POPULATION DENSITY AND DISTRIBUTION IN INDIA

POPULATION OF INDIA

India is the second most populous country in the world next only to China. On March 1, 2001 the total population of India was at 1027 million. This accounted for 16.7% of the world’s total population. In other words, about every sixth person in the world there is an Indian. China, the most populous country of the world, is a step ahead of us as every fifth person in the world there is a Chinese. While India possesses only 2.42% of the world’s total land area, she is required to sustain almost 17% of the world’s population. In terms of area, India stands seventh preceded by Russia, Canada, China, the United States of America, Brazil and Australia. Barring China, the total population of these large five countries is far less than that of India. The total area of these five countries is over sixteen times whereas their total population is much less than that of India. This may partly explain how handicapped we are because of our huge population. It can also be revealed from the fact that the total population of North America, South America and Australia added together is less than the population of India. On the top of it, we are adding over 17 million people each year. It is more than the total population of Australia. In fact the net addition to Chinese population each year is less than ours.

26.2 DENSITY AND DISTRIBUTION OF POPULATION

Population of the world or of any country is not uniformly distributed. The same is true about India also. Some parts of the country are densely populated, some parts moderately populated and some parts are sparsely populated. (see figure 26.1) The size of population of different areas can be compared in many ways. One of the ways can be to compare the absolute size of the population. But it does not provide any idea about the relationship of population with the area or resource base of the country. This type of comparison is therefore not adequate. For example, population of Singapore is 4.2 million and that of Peoples Republic of China is 1,300 million. Indeed one is too small and the other is too big. Now take into consideration that the area of Singapore is just 630 sq. km; whereas China has an area of 9.5 million sq.km. This helps us to know how crowded Singapore is as compared to China.

Therefore, the population of various countries are generally compared in terms of density of population. This is a method of comparing the man-land ratio of different regions. For this purpose, the population of a region is assumed to be distributed evenly in all its parts and the number of people per square kilometre is thus calculated. This is called arithmatic density of population. Which can be calculated by dividing the total population of a country or a region by the total area. Therefore the density of
population is expressed as the number of persons per square kilometre. According to 2001 census, the
density of population in India is 324 persons per square kilometre. Over the last 100 years density has
increased more than four times. It has increased from 77 in 1901 to 324 in 2001. When we say that the
density of population of India is 324 persons per square kilometre, this does not mean that population is
exactly 324 persons in each and every square kilometre. In reality, the distribution of population in India
is highly uneven. The uneven density of population in India is clear from the fact that in Arunachal
Pradesh the average number of population is only 13 persons per square kilometre, whereas it is 9,294
persons per square kilometre in Delhi as per 2001 census.

Comparison of populations of different countries or region becomes more meaningful if it is done
by comparing the average density of population of each area.

26.3 FACTORS INFLUENCING DISTRIBUTION AND DENSITY OF POPULATION

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

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

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

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

(iii) Soil: is another factor which affects the density and distribution of population. One may be tempted to question the validity of the role of soil in the present day highly industrialised society. But even today about 75 percent of population in India lives in villages. People in villages earn their livelihood from agriculture which depends upon the quality of soil. That is why alluvial region of northern plains and coastal and deltaic regions of India continue to support high densities of population. On the other hand, it may be worth mentioning that vast tracts of land in desert areas like Rajasthan, Rann of Kuchchh in Gujarat, Terai region in Uttarakhand have been suffering from problems like soil erosion and soil efflorescent which support only low density of population. In any region, the density and distribution is influenced by more than one factor. Take for example North-Eastern region of India. Here several factors are responsible for low density of population. These factors are high rainfall, rough terrain, dense forests and poor quality of soil.

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

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

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