

POPULATION DYNAMICS - FERTILITY, MORTALITY AND MIGRATION

For demographer's population dynamics or population change is an important topic of discussion. Population change or dynamics is the increase or decrease in population in an area over a time period. Generally, the demographers mostly consider three factors to play in the process of population dynamics. They are fertility, mortality and migration.

- 1) **Fertility** - Fertility is also called as the birth rate. Births are usually measured using the birth rate that is the number of live births per 1000 people. Besides this, there are other statistical methods to calculate the fertility. Among the various statistical measure, the common of them is the Total fertility rate. It is an indicator of the total number of children born or likely to born to a woman in her entire lifetime. As per the National Family Health Survey the total fertility rate varies across societies. The poorest section of the society has a fertility rate of 3.2 children per woman and the wealthiest countries has a total fertility rate of 1.5 children per woman. Thus, it can be said that higher the fertility rate more will be the population in a given area.

- 2) **Mortality** – The death rate is called as the mortality rate. Mortality rate is expressed in units of deaths per 1000 individuals per year. For example, if there is a mortality rate of 8.5 in a population of 1000, this would mean 8.5 deaths per year in that entire population.
The mortality rate can increase due to epidemics, war, etc.

- 3) **Migration**- The permanent movement of residence of human beings from one area to another is called as the migration. The humans who undergo migration are called as migrants. However, there is no accepted definition of migration. The United Nations defines migrant as an individual who has resided in a foreign country for more than a year irrespective of the causes, voluntary or involuntary.

There are two broad categories of migration. These are immigration and emigration. Immigration means the migrants who move into a new place by leaving their place of origin. It can also be called as the incoming of people to an area. They do so when pull factors work in the new place like better job opportunities, peace, security of life etc.

Emigration means migrants who move out of a place to another place. This can also be called as the outgoing of people from one place to another due to the operation of the push factors like unemployment, poor living conditions, political instability etc.

Immigration of population will increase the population of that particular area and emigration will result in decline of population of that area. For example, there are two countries like USA and Cuba. USA has got pull factors and Cuba has push factors. As a result, people will migrate from Cuba to USA and hence Cuba will have

Emigration and USA will have immigration. As a result, the population of USA will increase and the population of the Cuba will decline.

SOME CONCEPTS ON POPULATION CHANGE

- 1) **NATURAL GROWTH OF POPULATION**- This is the population increased by the difference between births and deaths in a particular region between two points of time.

$$\text{NATURAL GROWTH} = \text{BIRTHS} - \text{DEATHS}$$

FOR EXAMPLE – there is a place called A. In that place if births is 1000 and death is 100. Then the natural increase will be 900.

- 2) **ACTUAL GROWTH OF POPULATION**

This is $\text{BIRTHS} - \text{DEATHS} + \text{IN MIGRATION} - \text{OUT MIGRATION}$

FOR EXAMPLE – There is a place called x. In that place births is 500. Deaths are 50. The immigrants are 75 and emigrants are 30. Find out the actual growth of population . find the answer.