Human Resources

The 'population' of a place is counted on the basis of how many people live there. The population is related to a particular place. The number of people living in a regional unit, such as a village, city or country, is called the population of that place. The population becomes important as a human resource when human intelligence and skills are used for the development of society, and their capabilities are used in some productive work.

Many questions can be asked regarding the population of a place. For instance – What is the total population of a country? At what rate is it increasing or decreasing annually? What is the average life expectancy of people there, i.e. how long a life are people expected to have there on an average? What is the female and male ratio in that population? What is the ratio of children, youth and old people in it? What is the ratio of producers (working people) in it? What is the ratio of the people living in cities and those living in villages there? How many people among them are literate and how many of them have received higher education? How many of them are poor and how many are rich?

Where and how do we get all this information? Nowadays, nearly every country in the world conducts a periodic census, i.e. counting the number of people living there. In our country, a census is conducted after every ten years in which detailed information about the entire population of the country is gathered. The last census was conducted in 2011, so you can guess when the next census will take place.

- 1. There is a scheme to open one *AaganwdiI* centre per 1000 people, in each village of the district in which you live. How will you find out the number of such centres that will have to be opened?
- 2. The Chhattisgarh Government wants to formulate a health insurance scheme for the farming families in the state, which will involve an expenditure of five thousand rupees per person. Now, how will the Government determine the amount of money it will need for the scheme?
- **3.** Old age homes for senior citizens (old people) are to be opened in the state. How will you find out the number of such *ashrams* that will be needed?

Discuss with your teacher when the last census was conducted in our country and when the next one will be conducted, who are the people that help in this work, what is the process of collecting the data?



Fig. 5.1

Some important data obtained from the census

In the Indian census various types of information is gathered, such as the total number of people living in the country, the number of women and men separately, the number of educated people, the number of people in different age groups, how many people are engaged in what types of occupation, how many people migrate from one place to another for different reasons, and so on. On the basis of this information we analyse the distribution of population in the rural and urban areas, the population density, the numbers of people engaged in different occupations, and the rate of decrease or increase in the population. We shall discuss some of these points in more detail.

To understand the capabilities and needs of a country's population, we need to find out the qualities and attributes of its people. People differ from one another on the basis of their education, occupation, economic condition, age, sex, etc. In view of this fact, we need to understand these attributes of people. We shall now try to understand some of these important data.

Total Population and Rate of Growth

We are able to find out the total number of people living in a country, state, district, city or village with the help of the census. Owing to the method of door to door collection of information, such data of the census is acknowledged as the most credible. The last census in India took place in 2011, according to which the total number of people in the country at the time was 1,210,193,422, i.e. over 121 crore and 2 lakh. There were 102 crore and 87 lakh people in India in 2001. Thus the population of our country increased by 17.64 % in the previous ten years. We call this the decadal growth rate of the population.

How many people were added to the population of India between 2001 and 2011?

By how much does our population increase in a year approximately?

Of the total human population of the earth, 17.5 % people live in India. The only country with a bigger population than India is China where 20 % of the world's population lives.

In 2011, the population of Chhattisgarh was 2,55,40,196, i.e. over two crore and fifty-five lakh which is about 2 % of the total population of the country. However, the decadal growth rate of the population of Chhattisgarh is 22.6%.

The History of Census

The mention of the first census in the modern times is found in Sweden (1749). In the United States of America, the process of conducting a regular census began in 1790, and 80 years after that it began in India in 1872. Countries like England and France had begun the task of regularly conducting a periodic census nearly 71 years before we did.

The Government of India accepted in principle in 1865 the idea of a census. The questionnaire for conducting the census was prepared during the same year. However, the census was conducted for the first time in 1872, but it could not be implemented completely. The process of conducting a complete census was carried out only 9 years after that in 1881.

The latest census was conducted in India in 2011, according to which the population of our country was 1210.19 lakh then.

The census also tells us the percentage of total number of people living in cities and those living in villages. India is still a country largely inhabited by villagers, where 69 % of the people live in villages and only 31 % live in cities. When the country became independent, at that time only 17 % of the people lived in cities. From this, we can estimate how urbanization has increased in India in the last 60 years. What proportion of the population of Chhattisgarh lives in cities? Nearly 23 % of the people of our state live in cities now, while 20 % people lived in cities in 2001.

Find out the population of your district. Also find out how many women and men live in it and the proportion of the urban population in it. Prepare a detailed poster to display this information in the classroom.

Do you believe that the growth of the urban population of a country or a state is an indicator of its development? Discuss this with reasons.

Sex Ratio

Sex ratio tells us how many women there are per thousand men in a given region. For instance, the sex ratio in Sweden is 1006, in Japan 1067 and in Nepal 1073, while it is 940 in India. Normally, in a healthy society the number of women and the number of men should be equal. If this ratio is less in a society, it means that relatively less attention is given to the nutrition, education, health and other needs of girls and women in that society, due to which their lifespan is shorter.

According to the 2011 census the sex ratio in our country is 940. Which means that there are only 940 women per one thousand men here. Moreover, this sex ratio varies widely. The sex ratio in some states is more than the national average, such as in Kerala (1084), Tamil Nadu (995), Andhra Pradesh (991) and Chhattisgarh (991). On the other hand, In Haryana (877), Gujarat (912) and Rajasthan (926), the sex ratio is less than the national average. We are able to see from this data that in which particular states the situation of women is weaker and we can formulate a plan to improve this.



Look at the graph of sex ratio given below and answer the following questions.

In which decades was the sex ratio the highest and in which year the lowest?

After which decade is the sex ratio seen to be increasing continuously? What may be the reasons for this increase?

Of which decade's sex ratio has the sex ratio of 2011 become almost equal?

When we look at the figures we find that the number of women in proportion to men has been declining in India for a long time, which is indicative of the increasing discrimination against women in society. Women have to face discrimination in education and development. The census figures show that this discrimination has the biggest adverse effect on girls of small age. The ratio of boys to girls in the age group of 0 to 6 years is 1000 : 914.

We have seen that the conditions are different in different states of the country. If we look at Kerala, Tamil Nadu and others, we find that such factors as the relatively better healthcare facilities available there, the active role of women in the society, economic self-reliance etc., have contributed to the high sex ratio in these states. In sharp contrast to this, there are some parts of the country where this ratio has fallen to worrisome levels. In most states of the northern and western India, such as Rajasthan, Gujarat, Haryana, Uttar Pradesh, Punjab etc., the sex ratio is less than the national average due to such factors as the dominance of patriarchal society, fewer economic opportunities for women, historically long prevailing condition of inequality and others.

The situation in Chhattisgarh is better compared to other states, considering that the sex ratio is 991 here. In districts with a largely tribal population, such as Bastar, the sex ratio is 1000 or even higher, while in plains districts, such as Bilaspur, the sex ratio is relatively lower. However, even in Chhattisgarh, the sex ratio has been continuously declining in the zero to six years' age group. The sex ratio in this age group was 984 in 1991, 975 in 2001 and 964 in 2011.

Thus, while the figures for the sex ratio in our state show the relatively better position of women here, the figures for the 0-6 years' age group point to the fact that here too the girl-child mortality rate has increased in the last three decades, and the sex ratio in this age group has been consistently declining.

On the one hand, these figures show that the social position of women and girls is becoming better,

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but on the other hand, at the same time, girls are being prevented even from being born due to misuse of modern techniques.

You must have seen a notice displayed on the noticeboards of various hospitals telling the visitors that "Pre-natal (before birth) sex determination test is not done here". Have you ever thought why such notices are displayed in hospitals?

Why has the proportion of women in the total population continued to decline consistently, in spite of the progress made in education, health, economic development and all other fields as compared to 1901? Discuss this in the class.

Project Work: Conduct a survey of five families in your neighbourhood and make a list of the total number of men and women in them, and also the number of boys and girls up to the age of six years in them. On the basis of this, determine the ratio of women and girls per ten men.

Age Composition (the ratio of children, youth and old people)

For the purpose of analysis, the population of a region is divided into three broad age groups: boys



and girls group, youth and old people. In any society, the people with the maximum productive ability are the young people, who can work in homes, fields, factories and offices. Generally, children and old people are dependent on them. The children will become the producers of the future and they will have to be prepared for that role. On the other hand, special provisions will have to be made for helping the old people. In order to formulate such a policy, it is necessary to know how the population of the country and the state is distributed among these age groups.



Children: Children of less than 15 years of age are

included in this group. Normally, the people in this age group are dependent on people in other groups, and the arrangements for the education, health, economic development and other amenities for the members of this group are made by other people. The members of this group are not considered to be active contributors from an economic point of view. However, the prevalence of child labour contributing to production of goods and services in many areas cannot be denied.

Youth: People of ages varying from 15 to 59 years are included in this group. You will notice that people in this age group are the most active and usually the people in the other two age groups (children and old people) are dependent on them. This age group is more mobile also. It is the people in this age group who move from one place to another in attempts to find employment.

Old Age Group: This group includes people whose age is 60 years or more. After the age of 60, the work efficiency of people begins to decline and most people in this age group (who are not employed and who do not have a strong economic foundation) depend for their needs on the young people.

If the number of people in the children age group is very small in a country, what impact will this have on that country?

How will be the economy of a country if there are more people in the youth age group there?

In social sciences, population-age pyramid is used to show the age distribution of the population of a country. Look at the graph of the age pyramid in India 2014 given above. It shows the number of men and the number of women after every four years. You can see that in 2014 the proportion of children and youth in India was more than that of old people. Even in the youth age group the proportion of people under 20 years of age was higher than that of people in any other age group. This means that there will be no decline in the number of people engaged in productive work in the next 20 years. At the same time, having a lower number of old people will cause a lower burden on the economy. However, if we compare the columns for men and women, we will find that in the coming young generation, the number of women is going to be much lower than that of men, because the ratio of girls to boys is very low among the children under 8 years of age. Now we will compare this graph for India with the graphs for Western Africa and Western Europe.





The graph for Western Africa shows that the age of more than half the population there is less than 20 years. Moreover, the people aged more than 50 years are less than just 12 % there. This

points to a serious situation where most people die before completing 50 years of age. If we compare this with the situation in Western Europe, another disturbing fact emerges. You can see that in Europe around 36 % people are aged more than fifty years. But if we look at the situation of children there, we find that the proportion of children in the population has been consistently declining. In other words, the people in Europe have a very long life, but so few children are being born there that the population there will keep declining and gradually the old people will be in a majority there.

There may be several reasons for this difference between the situations in Western Africa and Western Europe. The first is that the income levels and healthcare services in Europe are so good that most people live till a ripe old age there, while people in Africa die early due to poverty and poor healthcare facilities there. The infant mortality rate is quite high there. On the other hand, economic prosperity in Europe has led to people giving birth to fewer children there. In view of this problem, special encouragement and financial help by the state is provided in many European countries for raising children.

The graph or pyramid for Western Europe is almost cylindrical in shape – from 0 to 40 years, the percentage of none of the groups is declining there, while the graph for India is triangular which means that the percentage of every age group is decreasing compared to the level below it. How may this be related to the health and medicare facilities for children in India? Discuss it in the class.

Where is the proportion of children and youth (those under the age of 40) the highest - in India, Europe or Western Africa?

Where is the proportion of youth (those from 15 to 40 years of age) the highest?

Where is the proportion of old people (those above 60 years of age) the highest?

Work and Working Population

It is a very puzzling question as to who should be considered a worker or producer (working person) in the census of our country. Most people do not have regular work and the nature of their work keeps changing. Sometime people have gainful employment and at other times they remain idle. Given this situation, in which category should they be included? There can be no precise solution of this puzzle, but the Census Commission uses a functional definition for this purpose. According to the 2011 census, work has been defined as participation in economically productive activities. This participation can be through physical or mental labour. As a broad category, work includes not only the actual productive activities, but also the jobs of supervision and management. It also includes part-time help in farming, household enterprise or any other economic activities, or even unpaid work. In this way all those engaged in the activities mentioned above are workers. Even the people completely engaged in farming or milk production for domestic consumption are considered as workers, but performing daily household chores - such as cooking, fetching water, taking care of children, house-cleaning etc. – is not considered productive work.

According to the 2011 census, 30 % of the people are mainly engaged in productive work and about 10 % people are partially engaged in productive work. About 60 % of the people are not engaged in productive work. The situation is somewhat different in Chhattisgarh - here, 32 %

people are mainly engaged in productive work, while about 16 % people partially perform productive work. Thus about 52 % people are not engaged in productive work.

Literacy

According to the 2011 census, the literacy rate of our country was 74.04 %; that is to say three out of every four persons were educated. If you look at the figures for the previous censuses, you will see that India has made considerable progress in this direction after independence. In the first census after independence the literacy rate was found to be only 18%, in other words 82 out of 100 persons were illiterate. The literacy rate had increased to 64.84 % in 2001.

Although our national literacy rate is over 74 percent, according to the 2011 census, it varies from state to state and between men and women. While the literacy rate among men is 82.14 per cent, the literacy rate of women is 65.46 per cent. Similarly, literacy rate is seen to be different in different regions, for instance Kerala (93.93%), Mizoram (91.58%), Tripura (87.75%) are states with a literacy rate higher than the national average, while Bihar (63.82%), Rajasthan (67.06%), Jharkhand (67.65%) and others are states where the literacy rate is much below the national average.

What is the literacy rate of Chhattisgarh? Find out about the literacy situation in your district and discuss its impact on the development of your district?

Is the literacy rate for women the same in all the districts of Chhattisgarh, and if it is not so, then what may be the reasons for it?

Population and Development

What is meant by development? Does development just mean continuous increase in production? How are we to determine whether the economic development of a country is having a positive impact on the lives of its people? You must have read about these things in your first economics lesson.

What kind of human life can be called developed life? Two economists have made great contributions towards finding answers to these questions – they are Prof. Mehboob Ul Haq of Pakistan and Prof. Amartya Sen of India. They made some suggestions for the United Nations Development Programme for measuring human development. Haq and Sen believed that the development of the people of any country depended on whether they had opportunities to live according to their wishes, and whether



Fig. 5.3 Mehboob Ul Haq



Fig. 5.4 Amartya Sen

they had the necessary capabilities to enable them to fulfil their wishes. According to Haq, the purpose of development is not just an increase in income, but to increase the opportunities for making choices among various life alternatives. The purpose of human development is to enhance human capabilities and make their fullest possible use. They contended that for this it is necessary to invest in people's education and health, more equal



Fig. 5.5 Human Development Report 2015 Work for Human Development

distribution of income and resources, and, in particular, empowerment and economic development of women.

In order to measure this development, the United Nations Development Programme formulated some basic criteria. The first criterion is related to health – What is the average lifespan of people, or till what age do people live, on an average, in a country? It is also called life expectancy at birth. It is believed that a healthy person usually lives till an old age. The second criterion is education - How many years of schooling (or formal education) have people had on an average and how many years of education they are likely to receive. The third criterion is economic development. This aspect is assessed by the per capita income (the average annual income per person) of people in a country. The human

development of a country is evaluated by taking all these three aspects together into consideration. According to this, India occupies the 130th position in the world and has received 609 points. Norway has received the highest number of points, 944, and it leads in human development. The expected life at birth is 68 years in India, while it is 81.6 years in Norway. An adult person in India has had 5.4 years of schooling on an average, while the corresponding figure for Norway is 12.6 years of education. The per capita annual income in India is 5497 American dollars, while the per capita income in Norway is 64,992 American dollars. (*Human Development Report 2015, pp. 212-214*)

However, many other ways can be used to assess the human development of a country – such as keeping track of the literacy rate, the rate of malnourished children and adults, the infant and child mortality rate, the maternal mortality rate, etc. You will read about these in other chapters of this book.

Reema says that if a woman is not allowed to do a job and live the way she wants to, in spite of being healthy and educated, then it is not development. Do you agree with her? Discuss in the class.

If the level of income is high in a country but the level of education is low, then what kind of problem will arise?

If the people of country are educated and have high income but are poor in health, then what kind of problem will arise?

Population and Poverty

Is large population the reason for poverty? This issue has been debated for a long time. Many people believe that resources and production are limited, and if they are used by a larger number of people, then each person will derive less benefit from them, but if they are to be used by fewer people then more resources will be available to each person. However, this issue is not so simple and straightforward.

The first thing is that production and resources are never constant and limited; they depend on technology. For example, when people produced heat by burning wood, the source of their energy depended on forests which were limited. But, when coal, mineral oil and gas began to be used, then new and huge deposits of energy sources emerged, and their use led to massive growth in

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production. Thus, production can be increased by a change in technology and enough wealth can be generated for distribution among a growing population.

Secondly, the question as to how much production will be there in any society, depends on how many people are there in its workforce and how are their working skills and efficiency. The production of a society can be increased if there are more skilled and efficient (healthy and educated) people there. For example, the population of Russia has been declining for several decades, and far from being pleased with this, the government there is trying to stabilize and increase the population. It is doing so because only a large population will provide people for working in the factories, offices and fields, enabling an increase in production.

Thirdly, poverty is caused not by a lack of resources but by their unequal distribution. If the total production of a society is equally distributed among all its people, then nobody will be poor and nobody will be rich. Even with a small population, if there is inequality in a society, then the distribution will be unequal, and some people will remain poor. This is the reason why a portion of the population is poor even in the countries that are considered developed.



Source: "Energy Use Per Capita". World Development Indicators. World Bank.

If we study this problem on a global level, we find that in reality poor countries with large populations - such as Bangladesh, India and others – use very little energy sources compared to developed countries like the United States. The graph above testifies to this fact.

You can see in this that while the inhabitants of countries like Bangladesh, India, Pakistan and Nigeria, on an average, consume less than one thousand kilos of oil, the inhabitants of developed countries consume two thousand to seven thousand kilos of oil per person. If we compare the energy consumption of the total population of India with the energy consumption of the total population of the United States of America, we find that India consumes only a third of the energy consumed by America. The population of America is only one-fourth that of India, still it consumes three times more resources than India. It is another matter that all people in India too do not use these resources equally. You can imagine the amount of resources consumed by the people living in cities, especially the rich people, on the one hand, and the amount of resources consumed by the tribal people living in remote regions on the other hand.

If we assume that all the people in the world should have the same standard of living as that of the average American middle class people, then would the resources of our world be enough? Perhaps not. Gandhiji had once said that there are enough resources on the earth to fulfil the needs of all its people, but not to satisfy any one person's greed.

However, along with this argument, we will also have to accept that there is definitely some relationship between poverty and high population growth rate. In 1974, at the World Population Conference held in Bucharest, India had put forth before that global forum the idea that development is the best contraceptive. In other words, if there is development the population will automatically decline. It has been observed that in developed countries, where the education and skill levels of people are high, and the healthcare services are effective, the child mortality rate is very low and the average lifespan of people is also high. It has often been also observed in those countries that women have the freedom and rights to take decisions regarding their life and occupation. One of the results of all these things is that people give birth to fewer children there. On the other hand, in countries where the child mortality rate is high, the parents do not know whether their children will survive or not. So, they give birth to more than two children believing that at least one or some of them will survive. Similarly, in countries where people have to work for low wages, child labourers are used to meet the needs of the family. This is also one of the reasons for producing more children. Parents think that if they have more children the family income will also be more. In societies where women are educated and are free to live their life as they wish, they give birth to fewer children, and the children who are born are well cared for. All in all, it has been observed that in the countries, developed in terms of these aspects, the population growth rate is relatively low. Even in India, there are states like Kerala and Tamil Nadu where the level of education, especially of women's education, is high and women have more freedom, and consequently the population growth rate is low.

This means that if the benefits of development reach all the people, the inequality in distribution of resources is removed, and the basic amenities and opportunities for employment are available to poor people, then the gap between the population and development would be reduced and the issue of population would be resolved. In order to move forward in this direction, we will have to overcome many hurdles and policy contradictions, and honestly implement the basic idea proposed at the Cairo Conference.

Give a little thought –

How much more energy resource does an average Indian consume as compared to an average Bangladeshi person?

How much more energy resource does an average Chinese consume as compared to an average Indian?

Deenu says that if the population of a country is large, then everybody will receive a low income. Does this argument seem right to you?

Meenu says that if the population of a country is small, the number of productive people will also be small there and they will produce less. As a result, the whole country will remain poor. Does this argument seem right to you?

Teenu says that if the society of a country is very unequal, there will be poverty there, because poverty is neither related to low population nor to high population, but to inequality among people. Does this argument seem right to you?

Exercise

Multiple choice questions

- 1. What will happen if there is no census?
 - (a) Literacy will not increase. (b) employment opportunities will decline.
 - (c) There will be no farming.
 - (d) Data about different aspects of the life of people will not be available to us.
- 2. The sex ratio in India was 940 in 2011: this means that
 - (a) the sex ratio is low. (b) the sex ratio is high.
 - (c) the sex ratio is balanced. (d) nothing can be said.
- 3. Economically, the most active age group is
 - (a) the children's group. (b) the youth group.
 - (c) the old people's group. (d) none of these.
- 4. An increase in the literacy rate of a country
 - (a) is good. (b) is not good.
 - (c) is neither good nor bad. (d) is sometimes good and sometimes bad.
- 5. As compared to an average Indian, the use of energy resources by an American is -
 - (a) equal. (b) less.
 - (c) twice as much. (d) 300 times as much.

Answer the following questions -

- 1. What all data do we obtain from the census?
- 2. How are the census data useful for us?
- 3. What will happen in a country if its sex ratio is low?
- 4. The sex ratio in India was 940 in 2011, but it was 914 in the 0-6 years' age group. What may be the reasons for this?
- 5. The literacy rate of women in India is lower than that of men. What are the reasons for this?
- 6. 'The growing population is the hurdle in the development of the whole world'. Do you agree with this statement?
- 7. In 2011, the number of men in Raipur city was 5,18,611 and the number of women was 4,91,822. What would be the sex ratio in Raipur city at that time?

Project Work

- Prepare a questionnaire with the help of your teacher to conduct a census, and obtain the following data after conducting a census of your colony or *tola* (hamlet): The total population, the sex ratio, the sex ratio in the 0-6 years' age group, the literacy rate, the population of children, youth and old people separately.
- 2. Construct an age pyramid for your neighbourhood on the basis of the data obtained.