

# Glossary

Aquaculture	The farming of aquatic organisms including fish, molluscs, crustaceans, aquatic plants, etc. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding and protection from predators. Farming also implies individual or corporate ownership of the stock being cultivated. For statistical purposes, aquatic organisms that are harvested by an individual or corporate body that has owned them throughout their rearing period contribute to aquaculture, while aquatic organisms that are exploitable by the public as a common property resource, with or without appropriate licenses, are the harvest of capture fisheries. In this <i>Outlook</i> , data relating to aquatic plants are not included.
African Swine Fever (ASF)	ASF is a highly contagious hemorrhagic disease of pigs, warthogs, European wild boar and American wild pigs. It is not a human health threat. The organism that causes ASF is a DNA virus of the Asfarviridae family. (For more information on this topic: <a href="https://www.woah.org/en/disease/african-swine-fever/">https://www.woah.org/en/disease/african-swine-fever/</a> )
Avian Influenza (AI)	AI is a highly contagious viral infection which can affect all species of birds and can manifest itself in different ways depending mainly on the ability of the virus to cause disease (pathogenicity) on the species affected (for more information on this topic, see <a href="https://www.woah.org/en/disease/avian-influenza/">https://www.woah.org/en/disease/avian-influenza/</a> )
Baseline	The set of market projections used for the <i>Outlook</i> analysis, also used as benchmark to analyse the impact of different economic and policy scenarios. A detailed description on how this baseline was generated is provided in the methodology section
Biofuels	In the wider sense, biofuels can be defined as all solid, fluid or gaseous fuels produced from biomass. More narrowly, the term comprises fuels that replace petroleum-based road-transport fuels. Ethanol is produced from sugar crops, cereals and other starchy crops, and can be used as an additive to, in a blend with, or as a replacement of gasoline. Biodiesel is produced mostly from vegetable oils, but also from waste oils and animal fats. There are two major forms of biodiesel: fatty acid methyl esters (FAME) and hydrogenated vegetable oil (HVO).
Biomass	Biomass is defined as any plant matter used directly as fuel or converted into other forms before combustion. Included are wood, vegetal waste (including wood waste and crops used for energy production), animal materials/wastes and industrial and urban wastes, used as feedstock for producing bio-based products. In the context of the <i>Outlook</i> , it does not include agricultural commodities used in the production of biofuels (e.g. vegetable oils, sugar or grains).
Blend wall	The term blend wall refers to short run technical constraints that act as an impediment to increased biofuel use in transportation fuels.
Bt cotton	A transgenic cotton variety that contains one or more foreign genes derived from the bacterium <i>Bacillus thuringiensis</i> . Bt cotton is resistant against some insect pests, but the fibre of BT cotton plants is shorter than that of traditional varieties.
Caloric sweeteners	Defined as sucrose and high fructose syrup.
Capture fisheries	Capture fisheries refer to the hunting, collecting and gathering activities directed at removing or collecting live wild aquatic organisms (predominantly fish, molluscs and crustaceans) including plants from the oceanic, coastal or inland waters for human consumption and other purposes by hand or more usually by various types of fishing gear such as nets, lines and stationary traps. The production of capture fisheries is measured by nominal catches (in live weight basis) of fish, crustaceans, molluscs and other aquatic animals and plants, killed, caught, trapped or collected for all commercial, industrial, recreational and subsistence purposes. It should be noted that in this <i>Outlook</i> data relating to aquatic plants are not included.
Carcass Weight Equivalent (cwe)	A standard measure used to compare the weight of livestock carcasses, including bones and other components.
Cereals	Defined as wheat, maize, other coarse grains and rice (milled).

Common Agricultural Policy (CAP)	The European Union's agricultural policy, first defined in Article 39 of the Treaty of Rome signed in 1957
Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)	CPTPP is a trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Viet Nam. It was signed in March 2018 and came into force for the first six countries in December 2018.
COVID-19	COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally.
Decoupled payments	Direct payments which are not linked to current production of specific commodities or livestock numbers or the use of specific factors of production.
Developed and developing countries	See summary table for country grouping in the <i>Agricultural Outlook</i> .
Direct payments	Payments made directly by governments to producers
Domestic support	Refers to the annual level of support, expressed in monetary terms, provided to agricultural production. It is one of the three pillars of the Uruguay Round Agreement on Agriculture targeted for reduction.
<i>El Niño</i> - Southern Oscillation	<i>El Niño</i> -Southern Oscillation (ENSO) refers to periodic but irregular variations in wind and sea surface temperatures in the tropical eastern Pacific Ocean. ENSO consists of a warming phase known as <i>El Niño</i> and a cooling phase known as <i>La Niña</i> , and occurs typically at intervals of two to seven years. The abnormal warm ocean climate conditions of <i>El Niño</i> are accompanied by higher local rainfall and flooding, and massive deaths of fish and their predators (including birds).
Enteric fermentation	A natural part of the digestive process in ruminant by which carbohydrates are broken down by microorganisms into simple molecules for absorption into the bloodstream of an animal, producing methane as a by-product.
Ethanol	A biofuel that can be used as a fuel substitute (hydrous ethanol) or a fuel extender (anhydrous ethanol) in mixes with petroleum, and which is produced from agricultural feedstocks such as sugar cane and maize. Anhydrous alcohol is free of water and at least 99% pure. Hydrous alcohol contains water and usually has a purity of 96%. In Brazil, this ethanol is being used as a gasohol substitute in flex-fuel vehicles.
Export subsidies	Subsidies given to traders to cover the difference between internal market prices and world market prices, such as the EU export restitutions. The elimination of agricultural export subsidies is part of the Nairobi Package adopted at the WTO's Tenth Ministerial Conference in December 2015.
Farm Bill	In the United States, the Farm Bill is the primary agricultural and food policy tool of the federal government.
Feed Conversion Ratio (FCR)	A measure of an animal's efficiency in converting feed mass into increases in weight gained by the animal.
Fertiliser	Fertilisers provide essential nutrients for maintaining agricultural crop yields and quality, and for growth in production. The three most important nutrients are nitrogen (N), phosphorus (P), and potassium (K).
Flexible-fuel vehicles (FFVs)	Vehicles that can run on either gasohol or on hydrous ethanol.
Foot and Mouth Disease (FMD)	FMD is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals ( <a href="https://www.woah.org/en/disease/foot-and-mouth-disease/">https://www.woah.org/en/disease/foot-and-mouth-disease/</a> ). International animal trade is linked to the FMD-status according to the World Organisation for Animal Health (WOAH).
Fresh dairy products	Fresh Dairy Products contain all dairy products and milk which are not included in the processed products (butter, cheese skim milk powder, whole milk powder and for some cases casein and whey). The quantities are in cow milk equivalent.
G20	The G20 is an international forum made up of 19 countries and the European Union, representing the world's major developed and emerging economies. Together, the G20 members represent 85% of global GDP, 75% of international trade, and two-thirds of the world's population. Originally bringing together finance ministers and central bank governors, the G20 has evolved into a forum to address broader global challenges.
Gasohol	Fuel that is a mixture of gasoline and anhydrous ethanol.
High Fructose Sweetener (HFS)	Starch-based sweetener extracted mainly from maize (high fructose corn syrup or HFCS).
Inflation Reduction Act (IRA)	The Inflation Reduction Act (IRA) was signed into United States law in 2022. The IRA targets include domestic energy security, climate change and rural areas, impacting farming, biofuels and fertiliser production.
Intergovernmental Panel on Climate Change (IPCC)	The IPCC is the United Nations body for assessing the science related to climate change. In its comprehensive assessment reports, the IPCC notably examines the Agriculture, Forestry and Other Land Use (AFOLU) sector due to its significant contribution to GHG emissions, mainly carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ) and nitrous oxide (N <sub>2</sub> O). GHG emission metrics are used to

	express emissions of different greenhouse gases in a common unit, and aggregated GHG emissions are stated in CO <sub>2</sub> equivalent (CO <sub>2</sub> -eq) using the global warming potential with a time horizon of 100 years. AFOLU CO <sub>2</sub> emissions fluxes are mainly driven by land use, land-use change, and forestry (LULUCF) activities, and account for about half of total net AFOLU emissions. Enteric fermentation from ruminant animals is the main source of CH <sub>4</sub> emissions, while NO <sub>2</sub> emissions are dominated by organic and synthetic fertiliser use.
Intervention stocks	Stocks held by national intervention agencies in the European Union as a result of intervention buying of commodities subject to market price support. Intervention stocks may be released onto the internal market if internal prices exceed intervention prices.
Isoglucose	Isoglucose is a starch-based fructose sweetener, produced by the action of the glucose isomerase enzyme on dextrose. This isomerisation process can be used to produce glucose/fructose blends containing up to 42% fructose. Application of a further process can raise the fructose content to 55%. Where the fructose content is 42%, isoglucose is equivalent in sweetness to sugar.
Least squares growth rate	The least-squares growth rate, $r$ , is estimated by fitting a linear regression trend line to the logarithmic annual values of the variable in the relevant period, as follows: $\text{Ln}(x_t) = a + r \cdot t$ and is calculated as $[\exp(r) - 1]$ .
Live weight	The weight of meat, finfish and shellfish at the time of their capture or harvest. In the case of fish products it is calculated on the basis of conversion factors from landed to nominal weight and on rates prevailing among national industries for each type of processing.
Manure management	Practices involved in the handling, storage, treatment, and disposal of animal feces and urine, which can impact nutrient management, methane emissions, and the environment.
Market access	Governed by provisions of the Uruguay Round Agreement on Agriculture which refer to concessions contained in the country schedules with respect to bindings and reductions of tariffs and to other minimum import commitments.
Marketing year	It is common to compare crop production across "marketing years," which are defined so that one season's harvest is not artificially split up across different calendar years. In this <i>Outlook</i> , international marketing years are mostly defined starting with their harvest in major supply regions, as follows: <ul style="list-style-type: none"> <li>• Wheat: 1 June; 1 October in Australia</li> <li>• Cotton: 1 August</li> <li>• Maize: 1 September; 1 March in Australia</li> <li>• Other coarse grains : 1 September; 1 November in Australia</li> <li>• Sugar, soybeans, other oilseeds, protein meal, vegetable oils: 1 October; 1 November in Australia.</li> </ul> Whenever the text refers to, for example, the marketing year 2021, this is short for 2021/22 for the above commodities. For all other commodities, the marketing year is equal to the calendar year except for meat and dairy products in New Zealand and beef and dairy products in Australia: year ending June 30.
Other coarse grains	Defined as barley, oats, sorghum and other coarse grains in all countries except Australia where it includes triticale, and in the European Union where it includes rye and other mixed grains.
Other oilseeds	Defined as rapeseed (canola), sunflower seed, and groundnuts (peanuts).
Protein meals	Defined as soybean meal, groundnut meal, rapeseed meal, sunflower meal, coconut meal, cottonseed meal and palm kernel meal.
Purchasing Power Parity (PPP)	Purchasing power parities (PPPs) are the rates of currency conversion that eliminate the differences in price levels between countries. The PPPs are given in national currency units per US dollar.
Renewable Energy Directive (RED)	EU directive legislating binding mandates of 20% for the share of renewable energy in all Member States' energy mix by the year 2020, with a specific target of 10% for the renewable energy share in transport fuels.
Renewable Fuel Standard (RFS and RFS2)	A standard in the United States for renewable fuel use in the transport sector in the Energy Act (EISA). RFS2 is a revision of the RFS program for 2010 and beyond.
Roots and Tubers	Plants that yield starch, either derived from their roots (e.g. cassava, sweet potato and yams) or stems (e.g. potatoes and taro). They are destined mainly for human food (as such or in processed form) but can also be used for animal feed or for manufacturing starch, ethanol and fermented beverages. Unless they are processed, they become highly perishable once harvested, which limits opportunities for trade and storage. Roots and tubers contain large amounts of water: all quantities in this publication refer to dry weight to increase comparability.
Rumen Manipulation	Techniques used to alter the microbial ecosystem in the rumen (a compartment of the stomach in ruminants) to improve feed efficiency and reduce methane emissions.

Scenario	A model-generated set of market projections based on alternative assumptions than those used in the baseline. Used to provide quantitative information on the impact of changes in assumptions on the outlook.
Stock-to-use ratio	The stock-to-use ratio for cereals is defined as the ratio of cereal stocks to its domestic utilisation.
Stock-to-disappearance ratio	The stock-to-disappearance ratio is defined as the ratio of stocks held by the main exporters to their disappearance (i.e. domestic utilisation plus exports). For wheat, the eight major exporters are considered, namely the United States, Argentina, the European Union, Canada, Australia, Russian Federation, Ukraine, and Kazakhstan. In the case of coarse grains, United States, Argentina, the European Union, Canada, Australia, Russian Federation, Ukraine, and Brazil are considered. For rice Viet Nam, Thailand, India, Pakistan and the United States enter this ratio calculation.
Sugar	Sucrose produced from sugar beet and sugarcane
Support price	Prices fixed by government policy makers in order to determine, directly or indirectly, domestic market or producer prices. All administered price schemes set a minimum guaranteed support price or a target price for the commodity, which is maintained by associated policy measures, such as quantitative restrictions on production and imports; taxes, levies and tariffs on imports; export subsidies; and/or public stockholding
Tariff-Rate Quota (TRQ)	A two-tier tariff regime where imports within the quota enter at a lower ("in-quota") tariff rate while a higher ("out-of-quota") tariff rate is used for imports above this level. As part of the Uruguay Round Agreement on Agriculture, certain countries agreed to provide minimum import opportunities for products they had previously protected by tariffs.
Tel quel basis	Weight of sugar, regardless of its sucrose content (measured by polarisation).
United States-Mexico-Canada Agreement (USMCA)	A trilateral agreement on trade (called CUSMA in Canada), including agricultural trade, between Canada, Mexico, and the United States that entered into force on 1 July 2020. The USMCA substituted the North America Free Trade Agreement (NAFTA) which entered into force on 1 January 1994, preserving existing agriculture commitments, eliminating tariffs for certain additional products and providing new market access opportunities.
Uruguay Round Agreement on Agriculture (URAA)	An international agreement negotiated as part of the Uruguay Round of the General Agreement on Tariffs and Trade. The URAA entered into force simultaneously with the establishment of the World Trade Organization in 1995. The URAA contains commitments to improve market access, reduce distorting domestic support, and reduce export subsidies. A separate agreement covers sanitary and phyto sanitary measures known as the SPS Agreement.
Vegetable oils	Defined as rapeseed oil (canola), soybean oil, sunflower seed oil, coconut oil, cottonseed oil, palm kernel oil, groundnut oil and palm oil.
World Trade Organization (WTO)	Intergovernmental organisation regulating international trade, providing a framework for negotiating trade agreements, and acting as dispute resolution process. The WTO was created by the Uruguay Round agreement and officially commenced in 1995.