Food and Agriculture Organization of the United Nations

Data Structure, Concepts and Definitions common to FAOSTAT and CountrySTAT framework

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1. Introduction

The implementation of CountrySTAT framework takes into account the existing national system of food and agricultural statistics. The framework is based on FAO data standard structure, concepts and definitions used in FAOSTAT and it considers countries specific data needs. It is essential that this data be fitted into a comprehensive framework that:

- generates harmonized information using international concepts, definitions and classification for comparison and aggregation purposes and presents the information in a standard data structure
- facilitates data exchange between national and international levels (in particular with FAOSTAT) in order to reduce countries data reporting burden
- presents country specific data with corresponding metadata at decentralized and disaggregated level.

The aim of this document is to define the guidelines to facilitate data harmonization and integration at country level by using international definitions and concepts common to FAOSTAT and CountrySTAT. It provides a standard data structure for presenting information.

2. Data Structure

The CountrySTAT framework organizes data into the following main areas:

a) The "National Core" area presents data per year at national level, corresponding to the concepts, definitions and other standard metadata by FAO.

The Core area takes into account data requirements for compiling satellite accounts for agricultural at national level. These data requirements relate to production of commodities, their trade and prices, use of land, farm machinery, fertilizers and pesticides, fisheries, food availability for consumption, population, labor force and forest production.

b) The "Sub-National" area includes the same categories as the Core with disaggregated data at sub-national level.

Data can be disseminated per Geographical Area (Administrative levels), Local Products (a description of local product and its main category is required) and time (Year and/or Month).

c) The "Thematic Modules" area includes some complex modules and relevant indicators for the national statistics (for example: FBS= Food Balance Sheet, SUA= Supply Utilization Accounts, Food Security, etc.). This is a variable area and can be expanded /shrunk according to country needs.
d) The “National Institutions” area includes data coming from single national institutions as required by the country.

e) The “International Partners” area includes data coming from other international organizations, associations, etc. relevant to the country.

f) The “All tables” area contains all tables together, that have been disseminated in all main mentioned categories.
### 3. List of Major Agricultural Domains and Selected Statistics - Indicators

The data harmonization with the FAO standards defines the main categories where national and sub-national data are disseminated and creates a succinct common structure that facilitates the data comparability.

The domains with the required essential indicators to be published are as follows:

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<th>Statistics/Indicators</th>
<th>Links to commodities and Resources sub-categories</th>
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<tr>
<td><strong>Production</strong></td>
<td>Production quantity of Primary Crops&lt;br&gt;Area Harvested&lt;br&gt;Area Sown&lt;br&gt;Seed&lt;br&gt;Feed&lt;br&gt;Production of Selected Processed Crops&lt;br&gt;Number of Live Animals&lt;br&gt;Number of female animals&lt;br&gt;Slaughtered Animals&lt;br&gt;Production of Meat&lt;br&gt;Milking animals&lt;br&gt;Production of milk&lt;br&gt;Laying animals&lt;br&gt;Production of Hen Eggs and Other Eggs&lt;br&gt;Other Livestock products</td>
<td>Crops Commodities&lt;br&gt;Selected Processed Crops&lt;br&gt;Primary Livestock Products</td>
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<tr>
<td><strong>Trade</strong></td>
<td>Import Value of Crops and livestock products&lt;br&gt;Export Value of Crops and livestock products&lt;br&gt;Re-export Value of Crops and livestock products&lt;br&gt;Import Value of Live Animals&lt;br&gt;Export Value of Live Animals&lt;br&gt;Re-export Value of Live Animals&lt;br&gt;Import Quantity of Crops and livestock products&lt;br&gt;Export Quantity of Crops and livestock products&lt;br&gt;Import Quantity of Live Animals&lt;br&gt;Export Quantity of Live Animals&lt;br&gt;Re-export Quantity of Crops and livestock products&lt;br&gt;Re-export Quantity of Live Animals</td>
<td>-</td>
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<tr>
<td><strong>Population</strong></td>
<td>Total population&lt;br&gt;Males&lt;br&gt;Females&lt;br&gt;Rural population&lt;br&gt;Urban population&lt;br&gt;Agricultural population&lt;br&gt;Non-agricultural population</td>
<td>-</td>
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<tr>
<td><strong>Food Availability</strong></td>
<td>Food supply quantity (metric tonnes)&lt;br&gt;Food supply quantity (kg/capita/yr)&lt;br&gt;Food supply (kg/capita/yr)&lt;br&gt;Food supply (kcal/capita/day)&lt;br&gt;Protein supply quantity (g/capita/day)&lt;br&gt;Fat supply quantity (g/capita/day)</td>
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<tr>
<td><strong>Labor</strong></td>
<td>Total economically active population&lt;br&gt;Male economically active population&lt;br&gt;Female economically active population&lt;br&gt;Total economically active population in Agriculture&lt;br&gt;Male economically active population in Agriculture&lt;br&gt;Female economically active population in Agriculture</td>
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<tr>
<td><strong>Land Use and Irrigation</strong></td>
<td>Area - Land Use&lt;br&gt;Purchase of Land&lt;br&gt;Rent of Land&lt;br&gt;Irrigation Charges</td>
<td>Land and Irrigation Categories</td>
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3.1 Production (1)

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.
### Indicators and Definitions

<table>
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<th>Indicator</th>
<th>Definition</th>
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<tr>
<td><strong>Production quantity of Primary Crops</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>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. 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. It is recommended to report primarily production in terms of harvested production, and when this is not possible indicate clearly the concept adopted in reporting production (and yield) figures.</td>
</tr>
<tr>
<td><strong>Area Harvested</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>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. Area harvested is reported in hectares (Ha).</td>
</tr>
<tr>
<td><strong>Area Sown</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>It refers to the area on which sowing or planting has been carried out, for the crop under consideration, on the soil prepared for that purpose. The area is usually reported net of uncultivated patches, footpaths, ditches, headlands, shoulders, shelterbelts, etc. For tree crops, the gross concept may be applied. With regard to mixed and associated crops, countries are requested to report the area sown for each crop separately. When the mixture refers to particular crops, generally grains, it is recommended to treat the mixture as if it were a single crop. Data are recorded in hectares (ha). The information on area sown allows for a particular application of the SUA system where the quantity allotted for next year’s sowing, which enters the account of this year, is calculated as a seeding rate times the area sown of the next year.</td>
</tr>
<tr>
<td><strong>Seed</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Feed</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>Data refer to the quantity of the commodity in question available for feeding to the livestock and poultry during the reference period. Feed data are reported in tonnes (t).</td>
</tr>
<tr>
<td>Indicators</td>
<td>Definitions</td>
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<tr>
<td><strong>Production of Selected processed Crops</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>Processed products of vegetal origin. Their parent products are found in the group 'Primary crops'. Production corresponds to the total output obtained from the processing of the input commodity in question (primary crops) during the calendar year. The quantity includes the output of home processing and of manufacturing industries and traditional processing. Data refer to total net production excluding processing losses, i.e. ex-factory or ex-establishment weight. As with the production of primary crops, it may occur that most of the output is obtained at the end of the calendar year and will be utilized during the following year. Olives picked towards the end of the year are immediately crushed after to avoid spoilage. Olive oil output therefore cannot enter the consumption during the same year. In these cases allocations to and from stocks (in the subsequent years) are made. 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. Data are reported in tonnes (t).</td>
</tr>
<tr>
<td><strong>Number of Live Animals</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>This variable indicates the number of animals of the species present in the country at the time of enumeration. It includes animals raised either for draft purposes or for meat, eggs and dairy production or kept for breeding. Live animals in captivity for fur or skin such as foxes, minks etc. are not included in the system although fur skin trade is reported. The enumeration to be chosen, when more than one survey is taken, is the closest to the beginning of the calendar year. Livestock data are reported in number of heads (units) except for poultry, rabbits and other rodents which are reported in thousand units. For FAO, figures for the year N relate to animals enumerated by the country any day between October of the year N-1 and September of the year N. The statistics are related to the total stock and the number of female animals.</td>
</tr>
<tr>
<td><strong>Slaughtered Head</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>Figures relate to the number of animals slaughtered within national boundaries, irrespective of their origin. Data are reported in number of heads (units) except for poultry, rabbits which are reported in thousand units ('000).</td>
</tr>
<tr>
<td><strong>Production of meat</strong>&lt;sup&gt;(15)&lt;/sup&gt;</td>
<td>Data relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e., excluding offal 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. Data are reported in tonnes (t).</td>
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<tr>
<td><strong>Milking Animals</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>Milking animals are those which in the course of the reference period have been milked. This concept is in relation to one applied for production of milk which excludes the milk sucked by the young animals. If, for example, the whole milk of a cow is sucked by the calf, the cow is not considered to be a &quot;milking animal&quot;. Data are reported in number of heads (units).</td>
</tr>
<tr>
<td><strong>Milk Production</strong>&lt;sup&gt;(13)&lt;/sup&gt;</td>
<td>Milk production figures refer to the Net Production (Milk actually milked - milk sucked by young animals + the amount of milk fed to livestock). They should be reported in terms of whole milk and in weight rather than in capacity measures. Data are reported in tonnes (t).</td>
</tr>
<tr>
<td><strong>Laying Animals</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>Covers the number ('000) of 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. Some countries have no statistics on egg production, and estimates had to be derived from such related data as chicken or total poultry numbers and reported or assumed rates of egg laying.</td>
</tr>
<tr>
<td><strong>Eggs Production</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>Egg production refers to the total production of eggs in the shell, and covers also eggs intended to be used for hatching but excludes waste on farms. Production data should be reported both in thousands and weight.</td>
</tr>
<tr>
<td><strong>Other Livestock Products</strong>&lt;sup&gt;(14)&lt;/sup&gt;</td>
<td>The others primary livestock products from live animals include honey, beeswax and fibres of animal origin. Production data are reported in tonnes (t).</td>
</tr>
</tbody>
</table>

Sources:
(1) FAO Statistics Division - FAOSTAT glossary
(4) FAO Statistics Division - The ICS Manual
(14) FAO Statistics Division - FAOSTAT Production Questionnaire
3.1.1 Crop Groups

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. (Source: FAO Statistics Division - FAOSTAT glossary)

- **CEREALS**
  Generally the germanous family is limited to crops harvested for the dry grain only, excluding, therefore, crops harvested green for forage, silage, grazing, etc.
  - **Wheat:** Two main types: 1) Common; 2) Durum. FAO has only one item (Wheat all); Data for Spelt should be included in the wheat figures.
  - **Rice, Paddy:** grain after threshing and winnowing. Also, it is known as rice in the husk or rough rice, it is used mainly for human consumption.
  - **Maize** is limited to crop harvested for the dry grain only, excluding crop harvested green for food (Green Maize, which is considered as "Vegetable Crop"). and Maize harvested green for Forage and Silage (which is considered as "Fodder Crop"). White Maize used mainly for food is included in Maize. "Cereals, nes" includes all other cereals not elsewhere specified (n.e.s) in this group.

- **ROOTS AND TUBERS**
  Production data should be reported in terms of clean weight, i.e. free of earth and mud.
  - **Cassava:** Bitter and sweet cassava should be reported in one single figure, in fresh weight including young and old cassava.
  "Roots and Tubers, nes" includes all other roots and tubers not elsewhere specified (n.e.s) in this group.

- **SUGAR CROPS**
  There are two main sugar crops: Sugar Cane and Sugar Beet. Their production relate to the stage when they are sent to the sugar factories to be processed into Sugar, i.e. normally free of earth/mud, tops and leaves. "Sugar Crops, nes" includes all other sugar crops not elsewhere specified (n.e.s) in this group.

- **PULSES**
**Pulses** are limited to crops harvested for the dry grain only excluding, therefore, crops harvested green for food (green peas, green beans etc.) which are considered Vegetable crops, and also those used mainly for the extraction of oil (Soyabeans, etc.). Similarly, also excluded from the group are those leguminous crops, such as Alfalfa, Clover etc. whose seeds are used exclusively for sowing purposes. Production data should be reported in terms of dry clean weight, excluding the pods.

"Pulses, nes" includes all other pulses not elsewhere specified (n.e.s) in this group.

- **NUTS** (3):
  Production data relate to the weight of the nuts in the shell or in the husks, but without the outer husk. Only nuts used mainly as dessert or table nuts are included. Nuts mainly used for flavouring beverages are excluded as well as nuts used mainly for the extraction of oil or butter: Coconuts, Oil-Palm nuts, Karite nuts, Tung nuts, etc. are included in oil crops. Nuts, nes includes all other nuts not elsewhere specified (n.e.s) in this group.

- **OIL CROPS** (3):
  Oil crops include both annual and perennial plants whose seeds, fruits or mesocarp and nuts are valued mainly for the edible or industrial oils that are extracted from them. **Oilseeds** are limited to crops harvested for the dry seed only, excluding those harvested green, or used for grazing and green manure. There are some oilseed crops which are also fibre crops, i.e. from the same plant both the seeds and fibres are harvested. These crops are Cotton (lint and seed), Flax, Hemp etc. Production data for most fibre and seed crops are reported separately; the exception is Cotton, where fibre (lint) and seed production is reported together. Production data are reported in terms of dry/mature products as they are marketed, except Groundnuts which are to be reported in terms of groundnuts in the shell and Coconuts in terms of the weight of the whole nut including the woody shell, the meat and water or milk but excluding the fibrous outer husk (coir)."Oilseeds, nes" includes all other oil crops not elsewhere specified (n.e.s) in this group.

- **VEGETABLES** (3):
  Production data should cover only those vegetables which are cultivated exclusively for human food. Crops cultivated both as field crops and garden crops in the open or under glass should be reported together. Certain gramineous and leguminous plants are classified among Cereals and Pulses if they are harvested for the dry grain. Vegetables that are harvested green for the green grains and/or for the green pods (green maize, green peas, green beans, string beans, etc.) should be included in the group. Production data for these commodities should include the weight of the pods even though they are not eaten. Vegetables grown principally for animal feed should be excluded from this group and should be included under Fodder Crops. Cabbages include Brussels Sprouts, Green Kale and Sprouting Broccoli. Cauliflowers include Heading Broccoli. The Vegetables group includes Melons and Water-melon.
  "Vegetables, nes" includes all other vegetables not elsewhere specified (n.e.s) in this group.

- **FRUIT** (3):
Production data of fruit crops relate to fruits actually harvested. Banana relates to that used as "Fruit/dessert" while that all others are included into "Plantains". Data on Bananas and Plantains relate to the weight of single Bananas and Plantains, excluding, therefore the weight of the central stalk of bunches.

Nuts, Olives, Coconuts, Melons and Watermelons are not included as fruit crops. "Fruit, nes" includes all other fruits not elsewhere specified (n.e.s) in this group.

- **STIMULANTS** (3):
  Stimulants are crops containing alkaloids, caffeine, theine, theobromine, etc. The most important are: Coffee green (considered as primary crop at the stage when the beans are dried, clean and cured), Cocoa beans (production figures should refer to the fermented and dried beans) and Tea (the primary crop consists of the tender leaves, withered, rolled, fermented and dried; production data should refer to Tea elaborated).

- **SPICES** (3):
  Production data of spices should be reported in terms of ripe, dried/powdered products to make them roughly comparable with trade figures. "Spices, nes" includes all other spices not elsewhere specified (n.e.s) in this group.

- **FORAGE PRODUCTS** (3):
  Fodder crops are given to animals as green feed. For Alfalfa, Clover, etc., it should be specified, in the notes, if their production refers to dry or green weight.

- **TOBACCO** (3):
  Production data should relate to farm sales weight of not manufactured dry tobacco leaves.

- **NATURAL RUBBER** (3):
  For FAO, the "primary product" relates to the latex, concentrated, stabilized and dried.

- **FIBERS, VEGETAL OR ANIMAL ORIGIN** (3):
  This group includes certain fiber crops of vegetal origin yield also seeds for sowing purposes and for processing into oil and cakes; Cotton production data should include in one single figure fiber and seed; Flax production data should be given in terms of scutched and hacked fiber, and should include Tow. Wool greasy are natural fibers taken from Sheep and Lambs including fleece-washed wool, shorn wool and pulled/slipped wool. They are not carded or combed.

**Selected Processed Crops**

- **SUGAR, RAW, CENTRIFUGAL** (3):
  It includes Cane sugar, Beet sugar and Sugar raw, centrifugal, nes. A non-refined, crystallized material derived from the juices of the sugar crops and consisting either wholly or essentially of sucrose.

- **VEGETABLE OILS** (3):
With modern methods Oil is recovered from oil crops either by crushing and pressing, or by dissolving in a solvent (chemical process) or a combination of the two methods. Production data refers to crude oils (not refined). "Vegetable Oils, nes" includes all other vegetable oils not elsewhere specified (n.e.s) in this group.

- **CAKES** (3):
  Residue from oil extraction

- **FRUIT** (3):
  Raisins are dried grapes. It includes sultanas and currants.

- **ALCOHOLIC BEVERAGES** (3):
  Wine production data should represent the total output of fermented juice obtained from grapes crushed for wine. Wine production includes: common wine, quality wine, liqueur wine, and sparkling wine, champagne. Beer may be alcoholic or non-alcoholic that is made from fermented malted cereals (mainly barley), water and hops. Non-malted cereals may also be used. It includes beer of barley, maize, millet, sorghum, etc. Must of Grapes is grape must that has partially fermented, whether or not fermentation has been arrested, as well as unfermented grape must to which alcohol has been added.

### 3.1.2 Primary Livestock Products (1)

Primary Livestock products include products from live and slaughtered animals. Products from slaughtered animals include meat, offal, raw fats, fresh hides and skins. Products from live animals include milk, eggs, honey, beeswax and fibers 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 offal 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.

- **Livestock – Live Animals** (3):
- **Product from Slaughtered Animals** (3):
- **Products from Live Animals** (3):
3.2 Trade

The general agricultural trade system is in use when statistical territory of a country coincides with its economic territory. Consequently, under the general trade system, imports include all goods entering the economic territory of a compiling country and exports include all goods leaving the economic territory of a compiling country, including re-exports and imports into and exports from customs warehouses and free zones or ports.

The detailed food and agriculture trade data collected, processed and disseminated by FAO according to the standard International Merchandise Trade Statistics Methodology is mainly provided by the national authorities and other international organizations. The total merchandise trade value by country is annually updated according to the national publications on Balance of Payment and trade statistics and harmonized with the consolidated figures disseminated by the Inter-Agency Common Data Set (CDS) on Total Merchandise Trade Statistics by countries.

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<td>Import Quantity of Crops and livestock products and Live Animals (1)</td>
<td>The quantity of food and agricultural imports is expressed in terms of weight (tones) for all commodities except for live animals which are expressed in units (heads); poultry, rabbits, pigeons and other birds are expressed in thousand units. As a general rule, trade quantity refers to net weight, excluding any sort of container.</td>
</tr>
<tr>
<td>Export Quantity of Crops and livestock products and Live Animals (1)</td>
<td>The quantity of food and agricultural exports is expressed in terms of weight (tones) for all commodities except for live animals which are expressed in units (heads); poultry, rabbits, pigeons and other birds are expressed in thousand units. As a general rule, trade quantity refers to net weight, excluding any sort of container.</td>
</tr>
<tr>
<td>Import Value of Crops and livestock products and Live Animals (1)</td>
<td>Value of agricultural imports should be reported in national currency, US dollars or other currency. Import values are mostly reported as CIF. In the FAOSTAT database import values are expressed in thousand US dollars (or could be in local currency, reporting the US dollar exchange rate)</td>
</tr>
<tr>
<td>Export Value of Crops and livestock products and Live Animals (1)</td>
<td>Value of agricultural exports should be reported in national currency, US dollars or other currency. Export values are mostly reported as FOB. In the FAOSTAT database export values are expressed in thousand US dollars. (or could be in local currency, reporting the US dollar exchange rate)</td>
</tr>
<tr>
<td>Re-exports Value and Quantity of Crops and livestock products and Live Animals (1)</td>
<td>Re-exports refer to foreign goods exported from any part of the economic territory of a country in the same state as previously imported. The term “in the same state” is applicable to foreign goods even if they underwent minor processing which did not change their origin. The scope of re-exports is not restricted to goods flows identified as re-exports in customs records. It includes, for instance, foreign goods which are withdrawn, in the same state, from the free circulation area. Sometimes the latter category of goods is given a special name (e.g. “nationalized” goods) and is included in the outright exportation, not in re-exports. Such practice is not recommended however, since it does not correctly reflect the structure of a compiling country's total exports. Foreign goods which enter a country for temporary storage (e.g. in customs warehouses) and leave the country shortly afterwards are to be excluded from trade statistics (i.e. they are not to be treated as re-exports). In FAOSTAT the export data includes re-export data reported by country Quantity data is in metric tonnes. Values are expressed in thousand US dollars. (or could be in local currency, reporting the US dollar exchange rate)</td>
</tr>
</tbody>
</table>

Sources:
(1) FAO Statistics Division - FAOSTAT glossary
3.3 Population

Time series of population and labor force are a basic vector for the computation of several indicators, for example “per caput” levels are often used for trend analysis and inter-country comparison.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (1)</td>
<td>The total population usually refers to the present-in-area (de facto) population which includes all persons physically present within the present geographical boundaries of countries at the mid-point of the reference period. (Cod. 511)</td>
</tr>
<tr>
<td>Female population (1)</td>
<td>Refers to the present-in-area (de facto) population which includes all female persons physically present within the present geographical boundaries of countries at the mid-point of the reference period. (Cod 513)</td>
</tr>
<tr>
<td>Male population (1)</td>
<td>Refers to the present-in-area (de facto) population which includes all male persons physically present within the present geographical boundaries of countries at the mid-point of the reference period. (Cod 512)</td>
</tr>
<tr>
<td>Urban Population (1)</td>
<td>It refers to the population residing in urban areas. Usually the urban areas and hence the urban population are defined according to national census definitions which can be roughly divided into three major groups: classification of localities of a certain size as urban; classification of administrative centres of minor civil divisions as urban; and classification of centres of minor civil divisions on a chosen criterion which may include type of local government, number of inhabitants or proportion of population engaged in agriculture, as urban. (Cod. 561)</td>
</tr>
<tr>
<td>Rural Population (1)</td>
<td>It is the residual population after subtracting urban population from total population (Cod 551)</td>
</tr>
<tr>
<td>Agricultural Population (1)</td>
<td>The agricultural population is defined as all persons (the economically active as well as the non-economically active) depending for their livelihood on agriculture, hunting, fishing or forestry. This comprises the economically active population and their non-working dependents (Cod. 571)</td>
</tr>
<tr>
<td>Non-Agricultural Population (1)</td>
<td>The non-agricultural population is obtained as a residual of agricultural population from the total population (Cod. 581)</td>
</tr>
</tbody>
</table>

Sources:
(1). FAO Statistics Division - FAOSTAT glossary

3.4 Food Availability for Consumption

The data here give estimates of total and per caput food supplies available for human consumption during the reference period in terms of quantity and, by applying appropriate food composition factors for all primary and processed products, also in terms of caloric value and protein and fat content

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food supply quantity (tonnes) (1)</td>
<td>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. Per caput supplies in terms of product weight are derived from the total supplies available for human consumption (i.e. Food) by dividing the quantities of Food by the total population actually partaking of the food supplies during the reference period, i.e. the present in-area (de facto) population within the present geographical boundaries of the country. In other words, nationals living abroad during the reference period are excluded, but foreigners living in the country are included.</td>
</tr>
<tr>
<td>Food supply quantity (kg/capita/yr) (1)</td>
<td></td>
</tr>
<tr>
<td>Food supply quantity (g/capita/day) (1)</td>
<td></td>
</tr>
<tr>
<td>Food supply (kcal/capita/day) (1)</td>
<td>It refers to the total amount of food available for human consumption expressed in kilocalories (kcal). Caloric content is derived by applying the appropriate food composition factors to the quantities of the commodities and shown in million units</td>
</tr>
<tr>
<td>Protein supply quantity (g/capita/day) (1)</td>
<td>It refers to the total amount of protein available for human consumption resulting from the multiplication of the quantity of food available. Protein content is derived by applying the appropriate food composition factors to the quantities of the commodities and are expressed in grams</td>
</tr>
<tr>
<td>Fat supply quantity (g/capita/day) (1)</td>
<td>It refers to the total amount of fat available for human consumption resulting from the multiplication of the quantity of food available. Fat content is derived by applying the appropriate food composition factors to the quantities of the commodities and are expressed in grams.</td>
</tr>
</tbody>
</table>
3.5 Labor

It refers to the Labor Force that defines: all those employed (including people above a specified age who, during the reference period, were in paid employment, at work, self-employed or with a job but not at work) and unemployed (including people above a specified age who, during the reference period, were without work, currently available for work and seeking work).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total economically active population</td>
<td>This refers to the number of all employed and unemployed persons (including those seeking work for the first time). It covers employers; self-employed workers; salaried employees; wage earners; unpaid workers assisting in a family, farm or business operation; members of producers' cooperatives; and members of the armed forces. The economically active population is also called the labor force. (Cod. 591)</td>
</tr>
<tr>
<td>Economically active female population</td>
<td>This refers to the number of all employed and unemployed female persons (including those seeking work for the first time). It covers female employers; self-employed workers; salaried employees; wage earners; unpaid workers assisting in a family, farm or business operation; members of producers' cooperatives; and members of the armed forces. The economically active female population is also called the female labor force. (Cod. 593)</td>
</tr>
<tr>
<td>Economically active male population</td>
<td>This refers to the number of all employed and unemployed male persons (including those seeking work for the first time). It covers male employers; self-employed workers; salaried employees; wage earners; unpaid workers assisting in a family, farm or business operation; members of producers' cooperatives; and members of the armed forces. The economically active male population is also called the male labor force. (Cod. 592)</td>
</tr>
<tr>
<td>Economically active population in agriculture</td>
<td>Economically active population in agriculture (agricultural labor force) is that part of the economically active population engaged in or seeking work in agriculture, hunting, fishing or forestry. (Cod. 601)</td>
</tr>
<tr>
<td>Economically active female population in agriculture</td>
<td>Economically active female population in agriculture is that part of the economically active female population engaged in or seeking work in agriculture, hunting, fishing or forestry. (Cod. 603)</td>
</tr>
<tr>
<td>Economically active male population in agriculture</td>
<td>Economically active male population in agriculture is that part of the economically active male population engaged in or seeking work in agriculture, hunting, fishing or forestry. (Cod. 602)</td>
</tr>
</tbody>
</table>

Sources:
(1) FAO Statistics Division - FAOSTAT glossary

3.6 Land and Irrigation

In agricultural statistics refers to land classification according to the agricultural holders' concepts of use, i.e. arable land, pastures etc.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area - Land Use (8)</td>
<td>This data compilation attempts to bring together all available data on land use (land cover) and irrigated land throughout the world. However, limitations to data comparability may be caused by difference in the concepts and classification given in FAOSTAT and those used by reporting countries as well as the occurrence of overlap in reporting the use of the land. Whenever identified, these differences/inconsistencies are explained and quantified by adequate notes. Land use categories are:</td>
</tr>
<tr>
<td>code</td>
<td>Category</td>
</tr>
<tr>
<td>6600</td>
<td>Country area</td>
</tr>
<tr>
<td>6601</td>
<td>Land area</td>
</tr>
<tr>
<td>6610</td>
<td>Agricultural area</td>
</tr>
<tr>
<td>6671</td>
<td>Agricultural area organic, total</td>
</tr>
<tr>
<td>6672</td>
<td>Agricultural Area certified organic</td>
</tr>
<tr>
<td>6673</td>
<td>Agricultural Area in conversion to organic</td>
</tr>
<tr>
<td>6611</td>
<td>Agricultural area irrigated</td>
</tr>
<tr>
<td>6620</td>
<td>Arable land and Permanent crops</td>
</tr>
<tr>
<td>6621</td>
<td>Arable land</td>
</tr>
<tr>
<td>6674</td>
<td>Arable land organic, total</td>
</tr>
<tr>
<td>6675</td>
<td>Arable Area certified organic</td>
</tr>
<tr>
<td>6676</td>
<td>Arable Area in conversion to organic</td>
</tr>
<tr>
<td>6630</td>
<td>Temporary crops</td>
</tr>
<tr>
<td>6631</td>
<td>Temporary crops irrigated</td>
</tr>
<tr>
<td>6632</td>
<td>Temporary meadows and pastures</td>
</tr>
<tr>
<td>6633</td>
<td>Temporary meadows and pastures irrigated</td>
</tr>
<tr>
<td>6634</td>
<td>Temporary meadows and pastures</td>
</tr>
<tr>
<td>6640</td>
<td>Fallow land (temporary: less than 5 years)</td>
</tr>
<tr>
<td>6650</td>
<td>Permanent crops</td>
</tr>
<tr>
<td>6677</td>
<td>Permanent crops organic, total</td>
</tr>
<tr>
<td>6678</td>
<td>Area of permanent crops certified organic</td>
</tr>
<tr>
<td>6679</td>
<td>Area of permanent crops in conversion to organic</td>
</tr>
<tr>
<td>6651</td>
<td>Permanent crops irrigated</td>
</tr>
<tr>
<td>6655</td>
<td>Permanent meadows and pastures</td>
</tr>
<tr>
<td>6681</td>
<td>Permanent meadows and pastures organic, total</td>
</tr>
<tr>
<td>6682</td>
<td>Area of Permanent meadows and pastures certified organic</td>
</tr>
<tr>
<td>6683</td>
<td>Area of Permanent meadows and pastures in conversion to organic</td>
</tr>
<tr>
<td>6656</td>
<td>Permanent meadows and pastures - Cultivated (more than 5 years)</td>
</tr>
<tr>
<td>6657</td>
<td>Permanent meadows and pastures - Cultivated and irrigated</td>
</tr>
<tr>
<td>6659</td>
<td>Permanent meadows and pastures - Naturally grown</td>
</tr>
<tr>
<td>6661</td>
<td>Forest area</td>
</tr>
<tr>
<td>6662</td>
<td>Other wooded land</td>
</tr>
<tr>
<td>6670</td>
<td>Other land</td>
</tr>
<tr>
<td>6680</td>
<td>Inland water</td>
</tr>
<tr>
<td>6690</td>
<td>Total area equipped for irrigation</td>
</tr>
<tr>
<td>Purchase of Land Rental of Land</td>
<td>The prices of land generally refer to land used for agricultural activities such as growing crops, etc. The value of land includes leveling, terracing and other improvements, and conservation measures necessary for the proper, management of crops, but excludes increases in land value. Land price also excludes land price influenced by peri-urban land. Prices are in the category of purchase/rental for a unit of land. The unit may be specified preferably for one hectare of: (i) irrigated and (ii) non-irrigated land. Purchase and rental of land are required in local currency for the following categories:</td>
</tr>
<tr>
<td>code</td>
<td>Category</td>
</tr>
<tr>
<td>6630</td>
<td>Temporary crops</td>
</tr>
<tr>
<td>6631</td>
<td>Temporary crops Irrigated</td>
</tr>
<tr>
<td>6632</td>
<td>Temporary crops Non-irrigated</td>
</tr>
<tr>
<td>6633</td>
<td>Temporary meadows and pastures</td>
</tr>
<tr>
<td>6634</td>
<td>Temporary meadows and pastures Irrigated</td>
</tr>
<tr>
<td>6635</td>
<td>Temporary meadows and pastures Non-irrigated</td>
</tr>
<tr>
<td>6640</td>
<td>Fallow land (temporary: less than 5 years)</td>
</tr>
<tr>
<td>6650</td>
<td>Permanent crops</td>
</tr>
<tr>
<td>6651</td>
<td>Temporary meadows and pastures Irrigated</td>
</tr>
<tr>
<td>6652</td>
<td>Temporary meadows and pastures Non-irrigated</td>
</tr>
<tr>
<td>6655</td>
<td>Permanent meadows and pastures</td>
</tr>
<tr>
<td>6656</td>
<td>Permanent meadows and pastures - Cultivated (more than 5 years)</td>
</tr>
<tr>
<td>6657</td>
<td>Permanent meadows and pastures - Cultivated and irrigated</td>
</tr>
<tr>
<td>6659</td>
<td>Permanent meadows and pastures - Naturally grown</td>
</tr>
<tr>
<td>Irrigation Charges</td>
<td>Irrigation charges include overhead cost for one cubic meter of water made available for irrigation or per hectare of area irrigated. Charges are required in local currency for the following category:</td>
</tr>
<tr>
<td>code</td>
<td>Category</td>
</tr>
<tr>
<td>6611</td>
<td>Agricultural area irrigated</td>
</tr>
</tbody>
</table>
3.6.1 Land categories (1)

Land Use

- **Country area**
  Area of the country including area under inland water bodies, but excluding offshore territorial waters. Possible variations in the data may be due to updating and revisions of the country data and not necessarily to any change of area.
  \[ \text{Country Area} = \text{Land Area} + \text{Inland water} \]

- **Land area**
  Total land area excluding area under inland water bodies. The definition of inland water bodies generally includes major rivers and lakes. Possible variations in the data may be due to updating and revisions of the country data and not necessarily to any change of area.
  \[ \text{Land Area} = \text{Agricultural Area} + \text{Forest Area} + \text{Other wooded land} + \text{Other Land} \]

- **Agricultural area**
  Agricultural area refers to:
  (a) arable land - land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for arable land are not meant to indicate the amount of land that is potentially cultivable;
  (b) permanent crops - land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee and rubber; this category includes land under flowering shrubs, fruit trees, nut trees and vines, but excludes land under trees grown for wood or timber;
  (c) permanent meadows and pastures - land used permanently (five years or more) for herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land).
  \[ \text{Agricultural Area} = \text{Arable land and Permanent crops} + \text{Permanent meadows and pastures} \]

- **Agricultural area irrigated**
  It refers to the total agricultural area that is irrigated in a given year
  \[ \text{Agricultural area irrigated} = \text{Temporary crops irrigated} + \text{Temporary meadows and pastures irrigated} + \text{Permanent crops irrigated} + \text{Permanent meadows and pastures (Cultivated and irrigated)} \]

- **Arable land and Permanent crops**
  Arable and permanent crops refer to the sum of areas under "Arable land" and "Permanent crops".
  \[ \text{Arable land and Permanent crops} = \text{Arable land} + \text{Permanent crops} \]

- **Arable land**
  Arable land refers to land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included. Data for arable land is not meant to indicate the amount of land that is potentially cultivable.
  \[ \text{Arable land} = \text{Temporary crops} + \text{Temporary meadows and pastures} + \text{Fallow land (temporary: less than 5 years)} \]

- **Temporary crops**
  Temporary crops is all land used for crops with a less than one-year growing cycle and which must be newly sown or planted for further production after the harvest.

- **Temporary crops irrigated**
  Area of the "Temporary crops" which is actually irrigated in a given year.

- **Temporary crops non-irrigated**
  Area of the "Temporary crops" which production relies on rain fed irrigation in a given year.

- **Temporary meadows and pastures**
It is the land temporarily cultivated with herbaceous forage crops for mowing or pasture. A period of less than five years is used to
differentiate between temporary and permanent meadows.

- **Temporary meadows and pastures irrigated**
  Area of the "Temporary meadows and pastures", which is actually irrigated in a given year.

- **Temporary meadows and pastures non-irrigated**
  Area of the "Temporary meadows and pastures" which development relies on rain fed irrigation in a given year.

- **Fallow land (temporary: less than 5 years)**
  Fallow land (temporary) is the cultivated land that is not seeded for one or more growing seasons. The maximum idle period is usually less
  than five years.
  Land remaining fallow for two long may acquire characteristics requiring to be reclassified, such as "permanent meadows and pastures" (if
  used for grazing), "forest or wooded land" (if overgrown with trees), or "other land" (if it becomes wasteland).

- **Permanent crops**
  Permanent crops is the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee);
  land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be
  classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.

- **Permanent crops irrigated**
  Area of the "Permanent crops" which is actually irrigated in a given year.

- **Permanent crops non-irrigated**
  Area of the "Permanent crops" which production relies on rain fed irrigation in a given year.

- **Permanent meadows and pastures**
  It is the land used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or
  grazing land).
  Permanent meadows and pastures = Permanent meadows and pastures – Cultivated (more than 5 years) + Permanent meadows and
  pastures - Naturally grown

- **Permanent meadows and pastures Cultivated (more than 5 years)**
  It refers to the land under permanent meadows and pastures that is managed and cultivated. A period of more than five years is used to
  differentiate between temporary and permanent meadows.

- **Permanent meadows and pastures - Cultivated and irrigated**
  Area of the "Cultivated Permanent meadows and pastures", which is actually irrigated in a given year.

- **Permanent meadows and pastures - Cultivated non- irrigated**
  Area of the "Cultivated Permanent meadows and pastures" which development relies on rain fed irrigation in a given year

- **Permanent meadows and pastures - Naturally grown**
  The land not being controlled under permanent meadows and pastures such as wild prairie or grazing land.

- **Forest area**
  Forest area is the land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees
  able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. Forest is
determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum
height of 5 meters (m) in situ. Areas under reforestation that have not yet reached but are expected to reach a canopy cover of 10 percent
and a tree height of 5 m are included, as are temporarily unstocked areas, resulting from human intervention or natural causes, which are
expected to regenerate. Includes: areas with bamboo and palms provided that height and canopy cover criteria are met; forest roads,
firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific scientific,
historical, cultural or spiritual interest; windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 ha and width of more
than 20 m; plantations primarily used for forestry or protective purposes, such as: rubber-wood plantations and cork, oak stands. It
excludes: tree stands in agricultural production systems, for example in fruit plantations and agro forestry systems. The term also excludes
trees in urban parks and gardens.

- **Other wooded land**
  Other wooded land is the land spanning more than 0.005 km2 (0.5 hectares); with trees higher than 5 meters and a canopy cover of 5-10
percent, or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 percent. Mangroves
and forests on wetlands according to the above height and canopy should be included. It does not include land that is predominantly under agricultural or urban land use.

- **Other land**
  All other land is the land not classified as Agricultural land, Forest area and Other wooded land. It includes built-up and related land, barren land, etc.

- **Inland water**
  It is the area occupied by major rivers, lakes and reservoirs.

- **Organic land**
  Land area managed for certified organic production (organic land), land area exclusively dedicated to organic agriculture and managed by applying organic agriculture methods. It refers to the land area fully converted to organic agriculture. It is the portion of land area (including arable lands, pastures or wild areas) managed (cultivated) or wild harvested in accordance with specific organic standards or technical regulations and that has been inspected and approved by a certification body.

  Land area in process of conversion to organic land (in conversion), land area which is going through the organic conversion process, usually two years period of conversion to organic land.

- **Total area equipped for irrigation**
  Area equipped to provide water (via irrigation) to the crops. It includes areas equipped for full and partial control irrigation, equipped lowland areas, pastures, and areas equipped for spate irrigation.

Sources:
1. FAO Statistics Division - FAOSTAT glossary
2. FAO Statistics Division - FAOSTAT Resources Questionnaire

### 3.7 Machinery

This domain identifies machinery and equipment used on the holding, wholly or partly for agricultural production. The reference period is usually the census reference year. Machinery and equipment used exclusively for purposes other than agricultural production should be excluded. Machinery or equipment owned by the holder, but not used should also be excluded.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Use (9)</td>
<td>A broad concept of machinery and equipment is used for the agricultural census, covering all machinery, equipment and implements used as inputs to agricultural production. This includes everything from simple hand tools, such as a hoe, to complex machinery such as a combine harvester. However, the main interest centres on farm mechanization. Advanced countries focus on machinery such as tractors, harvesting machines and office equipment. However, less developed countries may be interested in some animal or even hand-powered items of equipment, as well as machinery. Items of machinery and equipment should be clearly described; a seeder, for example could be anything from simple manual seeding device to a complex piece of machinery.</td>
</tr>
<tr>
<td>Import Quantity (11)</td>
<td>The quantity of imported agricultural machineries is expressed in number.</td>
</tr>
<tr>
<td>Import Value (11)</td>
<td>Data refer to the value (including CIF) of the trade expressed in 1000 USD (or could be in local currency, reporting the US dollar exchange rate)</td>
</tr>
<tr>
<td>Export Quantity (11)</td>
<td>The quantity of exported agricultural machineries is expressed in number.</td>
</tr>
<tr>
<td>Export Value (11)</td>
<td>Data refer to the value (including FOB) of the trade expressed in 1000 USD (or could be in local currency, reporting the US dollar exchange rate)</td>
</tr>
</tbody>
</table>

Sources:
1. FAO Statistics Division - FAOSTAT glossary
9. Concepts and definitions of Agricultural CENSUS Items - chapter 11: theme05 par.11.184

#### 3.7.1 Agricultural Machinery items

To help identify machinery and equipment items for the agricultural census, a classification of machinery/equipment is given on the following link Classification of Machinery and equipment (appendix 6)
In Use and Trade (quantity and import data)

- **Agricultural tractors, total**
  Agricultural tractors, total generally refer to total wheel, crawler or track-laying type tractors and pedestrian tractors used in agriculture.
  (HS code 8701.10, 30, 90)

- **Balers**
  Balers (including pickup balers) are machines that collect grass, hay or straw after it has been cut. They form a round or square bale by compressing the material or tying it with twine wire, or a plastic wrap.
  (HS code: 8433.40)

- **Combine harvesters - threshers**
  Combine harvesters - threshers are self-propelled machines that collect and thresh in one operation.
  (HS code: 8433.51)

- **Manure spreaders and Fertilizer distributors**
  Manure spreaders and Fertilizers distributors are implements for spreading solid or liquid manure and distributing powder or granular fertilizers.
  (HS code: 8432.40)

- **Milking machines**
  Milking machines are used for milking cows, sheep, goats, etc.
  (HS code: 8434.10)

- **Other Agricultural tractors**
  Other agricultural tractors include all other agricultural tractors that are not pedestrian controlled or track-lying, e.g. 4-wheel, 6-wheel, etc.
  (HS code: 8701.90)

- **Pedestrian controlled tractors**
  Pedestrian controlled tractors are small tractors equipped with a single driving axle carried on one or two wheels. They are not usually fitted with a seat and the steering is effected by means of two handles. Some types, however, have a one- or two-wheeled rear carriage with a seat for the driver.
  (HS code: 8701.10)

- **Ploughs**
  Ploughs are implements designed to lift and turn soil.
  (HS code: 8432.10)

- **Root or tuber harvesting machines**
  Root or tuber harvesting machines are implements used to harvest root and tubers.
  (HS code: 8433.53)

- **Seeders**
  Seeders are implements for sowing seeds or grain evenly in well-spaced rows at specific depths.
  (HS code: 8432.30)

- **Threshing machines (staking, forage harvesting)**
  Threshing machines (staking, forage harvesting) are machines that separate grain from straw.
  (HS code: 8433.52)

- **Track-laying tractors**
  Track-laying tractors are tractors which travel on steel or rubber or treads.
  (HS code: 8701.30)

**Trade (only trade value)**
• **Harvester and threshers**  
Harvester and threshers refer to total harvesting and threshing machines as described by the Harmonized Coding System - HS codes 8433 and 8437.10

• **Milking, dairy machinery**  
Milking, dairy machinery refer to total milking and dairy machines as described by the Harmonized Coding System - HS code: 8434

• **Soil machinery**  
Soil machinery refers to total machines described by the Harmonized Coding System (HS) code 8432.

Sources:  
(5) FAO Statistics Division - FAOSTAT Classification

### 3.8 Pesticides (1)

Pesticides refers to insecticides, fungicides, herbicides, disinfectants and any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution, and processing of food, agricultural commodities, or animal feeds of which may be administered to animals for the control of ectoparasites.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
</table>
| Consumption Quantity (1) | Data refer to quantities of pesticides used in (or sold to) the agricultural sector. Figures are generally expressed in terms of active ingredients. Data are expressed in tones (t). Pesticide means any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. Pesticides consumption groups:  
• INSECTICIDES, TOTAL  
• MINERAL OILS  
• HERBICIDES, TOTAL  
• FUNGICIDES AND BACTERICIDES, TOTAL  
• FUNGICIDES - SEED TREATMENTS, TOTAL  
• INSECTICIDES - SEED TREATMENTS, TOTAL  
• PLANT GROWTH REGULATORS, TOTAL  
• RODENTICIDES, TOTAL  |
| Import Value (1)  | Data refers to the value of all types of pesticides (put up in forms or packings for retail sale or as preparations or articles), provided to (exports) or received (imported) from the rest of the world. Differences between figures given for total exports and total imports at the world level may be due to several factors, e.g. the time lag between the dispatch of goods from exporting country and their arrival in the importing country; the use of different classification of the same product by different countries; or the fact that some countries supply data on general trade while others give data on special trade. Documents Data refer to the value of the trade expressed in 1000 USD (or could be in local currency, reporting the US dollar exchange rate). Starting on 1 January 2007, it came into effect a first set of specific HS Codes for most of the pesticides listed in Annex III of the Rotterdam Convention and subject to the Prior Informed Consent, PIC, procedure. The chemicals listed in Annex III include pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons. Trade values refer to:  
• Pesticides  
• Insecticides  
• Fungicides  
• Herbicides  
• Disinfectants, etc.  
• Goods specified in Subheading Note 1 to Chapter 38 HS (Pesticides listed in Annex III of the Rotterdam Convention and subject to the Prior Informed Consent, PIC, procedure.) |
| Export Value (1) |  |
3.8.1 Pesticides commodities

Consumption Quantity (active ingredients) and FAO codes

The pesticides products refer to consumption or sales and are shown for major groups and sub-groups (including codes) below:

• 1309 INSECTICIDES, TOTAL

  1310 Chlorinated hydrocarbons
  1311 Organo-phosphates
  1312 Carbamates-insecticides
  1313 Pyrethroids
  1314 Botanical products and biologicals
  1315 Others (specify)

• 1316 MINERAL OILS

• 1320 HERBICIDES, TOTAL

  1321 Phenoxy hormone products
  1322 Triazines
  1323 Amides
  1324 Carbamates-herbicides
  1325 Dinitroanilines
  1326 Urea derivates
  1328 Sulfonil ureas
  1329 Bipiridils
  1330 Uracil
  1327 Others (specify)

• 1331 FUNGICIDES AND BACTERICIDES, TOTAL

  1332 Inorganics
  1333 Dithiocarbamates
  1334 Benimidazoles
  1335 Triazoles, diazoles
  1336 Diazines, morpholines
  1337 Others (specify)

• 1352 FUNGICIDES - SEED TREATMENTS, TOTAL

  1317 Dithiocarbamates
  1318 Benimidazoles
  1319 Triazoles, diazoles
  1338 Botanical products and biologicals
  1339 Others (specify)

• 1353 INSECTICIDES - SEED TREATMENTS, TOTAL

  1340 Organo-phosphates
  1342 Carbamates-insecticides
  1343 Pyrethroids
  1344 Others (specify)

• 1641 "PLANT GROWTH REGULATORS, TOTAL(specify)“
• 1345 RODENTICIDES, TOTAL

1346 Anti-coagulants
1348 Cyanide Generators
1349 Hypercalcaemics
1350 Narcotics
1347 Others (specify)

Trade and Harmonized system codes

As far as the Trade commodities are concerned, they are classified in Harmonized Coding System and the main groups are identified as follows:

- **Pesticides**: Value of trade as described by the Harmonized Coding System – HS02/03 code: 3808
- **Insecticides**: Value of trade as described by the Harmonized Coding System – HS02 code: 3808.10 – HS03 3808.91
- **Fungicides**: Value of trade as described by the Harmonized Coding System – HS02 code: 3808.20 – HS03 3808.92
- **Herbicides**: Value of trade as described by the Harmonized Coding System – HS02 code: 3808.30 – HS03 3808.93
- **Disinfectants, etc**: Value of trade as described by the Harmonized Coding System – HS02 code: 3808.40,90 – HS03 3808.94,99
- **Goods specified in Subheading Note 1 to HS Chapter 38**: Value of trade as described by the Harmonized Coding System – HS03 3808.50. It refers to chemicals listed in Annex III of the Rotterdam Convention and subject to the Prior Informed Consent, PIC, procedure.

Sources:
(5) FAO Statistics Division - FAOSTAT Classification

3.9 Fertilizers

Fertilizer is critical for the enhancement of agricultural productivity in the world. At the national level most government institutions and private sector agencies promote a balanced fertilization usage along with other factors related to improving soil fertility for boosting crop yield in order to reduce the level of food insecurity.

The fertilizer statistics data are classified according to the HS coding systems; they are compiled in terms of fertilizer products and then converted into nutrients. Finally total N (Nitrogen), P$_2$O$_5$ (Phosphate) and K$_2$O (Potash) are calculated for: Production, Imports, Exports, Non-fertilizer use and Consumption. The methodology is shown on FAOSTAT Resources database

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Quantity (5)</td>
<td>Production data is expressed in metric metric tonnes and the reference period is the calendar year.</td>
</tr>
<tr>
<td>Import Quantity (5)</td>
<td>Data refer to the total quantity of products imported and exported from/to the country partners.</td>
</tr>
<tr>
<td>Export Quantity (5)</td>
<td>Data are in metric metric tonnes and the reference period is the calendar year.</td>
</tr>
<tr>
<td>Non Fertilizer Use Quantity (8)</td>
<td>It is usage of all fertilizer products other than for crop production or the manufacture of other fertilizer products (including feed use). Data is expressed in metric metric tonnes and the reference period is the calendar year.</td>
</tr>
<tr>
<td>Consumption (8)</td>
<td>It is usage of fertilizers that are applied to the soil to increase crop yields Data is expressed in metric metric tonnes and the reference period is the calendar year.</td>
</tr>
</tbody>
</table>

Sources:
(5) FAO Statistics Division - FAOSTAT Classification
(8) FAO Statistics Division - FAOSTAT Resources Questionnaire
3.9.1 Fertilizers commodities

Fertilizers may be organic, inorganic or mineral. Organic fertilizers play an important role in crop production and are derived from animal, plant and compost. Mineral fertilizers are available to the farmer in solid or liquid form, and are delivered to the farm either in bulk, in bags or in pressurized containers. All fertilizers contain at least one of the major plant nutrients: nitrogen (N), phosphorus (P) and potassium (K). Based on their N, P, K contents, normally expressed in terms of N, P₂O₅ and K₂O, fertilizers can be categorized as follows.

**Straight fertilizers**

- **Ammonia, anhydrous (NH₃)**
  It is a material mostly produced by the synthetic process and at standard temperature and pressure is a gas. Fertilizer grade anhydrous ammonia contains about 82% of nitrogen.
  (HS code 2814)

- **Ammonium nitrate (NH₄NO₃)**
  It is produced by neutralizing nitric acid (HNO₃) with ammonia (NH₃). Ammonium nitrate may be in white or off-white granular or prilled form and coated with a suitable material to prevent absorption of moisture and caking in storage. Pure ammonium nitrate may have a total nitrogen content of about 35%, of which one-half is present as ammoniac nitrogen and the other half as nitrate nitrogen.
  (HS code 310230)

- **Ammonium sulphate (NH₄)₂SO₄**
  It is produced by reacting ammonia with sulphuric acid (H₂SO₄). It is produced as fine white granules or crystals and contains not less than 20.6% nitrogen in ammoniac form.
  (HS code 310221)

- **Calcium ammonium nitrate (NH₄NO₃+CaCO₃)**
  It is produced from ammonium nitrate and finely pulverized calcium carbonate (CACO₃). It contains not less than 20.5% and up to 28% of nitrogen, half of which is in the form of ammoniac nitrogen and the other half in the form of nitrate nitrogen. It is produced as white, off-white or grey granules or prills.
  (HS code 310240)

- **Urea - CO(NH₂)₂**
  It is produced from synthetic ammonia and carbon dioxide (CO₂) and contains 46% nitrogen in ammoniac form. Urea may be in granular, prilled or crystalline form.
  (HS code 310210)

- **Urea and ammonium nitrate solutions**
  They are produced from concentrated solutions of urea and ammonium nitrate by chemical or blending processes.
  (HS code 310280)

- **Superphosphate above 35%**
  It is produced by the action of sulphuric and phosphoric acids on ground phosphate rock.
  (HS code 31031010)

- **Superphosphate other**
  It is produced by the action of concentrated sulphuric acid on ground phosphate rock.
  (HS code 31031090)

- **Superphosphate**
  It is a fertilizer produced by the action of concentrated sulfuric acid on powdered phosphate rock.
  (HS code 310310)

- **Phosphate rock**
It is a natural rock containing one or more calcium phosphate minerals of sufficient purity and quantity as to permit its use directly after grinding or after chemical processing in the manufacture of commercial phosphate fertilizers.

(HS code 2510)

- **Potassium chloride (Muriate of potash)**
  It is refined from mined, low-grade naturally occurring ores as the mineral sylvite and in combination with sodium chloride as sylvinite. Potassium chloride contains from about 48 to 62% K₂O.
  (HS code 310420)

- **Potassium sulphate**
  It is a white crystalline salt and contains 48 to 52 per cent potash (K₂O). Potassium sulfate can be extracted from naturally occurring brines or by the decomposition of potassium chloride with sulfuric acid.
  (HS code 310430)

### Compound fertilizers

The term ‘compound fertilizers’ is used in connection with fertilizers which contain more than one of the major plant nutrients. Compounds are produced in both liquid and solid forms. The solid, compound fertilizers may be further divided into mixed fertilizers, produced by a physical mixing process, and complex fertilizers, of which two of the major nutrients are present as the result of a chemical reaction. Mixed fertilizers can be in the form of powder mixtures or blends - the latter consisting of two or more intermediate granular fertilizer materials of matching physical characteristics. Compounds are principally used as such for direct application to the soil for crop production but quantities of some compounds, almost exclusively Monoammonium phosphate (MAP) and Diammonium phosphate (DAP), are used for intermediate purposes along with straight materials in the production of other NP and NPK compound fertilizers.

‘Compounds’ comprise NPK, NP, PK and NK products. These are:

- **Diammonium phosphate (DAP) - (NH₄)₂HPO₄**
  It is produced by evaporating a solution of phosphoric acid with excess of ammonia.
  (HS code 310530)

- **Monoammonium phosphate (MAP) - NH₄H₂PO₄**
  It is formed when a solution of phosphoric acid is added to ammonia until the solution is distinctly acid.
  (HS code 310540)

- **Other nitrogen & phosphates compounds**
  It can be produced as the result of a chemical reaction of nitric acid on phosphate rock, with or without added ammonia and/or phosphoric and/or sulfuric acid or between sulfuric acid and ammonia. or by simple mechanical mixing or blending. Other NP compound may also include some AN grades with small amounts of phosphates.
  (HS code 310551)

- **Other nitrogen & phosphorus compounds**
  It can be produced as the result of a chemical reaction of nitric acid on phosphate rock, with or without added ammonia and/or phosphoric and/or sulfuric acid or between sulfuric acid and ammonia. or by simple mechanical mixing or blending. Other NP compound may also include some AN grades with small amounts of phosphates.
  (HS code 310559)

- **NPK complex <=10kg**
  It can be produced as the result of a chemical reaction of nitric acid on phosphate rock – the nitrophosphate route, with or without added ammonia and/or phosphoric and/or sulfuric acid or between sulfuric acid and ammonia – the ammoniation route.
  (HS code 310510)

- **NPK complex >10kg**
  It can be produced as the result of a chemical reaction of nitric acid on phosphate rock – the nitrophosphate route, with or without added ammonia and/or phosphoric and/or sulfuric acid or between sulfuric acid and ammonia – the ammoniation route.
  (HS code 310520)

- **PK compounds**
  These comprise mixtures of superphosphate or basic slag or ground phosphate rock with straight potash products. PK compounds produced as a result of a chemical reaction are not produced for fertilizer usage.
  (HS code 310560)

- **Potassium nitrate (KNONH₃H₂PO₄)**
  It can be produced from naturally occurring sodium nitrate and potassium chloride and typically contains 13% N and 45% K₂O.
**TOTALS**

- **Nitrogen (N total nutrients)**  
  (HS code 3102)

- **Phosphate (P$_2$O$_5$ total nutrients)**  
  (HS code 3103)

- **Potash (K$_2$O total nutrients)**  
  (HS code 3104)

Sources:  
(5) FAO Statistics Division - FAOSTAT Classification

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### 3.10 Prices

Producer prices are prices received by farmers for primary agricultural products as defined in the SNA 93, par. 6.205. The producer's price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any VAT, or similar deductible tax, invoiced to the purchaser. It excludes any transport charges invoiced separately by the producer.

Producer prices refer to national level average prices of individual commodities comprising all grades, kinds and varieties, received by farmers when they participate in their capacity as sellers of their own products at the farm gate or first-point-of-sale.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Producer’s Prices for Primary Crops and Livestock products</strong> $^{(1)}$</td>
<td>Prices are in local currency and they are nominal producer prices expressed in the local currency prevailing in the current year. Units are preferably in metric metric tonnes, different local units must be indicated and relative conversion factor to the MT. Prices of livestock are given in terms of live weight and of indigenous meat (carcass weight).</td>
</tr>
<tr>
<td><strong>Agricultural Producer Prices Index (PPI)</strong> $^{(12)}$</td>
<td>In constructing index numbers of prices received by farmers, prices of all the important agricultural commodities produced in a country need to be used. In terms of value of production, the commodities included should represent at least 80 per cent of the total value. The prices of these commodities should be farm-gate prices, or prices at the first points of sale converted into farm-gate prices. Monthly average prices, or prices collected once in a month, would serve the purpose. Weights may be assigned to the price relatives of the selected commodities on the basis of proportionate average values of the marketings of each commodity during the weight base period. If, however data on marketed quantities are difficult to collect values of production, or marketable surpluses may be used instead. The index is calculated with “Laspeyres” Formula</td>
</tr>
<tr>
<td><strong>Agricultural Wholesale Price Index (WPI)</strong> $^{(12)}$</td>
<td>The index is calculated with “Laspeyres” Formula, on the Wholesale prices series for agricultural products</td>
</tr>
<tr>
<td><strong>Food Consumer Price Index</strong> $^{(14)}$</td>
<td>Consumer price index is used to indicate the change in prices against a reference period of a basket of goods and services purchased by households. Based on the purpose of the CPI, different basket of goods and services can be selected. For macroeconomic purposes, a broad based basket is used to represent the relative price movement of household final consumption expenditure. The index is calculated with “Laspeyres” Formula on Food Consumer Price series for food products</td>
</tr>
</tbody>
</table>

Sources:  
(1) FAO Statistics Division - FAOSTAT glossary  
(12) FAO Statistics Division - Farm and input price : collection and compilation
3.10.1 Producer Price Products

In the compilation of Producer Price statistics definitions and concepts of commodities are related to the Produced Primary crops and livestock products definitions. However some notes have to be taken into consideration for the following products:

- **Seed cotton, cotton seed, cotton lint:**
  Prices can refer to the seed (cotton seed, code 329), the fibre (cotton lint, code 767) or the seed and the fibre together (seed cotton or unginned cotton, code 328).

- **Indigenous meat:**
  Meat from animals slaughtered during the year, of indigenous and not foreign origin.

- **Live weight:**
  It is the weight of the animal immediately before slaughter. It is necessary to specify the reference quantity and reference units, i.e. if prices are per head (please give average weight of livestock head) or per ton of live weight.

3.11 Forestry

The definition derived from the ISIC classification. This division includes the production of round wood for the forest-based manufacturing industries (ISIC divisions 16 and 17) as well as the extraction and gathering of wild growing non-wood forest products. Besides the production of timber, forestry activities result in products that undergo little processing, such as fire wood, charcoal, wood chips and roundwood used in an unprocessed form (e.g. pit-props, pulpwood etc.). These activities can be carried out in natural or planted forests.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Quantity&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>The total production of primary products is reported, even though a portion may immediately be consumed in the production of another commodity (e.g., wood pulp, which may immediately be converted into paper as part of a continuous process). An exception is made in the case of veneer production, which excludes veneer sheets used for plywood production within the country.</td>
</tr>
<tr>
<td>Import Quantity&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>Products for domestic consumption or processing shipped into the country. &quot;In-transit&quot; shipments are excluded; in certain instances, imports for re-export may be included.</td>
</tr>
<tr>
<td>Export Quantity&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>All quantities of domestic origin or manufacture shipped out of the country. As indicated above under &quot;Imports&quot;, re-exports may be included. &quot;In-transit&quot; shipments are excluded.</td>
</tr>
<tr>
<td>Import Value&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>Values (c.i.f.) of Import quantity are normally in US dollars (or could be in local currency, reporting the US dollar exchange rate).</td>
</tr>
<tr>
<td>Export Value&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>Values (f.o.b) of Export quantity are normally in US dollars (or could be in local currency, reporting the US dollar exchange rate).</td>
</tr>
</tbody>
</table>

Source:

(9) **YEARBOOK OF FOREST PRODUCTS - Data Definitions**

3.11.1 Forestry Products<sup>(10)</sup>

- **ROUNDWOOD**
- **FUELWOOD + CHARCOAL**
- **INDUSTRIAL ROUNDWOOD**
- **SAWNWOOD**
- **WOOD-BASED PANELS**
3.12 Fisheries (16)

The fisheries indicators collected through the CountrySTAT system should be considered only as summarized information about fisheries and aquaculture on production, trade, and employment. Those indicators do not constitute the full report of statistical data annually collected by FAO from National authorities.

National authorities responsible for reporting in CountrySTAT should coordinate their input with the National Authority responsible for Fishery and Aquaculture Statistics (DoF, MoF, etc.).

- Production

It includes both capture and aquaculture production of fish, crustaceans, mollusks, aquatic mammals, plants and other aquatic animals, taken for commercial, industrial, recreational and subsistence purposes from inland, brackish and marine waters.

  a) Capture

Data refer to all industrial, artisanal and subsistence fisheries, excluding aquaculture. It should also exclude data on discards.

Data are recorded like nominal catches, i.e. live weight equivalent of landings to be expressed in tones and if the “live weight” is not available the exceptions should be indicated.

The flag of the vessel performing the essential part of the operation catching the fish should be considered the paramount indication of the nationality assigned to the catch.

However, the catch of chartered vessels should be considered to be the catch of the chartering country.

For this reason it is very important to include data on nominal catches of national flag vessels landed in foreign ports. Data on nominal catches of foreign flag vessels landed in your ports should be excluded.

In view of the importance of recreational fishing for certain stocks, and the difficulty of distinguishing in many cases between recreational and subsistence fishing, and in accordance with the recommendation of the 16th Session of the CWP (Coordinating Working Party on Fishery Statistics), Madrid, Spain, 20-25 March 1995, data should include recreational catches.

Data series refer to the annual time that is the period between 1 January and 31 December.
**Indicator**

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Quantity and Value of Fish Capture</strong></td>
</tr>
<tr>
<td>• Total annual capture fish production (weight equivalent and value)</td>
</tr>
<tr>
<td>• Total annual capture inland fish production (weight equivalent and value)</td>
</tr>
<tr>
<td>• Total annual capture marine fish production (weight equivalent and value)</td>
</tr>
</tbody>
</table>

Total annual capture fish production includes total annual capture **inland** fish production and total annual capture **marine** fish production. Units are expressed for quantity in tonnes and value in US$.

The term "INLAND WATERS" may be used to refer to lakes, rivers, brooks, streams, ponds, inland canals, dams, and other land-locked (usually freshwater) waters (such as the Caspian Sea, Aral Sea, etc.). Units are expressed for quantity in tonnes and value in US$.

The term "MARINE WATERS" is intended to refer to oceans and seas including adjacent saltwater areas. It includes total annual capture marine **industrial** fish (it refers to both recreational, subsistence and commercial fishing, and the harvesting, processing, and marketing sectors) and total annual capture marine **artisanal** fish production (it refers to traditional fisheries such as fishing households. They use relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips, close to shore, mainly for local consumption. In practice, definition varies between countries, e.g. from gleaning or a one-man canoe in poor developing countries, to more than 20 m. trawlers, seiners, or long-liners in developed ones. Artisanal fisheries can be subsistence or commercial fisheries, providing for local consumption or export. Sometimes referred to as small-scale fisheries. Units are expressed for quantity in tonnes and value in US$.

The 26 major fishing areas, internationally established for fishery statistical purposes, consist of:

a) seven major inland fishing areas, covering the inland waters of the continents;

b) nineteen major marine fishing areas, covering the waters of the Atlantic, Indian, Pacific and Southern Oceans with their adjacent seas

Freshwater species are usually recorded as caught in inland waters. Small quantities of several freshwater species are caught regularly in parts of some seas with low salinities; these catches are included in the statistics of the appropriate marine area. Similarly, the catches of diadromous (anadromous and catadromous) species are shown in either the marine or inland area where caught.

b) **Aquaculture**
Aquaculture is the farming of aquatic organisms: fish, molluscs, crustaceans, aquatic plants, crocodiles, alligators, turtles, and amphibians. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. For statistical purposes, aquatic organisms which are harvested by an individual or corporate body which has owned them throughout their rearing period contribute to aquaculture, while aquatic organisms which are exploitable by the public as a common property resource, with or without appropriate licenses, are the harvest of capture fisheries.

By **freshwater** culture is understood the cultivation of aquatic organisms where the end product is raised in freshwater; earlier stages of the life cycle of these species may be spent in brackish or marine waters.

By **mariculture** is understood that the cultivation of the end product takes place in sea water; earlier stages in the life cycle of these aquatic organisms may be spent in brackishwater or freshwater.

By **brackishwater** culture is understood the cultivation of aquatic organisms where the end product is raised in brackishwater; earlier stages of the life cycle of these species may be spent in fresh or marine waters. Brackishwaters are characterized by large seasonal fluctuations in salinity. If these conditions do not exist or have no effect on cultural practices, please record production under either "Freshwater culture" or "Mariculture".

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production quantity and value of inland aquaculture</td>
<td>Data include fish from lakes, rivers, brooks, streams, ponds, inland canals, dams, and other land-locked (usually freshwater) waters (such as the Caspian Sea, Aral Sea, etc.). Units are expressed for quantity in tonnes and value in US$.</td>
</tr>
<tr>
<td>Production quantity and values of marine/brackish water aquaculture</td>
<td>Data include fish, from marine and brackish environments. The harvest from inland waters is not included. Units are expressed for quantity in tonnes and value in US$.</td>
</tr>
</tbody>
</table>

- **Trade: Exports / Imports**

Two systems of recording trade are in common use, differing mainly in the way warehoused and reexported goods are recorded: special trade and general trade.

a) **Special trade** is a system of recording imports for domestic consumption on the one hand and exports of domestic goods on the other.

   Special imports include goods for domestic consumption and withdrawals from bonded warehouses or free zones for purposes of domestic consumption.

   Special exports comprise exports of goods wholly or partially produced or manufactured in the country, together with exports of “nationalized goods”, but not of goods held in bonded warehouses or free zones.

b) **General trade** is a system which records total imports and total exports including re-exports.
General imports consist of all imports into a country, including goods for domestic consumption and imports into bonded warehouses or free zones. General exports consist of the combined total of national exports and re-exports. Re-exports, in the general trade system, consist of the outward movement of nationalized goods plus goods which, after importation, move outward from bonded warehouses or free zones without having been transformed.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total quantity and value of annual imported fish products</td>
<td>Data refers to the total imports (general and special) fish caught by foreign fishing vessels and landed in domestic ports. Units are expressed for quantity in tonnes and value in US$.</td>
</tr>
<tr>
<td>Total quantity and value of annual exported fish products</td>
<td>Data refers to the total exports (general and special) fish caught by domestic fishing vessels and landed in foreign ports. Units are expressed for quantity in tonnes and value in US$.</td>
</tr>
</tbody>
</table>

Sources:
(17) FAO Fisheries Glossary
(18) FAO Fisheries Division - Fisheries and Aquaculture Country Questionnaires
(19) FAO Fisheries Division – 2007 Fishery and Aquaculture Statistics Yearbook

### 3.13 Water

This category includes a wide information range about water resource destined also for agriculture. More detailed information by country is available on [Aquastat](http://www.fao.org/fishery/cwp/handbook/G/en) database.

Assessing the impact of irrigation on water resources requires an estimate of the water effectively withdrawal for irrigation, i.e. the volume of water extracted from rivers, lakes and aquifers for irrigation purposes. Irrigation water withdrawal normally far exceeds the consumptive use of irrigation because of water lost in its distribution from its source to the crops. The ratio between the estimated irrigation water requirements and the actual irrigation water withdrawal is often referred to as "irrigation efficiency". It is very important to get this data.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural water withdrawal as % of total water withdrawal</td>
<td>Agricultural water withdrawal as percentage of total water withdrawal. Units are in percentage. Calculation Criteria: [\text{Agricultural water withdrawal as } % \text{ of total water withdrawal} = 100 \times \frac{\text{Agricultural water withdrawal}}{\text{Total water withdrawal (summed by sector)}}]</td>
</tr>
<tr>
<td>The rainfall amount by specific area</td>
<td>Precipitation, particularly rainfall, heavily influences the agricultural activity and it has to be considered a basic agricultural resource. Its monitoring (together with other indicators) at regular intervals is needed to estimate the extent of the area available for crops cultivation and to adapt agricultural policies to climate variability and climate change. The rainfall variability significantly affects crop growth from planting to harvesting stage; this influences the economic activities of the region and the country. Consequently the rainfall variability at a time scale from years to days is as much a characteristic of climate as the total amounts recorded. Low values, however, do not necessarily lead to drought, nor is drought necessarily associated with low rainfall. Agricultural drought occurs when water supply is insufficient to cover crop or livestock water requirements. The amount of rainfall (mm) by unit area (meteorological departments, agro-ecological regions, districts or provinces) that should possibly coincide with geographical administrative level and by time (day, week, month, year) is needed.</td>
</tr>
</tbody>
</table>

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dekad, week, month, year, long-term) is the representative indicator to show this variability. In addition, at country or regional level, it is necessary to calculate the weighted average rainfall. The amount of rainfall is useful to calculate more complex indicators in the long term.

Interesting example results are shown as follows:
- Rainfall distribution at meteorological subdivision and at national level
- Rainfall map of India example

Sources:
(20) FAO Aquastat Glossary

3.14 Value Added

Agriculture corresponds to the divisions 1-5 of the International Standard Industrial Classification (ISIC, revision 3) and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Data are in current or constant US dollars.

Source:
(1) FAO Statistics Division - FAOSTAT glossary

4. Benefits to countries

Collecting and disseminating data according to the short guidelines of international standards allows a new approach towards a common language for the Agricultural Statistics.

In particular the benefits are:

1. Facilitate the input of data providing a simplified structure
2. Aggregate sub-national data by a quick match between national coding and standard international coding.
3. To leverage the existing information utilizing national expertise
4. To improve the production and dissemination of core data and establish hyper-linkages with household based data, census and administrative records.
5. To provide support for the systematic review of economic development and policies relating to agriculture and food security.
6. To help adopting appropriate economic policies and identification of issues and problems in a timely manner, so that a country can implement suitable corrective measures more quickly.