Human development indicator tables

The human development indicator tables provide a global assessment of country achievements in different areas of human development. The main tables are organized thematically, as described by their titles. The tables include data for 175 UN member states—those for which the human development index (HDI) could be calculated—along with Hong Kong Special Administrative Region of China, and the Occupied Palestinian Territories. Because of insufficient cross-nationally comparable data of good quality, the HDI has not been calculated for the remaining 17 UN member countries. Instead a set of basic human development indicators for these countries is presented in Table 1a.

In the tables, countries and areas are ranked by their HDI value. To locate a country in the tables, refer to the *Key to countries* on the back cover flap where countries with their HDI ranks are listed alphabetically. Most of the data in the tables are for 2005 and are those available to the Human Development Report Office (HDRO) as of 1 July 2007, unless otherwise specified.

Sources and definitions

HDRO is primarily a user, not a producer, of statistics. It relies on international data agencies with the mandate, resources and expertise to collect and compile international data on specific statistical indicators. Sources for all data used in compiling the indicator tables are given in short citations at the end of each table. These correspond to full references in *Statistical references*. When an agency provides data that it has collected from another source, both sources are

credited in the table notes. But when an agency has built on the work of many other contributors, only that agency is given as the source. In order to ensure that all calculations can be easily replicated the source notes also show the original data components used in any calculations by HDRO. Indicators for which short, meaningful definitions can be given are included in *Definitions of statistical terms*. Other relevant information appears in the notes at the end of each table. For more detailed technical information about these indicators, please consult the relevant websites of the source agencies through the *Human Development Report* website at http://hdr.undp.org/statistics/.

Inconsistencies between national and international estimates

When compiling international data series, international data agencies often apply international standards and harmonization procedures to improve comparability across countries. When international data are based on national statistics, as they usually are, national data may need to be adjusted. When data for a country are missing, an international agency may produce an estimate if other relevant information can be used. And because of the difficulties in coordination between national and international data agencies, international data series may not incorporate the most recent national data. All these factors can lead to substantial differences between national and international estimates.

This Report has often brought such inconsistencies to light. When data inconsistencies have arisen, HDRO has helped to link national and international data authorities to address those inconsistencies. In many cases this has led to better statistics in the Report. HDRO continues to advocate improving international data and plays an active role in supporting efforts to enhance data quality. It works with national agencies and international bodies to improve data consistency through more systematic reporting and monitoring of data quality.

Comparability over time

Statistics presented in different editions of the Report may not be comparable, due to revisions to data or changes in methodology. For this reason HDRO strongly advises against trend analysis based on data from different editions. Similarly, HDI values and ranks are not comparable across editions of the Report. For HDI trend analysis based on consistent data and methodology, refer to Table 2 (Human development index trends).

Country classifications

Countries are classified in four ways: by human development level, by income, by major world aggregates and by region (see the *Classification of countries*). These designations do not necessarily express a judgement about the development stage of a particular country or area. The term *country* as used in the text and tables refers, as appropriate, to territories or areas.

Human development classifications. All countries included in the HDI are classified into one of three clusters of achievement in human development: high human development (with an HDI of 0.800 or above), medium human development (HDI of 0.500–0.799) and low human development (HDI of less than 0.500).

Income classifications. All countries are grouped by income using World Bank classifications: high income (gross national income per capita of US\$10,726 or more in 2005), middle income (US\$876–\$10,725) and low income (US\$875 or less).

Major world classifications. The three global groups are developing countries, Central and Eastern Europe and the Commonwealth of Independent States (CIS) and the Organization for Economic Co-operation and Development (OECD). These groups are not mutually exclusive. (Replacing the OECD group with the high-income OECD group and excluding the Republic of Korea would produce mutually exclusive groups). Unless otherwise specified, the classification *world* represents the universe of 194 countries and areas covered—192 UN member countries plus Hong Kong Special Administrative Region of China, and the Occupied Palestinian Territories.

Regional classifications. Developing countries are further classified into regions: Arab States, East Asia and the Pacific, Latin America and the Caribbean (including Mexico), South Asia, Southern Europe and Sub-Saharan Africa. These regional classifications are consistent with the Regional Bureaux of the United Nations Development Programme. An additional classification is least developed countries, as defined by the United Nations (UN-OHRLLS 2007).

Aggregates and growth rates

Aggregates. Aggregates for the classifications described above are presented at the end of tables when it is analytically meaningful to do so and sufficient data are available. Aggregates that are the total for the classification (such as for population) are indicated by a T. All other aggregates are weighted averages.

In general, an aggregate is shown for a country grouping only when data are available for at least half the countries and represent at least two-thirds of the available weight in that classification. HDRO does not supply missing data for the purpose of aggregation. Therefore, unless otherwise specified, aggregates for each classification represent only the countries: for which data are available; refer to the year or period specified; and refer only to data from the primary sources listed. Aggregates are not shown where appropriate weighting procedures are unavailable.

Aggregates for indices, growth rates and indicators covering more than one point in time are based only on countries for which data exist for all necessary points in time. When no aggregate is shown for one or more regions, aggregates are not always shown for the world classification, which refers only to the universe of 194 countries and areas.

Aggregates in this Report will not always conform to those in other publications because of differences in country classifications and methodology. Where indicated, aggregates are calculated by the statistical agency providing the data for the indicator.

Growth rates. Multiyear growth rates are expressed as average annual rates of change. In calculating growth rates, HDRO uses only the beginning and end points. Year-to-year growth rates are expressed as annual percentage changes.

Country notes

Unless otherwise noted, data for China do not include Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China, or Taiwan Province of China. In most cases data for Eritrea before 1992 are included in the data for Ethiopia. Data for Germany refer to the unified Germany, unless otherwise noted. Data for Indonesia include Timor-Leste through 1999, unless otherwise noted. Data for Jordan refer to the East Bank only. Economic data for the United Republic of Tanzania cover the mainland only. Data for Sudan are often based on information collected from the northern part of the country. While Serbia and Montenegro became two independent States in June 2006, data for the union of the two States have been used where data do not yet exist separately for the independent States. Where this is the case, a note has been included to that effect. And data for Yemen refer to that country from 1990 onwards, while data for earlier years refer to aggregated data for the former People's Democratic Republic of Yemen and the former Yemen Arab Republic.

Changes to existing indicator tables and introduction of new tables

This year, a number of changes have been introduced into some existing indicator tables and three new tables have been included. This is with a view to making the indicator tables more policy-relevant and also to make a link to the theme of this year's Report. New indicators have also been introduced in response to some of the recommendations of the GDI-GEM review held in 2006. As a consequence, some tables do not correspond to the indicator table bearing that number in HDR 2006.

Changes to existing tables

The 'Energy and environment' table (formerly Table 21 in HDR 2006) has been extended and split into four tables: energy and the environment (Table 22), energy sources (Table 23), carbon dioxide (CO_2) emissions and stocks (Table 24) and status of major internationl environmental treaties (Table 25).

The following new indicators have been introduced in the 'Energy and the environment' table (Table 22);

- Percentage change in electricity consumption between 1990 and 2004
- Electrification rate
- Population without access to electricity
- Change in GDP per capita per unit of energy use between 1990 and 2004
- Forest as a percentage of total land.
- Total area of forest cover in 2005
- Absolute change in area of forest cover between 1990 and 2005
- Average annual percentage change in forest cover between 1990 and 2005.

These indicators can be used: to monitor progress in improving access to modern energy; in reducing energy intensity of GDP growth; and to assess rates of deforestation or afforestation in countries.

The 'Energy sources' table (Table 23) is an entirely new table describing the share of total primary energy supply from different sources: fossil fuels (coal, oil and natural gas), renewable energy (from hydro, solar, wind, geothermal as well as biomass and waste) and other sources (nuclear). The total primary energy supply is also given in this table.

The 'Carbon dioxide emissions and stocks' table (Table 24) brings together indicators on CO_2 emissions previously contained in the orig-

inal energy and environment table and introduces a number of new indicators including:

- Total CO₂ emissions and the average annual percentage change between 1990 and 2004
- Countries' share of the world's total CO₂ emissions
- CO₂ emissions per capita (carbon footprints)
- CO₂ emissions per unit of energy use (carbon intensity of energy)
- CO₂ emissions per unit of GDP (carbon intensity of growth)
- CO₂ emissions from forest biomass and total carbon stocks in forests.

The 'Status of major environmental treaties' table (Table 25) extends the range of environmental treaties covered in the original table on energy and environment and presents them all in a single table.

The 'Victims of Crime' table (formerly Table 23 in HDR 2006) has been dropped for this Report in the absence of a new round of the International Crime Victims Survey on which the table was based since 2000–01. It has been replaced by a table on crime and justice (Table 27) which presents information on homicide rates, prison populations and the abolition or retention of capital punishment.

Tables introduced in response to some of the GDI-GEM review recommendations

Cross-nationally comparable gender disaggregated statistics are a major challenge to assessing progress towards the elimination of all forms of discrimination against women and men. In response to some of the recommendations from the GDI-GEM review, new gender disaggregated indicators of labour force participation in non-OECD countries have been introduced and an existing indicator table was also modified to provide more information.

Previously, unemployment information was presented for OECD countries only because of insufficient comparable data for other countries. In the new Table 21, in addition to data for men and women, such labour force statistics as total employment and unemployment, the distribution of employment by economic activity and participation in the informal sector are presented.

Table 32 'Gender work and time allocation' is a modification of Table 28 in HDR 2006, which provides information on how women and men share their time between market and nonmarket activities. Nonmarket activities have been broken down further to provide information on how much time women and men spend daily on cooking and cleaning, caring for children, on such other activities as personal care, and on free time for leisure and other social activities.

HDRO will continue to work with national, regional and international agencies towards improving availability and quality of gender-disaggregated data.

Currency conversion

Throughout the Report, for currency units that were originally reported in currencies other than US dollars (US\$), the estimated equivalent value in US\$ has been provided right next to them. The exchange rates used for these conversions are the 'average period' rates for the specific year, while for currencies with no specified year, the yearly rate for the most recently available 'average period' was used, as reported in the September 2007 International Monetary Fund's *International Financial Statistics* report.

Symbols

In the absence of the words *annual, annual rate* or *growth rate*, a dash between two years, such as in 1995–2000, indicates that the data were collected during one of the years shown. A slash between two years, such as in 1998/2001, indicates an average for the years shown unless otherwise specified. The following symbols are used:

- .. Data not available
- (.) Greater (or less) than zero but small enough to be rounded off to zero at the displayed number of decimal points
- < Less than
- Not applicable
- T Total.

Note to Table 1: about this year's human development index

The human development index (HDI) is a composite index that measures the average achievements in a country in three basic dimensions of human development: a long and healthy life; access to knowledge; and a decent standard of living. These basic dimensions are measured by life expectancy at birth, adult literacy and combined gross enrolment in primary, secondary and tertiary level education, and gross domestic product (GDP) per capita in Purchasing Power Parity US dollars (PPP US\$), respectively. The index is constructed from indicators that are available globally using a methodology that is simple and transparent (see *Technical note 1*).

While the concept of human development is much broader than any single composite index can measure, the HDI offers a powerful alternative to GDP per capita as a summary measure of human well-being. It provides a useful entry point into the rich information contained in the subsequent indicator tables on different aspects of human development.

Data availability determines HDI country coverage

The HDI in this Report refers to 2005. It covers 175 UN member countries, along with Hong Kong Special Administrative Region of China, and the Occupied Palestinian Territories.

To enable cross-country comparisons, the HDI is, to the extent possible, calculated based on data from leading international data agencies available at the time the Report was prepared (see *Primary international data sources* below). But, for a number of countries, data are missing from these agencies for one or more of the four HDI components. For this reason, 17 UN member countries cannot be included in the HDI ranking this year. Instead a set of basic HDIs for these countries is presented in Table 1a.

In very rare cases, HDRO has made special efforts to obtain estimates from other international, regional or national sources when the primary international data agencies lack data for one or two HDI components of a country. In a very few cases HDRO has produced an estimate. These estimates from sources other than the primary international agencies are clearly documented in the footnotes to Table 1. They are of varying quality and reliability and are not presented in other indicator tables showing similar data.

Primary international data sources

Life expectancy at birth. The life expectancy at birth estimates are taken from World Population Prospects 1950–2050: The 2006 Revision (UN 2007e) the official source of UN population estimates and projections. They are prepared biennially by the United Nations Department of Economic and Social Affairs Population Division (UNPD) using data from national vital registration systems, population censuses and surveys.

In *The 2006 Revision* UNPD incorporated available national data through the end of 2006. For assessing the impact of HIV/AIDS, the latest HIV prevalence estimates prepared by the Joint United Nations Programme on HIV/AIDS (UNAIDS) are combined with a series of assumptions about the demographic trends and mortality of both infected and non-infected people in each of the 62 countries for which the impact of the disease is explicitly modelled.

The availability of new empirical evidence on the HIV/AIDS epidemic and demographic trends often requires adjustments to earlier estimates. Recent UNAIDS estimates indicate a decline in the rate of transition of new individuals into the high risk group. Based on these and other factors, World Population Prospects 1950-2050: The 2006 Revision made several methodological changes, which resulted in significant increases in estimates of life expectancy at birth for some of the countries. Firstly, The 2006 Revision incorporates a longer survival for infected persons receiving treatment. Secondly, the rate of mother to child transmission is also projected to decline at varying rates depending on the progress made by each country in increasing access to treatment. The life expectancy estimates published by UNPD are usually five-year averages although it does also produce annual life expectancy estimates interpolated from the five-year averages. The life expectancy estimates for 2005 shown in Table 1 and those underlying Table 2 are from these interpolated data. For details on *World Population Prospects 1950–2050: The 2006 Revision* see www.un.org/esa/population/unpop.htm.

Adult literacy rate. This Report uses data on adult literacy rates from the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) April 2007 Assessment (UNESCO Institute for Statistics 2007a), that combines direct national estimates with recent estimates based on its Global age-specific literacy projections model developed in 2007. The national estimates, made available through targeted efforts by UIS to collect recent literacy data from countries, are obtained from national censuses or surveys between 1995 and 2005. Where recent estimates are not available, older UIS estimates, produced in July 2002 and based mainly on national data collected before 1995, have been used instead.

Many high-income countries, having attained high levels of literacy, no longer collect basic literacy statistics and thus are not included in the UIS data. In calculating the HDI, a literacy rate of 99.0% is assumed for high-income countries that do not report adult literacy information.

In collecting literacy data, many countries estimate the number of literate people based on self-reported data. Some use educational attainment data as a proxy, but measures of school attendance or grade completion may differ. Because definitions and data collection methods vary across countries, literacy estimates should be used with caution.

The UIS, in collaboration with partner agencies, is actively pursuing an alternative methodology for measuring literacy, the Literacy Assessment and Monitoring Programme (LAMP). LAMP seeks to go beyond the current simple categories of literate and illiterate by providing information on a continuum of literacy skills. It is hoped that literacy rates from LAMP will eventually provide more reliable estimates.

Combined gross enrolment ratios in primary, secondary and tertiary education. Gross enrolment ratios are produced by the UIS (UNESCO Institute for Statistics 2007c) based on enrolment data collected from national governments (usually from administrative sources) and population data from the World Population Prospects 1950-2040: The 2004 Revision. The ratios are calculated by dividing the number of students enrolled in primary, secondary and tertiary levels of education by the total population in the theoretical age group corresponding to these levels. The theoretical age group for tertiary education is assumed to be the five-year age group immediately following on the end of upper secondary school in all countries.

Although intended as a proxy for educational attainment, combined gross enrolment ratios do not reflect the quality of educational outcomes. Even when used to capture access to educational opportunities, combined gross enrolment ratios can hide important differences among countries because of differences in the age range corresponding to a level of education and in the duration of education programmes. Grade repetition and dropout rates can also distort the data. Measures such as the mean years of schooling of a population or school life expectancy could more adequately capture educational attainment and should ideally supplant the gross enrolment ratio in the HDI. However, such data are not yet regularly available for a sufficient number of countries.

As currently defined, the combined gross enrolment ratio measures enrolment in the country of study and therefore excludes students studying abroad from the enrolment ratio of their home country. Current data for many smaller countries, for which pursuit of a tertiary education abroad is common, could substantially under estimate access to education or educational attainment of the population and thus lead to a lower HDI value.

GDP per capita (PPP US\$). In comparing standards of living across countries, economic statistics must be converted into purchasing power parity (PPP) terms to eliminate differences in national price levels. The GDP per capita (PPP US\$) data for the HDI are provided by the World Bank (World Bank 2007b) for 168 countries based on price data from the last International Comparison Program (ICP surveys and GDP in local currency from national accounts data. The last round of ICP surveys conducted between 1993 and 1996 covered 118 countries. PPPs for these countries are estimated directly by extrapolating from the latest benchmark results. For countries not included in the ICP surveys, estimates are derived through econometric regression. For countries not covered by the World Bank, PPP estimates provided by the Penn World Tables of the University of Pennsylvania (Heston, Summers and Aten 2006) are used.

Though much progress has been made in recent decades, the current PPP data set suffers from several deficiencies, including lack of universal coverage, of timeliness of the data and of uniformity in the quality of results from different regions and countries. Filling gaps in country coverage with econometric regression requires strong assumptions, while extrapolation over time implies that the results become weaker as the distance lengthens between the reference survey year and the current year. The importance of PPPs in economic analysis underlines the need for improvement in PPP data. A new Millennium Round of the ICP has been launched and promises much improved PPP data for economic policy analysis. First results are expected to be published in late 2007 or early 2008. For details on the ICP and the PPP methodology, see the ICP website at www. worldbank.org/data/icp.

Comparisons over time and across editions of the Report

The HDI is an important tool for monitoring long-term trends in human development. To facilitate trend analyses across countries, the HDI is calculated at five-year intervals for the period 1975–2005. These estimates, presented in Table 2, are based on a consistent methodology and on comparable trend data available when the Report is prepared.

As international data agencies continually improve their data series, including updating historical data periodically, the year to year changes in the HDI values and rankings across editions of the Human Development Report often reflect revisions to data-both specific to a country and relative to other countries rather than real changes in a country. In addition, occasional changes in country coverage could also affect the HDI ranking of a country, even when consistent methodology is used to calculate the HDI. As a result, a country's HDI rank could drop considerably between two consecutive Reports. But when comparable, revised data are used to reconstruct the HDI for recent years, the HDI rank and value may actually show an improvement.

For these reasons HDI trend analysis should not be based on data from different editions of the Report. Table 2 provides up-to-date HDI trend data based on consistent data and methodology.

HDI for high human development countries

The HDI in this Report is constructed to compare country achievements across the most basic dimensions of human development. Thus, the indicators chosen are not necessarily those that best differentiate between rich countries. The indicators currently used in the index yield very small differences among the top HDI countries, and thus the top of the HDI ranking often reflects only very small differences in these underlying indicators. For these high-income countries, an alternative index-the human poverty index (shown in Table 4)-can better reflect the extent of human deprivation that still exists among the populations of these countries and can help direct the focus of public policies.

For further discussions on the use and limitations of the HDI and its component indicators, see http://hdr.undp.org/statistics.

CDIAC	Carbon Dioxide Information Analysis Center	ISCO	International Standard Classification of
CIS	Commonwealth of Independent States		Occupations
CO ₂	Carbon dioxide	ISIC	International Standard Industrial
CO ₂ e	Carbon dioxide equivalent		Classification
DAC	Development Assistance Committee	ITU	International Telecommunication Union
	(of OECD)	LIS	Luxembourg Income Studies
DHS	Demographic and Health Survey	MDG	Millennium Development Goals
DOTS	Directly Observed Treatment Short courses	MICS	Multiple Indicator Cluster Survey
	(method of detection and treatment of	Mt	Megatonne (one million tonnes)
	tuberculosis)	ODA	Official development assistance
EM-DAT	Emergency disasters database	OECD	Organization for Economic Co-operation and
FAO	Food and Agriculture Organization		Development
GDI	Gender-related development index	PPP	Purchasing power parity
GDP	Gross domestic product	R&D	Research and development
GEM	Gender empowerment measure	SAR	Special Administrative Region (of China)
GER	Gross enrolment ratio	SIPRI	Stockholm International Peace Research
GNI	Gross national income		Institute
Gt	Gigatonne (one billion tonnes)	SITC	Standard International Trade Classification
HDI	Human development index	TFYR	The former Yugoslav Republic (of Macedonia)
HDRO	Human Development Report Office	UN	United Nations
HIV/AIDS	Human Immunodeficiency Virus/Acquired	UNAIDS	Joint United Nations Programme on
	Immune Deficiency Syndrome		HIV/AIDS
HPI-1	Human poverty index (for developing	UNCTAD	United Nations Conference on Trade and
	countries)		Development
HPI-2	Human poverty index (for OECD countries,	UNODC	United Nations Office on Drugs and Crime
	Central and Eastern Europe and the CIS)	UNESCO	United Nations Educational, Scientific and
IALS	International Adult Literacy Survey		Cultural Organization
ICPS	International Centre for Prison Studies	UNDP	United Nations Development Programme
ICSE	International Classification of Status in	UNFPA	United Nations Population Fund
	Employment	UNHCR	Office of the United Nations High
IDMC	Internal Displacement Monitoring Centre		Commissioner for Refugees
IEA	International Energy Agency	UNICEF	United Nations Children's Fund
IISS	International Institute for Strategic Studies	UN-ORHLLS	5 United Nations Office of the High
ILO	International Labour Organization		Representative for the Least Developed
ILOLEX	ILO database on International Labour		Countries, Landlocked Developing Countries
	Standards		and Small Island Developing States
IPU	Inter-Parliamentary Union	WHO	World Health Organization
ISCED	International Standard Classification of	WIPO	World Intellectual Property Organization
	Education		