

underdeveloped countries. Distribution of population in urban, semi urban and rural areas is an important aspect of this component of population studies. Demographers also look into the changes taking place in the distribution of population, and the causes for these changes. Changes are basically due to migration of people from one place to another.

According to Thompson and Lewis, the questions of how the world's population is distributed among and within the continents, world regions and countries, and how their numbers and proportions change can be answered by learning about the demographic concepts of size, composition and distribution, and demographic processes of fertility, mortality and migration.

As a scientific study of human populations, demography uses a variety of analytical techniques to turn raw data into more precise measures. This branch of demography is usually referred to as formal or technical demography. Formal demography helps in understanding the causes and determinants of population growth. This knowledge is essential for avoiding the negative consequences of increase in population. Apart from dealing with the measures of fertility, mortality, nuptiality (marriages), migration and the relationships between them, demography also deals with the size and composition of human populations at a given point in time. The relationships between these elements and the social, economic and cultural environment within which they exist are also of interest to a demographer. This branch of demography is referred to as substantive demography or population studies. Population studies provide the tools for examining the interactions of demographic, social, economic, political and cultural processes, which are the basis for human survival. In its broadest sense, demography deals with these processes, which are necessary for effecting structural and institutional changes in societies in order to bring about effective improvements in living standards of the masses of the people. It is thus multi-disciplinary in nature.

There are different opinions regarding the scope of demography. Some demographers believe that its scope is restricted and have narrowed down, while others consider it to have a broad scope. There are yet others, who give a balanced view on the scope of demography. These views are discussed in the following section.

### **Broad View of the Scope of Demography**

Those who subscribe to the broad view of the scope of demography believe that demography is a study of causes of slow or rapid growth of birth rates, causes of changes in mortality rates, population growth or decrease, negative or positive female sex ratio and causes for the same and so on. Many economic problems are also demographic problems—standard of living.

unemployment, income levels, poverty, production and consumption, saving habits, work efficiency and so on. These are, in fact, influenced considerably by the existing population. The problems associated with adequate or inadequate food supply are also directly linked to the problem of population size.

Demography helps in understanding various issues related to marital status, composition of family, trends and changes in religious beliefs, caste, education and so on. Trends in urbanization, problems of rural-urban migration, distribution of population and other such aspects help in the understanding of geography and its impact on population. In this way, demography is considered to be a collective study of human life. According to Hans Raj (2003), demography deals with individual ancestries, hereditary nature of population and collects facts about physical, social and vital aspects of population. It registers vital events, such as birth, marriage, family, divorce, disease and sickness, death and population growth. Population data becomes socially useful when demographers make inferences from them. Population statistics will have meaning only when demographers give them meaning.

In its broad sense, demography is a multidisciplinary subject upon, and makes significant contributions to, the disciplines of biology, statistics, genetics, medicine, agriculture, education, ecology and environmental sciences, to name a few. Demography is the study of the size, composition, spatial distribution of human populations and the changes in these aspects over time. Subjects such as nutrition, food-fertility relationship, employment and manpower planning, resource management policies, income distribution and other related aspects are included in the scope of demography. Almost all topics related to human welfare and improving the quality of life are included in demography. It is therefore difficult to limit its scope. Demography includes two aspects—it is macro-static or looks at national aggregates at a particular point of time, and is also macro-dynamic or studies national aggregates over a period of time. It has both descriptive as well as analytical aspects.

### **Narrow View of the Scope of Demography**

Demographers who subscribe to the narrow view of the subject include Whipple, Philip Hauser and Otis Dudley Duncan. According to them, the scope of demography is limited to the study of births, deaths, marriages, diseases and migration. Hauser and Duncan have defined demography as the study of size, territorial distribution and composition of population, changes therein and the factors of such changes which include natality, territorial movement or migration, social mobility and mortality. They believe that it is not possible to have an all encompassing, integrated and comprehensive

theory of demography, since such a theory would have to include other disciplines. The scope of demography should be limited to one discipline and should not be multidisciplinary. Everything concerning population cannot be studied under demography. There should be a 'frame of reference' for the discipline, which by nature is selective. They also state that the scope of demography is not as wide as it is made out to be by some thinkers. Although demography deals with several other subjects, it does not mean that all such subjects can be studied under demography. One of the important topics studied under demography is urbanization. It includes communication, rehabilitation, transportation, administrative system, banking and other services, and so on. All these areas, however, cannot be included under demography and cannot be studied with its help. If the study of urbanization includes all the aspects mentioned earlier, it will make the subject unmanageable and unwieldy. It is, therefore, important to restrict and narrow down the scope of demography.

Those who believe that the scope of demography is narrow emphasize on the 'qualitative' aspect of demography and population studies. According to Barkley, the field of demography does not deal with behaviour patterns, but with aggregates of people. It is the numerical portrayal of human population that is called demography.

### Balanced View of Demography

A third school of thought prescribes a balanced view of the scope of demography. Thompson and Lewis state that demography can study births, deaths, growth rate of population, the sex ratio, female literacy, health conditions, marital status, rural-urban population distribution, classification of population on the basis of occupations and information on their social and economic conditions. Today, demography is considered to be a study of human society, and not of individualistic human problems. Mathematical and statistical tools are required to understand various aspects of human populations. Demography is to an extent dependent upon various other sciences, and the population is studied from economic, social and political angles. However, it is confined to the study of organization and distribution of groups.