

infant mortality rate: The number of deaths of infants under 1 year of age per 1000 live births in a population.

Thomas Malthus: British economist who maintained that increasing human population would eventually deplete the available food supply until starvation, war, or disease arose and reduced the population.

IPAT model: A formula that represents how humans' total impact (I) on the environment results from the interaction among three factors: population (P), affluence (A), and technology (T).

demography: A social science that applies the principles of population ecology to the study of statistical change in human populations.

demographers: A social scientist who studies the population size; density; distribution; age structure; sex ratio; and rates of birth, death, immigration, and emigration of human populations.

total fertility rate (TFR): The average number of children born per female member of a population during her lifetime.

replacement fertility: The total fertility rate (TFR) that maintains a stable population size.

rate of natural increase: The rate of change in a population's size resulting from birth and death rates alone, excluding migration.

life expectancy: The average number of years that individuals in particular age groups are likely to continue to live.

demographic transition: A theoretical model of economic and cultural change that explains the declining death rates and birth rates that occurred in Western nations as they became industrialized. The model holds that industrialization caused these rates to fall naturally by decreasing mortality and by lessening the need for large families. Parents would thereafter choose to invest in quality of life rather than quantity of children.

pre-industrial stage: The first stage of the demographic transition model, characterized by conditions that defined most of human history. In pre-industrial societies, both death rates and birth rates are high.

transitional stage: The second stage of the demographic transition model, which occurs during the transition from the pre-industrial stage to the industrial stage. It is characterized by declining death rates but continued high birth rates.

post-industrial stage: The fourth and final stage of the demographic transition model, in which both birth rates and death rates have fallen to a low level and remain stable there and populations may even decline slightly.

demographic fatigue: An inability on the part of governments to address overwhelming challenges related to population growth.

family planning: The effort to plan the number and spacing of one's children to offer children and parent the best quality of life possible.

birth control: The effort to control the number of children one bears, particularly by reducing the frequency of pregnancy.

contraception: The deliberate attempt to prevent pregnancy despite sexual intercourse.

reproductive window: The portion of a woman's life between sexual maturity and menopause during which she may become pregnant.

biocapacity: A term in ecological footprint accounting meaning the amount of biologically productive land and sea available to us.