

TABLE 56: List of countries

Developed regions			
North America	Asia and Oceania	Europe	European Union ¹
Bermuda	Australia	Albania	Austria
Canada	Israel	Andorra	Belgium
United States of America	Japan	Austria	Bulgaria
Greenland	New Zealand	Belarus	Cyprus ²
Saint Pierre and Miquelon		Belgium	Czech Republic
		Bosnia and Herzegovina	Denmark
		Bulgaria	Estonia
		Croatia	Finland
		Czech Republic	France
		Denmark	Germany
		Estonia	Greece
		Faroe Islands	Hungary
		Finland	Ireland
		France	Italy
		Germany	Latvia
		Gibraltar	Lithuania
		Greece	Luxembourg
		Holy See	Malta
		Hungary	Netherlands
		Iceland	Poland
		Ireland	Portugal
		Italy	Romania
		Latvia	Slovakia
		Liechtenstein	Slovenia
		Lithuania	Spain
		Luxembourg	Sweden
		Malta	United Kingdom
		Monaco	
		Montenegro	
		Netherlands	
		Norway	
		Poland	
		Portugal	
		Republic of Moldova	
		Romania	
		Russian Federation	
		San Marino	
		Serbia ³	
		Slovakia	
		Slovenia	
		Spain	
		Sweden	
		Switzerland	
		The former Yugoslav Republic of Macedonia	
		Ukraine	
		United Kingdom	

¹The European Union is treated as a group (EU27) and forms the geographical aggregate for Europe excluding Cyprus.

²Situated in West Asia, excluded from the Europe aggregate

³Kosovo is not considered to be a part of Serbia in World Bank sourced data.

Developing regions							
Africa		Asia					
North Africa	Sub-Saharan Africa	Central Asia	East Asia	South Asia	West Asia	Latin America and Caribbean	Oceania
Algeria	Angola	Kazakhstan	Brunei Darussalam	Afghanistan	Armenia	Antigua and Barbuda	Fiji
Egypt	Benin	Kyrgyzstan	Cambodia	Bangladesh	Azerbaijan	Argentina	French Polynesia
Libyan Arab Jamahiriya	Botswana	Tajikistan	China ⁴	Bhutan	Bahrain	Bahamas	Kiribati
Morocco	Burkina Faso	Turkmenistan	Indonesia	India	Cyprus	Barbados	New Caledonia
Tunisia	Burundi	Uzbekistan	Democratic People's Republic of Korea	Iran (Islamic Republic of)	Gaza Strip (Palestine)	Belize	Papua New Guinea
Western Sahara	Cameroon		Republic of Korea	Maldives	Georgia	Bolivia (Plurinational State of)	Samoa
	Cape Verde		Lao People's Democratic Republic	Nepal	Iraq	Brazil	Solomon Islands
	Central African Republic		Malaysia	Pakistan	Jordan	Chile	Tonga
	Chad		Mongolia	Sri Lanka	Kuwait	Colombia	Vanuatu
	Comoros		Myanmar		Lebanon	Costa Rica	American Samoa
	Congo		Philippines		Occupied Palestinian Territory ⁵	Cuba	Cook Islands
	Côte d'Ivoire		Singapore		Saudi Arabia	Dominica	Guam
	Democratic Republic of the Congo		Thailand		Syrian Arab Republic	Dominican Republic	Marshall Islands
	Djibouti		Timor-Leste		Turkey	Ecuador	Micronesia (Federated States of)
	Equatorial Guinea		Viet Nam		United Arab Emirates	El Salvador	Nauru
	Eritrea				West Bank	French Guiana	Niue
	Ethiopia				Yemen	Grenada	Northern Mariana Islands
	Gabon				Oman	Guatemala	Palau
	Gambia				Qatar	Guyana	Tokelau
	Ghana					Haiti	Tuvalu
	Guinea					Honduras	Wallis and Futuna Islands
	Guinea-Bissau					Jamaica	
	Kenya					Mexico	
	Lesotho					Netherlands Antilles	
	Liberia					Nicaragua	
	Madagascar					Panama	
	Malawi					Paraguay	
	Mali					Peru	
	Mauritania					Saint Kitts and Nevis	
	Mauritius					Saint Lucia	
	Mayotte					Saint Vincent and the Grenadines	
	Mozambique					Suriname	
	Namibia					Trinidad and Tobago	
	Niger					Uruguay	
	Nigeria					Venezuela (Bolivarian Republic of)	
	Réunion					Anguilla	
	Rwanda					Aruba	
	Saint Helena					British Virgin Islands	
	Sao Tome and Principe					Cayman Islands	
	Senegal					Falkland Islands (Malvinas)	
	Seychelles					Guadeloupe	
	Sierra Leone					Martinique	
	Somalia					Montserrat	
	Sudan ⁶					Puerto Rico	
	South Africa					Turks and Caicos Islands	
	Swaziland					United States Virgin Islands	
	United Republic of Tanzania						
	Togo						
	Uganda						
	Zambia						
	Zimbabwe						

⁴includes China, mainland; China, Hong Kong SAR; China, Macao SAR; and China, Taiwan Province of. The composition of China in World Bank sourced data is: China, mainland; and China, Taiwan Province of.

⁵Excludes West Bank and Gaza Strip.

⁶Includes South Sudan owing to a lack of data availability.

Concepts and methods

Agricultural production indices

The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 1999-2001. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed. All the indices at the country, regional and world levels are calculated by the Laspeyres formula. Production quantities of each commodity are weighted by 1999-2001 average international commodity prices and summed for each year. To obtain the index, the aggregate for a given year is divided by the average aggregate for the base period 1999-2001. Since the FAO indices are based on the concept of agriculture as a single enterprise, amounts of seed and feed are subtracted from the production data to avoid double counting, once in the production data and once with the crops or livestock produced from them. Deductions for seed (in the case of eggs, for hatching) and for livestock and poultry feed apply to both domestically produced and imported commodities. They cover only primary agricultural products destined to animal feed (e.g. maize, potatoes, milk, etc.). Processed and semi-processed feed items such as bran, oilcakes, meals and molasses have been completely excluded from the calculations at all stages. It should be noted that when calculating indices of agricultural, food and non-food production, all intermediate primary inputs of agricultural origin are deducted. However, for indices of any other commodity group, only inputs originating from within the same group are deducted; thus, only seed is removed from the group "crops" and from all crop subgroups, such as cereals, oil crops, etc.; and both feed and seed originating from within the livestock sector (e.g. milk feed, hatching eggs) are removed from the group "livestock products". For the main two livestock subgroups, namely, meat and milk, only feed originating from the respective subgroup is removed. Indices which take into account deductions for feed and seed are referred to as "net". Indices calculated without any deductions for feed and seed are referred to as "gross". The "international commodity prices" are used in order to avoid the use of exchange rates for obtaining continental and world aggregates, and also to improve and facilitate international comparative analysis of productivity at the national level. These "international prices", expressed in so-called "international dollars", are derived using a Geary-Khamis formula for the agricultural sector. This method assigns a single "price" to each commodity. For example, one metric ton of wheat has the same price regardless of the country where it was produced. The currency unit in which the prices are expressed has no influence on the indices published. The commodities covered in the computation of indices of agricultural

production are all crops and livestock products originating in each country. Practically all products are covered, with the main exception of fodder crops. The category of food production includes commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities because, although edible, they have practically no nutritive value. Prices applied to meat in reality represent the prices of animals for slaughtering in terms of live weight. For example, if the price of one metric ton (1000 kg) of pigs alive is 825 dollars and the ratio meat to live weight is 75 to 100, the price applicable to 750 kg of pig meat will be 825 dollars, corresponding to 1100 dollars per metric tons. The indices are calculated from production data presented on a calendar year basis. The FAO indices may differ from those produced by the countries themselves because of differences in concepts of production, coverage, weights, time reference of data and methods of calculation.

Area harvested

Data refer to the area from which a crop is gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. It is usually net for temporary crops and some times gross for permanent crops. Net area differs from gross area insofar as the latter includes uncultivated patches, footpaths, ditches, headlands, shoulders, shelterbelts, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. On the contrary, area harvested will be recorded only once in the case of successive gathering of the crop during the year from the same standing crops. With regard to mixed and associated crops, the area sown relating to each crop should be reported separately. When the mixture refers to particular crops, generally grains, it is recommended to treat the mixture as if it were a single crop; therefore, area sown is recorded only for the crop reported.

Capital stock in agriculture and investment in agriculture

The estimate of capital stock in agriculture refers to a value that is attached to the total physical capital capacity available for repeated use in the production of other goods, in existence at specific point in time in the economy of agriculture sector. The estimates of investment in agriculture have indirectly been derived by the FAO Statistics Division using physical data on livestock, tractors, irrigated land and land under permanent crops etc., and the average prices for the year 1995. These data enabled the derivation of the capital stock in agriculture which is the gross, and the annual change in the latter is taken to reflect investment in agriculture.

CIF

Cost-Insurance-Freight. CIF-trade values include the transaction value of the goods, the value of services performed to deliver goods to the border of the exporting

country and the value of the services performed to deliver the goods from the border of the exporting country to the border of the importing country. Import values are mostly reported as CIF.

Crop area

Crop area is a surface of land on which a crop is grown. In general, the area measured for cadastral purposes includes, in addition to the area cultivated, headlands, ditches and other non-cultivated areas. Such an area can be called gross area as against the net area which includes only the portion of the gross area actually cultivated. For various reasons, e.g. natural calamities or economic considerations, certain areas planted or sown with a given crop are not harvested or are harvested before the crop reaches maturity. Hence the need for the concept of area to be sub-divided into sown or planted area and harvested area. Sown area data are necessary to estimate quantities used for seeding purposes; harvested area, to provide reliable and accurate yield and production data. A peculiarity of permanent crops is that number of trees or plants is reported in addition to or, instead of, the area planted. This is particularly so as regards plants growing outside of compact plantations, which are either interplanted with other crops or are scattered. Both area and number of trees are also divided into productive or bearing and non-productive or non-bearing areas or trees. In most cases, non-bearing refers to young plants that are not yet bearing.

Crop production

Crop production data refer to the actual harvested production from the field or orchard and gardens, excluding harvesting and threshing losses and that part of crop not harvested for any reason. Production therefore includes the quantities of the commodity sold in the market (marketed production) and the quantities consumed or used by the producers (auto-consumption). When the production data available refers to a production period falling into two successive calendar years and it is not possible to allocate the relative production to each of them, it is usual to refer production data to that year into which the bulk of the production falls. Crop production data are recorded in tonnes (t). In many countries, crop production data are obtained as a function of the estimated yield and the total area. If such a compilation method of production statistics is enforced by the country, it must be ensured that the total area does not refer to sown or planted area, which would give then the "biological production", but to the actually harvested area during the year.

Crop yield

Harvested production per unit of harvested area for crop products. In most of the cases yield data are not recorded but obtained by dividing the production data by the data on area harvested. Data on yields of permanent crops are not as reliable as those for temporary crops either because most of the area information may correspond to

planted area, as for grapes, or because of the scarcity and unreliability of the area figures reported by the countries, as for example for cocoa and coffee.

Domestic supply

Production + imports - exports + changes in stocks (decrease or increase) = supply for domestic utilization. There are various ways of defining supply and, in fact, various concepts are in use. The elements involved are production, imports, exports and changes in stocks (increase or decrease). There is no doubt that production, imports and stock changes (either decrease or increase in stocks) are genuine supply elements.

Feed

Data refer to the quantity of the commodity in question available for feeding to the livestock and poultry during the reference period, whether domestically produced or imported.

FOB

Free-On-Board. FOB-trade values include the transaction value of the goods and the value of services performed to deliver goods to the border of the exporting country. Export values are mostly reported as FOB.

Food

Data refer to the total amount of the commodity available as human food during the reference period. Data include the commodity in question, as well as any commodity derived there from as a result of further processing. Food from maize, for example, comprises the amount of maize, maize meal and any other products derived there from available for human consumption. Food from milk relates to the amounts of milk as such, as well as the fresh milk equivalent of dairy products.

Food Balance Sheets

Food Balance Sheets (FBS) are compiled every year by FAO, mainly with country-level data on the production and trade of food commodities. Using these data and the available information on seed rates, waste coefficients, stock changes and types of utilization (feed, food, processing and other utilization), a supply/utilization account is prepared for each commodity in weight terms. The food component of the commodity account, which is usually derived as a balancing item, refers to the total amount of the commodity available for human consumption during the year. Besides commodity-by-commodity information, the FAO FBS also provide total food availability estimates by aggregating the food component of all commodities including fishery products. From these values and the available population estimates, the per person dietary energy and protein and fat supplies are derived and expressed on a daily basis. In the FBS production data refer only to primary products while data for

all other elements also include processed products derived there from, expressed in primary commodity equivalent.

Food insecurity

A situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. It may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level. Food insecurity, poor conditions of health and sanitation, and inappropriate care and feeding practices are the major causes of poor nutritional status. Food insecurity may be chronic, seasonal or transitory.

Food production

For primary commodities, production relates to the total domestic production whether inside or outside the agricultural sector, i.e. including non-commercial production and production in kitchen gardens. Unless otherwise indicated, production is reported at the farm level for primary crops (i.e. excluding harvesting losses for crops) and livestock items and in terms of live weight (i.e. the actual ex-water weight of the catch at the time of capture) for primary fish items. Production of processed commodities relates to the total output of the commodity at the manufacture level (i.e. it comprises output from domestic and imported raw materials of originating products). Reporting units are chosen accordingly, e.g. cereals are reported in terms of grains and paddy rice. As a general rule, all data on meat are expressed in terms of carcass weight. Usually the data on production relate to that which takes place during the reference period. However, production of certain crops may relate to the harvest of the year preceding the utilization period if harvesting takes place late in the year. In such instances, the production of a given year largely moves into consumption in the subsequent year. In the Food Balance Sheets a distinction is made between "output" and "input". The production of primary as well as of derived products is reported under "output". For derived commodities, the amounts of the originating commodity that are required for obtaining the output of the derived product are indicated under "input", and are expressed in terms of the originating commodity. The various factors used, i.e. milling rates, extraction rates, conversion or processing factors, carcass weights, milk yield, egg weights etc., should indicate the average national rate at which these commodities are generally converted.

Food security

A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Growth rates

Growth rates are calculated by the geometric formula:

$$100 \times ((x_t/x_0)^{1/(t-0)} - 1)$$

Harvested production

Excludes harvesting losses and production not harvested for various reasons. Harvested production is one of the three main concepts of production (and yield) used by countries when reporting to FAO.

Import dependency ratio

Import dependency ratio (IDR) is defined as: $IDR = \text{imports} \times 100 / (\text{production} + \text{imports} - \text{exports})$. The complement of this ratio to 100 would represent that part of the domestic food supply that has been produced in the country itself. However, there is a caveat to be kept in mind: these ratios hold only if imports are mainly used for domestic utilization and are not re-exported.

Kilocalorie (kcal)

Unit of measurement of dietary energy. It should be noted that in accordance to International System of Units, energy is measured in joules, J, but the customary usage of thermochemical energy units of kilocalories (kcal) is mostly used. $1 \text{ kcal} = 4.184 \text{ kJ}$.

Land use

In agricultural statistics refers to land classification according to the agricultural holders' concepts of use, i.e. arable land, pastures etc.

Livestock

Animals such as cattle and sheep which are kept on the holding or otherwise for agricultural production.

Minimum dietary energy requirement

In a specified age and sex group, the amount of dietary energy per person is that considered adequate to meet the energy needs for minimum acceptable weight for attained-height maintaining a healthy life and carrying out a light physical activity. In the entire population, the minimum energy requirement is the weighted average of the minimum energy requirements of the different age and sex groups in the population.

Poverty

According to the United Nations, poverty is defined as a lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion. It is also characterised by lack of participation in decision-making

and in civil, social and cultural life. It occurs in all countries: as mass poverty in many developing countries, pockets of poverty amid wealth in developed countries, loss of livelihoods as a result of economic recession, sudden poverty as a result of disaster or conflict, the poverty of low-wage workers, and the utter destitution of people who fall outside family support systems, social institutions and safety nets. According to the World Bank, poverty is a pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life.

Prevalence of overnourished in total population

Proportion of the population in a condition of overnourishment.

Prevalence of undernourishment

Proportion of the population in a condition of undernourishment. Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity.

Primary crops

Primary crops are those which come directly from the land and without having undergone any real processing, apart from cleaning. They maintain all the biological qualities they had when they were still on the plants. Certain primary crops can be aggregated, with their actual weight, into totals offering meaningful figures on area, yield, production and utilization; for example, cereals, roots and tubers, nuts, vegetables and fruits. Other primary crops can be aggregated only in terms of one or the other component common to all of them. For example, primary crops of the oil-bearing group can be aggregated in terms of oil or oil cake equivalent. Primary crops are divided into temporary and permanent crops. Temporary crops are those which are both sown and harvested during the same agricultural year, sometimes more than once; permanent crops are sown or planted once and not replanted after each annual harvest.

Production

Figures relate to the total domestic production whether inside or outside the agricultural sector, i.e. it includes non-commercial production and production from kitchen gardens. Unless otherwise indicated, production is reported at the farm level for crop and livestock products (i.e. in the case of crops, excluding harvesting losses) and in terms of live weight for fish items (i.e. the actual ex-water weight at the time of the catch). All data

shown relate to total meat production from both commercial and farm slaughter. Data are expressed in terms of dressed carcass weight, excluding offal and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight.

Production - Livestock primary

Livestock primary products include products from live and slaughtered animals. Products from slaughtered animals include meat, offals, raw fats, fresh hides and skins. Products from live animals include milk, eggs, honey, beeswax and fibres of animal origin. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids, respectively; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight. Cow milk production relates to total production of whole fresh milk, excluding the milk sucked by young animals but including amounts fed to livestock. The concept of production of buffalo, sheep and goat milk is the same as for cow milk; however, the coverage is probably less adequate. Egg production covers all domestic birds which have contributed to egg production during the year, wherever they lay and the corresponding total production, including eggs intended to be used for hatching but excluding waste on farms.

Seed

Data include the amounts of the commodity in question set aside for sowing or planting (or generally for reproduction purposes, e.g. sugar cane planted, potatoes for seed, eggs for hatching and fish for bait, whether domestically produced or imported) during the reference period. Account is taken of double or successive sowing or planting whenever it occurs. The data of seed include also, when it is the case, the quantities necessary for sowing or planting the area relating to crops harvested green for fodder or for food (e.g. green peas, green beans, maize for forage) Data for seed element are stored in tonnes (t). Whenever official data were not available, seed figures have been estimated either as a percentage of supply (e.g. eggs for hatching) or by multiplying a seed rate with the area under the crop of the subsequent year.

Self-sufficiency ratio

The self-sufficiency ratio (SSR) is defined as: $SSR = \frac{\text{production} \times 100}{\text{production} + \text{imports} - \text{exports}}$. The SSR can be calculated for individual commodities, groups of commodities of similar nutritional values and, after appropriate conversion of the commodity equations, also for the aggregate of all commodities. In the context of

food security, the SSR is often taken to indicate the extent to which a country relies on its own production resources, i.e. the higher the ratio the greater the self-sufficiency. While the SSR can be the appropriate tool when assessing the supply situation for individual commodities, a certain degree of caution should be observed when looking at the overall food situation. In the case, however, where a large part of a country's production of one commodity, e.g. other cereals, is exported, the SSR may be very high but the country may still have to rely heavily on imports of food commodities to feed the population. The self-sufficiency rate (as defined above) cannot be the complement to 100 of the import dependency rate, or vice-versa.

Shock

An unexpected or unpredictable event that affects livelihoods

Undernourishment

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity. The number of undernourished people refers to those in this condition.

Variability

The extent to which data in a series or a statistical distribution diverge from the average value

Volatility

Volatility represents the directionless variability of an economic variable, i.e. the dispersion of that variable within a given time horizon. For example, high (low) price volatility is described by situations when prices fluctuate significantly (little) over a short time period in either direction. The following formula is used to measure volatility

$$\sigma = \sqrt{\sum_{i=1}^n [r_t - \mu]^2 / n - 1}$$

where σ is the standard deviation, r_t are the logarithmic changes

Waste

Amount of the commodity in question lost through wastage (waste) during the year at all stages between the level at which production is recorded and the household, i.e. storage and transportation. Losses occurring before and during harvest are excluded. Waste from both edible and inedible parts of the commodity occurring in the household is also excluded. Quantities lost during the transformation of primary commodities into processed products are taken into account in the assessment of respective extraction/conversion rates. Distribution wastes tend to be considerable in countries with

hot humid climate, difficult transportation and inadequate storage or processing facilities. This applies to the more perishable foodstuffs, and especially to those which have to be transported or stored for a long time in a tropical climate. Waste is often estimated as a fixed percentage of availability, the latter being defined as production plus imports plus stock withdrawals.

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