

## Technical Notes

These notes outline the scope of the data presented in the tables and indicate the methodology and concepts used in their preparation. The sources cited in the Bibliography following the notes carry comprehensive definitions and descriptions of the concepts employed.

While the statistics and measures in this volume have been selected carefully, consistent with coverage of a large number of countries over extended time periods, readers are urged to exercise great care in interpreting them, particularly in comparing indicators across countries, since statistical practices, definitions, methodology, and coverage differ widely among countries. The statistical systems in many developing countries still are weak, and this affects the reliability of the data.

### Country Groupings and Coverage

The 125 countries covered are grouped as follows:

—*Developing Countries* with populations over a million<sup>1</sup> are divided on the basis of 1976 per capita gross national product (GNP) into:

*Low Income Countries*—with per capita income of US\$250 and below (34 countries)

*Middle Income Countries*—with per capita income above US\$250 (58 countries)

—*Industrialized Countries* (19 countries)

—*Major Capital Surplus Oil Exporting Countries* (3 countries)

—*Centrally Planned Economies* (11 countries)<sup>1</sup>

Within each group, countries are listed in ascending order of per capita GNP in 1976 (see *World Bank Atlas, 1977*), except for Cambodia, Lebanon, and Viet Nam, for which 1974 estimates of per capita GNP are the most recent available. Countries are listed in this same order in all the tables. They are shown alphabetically, with their reference numbers, on the page preceding the table of Contents.

Countries with populations under one million are not covered in the tables, but basic data for

<sup>1</sup>Albania, Cuba, the Democratic Republic of Korea, Mongolia, and the People's Republic of China are grouped with other centrally planned economies. Romania and Yugoslavia are grouped with the developing countries. Capital surplus oil exporting countries are shown in a separate category.

small countries which are members of the United Nations and/or the World Bank are given in the Notes to Table 1 below.

### Calculation of Growth Rates

Most growth rates have been calculated for two time periods: 1960 to 1970, and 1970 to 1976, or 1975 when data for 1976 were not available. All growth rates shown are in real terms and have been computed using the least-squares method.<sup>2</sup>

By using the least-squares method, all observations within the relevant time period have been taken into account, and the resulting growth rates reflect general trends without being unduly influenced by cyclical factors or exceptional variations in a particular year.

### Median Values

The median value is the central value of a set of values that have been arranged in order of magnitude. For each indicator and group of countries, the values for individual countries are simply arranged from the largest to the smallest and the median located as that which exceeds half the values and is exceeded by half the values. Where there is an odd number of countries, the median is the middle item; where there is an even number, the median is half-way between (i.e., the mean of) the two middle items.

### Table 1: Basic Indicators

The *population* estimates for mid-1976 are from the *World Bank Atlas, 1977*, with minor revisions to reflect more recent information.

The data on *area* are from the *UN Demographic Yearbook, 1975*.

*Gross national product (GNP)* measures the total domestic and foreign output claimed by residents of a country. It comprises Gross Domestic Product (see below) plus the factor in-

<sup>2</sup>The least-squares growth rate is calculated by regressing all the values of the variable studied within the relevant period over time using the following logarithmic form:

$$\text{Log } X_t = a + bt + e_t$$

where:

$X_t$  = variable  
 $t$  = time  
 $e$  = error term  
 $b$  = slope coefficient

then,  $r = (\text{antilog } b) - 1$

Thus,  $(\text{ant. } b) - 1$  provides a least-squares estimate of the growth rate.

come (such as investment receipts and workers' remittances) accruing to residents from abroad, less the income earned in the domestic economy accruing to persons abroad.

Gross domestic product (GDP) measures the total final output of goods and services produced by the country's economy—that is, within the country's territory by residents and non-residents, regardless of its allocation between domestic and foreign claims. The value of both GDP and GNP is calculated without making deductions for the value of expenditure on capital goods for replacement purposes.

Population, incomes, and surface area of small UN/World Bank member countries are as follows:

UN/World Bank Members with Population Under 1 Million			
	Population	GNP Per Capita	Area
	(millions)	(US dollars)	(thousand square kilometers)
	Mid-1976	1976	
Maldives	0.1	120	(.)
Guinea-Bissau	0.5	140	36
Comoros	0.3	180	2
Gambia, The	0.5	180	11
Cape Verde	0.3	270	4
Equatorial Guinea	0.3	330	28
Western Samoa	0.2	350	3
Botswana	0.7	410	600
Grenada	0.1	420	(.)
Swaziland	0.5	470	17
Sao Tomé and Príncipe	0.1	490	1
Guyana	0.8	540	215
Seychelles	0.1	610	(.)
Mauritius	0.9	680	2
Fiji	0.6	1,150	18
Surinam	0.4	1,370	163
Cyprus	0.6	1,480	9
Barbados	0.2	1,550	(.)
Malta	0.3	1,780	(.)
Bahrain	0.3	2,140	1
Djibouti	0.1	2,160	22
Gabon	0.5	2,590	268
Oman	0.8	2,680	213
Bahamas	0.2	3,310	14
Iceland	0.2	6,100	103
Luxembourg	0.4	6,460	3
Qatar	0.2	11,400	11
United Arab Emirates	0.7	13,990	84

The estimates of GNP underlying the 1976 GNP per capita figures and the real growth rates of GNP per capita have been prepared by the World Bank on the basis of national accounts series compiled by national statistical offices, supplemented by data gathered on World Bank missions.

The 1976 GNP per capita figures are taken from the *World Bank Atlas, 1977*, and calculated

in the following manner: 1976 GNP in national currency units is first expressed in weighted average prices for the base period 1974-76, converted into US dollars at the weighted average exchange rate for this period, and then adjusted for US inflation between the 1974-76 base period and the current year, 1976. The resulting estimate of GNP is then divided by the mid-1976 population. This method is designed to reduce the impact of temporary under- or over-valuations of a particular national currency and generally assures a greater degree of comparability of GNP per capita estimates among countries.

The conversion of the GNP of different countries to a common denominator is known to create distortions. The UN's International Comparison Project (ICP), in which the World Bank has been a major participant, is designed to provide more realistic comparisons of income levels based on comparisons of purchasing power.<sup>1</sup> To date work has been completed for 16 countries, based on 152 detailed categories of expenditure in each country.

The table on the next page provides examples of the differences between the conventionally computed GNP per capita data for 1970 and 1973, and incomes as calculated using the ICP methodology.

The index of *per capita food production* shows the average annual quantity of food produced per capita in the years 1974-76 as a percentage of the average annual amount produced in 1965-67. The estimates are derived from those of the UN Food and Agriculture Organization, which are calculated by dividing indexes of the quantity of food production (comprising cereals, starchy roots, sugar, pulses, edible oil crops, nuts, fruits, vegetables, wine, beverages, livestock, and livestock products) by indexes of population.

The data on *growth of energy production* and the *per capita consumption of energy* are taken from the UN. They refer to commercial forms of primary energy: coal and lignite, crude petroleum, natural gas and natural gas liquids, and hydro and nuclear electricity, converted into coal equivalent. The use of firewood and other traditional fuels, substantial in certain developing countries, is not taken into account.

The *average annual rate of inflation* is the "implicit GDP deflator," which is calculated by dividing, for each year of the period in question, the value of GDP in current market prices by the

<sup>1</sup>For a detailed description of the methodology, see I. B. Kravis, A. Heston, and R. Summers, *International Comparisons of Real Product and Purchasing Power* (Baltimore and London: The Johns Hopkins University Press, 1978). This book contains the results of Phase 2 of the United Nations International Comparison Project.

**Per Capita GNP Converted to US Dollars at Official Exchange Rates, and  
Per Capita GDP in "International" Dollars, 1970 and 1973**

	1970			1973		
	(1) US Dollars <sup>a</sup>	(2) International Dollars <sup>b</sup>	(3) Ratio (2):(1)	(1) US Dollars <sup>a</sup>	(2) International Dollars <sup>b</sup>	(3) Ratio (2):(1)
Kenya	143	303	2.1	183	378	2.1
India	97	335	3.5	112	404	3.6
Philippines	228	572	2.5	294	763	2.6
Korea, Rep. of	277	593	2.1	411	932	2.3
Colombia	347	858	2.5	452	1,126	2.5
Malaysia	437	915	2.1	609	1,185	1.9
Iran	665	975	1.5	1,156	1,797	1.6
Hungary	1,326	2,045	1.5	1,712	2,796	1.6
Italy	1,908	2,326	1.2	2,398	2,889	1.2
Japan	2,630	2,833	1.1	3,760	4,022	1.1
United Kingdom	2,503	3,027	1.2	3,204	3,742	1.2
Netherlands	3,774	3,293	0.9	4,813	4,239	0.9
Belgium	3,804	3,344	0.9	5,121	4,538	0.9
France	3,671	3,483	0.9	4,860	4,695	0.9
Germany, Fed. Rep.	4,421	3,738	0.8	5,690	4,789	0.8
United States	4,810	4,854	1.0	6,224	6,240	1.0

<sup>a</sup>World Bank Atlas Series.

<sup>b</sup>International Comparison Project.

value of GDP in constant market prices, both in national currency.

**Tables 2 and 3: Growth and Structure of Production**

National accounts series in national currency units have been used to calculate the indicators in these tables. The growth rates in Table 2 are calculated in constant prices; the shares of GDP in Table 3 are expressed in current prices.

Gross domestic product is defined in the Notes to Table 1 above.

The *agricultural sector* covers agriculture, forestry, hunting, and fishing. The *industrial sector* comprises mining, manufacturing, construction, and electricity, water, and gas. All other branches of economic activity are regarded as *services*.

**Tables 4 and 5: Growth of Selected Demand Aggregates; Structure of Demand**

National accounts series in national currency units have been used to compute the indicators in these tables. The growth rates in Table 4 are calculated in constant prices; the shares of GDP in Table 5 are expressed in current prices. Most of the definitions employed are those of the UN System of National Accounts (SNA).

Gross domestic product is defined in the Notes to Table 1 above.

*Public consumption* (General Government consumption in SNA terminology) includes all current expenditure for purchases of goods and services by all levels of government. Capital expenditure on national defense is regarded as a consumption expenditure.

*Private consumption* consists of the market

value of all goods and services purchased or received as income in kind, by households and non-profit institutions. It includes the imputed rent for owner-occupied dwellings.

Gross domestic investment consists of the outlays for additions to the fixed assets of both the private and public sectors, plus the net value of inventory changes.

Gross domestic savings shows the amount of gross domestic investment financed from domestic output. It is calculated as the difference between gross domestic investment and the deficit on current account of goods and non-factor services (excluding net current transfers). It comprises both public and private savings.

The *resource balance* is the difference between exports and imports of goods and non-factor services. Exports or imports of goods and non-factor services represent the value of all goods and non-factor services sold to or purchased from the rest of the world; this includes merchandise, freight, insurance, travel, and other non-factor services. The value of factor services (such as investment receipts and workers' remittances from abroad) is excluded from this measure.

**Table 6: Growth of Merchandise Trade**

The merchandise trade statistics are from the UN trade data system, supplemented by the International Monetary Fund's (IMF) *Direction of Trade* and *International Financial Statistics*.

Merchandise exports and imports cover, with a few exceptions, all international changes in ownership of merchandise passing across the customs borders of the compiling country. Ex-

ports are valued f.o.b. (free on board), imports c.i.f. (cost, insurance, and freight). These values are expressed in current US dollars.

The *growth rates of merchandise exports and imports* are in real terms. Those for the majority of countries are calculated from quantum indexes of exports and imports taken from the United Nations Conference on Trade and Development (UNCTAD) *Handbook of International Trade and Development Statistics*. The growth rates for developed countries are obtained by deflating annual export (or import) values, expressed in current US dollars, using indexes of export (or import) unit values developed from data in the *UN Monthly Bulletin of Statistics*.

The *terms of trade* (or the "net barter terms of trade") are calculated as the ratio of a country's export unit value index to the index of import unit values. The terms of trade index numbers shown here for 1960 and 1976, where 1970 = 100, thus indicate changes over time in the level of export prices expressed as a percentage of import prices. The unit value indexes are from the same UNCTAD and UN sources cited above, in connection with the growth rates of exports and imports.

#### Table 7: Structure of Merchandise Trade

The trade shares in this table are derived from trade values given in UN trade tapes and in the *UN Monthly Bulletin of Statistics*, expressed in current US dollars.

*Merchandise exports and imports* are defined in the Notes to Table 6 above.

In the categorization of exports, *primary commodities* comprise *Standard International Trade Classification (Revised)* Sections 0 to 4 (food and live animals, beverages and tobacco, inedible crude materials, fuels, oils, fats, and waxes) and the non-ferrous metals of SITC Division 68. *Manufactures* refers to commodities in the *Standard International Trade Classification (Revised)* Sections 5 through 9 (chemicals and related products, manufactured articles, machinery and transport equipment), excluding Division 68 (non-ferrous metals).

In the categorization of imports, *food commodities* are those in the SITC (Rev.) Sections 0, 1, 4 and Division 22 (food and live animals, beverages, tobacco, oils and fats). *Fuels* refers to commodities in the SITC (Rev.) Section 3. *Other imports* are calculated as the residual from the total value of imports.

#### Table 8: Destination of Merchandise Exports

*Merchandise exports* are defined in the Notes

to Table 6 above. The measure includes the value of re-exports.

All the trade shares in this table are calculated on the basis of trade value statistics (in current US dollars) published by the IMF in its *Direction of Trade*. Reflecting the practice used in the data source, the country groups shown as the *destinations* of merchandise exports differ somewhat from those used elsewhere in the volume. Specifically,

—Developed countries include Gibraltar and Iceland in addition to those referred to as "industrialized" elsewhere in the volume.

—Developing countries include Kuwait, Libya, and Saudi Arabia, referred to as capital surplus oil exporting countries elsewhere in the volume, and Cuba, elsewhere treated with other centrally planned economies.

#### Table 9: Balance of Payments and Debt Service Ratios

The *current account balance* is the difference between (i) exports of goods and services plus inflows of unrequited transfers, and (ii) imports of goods and services plus unrequited transfers to the rest of the world. Excluded from this figure are all *interest payments on external public and publicly guaranteed debt*, which are shown separately. The latter represent interest payments on the disbursed portion of outstanding public and publicly guaranteed debt plus commitment charges on undisbursed debt. The current account estimates have been taken from the IMF's data files; estimates of interest payments are from the World Bank's Debt Reporting System.

*Debt service* is the sum of interest payments and repayments of principal on *external public and publicly guaranteed debt*. Debt service data are taken from the Bank's Debt Reporting System. The *ratio of debt service to exports* of goods and services is a commonly used rule of thumb for assessing debt-servicing capacity. It is important to note, however, that the debt service ratios shown here do not cover private debt, which for some countries is substantial. The table on the following page illustrates the differences between interest payments as recorded in the Debt Reporting System (and used to calculate the debt service ratios in Table 9), and total interest payments as recorded in the IMF's *Balance of Payments* data files. Also it should be noted that debt contracted for the purchase of military equipment is not usually reported.

Since the World Bank's Debt Reporting System is concerned primarily with developing countries, data on external debt are not given

here for other groups of countries. Neither are comparable data for those countries available from other sources.

<b>Comparison of Interest Payments, 1976</b>		
	Debt Reporting System <sup>a</sup>	Balance of Payments <sup>b</sup>
	(In millions of US dollars)	
Pakistan	129	167
Korea, Rep. of	345	480
Philippines	87	246
Egypt	77	257
Turkey	114	169
Israel	196	632
Spain	267	816
Brazil	734	2,040
Mexico	1,070	1,357
Chile	209	326
Colombia	125	262
Greece	177	210
China, Rep. of	145	261
Singapore	35	331
Panama	60	447

<sup>a</sup>Interest payments due on external public and publicly guaranteed medium- and long-term loans.

<sup>b</sup>Interest payments due on external private, public and publicly guaranteed short-, medium- and long-term loans.

#### **Table 10: Flows of External Capital**

The data on the gross inflow and repayment of principal (amortization) of public and publicly guaranteed medium- and long-term loans are from the World Bank's Debt Reporting System. The net inflows are gross inflows less the repayment of principal.

Net direct private investment is the net amount invested by non-residents of the country in enterprises in which they (or other non-residents) exercise a significant degree of managerial control; these net figures also include the value of direct investment abroad by residents. The IMF's balance of payments data files have been used in compiling these estimates.

Since the World Bank's Debt Reporting System is concerned primarily with developing countries, data on external debt are not given here for other groups of countries. Neither are comparable data for those countries available from other sources.

#### **Table 11: External Public Debt and International Reserves**

External public debt outstanding represents the amount of public and publicly guaranteed loans which has been disbursed, net of cancelled loan commitments and repayments of principal. The data shown refer to the end of the year indicated, and are from the World Bank's Debt Reporting System.

Since the World Bank's Debt Reporting System is concerned primarily with developing countries, data on external debt are not given here for other groups of countries. Neither are comparable data for those countries available from other sources.

Gross international reserves comprise the sum of a country's holdings of gold, Special Drawing Rights (SDRs), the reserve position of IMF members in the Fund, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued throughout at SDR35 per ounce. This is equivalent to US\$35 per ounce before December 1971; US\$38 per ounce from December 1971 through January 1973; US\$42.22 per ounce from February 1973 through June 1974; and to the US dollar price of gold as measured by the market valuation of the SDR beginning in July 1974. The data for holdings of international reserves are from the IMF data files. The reserve levels shown for 1970 and 1976 refer to the end of the year indicated and are expressed in current US dollars. The reserve holdings at the end of 1976 are also expressed in terms of the number of months' imports of goods and services they could pay for, with imports at the average level for 1976.

#### **Table 12: Official Development Assistance From Members of the OECD**

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Official development assistance (ODA) consists of disbursements of grants or loans made at concessional financial terms by official agencies of the members of the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD), with the objective of promoting economic development and welfare. It includes the value of technical cooperation.

Figures for 1976 and earlier years are actual figures published by the OECD; those for 1977 are preliminary estimates. All others are projections by World Bank staff, based on OECD and World Bank estimates of GNP growth, on information on budget appropriations for aid, and on aid policy statements by governments. They are projections, not predictions, of what will occur, based on present plans. Commitments made in 1979 and 1980 will have a relatively small effect on disbursements in those years.

Finland became a member of the Development Assistance Committee (DAC) in January 1975. New Zealand became a member in 1973; ODA figures for New Zealand are not available for 1960 and 1965.

The nominal values of both GNP and ODA have been converted into constant 1977 prices

using the US dollar GNP deflator. This measures inflation in the OECD countries (excluding Greece, Portugal, Spain, and Turkey) in terms of the US dollar. It takes account of parity changes between the US dollar and national currencies (for example, when the US dollar depreciates, rates of inflation as calculated in national currencies have to be adjusted upwards by the amount of the depreciation in the dollar).

Estimates prepared by the DAC indicate the following ODA flows from members of the Organization of Petroleum Exporting Countries:

	1973	1974	1975	1976
Value (million US dollars)	1,308	3,446	5,512	5,182
As Percentage of OPEC Donors' GNP	1.4	2.0	2.7	2.1

OPEC donor countries are Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

### Tables 13 and 14: Population and Labor Force Growth; Structure of Population

The growth rates of total population have been calculated by the least-squares method from UN and World Bank estimates of mid-year country populations. With minor revisions to reflect more recent information, they correspond to the data published in the *World Bank Atlas, 1977*.

The estimates of urban population are those of the UN Population Division based on national data. The urban population growth rates are calculated from the UN estimates. Since these estimates reflect the different definitions of "urban" used in different countries, cross-country comparisons should be interpreted cautiously.

The labor force describes economically active persons, including the armed forces and the unemployed, but excluding housewives, students, and economically inactive groups. The labor force growth rates are projections derived by the International Labour Office (ILO) from 1960 and 1970 census information, but adjusted to ensure conceptual uniformity. The ILO projections do not take account of international migration. The percentage of the total labor force dependent on agriculture has been calculated by the ILO, based on national data.

The estimates of population below the age of 15 are from the UN Population Division, based on national data.

The working age population refers to the total population between 15 and 64 years of age. These estimates have been compiled by the UN Population Division.

### Table 15: Demographic Indicators

The crude birth and death rates are based on the computations of the UN Population Division.

The total fertility rates (TFR) have been computed by the UN Population Division. The TFR represents the number of children that hypothetically would be born per woman, if she were to live to the end of her child-bearing years and bear children at each age in accordance with the prevailing age-specific fertility rates.

### Table 16: Population Projections, 1976-2000, and Hypothetical Stationary Population

The estimates of mid-1976 population are those of Table 1.

To project population in the year 2000, data for each country on total population, fertility, and mortality rates in 1975, the base year for the projections, were obtained from the World Bank, the UN, and the US Bureau of the Census. Assumptions about future developments were based on analyses of recent fertility and mortality trends in each country.

In projecting mortality rates, it was assumed that female life expectancy at birth (see Notes to Table 17 for a definition of this term) would continue to rise until it reached 77.5 years, after which point it would remain constant. It was also assumed that average life expectancy at birth would increase according to the country's per capita income level. The projected death rates that result for countries of over US\$540 per capita in 1976 are similar to those in the UN "medium" projections (1975); those for lower income countries are slightly higher than the "medium" UN projections.

Fertility rates were assumed to decline according to the country's per capita income level and its past family planning performance. These assumptions result in birth rate projections that are generally similar to the UN "low" projections, for countries with family planning programs whose impact has been moderate to strong. For other countries, the projected decline in birth rates is the same as in the UN "medium" projections.

Throughout the projections, it was assumed that international migration would have no appreciable impact.

The estimates of the years when replacement level fertility would be reached, and hence of eventual stationary population size, are speculative. They should not be regarded as predictions. They are included to provide a summary indication of the long-run implications of recent trends, on the basis of highly stylized assumptions. In particular, no account is taken of the

effects that countries' future income growth might have on their fertility rates. Countries have been ascribed certain fertility and mortality characteristics on the basis of their present income levels, but if, for example, a country with low per capita GNP at present achieved rapid income growth over the projection period, its fertility rate would probably decline more rapidly than projected here.

• In a *stationary population* the birth rate is equal to the death rate. The population does not grow and its age structure remains constant.

The *net reproduction rate* (NRR) indicates the number of daughters that a newborn girl will bear during her lifetime, assuming fixed age-specific fertility rates and a fixed set of mortality rates. The NRR thus measures the extent to which a *cohort of newborn girls will reproduce themselves* under given schedules of fertility and mortality rates.

A *net reproduction rate of 1* indicates that fertility is at replacement level: at this rate child-bearing women, on average, bear only enough daughters to replace themselves in the population. A population will continue to grow after replacement level fertility has been reached, because its past higher birth rates will have produced an age distribution with a relatively high proportion of people currently in, or still to enter, the reproductive ages. This results in more births than deaths until the population changes to the older age distribution intrinsic in the low birth rate. The time taken for a country's population to become stationary after reaching replacement level fertility thus depends on its particular age structure and previous fertility patterns.

To estimate the stationary population size, the projected characteristics of the population in the year 2000 were taken as base. It was assumed that fertility rates would decline continuously until replacement level (NRR=1) was reached, after which the total fertility rate would remain at that level. The year in which replacement level fertility would be reached was first calculated from the fertility rate in the year 2000 of the country in question, and its income level.

In several industrialized countries, fertility is at present below replacement level. Since a population will not become stationary if its net reproduction rate is other than one, to make estimates of the hypothetical stationary population in these countries it was necessary to assume that their fertility rates would regain replacement levels. For the sake of consistency with the estimates made for other countries, the total fertility rates in these industrialized countries

were assumed to increase to replacement level by the years 2000-05, and then remain constant.

The hypothetical stationary population size was projected starting from the year where NRR = 1. Using life expectancy at birth, the mean age of child bearing, the sex ratio at birth, and Model Life Tables appropriate to the country in question, the total fertility rate was estimated for five-year intervals up until the year in which female life expectancy at birth reached 77.5 years. For intermediate years, total fertility rates were obtained by interpolating between the value in year 2000 and that in the year in which NRR=1.

According to the projections, the world population would increase to an ultimate size of about 10 billion within about 200 years, an increase of about 250 percent over the present level of 4 billion.

#### **Table 17: Health-Related Indicators**

*Life expectancy at birth* is an annual average figure for those born in the five-year period ended in 1975. The measure indicates the number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth. Data are from the UN Population Division.

The *infant and child mortality rates* are annual rates calculated by the UN Population Division. The infant mortality rate does not include stillbirths. The child mortality rate is generally considered a reasonable indicator of the extent of malnutrition among children. The data refer to a variety of years, generally not more than three years' distant from those quoted.

The estimates of *population per physician and per nursing person* are derived from World Health Organization (WHO) data. Nursing persons include graduate, practical, and assistant nurses. Both because country definitions of nursing personnel vary, and because the data shown are for years other than (though generally not more than three years' distant from) those specified, the data are not strictly comparable between countries.

The *percentage of total population with access to safe water*, estimated by WHO, is the proportion of people with reasonable access to safe water supplies, defined to include treated surface water or untreated but uncontaminated water such as that obtained from boreholes, springs, and sanitary wells.

#### **Table 18: Education**

The data in this table refer to a variety of years, generally not more than three years' distant from those quoted.

Estimates of total (and female) *enrollment in primary school*, of students of all ages, are expressed as percentages of the total (or total female) population of primary school age, to give "gross primary enrollment ratios." Although primary school age is generally considered to be 6 to 11 years, countries' educational systems vary. These differences between countries in the ages and duration of schooling are reflected in the ratios given. For countries with universal primary education, the gross enrollment ratios may exceed 100 percent since some pupils may be below or above the official primary school age.

The *gross secondary enrollment ratios* are

calculated in the same manner. Both primary and secondary enrollment ratios have been obtained from the UN Educational, Scientific and Cultural Organization (Unesco) *1976 Yearbook*.

The data on *numbers enrolled in higher education as a percentage of the population aged 20-24* are from Unesco. The minimum condition of entry to higher education is the successful completion of education at the second level, or proof of equivalent knowledge or experience.

The *adult literacy rate* is the percentage of population aged 15 and over able to read and write. These rates are based on Unesco and World Bank estimates.