerala	74.9	10	7.0	14.8
Madhya Pradesh	64.2	47	8.3	27.3
Maharastra	71.6	19	6.5	17.1
Orissa	65.8	44	8.6	20.5
Punjab	71.6	21	7.0	16.6
Rajasthan	67.7	41	6.7	26.7
Tamilnadu	71.7	17	7.6	15.9
Uttar Pradesh	64.1	43	8.1	28.3
W Bengal	70.2	25	6.0	16.8
Total India	**67.9**	**34**	**7.3**	**19.3**

According to the Economic Survey 2004-05, Total Fertility Rate (TFR) in 2002 in India was 3.1, which was 4.5 in 1981 and 6.0 in 1951. In the urban areas TFR was 2.7 only. **According to the Planning Commission, TFR is the highest in the four states – Bihar, Rajasthan, Madhya Pradesh and Uttar Pradesh. Uttar Pradesh has the highest TFR – 4.8; Bihar has 4.4; Rajasthan has 4.2 and Madhya Pradesh 4.0, while Goa has the lowest 1.0. The target of TFR has been fixed at 2.1 by 2010. Kerala and Tamil Nadu have already brought it down to 2.1 and 1.8 respectively.** This means that the average woman in Tamil Nadu produces 2.1 children which is the replacement level required to replace herself and her spouse. In Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Orissa, Punjab and West Bengal TFR is between 2.2 and 3.0.

Population below 15 years of age formed 42% of the total population in 1971, which has decreased to 37% in 1991. Despite the availability of population related measures the Net Production Rate (NPR) will be achieved by 2010when each couple will produce average two children.

According to the National Family Health Scheme of 2011, the NFR is 2.62 births per woman. The survey shows a close relationship between fertility and education. Education has brought down the fertility rate. 62% children are borne by women between the age group of 20-29 whereas 19% are borne by women between 15 and 19 years of age. Adoloscent Fertility Rate (Birth per 1000 women aged 15-19) is 79 in India. This compares poorly against China, where this ratio is 9 per 1000.

3. Statewise Distribution of Population

According to the census of 2011, Uttar Pradesh is the largest state in terms of population. 16% of the total population resides in Uttar Pradesh. Its total population is 19.9 crores, which is more than the total population of Pakistan. Sikkim is the smallest state in terms of population where 0.05 percent of the total population. Of the Union Territories Delhi is the most densely populated with 1% of the population. Table 4 shows state-wise population of India during census 2011.

Table 4 : India's Census 2011 : State-wise distribution of Population and Decadal Growth rate (in %)

S.No.	State/Union Territories	Population 2011 Persons	Male	Female	Sex Ratio	Density persq.(km.)	Growth (%)
	India---------	1,210,193,422	62,37,24,248	58,65,69,174	940	382	17.64
1.	Uttar Pradesh	199,581,477	104,596,415	94,985,062	908	828	20.09
2.	Maharashra	112,372,972	58,361,397	54,011,575	925	365	15.99
3.	Bihar	103,804,637	54,185,347	49,619,290	916	1,102	25.07
4.	W. Bengal	91,347,736	46,927,389	44,420,347	947	1,029	13.93
5.	Andhra Pradesh	84,665,533	42,509,881	42,155,652	992	308	11.10
6.	Madhya Pradesh	72,597,565	37,612,920	34,984,645	930	236	20.30
7.	Tamil Nadu	72,138,958	36,158,871	35,980,087	995	555	15.60
8.	Rajasthan	68,621,012	35,620,086	33,000,926	926	201	21.44
9.	Karnataka	61,130,704	31,057,742	30,072,962	968	319	15.67
10.	Gujarat	60,383,628	31,482,282	28,901,346	918	308	19.17
11.	Orissa	41,947,358	21,201,678	20,745,680	978	269	13.97
12.	Kerala	33,387,677	16,021,290	17,366,387	1,084	859	4.86
13.	Jharkand	32,966,238	16,931,688	16,034,550	947	414	22.34
14.	Assam	31,169,272	15,954,927	15,214,345	954	397	16.93
15.	Punjab	27,704,236	14,634,819	13,069,417	893	550	13.73
16.	Chhatisgarh	25,540,196	12,827,915	12,712,281	991	189	22.59
17.	Haryana	25,353,081	13,505,130	11,847,951	877	573	19.90
18.	NCT Delhi	16,753,235	8,976,410	7,776,825	866	11,297	20.96
19.	J & K	12,548,926	6,665,561	5,883,365	883	124	23.71
20.	Uttrakhand	10,116,752	5,154,178	4,962,574	963	189	19.17
21.	Himachal Pradesh	6,856,509	3,473,892	3,382,617	974	123	12.81
22.	Tripura	3,671,032	1,871,867	1,799,165	961	350	14.75
23.	Meghalaya	2,964,007	1,492,668	1,471,339	986	132	27.82
24.	Manipur	2,721,756	1,369,764	1,351,992	987	122	18.65
25.	Nagaland	1,980,602	1,025,707	954,895	931	119	-0.47

4. Density of Population

Density of population is continuously increasing in India. In the cities people don't have space to live. Of the total land of the world, India has 2.4 percent, whereas the population is 16 percent of the total of world population. According to the 2001 census approximately 324 persons live in an area of one square kilometer which increased to 382 persons per sq.km. in 2011. Out of the states, Bihar has the highest population with 1,102 persons living in one square kilometre area. Second on the list is W.Bengal with 1,029 persons and Arunachal Pradesh has the least – only 17 persons on one square kilometre. See Table 5 and 6.

Table 5 : Density of Population in India from 1901 to 2011

Year	Density (per sq.km.)	Year	Density (per sq.km.)
1901	77	1961	142
1911	82	1971	177
1921	81	1981	216
1931	90	1991	267
1941	103	2001	324
1951	117	2011	382

Table 6 : Density of Population in various States of India (2001-2011)

India/States	Capital	Area (Sq km)	Population (2011)	Density (Per Sq Km) 2001	2011
India	**N. Delhi**	**32,87,263**	**1,210,193,422**	**324**	**382**
States					
Andhra Pradesh	Hyderabad	2,75,068	84,665,533	275	308
Assam	Guwahati	78,438	31,169,272	340	397
Orissa	Bhuvneshwar	1,55,707	41,947,358	236	269
Uttar Pradesh	Luchnow	2,40,928	199,581,477	689	828
Kerala	Triruvananthapuram	38,863	33,387,677	819	859
Gujarat	Gandhi Nagar	1,96,024	60,383,628	258	308
Jammu & Kashmir	Srinagar	2,22,236	12,548,926	99	124
Tamil Nadu	Chennai	1,30,058	72,138,958	478	555
Tripura	Agartala	10,91,69	3,671,032	304	350

Nagaland	Kohima	16,579	1,980,602	120	119
Punjab	Chandigarh	50,362	27,704,236	482	550
W.Bengal	Kolkata	88,752	91,347,736	904	1,029
Bihar	Patna	99,223	103,804,637	880	1,102
Madhya Pradesh	Bhopal	3,08,245	72,597,565	196	236
Maharashtra	Mumbai	3,07,713	112,372,972	314	365
Meghalya	Shilong	22,429	2,964,007	103	132
Manipur	Imphal	22,327	2,721,756	107	122
Rajasthan	Jaipur	3,42,239	68,621,012	165	201
Haryana	Chandigarh	44,122	25,353,081	477	573
Himachal Pradesh	Shimla	55,673	6,856,509	109	123
Karnataka	Banglore	1,91,791	61,130,704	275	319
Sikkim	Gangtok	7,096	607,688	76	86
Mijoram	Ajal	21,081	1,091,014	42	52
Arunachal Pradesh	Itanagar	83,743	1,382,611	13	17
Goa	Panaji	3,702	1,457,723	363	394
Chhatisgarh	Raipur	1,35,191	25,540,196	154	189
Jharkhand	Ranchi	74,854	32,966,238	338	414
Uttrakhand	Dehradun	53,483	10,116,752	159	189
Union Territories					
Andman Nicobar Island	Port Blair	8,249	379,944	43	46
Chandigarh	Chandigarh	114	1,054,686	7,903	9,252
Delhi	Delhi	1,483	16,753,235	9,294	11,297
Daman & Diu	Daman	112	242,911	1,411	2,169
Dadar & Nagar Haweli	Silwassa	491	342,853	449	698
Pondicherry	Pondicherry	492	1,244,464	2,029	2,598
Lakshadweep	Kavaratti	32	64,429	1,894	2,013

Failure of Entitlement

India is increasingly becoming a density populated country. With over 1.21 billion mouths to feed adequate availability of food grain is a key priority for governance. The foodgrain production may be erratic, sometimes surplus and other times deficient but what experts believe that starvation and famine takes place not just because of food grain shortage but because of inability to buy or access the foodgrain by a large part of population. This, experts such as Professor **Amartaya Sen**, has termed as *Failure of Entitlement*.

Govt. has implemented a policy initiative namely 'National Rural Employment Guarantee Act' to address this issue of starvation and famine.

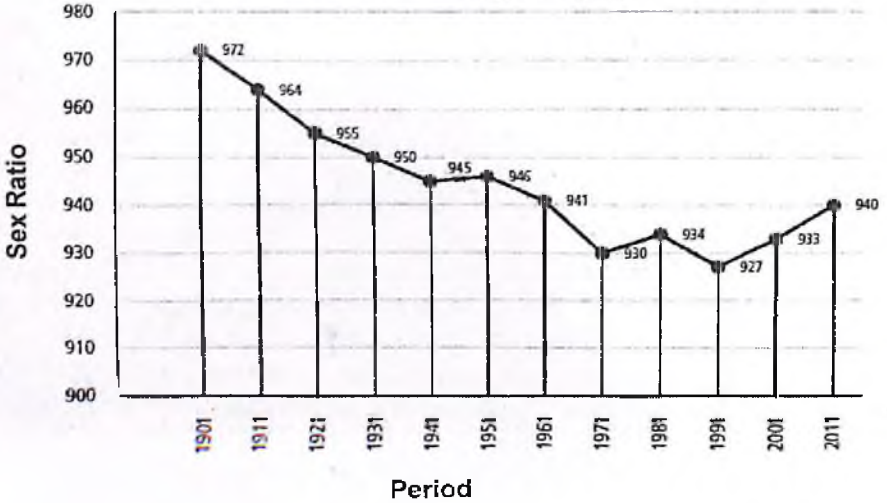
5. Sex Composition of the Population

Sex composition plays an important role in the demographical analysis of a country. Economic and population growth of a country depends on the sex composition to a large extent. According to the latest census of 2011 the male population of India is 62.37 crores, whereas the female population is 58.64 crores. Thus for every 1000 men there are 940 women in India. In 1901 this was 972, which is reducing year by year. See Table 7 and Diagram (vii).

Table 7: Male-female Ratio in India (1901 – 2001)

Year	Male-female Ratio (female per 1000 male)	Decadal increase-decrease in male-female ratio
1901	972	-
1911	964	- 8
1921	955	- 9
1931	950	- 5
1941	945	- 5
1951	946	+ 1
1961	941	- 5
1971	930	- 11
1981	934	+ 4
1991	927	- 7
2001	933	+ 6
2011	940	+ 7

Diagram (vii)



(a) Statewise sex composition in India—Sex composition varies from state to state in India. Kerala is the only state of India in which the female population is more than the male population. There, for every 1000 men there are 1084 women and in Haryana the ratio is the lowest –only 877 women for every 1000 men.

(b) Reasons for fall in sex ratio—The main reasons for the fall in male-female ratio in India are child marriage, relative neglect of girls, lack of nutritious food and maternity facilities, lack of care of pregnant and lactating mothers, female foeticide and generally the poor condition of women.

Table 8 : Sex Ratio in 10 Prominent Countries of the World

Country	Sex Ratio (per 1000 men)	
	2001	2011
World	**986**	**984**
China	944	926
India	933	940
USA	1,029	1,025
Indonesia	1,004	988
Brazil	1,025	1,042
Pakistan	938	943
Russia	1,140	1,167
Bangladesh	953	978
Japan	1,041	1,055
Nigeria	1,016	987

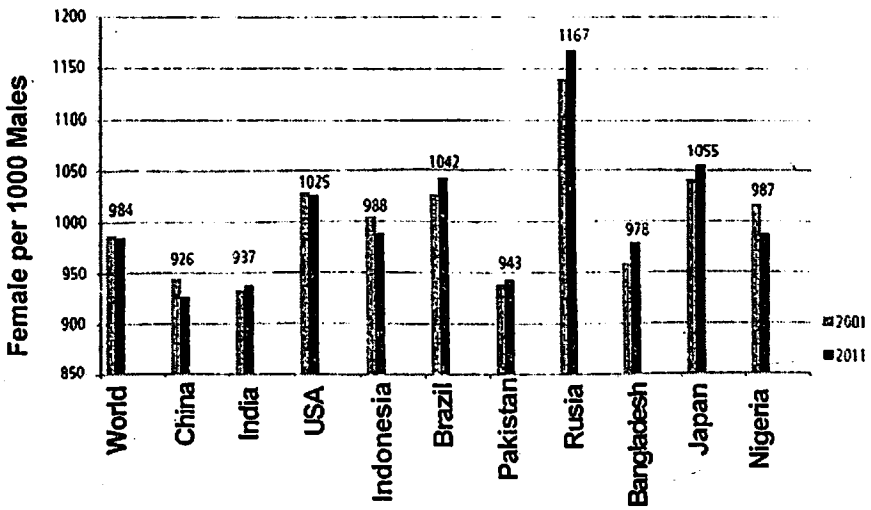


Diagram (viii) : Sex Ratio in 10 Prominent Countries of the World

6. Literacy

India is still far behind in terms of literacy though the level of literacy has increased quite a bit after independence. According to the 2011 census there is only 74.04% literacy in the country out of which the male literacy is 82.14%. From the point of view of the census a person is called literate if he has the basic three r's of reading, writing and arithmetic.

Table 9 : Literacy Rate in India (% of population above the age of 7 years)

Year	People	Male	Female	Difference in male-female literacy rate
1951	18.3	27.2	8.9	18.3
1961	28.3	40.4	15.4	25.1
1971	34.5	46.0	22.0	24.0
1981	43.6	56.4	29.8	26.6
1991	52.2	64.1	39.3	24.8
2001	65.4	75.9	54.2	21.7
2011	74.04	82.14	65.46	16.68

Table 10 : Literacy Rate (in %) of the States and Union Territories according to Census 2011

S.No.	State/Union Territories	Litercy Rate	Male Litercy Rate	Female Litercy Rate
	India	74.04	82.14	65.46
1.	Kerala	93.91	96.02	91.98
2.	Migoram	91.58	93.72	89.40
3.	Lakshadweep	92.28	96.11	88.25
4.	Goa	87.40	92.81	81.84
5.	Delhi	86.34	91.03	80.93
6.	Chandigarh	86.43	90.54	81.38
7.	Pondicherry	86.55	92.12	81.22
8.	Andaman Nicobar	86.27	90.11	81.84
9.	Daman & Diu	87.07	91.48	79.55
10.	Maharashtra	82.91	89.82	75.48

11.	Himachal Pradesh	83.78	90.83	76.60
12.	Tripura	87.75	92.18	83.15
13.	Tamil Nadu	80.33	86.81	73.86
14.	Uttranchal	79.63	88.33	70.70
15.	Gujarat	79.31	87.23	70.73
16.	Punjab	76.68	81.48	71.34
17.	Sikkim	82.20	87.21	76.43
18.	W. Bengal	77.08	82.67	71.16
19.	Manipur	79.85	86.49	73.17
20.	Haryana	76.64	85.38	66.77
21.	Nagaland	80.11	83.29	76.69
22.	Karnataka	75.60	82.85	68.13
23.	Chhatisgarh	71.04	81.45	60.59
24.	Assam	73.18	78.81	67.27
25.	Madhya Pradesh	70.63	80.53	60.02
26.	Orissa	83.45	82.40	64.36
27.	Meghalya	75.48	77.17	73.78
28.	Andhra Pradesh	67.66	75.56	59.74
29.	Rajasthan	67.06	80.51	52.66
30.	Dadra & Nagar Haveli	77.65	86.46	65.93
31.	Uttar Pradesh	69.72	79.24	59.26
32.	Arunchal Pradesh	66.95	73.69	59.57
33.	J & K	68.74	78.26	58.01
34.	Jharkhand	67.63	78.45	56.21
35.	Bihar	63.82	73.39	53.33

According to statistics available from the 2011 census, literacy levels in different states are quite different. In India Kerala has the maximum literacy, which is 93.91%. Male literacy is 96.02% and female literacy is 91.98%. The second place is that of Mizoram, where 91.58% population is literate and the third place is of Lakshdweep. The lowest literacy rate is in Bihar where only 63.82% of the population is literate, out of which 73.39% are men and 53.33% are women.

Demographic Dividend

India has one of the youngest populations in an aging world. By 2020, the median age in India will be just 28, compared to 37 in China and the US, 45 in Western Europe, and 49 in Japan. Demographics can change the pace and pattern of economic growth. While China's spectacular growth has already benefited from a demographic dividend, India is yet to do so. Demographic dividend is a concept where the population profile of a country is positive . This is to say that people in the age bracket 15-64 years outnumber those that fall in the age bracket <15 years + > 64 years. The 15-64 years is the age bracket of working class. This bracket has to produce enough to feed for itself as well as those that are in the age bracket which is non working class (Children and Elders).

Dividend or curse?

The growth benefit of a demographic dividend is not automatic. A lot depends on whether the bulge in working population can be trained, and enough jobs created to employ the 10 million more people who will join the labour force every year. There is mounting concern that future growth could turn out to be jobless due to de-industrialization, de-globalization, and the fourth industrial revolution and technological progress. While digital technologies may enable the creation of new products and more productive jobs, they may also substitute existing jobs. India may not be able to take advantage of these opportunities, due to a low human capital base and lack of skills.

Building human capital

India is home to the world's largest concentration of illiterate people in the world. It has made gains in human development, but challenges remain, including big barriers to secondary schooling, low-quality public services, and gender discrimination. New technology could be exploited to accelerate the pace of building human capital, including massive open online courses and virtual classrooms. **Skill India Program** launched by **Prime Minister Shri Narendra Modi** in 2015 aims to train about 40 crore people in different skills by 2022.

Investing more and more efficiently in people will enable India to tap into its demographic divided, and prepare the country for the future. There is a powerful link between these investments and economic growth, stability and security. Investing in people through healthcare, quality education, jobs and skills helps build human capital, which is key to supporting economic growth, ending extreme poverty, and creating more inclusive societies. Human capital is now the fastest-growing component of India's wealth. It is already the largest component of global wealth.

7. Age Composition of the Population

India has a very young population; majority of Indians are between the age group of 15 and 64 years. The average age of India is much lower than the average age of the world. Population under the age of 15 has decreased from 42% in 1971 to 31% in 2011. During this period the ratio of age group 15 to 64 was gone up from 53% to 63.7%. The ratio of +65 has increased from 5% to 5.3% in 2011. Table 11 shows the age structure of the Indian population.

Table 11: Age Structure of the Indian Population (1961-2011)

Year	Age group 0-14	Age group 15-64	Age group +65	Total
1961	41	53	6	100
1971	42	53	5	100
1981	40	54	6	100
1991	38	56	7	100
2001	34	59	7	100
2011	31	63.7	5.3	100

8. Infant Population

More than 1 lac babies are born in India everyday, out of which nearly 38% are not registered. Registration is hundred percent only in Punjab and Kerala. Bihar, Uttar Pradesh and other states are very backward in these matters. Hardly 35% births are registered in Bihar and 25% in Assam.

According to the 2011 census, the number of infants in the age group 0 to 6 years is 15.87 crores, out of which male infants are 8.29 crores and female infants are 7.58 crores. Thus the infants make 13.12% of the total population. In 2001 it was 15.42%. This shows that the fertility rate has come down in the decade of 2001-2011.

The reasons for infant sex ratio falling are: (i) preference of son is a deep seaded mindset of Indians, (ii) gender determination techniques like ultra sound (iii) high cost of raising and marrying children. All these have led to female foeticide. These are the main reasons for lowering girl child ratio amongst new born infants.

9. Rural- Urban Differences Population

It is evident from various figures that the urban population in India is increasing. According to the 1961 census 82% of India's population lived in the villages while only 28% India's population lived in the cities. According to the 2011 census there are 46 metro cities in India where the population is above ten lakhs each.

According to the 2011 census report 68.8% Indians lived in villages and 31.2% lived in the cities. According to the 2011 census the total population of the country had gone up to 121 crores.

Table 12: Rural and Urban Population Distribution (1991-2011)

Year	Population in lakhs		% of total population	
	Rural	Urban	Rural	Urban
1901	213	26	89.2	10.8
1911	226	26	89.7	10.3
1921	223	28	88.8	11.2
1931	246	33	88.0	12.0
1941	275	44	86.1	13.9
1951	299	62	82.7	17.3
1961	360	79	82.0	18.0
1971	439	109	80.1	19.9
1981	524	159	76.7	23.3
1991	629	218	74.3	25.7
2001	743	286	72.2	27.8
2011	833	377	68.8	31.2

10. National Population Policy

The overriding objective of economic and social development is to improve the quality of lives that people lead, to enhance their well-being, and to provide them with opportunities and choices to become productive assets in society.

In 1952, India was the first country in the world to launch a national programme, emphasizing family planning to the extent necessary for reducing birth rates "to stabilize the population at a level consistent with the requirement of national economy". After 1952, sharp declines in death rates were, however, not times from

238 million (23 crores) to 1 billion in the same period. India's current annual increase in population of 15.5 million is large enough to neutralize efforts to conserve the resource endowment and environment.

Some of the main objectives of the population policy or family planning are:

(1) To reduce TFR to 2:1.

(2) To provide top quality contraceptives to adopt the standard of two children

(3) To aim at full coverage of registration of births, deaths, marriages and pregnancies.

(4) To provide injections to prevent diseases of children.

(5) To reduce infant mortality rate to 30 per thousand.

(6) To reduce the number of dropouts from school by 20%.

Challenges of Population Growth

Rapid growth in population poses various challenges and also provides opportunities. These challenges can be summed up as follows:

We need to meet all the needs of rapidly growing adolescent and young adult population and to cater to their increasing expectations for improved quality, spectrum and access to services. This can be done by meeting their felt needs to accelerate demographic and socio-economic transition. We need to utilize human resources to accelerate socio-economic growth and improvement in quality of life and bring about convergence and synergy between ongoing programs to hasten demographic, socio-economic and educational transitions to achieve rapid population stabilization.

India needs to invest adequately in Human Resource Development (HRD)/skill development to provide appropriate employment with adequate emoluments to large work force. The need of the hour is to improve quality and coverage of health and nutrition services, achieve improvement in health and nutritional status and reduction in mortality and improve access to education and skill development.

For the first time in decades there is a respite from growing numbers but there is a huge increase in the number of persons requiring care. They will need wider spectrum of services and expect better quality of services. If their felt needs are met through effective implementation of Family Welfare program, it is possible

to accelerate demographic transition and achieve rapid population stabilization. We need to increase social sector investment and add quality of life to years.

Final Figures of Census - 2011 : At A Glance

- **People** - 1,21,07,26,932
- **Male** - 62,40,08,660
- **Female** - 58,67,18,272
- **Urban population** - 37,77,46,803 (31.2% of total)
- **Rural population** - 83,29,80,129 (68.8% of total)
- **Sex ratio** - 943 males per 1000 males
- **Density** - 382 persons per sq km
- **Decadal Population Growth (2001-2011)**
  - Absolute - 18,19,89,496
  - Percentage - 17.70%
- **Population (0-6 years)** :
  - Persons - 15.87 crores (13.12% of total)
  - Boys - 6.29 crores
  - Girls - 7.58 crores
- **Sex ratio** - 914
- **Literacy (Absolute)** :
  - Persons - 89,66,51,295 (74.04%)
  - Males - 51,26,85,515 (82.16%)
  - Females - 38,40,65,780 (65.46%)
- **Density of Population (2011)** :
  - India - 382 persons per sq kms
  - World - 45 persons per sq kms
- **Work Participation Rate (2001)** :
  - Person - 39.10%
  - Male - 51.69%
  - Female - 25.60%
- **Population below 25 years of age - 50%**
- **Population below 35 years of age - 65%**
- **India's share in World population - 17.5%**
- **India's share in World area - 2.4%**
- **Nos. of children born in a minute - 51**

64.8% Uttar Pradesh has the largest population followed by Maharashtra, Bihar, West Bengal and Andhra Pradesh in the same order. These five states represent half of the country's population. More than ¼ th of people live in two states of UP and Maharashtra alone. The three southern states of Kerala, Karnataka and Tamil Nadu together have fewer people than Uttar Pradesh alone. The uneven nature of the distribution of the population becomes more evident when we try to find out as to what proportion of India's population lives in each state of the Indian Union. This may be described as the Index of Concentration. This index is 16.16% for Uttar Pradesh, 0.19% for Nagaland, 0.23% for Meghalaya and 0.99% for Jammu and Kashmir. The state of West Bengal accommodates 7.79% of the country's population while the shares of the agriculturally developed states of Punjab and Haryana are 2.73% and 2.05% respectively. A closer examination of the census data shows that the states of the Indian Union have an unequal share not only in population but also in area. There is little relationship between area and population. The largest state in India Rajasthan accounts for 11% of the country's total area and has 5.5% of the country's total population. Madhya Pradesh with an area share of about 10% has a population share of 5.7%.However Uttar Pradesh with 7.6% of total area has a population share of over 16%.

IMPORTANT QUESTIONS

Questions of 2 Marks (Answer in about 30 words)

Q.1. What is demography? Or What do you understand by demography?

Ans. According to Gulliard, "Demography is the science that studies the population." Demography is the scientific study of population and all the aspects related to it.

Q. 2. In What way formal demography is different from social demography? *(CBSE, Delhi 2015)*

Ans. In formal demography events like birth, death, migration, marriage and divorce are studied. Whereas demographic compositions are studied in social demography. The economic and sociological problems related to population come under social demography.

Q. 3. What is the meaning of dependency ratio? *(CBSE, Chandigarh 2015, Delhi 2016)*

Ans. The dependency ratio is a measure showing the number of dependents, aged zero to 14 and over the age of 65, to the total population, aged 15 to 64.

$$\text{Dependency Ratio} = \frac{\text{Population } <15 + \text{Population } >64}{\text{Population (Ages 15-64)}} \times 100\%$$

Q. 4. Write the meaning of age-structure in population.
(CBSE, Chandigarh 2016, Delhi 2018)

Ans. The age-structure of population refers to the proportion of persons in different age groups relative to the total population.

Q. 5. What is population density?

Ans. The number of people living per square kilometre determine the density of population. According to the census 2011 the density of population in India is 382.

Q. 6. Mention the factors responsible for the decline in the child sex ratio in India. *(CBSE, Chandigarh 2017)*

Ans. Preference for male child. Severe neglect of female infant. Lack of care of pregnant and lactating mothers, female foeticide and generally the poor condition of women are factors responsible for declined.

Q. 7. State the importance of demographic data. *(CBSE, 2019)*

Ans. Demographic data is important for the planning and implementation of state policies, specially those for economic development and general public welfare.

Q. 8. How does India benefit from a demographic dividend? *(CBSE, 2019)*

Ans. India is one of the youngest working country in the world. Working age group must support itself as well as those two age groups that depend on it. The two age groups that require support are >15 years and <65 years. India benefits as it has large working population.

Q. 9. Why is rising dependency ratio a cause for worry in countries that are facing ageing population? *(CBSE, Chandigarh 2019)*

Ans. The dependency ratio is a measure of the number of dependence aged 0-14 and over the age of 65 compared with the total population aged 15-65 years. It becomes difficult for the working population to carry the additional burden of aging population.

Q. 10. Identify the reasons for different replacement levels found in the different States of India. *(CBSE, Chandigarh 2019)*

Ans. Socio-cultural formation and literacy is different in each state of India. Rising levels of income in a state, education and occupation of mothers and easy access to contraception methods can result in lowering of fertility rates and hence replacement levels.

Questions of 4 Marks (Answer in about 80 words)

Q. 11. What do you understand by demography? Define and explain.

Q. 12. What do you understand by the sociological perspective of demography?

Q. 13. According to demographers and sociologists, What are the reasons for the decline in child sex ratio in India? *(CBSE, Delhi 2018)*

Q. 14. Identify the reasons for regional variations of displacement levels in India. *(CBSE, Delhi 2018)*

Q. 15. Literacy varies across gender, regions and social groups. Explain. *(CBSE, Chandigarh 2019)*

Q. 16. The Family Planning Programme suffered a setback during the years of national emergency. Justify the statement. *(CBSE, 2019)*

Q. 17. Despite the decline in birth rate, the growth rate of India's population is increasing. Explain the reason. *(CBSE, Chandigarh 2016)*

Q. 18. Briefly explain India's demographic achivements. *(CBSE, Chandigarh 2016)*

Q. 19. Explain the regional variations of low child sex ratio in India. *(CBSE, Delhi 2015)*

Q. 20. Describe the Theory of Demographic Transition. Why is the transition period associated with population explosion? *(CBSE, Chandigarh 2015)*

Q. 21. Highlight the main features of demographic dividend in India. *(CBSE, Delhi 2016)*

Q. 22. The family planning programme suffered during the period of National Emergency. Give reasons. *(CBSE, Chandigarh 2018)*

Q. 23. "Literacy as a prerequisite to education is an instrument of empowerment." Discuss. *(CBSE, Chandigarh 2018)*

Questions of 6 Marks (Answer in about 200 words)

Q. 24. Why did Malthus believe that epidemics and famines become a cause of large scale deaths?

Q. 25. What is meant by birth rate and death rate? When death rate falls rapidly why does birth rate become less relatively?

Q. 26. What is sex ratio? Describe some of the consequences of declining sex ratio. Hasn't the son preference mindset changed yet?

Q. 27. Which states in India have achieved replacement levels in population growth? Which states still have population growth at high levels? What are the reasons for these regional differences?

Q. 28. Analyze the successes and failure of the family planning program. *(CBSE, Chandigarh 2014)*