

Human Population and Its Impact

Chapter Six

Human Population Size

- Populations grow or decline through the interplay of three factors: births, deaths, and _____.
- Population change is calculated by subtracting the number of people leaving a population (through death and emigration) from the number entering it (through birth and immigration) during a specified period of time.

Current Population

- There are currently about _____ humans on earth.
- Population growth is roughly 1.1%, adding 83 million people a year (that's adding 14 Raleighs every month!).
 - China (_____ billion) and India (_____ billion) combine to make up 37% of the world's population. The United States, with _____ million people, has the world's third largest population but only 4.3% of the world's people.

Fertility

- The fertility rate is the number of children born to a woman during her lifetime.
 - _____ - _____ fertility rate is the average number of children that couples in a population must bear to replace themselves
 - Total fertility rate is the average number of children born to women in a population.

Factors Affecting Birth Rates

- average level of _____ and affluence
- importance of children as part of the labor force
- urbanization
- cost of raising and educating children
- religious beliefs, traditions, and cultural norms
- educational and employment opportunities for _____
- _____ mortality rate
- average age of marriage
- availability of private and public pension systems
- availability of legal abortions
- availability of reliable methods of _____ control

Rule of 70

- Doubling Time is the amount of time it takes to double a population.
- A quick way to calculate doubling time is to use the Rule of 70.
- $\frac{70}{\text{percentage growth rate}} = \text{doubling time (in years)}$

Age Structure Diagrams

- The age structure of a population is the proportion of the population at each age level.
- Typical age structure diagrams plot the percentages or numbers of males and females in the total population in each of three age categories: _____, reproductive, and postreproductive.

Birth Control?

- To some the planet is already overpopulated, but others claim that if everyone existed at a minimum survival level, the earth could support _____ billion people.
- Because raising the death rate is not desirable, lowering the _____ rate is the focus of most efforts to slow population growth.

China

- China has the world's largest population. Since 1970, they have made efforts to bring its population growth under control.
 - Couples who pledge to have no more than one child are given extra food, larger _____, better housing, free _____ care, and salary bonuses; their children will be given free school tuition and preferential treatment in employment. Couples who break their pledge lose all the benefits.
 - All married couples have ready access to free sterilization, contraceptives, and abortion.

India

- India had the world's first national family-planning program in 1952. However, India is expected to overtake China in population by the middle of the century.
 - India has a rapidly growing economy which has led to economic inequality across the country with a _____ of the population living on less than \$1.25 per day.
 - Even with the family-planning program, Indian women still have an average of more than 2.4 children, contributing to continued _____ growth.

Demographic Transition

- One important consideration in human population is the demographic transition, which states that as countries become industrialized, first their _____ rates and then their _____ rates decline. This occurs in four stages:
 - In the preindustrial stage, harsh living conditions lead to a high birth rate (to compensate for high infant mortality) and a high death rate. There is little population growth.
 - In the _____ stage, industrialization begins, food production rises, and health care improves. Death rates drop and birth rates remain high, so the population grows rapidly.
 - In the industrial stage, industrialization is widespread and birth rates drop. Population growth continues, but at a slower rate.
 - In the postindustrial stage, the birth rate declines further and zero population growth is reached.

The Earth at Night