



United Nations
Educational, Scientific and
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International Institute
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GLOSSARY

Demographic Terms and Concepts

The 'Essentials' for Education Practitioners

This glossary presents a small selection of essential demographic terms and concepts explained for education practitioners who may not all be familiar with this particular field of social sciences. The selection covers terms and concepts referred to in the documents presented on this dedicated project research webpage. Definitions are in most cases presented with an illustrative example.

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AGING OF POPULATION

Aging of population is a process in which the proportions of adults and elderly increase in a population, while the proportions of children and adolescents decrease. This process results in a rise in the median age of the population. Aging occurs when fertility rates decline while life expectancy remains constant or improves at the older ages.

A population is considered "**aging**" if its share of the population aged 65 years old and older reaches 7 percent.

A population is considered "**aged**" if its share of the population aged 65 years old and older reaches 14 percent.

A population is considered "**super-aged**" if its share of the population aged 65 years old and older reaches 20 percent.

CRUDE BIRTH RATE

Crude birth rate, sometimes referred to as **birth rate**, is defined as the number of live births per year per 1,000 midyear population.

CRUDE DEATH RATE

Crude death rate, sometimes referred to as **death rate**, is defined as the number of deaths per year per 1,000 midyear population.

DEMOGRAPHIC TRANSITION

Classical **demographic transition** theory was first proposed by Warren Thompson in 1929 which envisaged countries, as they developed from a pre-industrial to an industrialized economic system, successively experiencing a drop in mortality, consequent greatly increased population growth, and finally the growth period coming to an end as the population implements fertility control.

Demographic transition can be described as a 4-stage model as follows:

Stage 1: Pre-transition

- Characterised by high birth rates, and high fluctuating death rates.

Stage 2: Early transition

- During the early stages of the transition, the death rate begins to fall.
- As birth rates remain high, the population starts to grow rapidly.

Stage 3: Late transition

- Birth rates start to decline.
- The rate of population growth decelerates.

Stage 4: Post-transition

- Post-transitional societies are characterised by low birth and low death rates.
- Population growth is negligible, or even enters a decline.

DEMOGRAPHIC DIVIDEND

The **demographic dividend** is the accelerated socioeconomic growth that can arise when a population has a relatively large proportion of working-age people coupled with effective human capital investment. With a smaller proportion of dependent people to support, a country has a window of opportunity for rapid economic growth if the right social and economic policies developed and effective human capital investments made.

DEMOGRAPHIC DIVIDEND – DEMOGRAPHIC TYPOLOGY WORLD BANK

In the Global Monitoring Report (GMR) 2015/2016, the World Bank introduced a new global demographic typology based on the concept of “demographic dividend”. It distinguishes countries by their ability to capture development opportunities associated with the demographic dividends. According to this typology, four types of countries can be distinguished:

Pre-dividend countries are mostly low-income countries, displaying low human development indicators, with fertility rates above four births per women. These countries face very rapid population growth and have high dependency ratios. They need to lay the foundations to realize the first demographic dividend. Examples are Afghanistan, Iraq, Timor Leste

Early-dividend countries are mostly lower-middle-income countries with fertility rates below four births per women. The working age share of the population is likely to rise considerably. These countries are positioned to capture the first demographic dividend and lay the foundation for the second demographic dividend. Examples are Bangladesh, Cambodia, India

Late-dividend countries are mostly upper-middle-income countries with fertility rates still above replacement level of 2.1 birth per women but fertility declining. Working-age population shares are declining, they experience rapid aging but overall age structures are still favourable. Opportunities concern the second dividend. Examples are China, Malaysia, Vietnam.

Post-dividend countries are mostly high-income countries where fertility has transitioned below replacement levels. Working-age population shares continue to shrink and shares of elderly are among the largest worldwide. They are past the first dividend but may still benefit from the second, through investments and savings. Examples are Australia, Japan, Republic of Korea

DEPENDENCY RATIO

The **total dependency ratio** is the number of persons aged 0 to 14 years plus persons aged 65 years or over per one hundred persons aged 15 to 64 years. It is the sum of the child dependency ratio and the old-age dependency ratio.

The **child dependency ratio** is the number of persons aged 0 to 14 years per one hundred persons aged 15 to 64 years.

The **old-age dependency ratio** is the number of persons aged 65 years or over per one hundred persons aged 15 to 64 years.

(POPULATION) GROWTH RATE

Population growth rate is the increase (or decrease) in the number of persons in the population during a certain period of time, expressed as a percentage of the population at the beginning of the time period.

The **average annual (population) growth rate**, more accurately known as the **compound annual (population) growth rate**, shows an average value for the annual rate of population change over a period of time (typically several years) allowing for the compound effect of growth.

$$r = \left(\sqrt[m-n]{\frac{X_m}{X_n}} - 1 \right) \times 100 (\%)$$

Where:

r: average annual growth rate

n: starting year

m: ending year

X_n: quantity in year n

X_m: quantity in year m

The average annual growth rates for all ages as well as for particular age groups are calculated on the assumption that growth is continuous.

LIFE EXPECTANCY

Life expectancy at a specific age is the average number of additional years a person of that age could expect to live if current mortality levels observed for ages above that age were to continue for the rest of that person's life. In particular, **life expectancy at birth** is the average number of years a new-born would live if current age-specific mortality rates were to continue.

For example, the life expectancy at age 60 is the average number of years a 60-year-old person would live if current age-specific mortality rates were to continue.

MIGRATION

The movement of people across a specified boundary for the purpose of establishing a new or semi-permanent residence. Divided into **international migration** (migration between countries) and **internal migration** (migration within a country).

An example of internal migration is rural-to-urban migration of the population attracted by emerging economic poles, in search of job opportunities and social services, etc.

NATURAL INCREASE

Natural increase is the difference between the number of live births and the number of deaths during the year. Natural increase is negative when the number of deaths exceeds the number of births, which is referred to as natural decrease.

NET MIGRATION

The net effect of immigration and emigration on an area's population, expressed as an increase or decrease per 1,000 population of the area in a given year.

Net migration rate is calculated as the number of immigrants minus the number of emigrants, divided by the midyear population in a given year.

POPULATION PROJECTION

Population projection is a computation of future changes in population numbers, given certain assumptions about future trends in the rates of fertility, mortality, and migration. Demographers often issue low, medium, and high projections of the same population, based on different assumptions of how these rates will change in the future.

TOTAL FERTILITY RATE

The **total fertility rate** is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (normally between the ages of 15 and 49 years).

URBAN

The definition of '**urban**' varies from country to country, and, with periodic reclassification, can also vary within one country over time, making direct comparisons difficult. An urban area can be defined by one or more of the following: administrative criteria or political boundaries (e.g., area within the jurisdiction of a municipality or town committee), a threshold population size (where the minimum for an urban settlement is typically in the region of 2,000 people, although this varies globally between 200 and 50,000), population density, economic function (e.g., where a significant majority of the population is not primarily engaged in agriculture, or where there is surplus employment) or the presence of urban characteristics (e.g., paved streets, electric lighting, sewerage).

For example, the definitions of 'urban' in three case countries are as follows:

- India: Towns (places with municipal corporation, municipal area committee, town committee, notified area committee or cantonment board); also, all places having 5 000 or more inhabitants, a density of not less than 1 000 persons per square mile or 400 per square kilometre, pronounced urban characteristics and at least three fourths of the adult male population employed in pursuits other than agriculture.
- Korea, Republic of: Cities irrespective of size of population.
- Malaysia: Gazetted areas which have a population of 10,000 or more with at least 60 percent of their population (15 years and above) involved in non-agricultural activities.

URBANISATION

Urbanisation is defined as the process by which an increasing proportion of the total population, usually that of a country, live in towns or cities, i.e. urban areas. Globally, in 2016, over half of the world's population (54 percent) lives in urban areas. The proportion of urban population is projected to reach 66 percent by 2050, with the greatest increase concentrated in Asia and Africa. This is fuelled by the greater opportunities for job seekers, better social services, etc. offered in urban areas.

Suburbanisation is defined as the process by which an increasing proportion of the population living in urban areas move to the edge of the towns or cities, i.e. suburban areas. This process is fuelled by the increasing high cost of living in inner cities, the improvement of transportation infrastructure, etc.

Counter-urbanisation is defined as the process by which an increasing proportion of the population living in urban areas move to rural areas. This process is fuelled by the advancement of technology which allows people from rural areas work from home, the aspiration to live in cleaner and quieter areas, etc.