



Distance Learning Programme

UPSC Mains

Indian Geography





drishti

INDIAN GEOGRAPHY


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Population & Settlement

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Chapter

The population distribution of any region depends upon many factors. India hosts 17.5% of world population on merely 2.4% of the world's geographical area.

Growth of Population in India

The change in the number of people living in a particular area between two points of time is known as the growth of population. It has two components namely; natural and induced.

The Natural Growth Rate: The difference between the crude birth rates and death rates between two points of time is known as the natural growth rate.

The Induced Growth Rate: It is explained by the volume of inward and outward movement of people in any given area. In other words, the volume of net migration in an area determines the induced growth rate of population.

Owing to fertile alluvial soils and favourable climate, India hosts 17.5% of world population on merely 2.4% of the world's geographical areas. The growth rates of population in India, decadal as well as annual both are very high. The decadal growth rates and annual growth rates of India's population are 17.64% and 1.64% respectively (2011). The population growth in India can be understood in four phases.

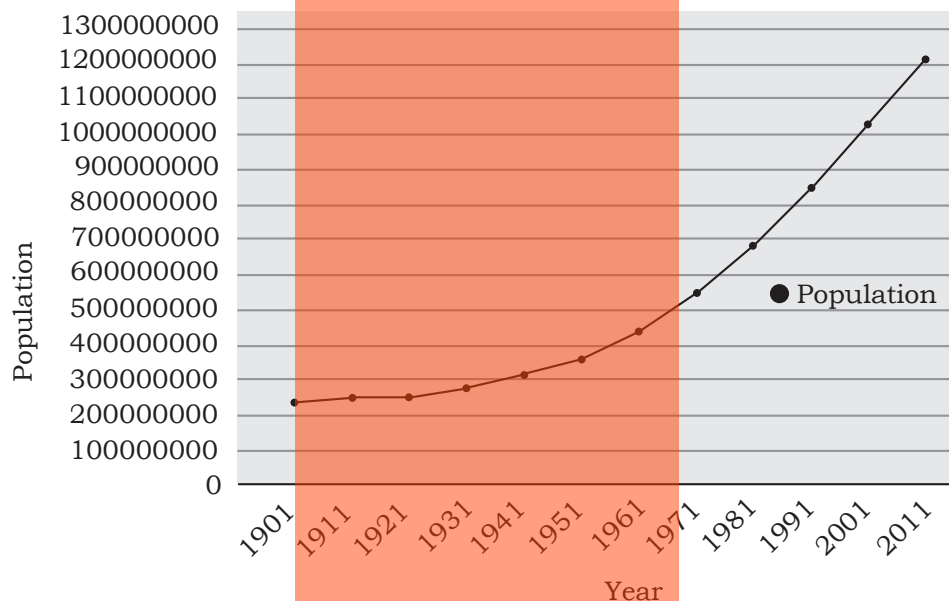


Fig: Population of India (1901-2011)

Phase I (1901-21, Period of Stagnant Growth): The period from 1901-1921 is referred to as a period of stagnant or stationary phase of growth of India's population. In this period

growth rate of population was very slow, even recording a negative growth rate during 1911-1921. The year 1921 is known as the great divide year. Both the birth rate and death rate were high during that phase, keeping the rate of increase low. This phase also corresponds to the first phase of demographic transition, when the birth rate was 48/1000 and the death rate was 45/1000. Poor health and medical services, contagious diseases, illiteracy of people at large, famine, inefficient distribution system of food and other basic necessities were largely responsible for a high birth and death rates in this period.

Phase II (1921-51, Period of Steady Population Growth): The period, 1921-1951 observed medium rate of population growth and is referred to as the period of steady population growth. An overall improvement in health and sanitation throughout the country brought down the mortality rate (27/1000).

The growth in agricultural production and improved distribution system due to better transport and communication led to the decrease in the famine. The crude birth rate (40/1000) remained high in this period leading to higher growth rate than the previous phase. The phase corresponds to the second phase of the demographic transition in India, which continued till 1991 and involved an early expansion of population.

Phase III (1951-81, Period of Population Explosion in India): The period, 1951-1981 observed average annual growth rate as high as 2.2%, which was astonishingly high population growth rate and is referred to as the period of population explosion in India. The year 1951 could also be referred to as the beginning year of heavy growth in population. The explosion in population growth was due to the rapid fall in the mortality rate and a high fertility rate of population in the country. Developmental activities introduced after the independence through a centralized planning process led to general improvement of living conditions of people at large. Consequently, there was a high natural increase and higher growth rate.

There was control in famine because of the increase in agricultural and industrial production after independence. Improvement in the health facilities led to the decline in the death rate and increase in the life expectancy. Increased international migration bringing in Tibetans, Bangladeshis, Nepalese and even people from Pakistan also contributed to the high growth rate.

Phase IV (Post 1981, Period of Steady Increase with Declining Trend): The decades covering post 1981 till present observed steady increase in the population but the rate of growth has started slowing down gradually. A downward trend of crude birth rate is held responsible for such a population growth. There was an increase in the mean age at marriage and family planning programme also expanded at a good pace. During the period, quality of life also improved and education of females was encouraged in the country.

This phase corresponds to the third phase of demographic transition which indicates a declining trend in the growth rate of population. However the growth rate of the population is still high in the country and it has been projected by World Development Report that the population of India will touch 1,350 million by 2025.

Regional Variation in Population Growth

There are wide regional variations in the population growth of India, in the period during 1901-2001, which are evident from the following facts. The States like Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, Odisha, Puducherry, and Goa show a low rate of growth which is below 20% decadal growth. Kerala registered the lowest growth rate (9.4%) in the country as a whole. The states in the north-west, north, and north central parts of the

country have a relatively higher growth rate than the southern states. It is in this belt comprising Gujarat, Maharashtra, Rajasthan, Punjab, Haryana, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Sikkim, Assam, West Bengal, Bihar, Chhattisgarh, and Jharkhand, the growth rate on the average remained 20-25%.

Recent Trends in the Growth of Population

During 2001-2011, the growth rates of almost all States and UTs have registered a lower figure compared to 1991-2001. The percentage decadal growth rates of the six most populous States, namely, Uttar Pradesh, Maharashtra, Bihar, West Bengal, Andhra Pradesh and Madhya Pradesh have fallen during 2001-2011 compared to 1991-2001. The fall in the rate of growth is the lowest for Andhra Pradesh and highest for Maharashtra. Tamil Nadu and Puducherry have registered some increase during 2001-2011 over the previous decade. Nagaland is the only state in the country where the population has decreased during 2001-2011. For the first time since 1921, urban India added more numbers to its population in a decade than rural India did.

Top Five and Bottom Five States/UTs by Decadal Population Growth Rate			
Top Five States/UTs		Bottom Five States/UTs	
State/UT	Growth Rate	State/UT	Growth Rate
Meghalaya	27.82	Nagaland	-0.47
Arunachal Pradesh	25.92	Kerala	4.86
Bihar	25.07	Lakshadweep	6.23
Jammu & Kashmir	23.71	A & N Islands	6.68
Mizoram	22.78	Goa	8.17

Population Distribution in India

A study of population distribution reveals some distinctive features. The river deltas and fertile plains are the most densely populated regions. These include the northern plains, the coastal plains and the delta along the Bay of Bengal.

The fertility of soil and availability of irrigation facilities are major factors in determining the density of population. The arid regions of Rajasthan and Gujarat are sparsely populated. So are the high mountain regions in the north. The rocky regions comprising the southern peninsula are moderately populated. The five states of Uttar Pradesh, Maharashtra, Bihar, West Bengal and Andhra Pradesh are home to about half the country's population.

Density of Population

Number of persons per unit area is known as density of population. It helps in getting a better understanding of the spatial distribution of population in relation to land.

Physiological Density = total population/net cultivated area. It reveals the pressure of population on agricultural land.

Agricultural Density = total agricultural population/net cultivable area. Agricultural population includes cultivators and agricultural labourers and their family members.

The density of population in India (2011) is 382 persons per sq km. It increased from 117 persons/sq km in 1951 to 382 persons/sq km in 2011. There is a spatial variation

of population densities in the country which ranges from as low as 17 persons per sq km in Arunachal Pradesh to 11,320 persons in the National Capital Territory of Delhi. Bihar (1106), West Bengal (1028) and Uttar Pradesh (829) have higher densities among the northern Indian States, while Kerala (860) and Tamil Nadu (555) have higher densities among the peninsular Indian states.

States like Assam, Gujarat, Andhra Pradesh, Haryana, Jharkhand, and Odisha have moderate densities of population. North eastern states and the hill states of the Himalayan region have relatively low densities while the Union Territories (excluding Andaman and Nicobar Islands) have very high densities of population.

Top five and bottom five states/UTs by Population Density: 2011			
Top Five States/UTs		Bottom Five States/UTs	
State/UT	Density	State/UT	Density
Delhi	11,297	Arunachal Pradesh	17
Chandigarh	9,252	Andaman & Nicobar Islands	46
Puducherry	2,598	Mizoram	52
Bihar	1,102	Sikkim	86
West Bengal	1,029	Nagaland	119

Population Composition

Population composition is the description of a population according to characteristics such as age and sex, place of residence, ethnic characteristics, tribes, language, religion, marital status, literacy and education, occupational characteristics, etc.

Rural-Urban Composition of Indian Population

About 68.8% of the total population of India lives in village (2011). States like Bihar and Sikkim have a very high percentage of rural population. The states of Goa and Maharashtra have only a little over half of their total population residing in villages. The Union Territories have a smaller proportion of rural population, except Dadra and Nagar Haveli (53.38%).

The proportion of urban population in India is 31.16%, but it is showing a much faster rate of growth over the decades due to the development of urban areas in terms of socio-economic conditions and an increased rate of rural-urban migration. The degree of urbanization has remained low in the agriculturally stagnant parts of the middle and lower Ganga Plains, Telengana, non-irrigated Western Rajasthan, remote and hilly regions, tribal areas of northeast, along the flood prone areas of Peninsular India and along the eastern part of Madhya Pradesh.

Linguistic Composition

There were 179 languages and as many as 544 dialects in the country, according to Grierson (Linguistic Survey of India, 1903 – 1928). In the context of modern India, there are 22 scheduled languages and a number of non-scheduled languages. The speakers of Hindi have the highest percentage among the scheduled languages. The smallest language groups are Kashmiri and Sanskrit speakers.

Classification of Modern Indian Languages			
Family	Sub-Family	Branch/Group	Speech Areas
Austroic (Nishada) 1.38%	Austro-Asiatic	Mon-Khmer	Meghalaya, Nicobar Islands
		Munda	West Bengal, Bihar, Odisha, Assam, Madhya Pradesh, Maharashtra
	Austro- Nesian		Outside India
Dravidian (Dravida) 20%		South-Dravidian	Tamil Nadu, Karnataka, Kerala
		Central Dravidian	Andhra Pradesh, M.P., Orissa, Maharashtra
		North Dravidian	Bihar, Odisha, West Bengal, M.P.
Sino-Tibetan (Kirata) 0.85%	Tibeto-Myanmari	Tibeto-Himalayan	Jammu & Kashmir, Himachal Pradesh, Sikkim
		North Assam	Arunachal Pradesh
	Siamese-Chinese	Assam-Myanmari	Assam, Nagaland, Manipur, Mizoram, Tripura, Meghalaya
Indo-European (Aryan) 73%	Indo-Aryan	Iranian	Outside India
		Dardic	Jammu & Kashmir
		Indo-Aryan	Jammu & Kashmir, Punjab, Himachal, Pradesh, U.P., Rajasthan, Haryana, M.P., Bihar, Orissa, West Bengal, Assam, Gujarat, Maharashtra, Goa.

Religious Composition

The Religious Composition reflects the distribution of total population by six major religious communities, namely, Hindu, Muslim, Christian, Sikh, Buddhist, Jain besides “Other Religions and Persuasions” and “Religion not stated”. The spatial distribution of religious communities in the country reflects the following trend.

Hindus are distributed as a major group in many states except the bordering districts; hill States of north-east and in scattered areas of the Deccan Plateau and Ganga Plain.

Muslims form a majority in Kashmir valley and Lakshadweep and are concentrated in Jammu & Kashmir, certain districts of West Bengal and Kerala, many districts of Uttar Pradesh, in and around Delhi and in Lakshadweep.

The Christian population is concentrated along the Western coast around Goa, Kerala and also in the hill states of Meghalaya, Mizoram, Nagaland, Chotanagpur area and Hills of Manipur.

Sikhs are mostly concentrated in a relatively small area of the country, particularly in the states of Punjab, Haryana and Delhi.

Religious Communities of India, 2011	
Religion	Percentage
Hindu	79.80%
Muslim	14.23%
Christian	2.30%
Sikh	1.72%
Buddhist	0.70%
Jain	0.37%
Other religion	0.66%

Jains are concentrated in the urban areas of Rajasthan, Gujarat and Maharashtra, while the Buddhists are concentrated mostly in Maharashtra.

The other areas where Buddhist are in the majority are Sikkim, Arunachal Pradesh, Ladakh in Jammu & Kashmir, Tripura, and Lahul and Spiti in Himachal Pradesh.

Age Composition

The age composition of a population refers to the number of people in different age groups in a country. It determines the social and economic structure of a population. A person's age influences what he needs, buys, and his capacity to perform. The population of a nation is generally grouped into three broad categories:

- **Young Population (generally below 15 years):** It is economically unproductive and need to be provided with food, clothing, education and medical care.
- **Working age Population (15-59 years):** It is economically productive segment of the population.
- **Elderly Population (Above 59 years):** Most of them are not economically productive and are dependent on others.

The percentage of children and the elderly population affect the dependency ratio, which is the ratio of people of dependent age (below 15 and above 60 years) to people of economically active ages (15-59 years).

Occupational Composition

According to the economic status the population of India is divided into three groups:

- **Main workers:** Main Worker is a person who works for at least 183 days (or six months) in a year.
- **Marginal workers:** Marginal Worker is a person who works for less than 183 days (or six months) in a year.
- **Non-workers:** They belong to an unemployed bunch of the population.

In India, the proportion of workers (both main and marginal) is only 39.8% (2011 census) leaving a vast majority of about 60% as non-workers. It varies from about 39.6 in Goa to about 49.9% in Daman and Diu. Among the UTs, Dadra and Nagar Haveli and Daman and Diu have higher worker participation rate. The worker participation rate is higher in the areas of lower levels of economic development since a large number of manual workers are needed to perform the subsistence or near subsistence economic activities. The occupational composition shows a large proportion of primary sector workers compared to secondary and tertiary sectors. As far as the occupation of country's male and female population is concerned, male workers out-number female workers in all the three sectors.

Sex Ratio

The number of females per thousand males is referred to as sex ratio. It determines the productive potential, marital status, work force, migration pattern, growth of population and the socio-economic relationship. According to the 2011 census, the sex ratio in India is 940 which was 933 in 2001. Kerala is the only state where the number of females is more than that of males. It has sex ratio of 1084. Haryana lies at the bottom with 879 females per thousand males. Among UTs, Pudducherry has the highest (1037) sex ratio and Daman Diu has the lowest (618). Three major states, i.e., J&K, Bihar and Gujarat

have shown decline in the sex ratio as compared to census 2001. Scheduled tribes, Christian and Muslim dominated districts of the country have a higher sex ratio.

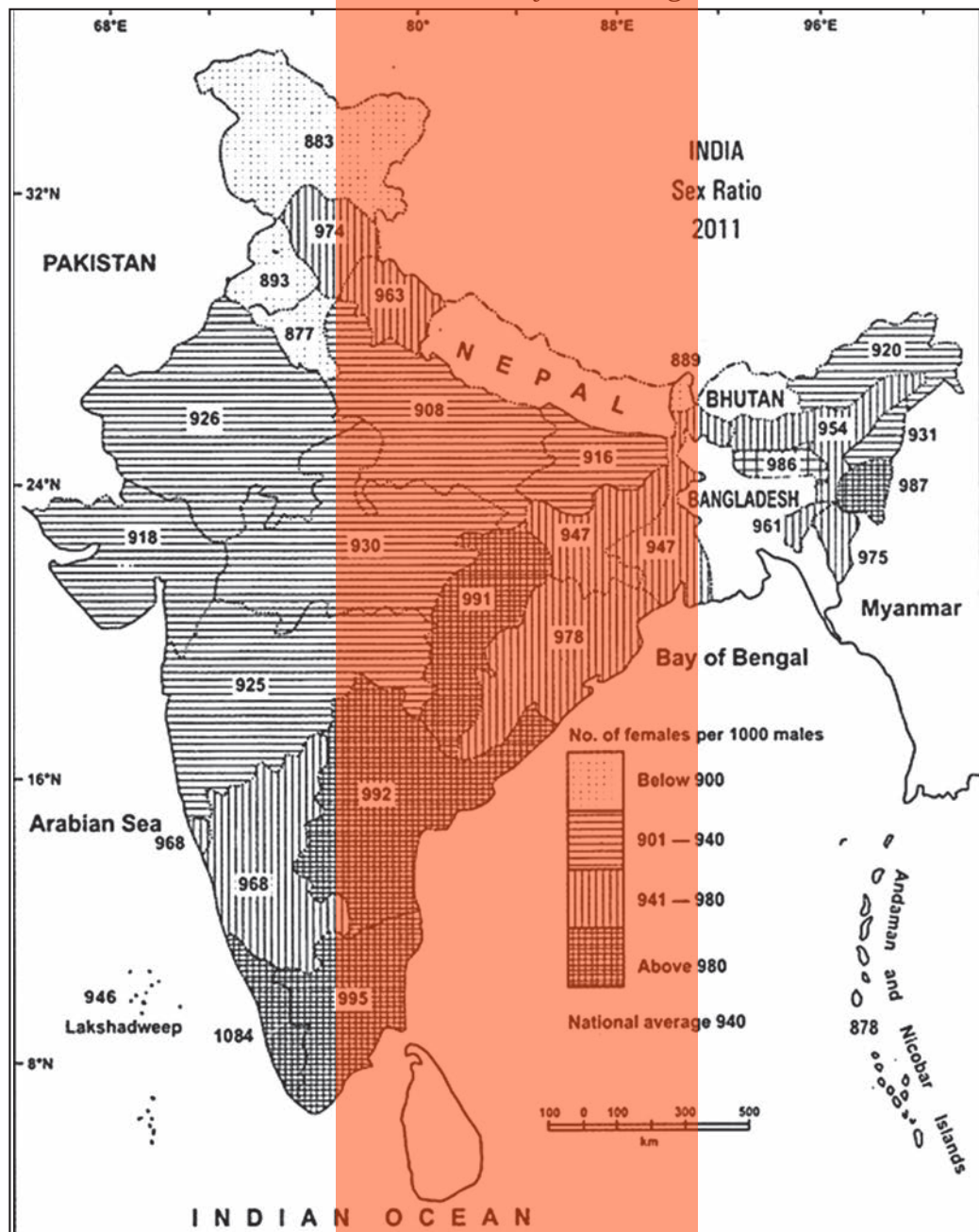


Fig: State wise Sex Ratio as per 2011 Census

Child Sex Ratio

The Child Sex Ratio in India is defined as the number of females per thousand males in the age group of 0–6 years in the human population. According to Census 2011, Child Sex Ratio in India is 918 which is lowest since independence. Punjab, Haryana, Himachal

Pradesh, Gujarat, Tamil Nadu, Mizoram, and Andaman and Nicobar Islands are observing an increasing trend in the Child Sex Ratio. The rest of the states show declining trend over the 2001 census. The socio cultural factors such as patriarchy, religious dogmas, low literacy among females, low literacy in general, dowry system, poverty, etc., and the pre birth sex determination are responsible for the low sex ratio in the country.

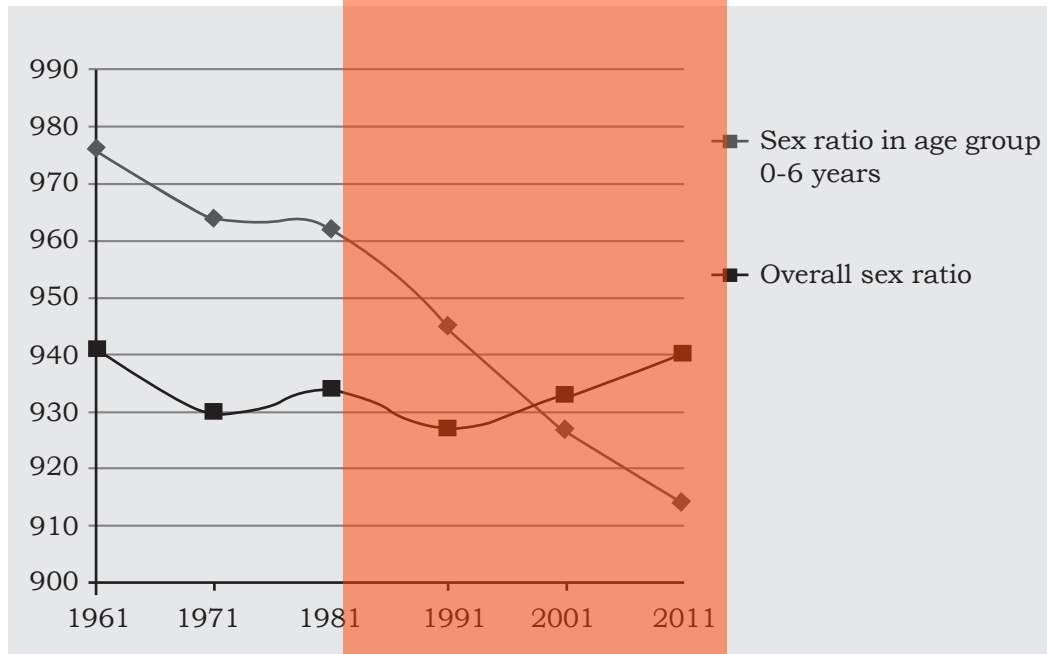


Fig: Trend in Overall and Child Sex Ratio in India

Literacy Rate

The literacy rate in India is defined as the total percentage of the population of an area at a particular time aged seven years or above who can read and write with understanding. According to the 2011 census, the literacy rate in India is 74.04%. Compared to the adult literacy rate, here the youth literacy rate is about 9% higher.

The number of children who do not get education, especially in the rural areas are still high. The female literacy rate in India is lower than the male literacy. The female literacy rate as per 2011 census is 65.46%, whereas the male literacy rate is over 70%. The Indian literacy rate has shown a significant rise in the past 10 years and there is a significant growth in female literacy than that of males. The highest literacy rate in India is in the state of Kerala (94%). It is followed by Lakshadweep, Mizoram, Tripura and Goa. The lowest literacy rate in India is in the state of Bihar (61.8%). Only 4.5% of the population in the country is educated upto the level of graduation or above while a majority of 32.6% population is not even educated upto the primary school level.

Population Policy of India

India launched its family planning programme in 1951 as part of the First Five-Year Plan, and became the first country in the world to have a state-sponsored population programme.