**26**

POPULATION DENSITY, DISTRIBUTION AND GROWTH IN INDIA

So far we have had a look at the natural resources of India. They include land, soil, water, forest, mineral and wild life resources. We have also noted the distribution of these above mentioned resources as well as direction and pace of their exploitation and utilization for development. All these aspects are to be studied in relation to people living in the country. By people we mean not only their numbers as consumers but also as developers or managers of natural resources. For this purpose, we look at their educational and health status, their vocational, technical, and social skills and above all their aspirations, value system including work habits or “work ethics”. In this context you would realise that people are not mere consumers but also constitute the most important resources of a country. In this lesson, we will examine the size of India’s population in the world context. We will study distribution and density of population and various factors influencing them. Finally, we will also analyse trends in population growth, their determinants and consequences.



OBJECTIVES

After studying this lesson, you will be able to:

- explain the size of Indian population in the world perspective;
- analyse factors responsible for uneven distribution of population;
- locate areas of dense, moderate and sparse population on a map;
- interpret the data about distribution, density and growth of population;
- explain the trends in population growth during the last hundred years (i.e. 1901-2001);

**Notes**

- identify factors responsible for rapid growth of population;
- define various demographic terms such as birth rate, death rate etc;
- appreciate the need for lowering the growth rate of population, and
- analyse causes and consequences of in and out migration in the country.

26.1 POPULATION OF INDIA

India is the second most populous country in the world next only to China. On March 1, 2001 the total population of India was at 1027 million. This accounted for 16.7% of the world's total population. In other words, about every sixth person in the world there is an Indian. China, the most populous country of the world, is a step ahead of us as every fifth person in the world there is a Chinese. While India possesses only 2.42% of the world's total land area, she is required to sustain almost 17% of the world's population.

In terms of area, India stands seventh preceded by Russia, Canada, China, the United States of America, Brazil and Australia. Barring China, the total population of these large five countries is far less than that of India. The total area of these five countries is over sixteen times whereas their total population is much less than that of India. This may partly explain how handicapped we are because of our huge population. It can also be revealed from the fact that the total population of North America, South America and Australia added together is less than the population of India. On the top of it, we are adding over 17 million people each year. It is more than the total population of Australia. In fact the net addition to Chinese population each year is less than ours.

26.2 DENSITY AND DISTRIBUTION OF POPULATION

Population of the world or of any country is not uniformly distributed. The same is true about India also. Some parts of the country are densely populated, some parts moderately populated and some parts are sparsely populated. (see figure 26.1)

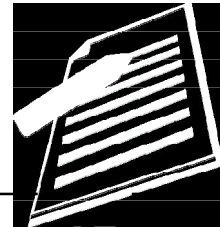
The size of population of different areas can be compared in many ways. One of the ways can be to compare the absolute size of the population. But it does not provide any idea about the relationship of population with the area or resource base of the country. This type of comparison is therefore not adequate. For example, population of Singapore is 4.2 million and that of Peoples Republic of China is 1,300 million. Indeed one is too small and the other is too big. Now take into consideration that the area of Singapore is just 630 sq. km; whereas China has an area of 9.5 million sq.km. This helps us to know how crowded Singapore is as compared to China. Therefore, the population of various countries are generally compared in terms of density of population. This is a method of comparing the man-land ratio of different regions. For this purpose, the population of a region is assumed to be distributed evenly in all its parts and the number of people per square kilometre is thus calculated. This is called arithmetic density of population.

Population Density, Distribution and Growth in India

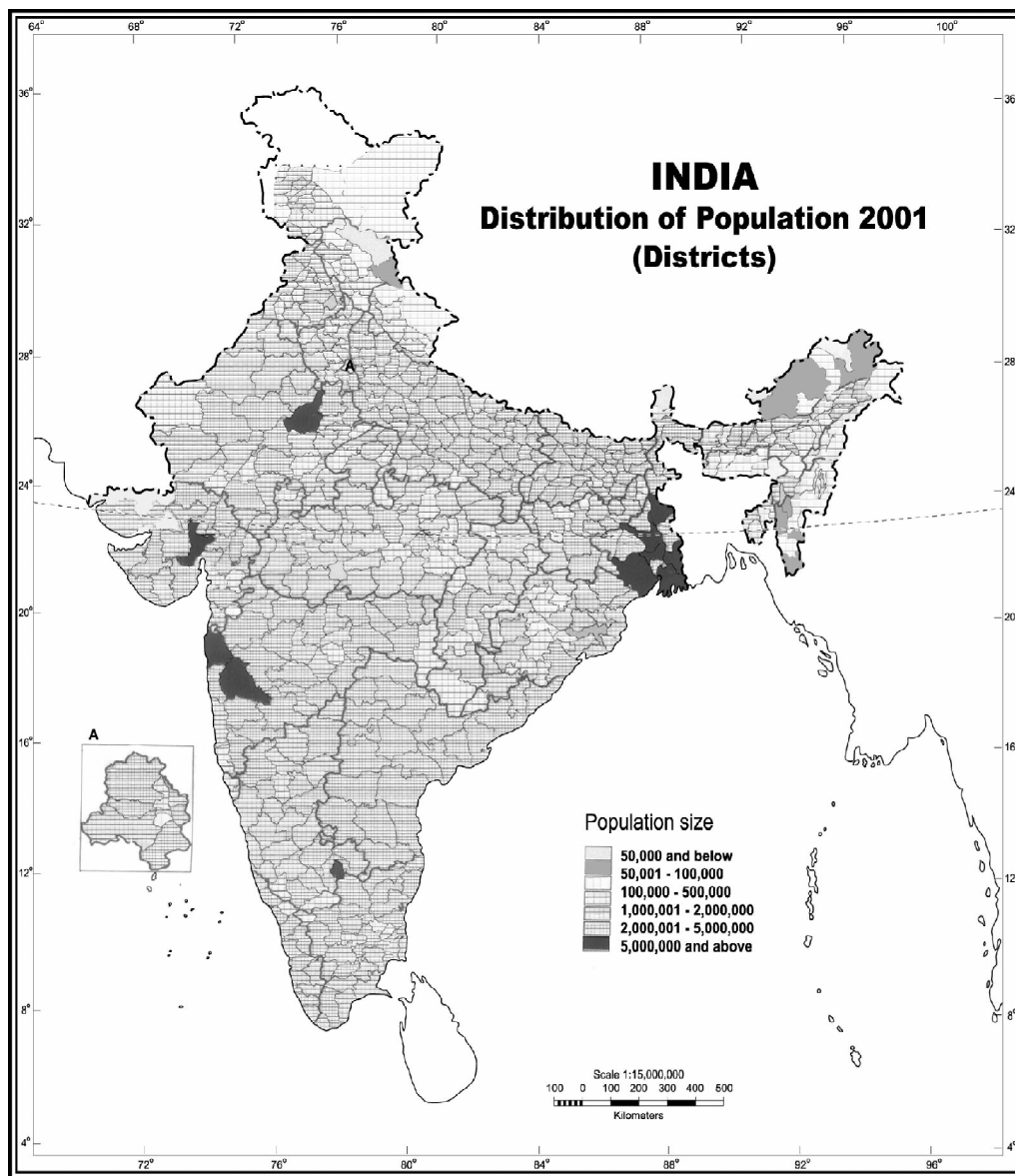
Which can be calculated by dividing the total population of a country or a region by the total area. Therefore the density of population is expressed as the number of persons per square kilometre. According to 2001 census, the density of population in India is 324 persons per square kilometre. Over the last 100 years density has increased more than four times. It has increased from 77 in 1901 to 324 in 2001. When we say that the density of population of India is 324 persons per square kilometre, this does not mean that population is exactly 324 persons in each and every square kilometre.

MODULE - 9

Human resource
development in India



Notes



Based upon Survey of India Outline Map printed in 1990
The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.
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Fig. 26.1 : INDIA : Distribution of Population 2001

In reality, the distribution of population in India is highly uneven. The uneven density of population in India is clear from the fact that in Arunachal Pradesh the average number of population is only 13 persons per square kilometre, whereas it is 9,294 persons per square kilometre in Delhi as per 2001 census.



Notes

- Comparison of populations of different countries or region becomes more meaningful if it is done by comparing the average density of population of each area.
- This is an expression of man-land ratio.
- The density of population can be expressed as

$$\text{Density} = \frac{\text{Total number of people of a country}}{\text{Total area of the country.}}$$

26.3 FACTORS INFLUENCING DISTRIBUTION AND DENSITY OF POPULATION

As we discussed earlier, the spatial spread of population in India is not uniform. There are very wide regional variations. Let us see what factors are responsible for these variations. All such factors affecting the population distribution and density may broadly be grouped into two major categories. They are (A) physical factors and (B) socio-economic factors.

(A) Physical Factors

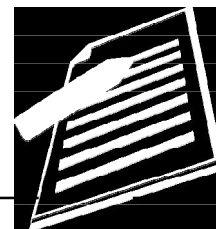
Physical factors play a vital role in the density and distribution of population. Physical factors include landform, climate, soil, etc. Though there is a lot of improvement in technology but the patterns of population distribution all over the world continues to reflect the influence of varied physical factors.

- (i) **Landforms** : it influence the distribution pattern of population. The most important attributes of landforms which determine population density and distribution are the altitude and slope. The most striking evidence of the influence of altitude and slope on population density and distribution have been observed between mountains and plains. For example, take the case of most densely populated Indo-Ganga plains on the one hand and a highly mountainous state of Arunachal Pradesh on the other.

Other than this, factors like drainage, and water table have also been affecting population distribution.

- (ii) **Climate** : is one of the essential elements of the physical factors which influence the spatial distribution of population through temperature conditions and the amount of precipitation. Take the case of hot and dry deserts of Rajasthan and the cold and wet Eastern Himalayan region where very low temperature and heavy precipitations prevail. This is the reason for uneven distribution and low density of population here. Almost even distribution and high density of population are found in plains of Kerala and West Bengal where rainfall is high. It is low in the regions of Rajasthan, and lee-ward sides of Western Ghats.

- (iii) **Soil**: is another factor which affects the density and distribution of population. One may be tempted to question the validity of the role of soil in the present

**Notes**

day highly industrialised society. But even today about 75 percent of population in India lives in villages. People in villages earn their livelihood from agriculture which depends upon the quality of soil. That is why alluvial region of northern plains and coastal and deltaic regions of India continue to support high densities of population. On the other hand, it may be worth mentioning that vast tracts of land in desert areas like Rajasthan, Rann of Kutch in Gujarat, Terai region in Uttarakhand have been suffering from problems like soil erosion and soil efflorescence which support only low density of population.

In any region, the density and distribution is influenced by more than one factor. Take for example North-Eastern region of India. Here several factors are responsible for low density of population. These factors are high rainfall, rough terrain, dense forests and poor quality of soil.

(B) Socio-Economic Factors

Like physical factors, socio-economic factors also play an equally important role in density and distribution of population. However, there may not be a perfect agreement upon the relative importance of these two determinants. In certain places physical factors play a vital role whereas in some places socio-economic factors have a greater impact. It has generally been agreed that the role of socio-economic (non-physical) determinants increases. Various socio-economic factors which have impact upon the population are (i) socio-cultural and political factors; (ii) exploitation of natural resources.

- (i) **Socio-Cultural and Political Factors :** Mumbai-Pune industrial complex is a good example to show how social, cultural, historical and political factors collectively have contributed to its rapid growth of population and its density. Less than 200 years ago, there were small insignificant islands of the Thana Creek on the western coast. The adventurous Portuguese seamen claimed these islands for their monarch. They in turn gifted these islands to the Royal Family of England by way of dowry. These couple of sleepy fishing village located on these islands could never guess that they would shortly turn into India's largest population conglomeration. East India Company of England set up a trading centre on these islands and later made it the capital city of Bombay Presidency. Enterprising trading and business communities of Parsis, Kutchchhis and Gujaratis played a leading role in setting textile mills, development of water power and laying roads and railways across the Western Ghats connecting it with its hinterland. Unexpectedly, the Suez international navigation canal made Mumbai the nearest Indian port to Europe. Availability of educated youth from Mumbai and Pune and inexpensive and disciplined labour from Konkan also contributed to the rapid population growth. The discovery of Bombay High oil and natural gas fields gave boost to its petro-chemical industry. Today, Mumbai is known as commercial capital of India backed by international and domestic airports, major sea ports and national road and rail terminals. Similar is the case with other cities like Kolkata and Chennai which were established by the colonial rulers.

- (ii) **Availability of Natural Resources :** The Chhotanagpur Plateau region has all along been a rocky and rugged terrain. This rainy and forested region has been a home of several tribes and was one of the sparsely populated parts of the country. However, a string of industrial towns and centres have sprung up over the past century soon after rich minerals such as iron-ore, manganese, limestone, coal etc. were found in unusual abundance and close to one another. The rich coal and iron fields have attracted heavy industries particularly iron and steel, heavy engineering, metallurgy and transport equipment industries. The region has also important super-power thermal stations from where power is supplied to far off areas. After liberalisation, many multi-nationals as well as national companies have been establishing their industries in large numbers.

26.4 POPULATION DENSITY AT STATE LEVEL

Population data can be plotted and described or interpreted in a couple of ways depending upon its purpose. For finding out a broad distribution pattern, population is collected and plotted on the basis of large units like states or their major parts. If information is needed for more accurately, the smaller units like districts or even tehsils are used. Let us first find out a broad pattern of population distribution and density in India.

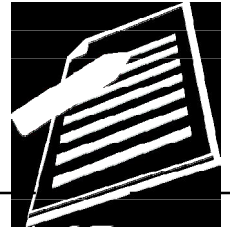
On the basis of availability of state level data, the density of population in India can be broadly divided into three zones : the areas of high density, the areas of moderate density and the areas of low density.

(i) Areas of High Density

In the map given above (Fig. 26.1) the areas having a density of population of more than 400 persons per square kilometre are included in this category. These areas have a high density due to fertile land and high amount of precipitation e.g. Kerala, West Bengal and Tamil Nadu. In these regions, a larger number of people can be provided sustenance per unit of area due to availability of fertile land which can produce more food for a large number of people. But the situation is entirely different in the case of Union Territories like Delhi, Chandigarh and Pondicherry. These regions are highly urbanised and offer job opportunities in industrial and service sectors. Thus we can say that the areas having fertile soil and those having good employment opportunities are densely populated. Find out which are the other states which have high density of population.

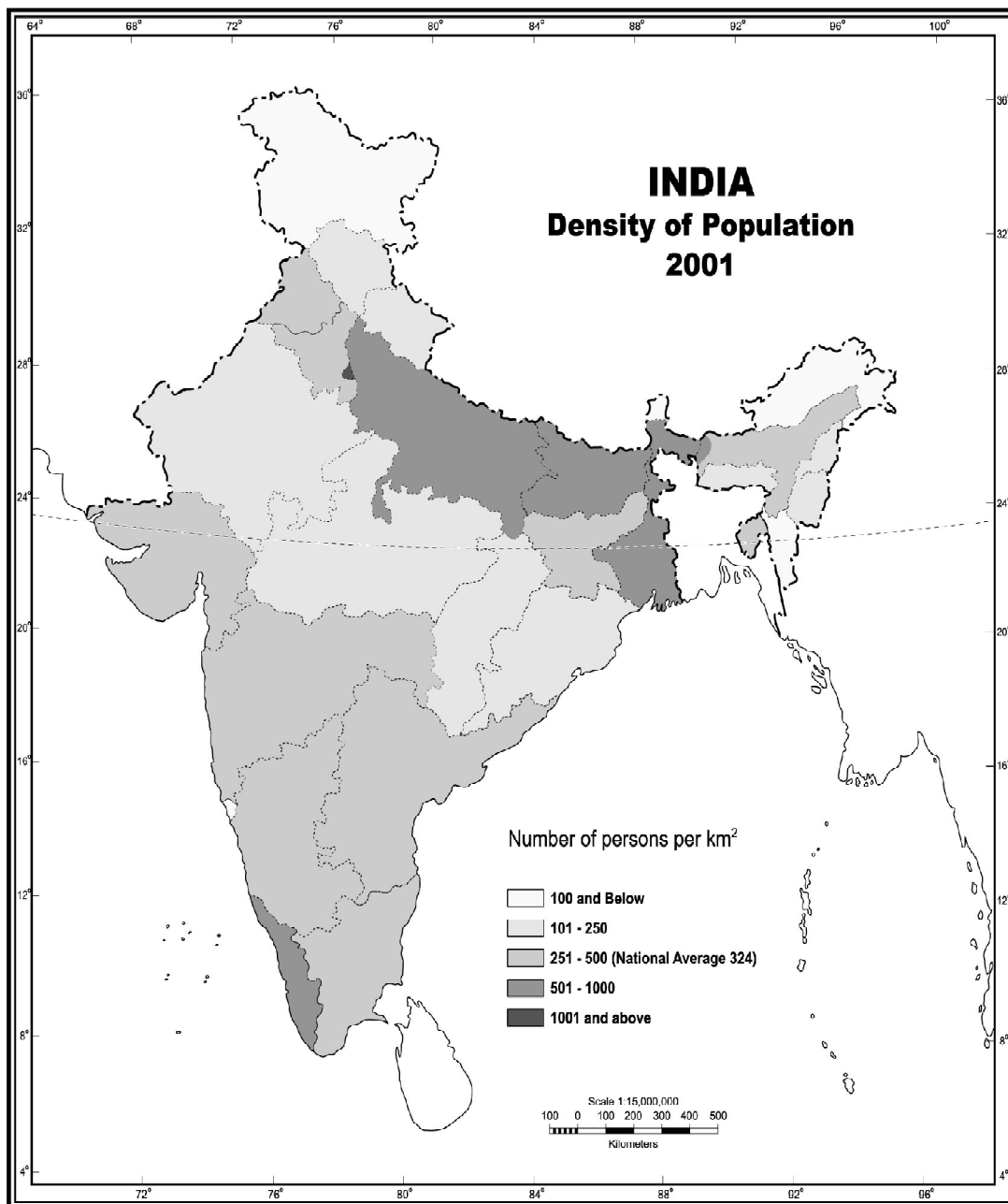
(ii) Areas of Moderate Density

States and Union Territories in which the density of population ranges between 100 and 400 persons per square kilometre are called areas of moderate density of population. They are Andhra Pradesh, Assam, Dadra & Nagar Haveli, Goa, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Rajasthan, Tripura, Jharkhand, Chhattisgarh, Jammu and Kashmir, Uttarakhand, Himachal Pradesh,



Notes

Nagaland, Manipur and Meghalaya. This region includes largest part of the country in terms of area. Broadly speaking moderate density of population is characterised by the areas in which the agriculture is handicapped by rugged topography, lower amount of precipitation and paucity of water for irrigation. The scope for developing primary and secondary activities is quite large if the facilities are provided in this area. For example, at the time of independence Chhotanagpur region was a sparsely populated area but development in the field of mining and industries in this part of the country has been mainly responsible for moderate density of population in this region.



Based upon Survey of India Outline Map printed in 1990.
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Notes
(iii) Areas of Low Density

All the remaining parts of India having a density of population less than 100 persons per square kilometre may be classified under this category. The States and Union Territories falling under this category include Arunachal Pradesh, Mizoram, Sikkim and Andaman and Nicobar Islands. Low density population areas are characterised by rough terrain, low rainfall or unhealthy climate. Due to the above reasons the prospects of earning livelihood is low in these areas. Agriculture cannot be developed in too dry or cold areas. Uneven topography and poor agricultural resources put a limit on urbanisation and industrialisation. Therefore, the number of persons that can be supported per unit area is low in such regions. Difficulties exist not only in transport and communication in the hilly and mountainous areas but also in the over all levels of economic development. That is why the density of population in all these areas is low.

- The areas of high density include the states of West Bengal, Kerala, Bihar, Punjab, Tamil Nadu, Uttar Pradesh and Haryana and Union Territories of Delhi, Chandigarh, Lakshadweep, Pondicherry and Daman and Diu.
- All these areas provide good scope for earning a livelihood through either agriculture or through jobs in various types of secondary and tertiary activities.
- The areas of low density of population in India include Arunachal Pradesh, Mizoram, Sikkim and Andaman & Nicobar Islands.
- These areas suffer from either low rainfall or rough terrain or harsh climatic conditions or a combinations of these factors.

26.5 POPULATION DENSITY AT DISTRICT LEVEL

But a minute observation shows that in each state there are variations in distribution of population and more than one category of population density is found. The geographical or spatial distribution becomes more clear by making an analysis of district level pattern. The great unevenness in distribution is mainly because of the diverse physical conditions as well as the variations in distribution of natural resources and stages of economic development. It varies from 2 persons per square kilometre in Lahul and Spiti district of Himachal Pradesh to 29,395 persons per square kilometre in National Capital Territory of Delhi. The top twenty districts in the country are either fully urban or highly urbanized. It includes all the nine districts of Delhi; Kolkata, Howrah, North Twenty-Four Pargana in West Bengal; Mumbai and Mumbai (suburban) in Maharashtra; Mahe and Pondicherry in Union Territory of Pondicherry, Chennai; Bangalore; Hyderabad and Union Territory of Chandigarh. The density is generally high over two marked continuous stretches of land. They are (a) large parts of Northern plains from Punjab to West Bengal and (b) Coastal plains from Orissa coast in the east to Konkan coast in the west. A belt of moderately high densities extend over the entire Maharashtra, plains of Gujarat, Telangana, parts of Tamil Nadu, southern Karnataka and the Chhotanagpur region of Jharkhand. The areas of low density are generally found over the hilly

forested and snow bound areas of the country, mainly situated in the Himalayan region, desert areas of Rajasthan specifically Jaisalmer districts and large expanse of uninhabited marshy lands of Kachchh districts of Gujarat.

**INTEXT QUESTIONS 26.1**

1. Name three states having a high density of population
(i) _____ (ii) _____ and (iii) _____
2. Name any three Union Territories in India which fall under the areas of high density of population
(i) _____ (ii) _____ and (iii) _____
3. Name any three states falling under the category of areas of low density of population
(i) _____ (ii) _____ and (iii) _____
4. Name any one Union Territory having a low density of population

5. Fill in the blanks with most appropriate words given in the brackets.
 - (a) Areas receiving ample precipitation and having fertile soils are likely to have a _____ density of population. (high, moderate, low)
 - (b) Areas suffering from droughts and having a rough terrain are likely to have a _____ density of population. (high, moderate, low)

26.6 GROWTH OF POPULATION

The growth of population in a region depends upon fertility, mortality and migration. Fertility or the birth rate is measured in terms of total number of live births per thousand population per year. Generally, the fertility rate is affected by various social, economic and demographic factors. Mortality or the death rate is measured in terms of total number of deaths per thousand population per year. The difference between these two rates (i.e. fertility and mortality) is called the natural growth rate. The term migration refers to the movement of people from one area to the other or from one country to another. The rate of migration affects the growth of population of a region by increasing or decreasing the number of people living there.

The growth rate of population may be positive or negative. A positive growth rate of population means an increase in the number of people living in a region, whereas negative growth rate means declining population. A positive growth rate occurs when the number of births and in migration exceeds the number of deaths and out migration; the negative growth rate means just opposite to positive growth rate.

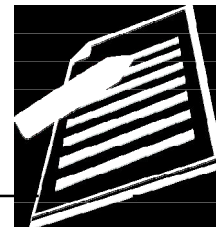
**Notes**

Table 26.1 INDIA : POPULATION GROWTH (1901-2001)

Census Year	Population in Million	Absolute change in Millions	Change in%	Average annual growth in%
1901	238.40	—	—	—
1911	252.09	+ 13.70	5.75	0.56
1921	251.32	-0.77	-0.31	-0.03
1931	278.98	+27.66	11.00	1.04
1941	318.66	+39.68	14.22	1.33
1951	361.09	+42.43	13.31	1.25
1961	439.23	+78.15	21.64	1.96
1971	548.16	+108.92	24.80	2.22
1981	683.33	+135.17	24.66	2.22
1991	843.39	+163.06	23.86	2.14
2001	1027.02	+180.63	21.34	1.93

Notes
District level Pattern

The district level analysis reflects that there are as many as 19 districts where the growth rate is very high i.e. more than fifty percent. On the other hand there are 58 districts where growth rate is very low i.e. less than ten percent. Out of the 19 very high growth rate districts five belong to Nagaland and four to Delhi. Similarly, out of 58 very low growth rate districts, as many as forty districts are in the southern part of India. Out of these forty districts as many as twenty are in Tamil Nadu, eleven in Kerala, five in Andhra Pradesh and four in Karnataka.

If we look at the district level pattern, it has been marked that higher growth rates are visible in almost the entire Indo-Gangetic plains extending from Haryana in the west to West Bengal in the east. High growth rates are also observed in the regions north of Satpura Ranges, spreading across the Malwa plateau, entire Rajasthan including the great Indian desert, Western Maharashtra and parts of North-Eastern states. On the other hand relatively low growth rate is observed in Godavari basin, Chhatisgarh plains, Chhotanagpur plateau and western part of West Bengal and Orissa. Very low growth rates are observed in Punjab, Uttarakhand, and in the southern regions of the Deccan plateau.

Look at the table 26.1, you will find that the total population of our country (as per political frontiers today), was 238 million. By 2001, it had risen to a phenomenal figure of 1027 million. About 788 million persons were added in the last century.

The rise is of about 4.3 times since 1901. If we look at this 100 years population growth then, it can be broadly grouped under the following four categories.

1. Period of stagnant growth rate (before 1921)
2. Period of steady growth rate (1921-1951)
3. Period of rapid growth rate (1951-1981)
4. Period of declining growth rate (after 1981)

Let us discuss each phase briefly.

1. Before 1921 the increase in population was sporadic, irregular and slow. This was mainly due to high birth and death rate. Therefore, the natural growth was insignificant. In 1911-21 the absolute increase declines marginally due to famines, epidemics etc. After 1921 the population has been increasing. Therefore, 1921 is known as demographic divide in the population study of India.
2. Since 1921 to 1951 there was a steady increase in population. This is because of steady decline in death rates. The decline was mainly due to improvement in sanitation and medical facilities. Other factors which helped were development in road facilities which helped in meeting the exigencies of food shortage and substantial improvement in agricultural economy. Therefore, the population growth during this period was known as mortality induced growth.
3. This is a very crucial phase as far as population growth of India is concerned. The population was almost doubled during these three decades. During this period there was a rapid decline in death rate whereas the decline in birth rate was marginal. Look at the table, you will find birth rate was reduced from 41.7 to 37.2 whereas death rate was reduced from 22.8 to 15.0 during this period. Therefore the difference between birth rate and death rate was very high and as a result natural growth rate remains very high. This was due to acceleration in developmental activities further improvement in medical facilities, improvement in living conditions of the people etc. This period of growth is termed as fertility induced growth.
4. In the last two decades i.e. 1981-91 and 1991-2001, the rate of growth started declining gradually. It signals the beginning of a new era in the demographic history of India. During this period birth declined significantly, from 37.2 in 1971-81 to 24.8 in 1991-2001. Whereas the decline in death rate continued in a slower rate. The death rate has declined from 15.0 to 8.9 during this period. This declining trend is a positive one and may be attributed to effective government role in promoting family welfare programmes and peoples awareness.

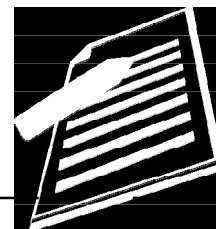


Table 26.2 Annual Birth Rates, Death Rates and Natural Growth Rates 1901-2001

Decade	Birth rate per thousand	Death rate per thousand	Natural Growth per thousand	Natural growth (in percentage)
1901-11	49.2	42.6	6.6	0.60
1911-21	48.1	47.2	0.9	0.09
1921-31	46.4	36.3	10.1	1.01
1931-41	45.2	31.2	14.0	1.40
1941-51	39.9	27.4	12.5	1.25
1951-61	41.7	22.8	18.9	1.89
1961-71	41.2	19.0	22.2	2.22
1971-81	37.2	15.0	22.2	2.22
1981-91	32.7	11.7	21.0	2.10
1991-2001	24.8	8.9	15.9	1.60

- Growth rate of population is a function of fertility, mortality and migration. The difference between the fertility and mortality rates is called natural increase of population.
- The population of India has been increasing steadily since 1921. The major factor responsible for it has been a very rapid decline in the death rate.

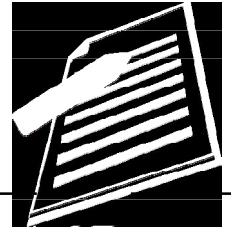
26.7 STATE LEVEL PATTERN OF POPULATION GROWTH

The actual growth rate of population is not uniform in all parts of the country. The rate is higher in some parts than in others. The average decadal growth in the country was 21.39% during 1991-2001. If we look at inter-state differences, then it has been observed that Kerala has the lowest growth rate i.e. 9.42%, whereas the state of Nagaland has the highest growth rate of 64.41%. The broad state level pattern which emerges reflect that there is a clear cut north-south divide. All the northern and north eastern states have recorded high growth rates whereas all the southern states have low growth rates. This is mainly due to differences in the level of socio-economic development which include high literacy rates, better primary health care facilities, more urban population, more development economy etc.

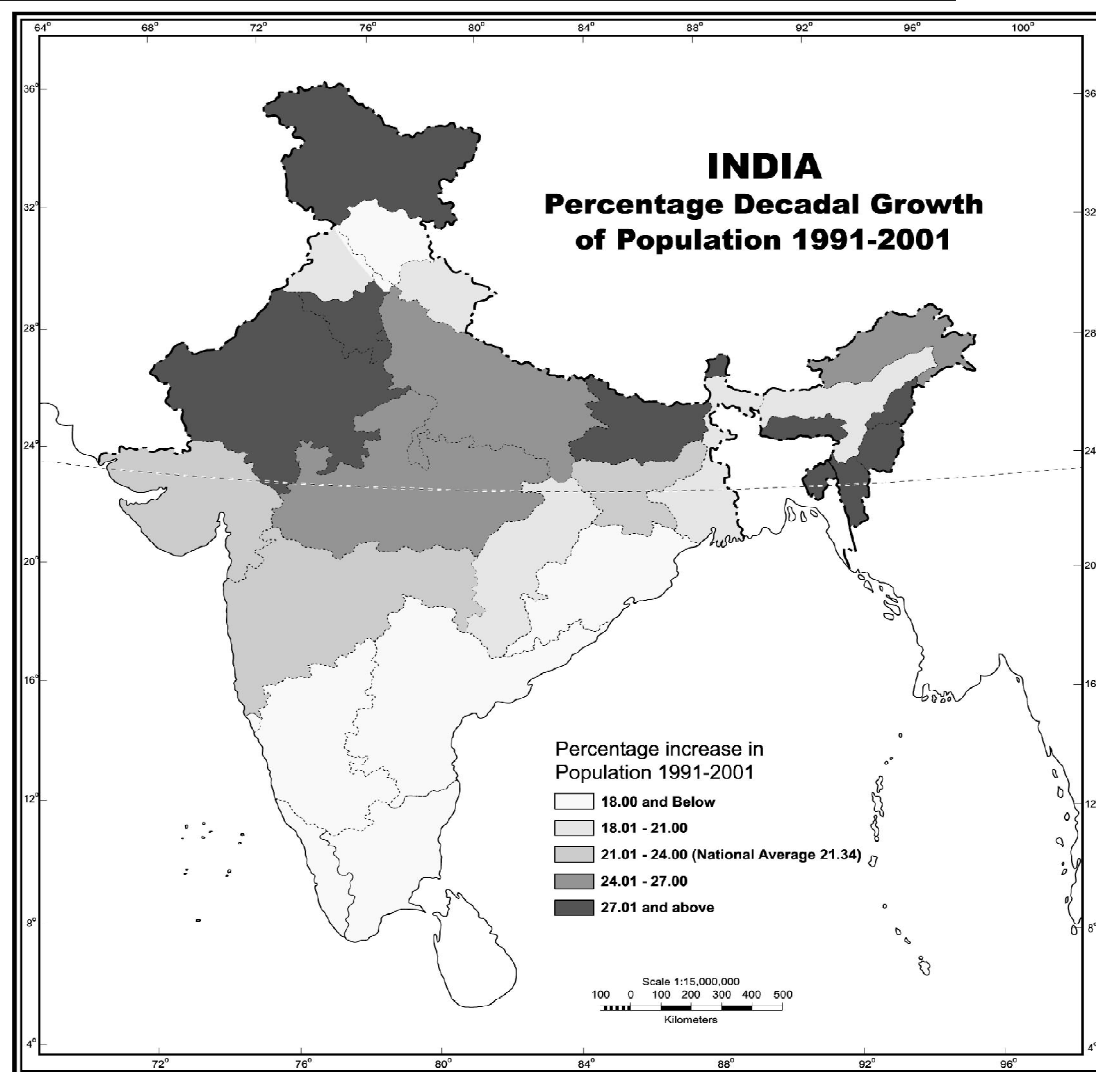


INTEXT QUESTIONS 26.2

1. Tick (✓) Mark the most appropriate answers
 - (a) The major reason for the high growth rate of population in India is
 - (i) rapidly rising birth rate



- (ii) rapidly falling death rate
 - (iii) high in-migration from outside
 - (iv) very high birth rate and death rate
 - (b) the growth rate of population in India has been constantly rising right since
 - (i) 1901
 - (ii) 1921
 - (iii) 1951
 - (iv) 1981
2. Name the State where the growth rate of population is the highest.
3. Name the states where the growth rate of population is the lowest.



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Fig. 26.3 INDIA : Growth of Population 1991-2001


Notes
26.8 MIGRATION

We have discussed earlier that the growth of population depends upon the birth rate, death rate and migration. Movement of people from one area to the another area is called migration. Migration can be of a number of types. According to the nature of movement, this can be divided into (i) permanent and (ii) temporary. Permanent migration involves movement of people from one place to the other and these people do not go back to their original place. A common example of this type of migration is provided by the movement of the people from rural to urban areas for permanent settlement. In case of temporary migration, the people move from one place to the other for some duration and then return to their original place of living. An example of this movement is seasonal migration. Migration of agricultural labourers from Bihar to Punjab and Haryana during the harvesting season is a temporary migration. Migration can be on daily basis also. You might have observed that a large number of people commute to the cities every day in the morning from the surrounding areas to work and they all go back in the evening. This is called daily or diurnal migration.

It is seen in mountainous regions that many people move from valleys to the higher reaches of mountains along with their cattle during summer and come back to the valleys during the winter. These people have their permanent homes in the valleys and they move to the higher areas to graze their cattle there. When the higher reaches of the mountains become too cold, they come back to the lower valleys. Their annual movement is always along some fixed routes and generally their grazing areas are also fixed. This type of altitudinal migration is called trans-humance. Gaddi tribes of Himachal Pradesh and Bakrawals in Jammu & Kashmir practises this type of migration.

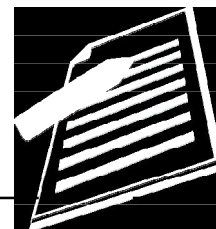
On the basis of source of origin and destination of migrant population, migration can be divided into four types.

- (a) Rural to Rural
- (b) Rural to Urban
- (c) Urban to Urban
- (d) Urban to Rural

- Movement of people from one area to the other is called migration.
- Migration can be called permanent, temporary and daily.
- Seasonal movement of people along with their cattle between two areas along fixed routes is called trans-humance.

26.9 MIGRATION TRENDS IN INDIA

Out of 1.02 billion people in the country, 307 million (30%) were reported as migrants by place of birth. Migrants by place of birth are those who are enumerated at a village/town at the time of census other than their place of birth. This proportion



i.e. 30% as reported in 2001 census (excluding Jammu and Kashmir) is slightly more than what was reported in 1991 i.e. 27.4%. Infact, there has been steady increase in number of migrants over successive censuses. If we compare between 1961 and 2001 then it has been observed that it has increased between 1961 and 2001 from 144 millions to 307 millions. During the last ten years (1991-2001), the number of migrants (excluding J&K) rose by 32.9%. Further break of the migrants in terms of sex and on the basis of source and destination are given below.

Table 26.3 India : Total Migrants and their Break-up 2001

Types of Migrants	No. of Population (in millions)
Total Migrants	307.1
Males	90.4
Females	216.7
● Intra-district	181.7
● Inter-district	76.8
● Inter-state	42.3
● From Abroad	6.1

If we look at their movement patterns, it has been observed that Maharashtra received largest number of migrants (7.9 million) followed by Delhi (5.6 million) and West Bengal (5.5 million). On the other hand Uttar Pradesh followed by Bihar and Rajasthan are the three top contributors of out migrants. But if we look at the net migration i.e. the differences between in-migrants and out-migrants Maharashtra stands at the top of the list with 2.3 million net migration followed by Delhi (1.7 million), Gujarat (0.68 million) and Haryana (0.67 million).

Let us know their profile in details. We have discussed below the age profile of the migrants and duration of stay of the migrants. In census, the first one is termed as migrants by place of birth by age and migrants by place of last residence.

- (i) **Migrants by age:** We will see age profile of inter-state migrants and intra-state migrants. Out of the total migrants numbering about 258 millions who migrated within the state, 17.4% are in the age group of 15-24 years, 23.2% in 25-34 years and 35.6% in 35-59 years. In the case of inter-state migrants, out of which 42 millions (18.5%) is in the age group of 15-24 years, 24.7% is in the age group of 25-34 years and 36.1% is in 35-59 years. In both the groups i.e. inter-state and intra-state migration we find high proportion of migrants are in the older and economically active age group. The details of inter and intra-state migration will be discussed in the successive paragraphs.
- (ii) **Migrants by Place of Last Residence :** This data is collected to understand the population of migration. It is likely that after one moves out of place of birth, one may continue to migrate from one place to another. Study

**Notes**

of migration by place of birth is like studying one time event. Data on migration by last residence reveals recent migrations over the years and therefore more informative. The data on migration by last residence in India as per 2001 census shows that the total number of migrants were 314 millions.

If we look at their duration of stay it has been observed that a substantial proportion among the total migrants i.e. 101 million out of 314 million had migrated at least 20 years back. About 98.3 million had migrated over the last decade (i.e. duration 0-9 years). We will analyse in details about the migration that took place in the last decade in two broad categories. (a) Intra-state and (b) Inter state migration within these two broad categories analysis will be made in terms of migration by streams and by sex.

(a) Intra-State Migration

The majority of the migrants belong to this category. According to 2001 Census, 80.73 millions of people are intra-state migrants. Among these migrants, overwhelming population i.e. 60.5 percent were rural to rural migrants whereas only 12.3 percent belonged to the category of urban to urban migrants. The remaining 17.6 percent migrants belonged to the category of rural to urban and 6.5% belonged to the urban to rural areas. The rest 3.1 percent is unclassified which means that the respondents have not mentioned any stream.

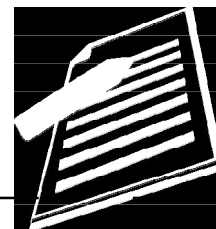
Among intra-state migrants about 70 percent were females. This high percentage was mainly due to marriages. About 69% of the female migrants were from rural to rural migration. 9.7 percent of female migrants moved from one urban centre to another, 13.6 percent moved from rural to urban areas and only 5.6 percent from urban to rural areas. The rest 2.6 percent is unclassified.

In the case of male migrants, 41.6 percent belonged to the category of rural to rural migrants, 18.3 percent belonged to urban to urban, 27.1 percent belonged to rural to urban and 8.6 percent were urban to rural. The major chunk of population who moved from rural to rural areas are mainly moved out in search of employment.

(b) Inter-State Migration

In India inter-state migration is limited in comparison to intra-state migration. According to 2001 Census, 17 million people were inter-state migrants. Out of these 17 millions people, 26.6 percent belonged to the category of rural to rural migrants, 26.7 belonged to the category of urban to urban, 37.9 belonged to rural to urban and 6.3 percent belonged to urban to rural. The rest 2.6% is unclassified.

About half of all inter-state migrants were males. Among them 26.6% percent moved within the rural areas, 26.7 percent moved within the urban areas. 37.9 percent of migrants moved from rural to urban areas and 6.3 percent from urban to rural areas.

**26.10 CAUSES OF MIGRATION**

Migration is a result of an inter-play of a large number of factors. Generally factors affecting migration can be grouped in to two categories of Push and Pull factors. The push factors are responsible for making people move from their original place of living. The pull factors are responsible for attracting people to some particular areas. Unless both these factors are operating simultaneously, no migration of people can be possible. The push and pull factors include the economic, social and political components. A brief description of these factors is given below.

- Migration is the result of inter-play of a number of factors. These factors can be grouped as push and pull factors.
- The push and pull factors can be economic, social and political in nature.

(a) Economic Factor

The people generally like to live in those areas where they can make their livelihood. Thus they would like to move away from areas of poor soils, less developed means of transport, low levels of industrialization and less job opportunities. These are the push factors. On the other hand, the areas offering good employment, better living standard attract large number of people. These are the pull factors. Thus all areas of fertile soil, deposits of minerals, better means of transportation and communication and higher levels of development of industries and urban areas provide more means of making a living. You might have observed that a large number of people move to the cities like Delhi, Mumbai, Kolkata and Chennai from neighbouring and different parts of the country like Bihar, Orissa, Uttar Pradesh where opportunities are less. The most important factor for which they move is the expected improvement in their economic conditions. Many are attracted by an apparent glare of city life with all its modern comforts and attractions.

- The important economic pull factors causing migration are fertile soils, availability of minerals, good means of transport and communication, high levels of industrialization and urbanization and more job opportunities.
- The important economic push factors are poor soils, lack of developed means of transport and communication, low levels of industrialization and urbanization and lack of job opportunities.

(b) Socio-Political Factor

Man is a social being and he likes to live with his kith and kin. Generally the people having a common religion or language or social customs like to live together. On the other hand a person would like to migrate to some other place if he is living among the people belonging to some other culture or customs. Many people migrate to places of religious importance. Migration of people to places like Badrinath, Tirupati and Varanasi though generally temporary is due to religious factors. The impact of the social factors is more clearly seen in the concentration of people belonging to a particular community in one locality of urban area or in a particular



Notes

city. Religious or social suppression of the minority communities can be an important push factor if the majority community is not tolerant to the other community.

(c) Demographic factor

Age is the important demographic factor. Young population is more mobile than the children and old age population. This is because young people mostly move either for work/better opportunities or further study.

Political factors related to the government policy are responsible for migration. This factor is becoming increasingly important in the modern times. Government can influence the incidence rates and directions of the migrations to a great extent. In some cases the minority communities are discriminated against and they are thus forced out of the countries. Partition of India into India and Pakistan at the time of independence resulted in large scale migration of people between the two countries.

- People like to live with those following the same religion or customs.
- Suppression of the minorities at the hands of majority community can be an important push factor leading to migration.

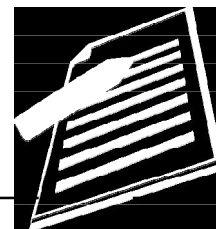
26.11 CONSEQUENCES OF MIGRATION

Consequences of migration are as diverse as the causes. The consequences are felt in both the regions i.e. the areas of origin of the migrants and the areas of destination. The consequences of migration can be grouped as economic, social and demographic.

(a) Economic Consequences

Among the economic consequences, the effects on the resource-population ratio is most significant. This ratio undergoes change in both the areas involved. The resource-population ratio may be such in an area which might be called either under populated or over populated or adequately populated or optimum populated. The condition of under population means a condition of too low a population to allow development and utilization of its resources. On the other hand, over population is a condition, when the pressure of population on resources is very high and generally results in low standards of living. A country having enough number of people to enable development and utilization of its resources without lowering the quality of life is called adequately populated. If the people are moving from an area of over-population to an area of under population, the result is in the direction of balancing the resource-population ratio. On the other hand if the migration is from an area of under population to over populated or adequately populated, the consequences may be harmful to both the areas.

Migration affects the occupational structure of the population in both the regions. Generally the proportion of working population in source areas is lowered and the



same proportion in the receiving areas is increased. Thus the population of the receiving areas tends to become more productive and in the source areas it results in increasing the dependency ratio by reducing the proportion of the working people in the population. One of the serious consequences of migration is 'brain drain'. This refers to the migration of the skilled persons from the poorer countries to the developed countries in search of better economic opportunities. An example can be of the migration of the doctors and engineers etc. from India to the USA, the UK and Canada. This type of migration does not alter the resource-population ratio significantly as the number of people involved in migration is not very large. However the quality of human resources in the source region suffers a lot. The resource of the source regions, which are generally poorer countries can not be developed fully because of the huge size of the population.

(b) Social Consequences

Migration involves interaction of different cultures. The receiving areas might receive through migration people belonging to different cultures and this might lead to cultural enrichment. India is a country which received migrants belonging to different cultural groups and the modern culture of India is a result of this inter-mixing of different cultures. Sometimes people, coming together having different cultures might result in cultural conflicts also.

Many migrants (mainly male member) those who stay alone in the city involve in extramarital and unsafe sexual practice. Some of them start taking drugs through infected syringes. Due to these unsafe practices, many of them got HIV infected. But this does not stop here. When these people go back to their home, they infect their spouses. HIV is also transmitted to their unborn child. Why does this happen?

- Due to lack of awareness
 - Due to unsafe practices
 - Curiosity about sex
 - Experimentation with drugs and alcohol
- Migration may generally result in cultural enrichment in the receiving areas although at times it may also lead to cultural conflicts.
 - The resource-population ratio in both source regions and receiving regions is altered through migration.
 - Brain-drain is also a serious consequence of migrations.

(c) Demographic Consequences

Due to migrations, the characteristics of the populations in both the regions undergo changes not only the age and sex structure of the population but also the rate of growth of population is altered. Generally the proportion of the old, children and females is increased in the source areas due to migration. On the other hand the proportion of these persons in the population of the receiving areas is generally

MODULE - 9

Human resource development in India

Population Density, Distribution and Growth in India



Notes

lowered. So this is one of the reason for high sex ratio in source areas and low sex ratio in the receiving areas. This happens because it is the youthful male population which is mostly involved in migration. Thus not only the number of people but also the structure of population in both regions involved in migration is changed. This results in changes in rates of fertility, mortality and consequently in the growth of population. The source regions are depleted of the youthful population and this results in lowered rates of births and comparatively lower rates of growth. An inverse impact is observed in the case of population structure of the receiving areas.

- The proportion of the children, women and old people become more in the source areas of the migration and these proportions are lowered in the receiving areas. This results in change of age and sex structure and the growth rates of population of both source and receiving regions.



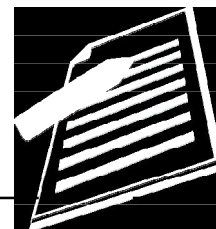
INTEXT QUESTIONS 26.3

1. Fill in the blanks with suitable words choosing the appropriate words given in the bracket.
 - (a) Movement of people from one place to the other is called _____ (migration/transhumance)
 - (b) Daily movement of people to cities from neighbouring areas is called _____ migration. (diurnal/seasonal)
 - (c) Seasonal movement of people with their cattle along some fixed routes is called _____. (trans human/seasonal)
 - (d) Due to migration the proportion of the youth in the total population of the source region is likely to _____ (increase/decline)
 - (e) The proportion of working population in the areas of immigration is likely to _____ (increase/decrease)
 - (f) Migration of the skilled people from the developing countries like India to the developed countries is known as _____ (emigration/brain drain)
 - (g) Who among the migrants dominate _____ (male/female)



WHAT YOU HAVE LEARNT

Human resource is the most important resource in an area. It is the quality rather than quantity of this resource which is important for the economic development of a country.



India is the second most populous country of the world after China. The distribution of population is generally studied in terms of density. The density of population in India is not uniform. On the basis of density of population, India can be divided into three broad regions of high density, the areas of moderate density, and the areas of low density. The factors which affect density and distribution can be grouped into two categories. They are physical factors and socio-economic factors.

The population of India has been increasing very rapidly since 1921 and the rate of growth has been increasing. The growth rate of population is determined by the birth rate, death rate and migration of an area. Like density and distribution, the growth rate is also not uniform throughout the country.

Migration is an important factor for the growth rate of population. Migration can be divided into various types. It can be divided as permanent and temporary. On the basis of source of origin and destination of migrant population, it can be divided into rural to rural, rural to urban, urban to urban and urban to rural. These four types can be grouped under two categories i.e. inter-state migration and intra-state migration.

People move from one place to other under the influence of economic, socio-political and demographic factors. The causes of migration can be studied in terms of push and pull factors. The consequences of migrations are numerous and they can be studied in terms of economic, social and demographic consequences. The migrants involve themselves in extra marital relation and drug abuse due to their loneliness since they have left their family at their source.

**TERMINAL QUESTIONS**

1. Discuss in brief the distribution of population in India. Outline some of the areas of high, moderate and low density of population.
2. What are the major trends in population growth in India? Discuss the factors responsible for it with suitable examples.
3. What is meant by migration? Define various types of migration with suitable examples.
4. Explain the major causes and consequences of migration.

**ANSWERS TO INTEXT QUESTIONS****26.1**

1. West Bengal, Kerala, Bihar, U.P. Punjab, Tamil Nadu and Haryana (Any three)
2. Delhi, Chandigarh, Pondicherry, Lakshadweep and Daman & Diu (Any three)

3. Sikkim, Mizoram, Arunachal Pradesh
4. Andaman and Nicobar Islands
5. (a) High
(b) Low

26.2

1. (a) (ii)
(b) (ii)
2. Nagaland
3. Kerala

26.3

1. (a) Migration
(b) Diurnal
(c) Trans-humance
(d) Decline
(e) Increase
(f) Brain-drain
(g) Male

HINTS TO TERMINAL QUESTIONS

1. The distribution of population in the country is highly uneven. India can be divided into three major regions on the basis of the density of population the areas of high density, the areas of moderate density and the areas of low density. Give the main characteristics of these regions in terms of the density of population. Name the area of high, moderate and low density (For details refer to sections 26.2 and 26.4).
2. The growth rate of Indian population has been increasing since 1921. Highlight this fact and provide the causes of this in brief (For details refer section 26.6).
3. Migration is the movement of people from one place to the other. It can be temporary, seasonal and permanent on the basis of the duration of movement and the period of time for which people migrate. Migration can be called internal and international also on the basis of whether it occurs within the country or between two or more countries (For details refer to section 26.8).

4. Discuss briefly causes and consequences of migration (For details refer to section 26.10 and 26.11).



Point to Ponder

Protection from HIV infection

HIV is :

**Human
Immunodeficiency
Virus**

AIDS is :

**Acquired
Immunodeficiency
Syndrome**

There is a lot you can do to protect yourself from HIV infection:

- *Learn the facts about growing up and HIV/AIDS.*
- *Do not feel shy about taking about your doubts and fears. Get these clarified.*
- *Do not let peer pressure force you into unsafe activities.*
- *Avoid taking alcohol or other drugs when you engage in sexual activities; this might cloud your judgement and lead you to engage in unsafe sexual practices.*
- *Practise abstinence. Postpone sex as long as possible. Many other activities such as hugging, cuddling, kissing, and fantasizing feel good and are safe.*
- *If you are not ready for abstinence, at least make sure that you practise safe sex. Have sexual intercourse with only one faithful, uninfected partner.*
- *Use a condom every time you have sex unless you are 100 percent sure that your partner is not infected with HIV or any other Sexually Transmitted Infection (STIs).*
- *If you use needles, syringes, or other instruments that pierce the skin, make sure that these are sterile.*
- *Make sure that blood is tested before transfusion. Use blood that is certified 'HIV free'.*

