

TECHNICAL NOTES

Introduction

A set of brief notes on the basic concepts and methods underlying the indicators reported in the regional tables are reproduced below. These notes, while not exhaustive, are designed to guide users. They are taken mostly from the Reference Manual currently used by the Development Indicators and Policy Research Division (ERDI). ERDI follows the international standard definitions that have been established by the following organizations: FAO on land use and agriculture production; ILO on labor force and employment; IMF on money and banking, balance of payments, international reserves and exchange rates; United Nations on national accounts, population and other social statistics; and the World Bank on external indebtedness.

Data on direction of trade contained in most country tables are based on data shown in the *Direction of Trade Statistics* (DOTS) yearbooks and CD-Roms of the IMF, which in turn are reported by the respective countries. However, such data may not be fully consistent with those reported by their trading partners. Data on Germany in the Direction of Trade refer to those of the former Federal Republic of Germany through June 1990. As from July 1990, data cover the area of united Germany.

Readers interested in obtaining further information and detail are encouraged to refer to both national data sources and publications and to international guidelines and manuals that set out methods, concepts and the classifications.

Country Classification

The DMCs are grouped in the regional tables according to the newly-organized regional departments of ADB, namely:

- **East and Central Asia:** East Asia — Hong Kong, China; People's Republic of China; Republic of Korea; and Taipei, China; Central Asia — Azerbaijan, Kazakhstan,

Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan

- **Mekong:** Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam
- **Pacific:** Cook Islands, Federated States of Micronesia, Fiji Islands, Kiribati, Marshall Islands, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu
- **South Asia:** Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka
- **Southeast Asia:** Indonesia, Malaysia, Philippines, and Singapore

Definitions and Concepts

POVERTY

Population in Poverty (%) refers to percentage of the population whose income/consumption falls below the national poverty line.

Population Living on \$1 a Day (%) refers to the percentage of the population whose income/consumption is below one US\$ per person per day measured at 1985 purchasing power.

Income Ratio of Highest 20% to Lowest 20% is the income share that accrues to the highest fifth income earner divided by the share of the lowest fifth income bracket.

Gini Coefficient measures the degree to which an economy's income distribution diverges from perfect equal distribution. A value of zero implies perfect equality while a value of one implies perfect inequality.

Human Development Index is a composite index, as compiled by UNDP, of longevity (as measured by life expectancy at birth), knowledge (as measured by adult literacy rate and combined enrollment ratio), and decent standard of living (as measured by the adjusted per capita income in PPP US\$).

EDUCATION

Gross Primary and Secondary School Enrollment Ratios (%) are calculated by dividing the total number of pupils enrolled at this level, regardless of age, by the population which, according to national regulations, should be enrolled at this level.

Ratio of Girls to Boys in Primary and Secondary Education is the combined primary and secondary gross enrollment ratio for girls as a percentage of the combined primary and secondary gross enrollment ratio for boys.

Adult Literacy Rate (%) refers to the percentage of adult population, 15 years old and over, who are able to read and write. For Taipei, China; however, the reference age is 25 years and over.

HEALTH AND NUTRITION

Daily Per Capita Protein Supply (grams) and Daily Per Capita Calorie Supply (calories) requires the estimation of total food supply by summing total production and quantity imported, and adjusting for any change in stocks from the beginning to the end of the year or period. Part of this total available supply is used as feed, seed, exported, put to industrial and other non-food uses or lost during storage and transportation, with the remainder as the food supplies available for human consumption. The latter quantity (by individual food items), is divided by the population size to obtain per capita estimates which are finally expressed in terms of nutrient elements by applying appropriate food composition factors.

Child Malnutrition (% of under age 5) refers to the percentage of the children population under 5 years of age whose weight for their age are more than two standard deviations below the median of the international reference population.

Population with Access to Safe Water (%) is the share of the population with reasonable access to an adequate amount of safe water (including treated surface water and untreated but uncontaminated water such as from springs, sanitary wells, and protected boreholes). In urban areas, the source may be a public fountain or

stand-post located no more than 200 meters away. In rural areas, the definition implies that members of the household do not have to spend a disproportionate part of the day fetching water.

Population with Access to Sanitation (%) is the percentage of the population with access to adequate and properly maintained human waste disposal facilities.

MORTALITY AND REPRODUCTIVE HEALTH

Life Expectancy at Birth (years) is the average number of years of life remaining from birth, which is normally estimated separately for the sexes. Its estimation requires construction of a "life table" which is a summary presentation of the experience of a "cohort" (e.g., a generation of females) over its period of life, in respect of its passage from one state to another.

Infant Mortality Rate (per 1,000 live births) is the number of deaths (excluding fetal deaths) between birth and age one year during the specified year per 1,000 live births within the same year.

Total Fertility Rate (births per woman) refers to the number of births per woman supposing she lives all throughout her childbearing years.

Maternal Mortality Ratio (per 100,000 live births) counts the number of women who do not survive pregnancy and childbirth complications per 100,000 live births.

Contraceptive Prevalence Rate (% of married woman 15-49 years) is the percentage of married women in the 15-49 years age bracket practicing any form of contraception. Also includes women whose partner is engaged in contraception method.

Births Attended by Skilled Health Staff (%) refers to the number of deliveries supervised by a trained health staff (from pregnancy to delivery and care of the newly-born) as a percentage of the total number of births in the same period.

ENVIRONMENT

Forest Area (% of land area) is the land area with tree crown cover (at least 10% for developing countries and more than about 20% for

developed economies) including natural forest and forest plantations.

Annual Rate of Deforestation (%) refers to the permanent conversion of natural forest area to other uses, including shifting cultivation, permanent agriculture, ranching, settlements, and infrastructure development.

National Protected Areas (as % of land area) are areas at least 1,000 hectares taken as national parks, monuments, nature reserves or wildlife sanctuaries, protected landscapes, and seascapes with limited access by the public.

GDP Per Unit of Energy Use refers to GDP per kilogram of oil equivalent of commercial energy use in 1995 US\$. Commercial energy is defined as energy obtained from the organized energy supply industries; it includes any energy form sold in the course of commerce or provided by a public utility. It covers the following energy forms: solid fuels (e.g., coal), liquids (e.g., crude petroleum, natural gas liquids and petroleum products), gas (e.g., natural gas), and electricity (e.g., hydro, nuclear, and geo-thermal power). This ratio provides a measure of energy efficiency.

Carbon Dioxide Emissions (per capita metric tons) measures emissions of carbon dioxide from industrial processes and land use change. It is the ratio of metric tons of carbon dioxide emission from industrial processes and land from use change, including industrial contributions to the carbon dioxide flux from solid fuels, liquid fuels, gas fuels, gas flowing, cement manufacture, deforestation, and the total population.

LAND USE

Total Area (1,000 sq km) comprises the land area of the country including areas under inland water bodies (major rivers and lakes).

Land Area is the total area excluding areas under inland water bodies.

Arable Land refers to cultivated land that includes all types of registered and unregistered land, including reclaimed riverbed, reclaimed tidal land, slope-land, and virgin land, which have been used for farming purposes. It is land under temporary crops (double cropped areas are

counted only once), temporary meadows for mowing or pasture, land under market or kitchen gardens, and land temporarily fallow or lying idle.

Permanent Cropland is land planted to perennial crops that need not be replanted after each harvest. Examples are coconut, banana, coffee, and rubber plantations.

Cropped Land is the land used for agriculture. It is the total of arable land and land under permanent crops. Cropped land can be subdivided further into cropped land irrigated and cropped land non-irrigated.

AGRICULTURE PRODUCTION

Per Capita Cereal Production refers to all cereals — including wheat, paddy rice, barley, maize, millet, and sorghum — divided by total population. Cereal data refer to the calendar year in which the whole harvest or bulk of harvest took place.

Per Capita Coconut Production refers to total coconut production divided by total population.

Per Capita Maize Production refers to total maize production divided by total population.

Per Capita Paddy Production refers to total rice paddy production divided by total population.

POPULATION AND EMPLOYMENT

Total Population series are midyear *de facto* population estimates. *De facto* population includes all persons physically present in the country during the census day. This should include, for example, foreign military and diplomatic personnel and their accompanying household members and transient foreign visitors in the country or in harbors.

Age Distribution (as % of total population) divides the total population into age categories namely: 0-14, 15-64, 65, and above. The frequency count for each age category is divided by the total population.

Economically Active Population (EAP) comprises the total labor force. It is further divided into employed and unemployed.

Unemployment Rate (%) is the ratio of unemployed persons over the total labor force.

NATIONAL ACCOUNTS

The current methodology for computing the national accounts is contained in the international standards embodied in the 1993 *System of National Accounts* (SNA). However, many countries have yet to adopt this latest system and continue to compile their national accounts in accordance with the methods contained in the 1968 version of the SNA. The transition economies, during the period prior to the abandonment of central planning, compiled their national accounts in accordance with the methods and concepts prescribed in the Material Product System (MPS). The MPS differed from the SNA in a number of ways, more particularly by excluding a large number of services considered “non-productive”. The transition countries have in recent years endeavored to implement the SNA.

Gross Domestic Product (GDP) is the sum of the gross value added by all resident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Transfer payments are excluded from the calculation of GDP. Value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC) revision 3. Thus **Agriculture** corresponds to ISIC divisions 1-5 and includes forestry and fishing, **Industry** comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas (ISIC divisions 10-45), **Manufacturing** refers to industries belonging to divisions 15-37, and **Services** correspond to ISIC divisions 50-99.

Data on GDP estimates converted through purchasing power parities (PPP) under the International Comparison Program (ICP) coordinated by the United Nations are not shown in this publication, mainly because of the lack of continuous series and more current data for many of the Bank’s DMCs.

Expenditure on GDP is made up of private (or household) consumption expenditure, general government consumption expenditure, gross fixed capital formation (private and public investment), changes in inventories, and net exports (exports minus imports) of goods and services. Such expenditures are generally recorded in purchaser prices and so include net indirect taxes.

Private Consumption is the market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased or received as income in kind by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings. It also includes payments and fees to governments to obtain permits and licenses. The expenditures of nonprofit institutions are also recorded as the consumption of households. In practice, private consumption may include any statistical discrepancy in the use of resources relative to the supply of resources.

General Government Consumption includes all current outlays on purchases of goods and services (including wages and salaries). It also includes most expenditure on national defense and security, but excludes government military expenditures that are part of public investment.

Gross Fixed Capital Formation covers outlays on additions to the fixed assets of the economy. Fixed assets include land improvements; plant, machinery, and equipment, and the construction of roads, railways, and the like, including commercial and industrial buildings, offices, schools, hospitals, and private residential dwellings. Net acquisitions of valuables are also considered capital formation.

Increase in Stocks refers to goods held by firms to meet temporary or unexpected fluctuations in production or sales represent assets. Changes reflect investment/disinvestments.

Net Exports and Imports of Goods and Services represent the value of all goods and other market services provided to or received from the rest of the world. Included is the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as

communication, construction, financial, information, business, personal, and government services. Labor and property income (formerly called factor services) is also included, plus statistical discrepancy.

Gross Domestic Savings are calculated as the difference between GDP and total consumption, made up of private household consumption and general government consumption.

Gross Capital Formation is gross fixed capital formation plus increase in stocks.

Resource Gap is the difference between gross capital formation and gross domestic savings.

Per Capita GNP (US\$) as published in the *World Bank Atlas*, are intended to show current prices GNP expressed in US dollars for inter-country comparison about aggregate income level. The computation of per capita GNP involves taking the GNP at constant prices in the respective DMCs' national currencies and shifting this to a moving three-year base period. The shifted constant price GNP is deflated with the weighted harmonic average exchange rate for the same base period to get GNP at constant prices, expressed in US dollars. The weight used for this purpose is the total GNP at current prices corresponding to each year of the base period. The resulting constant prices GNP in US dollars is further inflated with the US implicit price deflator (which has beforehand undergone similar shifting to base period measure) to obtain GNP expressed in current (US dollars) prices. To arrive at per capita GNP, the total GNP obtained above is divided by the corresponding mid-year population estimate. The exercise of using a three-year base period is meant to soften the impact of short-term price and exchange rate fluctuations.

GOVERNMENT FINANCE

Total Revenue includes current and capital revenues. Current revenue is the revenue accruing from taxes, as well as all current non-tax revenues except transfers received from other (foreign or domestic) governments and international institutions. Major items of non-tax revenue include receipts from government enterprises,

rents and royalties, fees and fines, forfeits, private donations, and repayments of loans properly defined as components of net lending. Capital revenue constitutes the proceeds from the sale of non-financial capital assets.

Total Expenditure is the sum of current and capital expenditures. Current expenditure comprises purchases of goods and services by the central government, transfers to non-central government units and to households, subsidies to producers, interest on public debt. Capital expenditure, on the other hand, covers outlays for the acquisition or construction of capital assets and for the purchase of land and intangible assets, as well as capital transfers to domestic and foreign recipients. Loans and advances for capital purposes are also included.

Fiscal Balance (Surplus/ Deficit) is the difference between total revenue and total expenditure. This provides a picture of the overall financial position of the government. When the difference is positive, then the fiscal position is in surplus, otherwise, it is in deficit.

Health, Education, and Housing and Community Amenities refers to government expenditures for health services, education, housing, and community amenities.

MONEY SUPPLY

Narrow Money (M1) relates to the liability of the monetary system in currency and demand deposits to the domestic private sector. Currency refers to currency in circulation which is obtained by deducting from currency issue the inactive cash held in the vaults of the central bank, government and commercial banking system. Deposit money means deposits unrestrictedly exchangeable on demand into currency at par and without penalty.

Quasi-Money consists of time and savings deposits and foreign currency deposits of residents held in deposit money banks.

Broad Money (M2) is the total of M1 and Quasi-money. It represents the liabilities of the monetary system.

PRICE INDEXES

Inflation Rate is the rate of increase of the level of prices (measured by the Consumer Price Index) during a given period.

Consumer Price Index (CPI) or cost of living index measures change over time in the cost of a typical basket of goods and services purchased by a chosen group of consumers. The price data of the different goods and services included in the CPI are normally weighted in proportion to the relative importance of each item to total consumption expenditure.

BALANCE OF PAYMENTS

Merchandise Exports/ Imports covers all movable goods, with a few specified exceptions, the ownership of which changes between a resident and a foreigner. For export, it represents the value of the goods and related distributive services at the customs frontier of the exporting economy, i.e., the f.o.b. value. Merchandise imports, on the other hand, are reported in c.i.f. (cost plus insurance plus freight) values. Adjustments in terms of coverage of goods, time of recording, and valuation are made to bring the customs figures in line with BOP concepts.

Total Trade is the sum of exports and imports of goods and services, calculated as a share of GNP.

Trade Balance is the difference between exports and imports of goods and services.

Current Account Balance refers to the balance on goods, services, and income or that balance plus either private unrequited transfers or all unrequited transfers. The balance on goods, services, and income alone measures the net transfer of real resources between an economy and the rest of the world.

Foreign Direct Investment covers all capital transactions between investment enterprises and the direct investors themselves or any of those investors' other direct investment enterprises. The sub-classification of investment abroad and in the reporting economy into equity capital, reinvestment of earnings, other long-term

capital, and short-term capital should not be seen as contradicting the basic premise that the behavior of direct investment flows reflects a lasting interest on the part of the direct investor.

Portfolio Investment covers investment in long-term bonds and corporate equities other than "direct investment" and "reserves".

INTERNATIONAL RESERVES

Total Reserves is the total holdings by monetary authorities (central banks, currency boards, exchange stabilization funds, and treasuries to the extent that they perform similar functions) of Gold, Special Drawing Rights (SDRs), Reserve Positions in the IMF, and Foreign Exchange. For purposes of comparability, the regional table on international reserves value gold holdings at London market prices, unless otherwise specified. However, the country table record gold at national valuation. SDRs are unconditional international reserve assets created by the IMF whereas reserve positions are unconditional assets arising from countries' reserve assets subscriptions to the IMF, from the Fund's use of members' currencies, and from Fund borrowings. Foreign exchange is defined as monetary authorities' claims on foreigners in the form of bank deposits, treasury bills, short and long-term government securities, and other claims usable in the event of a balance of payments deficit, including non-marketable claims arising from inter-central bank and inter-governmental arrangements, without regard to whether the claim is denominated in the currency of the debtor or the creditor.

Ratio of International Reserves to Imports (months) is the international reserves outstanding at the end of the year as percentage of imports from the balance of payments during the year, where imports are expressed in terms of the monthly average.

DEBT INDICATORS

Total External Debt consists of public and publicly guaranteed long-term debt, private non-

guaranteed long-term debt, estimated short-term debt, and use of IMF credit. It also includes interest arrears on long-term debt whenever available.

Total Debt Service refers to principal and interest payments in the year specified on total long-term debt, IMF repurchases and charges, and interest on short-term debt.

Concessional Debt is defined as loans with an original grant element of 25 percent or more. The grant equivalent of a loan is its commitment (present) value less the discounted present value of its contractual debt service.

Concessional Debt/Long-term Debt refers to the ratio of long-term concessional debt to total long-term debt.

FINANCIAL FLOWS

Official Flows refer to net flows of long-term public and publicly-guaranteed debt from official creditors and grants, including technical cooperation grants.

Net Private Flows refer to the sum of net foreign direct investment, portfolio equity flows, net flows of long-term public and publicly guaranteed

debt from private creditors, and net flows of total private non-guaranteed debt.

Aggregate Net Resource Flows refer to the sum of net official and private capital flows. Net flow is disbursements less principal repayments.

INFORMATION AND COMMUNICATION TECHNOLOGY

Internet Users are people with access to the worldwide network.

Internet Rate refers to the internet service provider charge associated with 30 off-peak hours of dial-up internet access per month. It is the monthly internet subscription rate plus extra charges once free hours have been used up.

Main Telephone Lines refers to telephone line connecting the subscriber's terminal equipment to the public switched network and which has a dedicated port in the telephone exchange equipment.

Total Estimated PCs is the estimated number of personal computers in use in the country.