UNIT 9 : DEMOGRAPHIC STRUCTURE OF INDIA

UNIT STRUCTURE

9.1 Learning Objectives

9.2 Introduction

9.3 Age Structure

9.4 Sex Structure

9.5 Religious Structure

9.6 Ethnic and Racial Composition

9.7 Let Us Sum Up

9.8 Further Reading

9.9 Answers To Check Your Progress

9.10 Model Questions

9.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- describe the age structure of Indian Population
- explain how sex composition affects the demographic structure of India
- discuss the religious and ethnic structure of Indian demography.

9.2 INTRODUCTION

A study of the structure and characteristics of population is an important aspect in demographic study. It is also known as 'composition of population' which embraces the following basic personal, social and economic attributes or characteristics of any population—age, sex, religion, race, ethnicity, etc. A population may be distributed into many sub-groups according to each of the above mentioned factors. For instance, when sex is considered, the entire population may be classified into two groups, males and females; when religion is considered, the entire population may be divided into different religious groups. This type of analysis helps us to understand the proportional distribution of males and females in a given population, the percentage of

Age data are usually available in the form of single years, that is the number of persons in the population of age 13, 14, 15, etc. But for demographic analysis, age data are used in different form. It is customary to classify them in five-year age groups, such as 0-4, 5-9, 10-14, 15-19, 20-24 and so on. The age data thus classified into mutually exclusive age groups are used for age structure analysis of any population.

The age structure of any population is generally studied with the help of a simple mathematical measure such as percent distribution and the age pyramid. The other measures used to analyze the age structure are the average age (mean, median, mode, etc). Moreover, other indices based on the distribution of population of various age groups are also used to analyze age structure of a given population. Among all these, the simplest measure is the percentage distribution of the population based on the absolute numbers in various five- year age groups that indicate the number of persons in an age group if the total number of persons in the age group considered is 100. This measure is also helpful in forming an idea about the age structure of any population and is used for analyzing it.

- **Effects of Fertility and Mortality:**

  Until 1950 demographers did not understand well enough the effects of changes in fertility and mortality on the age structure. Fertility measure is the rate at which population adds to itself by births. This measurement may be related to something like the total population of women in the country or the region. Human fertility is responsible for biological replacement and for maintenance of the human society. Any society replenishes itself through the process of human fertility. The size of births in a country depends on many factors, for example, relative position of child bearing females and males, marriage behavior, attitude towards children, outside marriage, conception control practices and attitudes, certain social and biological characteristics of population, political and religious attitudes and the state of medical facilities. Even though birth rate is a biological process, it also includes a social component. The number of children is mainly determined by the social

9.4 SEX STRUCTURE

Sex and age are the basic characteristics or the biological attributes of any demographic group. Sex is an easily identifiable attribute of demography. For the study of the sex-structure of any population, the following two measures are generally adopted:

- The percentage of males in the population or masculinity proportion
- The sex ratio

Of these two measures, the latter is more frequently used in the study of population.

The sex ratio of a population may either be calculated as the number of males per 100 females or as the number of females per hundred males. The Indian census has preferred to follow the latter definition. When the sex ratio is defined as the number of males per 100 females, the sex ratio above 100 indicates a high sex ratio, while that below 100 is considered to be a low sex ratio. According to the 1991 Census of India, the overall sex ratio of the total population was 107.9, that means there were 107.9 males for every 100 females in India in 1991.

- **Factors affecting the overall sex ratio:** While the sex-age structure of any population is determined by past trends in fertility, mortality and migration, the overall sex ratio is the result of the effect of the following three factors:
  - The sex ratio of new born babies or the sex ratio at birth.
  - The sex ratio of deceased persons
  - The sex ratio of net migrants

Sex Ratio at Birth:

It is a fact that there is no 1:1 correspondence in the male and female births; the number of male babies is always slightly higher. Sex ratio at birth is determined biologically, and therefore, only slight variations are observed from population to population. It appears that nature's balance is slightly more favorable to males at birth. The sex ratio at birth depends upon the sex ratios of two biological antecedent events: i) sex ratio at the time of conception ii) sex ratio of fetal losses or deaths. The sex of the fetus is determined at the

It has also been observed that the expectation of life at birth for females is almost universally higher than that for males, including India. In India, female life expectancy was lower than male life expectancy until recently. In developed countries, at each age, the death rates are usually higher for males than for females. Though the same pattern has not been observed in developing countries, the over-all mortality for males is generally higher for females.

Table: Sex Ratio for Three Main Age Groups for Various Regions of the World, 1995

Regions	Age Groups			
	Below 15	15-64	65+	All ages
World Total	105	103	75	102
Africa Latin	101	99	83	99
America	102	99	85	100
Northern America	103	99	66	96
Asia	107	105	85	105
Europe	104	99	60	96
Oceania	106	103	73	101

Source: United Nations, Demographic Year Book, 1995, New York, pp. 130-131

The table shows that sex ratios for the age group below 15 are above 100 because of the high sex ratio at birth, but these ratios decline for higher age groups as a result of higher male mortality. In fact, for the age group of 65 and above, the sex ratio shows a decrease in all the regions of the world. Thus, it may be observed that sex differentials in mortality tend to make the overall sex ratios more favorable to females in spite of the fact that males have advantages numerically at the beginning of life; that means more male babies are born than that of female babies. Unusual mortality conditions, especially losses during wars, widen the gap between male and female survivors.

Sex Ratio of Net Migrants:

The third factor affecting the overall sex ratio of any population is the sex ratio of the net migrants, which is essentially socio-economic in nature.

India.

This table indicates that the value of sex-ratio of each city has gone down considerably compared to 1971. This suggests that over a period of 30 years, the number of females among migrants has increased.

In India, the sex ratio in urban areas is favorable to males.

Sex Ratio in India

Overall Sex Ratio in India 1901-2001

Sex Ratio = (M ÷ F) x 100

Census Year	Sex Ratio
1901	102.9
1911	103.8
1921	104.7
1931	105.3
1941	105.8
1951	105.7
1961	106.3
1971	107.5
1981	107.1
1991	107.9
2001	107.2

Sources: 1. 1901-1971 computed from Census Centenary 1972, Pocket book of Population Statistics, pp. 18-19. 2. Computed from Registrar General and Census commissioner of India, Census of India 1981, Provisional population Totals, Series 1, India Paper 1 of 1981. 3. Computed from Registrar general and Census Commissioner of India, Census of India, 1991, Provisional Population totals, series I, India Paper 1 of 1991.4. Computed from registrar general and Census.

Here the table indicates that the sex ratio in the country has always remained unfavorable to females and the sex ratio which was 102.9 in 1901 has increased to 107.2 in 2001 showing more and more preponderance of males in the population.

During 1961-71 there was a sharp increase in the sex ratio from 106.3 males per 100 females to 107.5 males per 100 females. After 1971,

variables, such as age, sex, marital status, literacy, rural- urban residence etc. The earlier census reports contain a detailed discussion on various religious groups in India. The differential growth of these groups and an analysis of the reasons for such differential growth were undertaken by census scholars. However, since independence, the emphasis of the analysis has shifted to economic aspects of population.

A demographic analysis of religion is usually undertaken by describing the percentage distribution of the people in various religious groups. This type of analysis is done by sex and by rural- urban residence for various states and Union Territories right up to the district level.

9.6 ETHNIC AND RACIAL COMPOSITION

India's present day demography is a conglomeration of people belonging to different racial groups with different ethnic backgrounds. People entered India from different regions at different point of time. India has been a meeting point of different races and tribes from time immemorial. Various races are found in India. Consequently, India has a varied population and diversified ethnic composition. On the other hand, the present population of India is divided broadly into several racial groups. Such as-

- **The Negritos**- Perhaps they were the first of the racial groups that came to India. They got settled in the hilly areas of Kerala and the Andaman Islands. Kadar, Irula and Puliyan tribes of Kerala resemble the Negritos to a great extent. They are related to Africa, Australia and their neighboring islands. The Negritos have black (dark) skin, woolly hair, broad and flat nose and slightly protruded jaws.
- **The Proto-Australoids**- The people belonging to the Proto-Australoid race came here just after the Negritos. Their sources are Australian aborigines. They are settled in the central India from the Rajmahal hills to the Aravalis. Santhal, Bhil, Gond, Munda, Oraon, etc. are tribes are related to this group. They are physically different from the Negritos in many ways, for example, their hair is coarse and straight instead of being woolly. It is considered that they were the people who, in collaboration with Mediterranean race, had developed the Indus Valley

are populated mostly in the north-western border areas of Pakistan and Punjab. They are also found in sufficient number in Sindh (Pakistan), Rajasthan and western Uttar Pradesh.

- **The Brachycephalics (Western race with broad head):** Apart from Mongoloid, some other races found in India having broad head are: Alpinoids, Dinarics, Armenoids
- **The Nordics:** They are the last of the racial groups that came to India. They came from Taiga and Baltic regions. They were Aryan speaking families with long head, fair complexion, sharp nose and well-developed and well-built body. They are found in the region of Punjab, Haryana, Rajasthan and Jammu.

The Indo-Aryan people are part of the various Indo-European ethno-linguistic groups who speak one of the many Indo-Aryan languages. It is estimated that the Indo-Aryans first migrated to the Indian Subcontinent of South Asia around 1800 BCE. Indo-Aryans make up the majority of the Indian population and are mostly located in north and central India.

The Indo-Aryans are the most diverse group of people in India, being made up of Assamese, Bengali, Gujarati, Hindi, Kashmiri, Konkani, Marathi and Punjabi.

The Dravidian people are any of the native speakers of the Dravidian languages in the Indian Subcontinent of South Asia. Almost all the Dravidians of India live in the south of India. The five major ethnic groups of Dravidian people in India are Kannadiga, Malayali, Tulu, Tamil, and Telugu. The ancient Indus Valley civilization in India was believed to have been of Dravidian origin in northern India, but then the Dravidian people were pushed south when the Indo-Aryans came in and the Kuru Kingdom in northern Indian arose. Later south India was dominated by the three Dravidian kingdoms of the Cheras, Cholas, and the Pandyas. The major languages spoken by the Dravidian people are Brahui, Kannada, Malayalam, Tamil, and Telugu.

The Brachycephalic people were the first to arrive in India, having travelled all the way from Africa. In modern mainland India, only small groups of the Brachycephalic peoples like the Irulas, Kodars, Paniyans, and Kurumbas live in small areas in southern India in hill tribes. They are mostly found in the

language, religion and traditions which contribute to a person or group's identity.



9.8 FURTHER READINGS

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9.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The United Nation has defined age as "the estimated or calculated interval of time between the death of birth and the date of census, expressed in completed solar years."

Ans to Q No 2: The Brachycephalic people were the first to arrive in India, having travelled all the way from Africa. In modern mainland India, only small groups of the Brachycephalic peoples like the Irulas, Kodars, Paniyans, and Kurumbas live in small areas in southern India in hill tribes.

Ans to Q No 3: The overall sex ratio is the result of the joint effect of the following three factors:

- The sex ratio of new born babies or the sex ratio at birth.
- The sex ratio of deceased persons
- The sex ratio of net migrants

UNIT 10 : POPULATION POLICIES IN INDIA

UNIT STRUCTURE

10.1 Learning Objectives

10.2 Introduction

10.3 Population Policies

- 10.3.1 Concept of a Population Policy
- 10.3.2 Need for State Intervention in Population Control

10.4 Population Programme

- 10.4.1 National Population Policy

10.5 Initiatives and Their Critique

- 10.5.1 Decentralised Planning and Programme Implementation
- 10.5.2 Convergence of Service Delivery at Village Levels
- 10.5.3 Empowering Women for Improved Health and Nutrition
- 10.5.4 Meeting the Unmet Needs for Family Welfare Services

10.6 Let Us Sum Up

10.7 Further Reading

10.8 Answers to Check Your Progress

10.9 Model Questions

10.1 LEARNING OBJECTIVES

After going through this unit, you will be able to –

- explain the population policies
- describe the various programmes related to population
- describe the initiatives taken by government of India.

10.2 INTRODUCTION

Population policy may be defined as deliberately constructed or modified institutional arrangements and/or specific programs through which governments influence, directly or indirectly, demographic change. In simpler terms, population policy is a strategy for achieving a particular pattern of

network of small scale industries based upon agro-livestock raw material, utilising scheduled castes and schedule tribes manpower, diversifying economy by way of rapid urban industrial development, and better health, and enhancing education and employment facilities in general and for females in particular. On the other hand, short-term measures include: temporary and permanent methods of preventing child birth such as contraception, voluntary sterilisation, compulsory abortion after the birth of second and third child in the family, and social and economic benefits for small families and penalties for large families. All such measures need people's approval and participation.

During the 1991 Census, it was observed that there is a clear cut demographic divide between Northern BIMARU (BI stands for undivided Bihar, MA stands for undivided Madhya Pradesh, R stands for Rajasthan and U stands for undivided Uttar Pradesh) States in comparison to southern states of Kerala and Tamil Nadu. Major factors responsible for this are differences in literacy, particularly female literacy, and health care facilities. Accordingly, the development rationale of family planning programs was gradually dropped and was replaced by the argument that the programs satisfy important health needs and help people exercise a fundamental human right.

10.3.1 Concept of a Population Policy

The size of the population, its characteristics, spatial and rural-urban distribution, rate of growth and its determinants decide the quantum, pattern and distribution of consumption and production. It is, therefore, only natural for the state or the government to be concerned about population. Such concern is most essential for a complex democratic society seeking to eradicate poverty and ensure adequate standards of living for its people. Of course, even an authoritarian leader must consider the actual or potential supply of workers (including army personnel), the requisite equipment and the consumption needs of people. A policy is defined as a statement of important goals, accompanied by a specified set of means to achieve them. A well-elaborated set of means constitutes a programme. A

10.4 POPULATION PROGRAMME

Population policy began with the beginning of five year plans. Although India was the first developing country to adopt a positive population policy in 195 1 - 52 'to stabilise population at a level the national economy could absorb', yet its achievements in controlling its numbers have been far from satisfactory. A brief review of population policy since the beginning of the planning era is presented below**:**

- **The First Five Year Plan (1951 -56)** enunciated that the programme for family limitation and population control should:
  - present an accurate picture of the factors contributing to the rapid population increase in India; b) discover suitable techniques of family planning and devise methods by which Population Control Measures: Individual, knowledge of these techniques could be widely disseminated; and c) give National and international advice on family planning as an integral part of the service of government hospitals and public agencies, with the focus in the beginning remained on promoting the safe period method and a gradual popularisation of mechanical and chemical contraceptives.
- The population policy of the First Plan continued unaltered during **the Second Five Year Plan (1 956-61)** except that the voluntary sterilization scheme was introduced in 1956. The Second Five Year Plan recognised that the rate of economic development would depend upon:
  - The rate of growth of the population
  - The proportion of current income of the community devoted to capital formation.
  - The return by way of additional out put on the investment thus undertaken.
  - The planning commission was aware of the possible constraints on the impact of family planning during this period and was apprehensive of future economic growth.
- Due to unexpected high population growth rate in 1961 Census, the 'clinical approach' of the population policy was replaced by an 'extension

- providing population education to all children in 11 - 15 age-group and also to those out of educational institutions through Adult Education and Non-formal Education programmes.

- **The Eighth Plan (1992-97)** fixed up the target of achieving the crude birth rate of 26 per thousand, infant mortality rate of 70 per 1000 live births and the couple protection rate of 56 per cent. The plan initiated an Action Programme with main features of:
  - improving the quality and out-reach of family welfare services in the field;
  - introducing new package of compensation incentives giving more flexibility to State governments;
  - initiating innovative programmes in urban slums for propagating family welfare activities;
  - adopting a differential strategy for focusing attention on 90 districts of the country where the crude birth rate is above 39 per 1000;
  - increasing the involvement of voluntary agencies and non-governmental organisations in family welfare programmes;
  - linking the rural development and poverty-alleviation grants to districts and panchayats on the basis of their performance in the control of birth rate; and
  - reducing the strong son-preference in many parts of the country.
- **Ninth Five-Year Plan (1995-2000):** The planning commission observed that given the present situation in the country the achievements are lagging behind the proposed goals for the year 2000.

  In 1996, the existing family welfare programme was transformed into the new Reproductive and Child Health (RGH) Programme. This new programme integrates all family welfare and women and child health services with the explicit objective of providing beneficiaries with high quality integrated RCH services..
- **Tenth Five Year Plan (2002-2007)** To achieve 8% GDP growth rate. - Reducing of poverty ratio by 5 percentage points by 2007. - Providing gainful high quality employment to the addition to the labour force over the tenth plan period. - Reducing in decadal rate of population growth

programme of the country has remained to stabilise population at a level consistent with the needs of the national development. Some of the salient features are:

- The National Population Policy states that the objective of economic and social development is to improve the quality of lives people lead to enhance their well being, and to provide them with opportunities and choices to become productive assets in society.
- Population growth in India continues to be high on account of the large size of population in the reproductive age group, high total fertility rate due to the unmet need for contraceptive, and high wanted total fertility rate due to the high infant mortality rate and early marriage of girls.
- The immediate objectives of the National Policy is to address the unmet needs of contraception, health infrastructure, health personnel, and to provide integrated service delivery for basic reproductive and child health care. The long term objective is to achieve a stable population by 2045, at a level consistent with the requirements of sustainable economic growth, social development and environment protection

On the basis of the suggestions, a fresh draft was submitted to Cabinet which formed the basis for National Population Policy, 2000. It is under implementation till date. The NPP 2000 has laid down objectives at three time frames: immediate, medium term, and long term. The medium term objective is to effectively implement inter sectoral strategies to bring down the total fertility rate (TFR) to a replacement level by 2010. The long term objective is to achieve a stable population by 2045, at a level consistent with the requirements of sustainable economic growth, social development, and eco-conservation. It has special focus on health and education, and envisages the target of stable population by 2045. This National Population Policy 2000 affirms the commitment of government towards voluntary and informed choice and consent of citizens while availing

10.5 INITIATIVES AND THEIR CRITIQUE

The National Measures of Population Control are:

10.5.1 Decentralised Planning and Programme Implementation

The 73rd and 74th Constitutional Amendments Act, 1992 made health, family welfare and education a responsibility of village panchayats. The panchayati raj institutions are an important means of furthering decentralised planning and programme implementation in the context of the NPP 2000. These committees may identify area-specific unmet needs for reproductive health services, and prepare need-based, demand-driven, socio-demographic plans at the village level, aimed at identifying and providing responsive, people-centred and integrated basic reproductive and child health care.

10.5.2 Convergence of Service Delivery at Village Levels

Efforts at population stabilisation will be effective only if we direct an integrated package of essential services at village and household levels. Inadequacies in the existing health infrastructure have led to an unmet need of 28 percent for contraception services, and obvious gaps in coverage and outreach. Health care centres are over-burdened and struggling to provide services with limited personnel and equipment. A vast increase in the number of trained birth attendants, at least two per village, is necessary to universalise coverage and outreach of ante-natal, natal and post-natal health care.

10.5.3 Empowering Women for Improved Health and Nutrition

The complex socio-cultural determinants of women's health and nutrition have cumulative effects over a lifetime. Discriminatory childcare leads to malnutrition and impaired physical development of



CHECK YOUR PROGRESS

Q 1: What are population policies?

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Q 2: What are population control policies?

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Q 3: What are the main objectives of India's population policy?

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Q 4: What are the main objectives of national population policy (NPP) 2000?

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10.6 LET US SUM UP

- Population and development have a very close relationship because human beings are at the centre of concerns for any developmental activities, and people are the most important and valuable resource of any nation. Therefore, to understand the complex relationship between population and development, there is a need to study various aspects of population and its related theories and policies.
- If the population is not well controlled in India, instead of attaining her economic prosperity and scientific glory will remain a poverty stricken and backward country. Thus, the family planning programme must be tackled on a war footing and relentlessly pressed forward.
- The NPP 2000 has laid down objectives at three time frames: immediate, medium term, and long term. The medium term objective is to effectively implement inter sectoral strategies to bring down the total fertility rate

personnel, and to provide integrated service delivery for basic reproductive and child health care.



10.9 MODEL QUESTIONS

Short Answer Questions (Answer each question in about 150 words)

Q 1: What are the two approaches to the family welfare and planning programmes?

Q 2: List out the measures to control population?

Q 3: What are the features of the National Population Policy launched by the government of India?

Long Answer Questions (Answer each question in about 350-500 words)

Q 1: Describe the concept of a population policy

Q 2: What are the milestones in the evolution of population policy in India?

Q 3: What are the goals of National Population Policy 2000?

Q 4: Elaborate in detail the different population programmes of India?

Q 5: Briefly describe the initiatives of the government of India for population control?

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country's area. The Indian tribal population primarily resides in various ecological and geo-climatic conditions such as plains, forests, hills and inaccessible areas, scattered throughout India. According to Article 342 of the Indian Constitution, at present, there exist 697 tribes recognized by the central government. These Indian tribal groups have been recognized to reside in more than one state. It is due to the presence of these tribes that the country has such a diverse and varied flavour. Scheduled Tribes people constitute about 8% of the total population in India, with varying proportions in different States. They live in unique physical, socio-economic and cultural environment, isolated from general population. In view of their habitat and food habits, they form a distinct group compared to other populations. Their food intake is influenced by nature, with large seasonal variations, depending upon availability of agricultural and forest produce.

India‘s north-eastern region is extraordinarily diverse, distinct, and indeed distinguished on several counts. Apart from bordering itself with a few neighbouring countries, the entire land is a mixture of disparate races, civilizations, culture, and languages. The so-called north-eastern region (NER hereafter), which gained a definite geographical identity only after India‘s independence, comprises currently of the eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. Topographically, the region is a mixture of hills and plains, with abundance of rainfall, wide bio-diversities, and varied climatic conditions. While Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, and Sikkim are almost entirely hilly, Assam is largely a plain. The hills, while spreading across as much as 70 per cent of the entire landscape of NER, accommodate only about 30 per cent of its total population. There are more than 160 scheduled tribe groups in the region, with estimated 220 languages of Indo-Aryan, Sino-Tibetan, and Austric language families being spoken.

11.3 DEMOGRAPHIC STRUCTURES IN NORTH EAST INDIA

India is having the largest concentration of tribal population of the

Nagaland state the total population is 1,978,502.

Dimapur has the highest population of 378,811 and Longleng has the lowest population of 50,484.

There was negligible increase in population growth rate in the North Eastern region. Nagaland recorded an exceptionally very high population growth rate which is to the extent of 4.4 percent from 1991-2001. The growth rate of Nagaland is more than 3 times as compared to India's population growth rate, more than 4 times to that of population growth rate of Assam and Tripura and double than that of Manipur, Arunachal Pradesh, Meghalaya and Mizoram. The population growth rate in other five states except Manipur has decreased during the last two decades. In Manipur the annual growth rate is only 0.10 percent during 1991-2001 from 1981-1991.As per census data from 1971 to 2011 about four percent of India's total population has been contributed from the north-eastern region. According to the census 2011, the total population of the region is about 45 million, of which Assam contributes the highest (68%) of the total population followed by Tripura (8 %). The population of Assam is 31 million compared to only 3.67 millions in Tripura, 2.96 in Meghalaya and 2.72 millions in Manipur. Sikkim records the least with 0.61 million population.

11.3.2 Decadal Growth Rate of Population

The growth of population in the north eastern states has been higher than the national average. The decadal growth rate ever since 1971-81 census shows that, except for Assam, the growth rate of population in all the north eastern states is higher than the national average of 24.66. Tripura recorded the highest growth rate (50.77 percent) followed by Nagaland (50.05 percent) in the period 1971-81. In the next decade (i.e. 1981-91), Assam has reported the lowest growth rate of population (24.24 percent) which is higher than the national average of 23.85 percent. During the period 1981-91 to 1991-

Thus, unevenness of concentration of population has been the typical nature of the region. There is a high degree of population concentration in the central part of the region, where economic conditions and better infrastructural facilities ensure a quality life. In the peripheral mountainous portion of the region negligible concentration has been found due to isolation and inaccessibility.

11.3.4 Sex Ratio

Sex ratio is a significant demographic indicator in which a closer balance between the sexes has been recognized as a healthy sign of population composition. It signifies the status of women in the society. In this regard the north eastern states show no widespread discrimination against females as found in other parts of India. The region witnessed improved sex ratio during the last decade as it has risen from 937 in 2001 to 956 in 2011. In this period the north-eastern region experienced a higher sex ratio than the sex ratio of nation total. Thus, it is noticed that the picture of the north east region has not been bad overall insofar as sex ratio is concerned. As per 2001 Census, sex ratio of total ST population in Nagaland is 943. Zunheboto district recorded the highest sex ratio of 976 while Mon district has the lowest ratio of 899. Tripura sex ratio was 962 in 2001 which had increased to 959 in 2011. the sex ratio of ST population in Mizoram as a whole is 984. Sex ratio among Any Mizo (Lushai) tribes is above the state average; so is the case in respect of Pawi. Low sex ratio has been registered among Any Kuki Tribes (914), Chakma (929), and any Naga tribes (941). In Meghalaya Synteng (1024) and Khasi (1017) have recorded sex ratio higher than 1000 mark. Although Garo have recorded comparatively low sex ratio (979) in the state.

11.3.5 Rural-Urban Composition of Population

The pace of urbanization in the Northeast has been lower than the national figure since 1981. Sector-wise distribution of

of India, the birth rates of the States of the region are comparatively lower than the rest of India. Out of the eight states, Manipur and Tripura record the lowest birth rate followed by Nagaland (16.8), Mizoram (17.1) and Sikkim (17.8) in recent period. During the last three decades, the birth rates have been found higher only in two states, viz., Meghalaya and Assam than the national average. This indicates a very healthy demographic scenario of the region. Assam shows the poorest performance concerning reduction of death rate over the period of the last four decades. Over time since 1981, death rate of Assam has been higher than the national average. Here Manipur shows comparatively better result. Manipur records lower death rate not only than the states of the region but also the national average. Overall, north eastern states (except Assam) attain lower death rate than India which presents the evidence that all the States of the region are trying to comply with the desired goal of national population policy.

11.4 INTER-STATE AND INTER-COMMUNITY POPULATION DYNAMICS

The Northeast Region comprises the states of Arunachal Pradesh, Assam, Manipur, Nagaland, Meghalaya, Mizoram, Tripura and Sikkim. In this greater region, excluding Sikkim, more than two hundred ethnic communities, having distinctive cultural characteristics, inhabit in diverse ecological stretch. The north-eastern part of India is a vast topographical expanse comprising the mountains and hills of the eastern Himalayas wherein gracefully flows the mighty Brahmaputra, Barak, etc. The tribes such as Jaintias, Apatamis, Khasis, Garos, Mizos, Angami Nagas, Bodos and Kacharis as well as other tribes have sustained their cultures and traditions. This region, therefore, is stated as the most heterogeneous part of India with different food habits, languages, religions, dresses, customs, etc.

Nagaland is inhabited by 16 major tribes and other sub tribes. Lotha is the most urbanized tribe with 28.8 per cent urban population, while Tikhir

inhabiting in the hills and plains of North-East India and to show some of these relations that still exist today. There is some hope of rebuilding the bridge of inter-community understanding if we revive the historical ties among these communities. Some of the examples of inter community in North East India are given below:

The Sherdukpen, a small tribe of Mahayana sect in West Kameng District of Arunachal Pradesh, has an interesting myth which has it that they are the descendents of a Tibetan prince who married an Ahom princess. Tibet lies in the far north of Sherdukpen habitat while Assam plains (Darrang and Sonitpur District in the northern bank of Brahmaputra) lie to the south. Influences emanating from both these regions characterize their life and culture. The Sherdukpens and their northern neighbours, the Monpas, have the tradition of winter visit to the plains of Darrang and Sonitpur districts close to the foot-hills region. They used to move down to a place called Doimara in the foothills and camp there for about three months for visit to the villages. From Doimara they would make several trips to the villages in the plains with their horses loaded with their produce and return with loads of paddy collected from the villagers.

The Nyishis of Arunachal Pradesh too has similar tradition of close cultural ties with the Assamese villagers of the plains. In many cases, the Ahom rulers even granted them temporary fishing rights in the ponds and marshes in the plains during the winter months. Like the Sherdukpen, the Nyishis too have great regard for items such as *endi-chadar* from the plains. The ceremonial attire of the Nyishi is incomplete without endi woven by the Assamese villagers.

11.5 GENDER PERSPECTIVE

According to the Gender Perspective, gender is different than sex. Sex refers only to the biological reality of male or female, gender refers to socially constructed roles which can change. While in principle there is nothing wrong with distinguishing between the biological reality and the cultural or personal expression of masculinity and femininity, those promoting

be the cause of the low gender gap in the state. However the situation was worse in Tripura, Assam and Sikkim where tribal population were relatively lower in comparison to other north-eastern states. As regards sex ratio we found that Meghalaya, Manipur, Mizoram, Tripura and Assam had better sex ratio and states like Sikkim, Arunachal Pradesh and Nagaland had sex ratio much lower than that of the national average. Infant mortality rate was lower for the north-eastern states. Female infant mortality rate was higher than male infant mortality rate in the region except in the states of Sikkim and Tripura.

Similarly life expectancy at birth was more for women than for men in North East India. So it seems that the women of the region enjoyed better health status as compared to national level. Political participation of women at state and national level was lower for those states except Assam. However the participation at local level was almost one third for all the states of the region. But this might not indicate that women of the region are politically empowered or aware. There might be influence of male members of the family on the women as a result of which they acted as proxies of their male counterparts in the political domain. Although the status of women were relatively better in north-eastern states viz., Mizoram, Nagaland, Manipur and Meghalaya as compared to national level yet there were gaps in educational attainment, access to employment, health, political participation, etc. Giving property right, access to employment and educational opportunity to women thus might not change the picture. A revolutionary change in the social and cultural values and behavioural pattern is necessary to foster the process of achieving gender equality. As soon as women feel that they have the capability to operate the society at the same term as men then achieving gender equality would not remain as a distant dream.



CHECK YOUR PROGRESS

Q 1: Briefly state the density of population of North East India?

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11.7 FURTHER READING

1) Pandey, M.C. and Goel, N.P. (1994): "Population Trend in the North-Eastern Region", in S. Mukherjee, et al (eds), *Demographic Profile of North-East India*, Omsons Publications, New Delhi, pp. 1-7.

2) Anand, S. and A. Sen (1995) "Gender Inequality in Human Development: Theories and Measurement" in Fukuda Parr and A.K. Shiv Kumar (eds.) *Readings in Human Development*, OUP, New Delhi.



11.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: In 2011, the North East region occupies total population of 45,588 thousand with density varying from 17 persons per sq. kilometre in Arunachal Pradesh (the biggest state in the region) to 397 in Assam followed by Tripura (350), Meghalaya (132), Manipur (122), Nagaland (119) and Sikkim (86).

Ans to Q No 2: The different demographic factors are age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, average size of a family, average age at marriage.

Ans to Q No 3: The gender perspective looks at the impact of gender on people's opportunities, social roles and interactions. Gender relations are accordingly defined as the specific mechanisms whereby different cultures determine the functions and responsibilities of each sex.



11.9 MODEL QUESTIONS

Short Answer Questions (Answer each question in about 150 words)

Q 1: What is the Religious Composition of Population in northeast India?

UNIT 12 : DEMOGRAPHIC PROBLEMS IN NORTH EAST INDIA

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 Poverty

- 12.3.1 Causes of Poverty
- 12.3.2 Poverty in Northeast India

12.4 Unemployment

12.5 Child and Women Trafficking

- 12.5.1 Causes of Human Trafficking:
  - 12.5.1.1 Push or Supply Factors
  - 12.5.1.2 Pull or Demand Factors
- 12.5.2 Government Policy adopted as anti-human Trafficking Measures

12.6 Immigration

- 12.6.1 Factors of immigration

12.7 Inter-Community Feuds

12.8 Outmigration

12.9 Let Us Sum Up

12.10 Further Reading

12.11 Answers to Check Your Progress

12.12 Model Questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- discuss the different demographic problems in Northeast India
- explain the causes behind the demographic problems
- analyse the consequences of these problems.

12.3.2 Poverty in Northeast India

According to the Planning Commission, there has been a rise in poverty levels in the Northeastern states of India. 116.4 lakh people in Assam, followed by 12.5 lakh in Manipur, 6.3 lakh in Tripura, 4.9 lakh in Meghalaya, 4.1 lakh in Nagaland, 3.5 lakh in Arunachal Pradesh, and 2.3 lakh in Mizoram live below the poverty line. Tripura and Arunachal Pradesh have shown a decrease in the poverty scale as Tripura and Arunachal Pradesh are affected with less poverty in 2009-10 than in 2004-05. Nagaland has registered an increase of 12 per cent in poverty followed by Manipur at 9.2 per cent, Mizoram 5.7 per cent, Assam 3.5 per cent and Meghalaya one per cent. India Spend has reported Meghalaya and Sikkim show the largest decrease in poverty in India. In Sikkim the percentage of population below the poverty line was 13.1% in 2009-10 and it decreased to 8.2% in 2011-12. In the same way, the poverty line in Meghalaya in 2009-10 was 17.1% and it decreased to 11.9% in 2011-12. In 2004-05, all the north eastern states showed a higher poverty ratio vis-à-vis India (37.2), except Tripura (40.0) and Manipur (37.9). In this regard Nagaland presents better performance than other states of the region as it recorded least poverty ratio of 8.8, followed by Mizoram (15.4) and Meghalaya (16.1). Poverty estimate in 2009-10 showed improved picture for some of the states in the region, viz., Tripura, Sikkim and Arunachal Pradesh, compared to 2004-05 estimate of poverty ratio. The poverty estimates provide a deteriorating trend in states like Nagaland, Mizoram, Meghalaya, Manipur and Assam. These states show higher poverty ratios vis-à-vis 2004-05 estimates. It is observed that rural-urban gap in reducing poverty ratio has been greater in Mizoram, where urban and rural areas account for 11.5 per cent and 31.1 per cent poverty ratio respectively in 2009-10. Urban poverty ratio is found to be higher for states like Manipur, Assam, Arunachal Pradesh, Meghalaya and Nagaland than the national average figure. Manipur and Assam record worse off situation than India in rural

underdevelopment, creation of employment opportunities is a grave concern for the region. The overall development is the only solution to bring out the region from its underdeveloped stage.

12.5 CHILD AND WOMEN TRAFFICKING

The word 'trafficking' is a legal term which means dealing or trading with something that is illegal. In other words, this is an act criminalized by the existing legal norms. United Nations Office on Drugs and Crime (UNODC), in the year 2000, defined trafficking by the process, means and purpose of exploitation. According to this report, India is a source, destination and transit country for men, women and children trafficked.

The most important factor for fuelling human trafficking in northeast region is the fact that it is surrounded by international borders like China in the North, Bhutan in the West, Myanmar or Burma in the East and Bangladesh in the South. The threat of child and girl trafficking has assumed alarming proportions. Though child trafficking is prevalent all over the country, its incidence is quite high in the North-Eastern region. From the office of the Central Bureau of Investigation (CBI), Assam, it is found that during the period 2005-2010, 42.03 per cent children have been trafficked to states like Haryana, Uttar Pradesh, Rajasthan, Maharashtra and West Bengal, whereas 31.88 per cent children are sent to metro cities such as Delhi, Mumbai, Kolkata, etc., 14.49 per cent children are sent to unknown destinations, 7.25 per cent children are trafficked around the North Eastern region and 4.35 per cent are sent to other places. Women and children are the most vulnerable in the state. Due to open national and international border and loose security condition of North East India, the problem of human trafficking has become an unsolvable one.

Among these eight states, Assam ranks top in human trafficking cases during 2006-2013. In 2014, it occupied 4th rank with 407 cases contributing 7.4% of the total cases in India and in 2015, it occupied first rank with 1494 cases contributing 21.7% of the total of India. The statistics of women trafficking for the year 2015 is both alarming and a wake-up call for any civilized society. Engulfed by recurring flood and ethnic violence along with

12.5.1 Causes of Human Trafficking

12.5.1.1 Push or Supply Factors

The push factors which operate in any under developed region can generally be divided into three categories viz., (i) economic, (ii) socio-cultural, and (iii) political and legal factors. The economic factors include poverty arising out of illiteracy, ignorance, lack of access to knowledge and resources, unemployment, absence of livelihood opportunities, drug addiction of women and children either voluntarily or by force. Children kept in substitute homes run by dubious organisations or individuals also seem to enhance the chances of the vulnerable to fall prey to trafficking.

12.5.1.2 Pull or Demand Factors

The pull factors emerge from the demand for women and children's bodies by immoral individuals, and organised criminals, who see trafficking as a lucrative and easy business, facilitate such men's cruel desire by setting up the sex industry. Some of the other pull factors include legal acceptance of prostitution as an industry in some regions which generate demand for women and children. The prospective victims, who usually fall prey to the designs of organised criminals, often come from the economically, socially, and culturally vulnerable sections of the society. The available evidence suggests the causes found in underdeveloped or backward societies are grounded in the culture that prejudices against women, the girl child and the downtrodden.

12.5.2 Government Policy adopted on Anti-Human Trafficking

In India also, the government has taken several anti trafficking

12.6.1 Factors of Immigration

- Increasing pressure on land and mounting unemployment in Bangladesh due to uncontrolled steep rise in population and high density of population (964 per sq. km, according to 2011 estimate).
- The large scale migration from Bangladesh to India has been possible mainly due to the porous India-Bangladesh border of 4,096 kilometres, the fencing of which has not been completed
- Better economic opportunities across the border.
- Large segments of population in Bangladesh uprooted by severe floods and cyclones.

12.7 INTER-COMMUNITY FEUDS

The inter-community feuds are experienced due to distrust, conflict, tension and disharmony. The problem of ethnic conflict is engendered through grievances based on perceived deprivations and non-reciprocated expectations of the ethnic communities toward one another. The north-eastern region of India also bears witness to the problem of ethnic conflict. In fact, the region is often regarded as a conflict ridden area. The last decade of the twentieth century is best remembered in Manipur for the violent ethnic clashes between the Kukis and the Nagas which started in 1992 and continued till the year end of 1998. It was followed by clashes between Meiteis and Muslims in May 1993, Kuki- Paite clashes in 1997-1998. Nagaland has also experienced numerous ethnic conflicts which includes the Chakhesangs-Tangkhuls conflict in Phek district during 1995-1996. Assam was one of those states where linguistic issues have emerged as a dominant issue in the post-independent period. The most notorious language riot started in 1960-1961, before and after the passing of the Official Language Bill by the state Assembly. In both instances, there were violent conflicts between ethnic Assamese and Hindu Bengalis and there were deaths, destruction and sufferings as a result of inter-ethnic conflicts as well as of police attempt to control protest demonstration and movements. Socio-political development

per cent during the same period that implies that unemployment issue in their region was becoming a major reason for outmigration. A study found that in 2001 about 6000 people migrated to Bangalore and 67000 people to Delhi for better availability of opportunities, facilities and services such as employment, education, infrastructure, amenities, etc. The migration of males was high in Bangalore (989 females per thousand males in 1991 and 685 in 2001) and in Delhi (868 in 1991 and 784 in 2001) and females in Delhi than Bangalore in the year 2001.

The state of Tripura has lost its population by 27400 persons due to high outmigration. Assam has also lost a significant number of persons due to outmigration. Arunachal Pradesh, Nagaland and Manipur are the least affected ones of outmigration. Considering the net effect of migration, it can be observed that all the constituent units of the region have gained by population, except Tripura which has lost. The main stream of out-migration from Assam is directed towards West Bengal, Meghalaya, Arunachal Pradesh and Manipur. The distribution of migrants from Manipur shows that the bulk (constituting more than half) is spread over Assam. Nagaland also received one-fourth of the total out-migrants from Manipur. About 89 per cent of the migrants from Meghalaya· are found in Assam, another 3 per cent in West Bengal and 2 per cent in Nagaland. The latter are the other states which have received significant proportion of migrants from Meghalaya. About two-third of the total migrants from Nagaland is directed towards Assam. The other states which have received persons from Nagaland are Meghalaya (7 per cent) and 6 per cent in Arunachal Pradesh. The main out-flow from Tripura is directed towards Assam, West Bengal and these two states of the Indian Union attract about 60 per cent and 26 per cent respectively, i.e. around 86 percent of the total out-migrants from Tripura. Manipur attracted about 3 per cent and Meghalaya 1.89 per cent. Out of the total out-migrants from Arunachal Pradesh, a heavier proportion (about 63 per cent) has gone to Assam, while only 7.51 per cent went to Meghalaya and 3.07 per cent to West Bengal.

- The continuous exodus of people from Bangladesh to India's Northeast region is changing the demography of the north-eastern states which is being resented by the local population.
- Ethnic conflict in its extreme from is characterised by large scale violence, widespread insurgency and extensive civil war causing death, decay, destruction, misery and sufferings. A prolonged continuation of such a situation may seriously weaken and disturb the social order and lead to its political-economic disintegration.
- The rapid educational development, unemployment, underdeveloped economy and industrialisation, ailing educational system and infrastructure are the causes of outmigration in the northeast region



12.10 FURTHER READING

1) Marickan S.J. (1988) Poverty in India.
2) Goswami N. (2006) Illegal migration in Assam: A Concern for India's national security.
3) Kumar B.B. (2005) Tension and Conflict in North East India.
4) Sen S. and P.M. Nair (2005) Trafficking in Women and Children in India.



12.11 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Poverty means that the income level from employment is so low that basic human needs cannot be met. Poverty-stricken people and families might go without proper housing, clean water, healthy food, and medical attention. Each nation may have its own threshold that determines how many of its people are living in poverty. Causes of poverty are changing trends in a country's economy that is associated with the lack of education, unemployment, illiteracy, overpopulation,

UNIT 13 : CENSUS 2011 (MAJOR FEATURES FROM NATIONAL DATA)

UNIT STRUCTURE

13.1 Learning Objectives

13.2 Introduction

13.3 Major features of 2011 census

- 13.3.1 Growth of Population
- 13.3.2 Density of Population in the Country
- 13.3.3 Sex Ratio in the Country
- 13.3.4 Literacy Rate in the Country
- 13.3.5 Rural Urban Dichotomy

13.4 Let Us Sum Up

13.5 Further Reading

13.6 Answers to Check Your Progress

13.7 Model Questions

13.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- descibe the basic features of the census of India conducted in the year 2011
- explain the factual informations pertaining to different aspects of the population of India as per census 2011
- discuss in details the population composition of the country, sex ratio in the population, density of population in the country, religious affiliations of the population and so on as per the 2011 census data.

13.2 INTRODUCTION

India conducted its 15th decennial census in the year 2011, which was carried in two successive phases: house listing phase and population enumeration phase. House listing phase continued for about six months (from April 2010 to September 2010) while the population enumeration phase started

Table 1: Population Growth in India

STATE/ UT CODE	STATE/UNION TERRITORY#	TOTAL POPULATION	MALE	FEMALE	% OF DECADAL GROWTH
	JAMMU & KASHMIR	12,548,926	6,665,561	5,883,365	23.71
	HIMACHAL PRADESH	6,856,509	3,473,892	3,382,617	12.81
	PUNJAB	27,704,236	14,634,819	13,069,417	13.73
	CHANDIGARH#	1,054,686	580,282	474,404	17.10
	UTTARAKHAND	10,116,752	5,154,178	4,962,574	19.17
	HARYANA	25,353,081	13,505,130	11,847,951	19.90
	NCT OF DELHI#	16,753,235	8,976,410	7,776,825	20.96
	RAJASTHAN	68,621,012	35,620,086	33,000,926	21.44
	UTTAR PRADESH	199,581,477	104,596,415	94,985,062	20.09
	BIHAR	103,804,637	54,185,347	49,619,290	25.07
	SIKKIM	607,688	321,661	286,027	12.36
	ARUNACHAL PRADESH	1,382,611	720,232	662,379	25.92
	NAGALAND	1,980,602	1,025,707	954,895	-0.47
	MANIPUR	2,721,756	1,369,764	1,351,992	18.65
	MIZORAM	1,091,014	552,339	538,675	22.78
	TRIPURA	3,671,032	1,871,867	1,799,165	14.75
	MEGHALAYA	2,964,007	1,492,668	1,471,339	27.82
	ASSAM	31,169,272	15,954,927	15,214,345	16.93
	WEST BENGAL	91,347,736	46,927,389	44,420,347	13.93
	JHARKHAND	32,966,238	16,931,688	16,034,550	22.34
	ORISSA	41,947,358	21,201,678	20,745,680	13.97
	CHHATTISGARH	25,540,196	12,827,915	12,712,281	22.59
	MADHYA PRADESH	72,597,565	37,612,920	34,984,645	20.30
	GUJARAT	60,383,628	31,482,282	28,901,346	19.17
	DAMAN & DIU#	242,911	150,100	92,811	53.54
	DADRA & NAGAR HAVELI#	342,853	193,178	149,675	55.50
	MAHARASHTRA	112,372,972	58,361,397	54,011,575	15.99
	ANDHRA PRADESH	84,665,533	42,509,881	42,155,652	11.10
	KARNATAKA	61,130,704	31,057,742	30,072,962	15.67

km), Uttar Pradesh (829 person per sq km) and so on. The minimum population density was recorded in state of Arunachal Pradesh (17 person per sq km) for both 2001 and 2011 Census. Among the Union Territories Delhi (11,320) occupies the first place becoming the most densely settled Union Territory of India followed immediately by Chandigarh (9258), Puducherry (2547), Daman and Diu(2191) and Lakshadweep (2149) and so forth .The table below will give you an overall idea about the densities of population state wise.

TABLE II: Density of population in India as per 2011 census:

Sl no	***State/Union Territory#***	***Density of population***
1.	*Uttar Pradesh*	*829*
2.	*Maharashtra*	*365*
3.	*Bihar*	*1,106*
4.	*West Bengal*	*1,028*
5.	*Andhra Pradesh*	*308*
6.	*Madhya Pradesh*	*236*
7.	*Tamil Nadu*	*555*
8.	*Rajasthan*	*200*
9.	*Karnataka*	*319*
10.	*Gujarat*	*308*
11.	*Orissa*	*270*
12.	*Kerala*	*860*
13.	*Jharkhand*	*414*
14.	*Assam*	*398*
15.	*Punjab*	*551*
16.	*Chhattisgarh*	*189*
17.	*Haryana*	*573*
18.	*Delhi*	*11,32*
19.	*Jammu and Kashmir*	*56*
20.	*Uttarakhand*	*189*
21.	*Himachal Pradesh*	*123*
22.	*Tripura*	*350*
23.	*Meghalaya*	*132*

(889), Punjab (895), Uttar Pradesh (912) and Bihar (918) are also the worst performing states in the context of maintaining gender parity in its population. All these states thus need to work holistically and judiciously in the line of maintaining gender scenario to minimize the imbalance in their population composition

The top-performing states in context of the maintaining the sex ratio of the country are Kerala (1084), Tamil Nadu (996), Andhra Pradesh (993), Chhattisgarh (991) and Orissa (979). However, all the states have shown better performances in the context of maintaining their overall sex ratio if we compare their present ratio to that of the ratio in the previous census.

Point of concern: The census 2011, however, has recorded a serious anomaly in the context of the overall sex ratio of the country. As per the 2011 census there has been an annoying downward fall which can be observed in the context of the child sex ratio of the country. The ratio as per the census has declined from 927 to 918 between 2001 and 2011. Such a declining trend clearly reflects the persistence of continuing biasness against females in Indian society, which is not a healthy sign. The census data also held that the decline is drastic in rural India from 934 to 923, but in absolute terms the urban ratio is equally worse at 905 in 2011, even marginally lower than the figure of 906 in 2001. Thus, both in the rural and the urban India a declining trend can be observed in the context of child sex ratio, which is going to affect negatively the overall sex ratio of the country in the coming decades. The gap so created hence needed to be corrected/mitigated as soon as possible to maintain gender ratio in the country.

Let us now look at the sex ratio of the country in a tabular form. The table below will give you an overall glimpse and comparative understanding about the sex ratio across all the states in the last two census periods.

31	SIKKIM	890	875
32	ANDAMAN AND NICOBAR ISLANDS	876	846
33	DADRA AND NAGAR HAVELI	774	812
34	DAMAN AND DIU	618	710
35	LAKSHADWEEP	946	948

Source: *census 2011*

13.3.4 Literacy Rate in the Country

Literacy rate of the country has improved since the last census; this indicates a positive trend of school enrolment rate in the country. The overall literacy rate of India has increased by an average percentage of 8 per cent.73 per cent is the total percentage of literacy in India as per 2011 census, which has increased from 64.8 per cent in 2001. The total percentage of male literacy is 80.9 per cent and the female literacy rate is 64.6 per cent. Male literacy has increased by an average of 5.6 per cent while in case of female literacy an increase of 10.9 per cent has occurred since 2001. All this indicates a progressive trend towards education in the country. Again as per the census, the overall literacy rate for members of the Scheduled Castes (SCs) is 66.1 per cent, (76.2 per cent in the urban area) which is nearly seven percentage points lower than that of the entire population of the country and of Scheduled Tribes (STs) are also lower at 59.0 per cent overall and 56.9 per cent in rural areas. It is only in urban areas that the STs have a literacy rate that marginally exceeds that of the SCs, (at 76.8 per cent against 76.2 per cent for the SCs). According to the 2011 census, 4.14 crore households have at least one graduate in the home. The census held that there has been a total 4.5% point increase in the number of households with at least one graduate or above in the last decades.

It is important to note that the five states and Union Territories which have performed best in the context of the literacy rate in the

12	KERALA	94.00
13	JHARKHAND	66.41
14	ASSAM	72.19
15	PUNJAB	75.84
16	CHHATTISGARH	70.28
17	HARYANA	75.55
18	DELHI	86.21
19	JAMMU AND KASHMIR	67.16
20	UTTARAKHAND	78.82
21	HIMACHAL PRADESH	82.80
22	TRIPURA	87.22
23	MEGHALAYA	74.43
24	MANIPUR	76.94
25	NAGALAND	79.55
26	GOA	88.70
27	ARUNACHAL PRADESH	65.38
28	PUDUCHERRY	85.85
29	MIZORAM	91.33
30	CHANDIGARH	86.05
31	SIKKIM	81.42
32	ANDAMAN AND NICOBAR ISLANDS	86.63
33	DADRA AND NAGAR HAVELI	76.24
34	DAMAN AND DIU	87.10
35	LAKSHADWEEP	91.85

Source: *census 2011*

13.3.5 Rural and urban dichotomy

The census 2011 holds that, "The growth in population has been more rapid in urban areas than in rural areas, and the share of the urban population has risen from 27.81 percent to 31.14 percent." But despite such an increase in country's urban population, India continues to remain predominantly a rural country.

MEGHALAYA	79.92	20.08
ASSAM	85.92	14.08
WEST BENGAL	68.11	31.89
JHARKHAND	75.95	24.05
ORISSA	83.32	16.68
CHHATTISGARH	76.76	23.24
MADHYA PRADESH	72.37	27.63
GUJARAT	57.42	42.58
DAMAN & DIU #	24.84	75.16
DADRA & NAGAR HAVELI #	53.38	46.62
MAHARASHTRA	54.77	45.23
ANDHRA PRADESH	66.51	33.49
KARNATAKA	61.43	38.57
GOA	37.83	62.17
LAKSHADWEEP #	21.92	78.08
KERALA	52.28	47.72
TAMIL NADU	51.55	48.45
PUDUCHERRY #	31.69	68.31
A & N ISLANDS #	64.33	35.67

Source: *Census of India 2011*

The table above shows that the rural population is highest in Himachal Pradesh and is less in Goa. Again among the union territories the highest concentration of rural population can be found in UT Andaman and Nicobar Island and less in Delhi. Among the states, urban population is highest in the state Goa and is lowest in Himachal Pradesh. Among the union territories, urban population is highest is in NTC Delhi while lowest is in Andaman and Nicobar

Table VI: Comparative view on rural urban growth in the country

Year	Percentage Of Rural Urban Population		Rural urban ratio
	Rural	Urban	
1901	89.1	10.9	8.2
1911	89.7	10.3	8.7
1921	88.8	11.2	7.9

profess and practice Islamism (14.2 per cent), 2.78 crores follow Christianity (2.3 per cent), 2.08 crores follow Sikhism(1.7 per cent), 0.84 crore follow Buddhism(0.7 per cent), 0.45 crores Jainism (0.4 per cent), and 0.79 crore (0.7 per cent) have other religions & persuasions and 0.29 crore (0.2 per cent) have not stated any religion. Muslim population is the second largest group in the country after the Hindus and who are then followed by groups like Christians, Sikhs, Jains and so on in the country

The 2011 census also depicted that the "Proportion of the Hindu population to the total population had declined by 0.7 percentage point since the time of last census enumeration. Similar is the case with the proportion of the Sikh population, it got declined by 0.2 percentage point. Again, Buddhist population of the country has also declined by 0.1 percentage point when compared to the last census data. However, an opposite trend can be observed in the case of the Muslim population. As the total proportion of Muslim population has increased by 0.8 percentage there was no significant change in the proportion of Christians and Jains.

Caste enumeration in 2011 census: After 1931, the census 2011 has made the caste count in the country. This is the only instance of caste count on an all India level in the country in the post-Independence era. This happened on the insistence of coalition of the then several ruling party leaders including Lalu Prasad Yadav, Sharad Yadav and Mulayam Singh Yadav who also held support from the opposition parties like the Bharatiya Janata Party, Akali Dal, Shiv Sena and Anna Dravida Munnetra Kazhagam in the subject. As a result, census 2011 has collected information about ones caste during its enumeration. First findings of caste enumeration however have been revealed only on 3rd July 2015 by Union Finance Minister Arun Jaitley. According to many assumptions, this was said to be done to collect the exact information about the OBCs population in the country.

March 2011 is 1210.6 million. Of this total population 833.5 million is the rural population and other 371.1 million was the urban population.

- The population of India has increased by more than 181 million during the decade 2001-2011 The absolute addition of the population to the total population is slightly lower than the population of Brazil, the fifth most populous country in the world.
- 2011 census makes the milestone in the demographic history of the country as the percentage decadal growth during 2001-2011 has registered the sharpest decline since Independence. For 2001-2011 this decadal growth has become 17.64 percent which has declined by 3.90 percent points (i.e : from 21.54 percent) since the earlier census decade.
- India still remains predominantly rural with nearly 68.6% of Indian population still residing in villages. Out of the total of 1210.2 million populations the overall size of rural population has been 833.1 million.
- The total number of villages has India has increased during the phase of 2011 census. As per the record of the census 2011 goes, the total number of villages in India has increased from 6,38,588 (2001 census) to 6,40,867 (2011 census) which accounted for an increase of 2279 villages in total.
- Uttar Pradesh has the largest rural population of 155.3 million (18.6% of the country's rural population) whereas Maharashtra has the highest urban population of 50.8 million (13.5% of country's urban population) in the country.
- The overall sex ratio of the country has increased from 933 in 2001 to 940 in 2011.However the child sex ratio has slipped to its lowest since Independence .The gap in the rural urban sex ratio in India has been recorded to be 21 (urban :926) (rural: 947) as per 2011 census.
- The percentage of rural literacy is 68.91 per cent, while the percentage of urban literacy is 87.97 per cent in the country .The gap existing in rural and urban literacy rate is 16.06 per cent.
- Indian population accounts for 17.5% of the world's total population. The population of the country has been estimated to reach 1.3 billion

Ans to Q No 3: As per the 2011 census, the overall sex ratio of the country is 940 females against 1000 males.



13.7 MODEL QUESTIONS

Short Qestions (Answer each question in about 150 words)

Q 1: What does the literacy rate of the country signify?

Q 2: Can you see any improvement in the context of the sex ratio of the country? If so explain how? What does sex ratio of the country signify?

Q 3: Write a brief note on growth of population in India according to 2011 census.

Long Questions (Answer each question in about 300-500 words)

Q 1: Discuss the main features of 2011 census? Elucidate if you find any difference in the context of the 2011 census when compared to the previous censuses of the country?

Q 2: Write an essay on the rural-urban dichotomy in the country?

Q 3: *"Population itself is not a problem, qualitatively good population with manageable size represents the strength of the nation, but if it becomes unmanageable, it eats up the vitals of the nation and become an evil".* Critically elucidate the above statement in the light of contemporary population scenario of India.

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for its diversities and heterogeneity in almost all the aspects of society , be in terms of its culture, race, ethnicity, language, dialects, cuisines etc. Alongside sharing its Geo spatial boundaries with neighbouring countries like Bhutan, Myanmar, Nepal, China, Bangladesh, the entire region has been a multiculturally fabricated hub, where melts diverse races, civilizations, cultures, and languages. Until independence, North Eastern Region (NER) consisted of Assam and the princely state of Manipur and Tripura. The state of Nagaland, Arunachal Pradesh, Meghalaya, and Mizoram has been carved out of Assam in subsequent time. Physiologically the entire northeast India covers an area of 255,037 sq km, which is nearly 8 percent of the total geographical area of the country.In this unit we shall briefly discuss the major features of each of the States in North East India like population frowth, density of population, lieracy rate, sex ratio etc on the basis of Census 2011 data.

14.3 STATES OF NORTHEAST INDIA AND ITS FEATURES AS PER 2011 CENSUS

Census 2011 has been carried out in all the eight states of Northeast India and its reveals important information's about the social and demographic features region.

Let us have a look at the various statistics as being revealed by the 2011 census to have a better understanding about each of the state in the NER. Let us first start our discussion with Arunachal Pradesh.

14.3.1 Arunachal Pradesh

Arunachal Pradesh is the frontier state located in the extreme North Eastern corner of India Union. Being formed as a separate state in the year 1987, the state shares a unique social, cultural, and demographic history of its own. Physiologically, the state is predominantly hilly and hence it accommodates a thin population when compared to the other states of India. Both Patkai hills and Himalayas range covers much of the Arunachal Pradesh. Geo spatially, the state also shares its boundary with the neighbouring

composite whole, a melting terrain of the diverse ethnicities, cultures, religions etc. Since primordial times the state has a baffling variety of demography. Among all the neighbouring state of the N.E region, Assam has its unique identity and is being known for its socio-cultural and structural diversities. The 2011 census reveals some of the important features about this state. Let us try to learn about them under following heads:

- **Total population of the state:** According to the 2011 census, the state comprises a total of 3,11,692,72 population, out of which 15,954,927 are the male population is and 15,214,345 are the female population. According to the demographic statistics of the state, Assam shares the highest concentration of population among all the other states of the North East region. Further, the population of the state has increased by around 16.93% since the last census as per the latest census data.
- **Sex ratio:** The sex ratio of the state is 958 females per 1000 males. The ratio hence is slightly higher in the state when compared to the all India level,i.e. 940 (as per 2011 census)
- **Literacy:** Overall rate of literacy in the state is 73.18%, out of which the percentage of male literacy is 78.81% and female literacy rate is 67.27 %. There have been significant increases in the literacy rate when compared to the earlier recorded data i.e. 63.25 % during 2001 census. Thus there has been an upward shift in case of literacy in the state.
- **Density of population:** The density of population in the state is 397 per sq km, which is slightly higher than the all India level i.e. 382. Significantly the density of population has gone up when compared to the previous census which was 340 in 2011 census. This signifies that the population of the state has been growing rapidly.
- **Child population and child sex ratio:** The child population of Assam is 4511,307 and the child sex ratio is 957 as per the census 2011 data.

states of Nagaland and Mizoram and with the neighboring international country Myanmar.Geographically, the state have been bounded by Nagaland to the North, Mizoram to the South. Assam lies to its extreme west while Burma lies to its east. Let us have a look at, what census of 2011 has revealed about this state under the following heads:

- **Total Population of the state:** As per the statistics of 2011 census goes, the total population of the state was 1091014 out of which 1369764 is the number of male population and 1351993 was the number of female population.
- **Sex ratio of the state:** The sex ratio of the state is comparatively promising with 987 in every 1000 males.
- **Literary rate:** The overall literacy rate of the state was recorded to be around 79.89 %.which is a comparative decent percentage when compared to states like Bihar, UP, MP, Rajasthan and so on. Out of total literacy percentage, the percentage of male and female literacy was 86.49% and 73.17% respectively.
- **Density of population:** The density per sq km in the state is being recorded at 122 per sq km which indicated that the state is sparsely populated when compared to the other various states of India.

14.3.5 Mizoram

Every state of North East India is known for its scenic beauty and mesmerizing uniqueness. Mizoram is one such beautiful state of North East India known for its kaleidoscopic landscape and pleasant weather. The demographic parameters about the state have been revealed by the 2011 census. And as per the statistics of the census 2011 goes:

- **Population of the state :** The total population of the state as per 2011 census was 3671032.The male population was 5,52,339 and the female population was 5,38,675 in total.

the rate of female literacy is around 83.15 %.

- **Density of population:** However the density of population in this small state is as high as 350.The state is known for its dense settlements. The situation so arisen has aroused because of its geophysical condition. This is so because around 60% of the lands in the state are hilly and remaining 40% is only the flat and habitable lands. The flat land of the state ironically accommodates 65% of its total population.

14.3.7 Nagaland

Nagaland is a narrow mountainous territory between the Brahmaputra valley of Assam and Myanmar. Formed back as the separate state in the year 1963, the state is blessed with picturesque, landscapes, valleys and greenery.

- **Total Population of the state:** As per 2011 census,1,980,602 is the total population of Nagaland 1,025707 is the male population and 954895 is the number of female population .285981 is the total number of child population
- **Sex ratio:** the sex ratio of the state as per 2011 census is 931 in every 1000 males. Birth preferences of the male are clearly visible through the sex ratio of the state. The state has the lowest sex ratio even when compared to the all India ratio of sex. The child sex ratio is 944 which is slightly better than the overall sex ratio in the state.
- **Literacy:** overall literacy rate is 80.11 out of which rate of male literacy is 83.29% and the rate of female literacy is 76.69%
- **Density of population:** Density of population per sq km is 119 in the state. The state since is hilly is sparsely populated .

14.3.8 Sikkim

Sikkim is a small landlocked state in North East India, formed in the year 1975.This state shares its international boundary with

Assam	31,169272	159,54927	15214345	78,438
Manipur	2721756	1369764	1351992	22,327
Meghalaya	2964007	14,92,668	14,71,339	22,429
Mizoram	3671032	5,52339	5,38,675	21,081
Nagaland	19,78,502	10,24,649	9,53,853	16,579
Sikkim	6,07688	3,21,661	2,86,027	7,096
Tripura	2964007	18,71,867	17,99,165	10,486

Source: Census 2011. India

Table 1 one will help you to gather a comparative understanding about the states of N.E India on aspects like overall population composition, number of males and females in the states, the dichotomy persists between rural and urban population across the state and total land area of each states. The table shows that among the North Eastern States it was Assam which has the highest concentration of population. The state was followed by the state like Meghalaya, Manipur, Nagaland, Arunachal Pradesh, Mizoram and Sikkim. As per the above table total population of NER is 474, 59,991 out of which 233, 01,787 are the males and 222, 85,211 are the females.

Table 2 : Decadal growth rate of the North Eastern States

Name of State	Decadal growth rate IN PERCENTAGES(2011)
All India	17.64
Assam	16.93
Arunachal Pradesh	25.92
Manipur	18.65
Meghalaya	27.82
Mizoram	22.78
Nagaland	-0.47
Sikkim	12.36
Tripura	14.75

Source: Census 2011,India

Table 2 represents the decadal growth rate of the N.E states are shown. The decadal growth rate is highest in the state of Meghalaya (27.82%) while lowest in Nagaland. Nagaland in fact has set a negative trend in the overall growth rate of population. Nevertheless all the other states of NER

MEGHALAYA	972	986
MIZORAM	935	975
NAGALAND	900	931
SIKKIM	875	889
TRIPURA	948	961

SOURCE: Census 2011: Provisional population totals Office of the Registrar General and Census Commissioner, India Ministry of Home Affairs, 31st March 2011.

The above table represents the sex ratio of all the states of North East India. The sex ratio at birth (SRB) indicates 'the number of live female births per 1000 male live births'. Sex ratio is a better indicator of the recent trends of gender preferences in the society. The ratio quantitatively represents 'relative male or female deficits at birth'

From the above table, it has been clear that there is a comparative paucity of females in the region except Manipur where sex ratio has been as high as 992 females per thousand males. However when compared to the overall sex ratio of India(i.e:940), five states of North eastern states namely Manipur, Mizoram, Meghalaya, Assam, Tripura shows a promisingly upward trend while state like Arunachal Pradesh, Sikkim and Nagaland's still lags much behind the all India ratio. Further when we compare the sex ratio of 2011 census and 2001 census then we, however, can observe an upward trend in the context of the gender dynamics of NER.

TABLE 5 : LITERACY RATES IN N.E R

Name of State	TOTAL NUMBER OF LITERATES	MALE LITERATES	FEMALE
All India	74.04	82.14	65.46
ASSAM	73.18	78.81	67.27
ARUNACHAL PRADESH	66.95	73.69	59.57
MANIPUR	79.85	86.49	73.17
MEGHALAYA	75.48	77.17	73.78
MIZORAM	91.58	93.72	89.40
NAGALAND	80.11	83.29	76.69
SIKKIM	82.20	87.29	87.29
TRIPURA	87.75	92.18	83.15

TABLE 7: URBAN AGGLOMERATION IN NORTH EAST INDIA

RANK	URBAN AGGLO-MERATION/CITY	STATE	TOTAL POPULATION as per 2011 CENSUS
1.	GUWAHATI	ASSAM	1,260,419
2.	AGARTALA	TRIPURA	522,613
3.	IMPHAL	MANIPUR	414,288
4.	DIMAPUR	NAGALAND	379,769
5.	SHILLONG	MEGHALAYA	354,325
6.	AIZAWL	MIZORAM	291,822
7.	SILCHAR	ASSAM	228,985
8.	DIBRUGARH	ASSAM	154,019
9.	JORHAT	ASSAM	153,249
10.	NAGAON	ASSAM	147,137
11.	TINSUKIA	ASSAM	125,637
12.	DHUBRI	ASSAM	109,234
13.	TEZPUR	ASSAM	100,477
14.	KOHIMA	NAGALAND	100,000
15.	GANGTOK	SIKKIM	98,658
16.	ITANAGAR	ARUNACHAL PRADESH	95,650

SOURCE: Census 2011: Provisional population Totals, Office of the Registrar General and Census Commissioner, India Ministry of Home Affairs, 31st March 2011.

The above table represents the concentration of urban population in the North Eastern State. Rank-wise it was the metropolitan Guwahati which has the highest concentration of population and has been ranked as the most urbanized urban agglomerates of the North East India. Next to Guwahati was the urban concentration of Agartala, Imphal, Dimapur, Shillong which occupies the second to fifth rank in order, in the series of the most urbanized region of the North East India. Though we can observe a significant rise of urban population in the N.E region during the last the few years, the region is yet to make its distinct mark when comes to the case of rapid urbanization.

- According to 2011 census, highest rate of literacy in the north eastern region has been recorded in the state of Mizoram. Arunachal Pradesh has the lowest literacy rate compared to its sister states in the region. Interestingly Mizoram occupies the second position in the all India ranking after Kerala in context of the literacy.
- Hinduism is the predominant religion in the entire north east India as per the statistics of 2011 census. The region has with around 54% population who follows the religion Hinduism. The next dominant religion in the region is Islamism.
- As per the 2011 census Nagaland, Mizoram, and Meghalaya are the three states of the North Eastern region, where Christians people are in majority and people in these three states follow Christianity as their major religion.
- As per 2011 census, Sex ratio is highest in the state of Manipur and is lowest in the state Sikkim. Although in general, the sex ratio 2011 of NER shows an upward trend, the preferential tendency towards males in birth continues. Almost all the state shows have a male centric gender preference. Gender disparity thus exists in almost all the states of NER like the rest of India.
- According to 2011 census of India, Guwahati, the primate city of Assam have evolved as the largest urban agglomeration in the entire North Eastern Region. The city is then being followed by urban settlements like Agartala, Imphal, Dimapur ,Shillong, Aizwal, Silchar, Dibrugarh, Jorhat and so forth.(refer to the table)
- The entire north eastern region like the rest of India continues to remain predominantly rural. The available rural urban statistics from the 2011 census reveals a vivid disparity that exists in the context of the rural and urban growth in the region.
- 2011 census also holds that the Northeast India has as many as 220 ethnic groups and almost an equal number of dialects. Among the ethnic groups, Bodos are the largest ethnic group in the region.
- The hills states of the region like Arunachal Pradesh, Nagaland, Meghalaya, Mizoram, are the states which are predominantly inhabited

Q 3: Does gender disparity exist in North eastern states of Assam? If so, explain how?

Long Answer Questions (Answer each question in about 350-500 words)

Q 1: "Was northeast predominantly a rural region? Elucidate your answer with proper facts and data's.

Q 2: How does a male literacy rate vary from the female literacy rate of N.E region? What kind of trend does such variances portrays. Discuss In details.

Q 3: Give a comparative overview of the population dynamics of the different states of NER.

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- elucidate the recent trends in world population.

15.2 INTRODUCTION

This unit attempts to include a crucial aspect to the study of historical development of societies. The study of population has been constrained due to paucity of detailed data available for different parts of the world. However, the available data, though limited, helps in reconstructing the trends and transition in population during the medieval period. The role of population (which in fact forms the basic unit of any society) and changes within them have also led to change in various aspects of human life. In this sense, they are not merely passive statistical data. The variations in the population of any society (more so in the case of medieval world) have led to changes in family structure, marriage and social interaction patterns on the one hand, while they have also forced large-scale changes at macro-levels to announce transition from the medieval to the modern, as in the case of Europe. This unit is an attempt to locate changes in the medieval society through the prism of populations.

15.3 DISTRIBUTION OF WORLD POPULATION

World population is unevenly spread all over the globe. Some places have a low concentration of population, like deserts, dense forests, and mountainous areas, whereas many areas are heavily populated, like coastal and deltaic plains, moderate climates, fertile areas, industrialized areas, and urban centres. This spread of population is known as the distribution of population. If we look at the factors responsible for the distribution of population, then all the factors may be broadly grouped under two categories: (i) geographical factors – latitude, altitude, relief, climate, mineral and energy resources, and (ii) socioeconomic factors, like industrialization, urbanization, type of economy, political scenario and public policies. Density is one way of expressing distribution. Density of population is expressed as the number of persons per sq. km. This is popularly known as arithmetic density.

15.3.1 Distribution and Density of Population

origin, the process of ageing has picked up during the recent decade.

15.3.3 Factors Influencing the Distribution of Population

15.3.3.1 Geographical Factors

- *Availability of water:* It is the most important factor for life. So, people prefer to live in areas where fresh water is easily available. Water is used for drinking, bathing and cooking – and also for cattle, crops, industries and navigation. It is because of this that river valleys are among the most densely populated areas of the world.
- *Landforms:* People prefer living on flat plains and gentle slopes. This is because such areas are favourable for the production of crops and to build roads and industries. So, these areas tend to be less populated. The Ganga plains are among the most densely populated areas of the world while the mountain zones in the Himalayas are scarcely populated.
- *Climate:* An extreme climate such as very hot or cold deserts is uncomfortable for human habitation. Areas with a comfortable climate, where there is not much seasonal variation attract more people. Areas with very heavy rainfall or extreme and harsh climates have low population. Mediterranean regions were inhabited from early periods in history due to their pleasant climate.
- *Soil:* Fertile soil is important for agricultural and allied activities. Therefore, areas which have fertile loamy soil have more people living on them, as it supports intensive agriculture.

Most cities of Western Roman Empire in Italy, Gaul and Iberia suffered a similar fate. Even when population growth resumed in North-West Europe, population density remained very low.

In Asia, population rose steadily in India as a result of progress in agriculture. But China's population suffered repeated losses as a result of invasions by the Huns. While population growth in Western Asia suffered as a result of frequent wars between Byzantines and Persians. Egypt, the most densely populated area in Africa, too suffered demographic losses as a result of these wars in the late sixth century. In sub-Saharan Africa, population growth continued to remain slow, only small pockets of population practised slash-and-burn agriculture, while south of the Sahara, hunter-gatherer economy prevailed.

15.5 POPULATION ESTIMATES AND DISTRIBUTION: MEDIEVAL PERIOD

Due to paucity of data it is very difficult to work out population figures for different parts of the world during the medieval period. These estimates have been made based on different methods for different regions. These estimates give us only a broad idea. However, a lot of work has been done on the demography of Europe.

Asia

China's population estimated at 50-60 million in AD 600 rose to 110-120 million in AD 1500. The Chinese were far more advanced in technology than medieval Europe. The art of printing; use of navigational compass and gunpowder gave it an edge over Europe during the period. In India, population estimated at 50-55 million in AD 600 rose to 100-110 million in AD 1500. Its main demographic concentrations lay along the River Ganges. Moreland for the first time provided an estimate for the population of India for the year 1600 A.D. This estimate was a population of around 100 million.

Europe

As already indicated the population estimates for Europe are available in a much organised manner. They help us to get an idea of trends in population over a long period of time. The population in Western Europe

there were periods when the population dipped sharply (especially after 1348) and again started ascending.

Thus, demographic changes have been attributed to the development in modes of production. Improvements in farming led to an expansion in land under cultivation aided by the development and spread of ferrous metallurgy (iron axes, iron spades, iron edged hoes and ploughs). Population densities were highest where agricultural technology, urban development and spread of trade formed the salient features of the economy. Migration and Urbanisation were two other important factors of demographic change. Other factors which influenced the fluctuations in population were the marriage pattern, fertility, birth and death trends, family and household structure, diseases, famines and natural calamities etc. In this section we will analyse major factors which were responsible for fluctuations in population.

15.5.1.1 Migration and Urbanism

Europe experienced continuous wars and conflicts from the sixth to the tenth century as a result of migration of Germanic tribes towards the east, while Slavonic tribes pushed south into the Balkans and eastwards till Volga. In the seventh century Arab tribes, under the banner of Islam, moved into North Africa and by the eighth century crossed over and conquered nearly whole of Spain. In the ninth century invaders from the east, the Magyar tribes occupied Hungary from where they invaded neighbouring countries of Europe.

Urbanisation was yet another factor which contributed to changes in population distribution and its redistribution. The size of cities, despite elements of uncertainty, has been used to estimate total population, particularly where distribution of settlements is the only variable for demographic assessment. By the fourteenth century many urban sites may have accounted for nearly 7 to 8 per cent of the total population

their volume of production, with a consequent rise in living standards and a fall in mortality rate.

15.5.1.4 Life Expectancy and Death Rate

According to Russell there was rise in life expectancy from twenty two to thirty five years between 1100 and 1275. The life span of medieval women was not very high (frequent child bearing and heavy field work resulting in poor health made them more susceptible to disease), although their mortality rate is difficult to ascertain. However, it is difficult to examine the exact variations between the end of thirteenth and beginning of fifteenth century, the difference in death rate dependent on age and gender remain equally little known.

15.5.1.5 Birth and Fertility

The birth rate and nuptiality too suffers from an absence of data on total population. Female population was much less documented and recorded than male, except perhaps for a small upper section of society and even in those registration of birth was partial and irregular. In the long run this gives a relatively low average growth rate but because it lasted for nearly a century there is considerable evidence for population growth between 1050 and 1250. It appears likely that after the epidemic of 1363-4, the birth rate increased for two or three years. There is also evidence of extreme fecundity of women after the plague. This is obvious from comparison of fertility and ultimate descendents of couples made just before and after the epidemic.

15.5.1.6 Family and Household

Marriage and family among other social bonds have become central objects for the understanding of past

these result in increase in age at marriage, reduction in family size and improvement in health indices. As people have moved towards and into cities, information has flowed outward. Better communication and transportation now link urban and rural areas both economically and socially creating an urban-rural continuum of communities with improvement in some aspects of lifestyle of both. The ever increasing reach of mass media communicates new ideas, points of reference, and available options are becoming more widely recognized, appreciated and sought. This phenomenon has affected health care, including reproductive health, in many ways. For instance, radio and television programmes that discuss gender equity, family size preference and family planning options are now reaching formerly isolated rural populations. This can create demand for services for mothers and children, higher contraceptive use, and fewer unwanted pregnancies, smaller healthier families and lead to more rapid population stabilisation. But the rapid growth of urban population also poses some serious challenges. Urban population growth has outpaced the development of basic minimum services; housing, water supply, sewerage and solid waste disposal are far from adequate; increasing waste generation at home, offices and industries, coupled with poor waste disposal facilities result in rapid environmental deterioration. Increasing automobiles add to air pollution. All these have adverse effect on ecology and health. Poverty persists in urban and peri-urban areas; awareness about the glaring inequities in close urban setting may lead to social unrest.



CHECK YOUR PROGRESS

Q 1: What is the pattern of population distribution?

.....

.....

Q 2: What is an example of population distribution?

.....

.....

Better communication and transportation now link urban and rural areas both economically and socially creating an urban-rural continuum of communities with improvement in some aspects of lifestyle of both.



15.8 FURTHER READING

1) Cassen, Robert et. al. (1994), *Population and Development: Old Debates, New Conclusions,* New Brunswick: Transaction Publishers.

2) Chandna, R. C. (2008), *Geography of Population: Concept, Patterns & Determinants*, 7th edition, Ludhiana: Kalyani Publishers.



15.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The individual organisms that make up a population can be more or less equally spaced, dispersed randomly with no predictable pattern, or clustered in groups. These are known as uniform, random, and clumped dispersion patterns, respectively.

Ans to Q No 2: Three patterns of distribution in populations of organisms: A population may have a uniform, random, or clumped distribution. Territorial birds, such as penguins, tend to have uniform distribution. Plants with wind-dispersed seeds, such as dandelions, are usually distributed randomly.

Ans to Q No 3: The main factors determining population distribution are : climate, landforms, topography, soil, energy and mineral resources, accessibility like distance from sea coast, natural harbours, navigable rivers or canals, cultural factors, political boundaries, controls on migration and trade, government policies.



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Learner's Feedback on Course

Dear Learner,

Regarding the course as mentioned above, we would like to know your opinions and comments so as to improve the quality of self learning materials in future. Please respond to the following statements by ticking the number you feel most reflect your opinion. After completion of the additional comments, please detach the page and send/mail the same to us at the address given below.

The Director, Centre for Internal Quality Assurance, KKHandiqui State Open University
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(E-mail id: ciqa@kkhsou.in)

1. Approximately how many hours did you spend for studying the units in the course?

2. Please give your opinions (by √ mark) to the following items based on your reading of the block:

Sl. No.	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I.	The SLMs of the course fulfil the learning objectives set out in the beginning of each unit					
II.	The units of the SLM could satisfy my academic needs and expectations					
III.	The Unit writers have excellent knowledge about the course contents					
IV.	Language and contents of the units were presented at a level which I could readily understand					
V.	Ample opportunity for participation in the activities provided in the units					
VI.	Used enough Illustrations (Diagrams, tables etc.) for conceptual clarity					
VII.	Quality of content is engaging, relevant, and up-to-date					
VIII.	The self check questions are very helpful					
IX.	The Possible/model questions and the answers to check my progress have benefited me a lot					

Additional Comments: *(Please feel free to provide your open comments)*

1. Which aspects of the SLM, according to you, worked well?

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2. What sort of changes/improvements do you feel KKHSOU could implement to improve the overall quality of the SLM?

Thank you for taking the time to complete this form.

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