

Technical Notes

The statistical tables in this year's *The State of World Population* report once again give special attention to indicators that can help track progress in meeting the quantitative and qualitative goals of the International Conference on Population and Development (ICPD) and the Millennium Development Goals (MDGs) in the areas of mortality reduction, access to education, access to reproductive health services including family planning, and HIV and AIDS prevalence among young people. The sources for the indicators and their rationale for selection follow, by category.

Monitoring ICPD Goals

INDICATORS OF MORTALITY

Infant mortality, male and female life expectancy at birth.

Source: Spreadsheets provided by the United Nations Population Division. These indicators are measures of mortality levels, respectively, in the first year of life (which is most sensitive to development levels) and over the entire lifespan. Data estimates are for 2008.

Maternal mortality ratio. Source: WHO, UNICEF, UNFPA and World Bank. 2005. *Maternal Mortality in 2005: Estimates Developed by WHO, UNICEF, and UNFPA*. Geneva: WHO. This indicator presents the number of deaths to women per 100,000 live births which result from conditions related to pregnancy, delivery and related complications. Precision is difficult, though relative magnitudes are informative. Estimates between 100-999 are rounded to the nearest 10; and above 1,000 to the nearest 100. Several of the estimates differ from official government figures. The estimates are based on reported figures wherever possible, using approaches to improve the comparability of information from different sources. See the source for details on the origin of particular national estimates. Estimates and methodologies are reviewed regularly by WHO, UNICEF, UNFPA, academic institutions and other agencies and are revised where necessary, as part of the ongoing process of improving maternal mortality data. Because of changes in methods, prior estimates for 1995 levels may not be strictly comparable with these estimates.

INDICATORS OF EDUCATION

Male and female gross primary enrolment ratios, male and female gross secondary enrolment ratios. Source: Spreadsheet provided by the UNESCO Institute for Statistics,

April 2008. Population data is based on: United Nations Population Division. 2005/06. *World Population Prospects: The 2006 Revision*. New York: United Nations. Gross enrolment ratios indicate the number of students enrolled in a level in the education system per 100 individuals in the appropriate age group. They do not correct for individuals who are older than the level-appropriate age due to late starts, interrupted schooling or grade repetition. Data are for the most recent year estimates available for the 1999-2007 period.

Male and female adult illiteracy. Source: See gross enrolment ratios above for source; data adjusted to illiteracy from literacy. Illiteracy definitions are subject to variation in different countries; three widely accepted definitions are in use. Insofar as possible, data refer to the proportion who cannot, with understanding, both read and write a short simple statement on everyday life. Adult illiteracy (rates for persons above 15 years of age) reflects both recent levels of educational enrolment and past educational attainment. The above education indicators have been updated using estimates from: United Nations Population Division. 2008. *World Population Prospects: The 2006 Revision*. New York: United Nations. Data are for the most recent year estimates available for the 1995-2004 period.

Proportion reaching grade 5 of primary education.

Source: See gross enrolment ratios above for source. Data are most recent within the school years 1999-2007.

INDICATORS OF REPRODUCTIVE HEALTH

Births per 1,000 women aged 15-19. Source: Spreadsheet provided by the United Nations Population Division. This is an indicator of the burden of fertility on young women. Since it is an annual level summed over all women in the age cohort, it does not reflect fully the level of fertility for women during their youth. Since it indicates the annual average number of births per woman per year, one could multiply it by five to approximate the number of births to 1,000 young women during their late teen years. The measure does not indicate the full dimensions of teen pregnancy as only live births are included in the numerator. Stillbirths and spontaneous or induced abortions are not reflected. Estimates are for the 2005-2010 period.

Contraceptive prevalence. Source: Spreadsheet provided by the United Nations Population Division. These data are derived from sample survey reports and estimate the proportion of married women (including women in consensual unions)

currently using, respectively, any method or modern methods of contraception. Modern or clinic and supply methods include male and female sterilization, IUD, the pill, injectables, hormonal implants, condoms and female barrier methods. These numbers are roughly but not completely comparable across countries due to variation in the timing of the surveys and in the details of the questions. All country and regional data refer to women aged 15-49. The most recent survey data available are cited, ranging from 1986-2007.

HIV prevalence rate, M/F, 15-49. Source: UNAIDS provided data from the United Nations Population Division. 2006. These data derive from surveillance system reports and model estimates. Data provided for men and women aged 15-49 are point estimates for each country. The reference year is 2007. Male-female differences reflect physiological and social vulnerability to the illness and are affected by age differences between sexual partners.

DEMOGRAPHIC, SOCIAL AND ECONOMIC INDICATORS

Total population 2008, projected population 2050, average annual population growth rate for 2005-2010.

Source: Spreadsheets provided by the United Nations Population Division. These indicators present the size, projected future size and current period annual growth of national populations.

Per cent urban, urban growth rates. Source: United Nations Population Division. 2008. *World Urbanization Prospects: The 2007 Revision*. CD-ROM Edition: Data in Digital Format. New York: United Nations. These indicators reflect the proportion of the national population living in urban areas and the growth rate in urban areas projected.

Agricultural population per hectare of arable and permanent crop land. Source: Data provided by Food and Agriculture Organization, Statistics Division, using population data based on the total populations from: United Nations Population Division. 2008. *World Population Prospects: The 2006 Revision*. New York: United Nations; and activity rates of economically active population from: ILO. 1996. *Economically Active Population, 1950-2010*, 4th Edition. Geneva: ILO. This indicator relates the size of the agricultural population to the land suitable for agricultural production. It is responsive to changes in both the structure of national economies (proportions of the workforce in agriculture) and in technologies for land development. High values can be related to stress on land productivity and to fragmentation of land holdings. However, the measure is also sensitive to differing development levels and land use policies. Data refer to the year 2005.

Total fertility rate (2008). Source: Spreadsheet provided by the United Nations Population Division. The measure indicates the number of children a woman would have during her reproductive years if she bore children at the rate estimated for different age groups in the specified time period. Countries may reach the projected level at different points within the period.

Births with skilled attendants. Source: Spreadsheet provided by WHO with data from: Database on Skilled Attendant at Delivery. Geneva: WHO. Web site: www.who.int/reproductive-health/global_monitoring/data.html. This indicator is based on national reports of the proportion of births attended by "skilled health personnel or skilled attendant: doctors (specialist or non-specialist) and/or persons with midwifery skills who can diagnose and manage obstetrical complications as well as normal deliveries". Data for more developed countries reflect their higher levels of skilled delivery attendance. Because of assumptions of full coverage, data (and coverage) deficits of marginalized populations and the impacts of chance and transport delays may not be fully reflected in official statistics. Data estimates are the most recent available from 1995 through 2006.

Gross national income per capita. Source: Most recent (2006) figures from: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). This indicator (formerly referred to as gross national product [GNP] per capita) measures the total output of goods and services for final use produced by residents and non-residents, regardless of allocation to domestic and foreign claims, in relation to the size of the population. As such, it is an indicator of the economic productivity of a nation. It differs from gross domestic product (GDP) by further adjusting for income received from abroad for labour and capital by residents, for similar payments to non-residents, and by incorporating various technical adjustments including those related to exchange rate changes over time. This measure also takes into account the differing purchasing power of currencies by including purchasing power parity (PPP) adjustments of "real GNP". Some PPP figures are based on regression models; others are extrapolated from the latest International Comparison Programme benchmark estimates. See original source for details.

Central government expenditures on education and health. Source: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). These indicators reflect the priority afforded to education and health sectors by a country through the government expenditures dedicated to them. They are not sensitive to differences in allocations within sectors, e.g., pri-

mary education or health services in relation to other levels, which vary considerably. Direct comparability is complicated by the different administrative and budgetary responsibilities allocated to central governments in relation to local governments, and to the varying roles of the private and public sectors. Reported estimates are presented as shares of GDP per capita (for education) or total GDP (for health). Great caution is also advised about cross-country comparisons because of varying costs of inputs in different settings and sectors. Provisional data are for the most recent year estimates available for 2005.

External assistance for population. Source: UNFPA. 2006. *Financial Resource Flows for Population Activities in 2006*. New York: UNFPA. This figure provides the amount of external assistance expended in 2006 for population activities in each country. External funds are disbursed through multilateral and bilateral assistance agencies and by non-governmental organizations. Donor countries are indicated by their contributions being placed in parentheses. Regional totals include both country-level projects and regional activities (not otherwise reported in the table).

Under-5 mortality. Source: Spreadsheet provided by the United Nations Population Division. This indicator relates to the incidence of mortality to infants and young children. It reflects, therefore, the impact of diseases and other causes of death on infants, toddlers and young children. More standard demographic measures are infant mortality and mortality rates for 1 to 4 years of age, which reflect differing causes of and frequency of mortality in these ages. The measure is more sensitive than infant mortality to the burden of childhood diseases, including those preventable by improved nutrition and by immunization programmes. Under-5 mortality is here expressed as deaths to children under the age of 5 per 1,000 live births in a given year. Estimates are for the 2005-2010 period.

Per capita energy consumption. Source: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). This indicator reflects annual consumption of commercial primary energy (coal, lignite, petroleum, natural gas and hydro, nuclear and geothermal electricity) in kilograms of oil equivalent per capita. It reflects the level of industrial development, the structure of the economy and patterns of consumption. Changes over time can reflect changes in the level and balance of various economic activities and changes in the efficiency of energy use (including decreases or increases in wasteful consumption). Data estimates are for 2005.

Access to improved drinking water sources. Source: WHO and UNICEF. 2007. *Meeting the MDG Drinking Water and*

Sanitation Target: The Urban and Rural Challenge of the Decade. Geneva: WHO. This indicator reports the percentage of the population with access to an *improved source* of drinking water providing an *adequate amount of safe water* located within a *convenient distance* from the user's dwelling. The italicized words use country-level definitions. The indicator is related to exposure to health risks, including those resulting from improper sanitation. Data are estimates for the year 2004.