



Statistics Committee
19th Meeting
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London, United Kingdom

**Data concepts and variables used in the
statistics of the Organization**

Background

1. This document updates [SC-59/15](#) which contains the basic definitions of all data concepts and variables used in the statistics of the Organization. It serves to clarify certain misunderstandings some people may have in interpreting the basic data and concepts of the ICO statistical data series.
2. In addition, during the past few years the Organization has been asked regularly to clarify the methodology used to derive certain figures published in statistical documents, as they may differ compared to data published by other sources.

Action

The Statistics Committee is requested to review the information presented in this document prior to making its recommendation to the Council.

DATA CONCEPTS AND VARIABLES USED IN THE STATISTICS OF THE ORGANIZATION

I. Trade

Certificate of Origin: A certificate issued by the certifying agency in a Member country of the ICO to cover an export of coffee. The certificate states the country of origin of the coffee and provides information required under the relevant rules, e.g. country of destination, volume of coffee exported, type of coffee exported, etc. Voluntary information, such as the value of coffee shipments, may also be reported by countries where feasible.

Exports: Volume of coffee leaving the customs territory of a country or customs union. This typically refers to net weight.

Free port: A port where no duties are paid on goods in transit.

Imports: Volume of coffee entering the customs territory of a country or customs union. This typically refers to net weight.

Mode of shipment: Type of packaging used to enclose and/or protect coffee during transport. Typical packaging includes: Bags, Bulk, Containers, Bags in Containers or Bulk in Containers.

Net imports: Imports less exports or re-exports.

Quality standards for Export of Coffee: Target standards adopted by the ICO in [Resolution 420](#) that prescribe the maximum number of defects and moisture content for exported coffee.

Re-exports: Volume of coffee leaving the customs territory of a country or customs union that is a net importer of coffee. Re-exports typically consist of processed (roasted/soluble) coffee, but may include green coffee.

Special characteristic: Coffee is considered to have a special characteristic if it is covered by a certification/verification programme that is implemented internationally or by individual companies or can be classified as specialty/gourmet coffee.

Unit value of exports/imports/re-export: The total trade value (CIF or FOB) divided by total volume expressed in US cents/lb of green bean equivalent.

Value of exports/re-exports: The FOB value of coffee leaving the customs territory of a country or customs union.

Value of imports: The CIF value of coffee entering the customs territory of a country or customs union.

II. Supply and demand

Area under coffee: Total area planted with coffee trees in production and in formation reported in hectares.

Certified stocks: The volume of Arabica or Robusta coffee stocks that are graded by exchange-approved graders according to the specifications of the appropriate futures contract (that is, "Coffee C Futures" for Arabica and "Robusta Coffee Futures" for Robusta) and stored in exchange-approved warehouses. The exchange for the coffee futures contracts is the Intercontinental Exchange, which also maintains and publishes this data.

Crop percentage distribution: The share of the total volume of the coffee produced/harvested for each quarter of the crop year.

Disappearance: Apparent consumption that is measured by adding net imports to change in visible inventories. Whenever official data on inventories is not available, or cannot be estimated, disappearance refers simply to net imports.

Domestic consumption: The quantity of coffee used in or sold to the domestic coffee sector of coffee-producing countries and not exported.

Flowsheet: A balance sheet consisting of annual estimates of opening stocks, production, consumption and trade of coffee in producing countries.

Gross opening stocks: Existing volume of coffee held in producing countries at the beginning of the statistical/crop year that are carried over from the previous year. These are either estimates provided by countries or may be the calculated residual at the end of the previous statistical/crop year carried over as opening stocks.

Inventories: The volume of green coffee held by importers and roasters.

Per capita consumption: Is the measure of the total consumption of coffee within a country/region divided by the country/region's total population.

Production: The volume of coffee that is harvested and sold in the market, as well as the volume that is consumed or used by producers.

Roastings: Refers to the net weight of green coffee which has been roasted in a country.

World consumption: The total quantity of coffee used in (or sold to) the coffee sector within a given statistical period, typically a coffee year. It is the total of domestic consumption in producing countries, plus disappearance in net importing countries.

III. Reference/Typology

Bag: Standard measure of weight used by the ICO, equivalent to 60 kg or 132.28 lb of coffee.

Coffee year: A period of twelve months from 1 October to 30 September that is used as a basis for reporting production and consumption statistics by the ICO.

Conversion factors: Coefficients used by the ICO to convert the weights of different forms of coffee to green bean equivalent (GBE) for the purpose of standardisation in the recording, aggregation and analysis of coffee data.

The ICO uses the following conversion factors to convert different forms of coffee to GBE:

- *Dried cherry:* multiply the net weight of the cherry by 0.5.
- *Parchment:* multiply the net weight of the parchment by 0.8.
- *Decaffeinated green bean:* multiply the net weight by 1.05.
- *Roasted coffee:* multiply the net weight of the roasted coffee by 1.19.
- *Soluble coffee:* multiply the net weight of soluble coffee by 2.6.
- *Liquid coffee and other soluble preparations:* multiply the net weight of the dried coffee solids contained in the liquid coffee by 2.6.

Crop year: A period of twelve months commencing on the first day of the month in which harvesting of the coffee crop begins. Exporting countries are grouped by the ICO according to the date on which their crop year commences. The crop years currently used by the Organization commence on 1 April, 1 July and 1 October.

Exporting country: A country that is a net exporter of coffee and produces it in commercially significant quantities is classified as an exporting country by the ICO.

Form of coffee: Refers to the level of processing. Forms of coffee include dry cherry, parchment, green, roasted, ground, decaffeinated, liquid and soluble coffee.

- *Dried coffee cherry* means the dried fruit of the coffee tree.
- *Parchment coffee* means the green coffee bean contained in the parchment skin.
- *Green coffee* means all coffee in raw, unroasted bean form (i.e. from which the silver skin has been removed) before roasting.
- *Roasted coffee* means green coffee roasted to any degree and includes ground coffee.
- *Liquid coffee* means the water-soluble solids derived from roasted coffee and put into liquid form.
- *Soluble coffee* means the dried water-soluble solids derived from roasted coffee.
- *Decaffeinated coffee* means green, roasted or soluble coffee from which caffeine has been extracted.

Green bean equivalent (GBE): Refers to the equivalent amount of coffee in its green form derived by multiplying the weight of various forms of coffee with the appropriate conversion factors

Green Coffee Processing/Primary Processing: Coffee is processed to separate the green bean from the coffee cherry. This is typically done using wet or dry methods, producing washed and natural coffees respectively.

Group of Coffee: Refers to the ICO classification for grouping types of coffee with distinctive characteristics produced by net exporting countries. The following groups have been established by the ICO: Colombian Mild Arabicas, Other Mild Arabicas, Brazilian Natural Arabicas and Robustas.

Among the Arabica groups, Mild Arabicas are processed using the wet method, while Brazilian Naturals are processed using the dry method. Countries included in the Colombian Milds group are Colombia, Kenya and Tanzania. Mild Arabicas produced in all other countries are classified as Other Milds.

Harmonized System (HS): A system of classification developed by the World Customs Organization, which identifies more than 5,000 commodity groups through six-digit codes and allows countries to classify their traded merchandise using a standardized method. Participating countries are allowed to add customised codes beyond the six-digit level.

The ICO maintains trade data for the following HS Codes:

- 0901.11: Coffee, not roasted, not decaffeinated.
- 0901.12: Coffee, not roasted, decaffeinated.
- 0901.21: Coffee roasted, not decaffeinated.
- 0901.22: Coffee roasted, decaffeinated.
- 2101.11: Extracts, essences and concentrates, of coffee.
- 2101.12: Preparations with a basis of extracts, essences or concentrates of coffee, or with a basis of coffee.

Importing country: A net importer of coffee. Countries that produce coffee and are net importers, are classified as importing countries by the ICO.

Method of Processing: Refers to the technique used for primary or secondary processing of coffee. It can be dry or wet for green coffee, and freeze dried, spray dried, extract or preparation for soluble coffee.

- *Dry processed coffee* is green coffee that has been dried in the whole cherry.
- *Wet processed coffee* is green coffee whose cherry has been pulped and separated before drying.
- *Spray drying* and *freeze drying* are methods of dehydrating liquid coffee extract to prepare instant coffee.
- *Soluble preparations* refer to instant coffee mixes such as 3-in-1 coffee.
- *Soluble extracts* refer to instant coffee beverages.

Organic coffee: Coffee grown as part of an agricultural production management system that includes the composting of organic materials, mulching, shade regulation and biological pest control. It excludes the use of agro-chemicals. For the product to be marketed as organic, it must be certified as such by a third party. Certified organic coffee follows the standards set out in ISO 17065:2012.

Processed coffee: Coffee that has been processed beyond the primary level, i.e., roasted or soluble coffee.

Type of coffee: Refers to the species of coffee. The two main types of coffee traded internationally are Arabica and Robusta. Other types include Excelsa and Liberica coffees, which are also produced commercially, but in much smaller quantities.

IV. Prices

Daily prices: Prices based on prompt shipment, that is shipment within 30 calendar days from the date of contract. These prices represent various growths of coffee traded daily in selected physicals markets. The [Rules on Statistics: Indicator Prices](#) provides details on how these prices are collected and which growths and markets for which they are collected.

Group indicator prices: Represents the indicative price for the growths within a coffee group in different markets. The [Rules on Statistics: Indicator Prices](#) provides details on what growths are included in each group, and the market share of each group.

ICO composite indicator price: Is the price calculated based on the market share of exports of each group of coffee weighted in accordance with information contained in Annex I of document [ICC 105-17](#) (The weightings are revised every two years).

Prices paid to growers: The national average price paid to the grower at farmgate level, to another domestic stakeholder in the value chain, or the minimum price guaranteed by the Government to the grower. Methodologies vary across reporting countries.

Retail price: The market price paid by the end consumer to the commercial outlet.

Wholesale price: The market price paid by the intermediate consumer to the commercial distributor.

V. Process/Method/Metadata

Arabica/Robusta breakdown: The share of Arabica and Robusta coffee produced by a country.

Average of the 2nd and 3rd positions in the futures markets: The average of the futures prices of the 2nd and 3rd positions in the London (Robustas) and New York (Arabicas) markets.

Estimated imports/exports/re-exports: In the absence of data from official or alternative sources (e.g., FAO, UN Comtrade, and trade journals), the ICO estimates volume and value of coffee trade based on recent historical averages and current market information. The estimates are replaced with actual data as it becomes available. If no data is available for a particular country, the ICO uses mirror statistics – i.e., volumes and values of trade reported by partner countries – to fill the gaps.

Exchange rate: The value of exchange used to convert national currencies to US dollars. Daily exchange rates used in calculating the indicator prices are from the Financial Times. Monthly exchange rates used to convert trade values and other price data are from the IMF.

Processed coffee information (ratio by type): For countries that produce and export both Arabica and Robusta coffee, data for roasted and soluble coffee are converted into GBE and classified as Arabica and Robusta using a 50/50 ratio.

Value of exports/imports of all goods: Merchandise data as published by the IMF, UNCTAD and WTO.

LIST OF ABBREVIATIONS

CIF	Cost, Insurance and Freight
CPI	Consumer Price Index
FAO	Food and Agriculture Organization of the United Nations
FOB	Free On Board
GBE	Green Bean Equivalent
HS	Harmonized Commodity Description and Coding System
ICO	International Coffee Organization
IMF	International Monetary Fund
ISO	International Organization for Standardization
UN Comtrade	United Nations International Trade Statistics Database
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization