Topic 4 Population and migration

Topic summary: 4.1 Global population

* Population density is the average number of people/km2 in a country or region.
* Countries with a high population density are said to be densely populated, while regions with a low population density are sparsely populated.
* Population distribution is the way in which the population is spread out over a given area.
* Globally, Oceania has the lowest density, and Asia has the highest. Asia is over three times greater than Africa, the second-ranking continent.
* Population density is influenced by physical and environmental factors such as climate, soil fertility, water supply, proximity to coasts, raw materials, disease and pests.
* It is also affected by human factors such as cumulative causation, colonial legacies, social influences, political decisions, international borders and political unrest.
* It has been estimated that 10,000 years ago, the world population was no more than 5 million.
* Mainly due to technological advances, the carrying capacity of populated areas improved and population increased, quite slowly at first, but from the 1960s, much more rapidly (population explosion).
* Growth rates have recently slowed, especially in HICs and UMICs.
* The population of any country is determined by the difference between its birth rate and death rate, +/– net migration.
* Other important variables are total fertility rate (TFR), infant mortality rate (IMR) and life expectancy.
* Social, economic, environmental and political factors affect levels of fertility and mortality.
* Fertility levels in most parts of the world have fallen faster than previously expected, with an increasing number of countries below replacement-level fertility.
* The crude birth rate and the crude death rate are very generalised measures of the population of a country or region.
* Age- (and gender-) specific measures of fertility and mortality provide more accurate information.
* The causes of death vary significantly between the developed and developing worlds.
* The infant mortality rate is frequently considered to be the most sensitive indicator of socio-economic progress.
* It is likely that the life expectancy gap between rich and poor countries will continue to narrow in the future.

Additional work

1 Research the advances in the Neolithic Revolution that stimulated population growth.

2 Suggest why we can be more certain about the accuracy of demographic data from the nineteenth century onwards compared with the period before.

3 What are the main factors responsible for the UK’s current relatively low birth rate of about 11/1000?

4 Investigate how fertility has changed in the last 50 years in the country in which you live.

Suggested websites

* Population Reference Bureau: [www.prb.org](http://www.prb.org)
* United Nations Population Fund: [www.unfpa.org](http://www.unfpa.org)
* United Nations global issues: Population: [www.un.org/en/global-issues/population](http://www.un.org/en/global-issues/population)
* World Population Balance: [www.worldpopulationbalance.org](http://www.worldpopulationbalance.org)

Key terms

**Carrying capacity** is the largest population that the resources of a given environment can support.

**Child mortality rate** is the number of children who die before their fifth birthday per thousand live births.

**Crude birth rate** (generally referred to as the *birth rate*) is the number of births per thousand population in a given year. It is only a very broad indicator as it does not take into account the age and sex distribution of the population.

**Crude death rate** (generally referred to as the *death rate*) is the number of deaths per thousand population in a given year. It is only a very broad indicator as it is heavily influenced by the age structure of the population.

**Cumulative causation** is the process whereby a significant increase in economic growth can lead to even more growth as more money circulates in the economy.

**Demographers** are professionals who study the characteristics of human populations.

**Densely populated** refers to regions with a high population density.

**Fertility rate** is the number of live births per 1000 women aged 15–44 years in a given year.

**Infant mortality rate** is the number of deaths of infants under one year of age per thousand live births in a given year.

**Life expectancy at birth** is the average number of years a newborn infant can expect to live under current mortality levels.

**Natural change** is the difference between the number of births and the number of deaths in a country or region.

**Natural decrease** is when the number of births is lower than the number of deaths.

**Natural increase** is when the number of births is higher than the number of deaths.

**Net migration** is the number of immigrants entering a region or country minus the number of emigrants who leave the same region or country. The balance may be either positive or negative.

**Population density** is the average number of people per square kilometre (km2) in a country or region.

**Population distribution** is the way in which population is spread out over a given area, from a small region to the Earth as a whole.

**Population momentum** is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved because of a relatively high concentration of people in the childbearing years. This situation is due to past high fertility rates, which result in a large number of young people.

**Population projections** predict the future population, based usually on current and past trends.

**Replacement level fertility** is the level at which each generation has just enough children to replace themselves in the population. Although the level varies for different populations, a total fertility rate of 2.12 children is usually considered as replacement level.

**Rural population** describes those people living in the countryside in farms, isolated houses, hamlets and villages. Under some definitions, small market towns are classed as rural.

**Sparsely populated** refers to regions with a low population density.

**Total fertility rate (TFR)** is the average number of children that would be born alive to a woman (or group of women) during her lifetime, if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year.