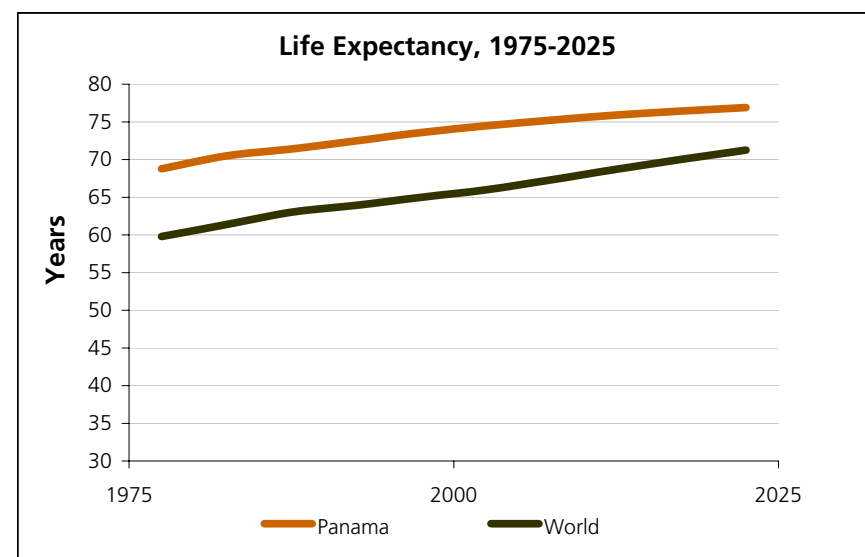
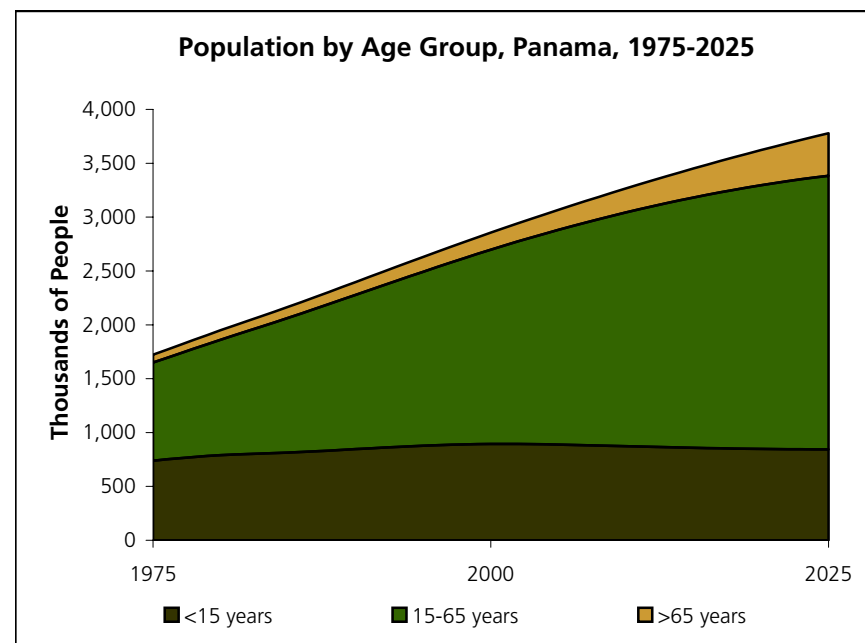


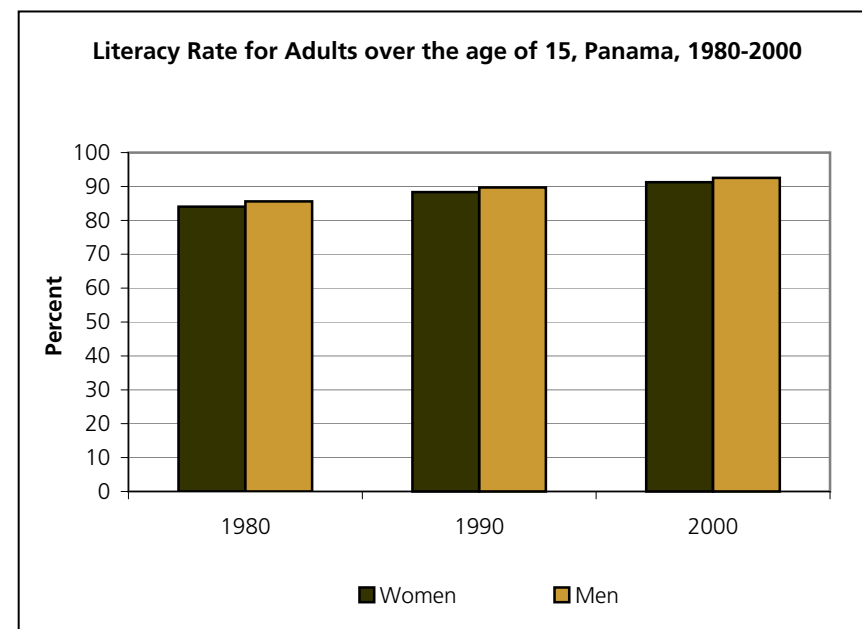
Demographic and Health Indicators	Panama	Central America & Caribbean	World
Total Population (in thousands of people)			
1950	860	53,981	2,519,495
2002	2,942	178,512	6,211,082
2025 (projected)	3,779	233,965	7,936,741
Population Density (people per square km), 2000:	37.8	63.7	45.1
Average Annual Population Growth Rate, 1980-2000			
Total	1.9%	1.9%	1.6%
In rural areas	1.3%	0.9%	0.9%
In urban areas	2.5%	2.5%	2.4%
Percentage of Population:			
Under age 15, 2002	30%	33%	29%
Over age 65, 2002	6%	5%	7%
Living in Urban Areas, 2000	56%	66%	47%
Average Total Fertility Rate {a}			
1975-1980	4.1	5.0	3.9
2000-2005	2.4	2.7	2.7
Infant Mortality Rate {b}, 2000-2005	19	31	55
Under-Five Mortality Rate {b}, 2000	26	37	83
Life Expectancy at birth (years), 2000-05			
Female	77.3	74.5	68.1
Male	72.6	68.7	63.9
Births Attended by Trained Personnel, 1994-2000 {c}	90%	84%	57%
Adults and Children Infected with HIV/AIDS, 2001 (number)	25,000	768,700	40,000,000
Percent of Adults Ages 15-49 infected with HIV or AIDS, 2001	1.5%	0.8%	1.2%
Number of Children Orphaned by AIDS since the beginning of epidemic, 2001	8,100	580,000	14,000,000
<b>Safe Water and Sanitation {c}</b>			
Access to Improved Sanitation, 2000			
Urban	99%	86%	85%
Rural	83%	49%	40%



View more Country Profiles on-line at <http://earthtrends.wri.org>

## Population, Health, and Human Well-Being-- Panama

	Panama	Central America & Caribbean	World
<b>Safe Water and Sanitation {c}</b>			
Access to an Improved Water Source, 2000			
Urban	99%	93%	95%
Rural	79%	71%	71%
<b>School Enrollment and Literacy {c}</b>			
Net Primary School Enrollment, both sexes			
1980	X	X	X
1997-1999 {c}	90%	X	X
Net Secondary School Enrollment, 1997-1999 {c}			
Female	72%	X	X
Male	71%	X	X
Gross Tertiary School Enrollment, 1996-99 {c}	32%	X	X
Adult Literacy Rate, 2002			
Female	92%	85%	75%
Male	93%	88%	86%
Youth Literacy Rate (ages 15-24), both sexes			
1980	93%	87%	80%
2002	97%	92%	87%



### Other Resources:

Country Profiles of the Food and Agriculture Organization of the United Nations, Economic Situation:

<http://www.fao.org/countryprofiles/index.asp?subj=3&iso3=PAN>

### Footnotes:

- Total fertility rate is an estimate of the number of children an average woman would have if current age-specific fertility rates remain constant during her reproductive years.
- In deaths per 1,000 live births. Infant mortality rate refers to children under one year of age.
- Data are for the most recent year within the range specified.

View more Country Profiles on-line at <http://earthtrends.wri.org>

## Population, Health, and Human Well-Being—Sources and Definitions

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### Demographic and Health Indicators

**Total Population** refers to the de facto midyear population of a country. The U.N. Population Division compiles and evaluates census and survey results from all countries, adjusting data for the miscalculation of certain age and sex groups, misreporting of age and sex distributions, and changes in definitions, when necessary. These adjustments incorporate data from civil registrations, population surveys, earlier censuses, and population models based on information from socioeconomically similar countries. All projections assume medium levels of fertility.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=363&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=363&themeid=4)

**Population Density** is calculated by WRI as the number of persons per square kilometer of land area. Population data are from the United Nations Population division. Total land area is from FAOSTAT.

**Average Annual Population Growth Rate** refers to the percentage growth in the midyear population of each country. The values are estimated using demographic models based on several kinds of demographic parameters: a country's population size, age and sex distribution, levels of internal and international migration, fertility and mortality rates by age and sex groups, and growth rates of urban and rural populations. Information collected through recent population censuses and surveys is used to calculate or estimate these parameters.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=449&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=449&themeid=4)

**Urban** and **Rural** areas are defined by parameters that vary slightly from country to country. Many countries define an urban area by the total number of inhabitants in a population agglomeration. Typically the threshold for considering a region urban is between 1,000 and 10,000 inhabitants. Any person not inhabiting an area classified as urban is counted in the rural population.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=451&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=451&themeid=4)

Percentage of Population **Under age 15** or **Over age 65** refer to the de facto population of a given country or region in the given age groups as of July 1 of a given year. All projections assume medium levels of fertility. View full technical notes at:

[http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=370&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=370&themeid=4)

**Living in Urban Areas** refers to the midyear population of areas defined as urban in each country. View full technical notes at:

[http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=446&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=446&themeid=4)

**Average Total Fertility Rate** is an estimate of the number of children an average woman would have if current age-specific fertility rates remained constant during her reproductive years. All projections are for the medium-case fertility scenario, which makes three assumptions. 1) Fertility in high-fertility countries will decline at an average pace of nearly one child per decade starting in 2005 or later, so that some of these countries do not reach replacement level (2.1 children per woman) by 2050. 2) Fertility in medium-fertility countries is assumed to reach replacement level before 2050. 3) Fertility in low-fertility countries is generally assumed to remain below replacement level during most of the projection period, reaching by 2045-2050 the fertility of the cohort of women born in the early 1960s or, if that information is lacking, reaching between 1.7 and 1.9 children per woman.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=369&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=369&themeid=4)

**Infant Mortality Rate** is an approximation of the number of deaths per 1,000 live births per year who die within one year of birth. The data are based on a review of all available national sources by the Population Division of the UN Secretariat. In developing countries where civil registration data are deficient, the most reliable sources are demographic surveys of households. Where these are not available, other sources and general estimates are made which are necessarily of limited reliability.

**Under-Five Mortality Rate** is the probability of a child dying between birth and age five expressed per 1,000 live births. The data is reported by countries from their national civil registration systems. Some are estimates prepared by national and international statistical services from population surveys. The completeness and accuracy of the data which these systems produce vary from one country or area to another.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=385&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=385&themeid=4)

**Female Life Expectancy at Birth** and **Male Life Expectancy at Birth** is the average number of years that a newborn baby is expected to live if the age-specific mortality rates effective at the year of birth apply throughout his or her lifetime. The Population Division of the UN Secretariat prepares estimates and projections based on data from national statistical sources. When needed, other sources, mainly population censuses and demographic surveys, are consulted. In countries highly affected by the HIV/AIDS epidemic, estimates of the impact of the disease are made explicitly by projecting the yearly incidence of HIV infection.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=379&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=379&themeid=4)

**Births Attended by Trained Personnel** is the percentage of births attended by physicians, nurses, midwives, or primary health care workers trained in midwifery skills. Women are most in need of skilled care during delivery and the immediate postpartum period, when roughly three-quarters of all maternal deaths occur. [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=395&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=395&themeid=4)

**Adults and Children Infected with HIV/AIDS** is the estimated number of people with HIV infection, whether or not they have developed symptoms of AIDS, alive at the end of 2001. The 1999 prevalence rate published by UNAIDS was applied to the country's 2001 population to produce these estimates. Children are defined as those aged 0–14. Adults are defined as those aged 15–49.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=396&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=396&themeid=4)

**Percent of Adults Ages 15-49 infected with HIV/AIDS** is the estimated percentage of people aged 15-49 living with HIV/AIDS. These estimates include all people with HIV infection, whether or not they have developed symptoms of AIDS, alive at the end of 2001. To calculate the adult HIV prevalence rate, the estimated number of adults living with HIV/AIDS at the end of 2001 was divided by the 2001 adult population (aged 15–49).

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=397&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=397&themeid=4)

**Number of Children Orphaned by AIDS since the beginning of the epidemic** is the estimated number of children under 15 who have lost their mother or both parents to AIDS since the beginning of the epidemic.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=399&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=399&themeid=4)

*Sources:*

Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2002. *World Population Prospects: The 2000 Revision. Dataset on CD-ROM*. New York: United Nations.

Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (1998). World Urbanization Prospects: The 1999 Revision. Urban and Rural Areas Dataset (POP/DB/WUP/Rev.1999/Table A.3), dataset in digital form.

United Nation's Children's Fund (UNICEF), State of the World's Children 2002 (New York 2001), available on-line at: <http://www.unicef.org/sowc02/>.

Joint United Nations Programme on HIV/AIDS (UNAIDS), 2002. HIV/AIDS estimates of data, end 2001. Electronic table available at: <http://www.unaids.org/barcelona/presskit/barcelona%20report/contents.html>. Geneva, UNAIDS.

## Improved Water and Sanitation

**Access to Improved Sanitation.** Improved Sanitation includes any of the following excreta disposal facilities: connection to a public sewer, connection to a septic tank, pour-flush latrine, simple pit latrine, and ventilated improved pit latrine. The World Health Organization (WHO) emphasizes that these data measure access to an *improved* excreta disposal system--access to a *sanitary* system cannot be adequately measured on a global scale. The dataset did not provide a standard definition of **Urban** or **Rural** areas. The countries' own working definition of urban and rural was used.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=403&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=403&themeid=4)

**Access to Improved Water.** An improved water source includes any of the following types of drinking water sources: household connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collection. At least 20 liters per person per day of this water must be available within one kilometer of a user's dwelling. WHO emphasizes that these data measure access to an *improved* water supply--access to a *safe* water supply cannot be adequately measured on a global scale. The dataset did not provide a standard definition of **Urban** or **Rural** areas. The countries' own working definition of urban and rural was used.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=402&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=402&themeid=4)

### Sources:

United Nation's Children's Fund (UNICEF). 2001. State of the World's Children 2002. Available on-line at <http://www.unicef.org/sowc02/>. New York: UNICEF. Data were originally collected under the UNICEF- WHO Joint Monitoring Program.

## School Enrollment and Literacy

**Net Primary School Enrollment** is defined as the enrollment of the official age-group for a primary level of education, expressed as a percentage of the population from the same age group. If the value is below 100%, users should not assume that the remaining school-aged population is not enrolled in any school; they could be enrolled in school at other grade levels. Primary Education is defined by the International Standard Classification of Education (ISCED) as the "beginning of systematic apprenticeship of reading, writing and mathematics". Programs are typically six years long and represent the beginning of compulsory education in many countries.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=411&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=411&themeid=4)

**Net Secondary School Enrollment** is defined as the enrollment of the official age-group for a secondary level of education, expressed as a percentage of the population from the same age group. If the value is below 100%, users should not assume that the remaining school-aged population is not enrolled in any school; they could be enrolled in school at other grade levels. Secondary education follows primary education, and is characterized as being subject-oriented with specialized fields of learning. Programs may be vocational or technical in nature, and students achieve a full implementation of basic skills.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=418&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=418&themeid=4)

**Gross Tertiary School Enrollment** is defined as the total enrollment, regardless of age, expressed as a percentage of the official school-age population for a tertiary level of education. Gross enrollment ratio can be over 100% due to the inclusion of over-aged and under-aged students. Such values indicate that a country is, in principle, able to accommodate all of its school-age population. Tertiary education provides the level of education required for entry into an advanced research program or a profession with high skills requirements. Faculty are typically required to have advanced research credentials. View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=423&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=423&themeid=4)

**Literacy Rates** are determined through census and survey data. If that information is lacking, estimates are based on neighboring countries with similar characteristics, including life expectancy at birth, enrollment ratio in secondary education, and fertility rate.

**Adult Literacy Rate** is defined as the population of women or men aged 15 years and over who cannot both read and write with understanding a short, simple statement on their everyday life. This indicator can be used to measure gender parity in education, the achievement of literacy programs and the effectiveness of primary education.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=409&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=409&themeid=4)

**Youth Literacy Rate** is defined as the percentage of the population aged 15 to 24 years old who can both read and write with understanding a short, simple statement on their everyday life. Youth illiteracy rates are increasingly used to gauge the impact of primary education as well as the speed with which illiteracy can be eradicated.

View full technical notes at: [http://earthtrends.wri.org/searchable\\_db/variablenotes\\_static.cfm?varid=499&themeid=4](http://earthtrends.wri.org/searchable_db/variablenotes_static.cfm?varid=499&themeid=4)

*Sources:*

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics. 2002. *World Education Indicators*. Paris: UNESCO.

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics, Literacy and Non Formal Education Sector. 2002. *Special Estimates and Projections of Adult Illiteracy for Population Aged 15 Years Old and Above, By Country and By Gender*. Paris: UNESCO.

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics, Literacy and Non Formal Education Sector. 2002. *Special Estimates and Projections of Adult Illiteracy for Countries With No Census Data*. Paris: UNESCO. Data are provided to WRI directly from UNESCO.

**Gross Tertiary School Enrollment** is defined as the total enrollment, regardless of age, expressed as a percentage of the official school-age population for a tertiary level of education. Gross enrollment ratio can be over 100% due to the inclusion of over-aged and under-aged students. Such values indicate that a country is, in principle, able to accommodate all of its school-age population. Tertiary education provides the level of education required for entry into an advanced research program or a profession with high skills requirements. Faculty are typically required to have advanced research credentials.

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*Sources:*

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics. 2002. *World Education Indicators*. Paris: UNESCO.

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics, Literacy and Non Formal Education Sector. 2002. *Special Estimates and Projections of Adult Illiteracy for Population Aged 15 Years Old and Above, By Country and By Gender*. Paris: UNESCO.

United Nations Educational Scientific, and Cultural Organization (UNESCO) Institute for Statistics, Literacy and Non Formal Education Sector. 2002. *Special Estimates and Projections of Adult Illiteracy for Countries With No Census Data*. Paris: UNESCO. Data are provided to WRI directly from UNESCO.