The People

Map 1 : If we were to show the area of countries on the basis of population it would look like this. How is it diffrent from other world maps? Discuss.

Population is a pivotal element in social studies. When we refer to 'development for all' it is people that we have in mind, especially to include those who are normally marginalised in the process of development. The idea of equality is used with reference to people. On the other hand, you often hear people blaming "population growth" for all problems that we face. They blame the lack of jobs, food, and resources on the fact that we have to share this with many people. Ninety two percent of the working people in India are in the unorganised sector. They have to struggle for work and have no other social security apart from their families to support them. How do we make sense of these contradictions? It is important to understand population numbers, its distribution and characteristics that provide the basic background for understanding and appreciating the other aspects.

- Talk to a few people in your neighbourhood who have different occupations and incomes. Find out about their views on the ideal family size.

- Have you ever wondered how information about the people living in your locality or village, and the country as a whole is collected and recorded? Ask your teacher to explain their experiences of collecting census data.

- What is the difference in collecting information using a census or a sample method? Discuss with few examples.

The census of India provides us with information regarding the population of our country. A census is the procedure of systematically acquiring and recording information about the members of a given population. Once in ten years information is collected about all people living in India. The people who do this survey go from house to house and find out the number of people living in every house in every village, town and city. This census provides us with a lot of information such as how old people are, their occupation, houses, education, religion etc. The Registrar General & Census Commission of India, organises the collection and recording of this information.

Before we find out more about the census, let us survey our own area and examine the kind of work done by the census.

Conducting a Survey

- Each group of two to three students will collect data from 10 families of their locality. The survey form is given below.
- Each group will fill in the details and construct the tables indicated.
- Based on the tables presented by each group, the class will discuss the questions.

Household 1 Name	Male	Female	Age	School Education	Occupation for 15 +
Household 2 Name					

Before the survey:

- The class needs to discuss and arrive at a common meaning for all the terms used in the survey form. Otherwise there willbe confusion in the actual survey and we would not be able to compare the result of one group with another. With the help of your teacher discuss the following:

1. How would a "household" be defined? Whom all would you include?

2. For "Education", what are the categories that you would use?

   Examples: child below six; studying in school/ college, class….; should be in school but not enrolled; studied up to class ..; did not attend school

3. What categories would you use for occupation?

   Examples: Homemaker, Student, self-employed as…, Unemployed, retired, non-employed, senior citizen

After the survey:

A) Each group would construct a table to show number of people in the surveyed families:

Male	Female	Total Population

B) What is the female/ male ratio for your group? Are the ratios very different among the groups? Discuss.

For all children 6-14 years			
Children	Male	Female	Total
At school			
Dropped out			
Never enrolled			

C) What is the percentage of dropouts & never enrolled children as a whole- for all groups? What are the reasons for this?

D) For those above 20 years, what is the average time they have spent at school? Find this for your group. Is this data useful?

E) For all people in the age group 15-59

Occupation	No	%
Self-employed		
Homemaker		
Job		
Unemployed		
Student		
Total		

How do you classify those who are "working" and those who are "dependent" in your sample?

What does the census show?

Age Structure

The age structure of a population refers to the number of males and females in different age groups in a country. It is one of the most basic characteristics of a population. To an important degree, a person's age influences what she requires, her capacity to work, whether she is dependent on others, etc. Consequently, the number and percentage of children in a population, people of working age, and aged persons are notable determinants of the population's social and economic structure.

The population of a nation is generally grouped into three broad categories:

1. Children (generally below 15 years) : They are taken care of by the family and like everyone else they require food, clothing, education and medical care and all other opportunities for growth. However, usually they do not earn their income to support themselves. It is not desirable that some children are forced to work because of economic conditions.

2. Working Age (15-59 years) : Usually this group forms the working population in a society. They are also biolgically reproductive. Most people in this age group desire decent income and security of work. Children and the aged often depend on the earning of this group.

3. Aged (Above 59 years) :

Those who have been in a salaried employment or in organised sector may get retirement pension. However, a vast majority of agricultural labourers, domestic workers, construction workers, and others usually continue their work as long as it is physically possible. These groups also depend on their families for support in old age when unable to work. It is also possible that their medical expenses are higher than that of other age groups.
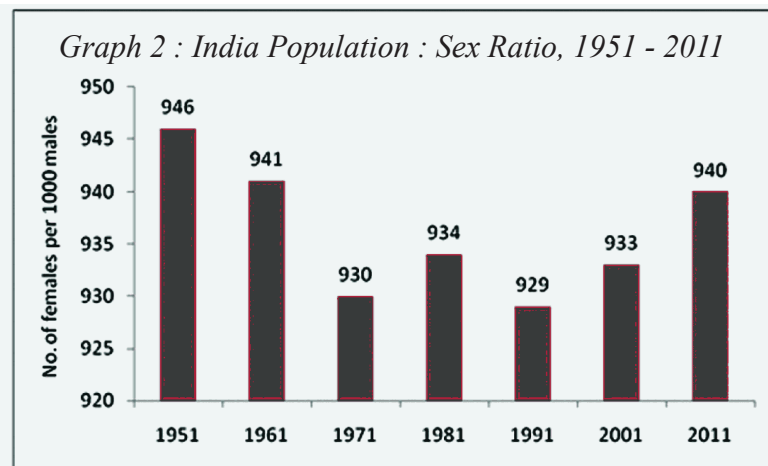

Graph 1 : Population Pyramid of India, 2011
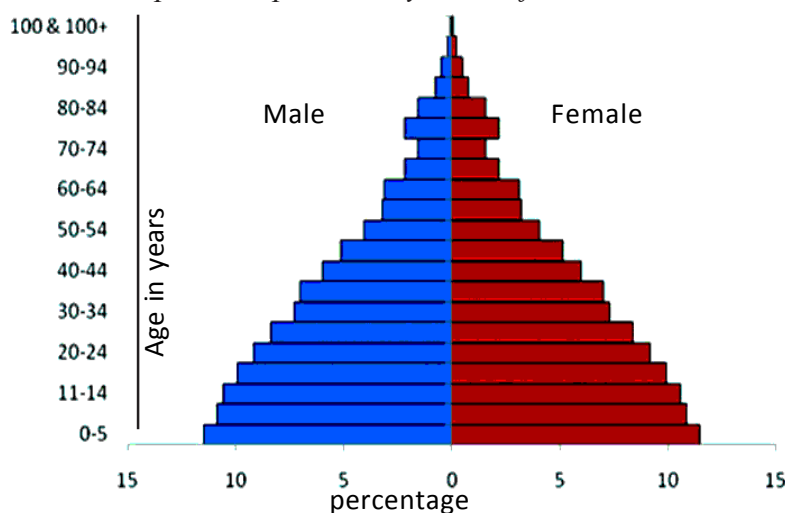
- From the age pyramid above identify a rough estimate of the percentage of children in the population.

- Based on your survey present following items in a table : Population, Children, Working, Aged,

Think of various ways in which government should have special schemes for different groups. Examples could be midday meal schemes; anganwadi programmes etc. Why are they necessary?

Sex Ratio

Sex ratio is the number of females per 1000 males in the population. This information is an important social indicator to measure the extent of equality between men and women in a society. You have calculated this for the families that you surveyed. Now examine these figures for the country as a whole.

Graph 2 : India Population : Sex Ratio, 1951 - 2011

We notice that the number of females in India has consistently been lower than that of men. This female/ male ratio, the 'sex ratio' is a cause of concern since it indicates a hidden form of discrimination. Women and girls in particular face inequal opportunities for education and development. In the most basic needs of nutrition, child care and health also they are discriminated against – they get less of these things than males. This happens within the same family. This discrimination is not always obvious.

Medical research shows that given similar circumstances, girl children survive much better than boys. Hence if there was no discrimination, the number of girls should be higher or as much as boys. From the census survey, we get another indicator. In India, 103 female babies are born against 100 male babies. However, more female babies die than male babies. The census shows that in the age group 0-5, the number of girls who survive is much lower than boys. This can only happen if there is some discrimination in their care and nutrition because otherwise the physical chance of survival is better for girls.

The other evidence that we have is from comparative figures. If we look at societies or regions that have provided equality for women and provided equal opportunities for them, the sex ratios are different. Regions that have unequal gender relations that favour the males and discriminate against the females tend towards unequal sex ratios. This can happen even though they have high incomes. For example, look at the following data:

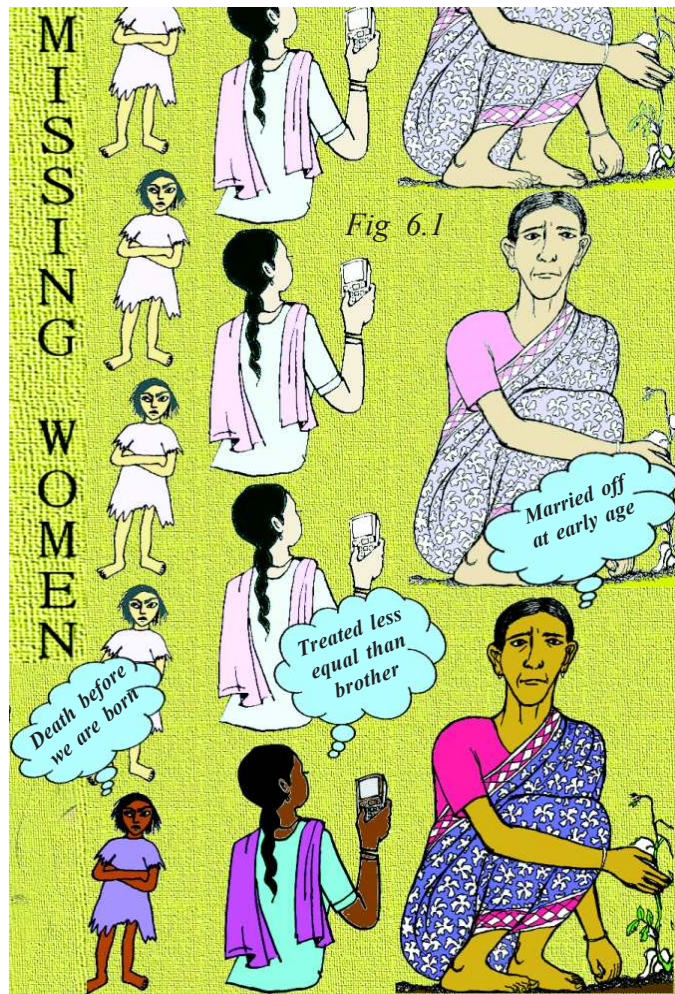| Area	Haryana	Punjab	AP	Kerala	USA
Sex ratio	870	880	970	1040	1050

It is noted that within India certain parts like Kerala have a positive sex ratio while some other regions are extremely biased against women. A distressing aspect of gender bias in India that shows little sign of going away is the preference for boys over girls. One of the worst manifestations of this pro-male bias is the relatively higher mortality rates of girls compared with boys. This is mainly because of the quiet violence of the neglect of their health and illness in comparison with the attention that male children receive. There has also been the case of female fetus infanticide. Due to the preference for male children parents may decide to abort the female child before birth. Many families consider female children as a burden. Studies have shown that male priority in health continues for adults, raising the mortality rates of even adult women above those of adult men.

Women's education has been a powerful force in reducing discrimination against women. There is definitive evidence that women's literacy and schooling reduce child mortality and work against the selective neglect of the health of girls. To understand such situations discuss the questions on the right and whether this would impact the sex ratio.

Fig 6.1

MISSING WOMEN

Death before we are born

Treated less equal than brother

Married off at early age

- Do girls get similar opportunities for further studies as boys?
- Do married women have opportunities for travel and work outside home?
- Are women expected to maintain a separation from their natal family and not ask for security or property rights?
- Is there a strong boy preference in your region?

Literacy Rates

According to the Census of 2011, a person aged 7 years and above who can read and write with understanding in any language, is treated as literate. Literacy is a key for socio-economic progress.

At independence in 1947, 12% of the population was literate. In 2001 it was 64.84%. It grew to 74.04% by 2011. However, the 2011 census shows that there is a wide disparity in literacy rates for men (82.14%) and women (65.46%).

Working population

It was pointed out earlier that those who are in the age group 15-59 are working people. They might work the whole year or only a part of the year. This depends on the availability of work. As discussed earlier this does not cover the unpaid work of home makers (see Table 1).

Table 1 : Distribution of workers as per Census -2011

Workers	Percentage of workers
Cultivators	25
Agri. Labourers	30
Workers in household industries	04
	59
Other workers	41

The Census of India groups them into four categories. Cultivators are farmers, who farm or supervise the land that they own or take on rent. Agricultural labourers are those who work on another's farm for wages in cash or kind. Workers in household industries would be those who are manufacturing or repairing some product at home such as dehusking of paddy, *bidi* workers, potters, weavers, repair of footwear, manufacture of toys, matches, etc. Other workers would be those who are employed in factories, trading, causal labour and all other occupations.

Changing population size

Population is dynamic. The numbers, distribution and composition of the population are always changing. This is because of the interaction of the three processes: (1) births, (2) deaths and (3) migrations.

Change in the size of a population is the difference in the number of inhabitants of a country/ territory during a specific period, say during the last ten years. Such a change can be expressed in two ways: (1) as absolute numbers, or (2) as percentage change.

The absolute numbers added each decade is the magnitude of increase. It is obtained by simply subtracting the earlier population (e.g. that of 1991) from the later population (e.g. that of 2011). If the result is a positive number, the population has increased. If it is a negative number, the population has decreased by that number.

Population change (absolute numbers) = (population at later date) – (population at earlier date)

Graph 3 : India Population (in millions) : 1901-2011
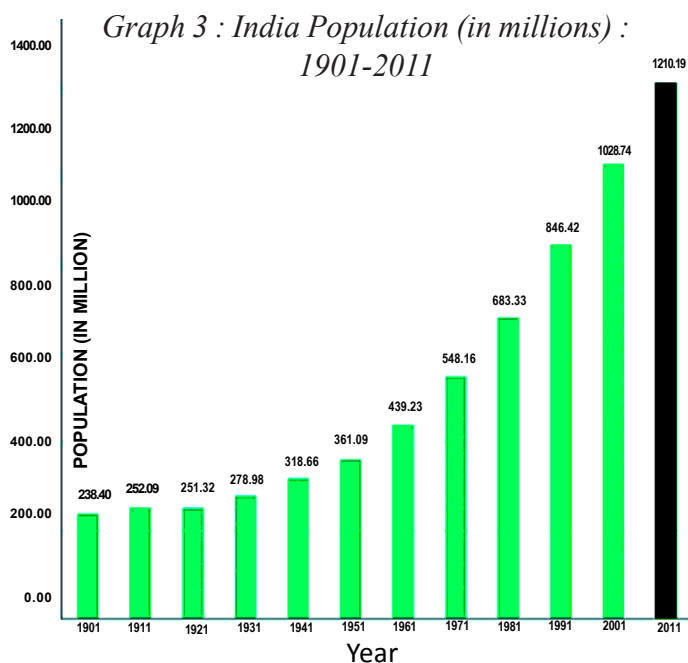
Observe the increment in population of India and its growth - 1901-2011 (Graph 3)

In which year did the population decrease?

From which year onwards is the population continuously increasing?

What could be the reasons for the speed with which increases took place after Indian independence?

Population change in a place = (number of births + number of in-migrants) – (number of deaths + number of out-migrants). A positive number means the population has increased by that number. A negaive number shows it has decreased by that number.

Assume for the moment that there is no migration. In order to calculate these increases we examine two rates. (1) Birth rate is the number of live births per thousand persons in a year. In 1992 the birth rate in India was 29. This means that for every 1000 people living in the country during that year 29 live births took place. (2) Death rate is the number of deaths per thousand persons in a year. For the year 1992, for every 1000 persons living at that time 10 people died during the year. Therefore 19 people for every 1000, was the addition during the year. This number can be expressed as a percentage i.e. 1.9%. Hence we say that the population growth rate was 1.9% for the year 1992.

The rate or the pace of population increase is important. It is studied in per cent per annum, e.g. a rate of increase of 2 per cent per annum means that in a given year, there was an increase of two persons for every 100 persons in the base year. This is calculated year by year like in compound interest. This is referred to as the annual growth rate. India's population has been steadily increasing.

In order to examine causes for the growth of the Indian population, as seen from the graph above, we need to look at both death rates and birth rates. There has been rapid decline in the death rates but till recent times birth rates were not decreasing substantially. From 1900 onwards and especially post independence impact of famines declined because of famine relief, movement of grain, ration

shops and an active public voice in a democracy. Similarly epidemics such as cholera, plague and to some extent malaria were controlled. Polluted water, congested living and un-cleared garbage were the real causes of several diseases. That these have to be met with better sanitation, clean water and nutrition began to be accepted and several steps were initiated. Later on advances in medicine, especially antibiotics and vaccines contributed to better health care. Compared to 1900, death rates fell rapidly. High birth rates together with declining death rates led to higher rates of population growth.

Why did birth rates remain high for such a long period? One set of reasons has to do with what has happened in the past. If in the overall population the percentage of young people is high, then in the coming years they would grow up, get married and have children. The total number of such children added would be high, because we began with a population with a large number of young people.

The other reason is the number of children that couples wish to have. This in turn is related to how many children survive, what social security people have and the preference of male child in society. For example look at three generations of Umed Singh:

"Umed Singh's grandfather and mother died because of a plague and cholera epidemic. His father, born around 1900 was brought up by his uncle. They owned some land but faced constant crisis, sometimes crop failure and famine with an only occasional good harvest. Umed Singh's father had nine children but six of them died very young. Out of the three surviving children, one was
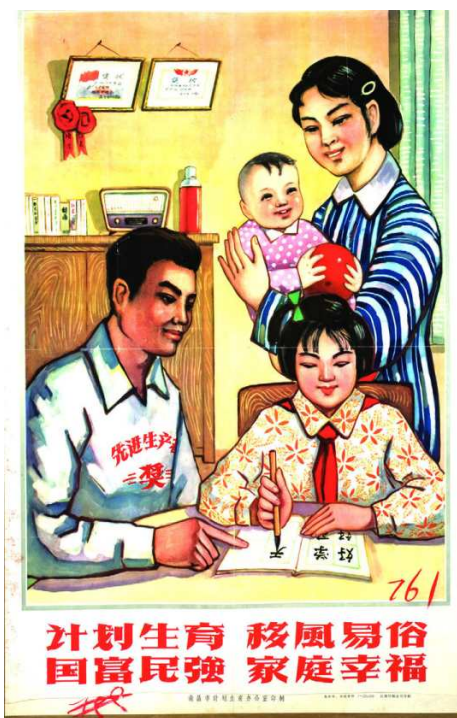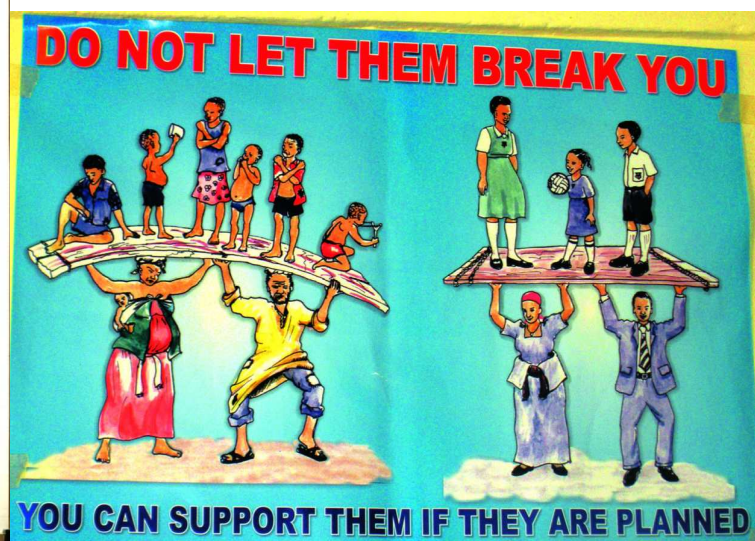

Fig 6.1 : Here are two posters from other countries. Can you guess the message given in them? Have you seen similar posters in India? Discuss.

Umed Singh, born around 1935. He has two sisters. Umed was able to go to a secondary school and become a policeman. Unlike his father he had regular salary and some income from land. Umed initially had two daughters but was worried about their survival. He also wanted a son. He then had four more children, three of them were sons. However, now Umed's eldest daughter who has trained to be a teacher does not want more than three children."

Year	Total Population (In millions)	Absolute increase in the decade	Percentage change in the decade
1951	361		
1961	439	78	
1971	548	?	
1981	683	?	
1991	846	?	
2001	1029	?	
2011	1210	?	

Table 2 : The Magnitude and Rate of India's Population Growth (calculate the missing figures and write them down)

Since 1981, birth rates have also started declining gradually, resulting in a gradual decline in the rate of population growth. Calculate the % change over the decades 1951 to 2011 and see if this is happening in the table above.

How do we understand this trend? We use another concept called the Fertility rate (total births per woman). Total fertility rate is the number of children that is likely to be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current pattern. If this declines then we can say that couples are deciding to have fewer children. Factors both within the family and outside are contributing to these decisions. Examine the Graph 6.4.

The fertility rate for India in 1960 was more than 5.6, which indicates that on an average each woman was likely to bear five or six children. The family decides the number of children they want depending on security, opportunity for children and social norms. There have been some changes in this outlook. Present fertility rate in India is 2.7, Andhra Pradesh fertility rate is 1.9.

Graph 4 : Fertility Rate in India, 1961 -2011
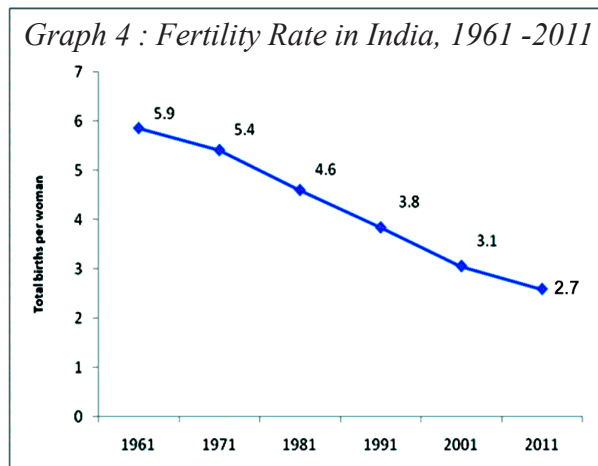
- When the fertility rate is near 2, what does this imply? Discuss.

- Talk to some couples who are recently married but do not have children. How many children do they plan for? What are the reasons?

- In your family trace the number of children for every woman in three generations. What changes do you observe?

- Use the survey you have done in groups and find out total number of women in the age group 45 and above and number of their children. What is the average number of children per woman in your sample?

- What are the factors that influenced the decisions about children for Umed Singh? Do you think his daughter is thinking in a similar manner?

The third component of population change is migration. Migration is the movement of people across regions and territories. Migration can be internal (within the country) or international (between the countries). Internal migration does not change the size of the population, but influences the distribution of population within the nation. Migration plays a very significant role in changing the composition and distribution of population. You will know more about migration in the forthcoming chapter.

We often hear people talk of population growth in alarmed tones. These people are often literate and talk about others not benefitting because there are too many people who have to share few resources. However, families decide the number of children they want to have based on many considerations such as the resources they own, their security in old age etc. Most often families with larger number of children are poorer than the rest, don't own many assets, and rely on their children for old age security. How do we understand these different points of view?
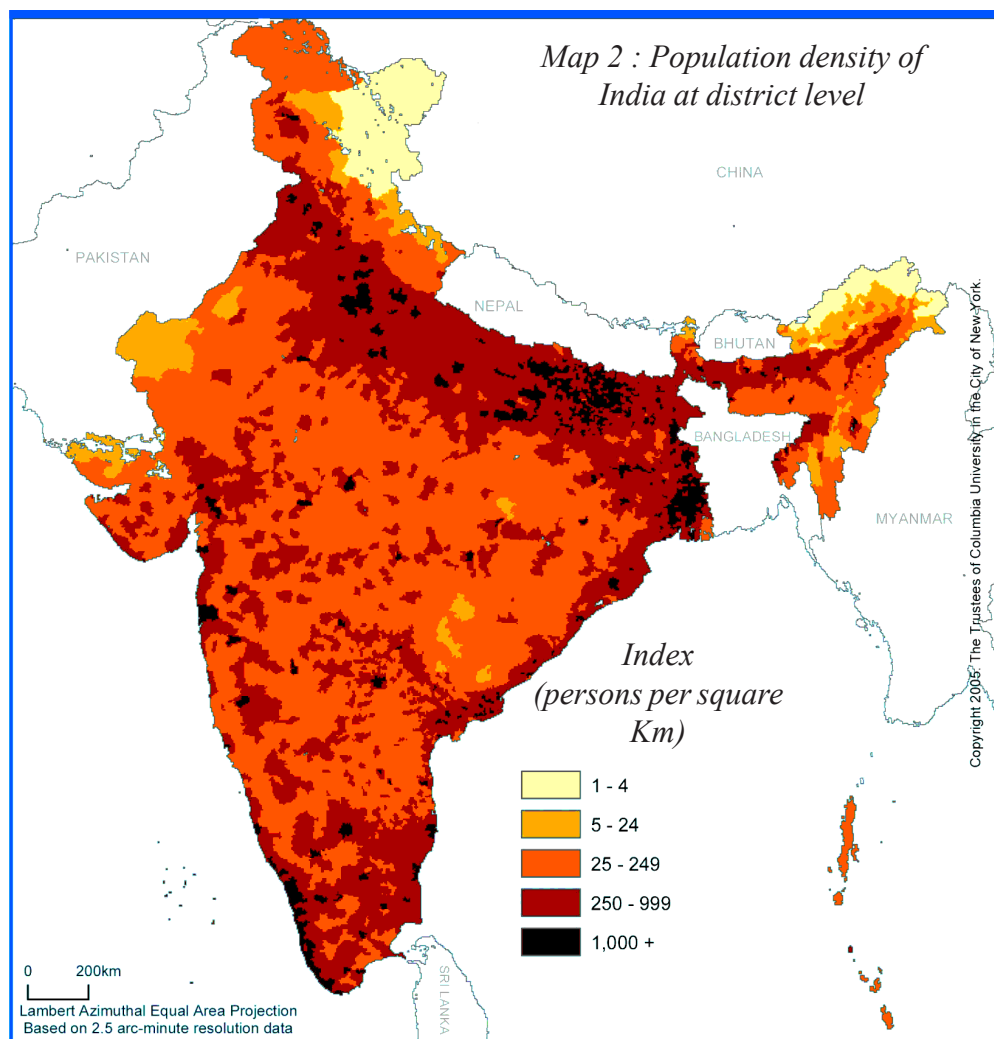
Population density

Population density provides a better picture of its distribution. Population density is calculated as the number of persons per unit area.
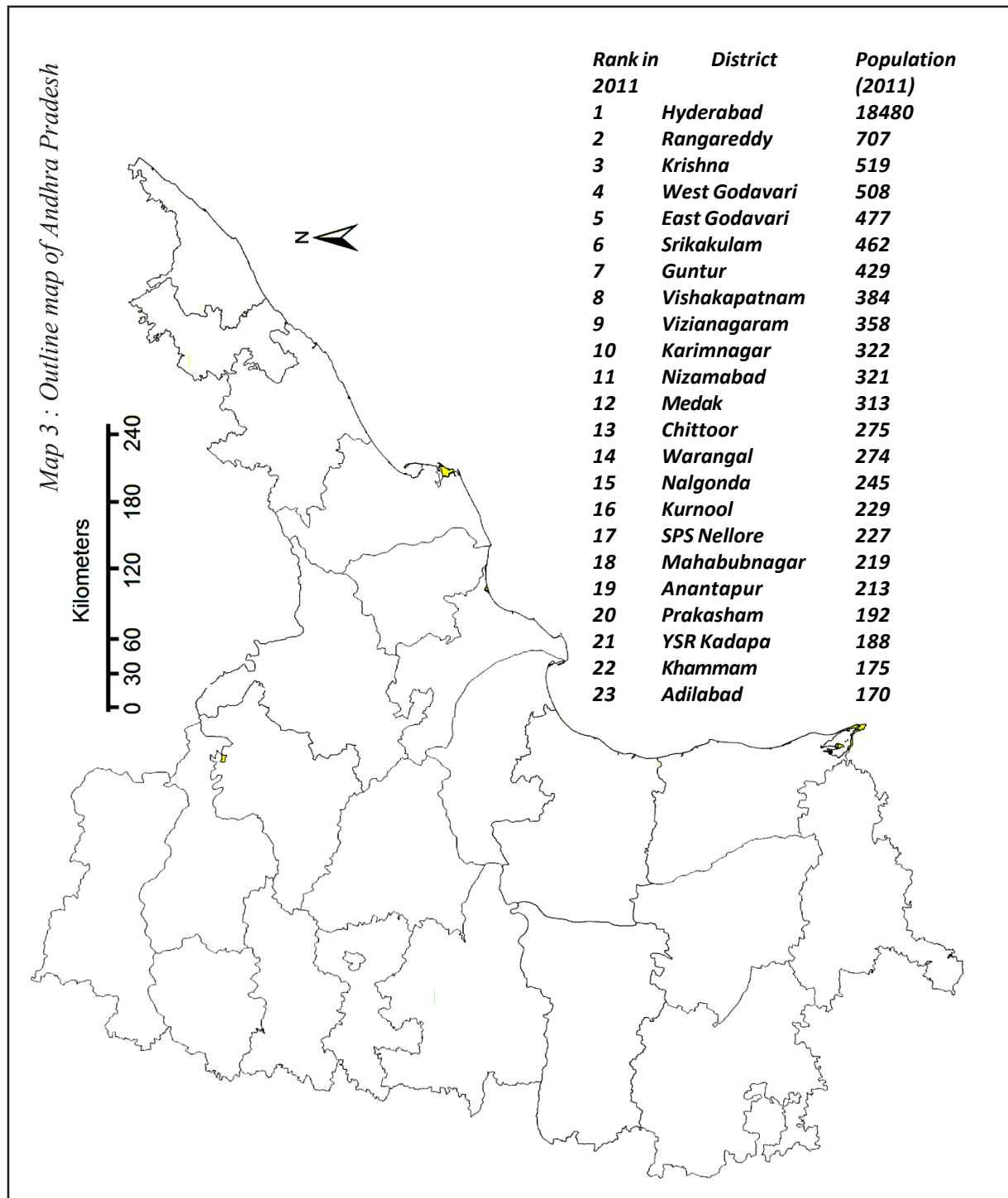
India is one of the most densely populated countries of the world. The population density of India in the year 2011 was 382 persons per sq km. Densities vary from 904 persons per sq km in West Bengal to only 13 persons per sq km in Arunachal Pradesh. Assam and most of the peninsular states have moderate population densities. Hilly, dissected and rocky nature of the terrain, moderate to low rainfall, shallow and less fertile soils have influenced population densities in these areas. The Northern Plains and Kerala in the south have high to very high population densities because of the flat plains with fertile soils and abundant rainfall.

Identify the three states of the Northern Plains with high population densities. How does the density of population vary so much? We have to examine the history

of the region, the terrain and climatic conditions to be able to understand this variation. For example in chapter 9 read the section on 'Land and other natural resources'. Even though the fertile land & irrigation is able to support a larger population than before, the impact on each group is different, especially for small farmers and landless labourers.

- By which year was all the land in the village cultivated?

- How do you think landed people responded to increasing family's size?

- What was the response of small farmers, like Govind, when families expanded? How far was tube well irrigation useful ?

- Look at the map 2. Find out if there is any relationship between relief features of India and population density. Identify major urban centers across the country. How do you explain the high population density in the cities?

Map 2 : Population density of India at district level

Index (persons per square Km)

1 - 4
5 - 24
25 - 249
250 - 999
1,000 +

0   200km

Lambert Azimuthal Equal Area Projection
Based on 2.5 arc-minute resolution data

Map 3 : Outline map of Andhra Pradesh

Rank in 2011	District	Population (2011)
1	Hyderabad	18480
2	Rangareddy	707
3	Krishna	519
4	West Godavari	508
5	East Godavari	477
6	Srikakulam	462
7	Guntur	429
8	Vishakapatnam	384
9	Vizianagaram	358
10	Karimnagar	322
11	Nizamabad	321
12	Medak	313
13	Chittoor	275
14	Warangal	274
15	Nalgonda	245
16	Kurnool	229
17	SPS Nellore	227
18	Mahabubnagar	219
19	Anantapur	213
20	Prakasham	192
21	YSR Kadapa	188
22	Khammam	175
23	Adilabad	170

Kilometers

0 30 60 120 180 240

N

Here are the data for population density of Andhra Pradesh -2011. On the above blank district map of AP plot them in ranges.

Compare a high density district and a low density district on the following

a. Terrain and potential for agriculture development

b. History of agriculture in that region- use of land, water and other natural resources

c. Migration to or from that region and reasons for this

Improve your learning

1. Identify the false statements and correct them:
   a) Census data is collected every 10 years
   b) Sex ratio refers to the number of female in adult population
   c) Age structure shows us the distribution of people according to their age
   d) Population density is higher in mountains as people like the climate there

2. Based on the following table answer the questions below.

World historical and predicted populations (in millions)

Region/ year	1500	1600	1700	1800	1900	1950	1999	2012	2050	2150
World	458	580	682	978	1,650	2,521	5,978	7,052	8,909	9,746
Africa	86	114	106	107	133	221	767	1,052	1,766	2,308
Asia	243	339	436	635	947	1,402	3,634	4,250	5,268	5,561
Europe	84	111	125	203	408	547	729	740	628	517
Latin America and the Caribbean	39	10	10	24	74	167	511	603	809	912
Northern America	3	3	2	7	82	172	307	351	392	398
Oceania	3	3	3	2	6	13	30	38	46	51

- Identify roughly how many centuries it took for the world population to double for the first time.
- In earlier classes you had studied about colonisation. Look at the table and identify in which of the continents the population decreased by 1800.
- Which continent has been most populous for most period of time?
- Is there any continent that is projected to show a significant decrease in population in future?

3. List out the impacts on society if sex ratio is too low or too high.

4. Compare Indian literacy rates with other countries:
   Brazil , Sri Lanka , South Africa, Nepal , Bangladesh , Norway , Chile , Indonesia
   What similarities and differences do you note?

5. Which areas of Andhra Pradesh have high density of population and what may be some of the reasons behind it?

6. Distinguish between population growth and population change.

7. Compare the population pyramid of India with data of three other countries given here.

- Which country's population is likely to grow?

- Which country's population is likely to reduce?

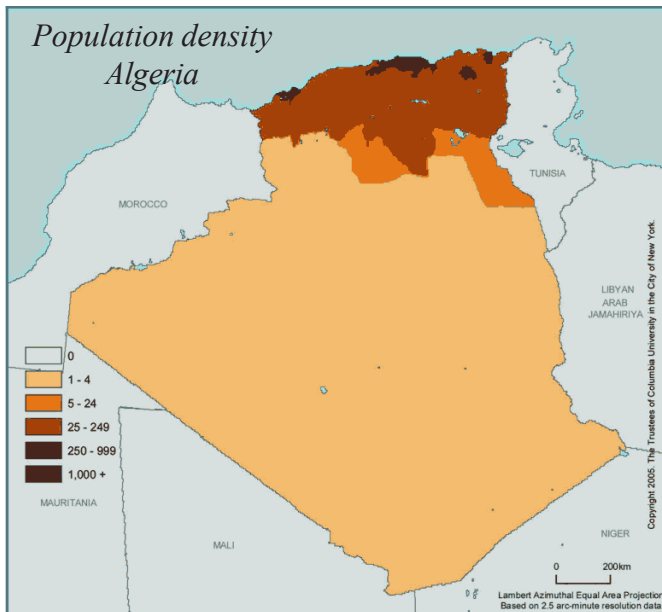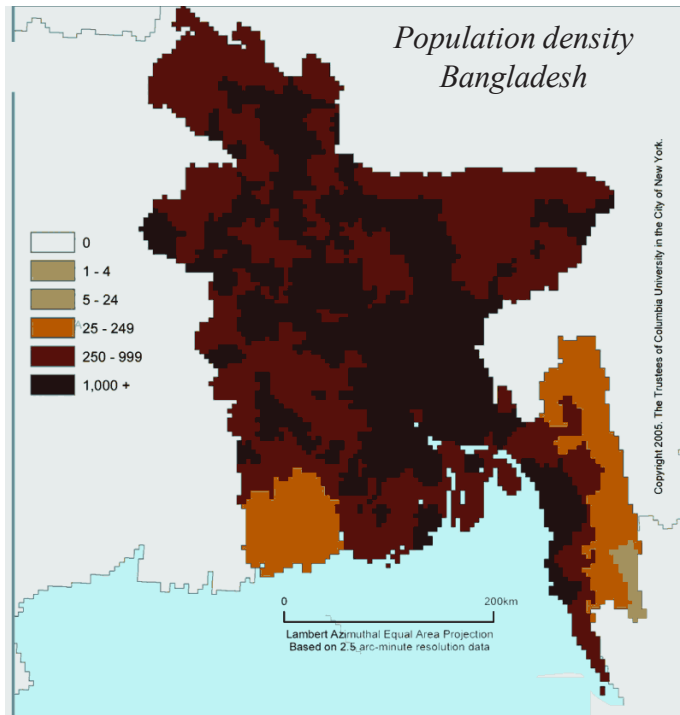- Compare the gender balance: What can you tell about each country's family and welfare policies?

Sweden - 2012

Kenya - 2012

Mexico - 2012
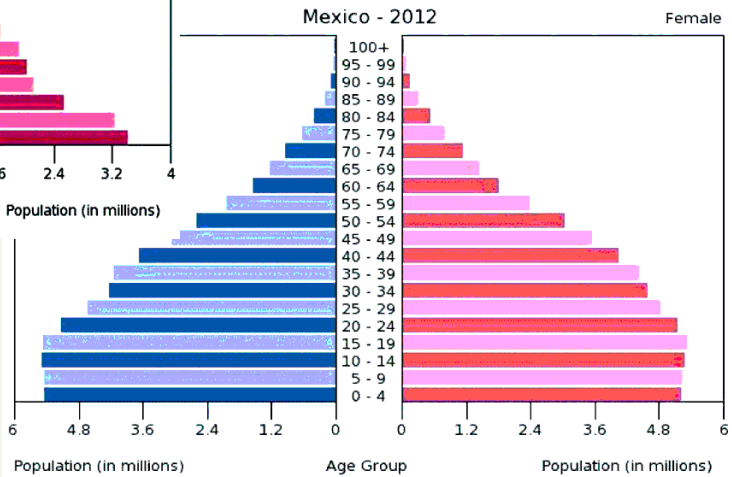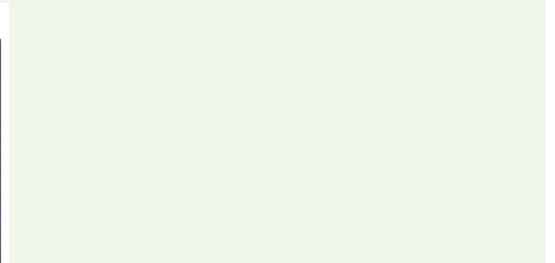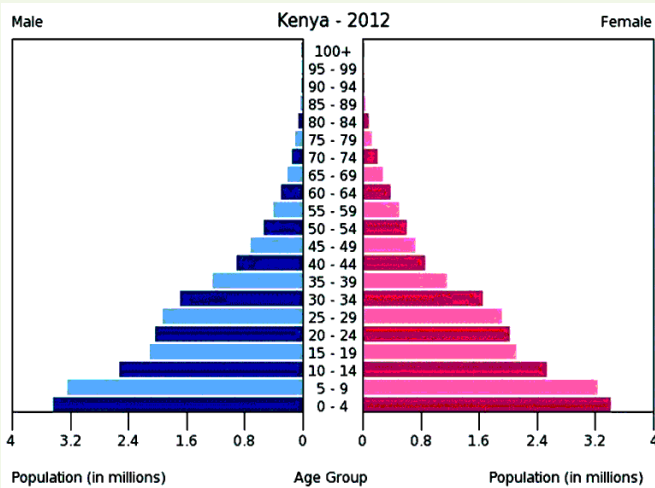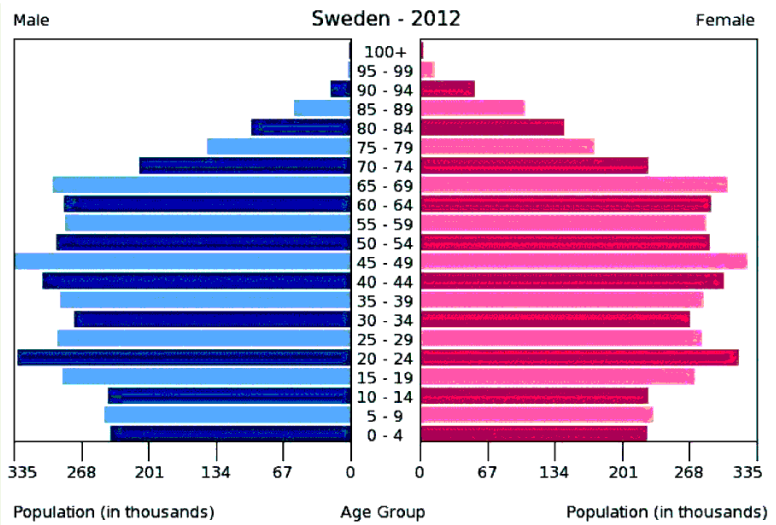
8. Map work:

a. On a blank map of India showing state boundaries, plot the state-wise population density based on the 2011census by taking five ranges.

b. On a blank map of Andhra Pradesh showing district boundaries, plot the population distribution using the dot method (one dot is equivalent to 10,000 population).

Project

Look at following two maps of density and the graphs on growth of population. Use various aspects of population you studied in this chapter and describe them.

Population density
Bangladesh

	0
	1 - 4
	5 - 24
	25 - 249
	250 - 999
	1,000 +

0   200km

Lambert Azimuthal Equal Area Projection
Based on 2.5 arc-minute resolution data

Population density
Algeria

MOROCCO

TUNISIA

LIBYAN
ARAB
JAMAHIRIYA

	0
	1 - 4
	5 - 24
	25 - 249
	250 - 999
	1,000 +

MAURITANIA

MALI

NIGER

0   200km

Lambert Azimuthal Equal Area Projection
Based on 2.5 arc-minute resolution data

Population Growth & Forest Loss Since 1990

■ Forest Loss

■ Population Increase

■ Population Increase   ■ Forest Loss

Social Studies

The People