By mortality rates than are found in other



By considering the total human population of world one finds that the generalized population formula is applicable: population equals biotic potential minus environmental resistance. According to usage by the demographers, biotic potentials can be expressed in terms of fecundity, which is defined as the theoretical or maximum capacity of the individual or population to reproduce.

Fertility is the actual reproductive performance of a given population. Fecundity in human population has been stable for a long time, but fertility, being dependent upon ecological and social factors, has varied greatly. Human birth rate (natality) is the fertility expressed as the average number of live births per thousand populations per year. Since not all age groups in a population have equal fertility, demographers often use more specialized measures of birth rates that relate to age groups. Human mortality rate is the average number of individuals who die per thousand populations per year. Again, demographers often use more sensitive measures, for different mortality rates.

Both the very young and the very old segments of the population have higher mortality rates than are found in other age groups. Human population shows uneven or clumping pattern of distribution on earth. The density of human population in a village, district, city, province, country or any area can be obtained by dividing the total number of persons living in the given region by the total land area of that region. The average number of people per square unit of land area tells us how dense or sparse is the population in a giver, area. The average population density of the world is calculated about 27 persons per square kilometre.

The information secured from the study of human populations is known as vital statistics. These have many applications in our modern society. For example, life insurance is based upon the computation of actuarial tables which express the incidence of death by sex, age, and cause. Some general findings resulting from an analysis of vital statistics are as follows: 1. Birth rates are higher in rural areas and among farming people than in cities.

Furthermore, the larger the city, the lower the birth rate. 2. Within a given region, such as city or a farming area, the lower economic classes have the higher birth rates. 3. Birth rates decrease during economic depressions and increase during times of prosperity.

4. More male's than females are born. 5. Social and economic factors which produce low birth rates also produce low mortality rates.

Mortality rates are lower in times of depression, in higher economic groups and in city dwellers. 6. Women have lower mortality rates than do men. 7. Both marriage and divorce rates increase during times of prosperity. 8. Both married men and married women live longer than single persons.

Table 24. 1 gives population size, birth rates and death rates for the human populations of different countries of world. Note that these are far from uniform and that, in general, the more highly industrial countries have lower birth rates and lower death rates. Table 24 1. 1975 population statistics for various countries (from MoCombs and Rosa, 1978): CountryPopulation (Millions)Population Density (Persons per Sq. Km.

)Annual Population GrowthCrude Birth RateCrude Death Rate1. United Kingdom552290. 2%12112. France53970. 8%1693. Italy55. 81850.

8%1694. United States213. 6230. 8%1695. Poland341090. 9%1786. U.

S. S. R. 242. 7110. 9%17i7. Spain35.

4701. 0%1888. Japan111. 92981. 2%1979. Argentina25.

491. 3%22910. Canada22. 821. 4 %15711. China838. 8871. 4%251012.

South Korea34. 73451. 6%28913. India598. 11822. 1%361014. Egypt37.

2372. 2%361315. Turkey39. 1502. 4%401316. Burma31.

2462. 5%401617. Ethiopia27.

9232. 6%502618. Iran33202.

9%411519. Philippines42. 51422. 9%441120. Brazil107.

1133. 0%37921. Pakistan70. 3873. 0%481722 Thailand42. 3823.

1%441123. Columbia29. 7223. 2%42924. Syria7.

4403. 3%461525. Mexico60. 1303. 5%43826. Kenya13.

4233. 6%501627. Libya2. 414. 2%4615