
UNIT 2 RURAL DEMOGRAPHY

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2.0 OBJECTIVES

After studying this unit, you should be able to:

- define demography and explain how it is related to development;
- outline the growth and distribution of rural population in our country;
- explain how sex and age compositions of the rural populations and their marital status have undergone changes;
- outline and explain the patterns of internal migration;
- explain the implications of the size of rural settlements for development; and
- describe the state of rural literacy.

2.1 INTRODUCTION

The basic objective of development is to improve the quality of life. We know that building a modern nation depends on the development of people and the organization of human activity. It is the development of human resources that unlocks the door to modernization and is one of the necessary conditions for all kinds of growth – social, political, cultural or economic. This principle applies to India as well, particularly as she is poised to emerge as a world political and economic power.

A country therefore plans for its people only. While planning for overall development and for providing services to the people, information regarding the size, growth, composition and quality of population plays an important role. Suppose schools or hospitals are to be opened in an area. To decide as to how many to set up, information regarding the total population of the area, their age and sex is needed. It is in this context that the study of *demography* assumes significant importance.

This unit is aimed at familiarizing you with the population scenario of rural India. An attempt has been made to give you an overview of the rural population in our country, so that you may have a reasonable idea about its size, composition and growth as well as the related phenomena like migration and the size of rural settlements.

2.2 MEANING OF DEMOGRAPHY

Now let us understand the term *demography*. Demography is the scientific and statistical study of population and in particular the size of various types of population, their development and structure.

There are various branches of Demography like Historical Demography, Social Demography, Economic Demography, Mathematical Demography, Medical Demography and so on. Though it is not the practice among demographers to study the Rural and the Urban Demography separately, it is useful to consider the demographic characteristics of the rural population separately, as it will help in providing a better understanding of the issues in rural development. This is important in a country like India, which is predominantly rural in character and will continue to remain so for several decades to come.

2.3 DEMOGRAPHIC DATA BASE

Let us now discuss the different sources of demographic data available in India and their usefulness in making developmental decisions. The various sources of data commonly utilized for demographic analysis are presented briefly as follows.

2.3.1 Census

You know that Census is generally a decennial affair. The first census in India was conducted in 1872 and since 1881 it has been undertaken regularly every ten years.

Census is a valuable and authentic source and can provide information at the lowest possible aggregation. In addition to the age-sex-marital status of the various types of population, it provides information about their socio-economic characteristics such as literacy and education, religion of the head of the household, occupation and industrial classification of the labour force, the available household and community amenities (health facilities, post offices, banks, schools etc.) and housing conditions. The compositions of the scheduled caste and the scheduled tribe households are also made available. This information with varying degrees of elaboration at the village level is thus available to decision maker.

2.3.2 Civil Registration System (CRS)

Civil registration is the continuous recording of vital events such as births, deaths, marriages etc. It is generally a compulsory recording done according to the legal requirements of the country as per the provisions made by official orders or rules.

2.3.3 Sample Registration System (SRS)

This system was initiated by the Registrar General of India in 1969-70. Conducted on a regular basis at the national level, it is in essence a demographic survey based on a dual recording system. It provides estimates for both rural and urban areas at the state (major states) as well as the national level. Both the estimates of birth and mortality are made available on an annual basis. But the problem is that SRS does not provide estimates at lower levels of aggregation and the sample units selected remain fixed for a long period of time.

2.3.4 Sample Surveys

Surveys, in which information is collected on a sample basis, are particularly suitable for providing a variety of information with a fair degree of precision. Sample surveys have become a major means for collecting information on a variety of demographic and health related indicators.

In India, since 1990 there has been a noticeable change in the availability of large-scale surveys in the field. Two rounds of the National Family Health Survey (NFHS) have been conducted on the lines similar to Demographic Health Surveys (DHS). NFHS -1 was conducted in 1992-93 and NFHS-2 in 1998-99. They provide information on fertility, family planning practices, mortality including infant and child mortality, utilization of maternal and child health care services, nutritional status of children, apart from the usual socio-economic and demographic characteristics of a household. Information from NFHS has been widely used by planners, policy makers and academicians.

Having learnt what *demography* is and what the different sources of demographic studies are, let us take up for discussion the size, growth and distribution of the rural population.

2.4 SIZE, GROWTH AND DISTRIBUTION OF RURAL POPULATION

2.4.1 National Picture

According to the 2001 census, the total population of our country was 10,27,015,247 in 2001, of which 7,41,660,293 or 72 per cent was rural (see Table 2.1). Though the percentage of the rural population shows a moderate decline over the years, the absolute number shows a large rural base even during the last census. Obviously, no development policy in India can succeed unless it centers around rural development.

Table 2.1: Rural Population of India, 1901 –2001

Year	Total Population	Rural Population	% of Rural Population
1901	238,396,327	212,544,454	89.16
1911	252,093,390	226,151,757	89.71
1921	251,321,213	223,235,046	88.82
1931	278,977,238	245,521,249	88.01
1941	318,660,580	274,507,283	86.14
1951	361,088,090	298,644,156	82.71
1961	439,234,771	360,298,168	82.03
1971	548,159,652	439,045,675	80.09
1981	683,329,097	523,866,550	76.66
1991	846,387,888	628,836,076	74.30
2001	1,027,015,247	741,660,293	72.22

Source: Census of India 1981, 1991 and 2001

Let us now look at the growth rate of rural population. The growth of population is often used to connote *the change* in the number of people living in a particular area during a specific period of time. It is positive if there is increase in population and negative if there is a decrease in population between any two given points in time. Table 2.2 presents the growth of rural population in India over a period of ten years.

Table 2.2: Growth of Rural Population 1901-2001

Year	Rural Population	Decennial Variation in Population	% Decennial Variation
1901	212,544,454	-	-
1911	226,151,757	13607303	6.40
1921	223,235,046	-2916711	-1.29
1931	245,521,249	22286203	9.98
1941	274,507,283	28986034	11.81
1951	298,644,156	24136873	8.79
1961	360,298,168	61654012	20.64
1971	439,045,675	78747507	21.86
1981	523,866,550	84820875	19.32
1991	628,836,076	104969526	20.04
2001	741,660,293	112824217	17.94

Source: Census of India 1981, 1991 and 2001

If you look at the table carefully, you will find four distinct phases of population growth from 1901 to 2001.

- i) Phase I : 1901-1921 Very Slow Growth
- ii) Phase II : 1931-1951 Steady Growth
- iii) Phase III: 1961-1981 Rapid High Growth
- iv) Phase IV : 1991-2001 High Growth with definite signs of slowing down.

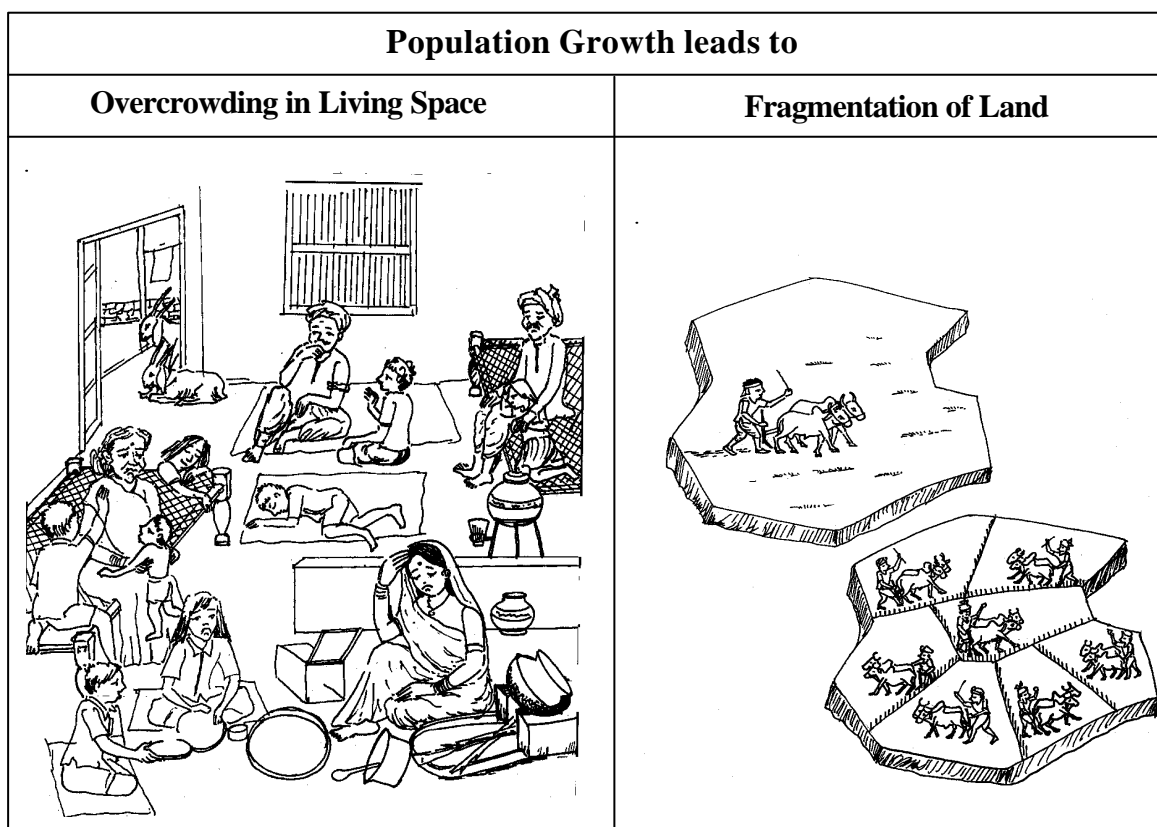


Fig. 1

2.4.2 Picture in the Major States

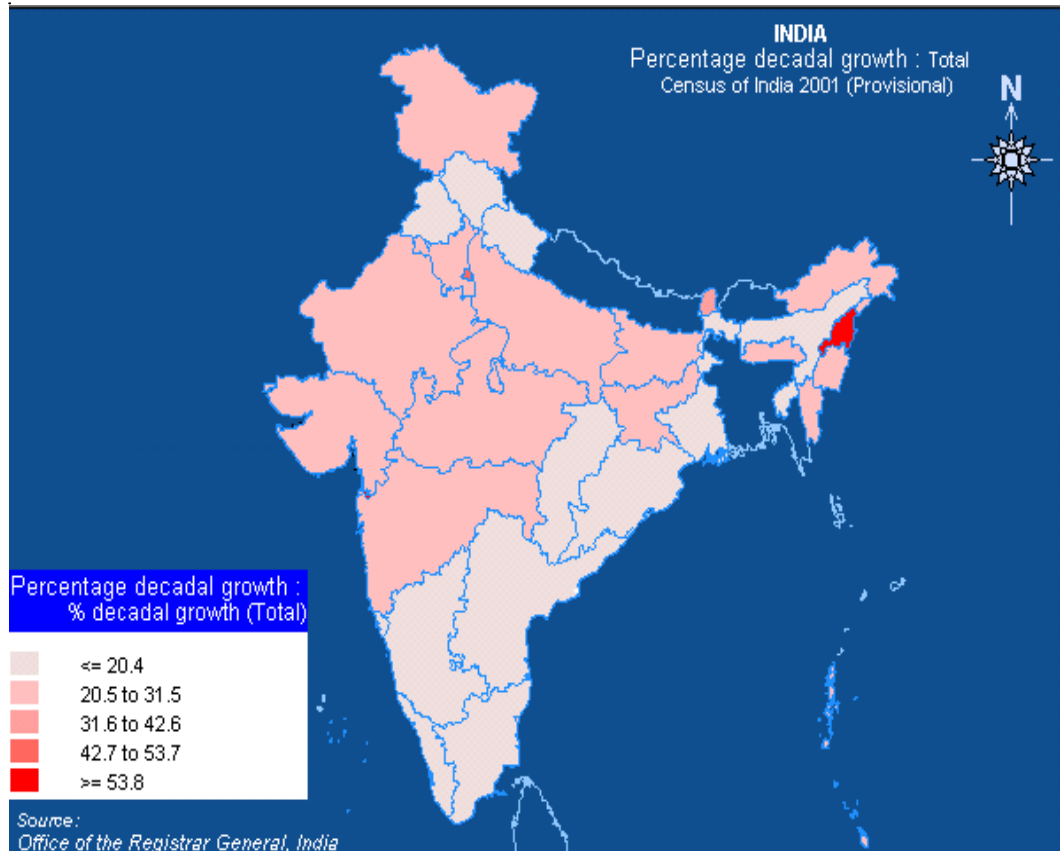
Population growth needs to be viewed not only in the context of increase in numbers but also within the broader perspective of its patterns in the different states of India. An analysis of the population growth patterns at the state level in India will help in understanding the regional contrasts in the growth pattern. Table 2.3 presents the state-wise growth of rural population.

You may also look at the variations in the growth rate as depicted in Map 1. The highest growth rate has been recorded by Nagaland (63.37%) and the lowest by Madhya Pradesh (-12.90%). Of the 28 states in the country, as many as seven recorded growth rates higher than the national average (19.08%). From the table you may also note that the so-called four BIMARU (Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh) states belong to two different categories. Bihar and Madhya Pradesh show negative growth rates, indicating *out* migration from their villages. Of course, Madhya Pradesh has also lost some of its rural population due to the formation of Chhattisgarh. Rajasthan and Uttar Pradesh, however, have recorded positive growth.

Table 2.3: Statewise Growth Rate of Rural Population

State / UT*	Rural Population: growth per cent		
	1991	2001	1991-2001
Nagaland	1001323	1635815	63.37
Lakshadweep *	22593	33647	48.93
Chandigarh *	66186	92118	39.18
Manipur	1331504	1818224	36.55
Dadra & Nagar Haveli *	126752	169995	34.12
Sikkim	369451	480488	30.05
Meghalaya	1444731	1853457	28.29
Rajasthan	33938877	43267678	27.49
Mizoram	371810	450018	21.03
Haryana	12408904	14968850	20.63
INDIA	622812376	741660293	19.08
Uttar Pradesh	111506372	131540230	17.97
Gujarat	27063521	31697615	17.12
West Bengal	49370364	57734690	16.94
Assam	19926527	23248994	16.67
Andaman & Nicobar Islands *	205706	239858	16.60
Himachal Pradesh	4721681	5482367	16.11
Arunachal Pradesh	753930	868429	15.19
Maharashtra	48395601	55732513	15.16
Orissa	27424753	31210602	13.80
Andhra Pradesh	48620882	55223944	13.58
Tripura	2335484	2648074	13.38
Punjab	14288744	16043730	12.28
Karnataka	31069413	34814100	12.05
Pondicherry *	290800	325596	11.97
Kerala	21418224	23571484	10.05
Delhi *	949019	963215	1.50
Bihar	75021453	74199596	-1.10
Goa	690041	675129	-2.16
Tamil Nadu	36781354	34869286	-5.20
Madhya Pradesh	50842333	44282528	-12.90
Jammu & Kashmir	N.A	7564608	-
Uttaranchal**	N.A	6309317	-
Jharkhand**	N.A	20922731	-
Chhattisgarh**	N.A	16620627	-
Daman & Diu *	54043	100740	-

Source: Census of India 1991, 2001



Map 1



Map 2

2.4.3 Distribution and Density of Rural Population

Now, you have a clear idea about the growth of rural population in the various states and union territories as well as the country as a whole. Why do some states have more population than some others? Let us address this question in some detail.

It is the unevenness of distribution, which is a significant feature of India's rural population. The factors that have guided the distribution pattern of population are the availability of cultivable land, depth and fertility of soil, depth of the underground water table, availability of water for irrigation, etc. Depending on these factors, the density of population varies from place to place. As per the 2001 census, India has an average density of 324 persons per square kilometer, but the rural population density is 254, which has increased from 214 in 1991. Table 2.4 shows the density of population in some of the major states of India and Map 2 brings out the variations in density. Though there are variations in density, the overall increase in the density of population is a matter of great concern as it puts immense pressure on our natural resources (see Fig. 1).

Table 2.4: Density of Rural Population

States	Density of Rural Population	
	1991	2001
INDIA	214	255
Andhra Pradesh	180	205
Assam	257	300
Bihar*	441	436
Gujarat	142	166
Haryana	287	346
Karnataka	166	186
Kerala	603	664
Madhya Pradesh**	117	102
Maharashtra	161	185
Orissa	179	204
Punjab	292	328
Rajasthan	101	128
Tamil Nadu	297	281
Uttar Pradesh***	386	455
West Bengal	576	674

* 1991 density includes both Bihar and Jharkhand while 2001 is only for Bihar and excludes Jharkhand

** 1991 density includes both Madhya Pradesh and Chhattisgarh while 2001 is only for Madhya Pradesh and excludes Chhattisgarh

*** 1991 density includes both Uttar Pradesh and Uttaranchal while 2001 is only for Uttar Pradesh and excludes Uttaranchal

Check Your Progress I

Note: a) Write your answers in the space provided.

b) Check your answers with the possible answers provided at the end of the unit.

1) What is the reason for the decline in population in Bihar and Madhya Pradesh in contrast with the situation in Rajasthan and Uttar Pradesh in 2001?

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2) Why is the density of Kerala or West Bengal higher than Madhya Pradesh or Rajasthan?

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2.5 SEX COMPOSITION OF RURAL POPULATION

This section provides details that should help you in understanding the various aspects of demographic dynamics, which influence the growth of population and its distribution. The most significant aspect of demographic dynamics is *the sex ratio*. It is an important social indicator used to measure the extent of the prevailing equity between males and females in a society at a given point in time. It is an outcome mainly of the interplay of sex differentials in mortality, sex-selective migration, sex ratio at birth and at times the sex differential in population enumeration.

According to the 2001 census, the *sex ratio* in India stands at 933 females per 1000 males, which is an improvement of 6 points over 927 recorded in the 1991 census. Though it has been improving since 1901 (see Table 2.5), it continues to be the lowest in the world. Let us see why? Some of the important reasons for this declining trend, specific to our country, are: i) neglect of the girl child resulting in their higher mortality at younger ages, ii) high maternal mortality, iii) sex selective female abortions, and iv) female infanticide.

Table 2.5: Sex Ratio in India 1901-2001

Year	Combined	Rural	Urban
1901	972	979	910
1911	964	975	872
1921	955	970	846
1931	950	966	838
1941	945	965	831
1951	946	965	860
1961	941	963	845
1971	930	949	858
1981	934	951	878
1991	927	948	935
2001	933	935	903

Source: Census of India, 1991 and 2001

Viewed in its regional perspective there is a phenomenal diversity in the sex ratio (see Table 2.6) in India. The highest sex ratio (1058) has been reported in Kerala, mainly because Kerala has been experiencing male-selective out migration to other parts of the country for employment since long, and the high literacy rates contribute to a low female mortality rate. The states that display more or less balanced sex ratio include Uttaranchal, Chhattisgarh, Tamil Nadu, Andhra Pradesh, Orissa, and Himachal

Pradesh. Haryana on the other hand has reported the lowest sex ratio. It is so mainly because of the increasing trend of female foetal abortions guided by sex determination tests as well as a strong preference for the male child at the cost of the female child. The other states with fairly large paucity of females are Punjab, Sikkim and Uttar Pradesh.

Table 2.6: State-wise Sex Ratio 2001

States	Total	Rural	Urban
Kerala	1058	1059	1058
Uttaranchal	964	1007	850
Chhattisgarh	990	1005	932
Tamil Nadu	986	992	980
Himachal Pradesh	970	991	797
Pondicherry*	1001	990	1006
Goa	960	988	933
Orissa	972	986	895
Andhra Pradesh	978	983	965
Karnataka	964	976	940
Meghalaya	975	972	985
Manipur	978	969	1009
Jharkhand	941	963	870
Maharashtra	922	959	874
Lakshadweep	947	957	936
West Bengal	934	950	893
Tripura	950	948	962
Gujarat	921	946	880
Assam	932	940	878
Nagaland	909	932	809
Rajasthan	922	932	890
Madhya Pradesh	920	927	899
Jammu & Kashmir	900	927	822
Bihar	921	927	869
Mizoram	938	925	951
Arunachal Pradesh	901	915	850
Uttar Pradesh	898	904	879
Punjab	874	887	848
Sikkim	875	881	828
Haryana	861	867	847
Andaman & Nicobar Islands*	846	862	815
Dadra & Nagar Haveli*	811	850	691
Delhi*	821	806	822
Chandigarh	773	621	792
Daman & Diu*	709	585	983
Assam	932	940	869

Source: Census of India 2001

Child Sex Ratio

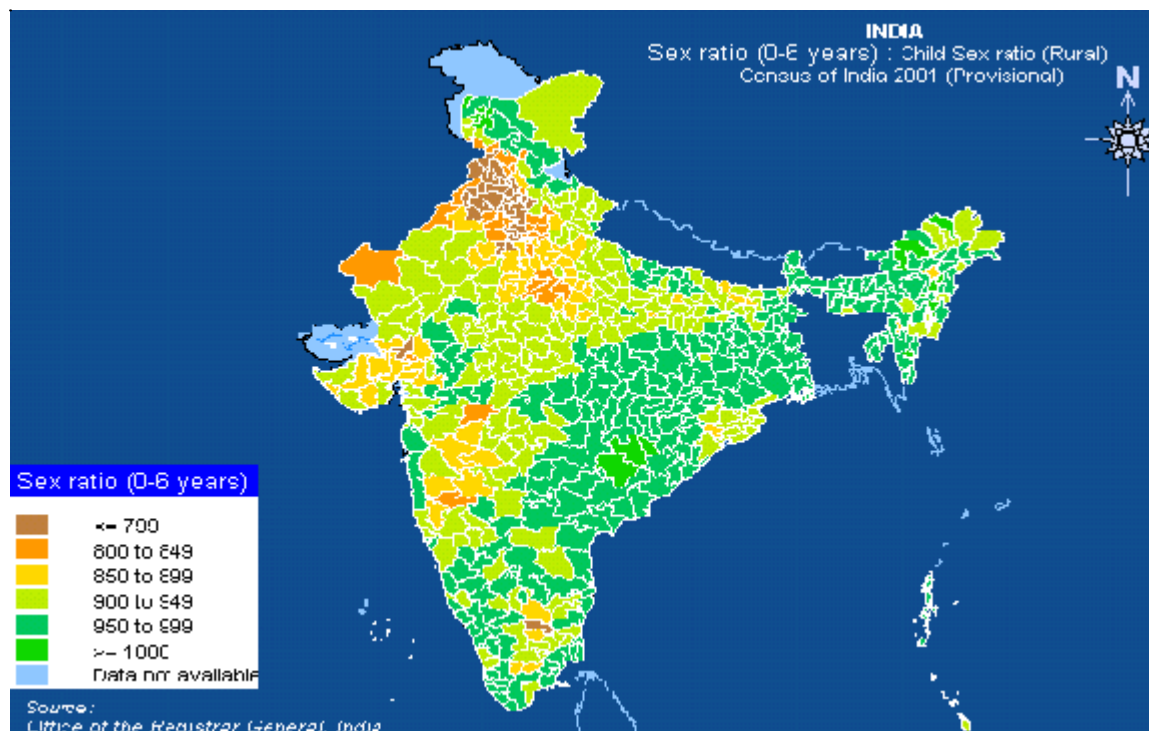
To understand the imbalances it is necessary to have an idea of the *child sex ratio* in India. In contrast to the overall sex ratio, the sex ratio of the child population (0-6 age group) fell from 945 in 1991 to 927 in 2001 (see Table 2.7). The sharpest decline in the sex ratio of the child population has been observed in Himachal Pradesh, Punjab, Haryana, Gujarat, Uttaranchal, Maharashtra and Chandigarh.

Table 2.7: Child Sex Ratio 1991 – 2001

State/ UT	Child sex ratio			
	Rural		Urban	
	1991	2001	1991	2001
India	948	934	935	903
Jammu & Kashmir	NA	952	NA	872
Haryana	877	824	884	809
Punjab	878	795	866	789
Delhi	900	853	917	866
Chandigarh	910	852	897	844
Rajasthan	919	914	909	886
Gujarat	925	905	908	827
Uttar Pradesh	927	922	928	880
Daman & Diu	933	920	996	935
Madhya Pradesh	944	941	931	906
Tamil Nadu	945	931	955	951
Lakshadweep	951	1,010	932	920
Uttaranchal	952	914	936	874
Bihar	953	940	949	924
Maharashtra	953	923	934	908
Kerala	958	964	958	958
Karnataka	963	954	951	939
Pondicherry	963	971	962	951
Himachal Pradesh	966	900	904	858
Sikkim	967	991	936	925
Tripura	968	978	959	948
West Bengal	969	967	955	948
Orissa	969	954	949	927
Goa	972	948	953	919
Mizoram	973	978	965	961
Andaman & Nicobar Islands	973	976	970	940
Manipur	975	956	972	980
Assam	977	967	955	931
Andhra Pradesh	979	965	962	958
Arunachal Pradesh	986	957	946	981
Jharkhand	986	973	950	931
Chhattisgarh	988	982	960	941
Meghalaya	989	977	968	964
Nagaland	1001	983	959	935
Dadra & Nagar Haveli	1015	995	977	885

Note: The table excludes Jammu and Kashmir where census was not held in 1991.

The above table shows that in 1991, Punjab and Haryana registered a child sex ratio below 900 in their rural areas. At the 2001 Census, Delhi and Chandigarh were the two new entrants in this category. The number of states recording a child sex ratio above one thousand has reduced from two to one. Map 3 shows the distribution of the child sex ratio in the country at present.



Map 3

Check Your Progress II

Note: a) Write your answers in the space provided.

b) Check your answers with the possible answers provided at the end of the unit.

1) The decreasing sex ratio can be attributed to several factors. In what way do you think would the data on sex ratio at birth have helped us in judging the situation better?

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2) Name three states, which have low sex ratio. Please state the reasons?

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3) What does the decline in the child sex ratio indicate?

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2.6 AGE COMPOSITION OF RURAL POPULATION

The age composition is another basic characteristics of a population. It not only influences the *rate of growth* but also enables us to determine the *proportion of labour force* in the total population as well as the *dependency ratio*.

Basically the age composition of a population is determined by three factors, i.e. fertility, mortality and migration. These factors are interdependent and any change in one of these may influence the other two.

Table 2.8: Age Composition

Age Group	Percentage	
	2002	2003
0 - 14	32.7	32.2
15-64	62.6	63.0
65 and over	4.7	4.8

Source: CIA The World Fact Book 2002, 2003

Table 2.8 shows the age composition of the population of India. It shows a broad base and a tapering top indicating a higher population growth and also an increasing number of unemployed.

Check Your Progress III

Note: a) Write your answers in the space provided.

b) Check your answers with the possible answers provided at the end of the unit.

1) What is the relation between the age at marriage and the birth rate in a country?

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2.7 MARITAL STATUS OF RURAL POPULATION

In India, one of the most important factors responsible for the present high population growth is the persistence of markedly low level of age at marriage in many of the Indian states. In India, the Child Marriage Restraint Act 1978 has laid down 18 years as the minimum age at marriage for females. Yet, even today the age at marriage remains quite low—in certain cases below 15 years. Variations in the age at marriage are shown in Table 2.9.

Table 2.9: Percentage of Women Ever Married before the age of 15/18 in Rural and Urban areas, 1992-93

Region	State	Per cent of women ever married before 15/18 years of age			
		Rural		Urban	
		20-24	40-44	20-24	40-44
North	Haryana	20.2 (65.4)*	42.1	16.8(54.4)	25.0
	Himachal Pradesh	4.7 (25.4)	23.8	1.2 (12.2)	14.4
	Jammu & Kashmir	5.7 (23.6)	32.6	1.7 (7.3)	16.5
	Punjab	1.9 (15.7)	6.2	3.0 (12.5)	6.0
	Rajasthan	41.4 (77.0)	54.7	21.8 (42.4)	33.0
Central	Madhya Pradesh	52.3 (82.8)	68.7	19.7 (42.7)	42.3
	Uttar Pradesh	42.5 (73.3)	61.1	9.5 (30.5)	22.3
East	Assam	21.0 (46.4)	34.5	14.8 (31.0)	19.3
	Bihar	43.6 (73.8)	65.3	16.9 (44.2)	40.1
	Orissa	13.6 (48.0)	35.0	8.7 (32.5)	24.0
	West Bengal	27.7 (64.1)	54.3	15.8 (34.6)	33.7
West	Gujarat	13.7 (40.6)	20.8	5.3 (20.6)	13.2
	Maharashtra	37.6 (70.8)	58.5	9.7 (35.3)	29.4
South	Andhra Pradesh	45.7 (77.8)	59.9	14.2 (44.2)	34.6
	Karnataka	28.4 (59.0)	41.7	12.1 (35.9)	23.5
	Kerala	4.0 (20.7)	9.0	0.09 (16.0)	4.4
	Tamilnadu	9.1 (42.2)	20.7	4.5 (26.2)	20.3

Source: NFHS India, 1992-93

* Figures within brackets indicate the % age of women aged 20-24 married before attaining 18 years and the figures outside the brackets indicate the % age of women married before attaining the age of 15 years.

There is a clear trend of rising age at marriage in all the states. As expected the incidence of early marriages is much higher in the rural areas than in the urban areas. Only a few states like Kerala, Punjab, Himachal Pradesh and Jammu and Kashmir are more homogenous in terms of lower incidences of marriage at younger ages. In these states early marriages are waning away in both the rural and the urban areas.

2.8 FERTILITY AND MORTALITY PATTERNS

Vital rates include mainly fertility and mortality of a group of population. Table 2.10 summarizes the decline in the vital rates in India from 1971 to 2001.

Table 2.10: Vital rates for India - 1971 – 2001

Year	Crude Birth Rate	Crude Death Rate	Infant Mortality Rate
1971	36.9	14.9	129
1976	34.4	15.0	129
1981	33.9	12.5	110
1986	32.6	11.1	96
1991*	29.5	98	80
1996	27.5	9.0	72
2000	25.8	8.5	68
2001	25.4	8.4	66

Source: Sample Registration System, Office of the Registrar General, India.

* The table excludes Jammu and Kashmir where census was not held in 1991.

It shows that with an improvement in the general health conditions the death rate has also declined. Since the decline in the *birth rate* is more than that in the *death rate*, the *rate of growth* of population has shown a rapid increase.

At the state level, however, the trend in the decline of vital rates shows a mixed pattern (see Table 2.11). In the Hindi speaking heartland comprising Rajasthan, Himachal Pradesh, Haryana, Uttar Pradesh, Madhya Pradesh and Bihar, where about 44% of the population of the country live, significant decline in the vital rates is still a far cry with the sole exception of Himachal Pradesh.

Table 2.11: Birth Rate, Death Rate and Infant Mortality Rate, 2001

India/State/Union Territory	Birth Rate			Death Rate			Infant Mortality Rate		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
INDIA	27.5	27.1	20.2	8.4	9.0	6.3	66	72	42
Andhra Pradesh	20.8	21.3	19.6	8.1	8.9	5.6	66	74	39
Assam	26.8	27.8	18.5	9.5	9.8	6.6	73	76	33
Bihar	31.2	32.3	23.4	8.2	8.5	6.3	62	63	52
Gujarat	24.9	26.6	21.5	7.8	8.8	5.6	60	67	42
Haryana	26.7	27.8	22.8	7.6	7.6	7.4	65	68	54
Karnataka	22.2	23.6	19.0	7.6	8.2	6.4	58	69	27
Kerala	17.2	17.4	16.6	6.6	6.8	6.1	11	12	9
Madhya Pradesh	30.8	32.8	23.0	10.0	10.8	7.2	86	92	53
Maharashtra	20.6	21.0	20.1	7.5	8.5	5.9	45	55	27
Orissa	23.4	23.9	19.6	10.2	10.7	6.8	90	94	60
Punjab	21.2	22.1	18.7	7.0	7.2	6.4	51	55	37
Rajasthan	31.0	32.3	24.7	7.9	8.3	6.2	79	83	57
Tamil Nadu	19.0	19.6	17.8	7.6	8.4	6.0	49	54	35
Uttar Pradesh	32.1	33.2	27.0	10.1	10.6	7.8	82	86	62
West Bengal	20.5	22.8	13.8	6.8	7.0	6.4	51	53	38
Arunachal Pradesh	22.0	22.9	12.8	5.5	5.9	2.3	39	41	11
Chattisgarh	26.3	29.0	22.4	8.8	10.1	7.0	76	88	56
Goa	13.9	14.0	13.9	7.5	8.1	6.5	19	21	16
Jharkhand	26.3	28.3	19.5	8.8	9.7	6.0	62	67	40
Himachal Pradesh	21.0	21.3	16.8	7.0	7.1	5.3	54	55	32
J & K	20.1	21.1	16.3	6.1	6.1	6.0	48	50	39
Manipur	18.2	19.0	15.9	5.1	4.8	6.1	20	19	23
Meghalaya	28.3	30.7	15.0	9.0	9.9	3.9	56	57	41
Mizoram	15.7	17.7	13.2	4.4	5.2	3.4	19	23	12
Nagaland	NA	NA	12.4	NA	NA	2.6	NA	NA	13
Sikkim	21.6	21.8	16.7	5.1	5.2	3.2	42	43	31
Tripura	16.1	16.6	13.5	5.6	5.6	5.2	39	40	30
Uttaranchal	18.5	21.1	16.6	7.8	10.0	6.1	48	69	26
Andaman & Nicobar islands	16.8	17.8	14.2	4.7	5.0	4.1	18	21	8
Chandigarh	16.1	20.6	15.6	3.5	2.2	3.7	24	28	23
Dadra & Nagar Haveli	29.3	30.1	20.0	6.5	6.8	2.9	58	62	9
Daman & Diu	22.3	22.6	22.0	6.7	7.6	5.9	40	42	35
Delhi	18.7	23.2	18.1	5.0	5.4	5.0	29	34	28
Lakshadweep	20.4	22.1	18.7	5.0	4.7	5.2	33	34	33
Pondicherry	17.9	18.7	17.3	7.0	7.7	6.6	22	31	15

Source: Sample Registration System Vol 36, No. 1, April 2002.

So, by now you know what factors influence the growth and the distribution of the population. They are *low age at marriage*, *high birth rate* and *distorted sex ratio*. All of them have a bearing on the rural population of India.

Now, let us try to understand the migration patterns as they obtain in rural India.

2.9 MIGRATION PATTERNS

According to some economists migration is considered to be a function of labour reallocation in response to market demands. Others explain it in terms of the push and pull caused by *higher man-land ratio*, underemployment at the place of origin and the pull of higher wages, opportunities for education and training, etc. Of the different streams of migration in India, *rural to rural* and *rural to urban* are important in the present context. Table 2.12 shows that according to 1991 census 81.76 per cent of the rural-rural migrants were females, who moved from one rural area to the other mostly due to marriages.

Table 2.12: Stream and Volume of Migration 1991

Last Residence elsewhere in India	Total Migrants ('000)			Percentage		
	Total	Male	Female	Total	Male	Female
Rural - rural	145045	26452	118593	100	18.24	81.76
Rural - urban	39910	18237	21673	100	45.70	54.30

Source: Census of India, 1991, Migration Tables, Vol. II, Part I.

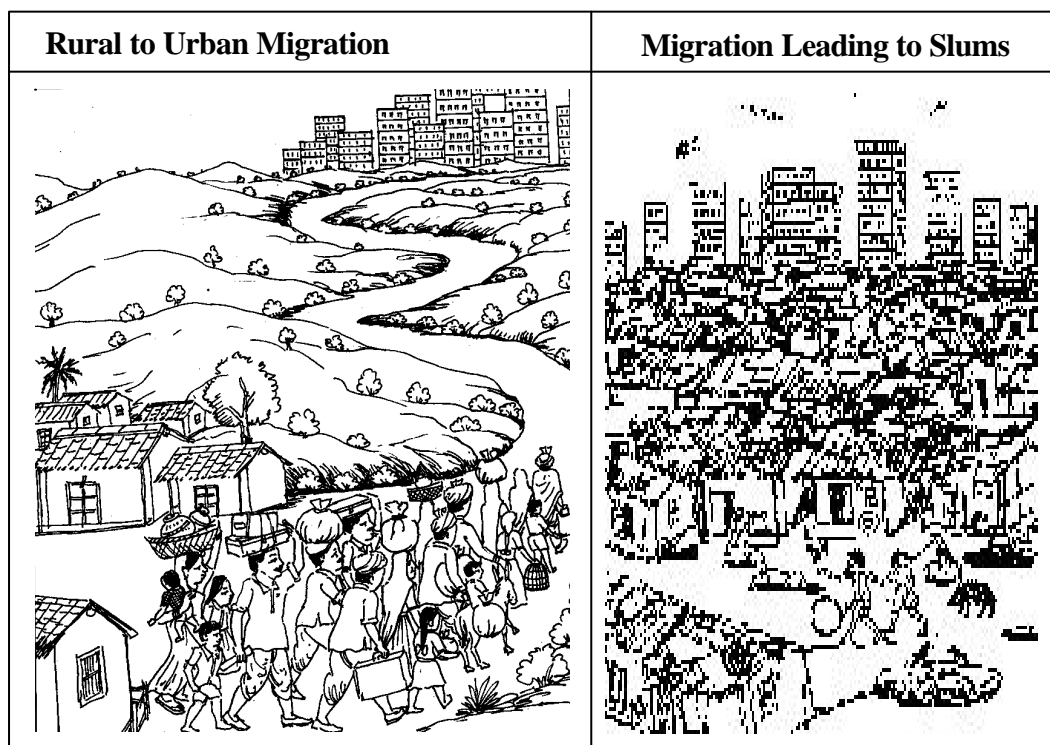


Fig. 2

On the other hand, only 18.24 per cent of the migrants who moved from one rural area to the other were males. They may be labourers or some service castes. The number of male migrants who moved from rural to urban areas was more and they moved mostly in search of jobs. If you look at Table 2.13, the reasons for migration become very clear. It is not difficult to see that the lack of employment opportunities in rural areas is pushing more and more migrants to cities or towns resulting in the rise of slums and overall urban explosion (see Fig. 2).

Table 2.13: Reasons for Rural to Urban Migration 1991

Reasons	Male/ Female	Within the district	Within the state in other districts	Between states
Employment	Male	37.73	31.82	51.81
	Female	3.96	3.55	4.45
Business	Male	8.59	8.46	12.55
	Female	0.90	0.82	1.24
Education	Male	7.91	8.99	3.37
	Female	2.25	2.40	1.38
Family movement	Male	24.19	26.21	19.29
	Female	22.29	20.14	34.17
Marriage	Male	2.53	2.99	1.12
	Female	59.42	61.88	48.57
Natural Calamities	Male	0.56	0.61	0.27
	Female	0.26	0.25	0.23
Others	Male	18.48	20.93	11.59
	Female	10.92	10.97	9.96

Source: Census of India, 1991, Migration Tables, Vol. III, Part I.

2.10 SIZE OF RURAL SETTLEMENTS

In the census, rural settlements have been divided into seven categories according to the population size of villages. These range from hamlets with less than 200 persons to large villages with more than 10,000 inhabitants.

Table 2.14: Inhabited villages classified by population size, 1991

Size Groups by population	Villages in the Size Group				Population living in those villages			
	Number		Per cent		Number (Millions)		Per cent	
	1981	1991	1981	1991	1981	1991	1981	1991
Less than 200	120073	103952	21.5	17.9	12.17	10.53	2.4	1.7
200 – 499	150722	141143	27.0	24.3	51.19	48.46	10.0	7.8
500 – 999	135928	144998	24.4	25.0	97.10	104.36	19.1	16.8
1,000 – 1,999	94486	114395	16.9	19.7	131.54	160.29	25.9	25.7
2,000 – 4,999	46892	62915	8.4	10.8	137.30	185.57	27.0	29.8
5,000 - 9,999	7202	10597	1.3	1.8	47.14	69.84	9.3	11.2
10, 000 and above	1834	2779	0.3	0.5	31.17	43.76	6.1	7.0
Total	557137	580779	100.0	100.0	507.61	622.81	100.0	100.0

* Excludes figures for Jammu and Kashmir where the 1991 census could not be conducted due to disturbed conditions.

Source: Table A3, Census of India 1991, Part II A (i) General Population Tables

According to the 1991 census more than 55 per cent of the rural population was concentrated in 30 per cent of the villages with populations ranging from 1000 – 4999 inhabitants (see Table 2.14). The corresponding figures for 1981 were 53% and 25% respectively. The inference is that population concentration in the larger villages is increasing while the number and the population of small villages and hamlets are decreasing. Also notice that in 1991 more than 60 per cent of the villages had less than 1000 inhabitants. This is a very important observation, because many rural

development schemes do not reach such small villages where accessibility is a serious problem. Therefore, a consideration of the *distribution of population* is equally important in formulating plans and programmes for rural development.

Table 2.15: Average Size of Villages by Population

State	No. of Villages		Rural Population		Average Population per Village	
	1991	2001	1991	2001	1991	2001
INDIA	634321	638,691	622812376	741,660,293	981	1161
Himachal Pradesh	19388	20118	4721681	5482367	244	273
Punjab	12795	12729	14288744	16043730	1117	1260
Haryana	6988	6955	12408904	14968850	1776	2152
Rajasthan	39810	41353	33938877	43267678	853	1046
Uttar Pradesh	107327	107452	111506372	131540230	1039	1224
Bihar	45077	45113	75021453	74199596	1664	1645
Assam	25590	26247	19926527	23248994	779	886
West Bengal	40889	40793	49370364	57734690	1207	1415
Orissa	51057	51349	27424753	31210602	537	608
Madhya Pradesh	55842	55392	50842333	44282528	910	799
Gujarat	18509	18544	27063521	31697615	1462	1709
Maharashtra	43025	43722	48395601	55732513	1125	1275
Andhra Pradesh	28000	28123	48620882	55223944	1736	1964
Karnataka	29193	29483	31069413	34814100	1064	1181
Kerala	1384	1364	21418224	23571484	15476	17281
Tamil Nadu	16780	16317	36781354	34869286	2192	2137

Source: Census of India, 1991 & 2001

Notes: The Number of Villages in both the 1991 & 2001 Censuses includes uninhabited villages.
The Number of Villages indicated for each State/Union Territory for 2001 is provisional.

Table 2.15 shows the average size of villages in some of the major states. In Kerala the average size of the village is 17281 as per the 2001 census while in Himachal Pradesh it is 273 and in Orissa 608. In such a situation particular rural development programmes launched on an all-India basis are bound to fail because of the problems of physical accessibility as well as cost-effectiveness, as generally the small villages tend to be in difficult and remote areas. Therefore while planning for rural development adequate attention needs to be given to these factors.

Check Your Progress IV

Note: a) Write your answers in the space provided.

b) Check your answers with the possible answers provided at the end of the unit.

1) Illustrate how the distribution of rural population in relation to the size of rural settlements is an important factor in the implementation of rural development programmes.

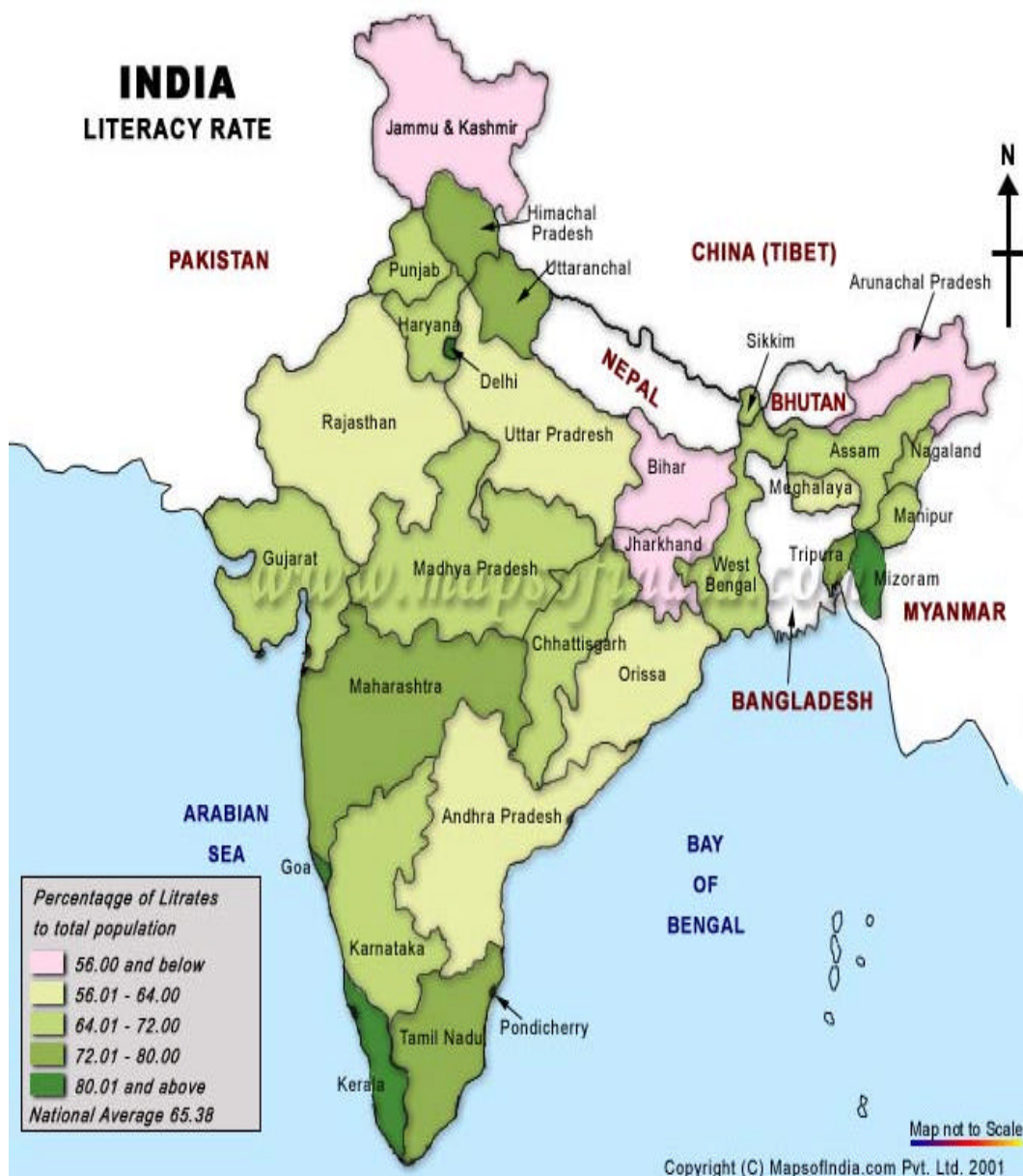
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2.11 LITERACY RATE

Literacy is an important driving force behind economic and social development and it is a powerful influence that tends to reduce the birth rate, thereby reducing the pressure of population. According to 2001 census, the literacy rate in the population seven years and above stands at 65.38 per cent *for the country as a whole*. The corresponding figures for males and females are 75.85 and 54.16 per cent respectively (*again, these figures are for the country as a whole*).

2.11.1 State-wise Variations in Literacy Rate (*the rural scenario*)

As you can see from Table 2.16, and Map 4, the literacy rate varies considerably across the states. Kerala continues in the top position followed by Lakshadweep and Mizoram. Bihar on the other hand has recorded the lowest literacy rate. The rural *male* literacy is more than 70 per cent in 24 states/UTs of India. It is only if we consider the male-female differential that *our rural literacy rate comes to be as low as 59 per cent*. The only positive sign seen in the 2001 census is that the gender gap has decreased, though marginally, in comparison with that shown in the earlier two censuses.



Map 4

Table 2.16: Rural Literacy in India

State/UT	1981			1991			2001		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Andhra Pradesh	38.72	16.80	27.85	47.28	23.92	35.74	66.13	44.36	55.33
Arunachal Pradesh	32.12	11.89	22.81	47.00	25.31	37.02	58.09	37.56	48.34
Assam	NA	NA	NA	58.66	39.19	49.32	69.02	52.25	60.92
Bihar	42.37	12.39	27.70	48.31	17.95	33.83	57.70	30.03	44.42
Goa	73.00	50.40	61.63	81.71	62.87	72.31	87.69	71.55	79.65
Gujarat	57.76	28.80	43.57	66.84	38.65	53.09	70.71	45.75	58.53
Haryana	53.35	18.78	37.26	64.78	32.51	49.85	76.13	49.77	63.82
Himachal Pradesh	62.39	35.29	48.89	73.89	49.79	61.85	83.58	65.23	74.38
Jammu & Kashmir	38.97	13.08	26.86	NA	NA	NA	60.34	35.09	48.22
Karnataka	51.11	23.84	37.63	60.30	34.76	47.69	70.63	48.50	59.68
Kerala	86.73	74.17	80.31	92.91	85.12	88.92	93.54	86.79	90.05
Madhya Pradesh	40.77	17.29	29.33	51.04	19.73	35.87	72.10	42.96	58.10
Maharashtra	61.71	29.49	45.65	69.74	40.96	55.52	82.17	59.12	70.84
Manipur	59.66	30.03	45.09	67.64	43.26	55.79	74.50	55.88	65.33
Meghalaya	38.59	30.00	34.39	44.83	37.12	41.05	59.90	54.02	57.00
Mizoram	74.89	62.92	69.17	77.36	67.03	72.47	84.38	76.17	80.46
Nagaland	54.15	35.95	45.62	63.42	50.36	57.23	67.73	57.87	62.99
Orissa	53.54	21.99	37.77	60.00	30.79	45.46	73.57	47.22	60.44
Punjab	49.64	32.73	41.77	60.71	43.85	52.77	71.70	57.91	65.16
Rajasthan	36.97	6.78	22.47	47.64	11.59	30.37	72.96	37.74	55.92
Sikkim	49.01	22.52	36.94	63.49	43.98	54.38	75.11	59.05	67.67
Tamil Nadu	60.08	29.80	45.00	67.18	41.84	54.59	77.47	55.84	66.66
Tripura	57.76	33.02	45.78	67.07	44.33	56.08	78.89	61.05	70.23
Uttar Pradesh	43.42	11.70	28.53	52.05	19.02	36.66	68.01	37.74	53.68
West Bengal	52.76	26.77	40.18	62.05	38.12	50.50	73.75	53.82	64.06
Andaman & Nicobar Island	65.79	47.59	58.12	75.99	61.99	69.73	83.90	72.23	78.55
Chandigarh	61.35	40.79	53.24	65.67	47.83	59.12	81.54	67.17	76.23
Dadra & Nagar Haveli	42.22	18.08	30.29	50.04	23.30	37.00	67.13	34.08	52.24
Daman & Diu	66.90	35.50	50.60	75.23	46.70	61.55	86.48	63.31	78.31
Delhi	72.55	39.14	57.83	78.46	52.15	66.90	87.15	68.23	78.75
Lakshadweep	78.69	52.16	65.47	88.66	68.72	78.89	92.56	79.86	86.39
Pondicherry	69.83	42.19	56.17	76.44	53.96	65.36	83.87	64.63	74.28
Uttaranchal	NA	NA	NA	NA	NA	NA	82.74	55.52	68.95
Jharkhand	NA	NA	NA	NA	NA	NA	51.57	30.33	46.26
Chhattisgarh	NA	NA	NA	NA	NA	NA	74.58	47.41	60.93
India	49.59	21.70	36.01	57.87	30.62	44.69	71.18	46.58	59.21

Notes:

- 1) Census was not held in Assam and Jammu & Kashmir in 1991
- 2) Literacy Rate is defined as the proportion of literates to the population in the age group 7+.
- 3) For the 1981 census, Literacy Rate was defined as the proportion of literates to the population in the age group 6+. To ensure comparability in this exercise it has been re-estimated for the age group 7+.
- 4) For 1981 and 1991, the states of Bihar, Uttar Pradesh and Madhya Pradesh also include data from Jharkhand, Uttaranchal and Chhattisgarh respectively.

Source: 1981- Census of India-social and Cultural Tables; 1991-Paper2 of 1992, series 1, Census of India 1991; 2001-Based on Preliminary census 2001 estimates.

In Rajasthan, *Jumbish* and *Shiksha Karmi* projects, and in Madhya Pradesh, the *Education Guarantee Scheme*, the *District Primary Education Programme* and programmes like *Mahila Samakhya* have made some visible impact.

In respect of female literacy, Bihar and Jharkhand, are at the bottom. Even though the states with very low female literacy have made good progress in bridging the gender gap over the years, they require some more concerted efforts to reduce the gap further in the years to come. The enrolment and retention of girls in these states must increase and there should be more emphasis on adult literacy programmes for females.

Check Your Progress V

Note: a) Write your answers in the space provided.

b) Check your answers with the possible answers provided at the end of the unit.

1) How does literacy rate affect the growth of population?

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2.12 DEMOGRAPHY AND DEVELOPMENT

The developmental problems related to the growth of population will not end with migration. An increasing population in the face of an already low supply of resources and land can only result in diminishing returns in the absence of other requirements such as more capital, better trained labour and technological innovations.

Let us understand how the growth of population retards the betterment of our material conditions.

- 1) It increases the pressure of numbers on a nation's land resources.
- 2) It tends to accelerate this pressure through time by accelerating the rate at which the store of exhaustible and non-replaceable natural resources are used up and the costs of their use are increased.
- 3) It diminishes the rate at which capital can be accumulated, and this diminution is greatly accentuated when much of the potential capital is utilized in maintaining the children who eventually die before they reach a productive age.
- 4) Given the rate of capital formation, the rate at which the labour force can be increased is reduced.

Fortunately while the demographic problems are formidable, the solutions are not so difficult as to be unmanageable or impossible. In India, the states of Goa, Kerala, Tamil Nadu and Andhra Pradesh have shown that education particularly of the girl child, reduction in infant mortality, reasonable health care, information about and adequate supply of family planning services and empowerment of women are some of the effective means which reduce the birth rate in a relatively short span of time.

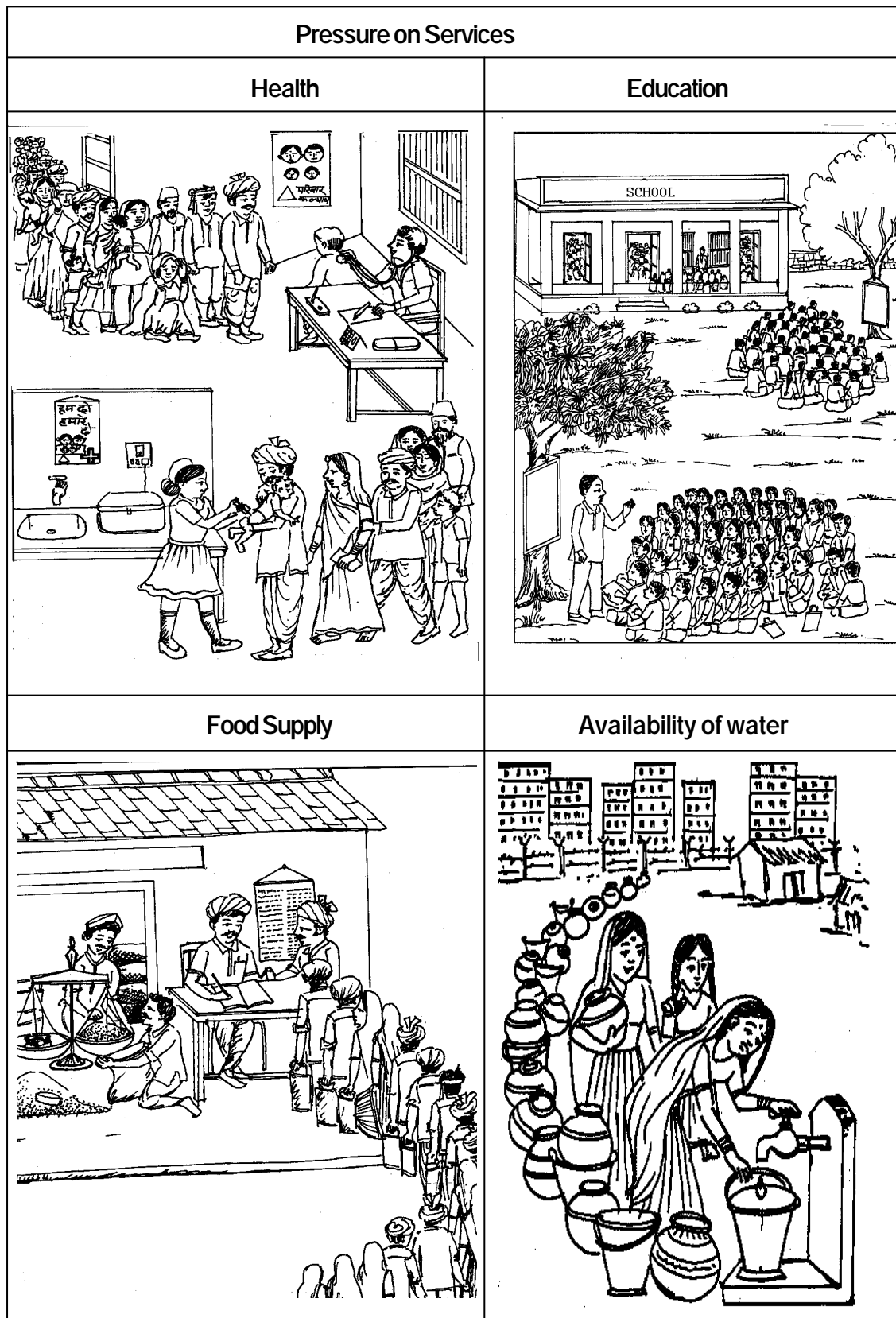


Fig. 3

2.13 LET US SUM UP

In this unit, we have learnt the meaning of demography and about the different demographic data sources that are commonly utilized for understanding the various aspects of Indian demography. We have also studied that even though the proportion of rural population in our country has gradually declined over the years, from 82 per

cent in 1951 to 72 per cent in 2001, there has been a considerable increase in the absolute number of people living in rural areas. This is indicated by the fact that the number of people living per square kilometer has increased from 214 in 1991 to 254 in 2001. The sex ratio in India is of great concern as it shows continuous decline both in the rural and the urban areas. The child sex ratio is particularly shocking as it reveals a strong preference for the male child throughout the country and more so in the northwestern states. Coming to the age composition of population, not much difference has occurred. As of now the base is quite broad with the productive age group gradually swelling out with a tapering top. The only silver lining is that the age at marriage of females is rising, though very slowly, all over the country. This will perhaps be able to arrest the birth rate and hence the growth of population. Unfortunately, however, this positive change is not uniform and particularly in the Hindi speaking heartland the decline in vital rates is very slow which is adversely affecting the overall efforts for growth in this region. Analyzing the migration data, we have seen that rural to urban migration mostly for employment purposes is significant. This highlights the lack of employment opportunities in the villages. We can assume that the size of the villages also guides this process, as in comparison with large villages such as those in Kerala development is slow in small villages and hamlets, which are inaccessible. Development is directly related to awareness and it comes only through literacy as we have seen it in Kerala. Though there are huge gaps between male and female literacy rates in both the rural and the urban areas, the gender gap has decreased as is indicated by the 2001 census, which brings some hope for population stabilization and overall development. In the last section we have also seen how development is related to demography, which if not favourable can retard it.

2.14 KEY WORDS

Crude Birth Rate	: Number of births in a year per 1000 population.
Crude Death Rate	: Number of deaths in a year per 1000 population.
Demography	: Science of population basically concerned with the statistical study of the size, distribution, characteristics, growth and structure of population over time.
Dependency Ratio	: The number of children (aged under 14) and old people (aged 60 or 65 and over) in a population as a ratio of the number of adults (aged 15-59/64).
Depopulate	: The decline in the total population of an area.
Infant Mortality Rate	: Number of deaths of infants (below one year) in a year per 1000 live births.
Migration	: Migration is a shift in the residence for some length of time. While it excludes short visits and tours, it includes different types of both voluntary and involuntary movements.
Population Density	: Persons per square kilometer at a particular place.
Population Growth Rate:	The rate at which a population is increasing (or decreasing) in a given year due to natural increase/decrease and net migration, expressed as a percentage of the base population.
Sex Ratio	: Number of females per 1000 males in the population.

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2.17 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress I

- 1) According to the 2001 census, the BIMARU states, excluding the new states formed recently, accommodate 39.54 per cent of the rural population of India and if the rural population of the new states is also included the figure comes to 45.45 per cent. Moreover, if the population of all the four states including the new three states is added together, the growth rate registered between 1991 and 2001 was 24.26 per cent, i.e. above the national growth rate of 19.08 per cent. The rural demographic situation has thus not changed dramatically in Bihar and Madhya Pradesh. It is only because of the new states of Jharkhand, Chhattisgarh and Uttaranchal carved out from Bihar, Madhya Pradesh and Uttar Pradesh respectively that the picture is distorted. The fact is that the growth of rural population in these states is still a cause of concern.
- 2) The land available for agriculture, fertile soil, irrigation facilities, and proper transportation networks have contributed significantly to the density of population in Kerala and West Bengal. On the other hand, thickly forested areas and rocky uplands unsuitable for agriculture in Madhya Pradesh and the extreme climate

of Thar Desert in Rajasthan have restricted settlements and thus the population density in these states. Rural development policies should therefore address the needs of these areas differently.

Check Your Progress II

- 1) Data on sex ratio at birth would have enabled us to find out whether the number of girls is more than, equal to or less than the number of boys at birth in our country. With this knowledge, we would have been able to assess the reasons for adverse sex ratio more realistically by ascertaining the extent to which the sex ratio at birth is carried forward. For instance, if the numbers of male and female children at birth were about the same, then the adverse sex ratio is likely to be due to the neglect of the girl child resulting in premature deaths of more girls than boys.
- 2) According to the 2001 census, Haryana (861), Sikkim (881) and Punjab (887) reported the lowest sex ratio among the major states. In Haryana and Punjab the important reasons behind this decline are sex selective abortions in favour of the male child, female infanticide, neglect of the girl child resulting in their high mortality at younger ages and high maternal mortality. In Sikkim, which is dominated by tribals, low sex ratio is mainly due to sex selective migration into Sikkim.
- 3) The decline in the child sex ratio between 1991 and 2001 is due to a very definite social bias against the girl child causing female foeticide and infanticide. The only solution to this problem is social awareness, which can be brought by education.

Check Your Progress III

- 1) Low age at marriage implies that the reproductive span of girls is comparatively longer, and so the birth rates are quite high. This is particularly true for the rural areas where contraception is not practiced, resulting in a high growth rate in these areas. In Kerala and Tamil Nadu, where educational attainments of males as well as females are high, the age at marriage also is high and, as a consequence, the birth rates are in transition, leading to population stabilization.

Check Your Progress IV

- 1) In most of our Rural Development programmes there are provisions for facilities and services to be made available per unit size of population. Suppose, one facility center (whatever type) each is to be provided for every set of 1000 persons. If, in a particular area, the size of rural settlements is large, just one village may have 1000 inhabitants. In such a situation, one center would be located in that village itself, rendering the services easily accessible to the people of that village. On the other hand, if in some other area, the rural settlements were generally around 250 persons strong, four villages would be entitled to one center, which would be located in one of these four villages. As a result, because of the distances involved, the services provided through this center would not be readily accessible to the people of the other three villages. Thus, the distribution of rural settlements by size emerges as an important factor that influences the extent to which the intended beneficiaries make use of the services provided.

Check Your Progress V

- 1) Literacy is an important driving force behind economic and social development and also a powerful influence that tends to reduce the birth rate, thereby controlling the growth of population. Kerala is the best example in this regard. Education in Kerala has resulted in a favourable sex ratio, rise of age at marriage, declining birth rate and improved health and hygiene, which collectively have provided better living conditions for the rural population.