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

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

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

(ii) Areas of Moderate Density States and Union Territories in which the density of population ranges between 100 and 400 persons per square kilometre are called areas of moderate density of population. They are Andhra Pradesh, Assam, Dadra & Nagar Haveli, Goa, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orisa, Rajasthan, Tripura, Jharkhand, Chhattisgarh, Jammu and Kashmir, Uttarakhand, Himachal Pradesh, Nagaland, Manipur and Meghalaya. This region includes largest part of the country in terms of area. Broadly speaking moderate density of population is characterised by the areas in which the agriculture is handicapped by rugged topography, lower amount of precipitation and paucity of water for irrigation. The scope for developing primary and secondary activities is quite large if the facilities are provided in this area. For example, at the time of independence Chhotanagpur region was a sparsely populated area but development in the field of mining and industries in this part of the country has been mainly responsible for moderate density of population in this region.

(iii) Areas of Low Density All the remaining parts of India having a density of population less than 100 persons per square kilometre may be classified under this category. The States and Union Territories
falling under this category include Arunachal Pradesh, Mizoram, Sikkim and Andaman and Nicobar Islands. Low density population areas are characterised by rough terrain, low rainfall or unhealthy climate. Due to the above reasons the prospects of earning livelihood is low in these areas. Agriculture cannot be developed in too dry or cold areas. Uneven topography and poor agricultural resources put a limit on urbanisation and industrialisation.

Therefore, the number of persons that can be supported per unit area is low in such regions. Difficulties exist not only in transport and communication in the hilly and mountainous areas but also in the over all levels of economic development. That is why the density of population in all these areas is low.

**POPULATION DENSITY AT DISTRICT LEVEL**

But a minute observation shows that in each state there are variations in distribution of population and more than one category of population density is found. The geographical or spatial distribution becomes more clear by making an analysis of district level pattern. The great unevenness in distribution is mainly because of the diverse physical conditions as well as the variations in distribution of natural resources and stages of economic development. It varies from 2 persons per square kilometre in Lahul and Spiti district of Himachal Pradesh to 29,395 persons per square kilometre in National Capital Territory of Delhi. The top twenty districts in the country are either fully urban or highly urbanized. It includes all the nine districts of Delhi; Kolkata, Hawrah, North Twenty-Four Pargana in West Bengal; Mumbai and Mumbai (suburban) in Maharashtra; Mahe and Pondicherry in Union Territory of Pondicherry, Chennai; Bangalore; Hyderabad and Union Territory of Chandigarh. The density is generally high over two marked continuous stretches of land. They are

(a) large parts of Northern plains from Punjab to West Bengal and

(b) Coastal plains from Orissa coast in the east to Konkan coast in the west. A belt of moderately high densities extend over the entire Maharashtra, plains of Gujarat, Telangana, parts of Tamil Nadu, southern Karnataka and the Chhotanagpur region of Jharkhand. The areas of low density are generally found over the hilly forested and snow bound areas of the country, mainly situated in the Himalayan region, desert areas of Rajasthan specifically Jaisalmer districts and large expanse of uninhabited marshy lands of Kachchh districts of Gujarat.
The growth of population in a region depends upon fertility, mortality and migration. Fertility or the birth rate is measured in terms of total number of live births per thousand population per year. Generally, the fertility rate is affected by various social, economic and demographic factors. Mortality or the death rate is measured in terms of total number of deaths per thousand population per year. The difference between these two rates (i.e. fertility and mortality) is called the natural growth rate. The term migration refers to the movement of people from one area to the other or from one country to another. The rate of migration affects the growth of population of a region by increasing or decreasing the number of people living there. The growth rate of population may be positive or negative. A positive growth rate of population mean an increase in the number of people living in a region, whereas negative growth rate means declining population. A positive growth rate occurs when the number of births and in migration exceeds the number of deaths and out migration; the negative growth rate means just opposite to positive growth rate.