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Working Party on Agricultural Policies and Markets

OECD-FAO AGRICULTURAL OUTLOOK 2013-2022
PART III - STATISTICAL ANNEX

The complete document is available in pdf format only.

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(Note by the Secretariat)

This is the final version of Part III of the *OECD-FAO Agricultural Outlook 2013-2022*, the annual report prepared in close collaboration with the Food and Agriculture Organisation (FAO) of the United Nations.

It is circulated on OLIS as part of the following set of documents forming the 2013 report:

Part I [[TAD/CA/APM/WP\(2013\)11/FINAL](#)]

Executive Summary

Chapter 1. Overview of the OECD-FAO Outlook 2013-2022

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Glossary of terms

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Glossary of terms

A-H1N1	This is an influenza virus that had never been identified as a cause of infections in people before the current H1N1 pandemic. Genetic analyses of this virus have shown that it originated from animal influenza viruses and is unrelated to the human seasonal H1N1 viruses that have been in general circulation among people since 1977.
Average Crop Revenue Election (ACRE) program	A new programme introduced with the 2008 US FCE Act allowing farmers to choose revenue-based protection against yield and market fluctuations.
AMAD	Agricultural Market Access database. A co-operative effort between Agriculture and Agri-food Canada, EU Commission-Agriculture Directorate-General, FAO, OECD, The World Bank, UNCTAD and the United States Department of Agriculture, Economic Research Service. Data in the database is obtained from countries' schedules and notifications submitted to the WTO.
APEC	Asia-Pacific Economic Cooperation - a forum for 21 Pacific-rim member economies that seeks to promote open trade and practical economic cooperation throughout the Asia-Pacific region. Cooperation is based on three pillars: trade and investment liberalization, business facilitation, and economic and technical cooperation. The primary goal is to support sustainable economic growth and prosperity in the region. Established in 1989, membership comprises Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; United States; and Viet Nam.
Aquaculture	The farming of aquatic organisms including fish, molluscs, crustaceans and 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.
Australia-US Free Trade	A Bilateral Agreement negotiated between the United States

Agreement (AUSFTA)	and Australia that came into force on 1 January 2005. AUSFTA covers goods, services, investment, financial services, government procurement, standards and technical regulations, telecommunications, competition-related matters, electronic commerce, intellectual property rights, labour and the environment.
Avian influenza	Avian influenza is an infectious disease of birds caused by type A strains of the influenza virus. The disease, which was first identified in Italy more than 100 years ago, occurs worldwide. The quarantining of infected farms, destruction of infected or potentially exposed flocks, and recently inoculation are standard control measures.
Atlantic beef/pigmeat market	The Atlantic market consists of countries producing and trading livestock, bovine and porcine, that are Foot and Mouth Disease (FMD) free with vaccination or contain FMD free zones. Most countries part of this market are located around the Atlantic rim and typically trade grass fed bovine and grain fed porcine. The main countries that are part of that market are; South America, EU, Russia, North Africa, Iran, Israel, Kazakhstan, Malaysia, Peru, Philippines, Saudi Arabia, Turkey, Ukraine, Uruguay, Vietnam, South Africa.
Baseline	The set of market projections used for the outlook analysis in this report and as a benchmark for the analysis of the impact of different economic and policy scenarios. A detailed description of the generation of the baseline is provided in the chapter on Methodology in this report.
Biofuels	In the wider sense defined as all solid, fluid or gaseous fuels produced from biomass. More narrowly, the term biofuels comprises those that replace petroleum-based road-transport fuels, i.e. bioethanol produced from sugar crops, cereals and other starchy crops that can be used as an additive to, in a blend with or as a replacement of gasoline, and biodiesel produced mostly from vegetable oils, but also from waste oils and animal fats, that can be used in blends with or as a replacement of petroleum-based diesel.
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 feedstocks for producing bio-based products. In the context of the Outlook it does not include agricultural commodities used in the production of biofuels (e.g. vegetable oils, sugar or grains).
Bovine Spongiform Encephalopathy (BSE)	A fatal disease of the central nervous system of cattle, first identified in the United Kingdom in 1986. On 20 March 1996

the UK Spongiform Encephalopathy Advisory Committee (SEAC) announced the discovery of a new variant of Creutzfeldt-Jacob Disease (vCJD), a fatal disease of the central nervous system in humans, which might be linked to consumption of beef affected by exposure to BSE.

BRICs	Refers to the emerging economies of Brazil, the Russian Federation, India and China.
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.
Cereals	Defined as wheat, coarse grains and rice.
Common Agricultural Policy (CAP)	The European Union's agricultural policy, first defined in Article 39 of the Treaty of Rome signed in 1957.
Coarse grains	Defined as barley, maize, 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.
Conservation Reserve Program (CRP)	A major provision of the United States' Food Security Act of 1985 and extended under the Food and Agriculture Conservation and Trade Act of 1990, the Food and Agriculture Improvement and Reform Act of 1996, and the Farm Security and Rural Investment Act of 2002 is designed to reduce erosion on 40 to 45 million acres (16 to 18 million hectares) of farm land. Under the programme, producers who sign contracts agree to convert erodible crop land to approved conservation uses for ten years. Participating producers receive annual rental payments and cash or payment in kind to share up to 50% of the cost of establishing permanent vegetative cover. The CRP is part of the <i>Environmental Conservation Acreage Reserve Program</i> . The 1996 FAIR Act authorised a 36.4 million acre (14.7 million hectares) maximum under CRP, its 1995 level. The maximum area enrolled in the CRP was increased to 39.2 million acres in the 2002 FSRI Act.
Commonwealth of Independent States (CIS)	The heads of twelve sovereign states (except the Baltic states) have signed the Treaty on establishment of the Economic

Union, in which they stressed that the Azerbaijan Republic, Republic of Armenia, Republic of Belarus, Republic of Georgia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan and Ukraine on equality basis established the Commonwealth of Independent States.

Common Market Organisation (CMO) for sugar

The common organisation of the sugar market (CMO) in the European Union was established in 1968 to ensure a fair income to community sugar producers and self-supply of the Community market. At present the CMO is governed by Council Regulation (EC) No. 318/2006 (the basic regulation) which establishes a restructuring fund financed by sugar producers to assist the restructuring process needed to render the industry more competitive.

Crop year, coarse grains

Refers to the crop marketing year beginning 1 April for Japan, 1 July for the European Union and New Zealand, 1 August for Canada and 1 October for Australia. The US crop year begins 1 June for barley and oats and 1 September for maize and sorghum.

Crop year, cotton

Refers to the crop marketing year beginning 1 August for all countries.

Crop year, oilseeds

Refers to the crop marketing year beginning 1 April for Japan, 1 July for the European Union and New Zealand, 1 August for Canada and 1 October for Australia. The US crop year begins 1 June for rapeseed, 1 September for soybeans and for sunflower seed.

Crop year, rice

Refers to the crop marketing year beginning 1 April for Japan, Australia, 1 August for the United States, 1 September for the European Union, 1 November for Korea and 1 January for other countries.

Crop year, sugar

A common crop marketing year beginning 1 October and extending to 31 September, used by ISO (International Sugar Organisation).

Crop year, wheat

Refers to the crop marketing year beginning 1 April for Japan, 1 June for the United States, 1 July for the European Union and New Zealand, 1 August for Canada and 1 October for Australia.

Decoupled payments	Budgetary payments paid to eligible recipients who are not linked to current production of specific commodities or livestock numbers or the use of specific factors of production.
Developed countries	See summary table at the end of the Glossary.
Developing countries	See summary table at the end of the Glossary.
Direct payments	Payments made directly by governments to producers.
Doha Development Agenda	The current round of multilateral trade negotiations in the World Trade Organisation that were initiated in November 2001, in Doha, Qatar.
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.
Eastern Europe	Refers to Russia, Ukraine and Kazakhstan.
Economic Partnership Agreements (EPAs)	Free trade agreements currently being negotiated between the EU and the African, Caribbean Pacific (ACP) group of developing countries to replace the Cotonou Agreement which expired in 2007.
El Niño	In this publication, El Niño is used to indicate a broader term of quasi-periodic ocean climate conditions including La Niña, Southern Oscillation, or ENSO, which are characterized by anomalies in the temperature of the surface of eastern coast of Latin America (centred on Peru) -warming or cooling known as <i>El Niño</i> and <i>La Niña</i> respectively- and air surface pressure in the tropical western Pacific (the Southern Oscillation), often around Christmas time. The abnormal warm ocean climate conditions are accompanied by dramatic changes in species abundance and distribution, higher local rainfall and flooding, massive deaths of fish and their predators (including birds).
Energy Independence and Security Act (EISA) 2007	US legislation passed in December 2007 that is designed to increase US energy security by lessening dependence on imported oil, to improve energy conservation and efficiency, expand the production of renewable fuels, and to make

America's air cleaner for future generations.

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 feed-stocks such as sugar cane and maize.
Everything-But-Arms (EBA)	The Everything-But-Arms (EBA) Initiative eliminates EU import tariffs for numerous goods, including agricultural products, from the least developed countries. The tariff elimination is scheduled in four steps from 2006/07 to 2009/10.
Export credits (with official support)	Government financial support, direct financing, guarantees, insurance or interest rate support provided to foreign buyers to assist in the financing of the purchase of goods from national exporters.
Export restitutions (refunds)	EU export subsidies provided to cover the difference between internal prices and world market prices for particular commodities.
Export subsidies	Subsidies given to traders to cover the difference between internal market prices and world market prices, such as for example the EU <i>export restitutions</i> . Export subsidies are now subject to value and volume restrictions under the <i>Uruguay Round Agreement on Agriculture</i> .
FCE Act, 2008	Officially known as the Food, Conservation and Energy Act of 2008. This US farm legislation replaces the FSRI Act of 2002 and covers the period 2008-13.
FSRI Act, 2002	Officially known as the Farm Security and Rural Investment Act of 2002. This US farm legislation replaces the FAIR Act of 1996, covering a wide range of commodity programs and policies for US agriculture for the period 2002-07.
G-20	Group of twenty which brings together important developed and developing economies to discuss key issues in the global economy. Established in 1999 and consists of Finance Ministers and Central Bank Governors from 20 of the world's largest national economies.
Gur, jaggery, khandasari	Semi-processed sugars (plantation whites) extracted from sugarcane in India.
Health Check Reform of the Common Agricultural Policy	On 20 November 2008 the EU agriculture ministers reached a political agreement on the Health Check of the Common Agricultural Policy. Among a range of measures, the agreement abolishes arable set-aside, increases milk quotas gradually leading up to their abolition in 2015, and converts market intervention into a genuine safety net. Ministers also

agreed to increase modulation, whereby direct payments to farmers are reduced and the money transferred to the Rural Development Fund.

High Fructose Corn Syrup (HFCS)	Isoglucose sweetener extracted from maize.
Industrial oilseeds	A category of oilseed production in the European Union for industrial use (i.e. biofuels).
Intervention purchases	Purchases by the EC Commission of certain commodities to support internal market prices.
Intervention purchase price	Price at which the European Commission will purchase produce to support internal market prices. It usually is below 100% of the intervention price, which is an annually decided policy price.
Intervention stocks	Stocks held by national intervention agencies in the European Union as a result of <i>intervention</i> buying of commodities subject to market price support. Intervention stocks may be released onto the internal markets if internal prices exceed intervention prices; otherwise, they may be sold on the world market with the aid of <i>export restitutions</i> .
Inulin	Inulin syrups are extracted from chicory through a process commercially developed in the 1980s. They usually contain 83 per cent fructose. Inulin syrup production in the European Union is covered by the sugar regime and subject to a production quota.
Isoglucose	Isoglucose is a starch-based fructose sweetener, produced by the action of 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. Isoglucose production in the European Union is covered by the sugar regime and subject to a production quota.
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: $\ln(x_t) = a + r * t$ and is calculated as $[\exp(r) - 1]$.
Live weight	The weight of meat, finfish and shellfish at the time of their capture or harvest. Calculated on the basis of conversion factors from landed to nominal weight and on rates prevailing among national industries for each type of processing.
Loan rate	The commodity price at which the <i>Commodity Credit</i>

Corporation (CCC) offers non-recourse loans to participating farmers. The crops covered by the programme are used as collateral for these loans. The loan rate serves as a floor price, with the effective level lying somewhat above the announced rate, for participating farmers in the sense that they can default on their loan and forfeit their crop to the CCC rather than sell it in the open market at a lower price.

Market access	Governed by provisions of the <i>Uruguay Round Agreement on Agriculture</i> which refer to concessions contained in the country schedules with respect to bindings and reductions of tariffs and to other minimum import commitments.
Marketing allotments (US sugar program)	Marketing allotments designate how much sugar can be sold by sugar millers and processors on the US internal market and were established by the 2002 FSRI Act as a way to guarantee the US sugar loan program operates at no cost to the Federal Government.
Marketing year, oilseed meals	Refers to the marketing year beginning 1 October.
Marketing year, vegetable oils	Refers to the marketing year beginning 1 October.
Market Price Support (MPS) Payment	Indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures creating a gap between domestic market prices and <i>border prices</i> of a specific agricultural commodity, measured at the farm gate level. Conditional on the production of a specific commodity, MPS includes the transfer to producers associated with both production for domestic use and exports, and is measured by the price gap applied to current production. The MPS is net of financial contributions from individual producers through producer levies on sales of the specific commodity or penalties for not respecting regulations such as production quotas (<i>Price levies</i>), and in the case of livestock production is net of the market price support on domestically produced coarse grains and oilseeds used as animal feed (<i>Excess feed cost</i>).
Methyl Tertiary Butyl Ether (MTBE)	A chemical gasoline additive that can be used to boost the octane number and oxygen content of the fuel, but can render contaminated water undrinkable.
Milk quota scheme	A supply control measure to limit the volume of milk produced or supplied. Quantities up to a specified quota amount benefit from full <i>market price support</i> . Over-quota volumes may be penalised by a levy (as in the European Union, where the "super levy" is 115% of the target price) or may receive a lower price. Allocations are usually fixed at individual producer level. Other features, including arrangements for quota reallocation, differ according to

scheme.

North American Free Trade Agreement (NAFTA)	A trilateral agreement on trade, including agricultural trade, between Canada, Mexico and the United States, phasing out tariffs and revising other trade rules between the three countries over a 15-year period. The agreement was signed in December 1992 and came into effect on 1 January 1994.
Oilseed meals	Defined as rapeseed meal (canola), soyabean meal, and sunflower meal in all countries, except in Japan where it excludes sunflower meal.
Oilseeds	Defined as rapeseed (canola), soyabeans, sunflower seed, peanuts and cotton seeds in all countries, except in Japan where it excludes sunflower seed.
Pacific beef/pigmeat market	The Pacific meat market consists of countries or zones within countries that produce and trade livestock free from/of, Foot and Mouth Disease (FMD) without vaccination. FMD status is given by the OIE according to strict guidelines (http://www.oie.int/en/animal-health-in-the-world/official-disease-status/fmd/) and include, inter alia, Australia, New Zealand, Japan, Korea, North America and the vast majority of Western Europe. The name “Pacific” refers to the fact that most of them are located around the Pacific rim.
Payment-In-Kind (PIK)	A programme used in the US to help dispose of public stocks of commodities. Under PIK, government payments in the form of Commodity Credit Corporation (CCC)-owned commodities are given to farmers in return for additional reductions in harvested acreage.
PROCAMPO	A programme of direct support to farmers in Mexico. It provides for direct payments per hectare on a historical basis.
Producer Support Estimate (PSE)	Indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at farm gate level, arising from policy measure, regardless of their nature, objectives or impacts on farm production or income. The PSE measure support arising from policies targeted to agriculture relative to a situation without such policies, i.e. when producers are subject only to general policies (including economic, social, environmental and tax policies) of the country. The PSE is a gross notion implying that any costs associated with those policies and incurred by individual producers are not deducted. It is also a nominal assistance notion meaning that increased costs associated with import duties on inputs are not deducted. But it is an indicator net of producer contributions to help finance the policy measure (e.g. producer levies) providing a given

transfer to producers. The PSE includes implicit and explicit payments. The percentage PSE is the ration of the PSE to the value of total gross farm receipts, measured by the value of total production (at farm gate prices), plus budgetary support. The nomenclature and definitions of this indicator replaced the former Producer Subsidy Equivalent in 1999.

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.
Non-Recourse loan programme	Programme to be implemented under the US FAIR Act of 1996 for butter, non-fat dry milk and cheese after 1999 in which loans must be repaid with interest to processors to assist them in the management of dairy product inventories.
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 mandate of 10% for the renewable energy share in transport fuels.
Renewable Fuel Standard (RFS and RFS2)	A standard in the United States for the use of renewable fuel use in the transport sector in the Energy Act (EISA). RFS2 is a revision of the RFS program for 2010 and beyond.
Saccharin	A low calorie, artificial sweetener used as a substitute for sugar mainly in beverage preparations.
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.
Set-aside programme	European Union programme for cereal, oilseed and protein crops that both requires and allows producers to set-aside a portion of their historical base acreage from current production. Mandatory set-aside rates for commercial producers are set at 10% until 2006.
Single Farm Payment	With the 2003 CAP reform, the EU introduced a farm-based payment largely independent of current production decisions and market developments, but based on the level of former payments received by farmers. To facilitate land transfers, entitlements are calculated by dividing the reference amount of payment by the number of eligible hectares (incl. forage area) in the reference year. Farmers receiving the new SFP are obliged to keep their land in good agricultural and environmental condition and have the flexibility to produce any commodity on their land except fruits, vegetables and table potatoes.

SPS Agreement	WTO Agreement on Sanitary and Phyto-sanitary measures, including standards used to protect human, animal or plant life and health.
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, Russia, Ukraine and Brazil are considered. For rice Vietnam, Thailand, India, Pakistan and the United States enter this ratio calculation.
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 public stockholding.
Tariff-rate quota (TRQ)	Resulted from the Uruguay Round Agreement on Agriculture. Certain countries agreed to provide minimum import opportunities for products previously protected by non-tariff barriers. This import system established a quota and a two-tier tariff regime for affected commodities. 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 the concessionary access level.
Uruguay Round Agreement on Agriculture (URAA)	The terms of the URAA are contained in the section entitled the "Agreement on Agriculture" of the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. This text contains commitments in the areas of <i>market access</i> , domestic support, and <i>export subsidies</i> , and general provisions concerning monitoring and continuation. In addition, each country's schedule is an integral part of its contractual commitment under the URAA. There is a separate agreement entitled the Agreement on the Application of Sanitary and Phyto-sanitary Measures. This agreement seeks establishing a multilateral framework of rules and disciplines to guide the adoption, development and the enforcement of sanitary and phyto-sanitary measures in order to minimise their negative effects on trade. See also <i>Phyto-sanitary</i>

regulations and Sanitary regulations.

Vegetable oils

Defined as rapeseed oil (canola), soyabean oil, sunflower seed oil, coconut oil, cotton oil, palm kernel oil, peanuts oil and palm oil, except in Japan where it excludes sunflower seed oil.

Voluntary Quota Restructuring Scheme

Established as part of the reform of the European Union's Common Market Organisation (CMO) for sugar in February 2006 to apply for four years from 1 July 2006. Under the scheme, sugar producers receive a degressive payment for permanently surrendering sugar production quota, in part or in entirety, over the period 2006-07 to 2009-10.

WTO

World Trade Organisation created by the Uruguay Round agreement.

DEVELOPPED	North America		Canada, United States
	Europe		Albania, Andorra, Belarus, Bosnia and Herzegovina, Croatia, European Union, Faeroe Islands, Gibraltar, Holy See, Iceland, Monaco, Montenegro, Norway, Republic of Moldova, Russia, San Marino, Serbia, The former Yugoslav Republic of Macedonia, Ukraine, Switzerland
	Oceania developed		Australia, New Zealand
	Other developed		Armenia, Georgia, Israël, Japan, Kasakhtan, Kyrgyzstan, Republic of Azerbaijan, South africa, Tajikistan, Turkmenistan, Uzbekistan
DEVELOPPING	Africa	North Africa	Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Tunisia
		Sub-saharian Africa	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Réunion, Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Soudan, Swaziland, Tanzania, Togo, Uganda, Western Sahara, Zambia, Zimbabwe
	Latin America and Caribbean		Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands (Malvinas), French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, South Georgia/Sandwich Islands, Suriname, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands, Uruguay, Venezuela
	Asia and Pacific		Afghanistan, American Samoa, Bahrain, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, China Taiwan, Christmas Island, Cocos (Keeling) Islands, Cook Islands, Democratic People's Republic of Korea, Fiji Islands, French Polynesia, GAZA, Gaza Strip (Palestine), Guam, HongKong, India, Indonesia, Iran, Iraq, Israel, Johnston Islands, Jordan, Kiribati, Korea, Kuwait, Lao People's Democratic Republic, Lebanon, Macau, Malaysia, Maldives, Marshall Islands, Micronesia (Federated States of), Mongolia, Myanmar, Nauru, Nepal, Neutral Zone, New Caledonia, Niue, Norfolk Island, Northern Mariana Islands, Oman, Pacific Islands, Pakistan, Philipines, Palau, Palestine Occupied Tr, Papua New Guinea, Pitcairn Islands, Qatar, Samoa, Saudi Arabia, Singapore, Solomon Islands, Sri Lanka, Syrian Arab Republic, Thailand, Timor-Leste, Tokelau, Tonga, Turkey, Tuvalu, United Arab Emirates, US Minor Outlying Islands, Vanuatu, Vietnam, Wallis and Futuna Islands, West Bank, Yemen
	LDC		Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Soudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, Zambia
BRICS			Brazil, Russia, India, China, South Africa

METHODOLOGY

This section provides information on the methodological aspects of the generation of the present *Agricultural Outlook*. It discusses the main aspects in the following order: First, a general description of the agricultural baseline projections and the *Outlook* report is given. Second, the compilation of a consistent set of the assumptions on macroeconomic projections is discussed in more detail. A third part presents how production costs are taken into account in the model's supply equations. Then the 4th part presents the methodology developed for the stochastic analysis conducted with the AGLINK-COSIMO model.

The generation of the OECD-FAO Agricultural Outlook

The projections presented and analysed in this document are the result of a process that brings together information from a large number of sources. The use of a model jointly developed by the OECD and FAO Secretariats, based on the OECD's Aglink model and extended by FAO's Cosimo model, facilitates consistency in this process. A large amount of expert judgement, however, is applied at various stages of the Outlook process. The Agricultural Outlook presents a single, unified assessment, judged by the OECD and FAO Secretariats to be plausible given the underlying assumptions, the procedure of information exchange outlined below and the information to which they had access.

The starting point of the outlook process is the reply by OECD countries (and some non-member countries) to an annual questionnaire circulated in the fall. Through these questionnaires, the OECD Secretariat obtains information from these countries on future commodity market developments and on the evolution of their agricultural policies. The starting projections for the country modules handled by the FAO Secretariat are developed through model based projections and consultations with FAO commodity specialists. External sources, such as the IMF, the World Bank and the UN, are also used to complete the view of the main economic forces determining market developments. This part of the process is aimed at creating a first insight into possible market developments and at establishing the key assumptions which condition the outlook. The main economic and policy assumptions are summarised in the Overview chapter and in specific commodity tables of the present report. The sources and assumptions for those assumptions are discussed in more detail further below.

As a next step, the modelling framework jointly developed by the OECD and FAO Secretariats is used to facilitate a consistent integration of this information and to derive an initial set of global market projections (baseline). In addition to quantities produced, consumed and traded, the baseline also includes projections for nominal prices (in local currency units) for the commodities concerned. Unless otherwise stated, prices referred to in the text are also in nominal terms. The data series for the projections is drawn from OECD and FAO databases. For the most part information in these databases has been taken from national statistical sources. For further details on particular series, enquiries should be directed to the OECD and FAO Secretariats.

The model provides a comprehensive dynamic economic and policy specific representation of the main temperate-zone commodities as well as rice, cotton and vegetable oils. The Aglink and Cosimo country and regional modules are all developed by the OECD and FAO Secretariats in conjunction with country experts and, in some cases, with assistance from other national administrations. The initial baseline results for the countries under the OECD Secretariat's responsibility are compared with those obtained from the questionnaire replies and issues arising are discussed in bilateral exchanges with country experts. The initial projections for individual country and regional modules developed by the FAO Secretariat are reviewed by a wider circle of in-house and international experts. In this stage, the global projection picture

emerges and refinements are made according to a consensus view of both Secretariats and external advisors. On the basis of these discussions and of updated information, a second baseline is produced. The information generated is used to prepare market assessments for biofuels, cereals, oilseeds, sugar, meats, fish and sea food, dairy products and cotton over the course of the outlook period, which is discussed at the annual meetings of the Group on Commodity Markets of the OECD *Committee for Agriculture*. Following the receipt of comments and final data revisions, a last revision is made to the baseline projections. The revised projections form the basis of a draft of the present *Agricultural Outlook* publication, which is discussed by the *Senior Management Committee* of FAO's Department of Economic and Social Development and the OECD's *Working Party on Agricultural Policies and Markets of the Committee for Agriculture*, in May 2013, prior to publication. In addition, the Outlook will be used as a basis for analysis presented to the FAO's *Committee on Commodity Problems* and its various *Intergovernmental Commodity Groups*.

The Outlook process implies that the baseline projections presented in this report are a combination of projections developed by collaborators for countries under the OECD Secretariat's responsibility and original projections for the 42 countries and regions under the FAO Secretariat's responsibility. The use of a formal modelling framework reconciles inconsistencies between individual country projections and forms a global equilibrium for all commodity markets. The review process ensures that judgement of country experts is brought to bear on the projections and related analyses. However, the final responsibility for the projections and their interpretation rests with the OECD and FAO Secretariats.

Sources and assumptions for the macroeconomic projections

Population estimates from the 2010 Revision of the United Nations Population Prospects database provide the population data used for all countries and regional aggregates in the Outlook. For the projection period, the medium variant set of estimates was selected for use from the four alternative projection variants (low, medium, high and constant fertility). The UN Population Prospects database was chosen because it represents a comprehensive source of reliable estimates which includes data for non-OECD developing countries. For consistency reasons, the same source is used for both the historical population estimates and the projection data.

The other macroeconomic series used in the AGLINK-COSIMO model are real GDP, the GDP deflator, the private consumption expenditure (PCE) deflator, the Brent crude oil price (in US dollars per barrel) and exchange rates expressed as the local currency value of USD 1. Historical data for these series in OECD countries (except Turkey, Chile and Israel) as well as Brazil, Argentina, China and Russia are consistent with those published in the OECD Economic Outlook No.92, December 2012 and No.91, June 2012. For other economies, historical macroeconomic data were obtained from the IMF, World Economic Outlook, October 2012. Assumptions for 2013-2022 are based on the recent medium term macroeconomic projections of the OECD Economics Department, projections of the OECD Economic Outlook No. 91 and projections of the IMF.

The model uses indices for real GDP, consumer prices (PCE deflator) and producer prices (GDP deflator) which are constructed with the base year 2005 value being equal to 1. The assumption of constant real exchange rates implies that a country with higher (lower) inflation relative to the United States (as measured by the US GDP deflator) will have a depreciating (appreciating) currency and therefore an increasing (decreasing) exchange rate over the projection period, since the exchange rate is measured as the local currency value of 1 USD. The calculation of the nominal exchange rate uses the percentage growth of the ratio "country-GDP deflator/US GDP deflator".

The oil price used to generate the *Outlook* is based on information from the OECD Economic Outlook No.92 until 2014 (short term update) and the growth rate of the International Energy Agency, World Energy Outlook, November 2012, for future paths.

The representation of production costs in AGLINK-COSIMO

Changes in production costs are an important variable for farmers' decisions on crop and livestock production quantities, in addition to output returns and, if applicable, policy measures.

While supply in AGLINK-COSIMO is largely determined by gross returns, production costs are represented in the model in the form of a cost index used to deflate gross production revenues. In other words, supply equations in the model in most cases depend on gross returns per unit of activity (such as returns per hectare or the meat price) relative to the overall production cost level as expressed by the index. Consequently, equations for harvested areas in crop production and for livestock production quantities take the following general forms:

$$AH = f\left(\frac{RH}{CPCI}\right); QP = f\left(\frac{PP}{CPCI}\right)$$

with: AH area harvested (crop production)
 RH returns per hectare (crop production)
 CPCI commodity production cost index
 QP production quantity (livestock production)
 PP producer price (livestock production)

Among others, energy prices, increased by rising crude oil prices, have fostered attention to agricultural production costs in agricultural commodity models. Energy prices can significantly impact on international markets for agricultural products as production costs for both crops and livestock products are highly dependent on energy costs. Fuels for tractors and other machinery, as well as heating and other forms of energy are directly used in the production process. In addition, other inputs such as fertilisers and pesticides have high energy content, and costs for these inputs are driven to a significant extent by energy prices. It is therefore important to explicitly consider energy prices in the representation of production costs.

The production cost indices employed in AGLINK-COSIMO for livestock products is constructed from three sub-indices representing non-tradable inputs, energy inputs, and other tradable inputs, respectively. While the non-tradable sub-index is approximated by the domestic GDP deflator, the energy sub-index is affected by changes in the world crude oil price and the country's exchange rate. Finally, the tradable sub-index is linked to global inflation (approximated by the US GDP deflator) and the country's exchange rate. This relationship is shown in the following equation:

$$\begin{aligned} CPCI_{r,t} = & CPCS_{r,t}^{NT} * GDPD_{r,t} / GDPD_{r,bas} \\ & + CPCS_{r,t}^{EN} * (XP_t^{OIL} * XR_{r,t}) / (XP_{bas}^{OIL} * XR_{r,bas}) \\ & + (1 - CPCS_{r,t}^{NT,I} - CPCS_{r,t}^{EN,I}) * (XR_{r,t} * GDPD_{USA,t}) / (XR_{r,bas} * GDPD_{USA,bas}) \end{aligned}$$

with: CPCI commodity production cost index for livestock
 CPCS^{NT} share of non-tradable input in total base commodity production costs
 CPCS^{EN} share of energy in total base commodity production costs
 GDPD deflator for the gross domestic product

XP^{OIL}	world crude oil price
XR	nominal exchange rate with respect to the US Dollar
r,t	region and time index, respectively
bas	base year (2000 or 2005 or 2008) value

The production cost index is different for each *crop products* and is constructed from five sub-indices representing seeds inputs, fertilizer inputs, energy inputs, other tradable inputs and non-tradable inputs, respectively.

$$\begin{aligned}
 CPCI_{r,t}^c &= CPCS_{r,t}^{NT} * GDPD_{r,t} / GDPD_{r,bas} \\
 &+ CPCS_{r,t}^{EN} * (XP_t^{OIL} * XR_{r,t}) / (XP_{bas}^{OIL} * XR_{r,bas}) \\
 &+ CPCS_{r,t}^{FT} * (XP_t^{FT} * XR_{r,t}) / (XP_{bas}^{FT} * XR_{r,bas}) \\
 &+ CPCS_{r,t}^{TR} * (XR_{r,t} * GDPD_{USA,t}) / (XR_{r,bas} * GDPD_{USA,bas}) \\
 &+ CPCS_{r,t}^{SD} * PP_{r,t}^c(-1) / PP_{r,bas}^c
 \end{aligned}$$

with:	$CPCI^c$	commodity production cost index for crop product c
	$CPCS^{NT}$	share of non-tradable input in total base commodity production costs
	$CPCS^{EN}$	share of energy in total base commodity production costs
	$CPCS^{FT}$	share of fertilizer in total base commodity production costs
	$CPCS^{TR}$	share of other tradable input in total base commodity production costs
	$CPCS^{SD}$	share of seeds input in total base commodity production costs
	$GDPD$	deflator for the gross domestic product
	XP^{OIL}	world crude oil price
	XP^{FT}	world fertilizer price
	PP^c	producer price for crop product c
	XR	nominal exchange rate with respect to the US Dollar
	c	Crop product
	r,t	region and time index, respectively
	bas	base year (2000 or 2005 or 2008) value

The shares of the various cost categories are country specific. They were estimated based on historic cost structures in individual counties. Shares vary depending on the development stages of the countries and regions. Developed countries tend to have higher shares of energy, fertilizer and tradable inputs than developing nations.

The fertilizer price is an index produced by the World Bank (Pink Sheets). It is formed as an index as follows:

$$XP^{FT} = 0.2 * DAP + 0.16 * MOP + 0.02 * TSP + 0.62 * Urea$$

With:

- US Diammonium Phosphate (DAP)
- Canada Potassium Chloride (MOP)
- Triple superphosphate (TSP)
- Urea (Black Sea)

And is represented by an equation in the AGLINK-COSIMO model:

$$\log(XP_t^{FT}) = CON + elas_{FT}^{OIL} * \log(XP_t^{OIL}) + elas_{FT}^{crop} * \log(0.5 * XP_{t-1}^{CG} + 0.2 * XP_{t-1}^{WT} + 0.2 * XP_{t-1}^{OS} + 0.1 * XP_{t-1}^{RI})$$

With	XP^{OIL}	world crude oil price
	XP^{FT}	world fertilizer price
	XP^{CG}	world coarse grain price
	XP^{WT}	world wheat price
	XP^{OS}	world oilseed price
	XP^{RI}	world rice price

The methodology of stochastic simulations with AGLINK-COSIMO

The AGLINK-COSIMO model is a forward-looking medium term economic model which is used to perform simulations over a 10-year horizon. It is necessary to feed into the model a set of assumptions for exogenous variables. While a single set of assumptions is used for the deterministic baseline, multiple sets of exogenous variables generated by random samplings, are fed into the model for stochastic experiments. The model is simulated for each set of assumptions and, thus, multiple sets of solutions are obtained. Implications of uncertainties for the baseline projections can be inferred from statistical information of the random outputs of the simulations.

For the stochastic analysis conducted for this year which assessed the uncertainty arising from macroeconomic variables and crop yields, the quantification of uncertainty surrounding 32 macroeconomic drivers was based on the errors in the OECD-FAO's 18-month-ahead forecasts of these variables between 2003 and 2011. Crop yield uncertainty was based on the differences between yields as predicted by the yield equations in AGLINK-COSIMO and actual yields over the eighteen years up to 2011.

In each case, a normal (Gaussian) distribution was assumed for the variability characterising uncertainty. This means that a variable's uncertainty is assumed to be symmetric around its most likely value. If policy makers want to investigate the implications of a skewed risk distribution (for example, greater upward price risk due to depressed yields or volatile crude oil prices), a non-symmetric distribution could be assumed.

The joint probability distribution of the uncertain macroeconomic drivers was derived, based on correlations between forecast errors observed in the past. Crop yield uncertainty was assumed to be correlated between crops within the same region, but not between regions (see Table 1).

In the next step, 500 independent "draws" were made from these joint distributions, resulting in 500 different sets of possible "error" values for the 97 stochastic drivers, for each year of the simulation period. The trend values of these drivers as used for the deterministic baseline were then "shocked" by these errors, yielding 500 sets of possible values for the 97 exogenous drivers.

AGLINK-COSIMO was then run 500 times,¹ each run corresponding to a different set of underlying assumptions about macroeconomic conditions and crop yields. In the last step, the variability of the market outcomes calculated by the model was studied to answer a number of policy-relevant questions.

¹ Convergence was achieved by 414 runs, giving a convergence rate of 83%.

Table 1. Yields treated as stochastic and correlation groupings

Commodity	EUROPE		BLACK SEA AREA			SOUTH AMERICA				NORTH AMERICA		SOUTH EAST ASIA		Australia	China	India	Total countries per crop
	EU-15	EU-N12	Kazakhstan	Ukraine	Russia	Argentina	Brazil	Paraguay	Uruguay	Mexico	USA	Thailand	Vietnam				
Durum wheat	X	X															2
Common wheat	X	X	X	X	X	X	X	X	X	X	X			X	X	X	14
Coarse grains				X				X	X								4
Barley	X	X				X								X			4
Maize	X	X				X	X			X	X						6
Oats	X	X															2
Rye	X	X															2
Oilseeds			X	X				X									3
Rapeseed	X	X												X			3
Sunflower seed	X	X			X	X											4
Soybean						X	X				X						3
Sugarbeet	X	X			X						X				X		5
Sugarcane						X	X				X	X		X	X	X	7
Rice	X										X		X		X	X	6
Total crops in each block	19		8			15				8		3		4	5	3	65

Note: Cells marked by a cross indicate which crop yields in which countries are treated as uncertain. Countries are grouped into regions, within each of which yield correlations between crops are allowed for. Yields in three countries (Australia, China and India) are assumed uncorrelated with those of other countries/regions.

Source: Institute for Prospective Technological Studies (European Commission) calculations.

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Table A.1. Economic assumptions

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REAL GDP¹												
Australia	%	2.8	3.0	3.2	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.1
Canada	%	2.6	1.8	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1
Chile	%	5.7	4.4	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
European Union	%	1.1	0.3	1.5	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8
Japan	%	1.8	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3
Korea	%	4.1	3.1	4.4	3.3	3.2	3.1	3.0	3.0	2.9	2.7	2.6
Mexico	%	4.4	3.3	3.6	3.3	3.4	3.4	3.5	3.5	3.6	3.6	3.6
New Zealand	%	1.0	2.4	2.9	2.5	2.6	2.7	2.8	2.8	2.8	2.9	2.9
Norway	%	1.8	2.5	2.0	4.2	4.0	3.9	3.7	3.6	3.4	3.3	3.1
Switzerland	%	1.9	1.1	2.3	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3
Turkey	%	6.9	3.5	4.0	4.3	4.4	4.4	4.3	4.3	4.3	4.3	4.3
United States	%	2.1	2.0	2.8	2.9	2.7	2.5	2.4	2.4	2.3	2.3	2.4
Algeria	%	2.7	3.4	3.3	3.4	3.9	4.0	3.7	3.7	3.7	3.7	3.7
Argentina	%	6.3	0.5	3.3	3.0	3.2	3.3	3.4	3.4	3.4	3.3	3.3
Bangladesh	%	6.3	6.1	6.7	7.1	7.2	7.3	7.0	7.0	7.0	7.0	7.0
Brazil	%	3.9	4.0	4.1	4.8	4.6	4.5	4.3	4.2	4.1	4.1	4.0
China	%	9.1	8.5	8.9	9.0	8.5	8.1	7.7	7.2	6.8	6.5	6.1
Egypt	%	3.0	3.0	4.5	6.0	6.5	6.5	5.9	5.9	5.9	5.9	5.9
India	%	7.3	6.0	6.4	6.7	6.9	6.9	6.7	6.7	6.7	6.7	6.7
Indonesia	%	6.2	6.3	6.5	6.6	6.7	6.8	6.7	6.7	6.7	6.7	6.7
Iran	%	2.3	0.8	1.5	1.8	2.0	2.0	1.8	1.8	1.8	1.8	1.8
Malaysia	%	5.5	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Pakistan	%	3.3	3.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Russian Federation	%	4.0	3.8	4.1	4.4	3.9	3.5	3.2	3.0	2.9	2.8	2.8
Saudi Arabia	%	6.0	4.2	3.8	4.3	4.3	4.2	4.1	4.1	4.1	4.1	4.1
South Africa	%	2.9	3.0	3.9	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Ukraine	%	4.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Uruguay	%	6.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
OECD ^{2,3}	%	2.0	1.4	2.2	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2
PCE DEFLATOR¹												
Australia	%	2.4	2.8	2.3	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.6
Canada	%	1.7	1.1	1.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2
Chile	%	2.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	2.4	1.9	1.7	2.1	2.0	2.0	1.9	1.9	2.0	2.0	1.9
Japan	%	-1.1	-0.6	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Korea	%	2.9	2.4	2.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Mexico	%	4.6	4.3	3.9	3.7	3.6	3.5	3.5	3.5	3.5	3.2	3.2
New Zealand	%	2.1	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	1.4	1.2	2.1	3.3	3.2	3.1	3.1	3.1	3.1	2.9	2.9
Switzerland	%	0.2	0.0	0.3	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Turkey	%	7.9	6.5	5.3	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.1
United States	%	2.1	1.8	2.0	1.7	1.9	1.9	2.0	2.0	2.1	2.0	2.0
Algeria	%	5.6	5.0	4.5	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1
Argentina	%	14.7	14.1	11.3	11.7	11.0	10.9	11.2	11.2	11.2	11.2	11.2
Bangladesh	%	9.1	6.7	6.3	5.9	5.5	5.5	5.8	5.8	5.8	5.8	5.8
Brazil	%	6.4	5.5	5.2	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5
China	%	4.9	2.9	3.6	3.8	3.9	3.9	4.0	4.0	4.0	4.0	4.0
Egypt	%	10.5	10.7	12.1	10.0	8.0	6.5	9.1	9.1	9.1	9.1	9.1
India	%	10.4	9.6	8.3	6.4	5.1	5.0	6.2	6.2	6.2	6.2	6.2
Indonesia	%	5.0	5.1	4.9	4.7	4.5	4.0	4.5	4.5	4.5	4.5	4.5
Iran	%	19.7	21.8	18.3	15.5	15.5	15.5	16.2	16.2	16.2	16.2	16.2
Malaysia	%	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Pakistan	%	11.6	10.4	11.0	12.0	13.0	13.0	12.2	12.2	12.2	12.2	12.2
Russian Federation	%	9.9	5.7	3.9	3.7	3.8	3.8	3.9	3.9	4.0	4.0	4.0
Saudi Arabia	%	5.1	4.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
South Africa	%	5.0	5.2	5.0	4.8	4.7	4.7	4.8	4.8	4.8	4.8	4.8
Ukraine	%	6.4	7.4	5.3	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.1
Uruguay	%	7.6	7.6	7.1	6.0	6.0	6.0	6.3	6.3	6.3	6.3	6.3
OECD ^{2,3}	%	2.1	1.8	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2

Table A.1. Economic assumptions (cont.)

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP DEFLATOR¹												
Australia	%	3.2	1.7	2.3	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.6
Canada	%	2.4	1.4	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2
Chile	%	4.3	2.8	3.2	3.1	3.0	3.1	3.1	3.1	3.1	3.1	3.1
European Union	%	1.4	1.6	1.7	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.8
Japan	%	-1.7	-0.5	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Korea	%	2.2	1.6	1.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Mexico	%	4.4	4.0	4.2	3.7	3.6	3.5	3.5	3.5	3.5	3.2	3.2
New Zealand	%	2.9	2.0	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	5.3	2.0	2.6	3.3	3.2	3.1	3.1	3.1	3.1	2.9	2.9
Switzerland	%	0.3	0.2	0.4	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Turkey	%	6.9	7.2	5.1	4.5	4.7	4.5	4.7	4.7	4.7	4.7	4.7
United States	%	1.8	1.8	1.9	1.7	1.9	1.9	2.0	2.0	2.1	2.0	2.0
Algeria	%	13.7	3.8	2.2	1.8	1.7	1.5	1.8	1.8	1.8	1.8	1.8
Argentina	%	16.3	14.1	11.3	11.7	11.0	10.9	11.2	11.2	11.2	11.2	11.2
Bangladesh	%	7.4	6.6	6.4	6.0	5.6	4.9	5.7	5.7	5.7	5.7	5.7
Brazil	%	7.0	5.3	5.1	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5
China	%	5.3	2.4	1.5	3.8	3.9	3.9	4.0	4.0	4.0	4.0	4.0
Egypt	%	10.4	12.2	10.8	9.1	7.9	6.4	8.5	8.5	8.5	8.5	8.5
India	%	8.9	8.8	8.6	7.5	7.1	7.1	7.6	7.6	7.6	7.6	7.6
Indonesia	%	7.7	7.3	8.0	7.8	7.6	7.5	7.7	7.7	7.7	7.7	7.7
Iran	%	17.9	16.8	14.6	12.8	13.0	13.4	13.4	13.4	13.4	13.4	13.4
Malaysia	%	4.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pakistan	%	13.9	10.4	11.0	12.0	13.0	13.0	12.2	12.2	12.2	12.2	12.2
Russian Federation	%	11.9	6.4	4.5	3.7	3.8	3.8	3.9	3.9	4.0	4.0	4.0
Saudi Arabia	%	13.8	-0.3	-1.6	-0.7	-0.4	-0.3	-0.8	-0.8	-0.8	-0.8	-0.8
South Africa	%	7.1	5.3	5.1	4.9	4.7	4.7	4.9	4.9	4.9	4.9	4.9
Ukraine	%	11.9	9.4	6.5	6.5	7.0	6.5	6.6	6.6	6.6	6.6	6.6
Uruguay	%	8.3	5.8	6.6	6.0	5.6	5.5	5.9	5.9	5.9	5.9	5.9
OECD ³	%	1.6	1.7	1.9	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1
WORLD OIL PRICE												
Brent crude oil price ⁴	USD/barrel	100.7	112.8	117.8	121.1	124.5	127.8	131.1	134.4	137.8	141.2	144.6
EXCHANGE RATES												
Australia	AUD/USD	1.01	0.96	0.96	0.97	0.98	0.98	0.99	1.00	1.00	1.01	1.02
Canada	CAD/USD	1.01	1.00	1.00	1.01	1.01	1.02	1.02	1.02	1.02	1.03	1.03
Chile	CLP/USD	492.11	476.00	479.00	487.00	487.00	487.00	489.79	492.59	495.42	498.25	501.11
European Union	EUR/USD	0.75	0.77	0.77	0.75	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Japan	JPY/USD	82.27	79.42	79.42	78.87	78.24	77.54	76.80	76.04	75.28	74.53	73.78
Korea	000 KRW/USD	1.13	1.09	1.09	1.10	1.12	1.13	1.14	1.16	1.17	1.18	1.19
Mexico	MXN/USD	12.75	13.23	13.23	13.41	13.55	13.66	13.76	13.86	13.95	14.01	14.06
New Zealand	NZD/USD	1.30	1.22	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Algeria	DZD/USD	74.76	79.75	82.22	84.23	86.16	87.63	89.72	91.85	94.04	96.28	98.57
Argentina	ARS/USD	4.19	4.78	4.78	4.87	4.91	4.92	4.93	4.94	4.95	4.96	4.98
Bangladesh	BDT/USD	75.79	86.98	91.01	94.79	98.43	101.65	105.69	109.89	114.26	118.80	123.52
Brazil	BRL/USD	1.80	2.07	2.07	2.15	2.23	2.31	2.39	2.47	2.56	2.64	2.73
China	CNY/USD	6.51	6.23	6.23	6.26	6.29	6.32	6.35	6.38	6.42	6.47	6.52
Egypt	EGP/USD	5.78	6.42	7.51	8.18	8.68	9.09	9.92	10.83	11.81	12.89	14.06
India	INR/USD	47.85	53.21	56.22	58.61	60.26	61.73	64.07	66.50	69.02	71.63	74.34
Indonesia	000 IDR/USD	9.08	9.50	9.27	9.22	9.15	9.06	8.95	8.85	8.74	8.64	8.54
Iran	000 IRR/USD	11.53	14.30	15.57	16.79	18.10	19.52	21.11	22.81	24.66	26.66	28.82
Malaysia	MYR/USD	3.12	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Pakistan	PKR/USD	86.42	99.46	110.88	124.01	139.13	155.99	174.57	195.36	218.63	244.67	273.81
Russian Federation	RUB/USD	30.31	31.74	31.74	31.83	31.94	32.09	32.26	32.47	32.70	32.95	33.22
Saudi Arabia	SAR/USD	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
South Africa	ZAR/USD	7.59	8.65	8.99	9.32	9.63	9.95	10.30	10.67	11.05	11.44	11.85
Ukraine	UAH/USD	7.97	8.35	8.64	8.90	9.17	9.44	9.74	10.04	10.36	10.68	11.01
Uruguay	UYU/USD	20.10	19.95	20.81	21.68	22.58	23.50	24.48	25.51	26.57	27.68	28.84

ANNEX A

Table A.1. Economic assumptions (cont.)

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
POPULATION¹												
Australia	%	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1
Canada	%	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8
Chile	%	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6
European Union	%	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Japan	%	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Korea	%	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Mexico	%	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8
New Zealand	%	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Norway	%	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Switzerland	%	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Turkey	%	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8
United States	%	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Algeria	%	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0
Argentina	%	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Bangladesh	%	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0
Brazil	%	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6
China	%	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1
Egypt	%	1.7	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3
India	%	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0
Indonesia	%	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7
Iran	%	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6
Malaysia	%	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3
Pakistan	%	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5
Russian Federation	%	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3
Saudi Arabia	%	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.8	1.8	1.7	1.6
South Africa	%	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Ukraine	%	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6
Uruguay	%	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
OECD ³	%	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
World	%	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9

Note: For OECD member countries (except Turkey, Chile and Israel), as well as Brazil, China and Russia, historical data for real GDP, private consumption expenditure deflator and GDP deflator were obtained from the OECD Economic Outlook No. 92, December 2012. For other economies, historical macroeconomic data were obtained from the IMF, World Economic Outlook, October 2012. Assumptions for the projection period draw on the recent short term update of the OECD Economics Department, projections of the OECD Economic Outlook No. 91, projections of the IMF, and for population, projections from the United Nations World Population Prospects Database, 2010 Revision (medium variant). Data for the European Union are euro area aggregates except for population.

Average 2010-12est and 2012est: Data for 2012 are estimated.

1. Annual per cent change. The price index used is the private consumption expenditure deflator.
2. Annual weighted average real GDP and CPI growth rates in OECD countries are based on weights using purchasing power parities (PPPs).
3. Excludes Iceland.
4. Short term update for crude oil price from the OECD Economic Outlook No.92, December 2012 and projections from IEA World Energy Outlook 2012.

Source: OECD and FAO Secretariats.

Table A.2. World prices

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
CEREALS												
Wheat ¹	USD/t	312.5	301.3	262.3	256.5	259.4	259.3	266.6	270.0	272.3	273.4	274.2
Coarse Grains ²	USD/t	284.6	243.4	216.4	221.1	227.2	228.2	234.1	236.4	237.7	240.3	240.6
Rice ³	USD/t	451.1	480.9	440.3	423.2	419.3	417.9	426.1	438.0	451.1	462.5	470.3
OILSEEDS												
Oilseeds ⁴	USD/t	605.0	564.1	514.0	511.2	507.0	521.7	523.0	530.0	530.5	538.9	540.0
Protein meals ⁵	USD/t	436.9	464.3	403.9	389.0	387.0	390.2	396.2	401.7	403.6	404.2	406.1
Vegetable oils ⁶	USD/t	1 206.6	1 141.4	1 038.3	1 077.6	1 065.2	1 097.7	1 104.9	1 117.6	1 136.1	1 154.6	1 160.3
SWEETENERS												
Raw sugar ⁷	USD/t rse	522.7	410.2	408.0	432.4	414.0	413.4	437.8	444.5	441.8	442.8	438.7
Refined sugar ⁸	USD/t rse	621.0	498.8	503.7	530.7	512.5	507.4	538.7	545.2	541.3	540.6	536.4
HFCS ⁹	USD/t	524.4	340.8	388.4	431.2	442.2	405.1	374.0	363.0	369.7	365.9	357.1
Molasses ¹⁰	USD/t	182.1	195.6	194.3	206.1	196.3	185.5	194.0	195.6	198.6	193.5	193.3
MEAT												
Beef and veal												
Price, EU ¹¹	USD/t dw	4 716.8	5 245.1	5 674.0	6 192.6	6 014.4	6 338.9	6 398.4	6 763.0	7 215.3	7 300.7	7 256.1
Price, United States ¹²	USD/t dw	3 946.5	4 654.1	4 716.4	4 730.5	4 639.9	4 568.5	4 393.9	4 414.8	4 475.5	4 546.1	4 570.3
Price, Brazil ¹³	USD/t pw	3 252.9	3 334.8	3 526.2	3 543.1	3 632.1	3 598.1	3 414.4	3 465.8	3 557.1	3 630.3	3 706.5
Pigmeat												
Price, EU ¹⁴	USD/t dw	2 037.3	2 473.5	2 659.0	2 739.6	2 601.1	2 600.0	2 807.4	2 956.6	2 982.3	2 954.2	2 928.2
Price, United States ¹⁵	USD/t dw	1 860.4	2 051.1	2 154.6	2 147.3	2 061.2	2 055.4	2 162.0	2 285.3	2 270.7	2 243.5	2 284.9
Price, Brazil ¹⁶	USD/t dw	1 511.7	1 677.3	1 787.4	1 820.8	1 749.0	1 765.4	1 856.6	1 984.3	1 991.6	1 979.3	2 034.3
Poultry meat												
Price, EU ¹⁷	USD/t rtc	2 477.8	2 321.9	2 265.7	2 300.0	2 300.6	2 349.1	2 411.2	2 461.1	2 503.6	2 533.1	2 525.5
Price, United States ¹⁸	USD/t rtc	1 133.6	1 167.9	1 157.2	1 174.0	1 171.5	1 193.6	1 220.7	1 241.4	1 260.3	1 272.6	1 279.3
Price, Brazil ¹⁹	USD/t rtc	1 358.2	1 389.1	1 354.5	1 375.0	1 378.2	1 407.4	1 444.8	1 474.8	1 499.6	1 518.4	1 531.6
Sheep meat												
Price, New Zealand ²⁰	USD/t dw	4 481.2	4 119.4	4 128.2	4 165.7	4 244.9	4 362.0	4 420.2	4 397.6	4 533.0	4 566.0	4 636.2
FISH AND SEAFOOD												
Product traded ²¹	USD/t	2 671.3	2 698.1	2 769.9	2 933.0	2 870.8	2 923.0	2 990.8	3 187.4	3 335.4	3 408.1	3 462.7
Aquaculture ²²	USD/t	2 034.8	2 047.6	2 092.0	2 225.1	2 224.9	2 221.5	2 273.0	2 422.4	2 568.2	2 658.3	2 700.9
Capture ²³	USD/t	1 324.5	1 386.3	1 431.8	1 501.8	1 513.7	1 555.2	1 601.5	1 681.3	1 750.2	1 798.1	1 842.8
Meal ²⁴	USD/t	1 594.2	1 824.8	1 648.4	1 691.6	1 534.7	1 496.5	1 514.8	1 620.7	1 727.6	1 655.2	1 700.0
Oil ²⁵	USD/t	1 514.7	2 004.9	1 772.8	1 844.5	1 725.2	1 730.0	1 767.4	1 782.3	1 978.3	1 840.4	1 864.1
DAIRY PRODUCTS												
Butter ²⁶	USD/t	3 943.5	3 499.5	3 576.8	3 547.8	3 543.7	3 631.7	3 659.3	3 709.3	3 722.0	3 717.9	3 688.5
Cheese ²⁷	USD/t	4 047.0	3 865.9	3 946.4	4 004.8	4 061.3	4 168.1	4 286.3	4 334.8	4 394.0	4 438.0	4 444.8
Skim milk powder ²⁸	USD/t	3 317.5	3 471.7	3 498.1	3 502.0	3 502.8	3 599.9	3 673.1	3 703.8	3 727.8	3 754.6	3 733.0
Whole milk powder ²⁹	USD/t	3 600.1	3 669.9	3 727.3	3 717.0	3 736.9	3 863.0	3 930.4	3 991.6	4 020.2	4 055.8	4 053.7
Whey powder wholesale price, United States ³⁰	USD/t	1 042.3	1 139.2	1 168.8	1 173.1	1 176.1	1 199.9	1 209.0	1 230.9	1 243.5	1 265.0	1 272.9
Casein ³¹	USD/t	8 463.6	8 706.9	8 819.9	8 823.4	8 935.0	9 127.5	9 330.7	9 436.4	9 507.5	9 570.0	9 673.8
BIOFUEL												
Ethanol ³²	USD/hl	70.1	61.7	65.2	69.0	72.1	72.6	75.5	77.9	80.5	82.4	83.5
Biodiesel ³³	USD/hl	143.1	151.4	156.2	153.5	148.8	154.7	159.8	159.8	164.3	167.0	173.0
COTTON												
Cotton ³⁴	USD/t	2 344.2	1 788.4	1 795.5	1 914.8	1 954.0	1 947.9	1 923.7	1 892.3	1 890.7	1 885.3	1 935.2

ANNEX A

Note: This table is a compilation of price information presented in the detailed commodity tables further in this annex. Prices for crops are on marketing year basis and those for meat and dairy products on calendar year basis (e.g. 09/10 is calendar year 2009).

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. No.2 hard red winter wheat, ordinary protein, United States f.o.b. Gulf Ports (June/May), less EEP payments where applicable.
2. No.2 yellow corn, United States f.o.b. Gulf Ports (September/August).
3. Milled 5% broken, f.o.b. Ho Chi Minh (January/December).
4. Weighted average oilseed price, European port.
5. Weighted average meal price, European port.
6. Weighted average price of oilseed oils and palm oil, European port.
7. Raw sugar world price, ICE contract No11 nearby, October/September.
8. Refined sugar price,Euronext,Liffe,Contract No. 407 London,Europe,October/September.
9. United States wholesale list price HFCS-55 , October/September.
10. Unit import price, Europe (October/September)
11. EU average beef producer price.
12. Choice steers, 1100-1300 lb lw, Nebraska - lw to dw conversion factor 0.63.
13. Brazil average beef producer price.
14. EU average pigmeat producer price.
15. Barrows and gilts, No. 1-3, 230-250 lb lw, Iowa/South Minnesota - lw to dw conversion factor 0.74.
16. Brazil average pigmeat producer price.
17. EU average producer price.
18. Wholesale weighted average broiler price 12 cities.
19. Brazil average chicken for slaughter producer price.
20. Lamb schedule price, all grade average.
21. World unit value of trade (sum of exports and imports).
22. World unit value of aquaculture fisheries production (live weight basis).
23. FAO estimated value of world ex vessel value of capture fisheries production excluding for reduction.
24. Fishmeal, 64-65% protein, Hamburg, Germany.
25. Fish oil any origin, N.W. Europe
26. F.o.b. export price, butter, 82% butterfat, Oceania.
27. F.o.b. export price, cheddar cheese, 39% moisture, Oceania.
28. F.o.b. export price, non-fat dry milk, 1.25% butterfat,Oceania.
29. F.o.b. export price, WMP 26% butterfat, Oceania.
30. Dry whey, West region, United States.
31. Export price, New Zealand.
32. Brazil, Sao Paulo (ex-distillery).
33. Producer price Germany net of biodiesel tariff.
34. Cotlook A index, Middling 1 3/32", c.f.r. far Eastern ports (August/July)

Source: OECD and FAO Secretariats.

Table A.3.1. World trade projections, imports

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wheat												
World Trade	kt	135 767	135 001	137 596	140 729	141 445	143 209	143 691	145 789	147 290	149 054	150 442
OECD ¹	kt	31 159	29 268	29 898	30 557	30 990	31 394	31 489	31 453	31 435	31 410	31 395
Developing countries	kt	107 641	107 096	109 731	112 074	112 700	114 180	114 793	116 864	118 400	120 182	121 662
Least Developed Countries	kt	15 038	16 091	15 978	16 505	16 461	16 777	16 882	17 332	17 716	18 119	18 479
Coarse grains												
World Trade	kt	123 208	132 101	136 111	138 439	142 023	144 694	148 865	152 285	155 793	158 473	162 150
OECD ¹	kt	54 006	52 141	52 112	52 626	54 160	53 440	55 362	56 644	57 578	57 733	58 532
Developing countries	kt	88 433	99 586	104 065	106 355	108 800	112 503	115 268	117 806	120 916	123 897	127 743
Least Developed Countries	kt	2 354	3 552	4 001	4 374	4 397	4 660	4 911	4 947	5 005	5 002	5 063
Rice												
World Trade	kt	36 879	36 503	39 388	40 653	41 239	42 070	42 669	43 284	43 845	44 447	45 041
OECD ¹	kt	4 989	5 230	5 412	5 528	5 640	5 759	5 879	5 989	6 092	6 190	6 298
Developing countries	kt	32 051	31 420	34 119	35 226	35 687	36 397	36 874	37 377	37 834	38 314	38 826
Least Developed Countries	kt	6 928	6 690	7 623	7 723	7 730	7 681	7 639	7 596	7 559	7 486	7 451
Oilseeds												
World Trade	kt	110 714	119 621	121 133	124 798	126 778	128 589	130 563	132 361	135 366	138 337	141 194
OECD ¹	kt	33 185	33 790	33 168	33 571	33 768	33 931	34 238	34 512	34 877	35 328	35 719
Developing countries	kt	85 357	93 382	95 435	98 769	100 621	102 284	103 958	105 461	108 120	110 709	113 200
Least Developed Countries	kt	381	327	324	332	334	340	345	347	350	351	356
Protein Meals												
World Trade	kt	73 198	75 154	77 480	79 885	82 188	84 226	86 467	88 822	91 217	93 738	96 187
OECD ¹	kt	41 942	42 701	43 301	43 645	44 272	44 512	44 973	45 350	45 658	46 003	46 395
Developing countries	kt	34 390	36 030	38 216	40 622	42 669	44 801	46 901	49 149	51 543	53 981	56 381
Least Developed Countries	kt	527	544	616	670	725	768	821	868	922	978	1 035
Vegetable Oils												
World Trade	kt	64 207	66 539	66 879	68 395	69 409	71 010	72 450	74 009	75 636	76 931	78 226
OECD ¹	kt	16 832	17 198	17 150	17 128	17 286	17 767	18 029	18 523	19 151	19 206	19 263
Developing countries	kt	47 752	49 710	50 246	51 821	52 723	53 889	55 138	56 289	57 377	58 698	60 018
Least Developed Countries	kt	4 923	5 080	5 331	5 451	5 622	5 771	5 945	6 103	6 265	6 425	6 599
Sugar												
World Trade	kt	49 741	49 493	50 605	51 686	51 811	53 056	53 508	54 214	54 821	55 395	56 710
OECD ¹	kt	13 504	12 605	12 240	11 177	11 464	11 550	11 385	11 378	11 283	11 028	10 975
Developing countries	kt	33 706	34 171	35 648	37 926	37 814	38 990	39 846	40 597	41 408	42 338	43 801
Least Developed Countries	kt	5 586	6 141	6 332	6 313	6 748	6 902	6 866	7 238	7 575	7 723	7 995
Beef²												
World Trade	kt	7 429	7 819	8 121	8 130	8 310	8 559	8 680	8 968	9 123	9 225	9 333
OECD ¹	kt	3 292	3 726	3 773	3 724	3 819	3 896	3 887	3 976	4 054	4 062	4 081
Developing countries	kt	3 977	4 029	4 265	4 355	4 507	4 677	4 798	4 990	5 073	5 174	5 291
Least Developed Countries	kt	167	130	290	332	389	455	439	456	411	373	325
Pigmeat²												
World Trade	kt	6 566	7 103	7 096	7 172	7 304	7 317	7 367	7 417	7 449	7 565	7 643
OECD ¹	kt	3 204	3 359	3 335	3 371	3 436	3 421	3 441	3 442	3 398	3 375	3 371
Developing countries	kt	3 109	3 610	3 496	3 569	3 646	3 676	3 702	3 740	3 790	3 894	3 944
Least Developed Countries	kt	157	205	180	196	202	212	220	234	248	262	276
Poultry												
World Trade	kt	11 997	12 008	12 180	12 398	12 660	12 921	13 189	13 472	13 771	14 129	14 523
OECD ¹	kt	2 541	2 591	2 555	2 546	2 523	2 508	2 498	2 497	2 482	2 468	2 448
Developing countries	kt	8 659	8 779	8 938	9 100	9 354	9 601	9 856	10 143	10 445	10 779	11 149
Least Developed Countries	kt	927	1 007	1 043	1 080	1 111	1 153	1 199	1 248	1 305	1 363	1 425
Fish												
World Trade	kt	37 012	38 300	39 171	39 836	40 396	41 439	42 253	42 954	43 617	44 392	45 082
OECD	kt	20 249	20 397	20 657	21 046	21 382	21 689	22 015	22 281	22 572	22 869	23 229
Developing countries	kt	16 494	17 574	18 147	18 399	18 562	19 252	19 693	20 085	20 437	20 874	21 146
Least Developed Countries	kt	717	705	698	691	693	689	689	680	683	690	698
Fishmeal												
World Trade	kt	3 129	3 269	3 233	3 103	3 156	3 138	3 081	3 060	2 946	3 004	3 015
OECD	kt	1 237	1 361	1 301	1 196	1 244	1 226	1 210	1 206	1 150	1 209	1 184
Developing countries	kt	1 979	2 016	2 035	2 030	2 030	2 029	1 990	1 980	1 927	1 925	1 966
Least Developed Countries	kt	20	16	17	17	17	17	18	18	18	18	18
Fish oil												
World Trade	kt	836	822	813	771	794	807	812	808	771	783	787
OECD	kt	686	686	665	633	631	632	631	624	601	596	594
Developing countries	kt	258	236	254	240	263	276	282	287	270	285	292
Least Developed Countries	kt	0	0	0	0	0	0	0	0	0	0	0
Butter												
World Trade	kt	822	860	882	905	924	930	940	956	972	988	1 008
OECD ¹	kt	134	144	141	138	139	138	139	139	139	138	137
Developing countries	kt	553	572	589	612	632	644	662	677	695	713	733
Least Developed Countries	kt	11	9	8	8	8	8	8	8	9	9	10

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Table A.3.1. World trade projections, imports (cont.)

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cheese												
World Trade	kt	2 356	2 390	2 427	2 521	2 585	2 628	2 686	2 737	2 792	2 837	2 869
OECD ¹	kt	776	780	801	814	821	830	833	839	842	847	822
Developing countries	kt	1 255	1 343	1 375	1 434	1 502	1 555	1 598	1 623	1 656	1 695	1 748
Least Developed Countries	kt	60	70	70	79	90	97	106	108	112	117	123
Whole milk powder												
World Trade	kt	2 225	2 299	2 317	2 340	2 372	2 376	2 405	2 431	2 469	2 508	2 559
OECD ¹	kt	66	53	56	58	58	57	58	58	60	62	63
Developing countries	kt	2 176	2 239	2 255	2 275	2 308	2 314	2 338	2 360	2 393	2 431	2 477
Least Developed Countries	kt	227	215	219	223	228	231	236	240	245	249	255
Skim milk powder												
World Trade	kt	1 624	1 784	1 826	1 869	1 917	1 953	1 998	2 036	2 076	2 121	2 156
OECD ¹	kt	289	321	326	330	336	338	341	346	351	356	338
Developing countries	kt	1 501	1 655	1 697	1 738	1 785	1 824	1 866	1 901	1 937	1 981	2 036
Least Developed Countries	kt	94	99	99	103	107	111	115	119	123	127	132
Cotton												
OECD	kt	1 447	1 770	1 784	1 844	1 864	1 888	1 928	1 961	2 003	2 048	2 091
Developing countries	kt	8 072	7 410	7 369	7 414	7 461	7 475	7 655	7 816	7 861	7 968	8 075
Least Developed Countries	kt	784	803	864	917	972	1 031	1 096	1 166	1 200	1 244	1 289

Note: The values do not add up to world trade due to double counting of certain countries and statistical differences (i.e. LDC are already included in the Developing countries aggregate).

Average 2010-12est: Data for 2012 are estimated.

1. Excludes Iceland but includes all EU27 member countries.
2. Excludes trade of live animals.

Source: OECD and FAO Secretariats.

Table A.3.2. World trade projections, exports

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wheat												
OECD ¹	kt	91 620	84 488	82 697	83 164	81 753	82 370	82 041	82 554	82 968	83 553	84 036
Developing countries	kt	23 936	24 578	26 404	26 828	26 552	26 261	25 646	25 987	25 860	25 646	25 099
Least Developed Countries	kt	46	42	37	34	32	30	29	27	26	25	24
Coarse grains												
OECD ¹	kt	60 298	58 679	66 665	68 462	70 838	71 944	74 543	75 809	77 705	78 932	81 261
Developing countries	kt	43 500	46 327	42 656	42 946	43 413	44 331	45 159	46 746	47 696	48 492	49 169
Least Developed Countries	kt	4 251	2 046	1 662	1 623	1 598	1 537	1 485	1 461	1 441	1 440	1 420
Rice												
OECD ¹	kt	4 062	3 910	3 983	4 073	4 183	4 259	4 341	4 437	4 547	4 677	4 797
Developing countries	kt	32 365	32 561	35 398	36 582	37 060	37 813	38 329	38 846	39 294	39 760	40 228
Least Developed Countries	kt	2 048	1 636	1 291	1 492	1 850	2 364	2 818	3 238	3 632	4 021	4 434
Oilseeds												
OECD ¹	kt	51 994	57 375	56 419	58 200	59 057	58 881	59 783	60 060	60 773	61 943	62 761
Developing countries	kt	54 831	57 139	59 489	61 774	62 330	64 152	65 096	66 444	68 595	70 236	72 128
Least Developed Countries	kt	106	70	76	77	79	81	86	97	109	126	143
Protein Meals												
OECD ¹	kt	12 902	11 886	12 909	13 575	14 038	14 498	14 925	15 473	15 915	16 205	16 624
Developing countries	kt	56 744	58 845	60 018	61 536	63 116	64 511	66 193	67 851	69 643	71 693	73 567
Least Developed Countries	kt	200	341	313	328	385	426	493	547	586	630	682
Vegetable Oils												
OECD ¹	kt	5 695	5 280	5 384	5 513	5 606	5 695	5 855	5 945	5 948	5 966	6 058
Developing countries	kt	54 384	56 252	56 452	57 693	58 566	59 907	60 937	62 135	63 550	64 569	65 585
Least Developed Countries	kt	256	158	151	148	144	141	138	135	133	131	130
Sugar												
OECD ¹	kt	6 896	7 264	7 314	8 216	7 447	7 366	7 828	7 588	7 673	7 496	7 445
Developing countries	kt	48 158	49 581	50 427	50 287	51 305	52 744	52 654	53 499	53 973	54 468	55 737
Least Developed Countries	kt	1 213	1 832	2 037	1 684	1 788	1 780	1 877	1 963	2 011	2 003	2 057
Beef²												
OECD ¹	kt	3 853	3 869	3 842	3 717	3 847	3 924	3 922	4 044	4 129	4 158	4 196
Developing countries	kt	4 007	4 031	4 348	4 480	4 520	4 659	4 755	4 875	4 917	4 967	5 019
Least Developed Countries	kt	4	2	2	2	2	2	2	2	2	2	2
Pigmeat²												
OECD ¹	kt	5 787	6 167	6 217	6 278	6 397	6 397	6 430	6 461	6 481	6 592	6 675
Developing countries	kt	1 133	1 133	1 141	1 171	1 187	1 197	1 206	1 222	1 235	1 233	1 233
Least Developed Countries	kt	1	1	1	1	1	1	1	1	1	1	1
Poultry												
OECD ¹	kt	5 361	5 582	5 581	5 669	5 855	5 940	6 059	6 199	6 274	6 419	6 600
Developing countries	kt	6 861	6 957	7 123	7 246	7 315	7 487	7 632	7 759	7 972	8 172	8 372
Least Developed Countries	kt	23	2	2	2	2	2	2	2	2	2	2
Fish												
OECD	kt	12 398	12 747	12 937	12 950	13 242	13 559	13 845	14 206	14 258	14 571	14 652
Developing countries	kt	24 626	25 984	26 548	27 081	27 384	28 142	28 697	29 008	29 423	29 912	30 484
Least Developed Countries	kt	1 441	1 452	1 478	1 544	1 533	1 552	1 583	1 645	1 709	1 755	1 795
Fishmeal												
OECD	kt	900	1 072	1 072	1 031	1 041	1 044	1 032	1 055	1 025	1 043	1 051
Developing countries	kt	2 198	2 254	2 255	2 133	2 240	2 253	2 222	2 218	2 113	2 209	2 241
Least Developed Countries	kt	83	105	105	105	105	105	105	105	105	105	105
Fish oil												
OECD	kt	410	471	476	468	464	478	480	478	461	459	464
Developing countries	kt	470	475	475	429	468	475	483	481	442	468	473
Least Developed Countries	kt	3	2	2	2	2	2	2	2	2	2	2
Butter												
OECD ¹	kt	680	690	712	733	748	749	757	772	788	802	822
Developing countries	kt	94	97	99	100	101	104	105	107	109	111	113
Least Developed Countries	kt	6	7	8	7	7	7	7	7	7	7	7
Cheese												
OECD ¹	kt	1 413	1 513	1 531	1 609	1 662	1 683	1 711	1 738	1 771	1 801	1 823
Developing countries	kt	732	682	703	716	723	739	760	779	795	807	815
Least Developed Countries	kt	0	0	0	0	0	0	0	0	0	0	0
Whole milk powder												
OECD ¹	kt	1 565	1 725	1 741	1 759	1 783	1 768	1 787	1 804	1 845	1 885	1 940
Developing countries	kt	573	558	560	564	569	584	590	598	595	593	588
Least Developed Countries	kt	7	7	7	7	7	7	7	7	7	7	7
Skim milk powder												
OECD ¹	kt	1 491	1 601	1 644	1 684	1 731	1 760	1 799	1 834	1 872	1 917	1 953
Developing countries	kt	138	129	131	131	130	131	132	133	133	133	132
Least Developed Countries	kt	3	3	3	3	3	3	3	3	3	3	3
Biofuel³												
Ethanol World Trade	Mil l	3 749	4 605	9 522	11 155	11 869	14 245	15 827	15 129	14 147	14 788	12 259
Biodiesel World Trade	Mil l	2 029	1 659	1 870	2 021	2 278	2 199	2 184	2 071	1 855	2 050	2 152

Table A.3.2. World trade projections, exports (cont.)

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cotton												
OECD	kt	3 962	3 814	3 850	3 868	3 851	3 793	3 841	3 924	4 002	4 013	4 052
Developing countries	kt	3 619	2 899	2 839	2 873	2 943	3 014	3 146	3 230	3 225	3 336	3 422
Least Developed Countries	kt	655	852	860	918	980	1 062	1 148	1 235	1 284	1 349	1 413

Note: Average 2010-12est: Data for 2012 are estimated.

1. Excludes Iceland but includes all EU27 member countries.

2. Excludes trade of live animals.

3. Sum of all positive net trade positions

Source: OECD and FAO Secretariats.

Table A.4.1. Biofuel projections: Ethanol

	PRODUCTION (Mn l)		Growth (%) ¹	DOMESTIC USE (Mn l)		Growth (%) ¹	FUEL USE (Mn l)		Growth (%) ¹	SHARE IN GAZOLINE TYPE FUEL USE (%)				NET TRADE (Mn l) ²	
	Average 2010-12est	2022	2013-22	Average 2010-12est	2022	2013-22	Average 2010-12est	2022	2013-22	Energy Shares		Volume Shares		Average 2010-12est	2022
										Average 2010-12est	2022	Average 2010-12est	2022		
NORTH AMERICA															
Canada	1 572	1 474	-0.85	1 920	2 202	0.20	1 920	2 202	0.20	3.2	3.5	4.7	5.1	-349	-729
United States	47 906	79 997	3.79	46 383	87 773	4.39	44 216	85 393	4.51	5.8	10.9	8.4	15.5	1 624	-7 874
of which second generation	37	16 353	..	..	..	..	..	..	..	..	..	..	..	..	..
EUROPE															
European Union	6 554	12 261	6.76	8 243	16 098	7.18	5 683	13 803	8.99	3.1	8.1	4.5	11.7	-1 689	-3 837
of which second generation	42	425	..	..	..	..	..	..	..	..	..	..	..	..	..
OCEANIA DEVELOPED															
Australia	349	427	-0.71	372	453	-0.67	372	453	-0.67	1.3	1.6	2.0	2.4	-23	-26
OTHER DEVELOPED															
Japan	101	101	0.15	950	1 551	4.61	350	966	8.84	0.0	0.0	0.0	0.0	-877	-1 450
of which second generation	79	78	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	367	319	-1.19	190	199	0.08	4	6	1.02	..	..	..	..	177	121
SUB-SAHARIAN AFRICA															
Mozambique	36	72	6.94	34	45	2.35	2	15	8.60	..	..	..	..	2	27
Tanzania	34	42	2.92	43	50	2.89	3	19	9.69	..	..	..	..	-9	-8
LATIN AMERICA AND CARRIBBEAN															
Argentina	355	1 015	8.04	512	1 154	7.62	344	980	9.76	3.4	6.6	5.0	9.6	-157	-139
Brazil	25 373	47 376	5.10	23 549	35 558	4.23	21 886	33 642	4.45	46.4	56.8	56.2	66.2	1 823	11 818
Columbia	352	598	3.63	409	603	2.55	342	539	2.89	..	..	..	..	-58	-5
Mexico	210	252	0.99	342	404	0.99	0	0	..	0.0	0.0	0.0	0.0	-132	-151
Peru	181	402	3.15	90	193	2.99	70	173	3.35	..	..	..	..	90	209
ASIA AND PACIFIC															
China	8 643	10 531	1.83	8 566	10 090	0.96	2 133	3 890	3.72	1.5	1.8	2.2	2.7	77	441
India	2 258	2 971	2.41	2 294	3 057	2.62	262	964	11.65	..	..	..	..	-36	-86
Indonesia	193	260	2.96	156	225	2.26	31	95	6.08	..	..	..	..	38	35
Malaysia	89	96	0.16	91	96	0.11	0	0	4.93	..	..	..	..	-2	-1
Philippines	129	269	5.57	425	547	0.68	230	362	1.00	..	..	..	..	-297	-279
Thailand	781	1 461	4.28	640	958	3.83	461	783	4.90	..	..	..	..	141	502
Turkey	84	130	3.37	123	143	1.29	50	68	2.78	..	..	..	..	-39	-13
Viet Nam	345	690	2.77	257	437	2.12	94	264	3.72	..	..	..	..	88	253
TOTAL	100 130	167 391	4.10	99 776	167 293	4.12	79 051	145 202	4.77	6.2	10.7	9.0	15.2	3 749	12 259

Note: .. : Not available.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).

2. For total net trade exports are shown.

Source: OECD and FAO Secretariats.

Table A.4.2. Biofuel projections: Biodiesel

	PRODUCTION (Mn l)		Growth (%) ¹	DOMESTIC USE (Mn l)		Growth (%) ¹	SHARE IN DIESEL TYPE FUEL USE (%)				NET TRADE (Mn l) ²	
	Average 2010-12est	2022		Average 2010-12est	2022		2013-22	Energy share		Volume share		Average 2010-12est	2022
			2013-22				Average 2010-12est	2022	Average 2010-12est	2022		
NORTH AMERICA												
Canada	248	346	-3.91	319	665	0.43	0.9	1.8	1.1	2.3	-71	-318
United States	3 721	6 267	1.65	3 477	6 158	1.76	1.4	2.2	1.8	2.7	244	109
EUROPE												
European Union	10 707	18 282	6.28	13 430	20 530	5.03	5.2	7.4	6.5	9.1	-2 723	-2 248
of which second generation	52	225	..	..	..	..	..	..	..	..	..	..
OCEANIA DEVELOPED												
Australia	649	734	1.10	649	734	1.10	2.9	2.4	3.6	3.0	0	0
OTHER DEVELOPED												
South Africa	72	98	2.38	72	98	2.38	..	..	..	..	0	0
SUB-SAHARIAN AFRICA												
Mozambique	66	84	0.78	9	49	5.81	..	..	..	..	57	36
Tanzania	61	96	4.29	0	58	119.70	..	..	..	..	61	38
LATIN AMERICA AND CARIBBEAN												
Argentina	2 524	3 451	2.01	784	1 467	2.98	5.6	8.4	7.0	10.3	1 740	1 984
Brazil	2 599	3 337	2.85	2 603	3 278	2.70	4.9	4.6	6.0	5.7	-4	59
Columbia	537	926	3.54	537	925	3.55	..	..	..	..	0	1
Peru	68	105	1.68	213	316	2.64	..	..	..	..	-145	-211
ASIA AND PACIFIC												
India	276	776	9.15	347	1 205	10.54	..	..	..	..	-71	-429
Indonesia	1 353	2 279	3.70	341	1 432	10.10	..	..	..	..	1 012	847
Malaysia	125	783	13.64	50	650	14.82	..	..	..	..	75	133
Philippines	142	378	9.43	142	378	9.43	..	..	..	..	0	0
Thailand	706	1 465	4.93	706	1 465	4.93	..	..	..	..	0	0
Turkey	11	17	2.73	11	17	2.73	..	..	..	..	0	0
Viet Nam	18	103	11.18	18	103	11.21	..	..	..	..	0	0
TOTAL	24 011	40 620	4.46	23 837	40 620	4.46	3.0	4.0	3.7	4.9	2 029	2 152

Note: ..: Not available.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. For total net trade exports are shown.

Source: OECD and FAO Secretariats.

Table A.5. Main policy assumptions for biofuel markets

		2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
ARGENTINA												
Biodiesel												
Export tax	%	18.3	20.1	21.7	20.8	19.3	21.2	22.9	22.9	24.0	24.0	24.0
BRAZIL												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incorporation mandate ¹	%	14.3	16.1	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
Biodiesel												
Tax concessions ²	BRL/hl	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Import tariffs	%	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
CANADA												
Ethanol												
Tax concessions ²	CAD/hl	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Import tariffs	CAD/hl	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Incorporation mandate ¹	%	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Direct support												
Federal	CAD/hl	7.0	6.0	5.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Provincial	CAD/hl	4.3	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Tax concessions ²	CAD/hl	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Incorporation mandate ¹	%	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Direct support												
Federal	CAD/hl	14.0	12.0	10.0	8.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Provincial	CAD/hl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLOMBIA												
Ethanol												
Import tariffs	%	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Blending target ^{3,4}	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
EUROPEAN UNION												
Biofuel												
Energy share in fuel consumption ⁵	%	4.5	5.0	5.4	5.8	6.2	6.6	7.0	7.5	8.0	8.3	8.6
Ethanol												
Tax concessions ²	EUR/hl	20.5	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
Import tariffs	EUR/hl	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Biodiesel												
Tax concessions ²	EUR/hl	20.1	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
Import tariffs	%	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
INDIA												
Ethanol												
Import tariffs	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Share of biofuel mandates in total fuel consumption	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Biodiesel												
Import tariffs	%	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Share of biofuel mandates in total fuel consumption	%	1.9	2.8	3.7	4.6	5.5	6.4	7.3	8.2	8.2	8.2	8.2
INDONESIA												
Ethanol												
Import tariffs	%	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3
Blending target ⁴	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Blending target ⁴	%	3.0	3.0	3.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
MALAYSIA												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
PERU												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Biodiesel												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Table A.5. Main policy assumptions for biofuel markets (cont.)

		2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
THAILAND												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
UNITED STATES												
Renewable Fuel Standard⁶												
Total	Mn l	62 648	66 820	72 068	74 402	77 809	80 371	83 816	85 926	88 825	93 932	97 698
advanced mandate	Mn l	10 410	12 310	15 287	17 621	21 028	23 590	27 035	29 145	32 044	37 151	40 917
cellulosic ethanol	Mn l	53	189	757	1 514	3 028	3 208	4 698	6 450	8 889	12 613	16 353
biodiesel	Mn l	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845
Ethanol												
Import surcharge	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Import tariffs (undenatured)	%	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Import tariffs (denatured)	%	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Blenders tax credit	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Biodiesel												
Import tariffs	%	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Blenders tax credit	USD/hl	0.00	26.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: 2012/13est: Data for 2012/13 are estimated.

1. Share in respective fuel type, energy equivalent.
2. Difference between tax rates applying to fossil and biogen fuels.
3. Applies to cities with more than 500 000 inhabitants.
4. Expressed in volume share.
5. According to the current Renewable energy Directive 2009/28/EC, the energy content of biofuel other than first-generation biofuels counts twice towards meeting the target.
6. The total, advanced and cellulosic mandates are not at the levels defined in EISA. As those mandates are subject to uncertainties regarding EPA implementation, the following assumptions were taken to construct the baseline: The total and advanced mandates have been reduced by a portion of the shortfall in cellulosic production. That portion starts at 29% in 2013/2014 and reaches 87% in 2022/2023.

Source: OECD and FAO Secretariats.

Table A.6. World cereal projections

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
WHEAT												
World												
Production	mt	675.3	697.4	711.8	716.5	724.1	732.4	740.4	753.6	764.6	775.4	784.5
Area	mha	220.9	222.8	225.5	225.4	225.9	226.6	226.9	228.6	230.0	231.1	231.8
Yield	t/ha	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.4	3.4
Consumption	mt	677.1	692.2	700.8	712.0	723.8	733.1	742.9	753.6	763.4	773.2	782.4
Feed use	mt	135.5	140.8	143.5	145.4	149.9	151.7	154.0	156.0	157.8	160.1	162.0
Food use	mt	461.6	471.2	475.7	483.4	489.4	495.4	502.0	509.4	516.3	523.2	530.1
Biofuel use	mt	6.8	6.7	6.9	7.2	7.5	7.8	8.1	8.8	9.5	9.7	10.1
Other use	mt	73.2	73.6	74.7	76.0	77.0	78.1	78.8	79.4	79.8	80.1	80.2
Exports	mt	137.2	135.0	137.6	140.7	141.4	143.2	143.7	145.8	147.3	149.1	150.4
Closing stocks	mt	190.4	188.1	199.1	203.6	203.9	203.2	200.7	200.7	201.9	204.2	206.2
Price ¹	USD/t	312.5	301.3	262.3	256.5	259.4	259.3	266.6	270.0	272.3	273.4	274.2
Developed countries												
Production	mt	346.9	362.6	368.4	367.6	370.9	374.6	377.1	382.8	387.7	392.7	396.3
Consumption	mt	269.8	272.7	275.7	278.5	283.4	285.9	288.9	291.4	293.9	296.1	298.1
Closing stocks	mt	73.1	70.0	79.3	83.3	84.5	85.3	84.3	84.8	86.0	88.0	89.6
Developing countries												
Production	mt	328.4	334.8	343.4	348.8	353.2	357.8	363.3	370.8	377.0	382.7	388.2
Consumption	mt	407.3	419.6	425.0	433.5	440.3	447.2	454.0	462.2	469.4	477.0	484.3
Closing stocks	mt	117.4	118.1	119.8	120.3	119.4	117.9	116.4	115.9	116.0	116.2	116.6
OECD²												
Production	mt	275.1	278.1	281.0	278.0	279.3	280.8	280.9	283.6	285.8	287.9	288.8
Consumption	mt	220.2	222.2	223.2	224.3	227.4	228.8	230.9	232.3	233.6	234.4	235.1
Closing stocks	mt	50.8	45.3	50.2	51.4	52.5	53.5	53.0	53.3	53.9	55.2	56.3
COARSE GRAINS												
World												
Production	mt	1 149.9	1 249.1	1 232.6	1 234.3	1 259.7	1 287.6	1 312.5	1 337.5	1 359.4	1 382.0	1 407.1
Area	mha	324.2	333.8	332.5	330.9	333.0	336.1	339.0	342.6	345.7	348.6	352.0
Yield	t/ha	3.5	3.7	3.7	3.7	3.8	3.8	3.9	3.9	3.9	4.0	4.0
Consumption	mt	1 155.5	1 203.9	1 231.7	1 247.3	1 267.6	1 289.6	1 314.1	1 338.0	1 361.1	1 384.0	1 408.2
Feed use	mt	602.0	644.6	660.2	668.1	679.4	693.1	708.7	721.6	735.2	750.7	767.1
Food use	mt	215.5	226.2	230.3	234.8	239.2	244.6	250.4	256.4	262.6	268.6	274.9
Biofuel use	mt	137.0	156.7	163.0	163.7	166.1	166.3	167.2	170.2	171.8	172.1	172.6
Other use	mt	161.9	136.7	138.3	139.9	141.4	143.4	145.3	146.6	147.8	148.5	149.2
Exports	mt	124.6	130.0	134.0	136.4	140.0	142.6	146.8	150.2	153.7	156.4	160.1
Closing stocks	mt	189.4	237.7	240.6	229.6	223.7	223.8	224.2	225.7	226.1	226.2	227.2
Price ³	USD/t	284.6	243.4	216.4	221.1	227.2	228.2	234.1	236.4	237.7	240.3	240.6
Developed countries												
Production	mt	585.1	648.3	627.5	618.3	632.8	646.2	657.4	667.1	674.9	683.2	693.0
Consumption	mt	555.7	557.6	563.3	564.9	572.6	580.8	589.9	598.1	604.4	610.8	616.7
Closing stocks	mt	80.9	109.5	114.3	106.4	103.2	102.5	102.0	102.0	101.3	100.3	100.1
Developing countries												
Production	mt	564.7	600.7	605.1	616.0	626.9	641.4	655.1	670.4	684.6	698.8	714.1
Consumption	mt	599.7	646.3	668.4	682.4	695.0	708.8	724.3	739.9	756.7	773.2	791.4
Closing stocks	mt	108.5	128.2	126.3	123.2	120.5	121.3	122.2	123.8	124.9	125.9	127.1
OECD²												
Production	mt	539.0	593.4	571.5	561.6	574.5	586.6	596.6	605.0	611.4	618.2	626.6
Consumption	mt	548.8	547.6	553.0	554.3	561.3	569.1	577.9	585.9	592.0	598.1	604.3
Closing stocks	mt	76.7	105.6	109.5	100.9	97.4	96.4	95.9	95.8	95.1	94.0	93.6

ANNEX A

Table A.6. World cereal projections (cont.)

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
RICE												
World												
Production	mt	481.1	493.7	500.5	506.7	512.4	518.2	524.0	530.3	536.4	542.9	549.3
Area	mha	161.7	162.1	162.6	162.9	163.3	163.6	163.9	164.1	164.4	164.6	164.9
Yield	t/ha	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.3
Consumption	mt	468.7	486.7	496.1	505.7	510.4	517.2	524.4	531.8	538.7	545.2	551.3
Feed use	mt	16.1	17.4	18.3	18.9	19.6	20.3	20.9	21.5	22.1	22.7	23.3
Food use	mt	397.3	410.3	416.7	424.0	428.7	434.2	440.3	446.8	452.8	458.2	463.0
Exports	mt	36.6	36.5	39.4	40.7	41.2	42.1	42.7	43.3	43.8	44.4	45.0
Closing stocks	mt	159.4	179.6	184.1	185.0	187.1	188.0	187.5	186.0	183.7	181.4	179.5
Price ⁴	USD/t	451.1	480.9	440.3	423.2	419.3	417.9	426.1	438.0	451.1	462.5	470.3
Developed countries												
Production	mt	18.1	17.5	18.3	18.2	18.3	18.3	18.4	18.5	18.7	18.8	19.0
Consumption	mt	18.6	18.6	19.1	19.3	19.5	19.6	19.7	19.8	19.9	20.0	20.1
Closing stocks	mt	4.7	4.6	5.1	5.4	5.5	5.7	5.8	6.0	6.3	6.5	6.8
Developing countries												
Production	mt	463.0	476.2	482.2	488.5	494.1	499.9	505.6	511.8	517.7	524.1	530.3
Consumption	mt	450.1	468.1	476.9	486.4	490.9	497.6	504.7	512.0	518.8	525.1	531.2
Closing stocks	mt	154.7	175.0	179.0	179.7	181.5	182.3	181.7	179.9	177.4	174.9	172.7
OECD²												
Production	mt	21.6	21.0	21.7	21.7	21.8	21.8	21.9	22.0	22.2	22.3	22.5
Consumption	mt	22.5	22.3	22.7	22.9	23.0	23.1	23.2	23.4	23.5	23.6	23.7
Closing stocks	mt	6.4	6.1	6.6	6.9	7.1	7.2	7.4	7.6	7.8	8.1	8.3

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. No.2 hard red winter wheat, ordinary protein, United States f.o.b. Gulf Ports (June/May), less EEP payments where applicable.
2. Excludes Iceland but includes all EU27 member countries.
3. No.2 yellow corn, United States f.o.b. Gulf Ports (September/August).
4. Milled, 5% broken, f.o.b. Ho Chi Minh (January/December).

Source: OECD and FAO Secretariats.

Table A.7.1. Wheat projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	675 293	784 493	1.89	1.29	135 767	150 442	3.57	1.13	137 247	150 442	3.75	1.13
DEVELOPED COUNTRIES	346 874	396 282	1.42	0.98	28 126	28 780	2.02	0.35	113 311	125 343	4.01	1.42
NORTH AMERICA	84 005	85 746	0.37	-0.03	3 151	3 879	6.11	1.69	48 228	45 323	0.63	0.41
Canada	25 264	29 024	1.02	0.39	76	74	23.66	-0.42	17 482	20 869	1.78	1.35
United States	58 741	56 722	0.12	-0.25	3 075	3 805	5.86	1.73	30 745	24 455	-0.04	-0.33
EUROPE	207 725	244 904	1.89	1.18	9 062	8 649	-2.86	-0.61	35 123	48 956	9.03	2.65
European Union	136 945	148 593	1.13	0.66	6 007	5 527	-1.55	0.22	17 940	17 746	6.15	-0.55
Russian Federation	45 580	66 220	1.98	2.15	421	53	-15.24	1.56	11 285	21 147	9.16	5.44
Ukraine	18 315	22 233	10.39	2.15	443	986	-19.62	-2.93	5 291	9 366	33.34	4.01
OCEANIA DEVELOPED	26 895	25 395	2.28	0.38	464	425	3.72	-1.22	21 379	17 651	5.02	0.00
Australia	26 456	24 956	2.23	0.39	0	0	..	..	21 378	17 651	5.02	0.00
New Zealand	439	439	6.29	-0.21	464	425	3.72	-1.22	1	0	..	..
OTHER DEVELOPED ¹	28 249	40 237	1.34	2.58	15 450	15 827	5.25	0.65	8 581	13 413	8.97	3.09
Japan	724	996	-2.29	1.72	5 990	5 430	1.21	-0.41	0	0	..	..
South Africa	1 791	2 349	1.06	1.71	1 624	1 537	5.76	0.12	239	244	6.99	-0.12
DEVELOPING COUNTRIES	328 419	388 211	2.39	1.61	107 641	121 662	4.02	1.33	23 936	25 099	2.20	-0.17
AFRICA	22 147	31 472	1.65	2.65	38 201	43 774	4.34	1.92	880	67	0.19	-19.06
NORTH AFRICA	17 593	25 081	0.98	2.39	23 613	25 604	5.11	1.68	250	43	-1.73	-1.03
Algeria	3 083	4 557	1.81	2.99	5 800	5 776	2.93	0.63	0	0	0.00	-0.74
Egypt	8 079	10 843	1.69	2.13	10 613	12 708	5.43	2.41	0	0	0.00	0.51
SUB-SAHARAN AFRICA	4 554	6 392	4.74	3.72	14 588	18 170	3.18	2.27	630	24	1.04	-27.79
LATIN AMERICA and CARIBBEAN	27 740	31 910	0.45	2.21	20 405	22 268	1.06	0.73	14 207	17 215	3.18	2.36
Argentina	13 853	15 707	-2.10	2.61	0	0	..	..	8 890	10 485	-1.80	3.48
Brazil	5 591	5 925	1.06	2.29	6 123	7 564	0.79	1.53	2 307	2 906	37.50	0.92
Chile	1 393	1 391	-2.66	0.45	725	1 046	10.43	3.41	0	0	0.00	-0.24
Mexico	3 535	4 223	4.11	1.06	3 927	3 024	0.90	-1.43	752	1 030	9.35	0.45
Uruguay	1 540	2 290	20.73	3.18	27	184	-13.42	-6.91	990	1 737	70.41	1.97
ASIA and PACIFIC	278 533	324 829	2.66	1.46	49 035	55 621	5.21	1.12	8 849	7 817	0.83	-3.72
Bangladesh	997	1 522	-2.71	4.38	2 740	2 634	4.57	-0.04	0	0	-31.43	-27.99
China ²	117 720	127 106	3.54	0.60	2 100	2 784	-1.58	3.94	303	239	-21.11	-0.25
India	87 517	111 829	3.64	2.56	64	5	-26.06	1.84	2 747	3 796	-30.66	-3.18
Indonesia	0	0	0.00	-1.12	5 720	6 714	2.93	1.59	25	30	2.46	-0.23
Iran, Islamic Republic of	14 100	13 843	-0.49	-0.07	2 014	3 632	19.43	0.22	300	51	95.02	-19.21
Korea	38	28	21.05	0.00	5 049	4 494	5.31	0.99	50	52	-9.66	0.00
Malaysia	0	0	0.00	0.71	1 260	1 447	-1.04	1.56	116	97	-3.03	-0.22
Pakistan	23 874	28 260	2.58	1.45	200	204	-11.13	0.24	900	895	19.26	-1.23
Saudi Arabia	1 120	1 305	-12.09	1.47	2 200	3 001	72.57	2.00	0	0	-64.68	-0.79
Turkey	20 525	21 380	0.27	0.57	3 317	4 711	27.70	2.65	3 267	2 229	12.44	-2.58
LEAST DEVELOPED COUNTRIES (LDC)	11 501	16 631	3.29	3.30	15 038	18 479	3.93	1.61	46	24	-19.74	-5.89
OECD³	275 095	288 795	0.87	0.42	31 159	31 395	3.24	0.71	91 620	84 036	2.83	0.02
BRICS	258 199	313 429	3.23	1.63	10 332	11 943	-2.44	1.81	16 882	28 332	5.72	3.09

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.7.2. Wheat projections: Consumption, food use, per capita

Crop year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD USE (kt)		Growth (%) ⁴		PER CAPITA (kg)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	677 051	782 430	1.48	1.39	461 561	530 084	0.74	1.34	66.2	68.0	-0.43	0.33
DEVELOPED COUNTRIES	269 761	298 085	0.84	1.01	132 892	143 068	0.23	0.58	96.4	100.0	-0.24	0.24
NORTH AMERICA	42 307	43 870	1.03	0.06	28 297	30 671	0.23	0.68	81.4	80.7	-0.68	-0.13
Canada	8 667	8 223	1.55	-0.61	2 741	2 891	-1.03	0.35	79.8	76.6	-2.05	-0.50
United States	33 640	35 647	0.90	0.23	25 556	27 780	0.37	0.71	81.6	81.2	-0.53	-0.09
EUROPE	186 138	204 314	0.76	1.07	81 311	85 161	-0.05	0.30	109.7	113.9	-0.24	0.23
European Union	126 765	136 360	0.56	0.83	55 881	58 786	0.32	0.47	111.0	114.2	-0.07	0.28
Russian Federation	37 423	44 929	0.77	1.94	14 652	15 481	-1.09	-0.14	102.6	110.3	-0.94	0.03
Ukraine	13 477	13 813	2.64	0.94	5 276	5 165	-0.86	-0.47	116.7	121.3	-0.22	0.07
OCEANIA DEVELOPED	6 809	7 641	0.00	0.83	2 064	2 614	-0.83	1.07	76.3	85.2	-2.38	-0.07
Australia	5 908	6 777	-0.55	1.05	1 746	2 291	-1.03	1.24	77.2	88.8	-2.65	0.05
New Zealand	901	864	4.30	-0.72	318	323	-0.33	-0.04	72.1	65.8	-1.45	-0.98
OTHER DEVELOPED ¹	34 506	42 260	1.14	1.86	21 220	24 622	1.45	1.41	80.8	90.2	0.91	1.07
Japan	6 652	6 412	0.81	-0.04	5 526	5 407	0.63	-0.03	43.7	43.6	0.61	0.17
South Africa	3 103	3 624	1.61	1.37	2 949	3 453	1.31	1.39	58.5	65.1	0.35	0.94
DEVELOPING COUNTRIES	407 290	484 345	1.94	1.62	328 669	387 016	0.95	1.63	58.7	60.8	-0.39	0.47
AFRICA	59 376	75 153	3.56	2.25	50 810	64 479	2.73	2.32	51.0	50.4	0.32	0.03
NORTH AFRICA	40 423	50 696	3.37	2.04	33 559	41 831	2.30	2.06	200.0	216.9	0.75	0.81
Algeria	8 800	10 275	2.72	1.59	7 633	8 875	1.95	1.66	212.2	216.6	0.44	0.51
Egypt	18 226	23 751	3.56	2.27	15 759	20 161	2.34	2.21	190.9	207.2	0.53	0.74
SUB-SAHARAN AFRICA	18 952	24 457	3.98	2.69	17 251	22 648	3.61	2.83	20.8	20.8	1.00	0.33
LATIN AMERICA and CARIBBEAN	34 417	36 878	-0.19	1.09	30 366	32 724	-0.13	1.15	50.9	49.3	-1.28	0.21
Argentina	4 895	5 183	-4.37	0.17	3 977	4 380	-5.08	0.22	97.8	98.4	-5.91	-0.56
Brazil	9 899	10 620	-0.92	2.07	9 371	10 142	-1.00	2.16	47.7	47.6	-1.95	1.46
Chile	2 107	2 431	-0.65	1.64	1 909	2 180	0.06	1.61	110.6	116.1	-0.91	0.86
Mexico	6 710	6 217	1.66	-0.14	5 327	4 736	2.48	-0.33	46.4	37.0	1.21	-1.28
Uruguay	637	715	4.83	1.48	391	426	1.29	1.12	115.7	121.1	1.04	0.74
ASIA and PACIFIC	313 497	372 314	1.89	1.56	247 492	289 813	0.74	1.54	61.8	65.5	-0.38	0.65
Bangladesh	3 354	4 259	0.81	2.04	3 154	4 186	0.80	2.54	21.0	24.5	-0.38	1.42
China ²	118 758	129 391	1.98	0.67	82 833	82 156	-1.02	0.07	61.5	59.0	-1.52	-0.20
India	82 167	108 691	1.77	2.66	73 619	98 654	1.63	2.81	59.3	69.6	0.19	1.62
Indonesia	5 211	6 618	2.05	2.05	4 483	5 483	2.02	1.75	18.5	20.6	0.92	0.91
Iran, Islamic Republic of	15 330	17 167	0.16	0.71	12 561	13 559	1.24	0.49	167.9	165.4	0.06	-0.29
Korea	4 804	4 469	4.48	0.28	2 317	2 345	0.29	0.03	47.9	46.9	-0.17	-0.25
Malaysia	1 061	1 339	-1.53	2.07	841	1 072	-1.90	2.19	29.1	31.7	-3.58	0.74
Pakistan	23 474	27 547	1.59	1.56	21 424	25 672	1.78	1.58	121.2	121.3	-0.03	-0.03
Saudi Arabia	3 420	4 286	4.73	2.22	2 698	3 475	5.32	2.28	96.1	100.3	2.47	0.39
Turkey	20 541	23 816	0.63	1.37	15 217	17 341	1.34	1.21	206.7	211.2	0.03	0.25
LEAST DEVELOPED COUNTRIES (LDC)	26 772	35 018	3.94	2.46	23 870	31 412	3.47	2.70	28.0	29.1	1.19	0.53
OECD³	220 233	235 115	0.78	0.69	118 589	126 255	0.51	0.59	92.8	93.5	-0.16	0.10
BRICS	251 350	297 256	1.60	1.61	183 425	209 887	0.00	1.37	61.6	65.3	-0.88	0.70

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.8.1. Coarse grain projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	1 149 852	1 407 105	2.27	1.56	123 208	162 150	2.03	2.29	124 559	160 083	1.44	2.32
DEVELOPED COUNTRIES	585 103	693 022	0.68	1.10	34 774	34 407	-0.54	0.98	81 059	110 914	-0.67	2.81
NORTH AMERICA	336 064	397 136	0.75	1.16	4 011	3 472	-0.41	0.02	44 354	68 920	-4.92	4.07
Canada	22 918	26 477	-1.34	1.38	1 021	899	-10.45	0.52	5 499	5 437	2.26	2.08
United States	313 146	370 659	0.92	1.14	2 990	2 573	5.96	-0.15	38 855	63 483	-5.80	4.27
EUROPE	217 774	260 636	0.51	1.05	9 409	10 315	1.95	3.40	27 511	34 576	8.30	1.37
European Union	145 112	160 571	-0.20	0.42	7 892	8 867	4.30	4.40	8 781	5 960	-0.69	-3.88
Russian Federation	26 062	37 497	-1.01	1.71	372	551	-13.12	-0.04	2 976	2 860	5.10	2.22
Ukraine	28 119	41 688	6.17	3.39	102	102	3.97	-9.98	13 918	21 523	17.73	2.90
OCEANIA DEVELOPED	13 084	14 300	-0.97	0.69	27	5	7.39	-22.45	6 590	5 873	1.50	1.89
Australia	12 470	13 613	-1.09	0.67	0	0	..	..	6 584	5 867	1.50	1.89
New Zealand	614	687	2.64	1.17	27	5	8.70	-22.45	6	6	28.68	-0.01
OTHER DEVELOPED ¹	18 181	20 950	2.87	1.10	21 328	20 614	-1.30	0.06	2 604	1 545	8.31	-5.93
Japan	203	203	-1.52	-0.14	18 947	17 885	-1.30	-0.25	0	0	..	..
South Africa	12 776	14 819	3.55	1.27	278	2	-13.66	-41.83	2 137	1 247	10.37	-5.55
DEVELOPING COUNTRIES	564 749	714 082	4.18	2.03	88 433	127 743	3.22	2.68	43 500	49 169	6.28	1.34
AFRICA	107 771	135 733	3.92	2.55	16 903	27 071	2.83	2.85	4 524	1 521	10.65	-3.46
NORTH AFRICA	12 465	14 653	0.41	1.64	13 482	19 214	4.43	2.53	50	41	-4.77	-0.74
Algeria	1 646	2 284	3.85	2.50	2 738	3 590	3.22	1.15	0	0	0.00	-0.08
Egypt	7 864	8 860	0.32	1.49	6 238	9 488	4.82	3.13	0	0	0.00	-0.22
SUB-SAHARAN AFRICA	95 305	121 080	4.47	2.67	3 421	7 856	-1.74	3.68	4 474	1 481	10.99	-3.52
LATIN AMERICA and CARIBBEAN	142 878	181 611	3.69	1.64	26 101	33 429	3.64	2.07	33 870	41 645	10.07	1.34
Argentina	30 697	40 689	5.15	2.96	0	0	..	..	18 595	25 641	5.75	3.46
Brazil	63 548	80 032	5.00	0.80	874	1 440	1.95	2.29	12 592	11 444	20.56	-2.81
Chile	2 018	2 374	1.06	1.15	1 298	1 967	0.94	2.34	123	85	2.72	-2.22
Mexico	28 710	35 554	0.03	1.86	10 885	13 619	2.46	2.64	196	243	28.64	24.51
Uruguay	903	1 299	5.38	1.29	63	39	5.56	-1.48	100	141	2.11	1.51
ASIA and PACIFIC	314 100	396 739	4.51	2.04	45 430	67 244	3.15	2.93	5 107	6 003	-7.41	3.04
Bangladesh	1 705	2 073	28.04	1.90	128	1 196	-4.38	5.88	0	0	0.00	-0.41
China ²	200 681	256 811	5.36	1.90	5 370	13 238	17.53	9.10	141	110	-42.23	-5.46
India	42 403	53 293	2.25	2.83	10	7	-28.12	3.40	3 328	4 272	26.43	4.68
Indonesia	18 311	24 260	7.23	2.37	2 257	3 983	8.92	1.01	59	109	4.82	-0.10
Iran, Islamic Republic of	5 010	5 843	-0.12	2.34	4 671	6 130	10.28	1.08	0	0	0.00	-1.50
Korea	195	272	-7.18	2.20	8 011	8 304	-1.46	0.20	0	0	11.07	2.12
Malaysia	97	90	4.17	1.40	3 003	3 924	2.93	1.76	8	6	0.89	-1.72
Pakistan	4 059	5 075	4.17	2.07	26	23	-4.61	-1.65	0	0	-28.79	0.94
Saudi Arabia	475	494	2.25	1.08	9 176	11 982	2.53	1.89	0	0	0.00	-0.13
Turkey	12 374	14 869	-0.37	1.73	553	1 783	-1.42	8.67	254	180	-2.58	-3.56
LEAST DEVELOPED COUNTRIES (LDC)	72 756	94 187	6.02	2.73	2 354	5 063	-0.57	3.60	4 251	1 420	12.50	-3.10
OECD³	539 013	626 590	0.36	1.00	54 006	58 532	0.05	1.45	60 298	81 261	-3.73	3.07
BRICS	345 470	442 452	4.20	1.76	6 904	15 239	7.50	7.46	21 174	19 933	6.10	-1.27

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.8.2. Coarse grain projections: Consumption, feed use, per capita

Crop year

	CONSUMPTION (kt)		Growth (%) ⁴		FEED USE (kt)		Growth (%) ⁴		PER CAPITA (kg)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	1 155 480	1 408 175	2.38	1.74	601 983	767 062	0.50	1.92	30.9	35.2	0.88	1.21
DEVELOPED COUNTRIES	555 737	616 741	1.14	1.19	296 117	345 923	-2.02	1.40	23.3	23.6	0.30	-0.02
NORTH AMERICA	306 112	332 219	2.47	1.19	107 385	138 319	-5.06	2.18	32.3	34.0	2.32	-0.37
Canada	19 104	21 853	-2.13	1.35	13 547	15 825	-4.59	1.90	62.7	65.6	-2.95	-1.33
United States	287 008	310 366	2.85	1.18	93 838	122 494	-5.13	2.22	29.0	30.5	3.98	-0.13
EUROPE	206 230	236 054	-0.32	1.26	158 272	174 235	0.14	0.90	20.0	19.5	-0.92	0.14
European Union	149 826	163 416	-0.08	1.00	113 233	117 794	-0.25	0.42	18.9	19.1	0.44	0.09
Russian Federation	23 878	35 088	-2.59	1.66	21 120	29 114	1.50	1.98	14.6	9.5	-9.42	-1.24
Ukraine	14 670	20 123	1.03	3.77	9 405	13 223	1.31	4.09	45.0	50.8	2.15	1.49
OCEANIA DEVELOPED	6 873	8 433	-1.32	0.16	6 035	6 585	-1.93	0.54	21.8	20.9	3.77	-2.14
Australia	6 239	7 746	-1.64	0.14	5 512	6 014	-2.34	0.50	21.1	20.4	5.44	-2.06
New Zealand	634	687	2.50	0.43	523	572	3.38	0.93	25.3	24.0	-3.35	-2.47
OTHER DEVELOPED ¹	36 522	40 035	0.04	1.08	24 425	26 784	0.26	1.17	20.8	20.9	-0.47	0.10
Japan	18 856	18 154	-1.21	-0.18	14 128	13 270	-1.16	-0.38	2.5	2.6	-1.19	0.00
South Africa	10 981	13 557	1.93	2.38	4 976	6 890	3.17	3.71	94.5	92.6	-0.57	-0.07
DEVELOPING COUNTRIES	599 743	791 433	3.64	2.19	305 866	421 139	3.55	2.38	32.8	37.8	0.94	1.35
AFRICA	119 211	160 555	3.61	2.72	25 935	34 262	4.67	2.41	77.3	83.8	0.54	0.78
NORTH AFRICA	26 156	33 692	2.54	2.21	18 475	24 256	3.10	2.27	39.4	43.5	0.01	0.97
Algeria	4 500	5 855	4.88	1.73	3 657	4 838	6.01	1.75	19.7	21.1	-0.26	0.59
Egypt	14 062	18 305	1.74	2.36	9 513	12 551	1.86	2.41	48.3	52.8	-0.13	0.96
SUB-SAHARAN AFRICA	93 055	126 863	3.93	2.86	7 460	10 006	9.69	2.78	84.9	90.9	0.50	0.66
LATIN AMERICA and CARIBBEAN	132 977	172 841	2.56	1.85	74 487	102 698	2.92	2.04	75.6	81.4	1.15	0.80
Argentina	11 789	15 036	4.48	2.51	6 425	9 261	6.54	2.84	94.1	92.7	2.12	1.82
Brazil	50 523	69 709	3.07	1.63	33 121	52 932	3.02	2.71	62.5	52.8	2.62	-2.11
Chile	3 179	4 242	1.12	1.85	2 539	3 469	1.24	1.95	18.8	20.5	0.88	0.78
Mexico	39 408	48 871	0.69	2.02	16 442	16 797	-0.15	-0.08	170.5	212.7	0.57	2.31
Uruguay	822	1 187	4.88	1.43	277	441	3.95	1.59	21.5	25.4	-1.52	0.54
ASIA and PACIFIC	347 555	458 037	4.09	2.14	205 444	284 178	3.65	2.50	15.3	18.0	0.36	1.42
Bangladesh	1 757	3 255	21.45	3.18	983	2 209	29.90	3.80	4.1	4.8	12.44	1.03
China ²	200 711	270 120	5.19	2.10	122 372	176 413	3.73	2.65	11.2	13.9	1.78	1.59
India	37 550	49 242	1.18	2.65	5 640	7 809	4.41	3.74	21.6	25.7	-1.08	1.67
Indonesia	20 075	28 000	7.25	2.35	9 065	14 249	13.75	2.81	29.5	32.4	0.85	0.84
Iran, Islamic Republic of	9 181	12 082	3.55	1.78	8 696	11 477	3.79	1.84	1.3	1.4	-1.11	0.08
Korea	8 249	8 582	-1.50	0.29	6 051	6 438	-1.60	0.43	4.4	4.3	-0.12	-0.15
Malaysia	3 196	4 003	3.26	1.94	2 997	3 788	3.41	2.04	1.6	1.4	-1.20	-0.86
Pakistan	4 152	5 067	5.33	1.98	1 662	2 039	8.08	2.21	9.4	10.0	0.94	0.61
Saudi Arabia	9 650	12 417	2.91	1.98	9 404	12 129	3.18	2.01	3.4	2.9	-2.45	-1.41
Turkey	12 707	16 404	-0.68	2.46	10 244	13 567	-0.58	2.69	17.4	18.1	-0.21	0.46
LEAST DEVELOPED COUNTRIES (LDC)	69 336	97 254	5.40	2.93	8 330	11 817	12.37	2.56	58.8	67.4	1.93	1.20
OECD³	548 806	604 262	1.24	1.16	279 289	319 753	-2.42	1.19	33.9	39.5	1.19	1.29
BRICS	323 643	437 715	3.47	2.05	187 230	273 158	3.34	2.63	20.5	22.8	0.14	0.89

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.9.1. Rice projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁵		IMPORTS (kt)		Growth (%) ⁵		EXPORTS (kt)		Growth (%) ⁵	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	481 059	549 330	2.40	1.18	36 879	45 041	3.17	2.00	36 626	45 041	3.45	2.00
DEVELOPED COUNTRIES	18 085	19 012	0.60	0.67	4 829	6 215	2.16	2.20	4 261	4 813	1.24	2.26
NORTH AMERICA	6 594	7 351	-0.51	1.62	992	1 300	3.14	2.54	3 363	3 841	0.02	2.66
Canada	0	0	..	..	380	413	2.95	0.90	0	0	..	..
United States	6 594	7 351	-0.51	1.62	612	886	3.31	3.41	3 363	3 841	0.02	2.66
EUROPE	2 562	2 702	3.65	0.64	1 456	1 939	0.07	3.32	416	206	13.78	-1.41
European Union	1 731	1 771	1.30	0.29	1 008	1 550	3.28	3.92	168	151	2.00	-0.27
Russian Federation	707	789	11.18	1.33	184	120	-8.47	4.57	237	44	41.77	-5.14
Ukraine	108	123	9.28	1.54	57	45	-9.35	-3.04	8	9	36.10	3.06
OCEANIA DEVELOPED	615	760	7.48	0.97	212	201	8.22	0.29	260	477	6.76	0.93
Australia	615	760	7.48	0.97	171	160	10.44	0.36	260	477	6.76	0.93
New Zealand	0	0	..	..	41	41	1.62	0.00	0	0	..	..
OTHER DEVELOPED ¹	8 314	8 199	0.34	-0.13	2 168	2 775	2.77	1.48	221	289	-0.20	2.46
Japan	7 749	7 506	0.23	-0.30	853	903	1.22	0.00	173	181	-0.37	0.00
South Africa	2	7	0.00	12.07	967	1 357	3.76	1.61	0	0	0.00	-0.23
DEVELOPING COUNTRIES	462 975	530 318	2.47	1.20	32 051	38 826	3.33	1.97	32 365	40 228	3.78	1.98
AFRICA	16 811	28 074	4.17	5.06	11 220	14 576	3.49	2.44	489	87	-10.30	-10.03
NORTH AFRICA	3 835	3 718	-1.49	-1.15	769	1 780	14.52	14.47	390	0	-12.79	-53.88
Algeria	1	1	0.00	1.20	85	101	2.28	1.74	0	0	0.00	-0.25
Egypt	3 801	3 679	-1.56	-1.17	400	1 223	90.46	28.15	390	0	-12.79	-55.03
SUB-SAHARAN AFRICA	12 976	24 356	6.50	6.43	10 451	12 796	2.99	1.48	99	87	3.86	0.00
LATIN AMERICA and CARIBBEAN	18 345	22 982	1.30	2.24	3 905	5 081	0.80	2.47	3 244	4 040	12.56	0.88
Argentina	992	1 316	4.68	2.25	0	0	..	..	610	771	8.32	1.58
Brazil	8 187	10 473	0.34	2.90	705	625	-3.96	2.27	1 039	1 197	51.49	-1.14
Chile	84	87	-0.28	0.49	111	156	0.74	2.23	1	1	38.27	-0.49
Mexico	129	183	-5.09	2.86	923	1 257	3.43	2.55	3	31	13.72	21.06
Uruguay	984	1 174	3.56	1.55	1	0	-6.27	-0.31	859	1 053	4.46	1.65
ASIA and PACIFIC	427 818	479 262	2.46	0.96	16 926	19 169	3.91	1.50	28 632	36 101	3.47	2.20
Bangladesh	33 712	40 191	3.76	1.72	808	1 760	-5.39	8.57	7	10	-3.97	2.40
China ²	137 990	136 574	2.29	-0.24	1 656	1 494	11.57	-2.55	365	304	-12.93	-0.99
India	101 030	112 916	1.85	1.00	100	140	53.37	2.50	7 179	5 286	4.82	-2.48
Indonesia	42 248	50 845	3.37	1.54	1 800	1 292	1.85	-1.04	2	5	58.85	0.09
Iran, Islamic Republic of	1 468	1 652	-2.42	0.82	1 305	1 919	2.80	3.92	0	0	0.00	3.08
Korea	4 175	4 032	-1.45	0.05	393	444	7.92	0.28	3	3	-40.64	0.00
Pakistan	5 751	7 752	2.44	1.94	60	55	77.09	-0.69	3 088	4 074	2.52	1.85
Philippines	11 300	15 163	2.35	2.18	1 100	1 031	-2.91	-1.18	0	0	0.00	0.08
Thailand	24 084	28 077	2.96	1.13	517	95	91.44	14.31	8 453	12 231	-0.80	1.86
Turkey	528	761	8.97	2.36	258	201	5.40	-1.01	90	111	97.15	1.02
Viet Nam	28 012	31 783	2.50	1.13	583	97	42.41	-15.17	7 444	9 691	7.41	2.90
LDC Asia ³	30 195	41 362	3.42	3.17	1 000	364	2.89	-9.68	1 951	4 346	24.43	15.72
LEAST DEVELOPED COUNTRIES (LDC)	73 441	99 822	4.01	3.07	6 928	7 451	1.16	0.41	2 048	4 434	21.93	15.11
OECD⁴	21 606	22 450	-0.02	0.56	4 989	6 298	3.34	2.02	4 062	4 797	0.20	2.27
BRICS	247 916	260 758	2.05	0.39	3 610	3 737	3.66	-0.03	8 820	6 831	5.31	-2.25

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. LDC Asia includes Afghanistan, Bhutan, Myanmar, Cambodia, Lao Peoples' Democratic Republic, Nepal, Yemen, Timor Meste, Maldives.
4. Excludes Iceland but includes all EU27 member countries.
5. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

ANNEX A

Table A.9.2. Rice projections: Consumption, per capita

Crop year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	468 706	551 295	1.76	1.36	57.0	59.4	0.17	0.35
DEVELOPED COUNTRIES	18 608	20 143	0.40	0.76	12.6	13.3	-0.27	0.45
NORTH AMERICA	4 290	4 795	0.54	1.22	12.4	12.6	-0.37	0.41
Canada	380	413	2.95	0.90	11.0	10.9	1.89	0.05
United States	3 910	4 382	0.32	1.25	12.5	12.8	-0.57	0.44
EUROPE	3 634	4 432	0.83	1.86	4.9	5.9	0.62	1.80
European Union	2 602	3 167	1.53	1.94	5.2	6.2	1.13	1.74
Russian Federation	654	865	-1.43	2.29	4.6	6.2	-1.28	2.47
Ukraine	158	159	-1.10	-0.07	3.3	3.6	-0.80	0.42
OCEANIA DEVELOPED	348	477	-2.12	1.99	12.9	15.5	-3.65	0.84
Australia	306	436	-2.59	2.20	13.5	16.9	-4.19	1.01
New Zealand	41	41	1.62	0.00	9.3	8.4	0.48	-0.94
OTHER DEVELOPED ²	10 336	10 439	0.28	0.08	34.9	34.1	-0.65	-0.30
Japan	8 514	7 983	-0.31	-0.44	58.8	56.5	-0.89	-0.30
South Africa	962	1 362	3.63	1.68	18.1	24.5	3.03	1.27
DEVELOPING COUNTRIES	450 099	531 151	1.82	1.39	67.9	69.7	0.04	0.22
AFRICA	27 536	42 490	4.46	4.10	24.2	30.2	1.84	1.99
NORTH AFRICA	4 315	5 493	2.01	1.92	23.2	25.7	0.92	0.84
Algeria	86	102	2.38	1.74	2.4	2.5	0.86	0.58
Egypt	3 911	4 899	1.69	1.75	42.3	44.9	0.33	0.45
SUB-SAHARAN AFRICA	23 222	36 996	4.98	4.47	24.4	31.0	2.04	2.16
LATIN AMERICA and CARIBBEAN	19 296	23 913	0.38	2.51	30.6	34.3	-0.74	1.61
Argentina	383	544	1.22	3.29	9.4	12.2	0.34	2.49
Brazil	7 989	9 824	-1.23	3.32	40.6	46.1	-2.17	2.61
Chile	201	241	0.72	1.58	11.4	12.6	-0.15	0.84
Mexico	1 046	1 398	1.96	2.41	9.1	10.9	0.69	1.43
Uruguay	100	120	6.99	1.11	7.5	8.1	-2.94	0.60
ASIA and PACIFIC	403 267	464 749	1.73	1.12	84.3	86.4	0.14	0.17
Bangladesh	34 031	41 826	3.41	1.93	169.7	184.1	0.91	0.76
China ³	130 595	140 127	0.69	0.26	77.8	76.6	-0.17	-0.19
India	93 418	108 516	1.61	1.24	71.4	73.6	-0.26	0.15
Indonesia	43 446	51 985	2.90	1.48	160.9	173.2	1.17	0.54
Iran, Islamic Republic of	2 703	3 568	-0.42	2.36	32.1	37.8	-1.14	1.42
Korea	4 603	4 474	-0.35	0.07	66.2	54.1	-2.09	-1.19
Pakistan	2 905	3 717	3.79	2.01	13.7	15.0	3.32	0.58
Philippines	13 023	16 161	2.23	1.99	123.2	130.5	1.50	0.42
Thailand	12 198	15 917	1.50	2.03	126.0	133.5	0.18	0.52
Turkey	702	848	5.81	1.66	9.0	9.7	4.32	0.69
Viet Nam	21 085	22 048	1.38	0.26	188.9	170.7	0.21	-1.03
LDC Asia ⁴	29 952	37 230	3.48	2.12	127.9	137.4	0.22	0.72
LEAST DEVELOPED COUNTRIES (LDC)	78 531	102 543	3.75	2.55	68.4	73.2	0.34	0.66
OECD⁵	22 544	23 671	0.31	0.60	15.7	15.4	-0.74	0.03
BRICS	233 618	260 695	0.98	0.77	68.1	69.3	-0.25	0.12

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. LDC Asia includes Afghanistan, Bhutan, Myanmar, Cambodia, Lao Peoples' Democratic Republic, Nepal, Yemen, Timor Leste, Maldives.
5. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.10. Main policy assumptions for cereal markets

Crop year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ARGENTINA												
Crops export tax	%	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Rice export tax	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
CANADA												
Tariff-quotas ¹												
Wheat	kt	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0
In-quota tariff	%	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Out-of-quota tariff	%	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
Barley	kt	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0
In-quota tariff	%	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Out-of-quota tariff	%	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
EUROPEAN UNION²												
Cereal reference price ³	EUR/t	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Single farm payment ⁴	EUR/ha	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9
Rice reference price ⁵	EUR/t	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
Direct payment for rice	EUR/ha	180.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wheat tariff-quota ¹	kt	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0	3 346.0
Coarse grain tariff-quota ¹	kt	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3	3 518.3
Subsidised export limits ¹												
Wheat	mt	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Coarse grains ⁶	mt	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
JAPAN												
Wheat tariff-quota	kt	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Barley tariff-quota	kt	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
Rice tariff-quota	kt	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0
KOREA												
Wheat tariff	%	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Maize tariff-quota	kt	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0
In-quota tariff	%	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Out-of-quota tariff	%	403.5	403.5	403.5	403.5	403.5	403.5	403.5	403.5	403.5	403.5	403.5
Barley tariff-quota	kt	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
In-quota tariff	%	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Out-of-quota tariff	%	359.3	359.3	359.3	359.3	359.3	359.3	359.3	359.3	359.3	359.3	359.3
Rice quota ⁷	kt	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
In-quota tariff	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
MERCOSUR												
Wheat tariff	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Coarse grain tariff	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Rice tariff	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
MEXICO												
Barley import tariff	%	115.2	100.0	60.0	45.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
UNITED STATES												
ACRE participation rate												
Wheat	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Coarse grains	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Rice	%	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Wheat loan rate	USD/t	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Maize loan rate	USD/t	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
Prod. flex. contract payment												
Wheat	USD/t	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
Maize	USD/t	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
CRP areas ⁸												
Wheat	mha	3.2	3.1	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Coarse grains	mha	2.9	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.0	2.6	2.6
Subsidised export limits ¹												
Wheat	mt	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Coarse grains	mt	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

Table A.10. Main policy assumptions for cereal markets (cont.)

Crop year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINA												
Wheat tariff-quota	kt	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636
In-quota tariff	%	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Out-of-quota tariff	%	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Coarse grains tariff	%	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Maize tariff-quota	kt	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200
In-quota tariff	%	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Out-of-quota tariff	%	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7
Rice tariff-quota	kt	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320
In-quota tariff	%	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Out-of-quota tariff	%	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
INDIA												
Input subsidy coarse grains ⁹	INR/ha	7 165	7 194	7 151	7 182	7 183	7 114	7 105	7 014	6 949	6 889	6 831
Input subsidy rice ⁹	INR/ha	7 165	7 194	7 151	7 182	7 183	7 114	7 105	7 014	6 949	6 889	6 831
Input subsidy wheat ⁹	INR/ha	7 165	7 194	7 151	7 182	7 183	7 114	7 105	7 014	6 949	6 889	6 831
Minimum support price												
Maize	INR/t	9 157	9 899	10 295	10 707	11 135	11 580	12 043	12 525	13 026	13 514	14 011
Rice	INR/t	10 405	11 249	11 699	12 167	12 653	13 159	13 686	14 233	14 802	15 357	15 922
Wheat	INR/t	11 654	12 598	13 102	13 627	14 172	14 738	15 328	15 941	16 579	17 200	17 832
Wheat Export subsidy	INR/t	1 941	1 941	1 941	1 941	1 941	1 941	1 941	1 941	1 941	1 941	1 941
Wheat tariff	%	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
Maize tariff	%	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Rice tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Barley tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
RUSSIAN FEDERATION												
Wheat ad valorem import tax	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Rice tariff equivalent of import barriers	%	5.0	13.3	11.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Coarse grains tariff equivalent of import barriers	%	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Coarse grain specific tariff	RUB/t	1.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Coarse grain ad valorem import tax	%	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

The source for tariffs and Tariff Rate Quotas is AMAD (Agricultural market access database). The tariff and TRQ data are based on Most Favoured Nation rates scheduled with the WTO and exclude those under preferential or regional agreements, which may be substantially different. Tariffs are simple averages of several product lines. Specific rates are converted to ad valorem rates using world prices in the Outlook. Import quotas are based on global commitments scheduled in the WTO rather than those allocated to preferential partners under regional or other agreements.

Average 2010-12est: Data for 2012 are estimated.

1. Year beginning 1 July.
2. EU farmers also benefit from the Single Farm Payment (SFP) Scheme, which provides flat-rate payments independent from current production decisions and market developments. For the new member states, payments are phased in with the assumption of maximum top-ups from national budgets up to 2013 through the Single Area Payment Scheme (SAPS). Due to modulation, an increasing share of the total SFP will go to rural development spending rather than directly to farmers.
3. Buying-in at the fixed reference price is operable automatically only for common wheat up to a maximum quantity of 3 million tons per marketing year. Above that ceiling and for durum wheat, maize, barley and sorghum intervention can take place only via tender.
4. EU average payment per hectare after modulation. Actual payments are made per eligible hectare based on historical reference or regional average and can differ significantly from EU average.
5. Intervention is set at zero tonnes per marketing year. However, the Commission may initiate intervention if market requires.
6. The export volume excludes 0.4 mt of exported potato starch. The original limit on subsidised exports is 10.8 mt.
7. Husked rice basis.
8. Includes wheat, barley, maize, oats and sorghum.
9. Indian input subsidies consist of those for electricity, fertiliser and irrigation.

Source: OECD and FAO Secretariats.

Table A.11. World oilseed projections

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
OILSEED (crop year)²												
World												
Production	mt	390.4	408.2	414.0	427.0	435.7	443.7	452.5	460.7	470.9	480.8	490.5
Area	mha	150.0	188.8	188.6	191.1	192.8	194.3	195.9	197.3	199.6	201.8	203.5
Yield	t/ha	1.9	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4
Consumption	mt	392.0	406.2	416.2	426.6	436.3	444.5	453.3	461.6	470.7	480.5	489.6
Crush	mt	345.3	357.5	366.5	376.5	385.0	392.4	400.5	408.2	416.7	425.8	434.3
Exports	mt	74.5	118.6	120.1	123.8	125.8	127.6	129.6	131.4	134.4	137.3	140.2
Closing stocks	mt	40.3	38.5	37.2	38.6	39.0	39.2	39.4	39.5	40.7	41.9	43.8
Price ³	USD/t	605.0	564.1	514.0	511.2	507.0	521.7	523.0	530.0	530.5	538.9	540.0
Developed countries												
Production	mt	165.5	176.3	177.3	182.6	186.2	188.3	191.5	194.0	197.3	200.5	203.2
Consumption	mt	136.6	139.2	142.1	145.2	148.5	151.0	153.7	156.1	158.6	160.9	163.0
Crush	mt	124.4	126.5	128.8	132.2	134.8	137.0	139.6	141.9	144.4	146.6	148.6
Closing stocks	mt	14.4	13.9	14.2	15.6	16.0	16.2	16.2	16.1	16.3	16.4	16.6
Developing countries												
Production	mt	224.9	231.9	236.7	244.3	249.5	255.4	261.0	266.6	273.6	280.3	287.2
Consumption	mt	255.4	267.0	274.1	281.4	287.8	293.5	299.6	305.5	312.2	319.6	326.6
Crush	mt	220.9	231.0	237.7	244.3	250.1	255.4	260.9	266.3	272.4	279.1	285.6
Closing stocks	mt	25.8	24.5	23.0	23.0	23.0	23.0	23.3	23.4	24.4	25.6	27.2
OECD¹												
Production	mt	140.8	150.7	150.6	155.7	157.8	159.0	161.2	162.7	165.0	167.1	169.0
Consumption	mt	123.4	125.0	127.1	129.7	132.1	133.9	135.8	137.3	139.0	140.5	141.8
Crush	mt	112.5	113.9	115.4	118.2	120.0	121.6	123.3	124.7	126.4	127.8	129.1
Closing stocks	mt	13.2	13.2	13.3	14.7	15.1	15.2	15.1	15.0	15.1	15.1	15.2
PROTEIN MEALS (marketing year)												
World												
Production	mt	271.5	280.9	288.3	295.5	301.7	307.0	313.4	319.3	325.7	332.4	338.8
Consumption	mt	268.9	280.6	287.8	295.2	301.6	307.0	313.3	319.1	325.5	332.1	338.5
Closing stocks	mt	15.4	14.9	15.5	15.9	16.1	16.2	16.4	16.6	16.9	17.3	17.6
Price ⁴	USD/t	436.9	464.3	403.9	389.0	387.0	390.2	396.2	401.7	403.6	404.2	406.1
Developed countries												
Production	mt	87.2	88.6	90.4	92.6	94.2	95.3	97.1	98.5	100.1	101.5	102.8
Consumption	mt	107.3	111.5	112.2	113.5	114.8	115.1	116.5	117.3	118.3	119.3	120.0
Closing stocks	mt	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4
Developing countries												
Production	mt	184.3	192.3	197.9	203.0	207.5	211.7	216.2	220.7	225.6	230.9	236.0
Consumption	mt	161.6	169.1	175.5	181.7	186.9	191.9	196.8	201.8	207.2	212.8	218.5
Closing stocks	mt	14.2	13.7	14.2	14.6	14.7	14.9	15.1	15.3	15.6	15.9	16.3
OECD												
Production	mt	82.6	83.8	85.2	87.0	88.2	89.0	90.3	91.2	92.4	93.4	94.3
Consumption	mt	110.3	114.6	115.5	117.1	118.5	119.0	120.3	121.1	122.2	123.2	124.0
Closing stocks	mt	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
VEGETABLE OILS (marketing year)												
World												
Production	mt	156.2	163.3	166.9	170.9	174.3	177.5	181.2	184.6	188.3	192.1	195.7
Of which palm oil	mt	52.1	55.7	56.9	58.2	59.4	60.6	61.9	63.1	64.4	65.6	66.9
Consumption	mt	154.9	163.7	167.9	170.6	174.9	178.3	181.8	185.3	189.0	192.6	196.2
Food	mt	108.4	133.6	137.0	138.6	141.2	143.4	145.8	148.1	150.5	153.2	156.0
Biofuel	mt	19.4	21.0	21.5	22.5	24.0	25.1	26.2	27.1	28.4	29.1	29.7
Exports	mt	41.8	65.6	66.0	67.5	68.5	70.1	71.5	73.1	74.7	76.0	77.3
Closing stocks	mt	21.3	22.1	22.0	23.1	23.5	23.6	23.8	24.1	24.3	24.7	25.0
Price ⁵	USD/t	1 206.6	1 141.4	1 038.3	1 077.6	1 065.2	1 097.7	1 104.9	1 117.6	1 136.1	1 154.6	1 160.3
Developed countries												
Production	mt	39.8	40.5	41.2	42.3	43.1	43.7	44.6	45.4	46.2	47.0	47.7
Consumption	mt	46.9	47.7	48.3	48.9	49.8	50.6	51.3	52.1	53.3	53.7	54.1
Closing stocks	mt	3.4	3.3	3.3	3.4	3.5	3.5	3.5	3.6	3.6	3.8	3.9
Developing countries												
Production	mt	116.4	122.8	125.7	128.6	131.2	133.8	136.5	139.2	142.1	145.0	147.9
Consumption	mt	108.0	116.0	119.5	121.7	125.1	127.7	130.5	133.2	135.7	139.0	142.2
Closing stocks	mt	17.9	18.8	18.7	19.7	20.0	20.1	20.3	20.5	20.7	20.9	21.1
OECD												
Production	mt	34.3	34.8	35.2	36.0	36.5	36.9	37.5	37.9	38.5	38.9	39.3
Consumption	mt	45.8	46.5	47.0	47.5	48.2	49.0	49.6	50.5	51.6	52.0	52.4
Closing stocks	mt	3.0	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.3	3.5

ANNEX A

1. Excludes Iceland but includes all EU27 member countries.
2. Beginning crop marketing year - see Glossary of Terms for definitions. Cotton seeds have been extracted from the oilseed total. Based on the cotton outlook, cotton seed production and crush would reach about 50 mt in 2022.
Average 2010/11-2012/13est: Data for 2012/13 are estimated.
3. Weighted average oilseed price, European port.
4. Weighted average protein meal, European port.
5. Weighted average price of oilseed oils and palm oil, European port.

Source: OECD and FAO Secretariats.

Table A.12.1. Oilseed projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	390 414	490 460	3.13	2.07	110 714	141 194	6.68	1.82	110 371	140 197	6.27	1.83
DEVELOPED COUNTRIES	165 474	203 242	3.70	1.63	25 357	27 995	-0.47	0.86	55 540	68 070	6.67	1.22
NORTH AMERICA	107 682	128 468	2.35	1.13	1 649	1 477	1.95	0.07	49 400	59 152	6.15	1.01
Canada	18 184	23 367	8.05	1.62	519	541	-6.30	0.00	10 594	13 703	10.35	2.00
United States	89 497	105 101	1.44	1.03	1 130	936	8.70	0.10	38 805	45 449	5.23	0.73
EUROPE	52 349	66 678	6.59	2.46	17 592	20 816	0.53	1.27	4 040	5 912	12.51	3.21
European Union	28 073	33 832	4.20	1.97	16 096	18 981	-0.21	1.24	657	662	-0.30	0.34
Russian Federation	9 933	12 095	7.03	2.68	895	1 272	73.42	2.31	283	1 011	0.00	9.84
Ukraine	12 088	17 859	14.45	3.41	24	25	0.86	-0.19	2 705	3 640	25.61	2.20
OCEANIA DEVELOPED	2 861	4 130	9.33	2.53	35	30	1.32	-0.01	1 864	2 876	11.72	2.46
Australia	2 851	4 120	9.32	2.53	25	25	1.53	0.00	1 863	2 876	11.72	2.46
New Zealand	10	10	14.26	0.00	10	5	1.54	-0.08	0	0	-0.11	-1.52
OTHER DEVELOPED ¹	2 582	3 966	5.88	4.01	6 081	5 672	-3.48	-0.31	237	130	16.66	-6.76
Japan	246	239	0.93	0.00	5 222	4 476	-4.23	-1.03	0	0	-10.09	0.00
South Africa	1 523	2 714	6.32	5.21	46	130	-2.67	15.25	127	23	34.46	-20.01
DEVELOPING COUNTRIES	224 940	287 218	2.71	2.39	85 357	113 200	9.89	2.07	54 831	72 128	5.80	2.45
AFRICA	10 043	12 910	1.11	2.65	3 009	3 773	12.34	1.84	281	169	9.41	4.51
NORTH AFRICA	555	656	0.26	1.88	2 902	3 633	13.23	1.76	36	34	0.79	-1.37
Algeria	115	136	1.15	2.17	205	260	10.64	0.68	0	0	0.00	-0.05
Egypt	270	327	-0.48	1.96	1 894	2 288	20.33	1.31	30	30	12.44	-1.30
SUB-SAHARAN AFRICA	9 489	12 254	1.16	2.69	108	140	-0.97	4.18	244	135	11.52	6.83
LATIN AMERICA and CARIBBEAN	139 470	189 415	4.17	2.84	7 409	8 705	-0.21	0.07	52 832	71 075	6.06	2.58
Argentina	52 500	73 607	2.14	3.54	294	1 686	-42.13	0.81	11 372	17 501	1.51	2.24
Brazil	73 635	95 403	5.01	2.31	84	68	-22.83	0.08	34 064	41 569	6.58	2.38
Chile	83	144	1.12	5.25	209	234	-1.29	3.06	5	3	-5.15	-2.85
Mexico	297	209	3.89	-4.29	5 432	5 589	2.08	0.11	10	10	2.67	-0.06
Uruguay	2 623	4 434	21.71	2.99	4	4	-9.13	-0.53	2 242	3 488	21.69	3.06
ASIA and PACIFIC	75 427	84 893	0.62	1.42	74 939	100 721	11.41	2.27	1 719	884	-0.88	-5.15
Bangladesh	365	435	3.47	1.60	252	237	2.91	1.04	0	0	0.00	-0.07
China ²	44 380	47 951	0.01	1.20	58 898	82 830	14.17	2.57	932	409	-4.71	-7.41
India	23 222	27 165	1.29	1.71	191	2	62.22	-34.98	521	202	7.12	-4.35
Indonesia	1 899	2 425	0.16	2.16	2 184	2 230	7.32	0.75	3	2	-7.15	-0.06
Iran, Islamic Republic of	501	586	3.76	1.38	712	803	0.03	0.47	3	3	-1.41	-0.06
Korea	136	144	0.88	0.00	1 311	1 453	-1.78	1.47	0	0	-4.56	0.00
Malaysia	7	8	4.37	1.28	559	587	-1.35	0.95	17	22	-6.53	-0.14
Pakistan	871	1 070	8.42	2.55	1 311	1 709	7.06	1.68	8	0	68.19	-0.29
Saudi Arabia	4	4	0.00	0.81	5	7	0.00	1.89	0	0	0.00	-1.86
Turkey	1 257	1 620	6.08	0.94	2 150	2 169	5.53	1.10	38	40	33.86	-0.66
LEAST DEVELOPED COUNTRIES (LDC)	6 617	8 640	0.98	2.60	381	356	1.60	1.03	106	143	4.40	7.82
OECD³	140 802	168 962	2.82	1.32	33 185	35 719	-0.25	0.73	51 994	62 761	6.16	1.06
BRICS	152 693	185 330	2.89	1.98	60 114	84 302	13.94	2.56	35 927	43 214	6.14	2.27

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.12.2. Oilseed projections: Consumption, domestic crush

Crop year

	CONSUMPTION (kt)		Growth (%) ¹		DOMESTIC CRUSH (kt)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	391 994	489 640	3.47	2.06	345 295	434 270	3.77	2.15
DEVELOPED COUNTRIES	136 565	162 990	2.26	1.77	124 420	148 629	2.66	1.82
NORTH AMERICA	60 840	70 687	0.49	1.36	55 230	63 790	0.88	1.41
Canada	8 913	10 210	5.93	1.31	8 018	8 970	6.96	1.09
United States	51 928	60 476	-0.23	1.36	47 211	54 820	0.09	1.46
EUROPE	66 277	81 556	4.72	2.17	61 019	75 510	5.20	2.19
European Union	43 878	52 162	2.73	1.86	40 533	48 402	3.07	1.80
Russian Federation	10 569	12 336	9.28	2.07	9 996	11 645	9.77	2.20
Ukraine	9 385	14 234	12.81	3.75	8 459	13 116	14.90	4.01
OCEANIA DEVELOPED	939	1 284	5.84	2.39	912	1 262	6.30	2.44
Australia	920	1 270	5.80	2.42	901	1 250	6.26	2.46
New Zealand	19	14	7.79	0.02	12	12	9.62	0.02
OTHER DEVELOPED ²	8 508	9 463	-1.41	1.52	7 259	8 068	-1.76	1.63
Japan	5 564	4 708	-3.73	-0.82	4 681	3 828	-4.23	-0.99
South Africa	1 440	2 787	4.67	6.49	1 283	2 599	4.66	6.96
DEVELOPING COUNTRIES	255 429	326 650	4.16	2.21	220 875	285 641	4.44	2.32
AFRICA	12 794	16 507	2.89	2.45	7 954	9 335	4.22	1.42
NORTH AFRICA	3 427	4 250	10.42	1.85	3 211	3 972	11.20	1.79
Algeria	322	396	6.38	1.26	303	375	6.60	1.20
Egypt	2 126	2 580	15.42	1.49	1 990	2 397	17.35	1.38
SUB-SAHARAN AFRICA	9 367	12 257	0.99	2.67	4 743	5 363	1.05	1.15
LATIN AMERICA and CARIBBEAN	93 868	126 728	3.24	2.79	87 468	119 734	3.02	2.93
Argentina	41 332	57 507	2.12	3.91	40 384	56 487	2.16	3.98
Brazil	39 560	53 885	4.26	2.25	35 117	49 158	3.58	2.44
Chile	289	375	-0.42	3.91	279	363	-0.48	3.98
Mexico	5 718	5 788	2.15	-0.09	5 374	5 444	3.19	-0.09
Uruguay	385	948	21.65	2.87	326	828	21.32	3.00
ASIA and PACIFIC	148 767	183 414	4.90	1.81	125 453	156 572	5.52	1.94
Bangladesh	633	671	3.60	1.40	545	547	3.09	0.99
China ³	102 415	129 172	6.12	1.94	85 461	109 856	7.02	2.13
India	22 729	26 866	1.47	1.63	20 113	23 502	1.46	1.59
Indonesia	4 103	4 651	3.55	1.47	2 322	2 997	6.73	2.57
Iran, Islamic Republic of	1 209	1 386	1.56	0.85	1 151	1 312	1.46	0.79
Korea	1 499	1 596	-0.90	1.33	1 066	1 079	-0.84	0.95
Malaysia	550	572	-1.06	1.04	543	566	-1.11	1.04
Pakistan	2 244	2 777	8.12	2.01	2 027	2 475	8.38	1.99
Saudi Arabia	9	11	0.00	1.50	6	7	0.00	0.61
Turkey	3 414	3 747	5.78	1.08	3 201	3 491	5.83	0.98
LEAST DEVELOPED COUNTRIES (LDC)	6 921	8 851	1.02	2.47	4 608	5 469	1.20	1.69
OECD⁴	123 370	141 813	1.22	1.41	112 470	129 099	1.60	1.41
BRICS	176 713	225 046	5.15	2.03	151 970	196 759	5.43	2.20

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.13.1. Protein meal projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	271 467	338 786	3.50	2.06	73 198	96 187	3.44	2.75	74 002	96 106	3.36	2.75
DEVELOPED COUNTRIES	87 154	102 790	1.70	1.64	38 808	39 805	1.39	0.19	17 259	22 539	7.25	3.53
NORTH AMERICA	45 300	52 053	0.35	1.30	3 820	4 465	3.77	1.30	11 566	12 458	5.69	1.94
Canada	4 831	5 504	5.44	1.21	1 055	863	-1.74	-0.60	3 239	3 566	9.74	1.71
United States	40 469	46 549	-0.13	1.31	2 764	3 603	6.73	1.82	8 327	8 892	4.49	2.04
EUROPE	35 036	42 976	4.39	2.10	28 943	29 012	-0.16	0.11	5 438	9 856	11.25	6.10
European Union	25 377	30 180	2.14	1.74	26 674	26 317	-0.53	-0.06	1 039	3 997	5.47	11.55
Russian Federation	4 906	5 682	12.10	2.34	440	702	-3.95	4.84	1 153	831	7.69	1.02
Ukraine	3 940	6 137	17.15	4.01	70	53	-2.38	-4.03	2 973	4 807	16.36	4.27
OCEANIA DEVELOPED	893	1 147	6.23	1.79	2 046	2 423	20.00	0.48	23	22	5.85	-0.01
Australia	885	1 139	6.21	1.81	620	702	5.99	0.91	23	22	5.85	0.00
New Zealand	8	8	8.22	0.00	1 425	1 721	36.79	0.31	0	0	..	..
OTHER DEVELOPED ¹	5 926	6 615	-1.82	1.52	4 000	3 905	7.28	-0.56	231	203	8.81	-0.65
Japan	3 219	2 697	-4.73	-0.99	2 350	2 585	8.70	0.79	2	0	-25.78	0.00
South Africa	767	1 551	4.19	6.78	1 148	756	4.68	-4.66	64	75	40.43	4.86
DEVELOPING COUNTRIES	184 313	235 996	4.45	2.24	34 390	56 381	6.25	5.04	56 744	73 567	2.36	2.53
AFRICA	6 299	8 713	3.80	2.81	2 947	5 200	4.57	5.52	420	857	-0.11	6.14
NORTH AFRICA	2 530	3 083	9.93	1.78	2 626	4 858	4.45	5.71	6	5	5.03	-0.49
Algeria	197	246	8.49	1.20	943	1 619	8.18	4.75	0	0	0.00	-0.33
Egypt	1 651	1 948	12.86	1.40	675	1 854	-1.82	9.19	2	2	0.00	-0.70
SUB-SAHARAN AFRICA	3 769	5 630	0.93	3.42	321	341	5.61	3.19	413	852	-0.17	6.20
LATIN AMERICA and CARIBBEAN	68 590	93 732	3.04	2.96	6 675	9 132	3.42	3.57	42 562	58 725	1.77	3.18
Argentina	30 867	42 826	2.35	4.04	0	0	0.00	0.00	27 780	38 384	1.22	4.17
Brazil	28 358	39 424	3.54	2.45	24	25	-30.56	4.47	12 289	18 256	2.65	1.96
Chile	202	254	-0.53	3.98	961	1 209	4.44	1.62	10	9	115.95	-1.44
Mexico	3 965	4 180	2.61	0.01	564	1 427	10.65	10.02	15	15	12.44	0.08
Uruguay	201	555	21.58	2.99	253	251	18.48	7.60	6	5	0.03	-4.95
ASIA and PACIFIC	109 423	133 552	5.44	1.73	24 769	42 049	7.36	5.32	13 762	13 985	4.50	0.00
Bangladesh	369	383	2.90	1.18	343	711	11.03	6.94	0	0	0.00	-0.48
China ²	65 513	80 784	7.08	1.75	1 592	5 847	21.76	17.80	918	128	2.21	-22.04
India	19 270	23 074	3.21	1.76	76	80	1.76	-0.23	5 380	6 118	3.67	1.99
Indonesia	5 428	6 920	7.57	1.97	3 351	6 365	7.51	6.08	3 329	3 986	7.66	1.20
Iran, Islamic Republic of	1 005	1 231	1.86	1.61	2 086	3 051	21.25	4.42	180	104	24.19	-4.24
Korea	881	893	-0.80	0.89	3 211	3 811	2.63	1.65	0	0	..	..
Malaysia	3 084	3 832	1.96	1.86	1 104	1 089	5.72	-0.33	2 354	2 573	2.82	0.33
Pakistan	3 589	4 599	2.31	2.63	626	1 385	19.22	4.79	142	77	20.40	-3.68
Saudi Arabia	29	3	-0.16	0.60	592	857	-1.58	2.29	4	0	7.06	-2.24
Turkey	2 522	2 565	3.26	0.54	1 386	3 171	6.72	6.72	183	60	13.89	-6.24
LEAST DEVELOPED COUNTRIES (LDC)	3 148	4 678	0.71	3.49	527	1 035	7.95	7.05	200	682	-1.28	9.66
OECD³	82 611	94 257	0.84	1.29	41 942	46 395	1.56	0.90	12 902	16 624	5.78	3.53
BRICS	118 813	150 514	5.61	1.99	3 281	7 411	5.97	10.57	19 804	25 408	3.16	1.35

Note: Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.13.2. Protein meal projections: Consumption

Marketing year

	CONSUMPTION (kt)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22
WORLD	268 898	338 524	3.60	2.06
DEVELOPED COUNTRIES	107 329	120 048	0.96	0.84
NORTH AMERICA	36 117	44 062	-0.58	1.12
Canada	2 665	2 801	-0.89	0.01
United States	33 452	41 261	-0.55	1.20
EUROPE	58 577	62 124	1.55	0.65
European Union	51 013	52 500	0.63	0.36
Russian Federation	4 201	5 551	10.23	2.85
Ukraine	1 056	1 380	16.52	2.79
OCEANIA DEVELOPED	2 912	3 547	14.26	0.89
Australia	1 479	1 818	5.92	1.47
New Zealand	1 433	1 729	36.58	0.31
OTHER DEVELOPED ²	9 723	10 315	1.03	0.76
Japan	5 600	5 282	-0.59	-0.12
South Africa	1 848	2 231	4.11	1.45
DEVELOPING COUNTRIES	161 569	218 475	5.72	2.81
AFRICA	8 841	13 047	4.32	3.62
NORTH AFRICA	5 155	7 929	6.84	4.02
Algeria	1 136	1 862	8.14	4.25
Egypt	2 329	3 797	6.34	4.51
SUB-SAHARAN AFRICA	3 686	5 118	1.49	3.02
LATIN AMERICA and CARIBBEAN	32 186	43 983	5.10	2.80
Argentina	3 044	4 406	20.45	3.03
Brazil	15 600	21 105	4.26	2.87
Chile	1 149	1 452	3.37	2.17
Mexico	4 514	5 592	3.30	1.83
Uruguay	448	801	20.17	4.24
ASIA and PACIFIC	120 542	161 446	6.01	2.74
Bangladesh	713	1 094	6.15	4.56
China ³	66 212	86 437	7.51	2.52
India	14 152	17 004	3.25	1.73
Indonesia	5 401	9 254	7.39	5.13
Iran, Islamic Republic of	2 909	4 175	11.16	3.83
Korea	4 092	4 704	1.58	1.51
Malaysia	1 826	2 342	3.04	2.63
Pakistan	4 072	5 903	3.44	3.22
Saudi Arabia	617	859	-1.46	2.29
Turkey	3 733	5 669	4.24	3.71
LEAST DEVELOPED COUNTRIES (LDC)	3 477	5 031	1.72	3.48
OECD⁴	110 256	124 021	0.69	0.88
BRICS	102 013	132 328	6.31	2.46

Note: Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).

2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.

3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.

4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.14.1. Vegetable oil projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	156 234	195 658	4.62	2.01	64 207	78 226	5.66	1.93	64 072	77 321	5.24	1.95
DEVELOPED COUNTRIES	39 787	47 722	3.82	1.85	16 455	18 208	4.41	1.24	9 688	11 736	11.90	2.64
NORTH AMERICA	14 922	16 796	1.40	1.17	3 875	3 308	9.57	-2.46	3 997	4 504	10.91	2.12
Canada	3 181	3 590	9.39	1.17	262	232	1.96	-1.21	2 564	2 929	13.10	1.87
United States	11 740	13 206	-0.09	1.17	3 613	3 076	10.38	-2.55	1 433	1 575	7.44	2.61
EUROPE	21 829	27 485	6.37	2.32	10 218	12 483	3.09	2.84	5 442	6 935	12.67	3.02
European Union	14 197	17 164	4.51	1.91	8 209	10 315	2.89	3.42	999	876	2.09	0.19
Russian Federation	3 543	4 160	8.26	2.11	944	1 118	0.96	1.80	1 157	1 408	22.23	2.67
Ukraine	3 645	5 629	14.58	4.01	326	266	6.02	-3.85	3 080	4 420	17.27	4.00
OCEANIA DEVELOPED	461	622	5.33	2.05	488	524	5.50	1.04	138	195	15.90	2.19
Australia	457	617	5.30	2.07	381	416	9.19	1.29	138	194	15.98	2.19
New Zealand	5	5	8.98	0.00	107	108	-2.64	0.12	0	0	-0.60	-0.22
OTHER DEVELOPED ¹	2 574	2 819	-0.27	1.59	1 874	1 894	2.99	-0.78	111	103	5.79	2.15
Japan	1 441	1 166	-2.30	-0.95	730	940	2.60	0.51	1	0	9.08	0.00
South Africa	398	762	3.41	6.57	786	592	3.32	-2.81	86	77	6.30	2.89
DEVELOPING COUNTRIES	116 447	147 936	4.90	2.07	47 752	60 018	6.13	2.15	54 384	65 585	4.34	1.83
AFRICA	5 421	7 213	2.88	2.48	7 322	9 346	6.15	2.83	1 145	645	12.20	-2.66
NORTH AFRICA	763	917	7.42	1.66	2 994	3 423	3.44	1.45	419	292	25.61	-1.57
Algeria	83	102	4.26	1.20	560	691	1.04	1.65	34	20	-6.97	-1.62
Egypt	433	510	10.71	1.40	1 745	2 174	5.70	2.15	319	219	51.50	-2.11
SUB-SAHARAN AFRICA	4 658	6 297	2.28	2.61	4 327	5 924	8.40	3.72	726	353	9.05	-3.48
LATIN AMERICA and CARIBBEAN	21 666	29 507	3.37	2.72	3 913	3 841	4.30	2.00	8 588	11 809	-2.31	4.35
Argentina	8 177	11 516	1.85	3.76	11	13	2.26	-0.11	4 933	7 639	-3.32	5.36
Brazil	7 659	10 524	3.78	2.42	397	486	16.82	1.58	1 849	2 912	-4.90	3.95
Chile	71	95	-0.05	3.98	309	374	2.27	0.90	3	3	-5.24	-0.66
Mexico	1 643	1 772	3.07	0.22	750	927	3.30	4.14	22	0	-15.22	..
Uruguay	83	192	20.32	2.99	80	51	13.04	1.48	2	2	-2.16	-0.62
ASIA and PACIFIC	89 360	111 215	5.43	1.87	36 518	46 831	6.33	2.03	44 651	53 131	5.91	1.41
Bangladesh	218	221	4.14	1.00	1 436	2 120	4.16	2.84	0	0	0.00	-0.20
China ²	21 320	25 733	5.57	1.68	9 101	11 418	3.52	1.60	119	159	-3.93	-0.98
India	7 258	8 694	1.72	1.76	9 688	14 665	10.26	3.20	69	99	-11.14	-0.52
Indonesia	30 051	38 365	8.80	1.84	74	65	6.93	-0.25	20 969	26 288	8.22	1.64
Iran, Islamic Republic of	302	372	1.76	1.66	1 460	1 470	1.81	1.00	189	93	0.29	-0.99
Korea	250	256	-0.43	0.82	850	953	6.62	0.71	19	5	13.41	0.00
Malaysia	21 080	26 093	3.32	1.97	2 695	2 299	13.01	-1.40	19 510	22 878	4.33	1.42
Pakistan	1 321	1 651	4.57	2.45	2 296	2 943	4.31	2.55	113	0	1.09	-46.34
Saudi Arabia	11	2	-0.15	0.60	386	581	-0.46	3.39	8	1	-16.64	-3.28
Turkey	1 241	1 320	4.12	0.70	1 168	1 391	4.57	1.11	443	399	33.73	-1.09
LEAST DEVELOPED COUNTRIES (LDC)	2 740	3 939	1.78	3.24	4 923	6 599	5.04	2.85	256	130	5.81	-2.10
OECD³	34 342	39 311	2.61	1.37	16 832	19 263	4.73	1.58	5 695	6 058	9.27	1.55
BRICS	40 177	49 874	4.63	1.94	20 916	28 278	6.26	2.28	3 280	4 655	-0.02	3.21

Note: Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

ANNEX A

Table A.14.2. Vegetable oil projections: Consumption, per capita food use

Marketing year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA FOOD USE (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	154 876	196 243	4.75	2.02	18.3	20.0	1.82	0.67
DEVELOPED COUNTRIES	46 869	54 088	3.00	1.50	24.9	24.4	-0.57	-0.05
NORTH AMERICA	15 163	15 523	1.63	0.08	37.9	32.2	-0.83	-1.01
Canada	903	893	0.77	-1.42	23.9	20.8	-1.73	-0.59
United States	14 260	14 630	1.69	0.18	39.5	33.5	-0.77	-1.03
EUROPE	26 552	33 024	4.16	2.37	21.8	23.3	-0.76	0.46
European Union	21 409	26 597	4.06	2.54	21.9	22.3	-2.74	-0.05
Russian Federation	3 267	3 869	3.43	1.80	22.9	27.6	3.59	1.98
Ukraine	905	1 474	7.52	2.27	19.4	22.8	7.83	0.64
OCEANIA DEVELOPED	809	946	4.10	1.44	26.4	27.0	0.89	0.26
Australia	698	834	5.61	1.63	26.7	27.9	2.00	0.44
New Zealand	111	112	-2.41	0.11	25.1	22.8	-3.51	-0.83
OTHER DEVELOPED ²	4 345	4 595	1.03	0.59	16.2	16.4	0.26	0.21
Japan	2 180	2 093	-0.67	-0.28	17.2	16.9	-0.69	-0.08
South Africa	1 105	1 275	3.31	1.35	20.3	22.0	1.44	0.82
DEVELOPING COUNTRIES	108 007	142 155	5.59	2.23	16.7	19.0	2.98	0.95
AFRICA	11 557	15 900	4.10	2.97	11.4	12.2	1.57	0.68
NORTH AFRICA	3 333	4 039	3.06	1.76	19.7	20.7	1.50	0.52
Algeria	611	772	1.97	1.72	16.8	18.7	0.45	0.57
Egypt	1 854	2 458	4.89	2.48	22.2	25.0	3.04	1.02
SUB-SAHARAN AFRICA	8 224	11 861	4.55	3.42	9.7	10.7	1.78	0.93
LATIN AMERICA and CARIBBEAN	16 581	21 592	7.59	1.85	19.2	22.3	1.24	0.76
Argentina	3 071	3 959	18.86	1.72	23.4	23.9	-0.31	0.22
Brazil	6 035	8 089	8.45	1.75	20.1	26.6	1.26	0.99
Chile	375	466	1.62	1.47	21.5	24.6	0.64	0.73
Mexico	2 347	2 699	3.39	1.22	20.4	21.1	2.11	0.26
Uruguay	161	241	16.94	2.64	16.0	17.7	2.21	0.59
ASIA and PACIFIC	79 869	104 663	5.44	2.20	17.7	20.5	3.61	1.15
Bangladesh	1 646	2 337	4.19	2.68	10.8	13.6	2.96	1.56
China ³	29 828	36 919	4.60	1.64	21.9	26.3	4.06	1.37
India	16 919	23 244	6.25	2.66	13.3	16.0	4.61	1.41
Indonesia	8 801	12 031	9.75	2.40	19.1	22.3	2.67	1.16
Iran, Islamic Republic of	1 544	1 746	1.76	1.27	20.4	21.1	0.58	0.47
Korea	1 079	1 204	4.36	0.73	22.3	24.1	3.87	0.45
Malaysia	3 912	5 483	3.48	2.68	23.6	26.6	3.16	0.81
Pakistan	3 492	4 615	4.58	2.53	19.4	20.3	2.56	0.60
Saudi Arabia	392	582	0.52	3.39	13.8	16.7	-2.19	1.50
Turkey	1 912	2 307	1.92	1.37	25.5	27.6	0.59	0.40
LEAST DEVELOPED COUNTRIES (LDC)	7 388	10 400	3.72	3.08	8.5	9.5	1.30	0.94
OECD⁴	45 764	52 410	2.86	1.44	26.0	25.1	-0.97	-0.25
BRICS	57 154	73 396	5.34	1.97	18.3	21.8	3.80	1.27

Note: Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).

2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.

3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.

4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.15. Main policy assumptions for oilseed markets

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
ARGENTINA												
Oilseed export tax	%	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
Protein meal export tax	%	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
Oilseed oil export tax	%	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
AUSTRALIA												
Tariffs												
Soybean oil	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Rapeseed oil	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
CANADA												
Tariffs												
Rapeseed oil	%	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
EUROPEAN UNION												
Single farm payment ¹	EUR/ha	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9
Tariffs												
Soybean oil	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Rapeseed oil	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
JAPAN												
New output payments												
Soybeans	JPY/kg	188.5	188.5	188.5	188.5	188.5	188.5	188.5	188.5	188.5	188.5	188.5
Tariffs												
Soybean oil	JPY/kg	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Rapeseed oil	JPY/kg	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
KOREA												
Soybean tariff-quota	kt	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032
In-quota tariff	%	5	5	5	5	5	5	5	5	5	5	5
Out-of-quota tariff	%	487	487	487	487	487	487	487	487	487	487	487
Soybean (for food) mark up	'000 KRW/t	156	146	141	138	134	130	127	123	119	115	112
MEXICO												
Tariffs												
Soybeans	%	33	33	33	33	33	33	33	33	33	33	33
Soybeans meal	%	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Soybeans oil	%	45	45	45	45	45	45	45	45	45	45	45
UNITED STATES												
ACRE participation rate												
Soybeans	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Soybeans loan rate	USD/t	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7
CRP area												
Soybeans	mha	1.8	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Tariffs												
Rapeseed	%	3	3	3	3	3	3	3	3	3	3	3
Soybean meal	%	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Rapeseed meal	%	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Soybean oil	%	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Rapeseed oil	%	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Subsidised export limits												
Oilseed oils	kt	141	141	141	141	141	141	141	141	141	142	142
CHINA												
Tariffs												
Soybeans	%	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Soybean meal	%	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
Soybean oil in-quota tariff	%	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Vegetable oil tariff-quota	kt	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1
INDIA												
Input subsidy rate, oilseeds ²	INR/t	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3	4 888.3
Soybean tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Rapeseed tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Sunflower tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Oilseed tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Soybean meal tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rapeseed meal tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sunflower meal tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Soybean oil tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rapeseed oil tariff	%	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Sunflower oil tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Palm oil tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Note: Beginning crop marketing year - see Glossary of Terms for definitions.

The source for tariffs and Tariff Rate Quotas is AMAD (Agricultural market access database). The tariff and TRQ data are based on Most Favoured Nation rates scheduled with the WTO and exclude those under preferential or regional agreements, which may be substantially different. Tariffs are simple averages of several product lines. Specific rates are converted to ad valorem rates using world prices in the Outlook. Import quotas are based on global commitments scheduled in the WTO rather than those allocated to preferential partners under regional or other agreements. For Mexico, the NAFTA tariffs on soybeans, oil meals and soybean oil are zero after 2003.

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. EU average payment per hectare after modulation. Actual payments are made per eligible hectare based on historical reference or regional average and can differ significantly from EU average.
2. Indian input subsidies consist of those for electricity, fertiliser and irrigation.

Source: OECD and FAO Secretariats.

Table A.16. World sugar projections

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
WORLD												
SUGARBEET												
Production	mt	251.7	247.7	248.3	251.5	253.2	258.6	261.9	264.8	267.6	270.0	272.5
Area	mha	4.9	4.7	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7
Yield	t/ha	51.3	53.0	53.9	54.4	54.9	55.7	56.3	56.8	57.3	57.7	58.1
Biofuel use	mt	14.3	14.6	15.1	15.1	15.2	15.6	15.9	16.3	16.7	16.9	17.2
SUGARCANE												
Production	mt	1 703.9	1 741.3	1 786.1	1 766.8	1 820.9	1 925.3	1 878.6	1 932.2	1 952.1	1 985.4	1 996.2
Area	mha	24.3	24.9	24.9	24.5	25.2	26.9	26.3	26.7	27.0	27.2	27.3
Yield	t/ha	70.1	70.0	71.7	72.1	72.3	71.6	71.5	72.4	72.4	73.0	73.1
Biofuel use	mt	290.7	334.4	416.2	443.2	470.2	519.7	529.4	545.2	552.0	572.9	568.7
SUGAR												
Production	mt rse	173.7	180.5	182.9	182.4	190.3	195.3	194.7	200.2	203.7	207.9	212.2
Consumption	mt rse	164.8	173.1	176.4	179.0	182.6	186.4	188.9	192.7	196.8	200.5	204.2
Closing stocks	mt rse	64.3	70.7	70.8	67.7	68.9	71.3	70.6	71.5	71.8	72.6	73.9
Price, raw sugar ¹	USD/t	522.7	410.2	408.0	432.4	414.0	413.4	437.8	444.5	441.8	442.8	438.7
Price, white sugar ²	USD/t	621.0	498.8	503.7	530.7	512.5	507.4	538.7	545.2	541.3	540.6	536.4
Price, HFCS ³	USD/t	524.4	340.8	388.4	431.2	442.2	405.1	374.0	363.0	369.7	365.9	357.1
DEVELOPED COUNTRIES												
SUGARBEET												
Production	mt	195.8	190.5	189.6	191.6	191.6	195.5	197.1	198.0	199.0	199.4	199.9
SUGARCANE												
Production	mt	72.2	77.6	77.9	78.2	79.7	78.8	80.1	79.5	81.2	80.9	82.2
SUGAR												
Production	mt rse	41.2	41.8	41.6	42.2	42.6	43.2	43.8	44.0	44.5	44.7	45.1
Consumption	mt rse	49.3	49.6	49.9	49.8	50.1	50.2	50.3	50.4	50.6	50.7	50.6
Closing stocks	mt rse	17.2	19.7	19.8	18.2	17.8	18.2	18.2	18.3	18.4	18.2	18.2
HFCS												
Production	mt	11.7	11.6	11.6	12.1	12.3	12.6	12.7	12.8	13.0	13.1	13.3
Consumption	mt	10.2	10.0	9.9	10.1	10.4	10.6	10.6	10.7	10.8	10.7	10.7
DEVELOPING COUNTRIES												
SUGARBEET												
Production	mt	55.9	57.3	58.6	59.9	61.6	63.1	64.7	66.8	68.7	70.6	72.6
SUGARCANE												
Production	mt	1 631.7	1 663.7	1 708.2	1 688.6	1 741.2	1 846.5	1 798.5	1 852.6	1 870.9	1 904.6	1 914.0
SUGAR												
Production	mt rse	132.6	138.7	141.3	140.2	147.7	152.1	150.9	156.2	159.2	163.3	167.1
Consumption	mt rse	115.5	123.6	126.5	129.2	132.5	136.2	138.6	142.3	146.2	149.8	153.6
Closing stocks	mt rse	47.1	51.0	51.0	49.5	51.1	53.1	52.5	53.2	53.4	54.4	55.7
HFCS												
Production	mt	2.5	2.6	2.6	2.7	2.7	2.8	2.9	3.0	3.0	3.0	3.1
Consumption	mt	3.7	3.9	3.9	4.2	4.3	4.5	4.6	4.8	4.9	5.1	5.3
OECD⁴												
SUGARBEET												
Production	mt	163.7	163.3	162.5	165.1	164.8	168.2	168.9	168.7	168.9	168.3	168.0
SUGARCANE												
Production	mt	108.5	118.7	116.8	116.0	118.5	118.8	121.8	121.7	124.0	124.1	125.7
SUGAR												
Production	mt rse	39.1	40.7	40.1	40.6	41.0	41.5	42.0	41.9	42.2	42.1	42.3
Consumption	mt rse	44.5	44.9	45.4	45.2	45.5	45.4	45.5	45.6	45.9	46.1	46.0
Closing stocks	mt rse	14.9	17.0	16.6	15.0	14.5	14.9	15.0	15.2	15.1	14.7	14.6
HFCS												
Production	mt	12.9	12.8	12.7	13.3	13.6	13.9	14.0	14.2	14.4	14.6	14.7
Consumption	mt	12.5	12.3	12.3	12.8	13.1	13.4	13.5	13.7	13.9	13.9	14.0

Note: Crop year: Beginning crop marketing year (Oct/Sept)- see the Glossary of Terms for definitions.

rse : raw sugar equivalent.

HFCS: High fructose corn syrup

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. Raw sugar world price, ICE contract No11 nearby, October/September.
2. Refined sugar price, White Sugar Futures Contract No. 407, Euronext market, Liffe, London, Europe, October/September.
3. United States wholesale list price HFCS-55 , October/September.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.17.1. Sugar projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	173 721	212 197	2.32	1.87	49 741	56 710	1.81	1.40	54 696	63 091	1.69	1.25
DEVELOPED COUNTRIES	41 158	45 056	-0.76	0.93	16 035	12 909	-1.05	-1.64	6 537	7 354	-9.43	1.20
NORTH AMERICA	7 826	8 129	0.62	0.31	4 634	4 163	5.31	-0.05	266	230	2.72	0.00
Canada	108	104	0.59	-0.23	1 310	1 361	0.00	0.09	57	70	11.48	0.00
United States	7 718	8 025	0.63	0.32	3 324	2 802	8.27	-0.11	209	160	0.70	0.00
EUROPE	26 472	28 376	-0.44	1.04	6 522	3 309	-4.57	-6.01	2 861	2 994	-12.57	1.62
European Union	17 826	17 893	-2.61	0.16	3 929	1 613	3.51	-6.40	1 859	1 260	-15.86	-2.98
Russian Federation	4 717	5 313	8.86	2.21	1 478	818	-14.94	-8.45	121	150	-6.85	0.00
Ukraine	2 223	2 901	1.22	3.60	110	10	-18.75	-14.68	143	639	-3.47	17.58
OCEANIA DEVELOPED	4 004	5 007	-3.61	1.11	294	261	1.09	0.75	2 916	3 841	-4.33	1.38
Australia	4 004	5 007	-3.61	1.11	51	10	14.27	0.00	2 899	3 836	-4.33	1.38
New Zealand	0	0	..	..	243	251	-0.70	0.78	17	5	-7.57	0.00
OTHER DEVELOPED ¹	2 856	3 544	-2.35	1.39	4 585	5 175	-0.66	0.89	495	290	-15.68	-2.68
Japan	784	952	-2.28	1.40	1 386	1 206	-0.59	-2.99	4	5	4.81	0.00
South Africa	1 949	2 448	-2.33	1.36	343	306	2.21	2.64	293	212	-16.38	-2.57
DEVELOPING COUNTRIES	132 563	167 140	3.47	2.14	33 706	43 801	3.33	2.52	48 158	55 737	4.64	1.26
AFRICA	8 271	11 797	2.03	3.09	9 418	13 453	2.55	3.38	2 708	3 343	0.62	1.41
NORTH AFRICA	2 295	2 781	1.27	2.17	4 196	5 218	1.91	1.87	320	251	15.75	-0.74
Algeria	0	0	..	..	1 513	2 011	2.14	2.14	247	242	112.17	-0.30
Egypt	2 008	2 499	3.62	2.23	1 135	1 341	0.50	1.81	73	8	-4.07	-8.42
SUB-SAHARAN AFRICA	5 976	9 016	2.31	3.39	5 222	8 235	3.12	4.46	2 388	3 092	-0.40	1.61
LATIN AMERICA and CARIBBEAN	58 290	71 350	2.88	1.27	2 590	2 721	3.99	1.92	31 880	38 256	4.40	0.87
Argentina	2 044	2 459	0.21	1.00	22	5	17.53	0.00	199	377	-5.22	-2.37
Brazil	37 874	48 207	4.50	1.63	0	0	..	..	24 927	31 968	5.30	1.69
Chile	340	411	-2.40	3.01	496	641	9.43	3.42	0	0	0.00	-0.24
Mexico	5 607	6 643	-0.09	0.81	273	50	6.54	-0.03	1 452	1 624	28.02	-0.40
Uruguay	20	32	16.77	4.79	112	137	-1.83	0.86	3	9	-33.46	-0.85
ASIA and PACIFIC	66 003	83 993	4.27	2.80	21 699	27 627	3.61	2.20	13 570	14 137	6.21	2.40
Bangladesh	137	160	-1.89	0.71	1 498	2 518	6.91	3.50	83	227	31.21	-4.20
China ²	12 828	16 467	2.88	2.75	2 963	2 570	11.77	-0.51	60	33	-12.10	-3.03
India	27 249	31 848	6.15	2.28	505	1 436	68.56	44.93	2 571	211	27.09	3.82
Indonesia	2 525	3 570	1.56	3.23	2 950	4 009	5.98	2.47	0	0	-6.90	-0.18
Iran, Islamic Republic of	1 050	1 433	-3.49	2.08	1 407	1 876	5.99	3.09	48	0	-11.64	-0.01
Korea	0	0	..	..	1 664	2 064	0.65	2.17	344	468	0.23	4.10
Malaysia	28	54	-13.62	2.80	1 624	2 057	1.27	2.69	165	78	-5.69	-2.62
Pakistan	4 943	7 063	3.59	2.86	192	24	-3.29	-6.17	126	308	12.28	3.78
Saudi Arabia	0	0	..	..	1 301	1 936	5.06	3.22	250	335	9.58	2.01
Thailand	10 077	13 768	6.86	4.00	10	5	34.62	-0.44	6 971	10 094	8.98	4.59
Turkey	2 449	2 944	3.06	2.35	67	258	32.23	-1.90	45	12	-9.74	1.28
LEAST DEVELOPED COUNTRIES (LDC)	4 177	7 016	4.23	4.22	5 586	7 995	5.45	3.00	1 213	2 057	4.91	1.31
OECD³	39 097	42 255	-1.44	0.59	13 504	10 975	2.83	-1.18	6 896	7 445	-6.82	0.10
BRICS	84 617	104 284	4.68	2.01	5 289	5 131	-0.83	-0.95	27 972	32 576	5.05	1.38

Note: Crop year: Beginning crop marketing year (Oct/Sept) - see Glossary of Terms for definitions. Sugar data are expressed in raw sugar equivalent.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.17.2. Sugar projections: Consumption, per capita

Crop year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	164 796	204 189	1.84	1.85	23.6	26.2	0.66	0.84
DEVELOPED COUNTRIES	49 287	50 596	0.40	0.23	35.8	35.3	-0.06	-0.10
NORTH AMERICA	11 714	12 110	1.65	0.08	33.7	31.9	0.73	-0.72
Canada	1 385	1 396	0.86	0.07	40.3	37.0	-0.18	-0.77
United States	10 329	10 715	1.76	0.08	33.0	31.3	0.85	-0.71
EUROPE	29 189	28 726	-0.26	-0.07	39.4	38.4	-0.46	-0.13
European Union	19 290	18 334	0.45	-0.29	38.3	35.6	0.06	-0.48
Russian Federation	5 906	5 975	-1.76	-0.11	41.3	42.6	-1.61	0.06
Ukraine	2 022	2 243	-2.01	1.02	44.7	52.7	-1.38	1.57
OCEANIA DEVELOPED	1 285	1 385	-0.06	0.95	47.6	45.1	-1.62	-0.19
Australia	1 060	1 138	-0.02	0.94	46.9	44.1	-1.66	-0.24
New Zealand	225	246	-0.25	1.03	51.0	50.2	-1.38	0.08
OTHER DEVELOPED ²	7 098	8 374	1.37	1.47	27.0	30.7	0.83	1.13
Japan	2 228	2 156	-0.79	-0.24	17.6	17.4	-0.82	-0.04
South Africa	2 045	2 485	3.89	1.51	40.5	46.8	2.91	1.07
DEVELOPING COUNTRIES	115 510	153 593	2.49	2.45	20.6	24.1	1.13	1.28
AFRICA	14 855	21 424	2.76	3.25	14.9	16.7	0.35	0.94
NORTH AFRICA	6 244	7 667	1.67	1.74	37.2	39.8	0.13	0.49
Algeria	1 345	1 751	2.07	2.38	37.4	42.7	0.55	1.22
Egypt	3 075	3 811	2.18	1.88	37.3	39.2	0.37	0.41
SUB-SAHARAN AFRICA	8 611	13 757	3.62	4.20	10.4	12.7	1.00	1.67
LATIN AMERICA and CARIBBEAN	29 090	35 706	1.13	1.60	48.8	53.8	-0.04	0.66
Argentina	1 784	2 108	1.00	1.50	43.8	47.4	0.12	0.71
Brazil	13 414	16 254	2.05	1.51	68.2	76.3	1.07	0.81
Chile	807	1 021	2.40	2.18	46.7	54.4	1.41	1.43
Mexico	4 380	5 118	-2.12	0.92	38.2	40.0	-3.33	-0.04
Uruguay	130	159	1.59	1.59	38.4	45.3	1.34	1.21
ASIA and PACIFIC	71 564	96 464	3.04	2.61	17.9	21.8	1.89	1.71
Bangladesh	1 477	2 420	8.16	4.43	9.8	14.2	6.89	3.28
China ³	15 058	19 053	3.61	2.22	11.2	13.7	3.09	1.96
India	23 695	32 771	2.84	2.74	19.1	23.1	1.38	1.54
Indonesia	5 523	7 569	4.48	2.82	22.8	28.4	3.35	1.97
Iran, Islamic Republic of	2 475	3 265	2.42	2.48	33.1	39.8	1.22	1.68
Korea	1 318	1 604	0.77	1.76	27.2	32.1	0.30	1.48
Malaysia	1 487	2 000	2.86	2.68	51.5	59.0	1.10	1.22
Pakistan	4 910	6 740	2.76	2.66	27.8	31.9	0.93	1.03
Saudi Arabia	1 035	1 541	4.49	3.55	36.9	44.5	1.67	1.64
Thailand	2 833	3 643	2.74	2.29	40.8	50.3	1.99	1.95
Turkey	2 492	3 183	3.84	1.96	33.8	38.8	2.50	1.00
LEAST DEVELOPED COUNTRIES (LDC)	8 296	12 653	5.55	3.74	9.7	11.7	3.22	1.55
OECD⁴	44 534	45 953	0.55	0.25	34.8	34.0	-0.12	-0.24
BRICS	60 117	76 538	2.34	2.06	20.2	23.8	1.44	1.38

Note: Crop year: Beginning crop marketing year (Oct/Sept) - see Glossary of Terms for definitions. Sugar data are expressed in raw sugar equivalent.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

ANNEX A

Table A.18. Main policy assumptions for sugar markets

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
ARGENTINA												
Tariff, sugar	ARS/t	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
BANGLADESH												
Tariff, white sugar	%	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
BRAZIL												
Tariff, raw sugar	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Tariff, white sugar	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
CANADA												
Tariff, raw sugar	CAD/t	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
Tariff, white sugar	CAD/t	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
CHINA¹												
TRQ sugar	kt	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0
In-quota tariff, raw sugar	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
In-quota tariff, white sugar	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Tariff, over-quota	%	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
EUROPEAN UNION												
Reference price, white sugar	EUR/t	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4
Production quota ²	mt wse	13.3	13.3	13.3	..	..	..	..	..	..	..	..
WTO export limit	kt wse	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4	1 374.4
Tariff, raw sugar	EUR/t	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0
Tariff, white sugar	EUR/t	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0
INDIA												
Intervention price, sugarcane	INR/t	1 516.7	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0
Applied tariff, raw sugar	%	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
INDONESIA												
Tariff, white sugar	%	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
JAPAN												
Minimum stabilisation price, raw sugar	JPY/kg	153.0	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2
Tariff, raw sugar	JPY/kg	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
Tariff, white sugar	JPY/kg	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1
KOREA												
Tariff, raw sugar	%	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
MEXICO												
Mexico common external tariff, raw sugar	MXN/t	4 318.1	4 478.4	4 478.4	4 540.0	4 587.1	4 625.7	4 659.7	4 691.8	4 723.6	4 743.6	4 761.9
Mexico common external tariff, white sugar	MXN/t	4 557.0	4 726.2	4 726.2	4 791.2	4 841.0	4 881.7	4 917.5	4 951.5	4 985.0	5 006.1	5 025.4
RUSSIAN FEDERATION												
Minimum tariff, raw sugar	USD/t	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0
Minimum tariff, white sugar	USD/t	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0
UNITED STATES												
Loan rate, raw sugar	USD/t	411.5	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4
Loan rate, white sugar	USD/t	528.8	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1
TRQ, raw sugar	kt rse	1 560	1 413	1 416	1 419	1 424	1 427	1 431	1 434	1 435	1 436	1 437
TRQ, refined sugar	kt rse	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
Raw sugar 2nd tier WTO tariff	USD/t	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6
White sugar 2nd tier WTO tariff	USD/t	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4
SOUTH AFRICA												
Tariff, raw sugar	%	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0
TANZANIA												
Applied tariff, white sugar	%	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
VIETNAM												
Applied tariff, white sugar	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0

Note: Crop year: Beginning crop marketing year - see the Glossary of Terms for definitions.

The source for tariffs (except United States and Russia) is AMAD. The source for Russia and United States tariffs is ERS, USDA.

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. Refers to mainland only.
2. Production that receives official support.

Source: OECD and FAO Secretariats.

Table A.19. World meat projections

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WORLD												
BEEF AND VEAL												
Production	kt cwe	66 891	67 212	67 955	68 934	70 066	71 180	72 438	73 485	74 440	75 422	76 531
Consumption	kt cwe	66 404	67 071	67 744	68 726	69 830	70 947	72 220	73 273	74 218	75 196	76 310
PIGMEAT												
Production	kt cwe	109 793	111 853	113 963	115 944	118 146	119 458	121 172	122 537	123 965	125 322	126 731
Consumption	kt cwe	109 456	111 717	113 830	115 800	117 997	119 319	121 038	122 404	123 821	125 168	126 576
POULTRY MEAT												
Production	kt rtc	103 257	108 354	110 519	113 144	115 388	117 763	120 001	121 975	124 289	126 502	128 669
Consumption	kt rtc	103 132	108 084	110 225	112 848	115 088	117 471	119 709	121 685	123 999	126 212	128 377
SHEEP MEAT												
Production	kt cwe	13 854	14 102	14 331	14 332	14 620	14 683	14 952	15 125	15 351	15 569	15 782
Consumption	kt cwe	13 804	14 084	14 316	14 315	14 607	14 670	14 939	15 112	15 341	15 559	15 774
TOTAL MEAT												
Per capita consumption ¹	kg rwt	33.7	33.9	34.1	34.4	34.6	34.8	35.1	35.2	35.4	35.6	35.8
DEVELOPED COUNTRIES												
BEEF AND VEAL												
Production	kt cwe	29 482	28 720	28 743	28 888	29 424	29 687	30 112	30 362	30 609	30 695	30 876
Consumption	kt cwe	29 528	28 974	29 001	29 192	29 615	29 833	30 255	30 447	30 637	30 666	30 792
PIGMEAT												
Production	kt cwe	41 903	41 584	42 085	42 651	43 383	43 358	43 585	43 769	44 009	44 258	44 499
Consumption	kt cwe	39 647	39 059	39 684	40 196	40 862	40 826	41 041	41 205	41 396	41 530	41 721
POULTRY MEAT												
Production	kt rtc	42 330	43 278	43 743	44 558	45 309	46 060	46 694	47 178	47 875	48 453	49 078
Consumption	kt rtc	40 502	41 186	41 642	42 412	42 976	43 658	44 177	44 502	45 110	45 555	46 009
SHEEP MEAT												
Production	kt cwe	3 179	3 226	3 241	3 249	3 278	3 294	3 318	3 346	3 364	3 400	3 418
Consumption	kt cwe	2 713	2 733	2 732	2 723	2 741	2 748	2 755	2 765	2 774	2 797	2 800
TOTAL MEAT												
Per capita consumption ¹	kg rwt	65.0	64.3	64.8	65.4	66.1	66.4	66.8	67.0	67.4	67.5	67.8
DEVELOPING COUNTRIES												
BEEF AND VEAL												
Production	kt cwe	37 219	38 492	39 211	40 046	40 642	41 493	42 326	43 123	43 832	44 728	45 655
Consumption	kt cwe	36 876	38 097	38 742	39 534	40 215	41 115	41 966	42 825	43 581	44 531	45 518
PIGMEAT												
Production	kt cwe	67 890	70 270	71 878	73 293	74 763	76 101	77 587	78 768	79 956	81 064	82 232
Consumption	kt cwe	69 808	72 658	74 146	75 605	77 135	78 493	79 997	81 199	82 425	83 638	84 856
POULTRY MEAT												
Production	kt rtc	60 927	65 077	66 776	68 586	70 079	71 702	73 307	74 797	76 414	78 048	79 592
Consumption	kt rtc	62 630	66 898	68 583	70 435	72 111	73 813	75 531	77 183	78 889	80 657	82 368
SHEEP MEAT												
Production	kt cwe	10 675	10 876	11 089	11 082	11 342	11 389	11 634	11 779	11 987	12 169	12 364
Consumption	kt cwe	11 091	11 350	11 584	11 592	11 866	11 922	12 185	12 347	12 567	12 762	12 974
TOTAL MEAT												
Per capita consumption ¹	kg rwt	25.9	26.5	26.7	27.0	27.2	27.4	27.7	27.9	28.1	28.3	28.6
OECD²												
BEEF AND VEAL												
Production	kt cwe	27 117	25 983	25 961	26 047	26 513	26 689	27 046	27 228	27 402	27 434	27 542
Consumption	kt cwe	26 335	25 767	25 786	25 959	26 376	26 568	26 942	27 102	27 264	27 281	27 384
PIGMEAT												
Production	kt cwe	40 057	39 621	40 071	40 554	41 243	41 191	41 404	41 552	41 773	42 035	42 265
Consumption	kt cwe	37 207	36 536	36 925	37 371	38 000	37 943	38 148	38 268	38 414	38 531	38 688
POULTRY MEAT												
Production	kt rtc	41 785	42 459	42 839	43 573	44 201	44 885	45 537	45 956	46 573	47 086	47 650
Consumption	kt rtc	38 967	39 489	39 816	40 448	40 866	41 455	41 975	42 253	42 780	43 134	43 496
SHEEP MEAT												
Production	kt cwe	2 507	2 522	2 529	2 537	2 546	2 550	2 558	2 571	2 581	2 599	2 608
Consumption	kt cwe	2 055	2 039	2 017	2 007	2 004	2 001	1 990	1 982	1 983	1 987	1 981
TOTAL MEAT												
Per capita consumption ¹	kg rwt	65.4	64.2	64.3	64.8	65.3	65.5	65.8	65.8	66.0	66.1	66.2

Note: Calendar Year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.
2. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.20.1. Beef and veal projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	66 891	76 531	1.23	1.49	7 429	9 333	2.83	2.02	7 934	9 369	1.44	1.87
DEVELOPED COUNTRIES	29 482	30 876	-0.01	0.92	3 452	4 042	-1.33	0.86	3 737	4 350	1.30	1.49
NORTH AMERICA	12 775	13 012	0.02	1.12	1 278	1 821	-3.93	1.50	1 547	2 043	5.03	2.53
Canada	1 398	1 486	-3.63	0.25	233	260	4.83	0.96	405	476	-3.56	0.59
United States	11 377	11 527	0.55	1.24	1 044	1 561	-5.10	1.59	1 142	1 567	12.98	3.26
EUROPE	10 891	11 238	-0.85	0.57	1 251	1 112	0.52	-0.99	458	396	-2.68	2.30
European Union	8 092	7 958	-0.42	0.20	291	371	-8.74	2.78	259	171	-4.69	2.83
Russian Federation	1 655	2 089	-2.04	1.96	855	637	6.25	-2.87	0	0	..	..
Ukraine	407	369	-6.28	-0.32	8	20	-4.19	3.99	13	3	-23.95	-6.65
OCEANIA DEVELOPED	2 771	3 024	0.12	0.60	11	9	-3.69	0.00	1 717	1 895	0.04	0.34
Australia	2 135	2 405	0.40	1.00	5	3	-1.14	0.00	1 200	1 405	0.48	0.95
New Zealand	636	619	-0.78	-0.81	6	6	-3.30	0.00	517	490	-0.94	-1.24
OTHER DEVELOPED ¹	3 045	3 602	3.29	1.62	912	1 100	0.77	1.91	15	15	2.77	0.58
Japan	512	505	0.35	0.00	734	797	0.73	0.61	1	1	39.47	0.00
South Africa	915	1 105	4.60	1.69	10	9	-8.87	-0.82	10	11	0.63	0.83
DEVELOPING COUNTRIES	37 219	45 655	2.30	1.90	3 977	5 291	8.03	3.01	4 007	5 019	1.89	2.22
AFRICA	4 818	6 552	2.57	3.31	542	853	4.24	5.70	70	13	4.57	-13.07
NORTH AFRICA	1 096	1 271	3.19	1.95	359	504	4.82	4.04	1	1	4.45	-0.35
Algeria	127	159	2.16	1.93	75	109	0.50	2.73	0	0	-20.83	-0.19
Egypt	719	783	3.63	1.88	251	378	5.93	4.40	1	1	1.74	-0.34
SUB-SAHARAN AFRICA	3 722	5 282	2.39	3.67	183	349	3.23	8.73	69	11	4.55	-13.97
LATIN AMERICA and CARIBBEAN	17 829	21 025	1.73	1.61	902	988	4.03	1.23	2 405	3 047	-2.28	3.06
Argentina	2 571	3 215	-1.33	1.97	5	10	-5.05	3.55	249	527	-10.05	7.62
Brazil	9 740	11 027	2.37	1.16	38	95	-1.90	0.53	1 307	1 577	-4.27	2.65
Chile	197	214	-0.74	1.20	171	188	0.39	1.00	10	6	-5.31	-0.91
Mexico	1 769	1 959	2.18	1.03	291	301	-2.08	0.10	110	74	22.27	-6.34
Uruguay	548	661	0.95	2.72	0	0	-18.03	-0.26	312	459	-0.05	3.40
ASIA and PACIFIC	14 572	18 078	2.94	1.77	2 533	3 450	11.07	2.98	1 532	1 959	13.50	1.27
Bangladesh	197	220	0.85	0.95	0	0	9.49	7.72	0	0	-16.61	-6.96
China ²	6 483	7 546	2.18	1.67	79	176	49.33	8.19	88	85	1.47	1.16
India	2 934	4 163	3.55	2.13	1	1	29.09	-0.92	1 174	1 635	13.24	1.88
Indonesia	481	684	3.24	1.99	89	123	22.57	7.81	1	1	-9.18	-0.62
Iran, Islamic Republic of	410	468	2.53	1.22	176	83	16.46	2.02	1	2	40.14	-0.19
Korea	292	378	6.82	2.59	385	425	4.59	-0.06	3	3	9.07	0.00
Malaysia	12	17	-1.11	2.83	160	203	0.91	1.91	8	7	16.15	-1.88
Pakistan	1 476	1 774	5.57	1.67	3	3	36.83	2.56	26	17	45.38	-8.92
Saudi Arabia	38	29	10.83	-2.86	163	217	10.53	2.08	14	8	3.34	-2.04
Turkey	236	221	-4.64	0.48	2	1	86.01	6.12	13	1	42.23	-36.49
LEAST DEVELOPED COUNTRIES (LDC)	3 593	5 104	2.17	3.82	167	325	6.94	7.22	4	2	4.59	-2.05
OECD³	27 117	27 542	0.05	0.76	3 292	4 081	-2.27	1.15	3 853	4 196	1.81	1.19
BRICS	21 727	25 930	2.15	1.54	984	919	6.58	-1.09	2 580	3 308	1.28	2.21

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD and FAO Secretariats.

Table A.20.2. Beef and veal projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ¹		PER CAPITA (kg rwt) ⁵		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	66 404	76 310	1.35	1.49	6.7	6.8	0.18	0.48
DEVELOPED COUNTRIES	29 528	30 792	-0.25	0.78	15.0	15.1	-0.72	0.44
NORTH AMERICA	12 857	13 068	-0.80	0.91	25.9	24.1	-1.70	0.10
Canada	992	981	-0.57	-0.01	20.2	18.2	-1.60	-0.85
United States	11 865	12 087	-0.82	0.99	26.5	24.7	-1.70	0.19
EUROPE	11 833	12 030	-0.49	0.29	11.2	11.3	-0.68	0.23
European Union	7 978	8 100	-0.82	0.37	11.1	11.0	-1.20	0.17
Russian Federation	2 783	2 842	1.39	0.02	13.6	14.2	1.55	0.20
Ukraine	403	386	-4.68	-0.07	6.2	6.3	-4.06	0.47
OCEANIA DEVELOPED	861	931	-0.60	0.83	22.3	21.2	-2.15	-0.32
Australia	740	813	-0.73	0.94	22.9	22.1	-2.37	-0.24
New Zealand	121	118	0.43	0.10	19.1	16.8	-0.70	-0.84
OTHER DEVELOPED ²	3 978	4 764	2.61	1.70	10.6	12.2	2.06	1.36
Japan	1 236	1 300	0.29	0.38	6.8	7.3	0.27	0.58
South Africa	906	1 093	4.20	1.70	12.6	14.4	3.22	1.25
DEVELOPING COUNTRIES	36 876	45 518	2.79	2.00	4.6	5.0	1.42	0.83
AFRICA	5 322	7 415	2.69	3.62	3.7	4.1	0.28	1.29
NORTH AFRICA	1 508	1 821	3.72	2.42	6.3	6.6	2.15	1.16
Algeria	210	276	0.93	2.17	4.1	4.7	-0.57	1.02
Egypt	1 004	1 191	4.43	2.55	8.5	8.6	2.58	1.07
SUB-SAHARAN AFRICA	3 814	5 595	2.31	4.04	3.2	3.6	-0.27	1.51
LATIN AMERICA and CARIBBEAN	15 769	18 408	2.48	1.41	18.5	19.4	1.30	0.47
Argentina	2 327	2 699	0.15	1.22	40.0	42.5	-0.72	0.43
Brazil	8 219	9 242	3.49	0.89	29.3	30.4	2.50	0.20
Chile	358	395	-0.07	1.14	14.5	14.7	-1.04	0.40
Mexico	1 630	1 942	0.54	1.67	9.9	10.6	-0.71	0.70
Uruguay	181	178	-0.72	1.51	37.6	35.4	-0.97	1.13
ASIA and PACIFIC	15 785	19 695	3.14	2.01	2.8	3.1	2.00	1.12
Bangladesh	197	220	0.85	0.96	0.9	0.9	-0.33	-0.15
China ³	6 480	7 644	2.38	1.78	3.4	3.8	1.86	1.52
India	1 761	2 529	-0.23	2.30	1.0	1.2	-1.65	1.11
Indonesia	639	810	4.88	2.67	1.8	2.1	3.75	1.81
Iran, Islamic Republic of	590	554	5.29	1.26	5.5	4.7	4.06	0.47
Korea	646	800	4.28	1.13	9.3	11.2	3.80	0.85
Malaysia	181	230	0.73	1.96	4.4	4.8	-1.00	0.51
Pakistan	1 446	1 755	5.34	1.82	5.7	5.8	3.46	0.20
Saudi Arabia	191	241	10.12	1.46	4.7	4.9	7.15	-0.41
Turkey	306	326	-1.27	1.04	2.9	2.8	-2.54	0.08
LEAST DEVELOPED COUNTRIES (LDC)	3 721	5 377	2.47	3.83	3.1	3.5	0.21	1.64
OECD⁴	26 335	27 384	-0.52	0.78	14.4	14.2	-1.18	0.29
BRICS	20 149	23 349	2.49	1.24	4.7	5.1	1.58	0.57

Note: Calendar year: Year ending 30 September New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD and FAO Secretariats.

Table A.21.1. Pigmeat projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	109 793	126 731	1.83	1.37	6 566	7 643	6.43	0.82	6 839	7 765	5.41	0.85
DEVELOPED COUNTRIES	41 903	44 499	1.15	0.70	3 457	3 699	3.42	0.45	5 706	6 532	7.17	0.82
NORTH AMERICA	12 315	13 649	1.50	1.09	587	609	-0.59	1.94	3 453	4 165	8.30	1.17
Canada	2 141	2 382	-0.65	0.88	202	233	9.72	2.63	1 224	1 403	2.67	1.60
United States	10 175	11 266	2.00	1.13	385	376	-3.81	1.53	2 229	2 762	12.85	0.97
EUROPE	27 311	28 430	1.01	0.52	1 330	1 412	8.56	0.05	2 199	2 323	6.09	0.27
European Union	22 950	23 189	0.69	0.32	17	14	-8.06	0.41	2 062	2 222	6.07	0.34
Russian Federation	2 452	3 181	5.55	1.64	916	889	8.24	0.17	0	0	..	..
Ukraine	659	708	1.91	1.70	156	167	26.14	-4.44	16	35	-9.54	2.11
OCEANIA DEVELOPED	393	417	-2.08	0.53	325	431	10.94	1.95	50	39	-5.98	-2.27
Australia	344	369	-2.33	0.72	285	380	11.85	1.88	50	39	-6.01	-2.28
New Zealand	48	48	-0.14	-0.85	40	51	5.82	2.47	0	0	9.49	0.00
OTHER DEVELOPED ¹	1 884	2 004	1.65	0.71	1 216	1 247	0.03	-0.21	5	5	3.48	-0.21
Japan	1 286	1 290	0.41	-0.06	1 123	1 141	-0.39	-0.34	1	0	56.73	-9.98
South Africa	311	370	12.27	2.21	40	25	5.02	-5.96	3	4	6.21	1.11
DEVELOPING COUNTRIES	67 890	82 232	2.27	1.75	3 109	3 944	10.82	1.18	1 133	1 233	-0.99	1.01
AFRICA	1 017	1 315	4.38	3.63	184	334	14.88	4.86	5	2	-2.83	-2.68
NORTH AFRICA	95	2	15.52	2.19	1	2	17.90	2.08	0	0	29.99	-0.51
Algeria	93	0	38.58	2.46	0	0	-15.09	0.00	0	0	0.00	0.00
Egypt	0	0	-17.39	1.60	1	1	29.68	2.52	0	0	33.04	-2.46
SUB-SAHARAN AFRICA	922	1 314	3.25	3.63	183	333	14.86	4.87	5	2	-3.44	-2.89
LATIN AMERICA and CARIBBEAN	6 789	8 293	3.19	1.85	909	1 052	9.91	0.38	773	923	2.61	1.36
Argentina	300	420	6.97	3.11	37	34	0.22	-0.04	8	33	28.68	11.64
Brazil	3 330	3 988	3.05	1.60	10	11	36.43	0.01	529	640	0.64	1.82
Chile	521	602	4.44	1.38	19	23	46.63	0.43	142	150	5.64	-0.49
Mexico	1 193	1 400	2.18	1.61	587	655	9.54	-0.29	72	91	14.39	-0.23
Uruguay	19	27	0.98	3.26	22	25	11.78	-0.65	0	0	-48.13	0.05
ASIA and PACIFIC	60 085	72 623	2.13	1.71	2 016	2 558	10.91	1.12	355	308	-6.51	0.05
Bangladesh	0	0	0.00	7.94	0	0	26.43	0.00	0	0	0.00	0.00
China ²	50 431	60 435	2.01	1.61	480	695	29.13	1.16	255	230	-9.41	0.42
India	321	384	-4.59	2.64	1	1	42.77	-0.01	1	1	7.79	0.01
Indonesia	700	842	4.18	1.78	1	1	-21.04	2.34	0	0	-35.08	-2.14
Iran, Islamic Republic of	0	0	0.00	4.53	1	2	40.98	0.00	1	1	63.93	0.00
Korea	1 004	1 306	-0.24	2.16	528	470	12.45	-2.00	1	2	-34.55	0.00
Malaysia	241	287	2.36	1.72	16	48	17.83	6.26	5	4	23.75	-1.95
Pakistan	0	0	0.00	2.65	0	0	-34.56	0.00	0	0	-16.13	0.00
Saudi Arabia	0	1	0.00	28.30	5	5	-4.01	0.00	0	0	-42.99	0.00
Turkey	0	0	-26.99	31.20	1	2	25.34	0.00	1	1	15.16	0.00
LEAST DEVELOPED COUNTRIES (LDC)	1 233	1 669	4.13	3.14	157	276	17.45	4.30	1	1	30.88	-0.64
OECD³	40 057	42 265	0.96	0.66	3 204	3 371	3.39	0.10	5 787	6 675	7.13	0.80
BRICS	56 846	68 359	2.19	1.62	1 448	1 621	12.03	0.46	789	875	-3.45	1.42

Note: Calendar year: Year ending 30 September New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD and FAO Secretariats.

Table A.21.2. Pigmeat projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ¹		PER CAPITA (kg rwe) ⁵		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	109 456	126 576	1.88	1.37	12.2	12.7	0.70	0.37
DEVELOPED COUNTRIES	39 647	41 721	0.72	0.66	22.4	22.7	0.26	0.33
NORTH AMERICA	9 215	9 874	-0.47	1.11	20.7	20.3	-1.37	0.30
Canada	735	763	-1.15	0.10	16.7	15.8	-2.17	-0.74
United States	8 480	9 110	-0.41	1.20	21.1	20.8	-1.30	0.39
EUROPE	26 664	27 792	1.06	0.52	28.0	29.0	0.86	0.45
European Union	20 839	20 916	0.21	0.32	32.3	31.7	-0.18	0.13
Russian Federation	3 602	4 350	7.19	1.26	19.7	24.2	7.35	1.44
Ukraine	812	859	4.20	0.13	14.0	15.7	4.88	0.67
OCEANIA DEVELOPED	668	809	3.22	1.44	19.3	20.6	1.61	0.29
Australia	580	710	3.38	1.54	20.0	21.5	1.68	0.35
New Zealand	88	99	2.21	0.74	15.5	15.7	1.06	-0.21
OTHER DEVELOPED ²	3 100	3 246	1.13	0.37	9.2	9.3	0.58	0.04
Japan	2 414	2 431	0.18	-0.15	14.9	15.3	0.16	0.05
South Africa	348	392	11.60	1.50	5.4	5.8	10.55	1.05
DEVELOPING COUNTRIES	69 808	84 856	2.59	1.74	9.7	10.4	1.23	0.57
AFRICA	1 191	1 648	5.56	3.87	0.9	1.0	3.08	1.54
NORTH AFRICA	96	3	19.46	2.35	0.4	0.0	17.65	1.09
Algeria	93	0	32.02	2.17	2.0	0.0	30.05	1.02
Egypt	1	2	-4.54	2.42	0.0	0.0	-6.23	0.94
SUB-SAHARAN AFRICA	1 095	1 644	4.57	3.87	1.0	1.2	1.93	1.35
LATIN AMERICA and CARIBBEAN	6 928	8 433	3.89	1.71	9.1	9.9	2.70	0.76
Argentina	329	421	5.64	2.38	6.3	7.4	4.72	1.58
Brazil	2 811	3 360	3.63	1.55	11.1	12.3	2.64	0.85
Chile	398	476	4.69	2.02	18.0	19.8	3.67	1.27
Mexico	1 711	1 974	3.51	1.02	11.6	12.0	2.23	0.06
Uruguay	42	52	5.86	1.23	9.6	11.5	5.60	0.85
ASIA and PACIFIC	61 690	74 775	2.40	1.70	12.0	13.2	1.26	0.81
Bangladesh	0	0	17.48	0.96	0.0	0.0	16.10	-0.15
China ³	50 526	60 782	2.22	1.61	29.2	34.1	1.70	1.34
India	321	384	-4.57	2.63	0.2	0.2	-5.93	1.44
Indonesia	681	822	4.23	1.83	2.2	2.4	3.11	0.99
Iran, Islamic Republic of	0	0	31.34	1.26	0.0	0.0	29.81	0.47
Korea	1 556	1 774	3.27	0.88	25.1	27.7	2.79	0.60
Malaysia	253	331	2.72	2.29	6.8	7.6	0.96	0.84
Pakistan	0	0	-26.74	1.82	0.0	0.0	-28.04	0.20
Saudi Arabia	5	6	-2.71	1.46	0.2	0.1	-5.33	-0.41
Turkey	0	1	4.37	1.04	0.0	0.0	3.02	0.08
LEAST DEVELOPED COUNTRIES (LDC)	1 388	1 949	5.07	3.29	1.3	1.4	2.75	1.11
OECD⁴	37 207	38 688	0.38	0.59	22.7	22.3	-0.29	0.11
BRICS	57 607	69 268	2.54	1.59	15.1	16.8	1.63	0.92

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD and FAO Secretariats.

Table A.22.1. Poultry meat projections: Production and trade

Calendar year

	PRODUCTION (kt rtc)		Growth (%) ⁴		IMPORTS (kt rtc)		Growth (%) ⁴		EXPORTS (kt rtc)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	103 257	128 669	3.68	1.93	11 997	14 523	6.74	2.13	12 029	14 813	6.69	2.09
DEVELOPED COUNTRIES	42 330	49 078	2.34	1.43	3 338	3 374	-0.14	0.42	5 167	6 441	4.86	2.17
NORTH AMERICA	20 400	23 440	0.95	1.68	297	323	6.57	0.71	3 628	4 566	4.76	2.68
Canada	1 205	1 378	1.01	1.33	238	264	4.42	0.93	177	195	6.06	1.08
United States	19 195	22 062	0.94	1.71	59	59	24.04	-0.20	3 451	4 372	4.70	2.76
EUROPE	17 003	19 691	3.66	1.06	1 829	1 416	-3.39	-1.68	1 457	1 780	4.94	0.99
European Union	12 375	12 976	1.34	0.20	809	798	2.11	-0.15	1 271	1 397	3.59	-0.12
Russian Federation	3 167	4 555	14.77	2.55	519	259	-11.61	-3.59	30	160	77.31	13.53
Ukraine	863	1 297	12.62	3.99	241	164	4.54	-4.41	48	84	20.97	4.38
OCEANIA DEVELOPED	1 199	1 405	3.85	1.31	0	0	..	..	44	63	7.62	2.24
Australia	1 041	1 224	4.40	1.34	0	0	..	..	44	63	7.62	2.24
New Zealand	158	181	0.71	1.07	0	0	..	..	0	0	..	..
OTHER DEVELOPED ¹	3 728	4 541	4.33	1.82	1 212	1 635	5.16	2.62	38	31	7.80	0.40
Japan	1 415	1 401	1.70	-0.20	446	391	0.90	-1.37	8	8	23.79	0.00
South Africa	1 523	2 101	7.49	3.03	336	632	8.12	5.20	15	10	9.26	-0.86
DEVELOPING COUNTRIES	60 927	79 592	4.71	2.24	8 659	11 149	10.87	2.72	6 861	8 372	8.31	2.02
AFRICA	3 215	4 435	3.85	2.98	1 199	1 896	13.44	4.04	41	16	3.52	-0.25
NORTH AFRICA	1 979	2 706	3.96	3.02	136	193	26.61	1.98	7	7	-6.99	4.35
Algeria	272	326	0.69	1.70	12	17	8.29	2.04	1	0	105.47	-0.21
Egypt	794	1 049	2.15	2.84	111	172	60.36	2.17	5	4	-11.12	-0.26
SUB-SAHARAN AFRICA	1 236	1 730	3.67	2.93	1 063	1 703	12.37	4.30	34	10	9.52	-3.72
LATIN AMERICA and CARIBBEAN	23 588	30 295	5.71	2.01	1 758	2 066	8.98	1.33	4 309	5 706	7.29	2.60
Argentina	1 778	2 613	11.18	2.54	19	16	1.07	0.00	231	613	24.58	8.01
Brazil	13 121	16 261	6.00	1.59	2	2	21.34	-0.04	3 849	4 894	6.49	2.20
Chile	638	816	3.24	2.00	79	81	40.59	-0.36	114	125	10.42	0.36
Mexico	2 797	3 575	2.76	2.34	623	615	5.76	-0.63	19	19	79.84	0.86
Uruguay	65	66	7.06	1.35	3	5	24.23	2.67	12	10	154.79	-3.18
ASIA and PACIFIC	34 123	44 862	4.15	2.33	5 702	7 186	11.05	2.81	2 511	2 650	10.76	0.90
Bangladesh	186	238	3.81	3.19	2	3	-3.92	1.64	0	0	-6.43	-0.71
China ²	17 094	21 475	3.12	1.89	473	555	3.06	1.42	584	532	2.24	-1.05
India	2 875	4 124	7.20	2.98	0	0	17.47	1.76	9	10	5.89	-2.29
Indonesia	1 722	2 365	5.39	3.00	1	1	-17.03	2.85	0	0	-40.56	-2.68
Iran, Islamic Republic of	1 725	2 391	5.51	2.99	49	22	27.17	0.79	32	21	4.07	-0.47
Korea	686	884	5.70	2.06	137	107	10.22	-2.29	23	15	34.14	0.00
Malaysia	1 540	1 951	6.23	2.21	50	97	6.42	6.14	143	64	6.45	-8.05
Pakistan	732	1 019	9.17	2.94	3	3	9.90	6.01	2	3	-5.19	-5.47
Saudi Arabia	547	795	1.53	2.07	743	984	8.26	3.50	38	37	7.78	-3.34
Turkey	1 589	2 310	8.26	3.19	101	82	-0.55	-2.44	239	395	30.35	2.54
LEAST DEVELOPED COUNTRIES (LDC)	1 996	2 744	5.56	2.94	927	1 425	11.21	3.92	23	2	17.14	-3.13
OECD³	41 785	47 650	1.63	1.32	2 541	2 448	3.68	-0.55	5 361	6 600	5.22	1.95
BRICS	37 780	48 517	5.23	1.98	1 331	1 449	-4.26	1.62	4 487	5 606	5.88	2.02

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.22.2. Poultry meat projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt rtc)		Growth (%) ¹		PER CAPITA (kg rwt) ⁵		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	103 132	128 377	3.67	1.93	13.0	14.5	2.47	0.92
DEVELOPED COUNTRIES	40 502	46 009	1.82	1.25	25.9	28.3	1.35	0.92
NORTH AMERICA	17 081	19 196	0.34	1.44	43.3	44.5	-0.57	0.63
Canada	1 271	1 447	1.04	1.29	32.6	33.7	0.00	0.44
United States	15 810	17 749	0.29	1.45	44.4	45.6	-0.61	0.64
EUROPE	17 373	19 327	2.58	0.83	20.6	22.7	2.38	0.77
European Union	11 914	12 377	1.18	0.22	20.8	21.2	0.79	0.02
Russian Federation	3 655	4 654	6.00	1.87	22.5	29.2	6.16	2.04
Ukraine	1 056	1 377	9.79	2.51	20.6	28.5	10.50	3.06
OCEANIA DEVELOPED	1 156	1 343	3.72	1.27	37.6	38.5	2.10	0.12
Australia	997	1 162	4.27	1.30	38.8	39.6	2.56	0.12
New Zealand	158	181	0.71	1.07	31.6	32.5	-0.43	0.12
OTHER DEVELOPED ²	4 892	6 144	4.48	2.03	16.4	19.8	3.92	1.69
Japan	1 843	1 784	1.40	-0.47	12.8	12.7	1.37	-0.27
South Africa	1 844	2 723	7.58	3.51	32.2	45.2	6.57	3.05
DEVELOPING COUNTRIES	62 630	82 368	5.03	2.33	9.8	11.4	3.63	1.16
AFRICA	4 373	6 317	5.85	3.31	3.9	4.3	3.37	0.99
NORTH AFRICA	2 108	2 894	4.78	2.96	11.1	13.2	3.19	1.70
Algeria	283	343	0.88	1.72	6.9	7.4	-0.62	0.57
Egypt	900	1 217	4.12	2.76	9.6	11.0	2.28	1.27
SUB-SAHARAN AFRICA	2 265	3 423	6.93	3.61	2.4	2.8	4.23	1.09
LATIN AMERICA and CARIBBEAN	20 943	26 653	5.62	1.84	30.9	35.4	4.40	0.89
Argentina	1 472	2 016	9.04	1.30	31.7	39.9	8.09	0.51
Brazil	9 274	11 369	5.82	1.35	41.5	47.0	4.81	0.65
Chile	603	772	3.82	2.01	30.7	36.2	2.81	1.26
Mexico	3 401	4 172	3.18	1.85	26.1	28.7	1.90	0.88
Uruguay	55	60	4.25	2.51	14.3	15.1	4.00	2.12
ASIA and PACIFIC	37 314	49 398	4.62	2.49	8.2	9.8	3.46	1.59
Bangladesh	188	241	3.70	3.17	1.1	1.2	2.48	2.03
China ³	16 984	21 499	3.11	1.96	11.1	13.6	2.59	1.69
India	2 866	4 114	7.21	3.00	2.0	2.6	5.69	1.80
Indonesia	1 723	2 366	5.38	3.00	6.3	7.8	4.24	2.15
Iran, Islamic Republic of	1 742	2 392	5.76	3.01	20.5	25.7	4.53	2.20
Korea	800	976	5.87	1.52	14.5	17.2	5.38	1.24
Malaysia	1 447	1 983	6.19	3.00	44.1	51.5	4.38	1.54
Pakistan	732	1 019	9.23	3.00	3.6	4.2	7.28	1.37
Saudi Arabia	1 251	1 742	4.96	3.01	39.2	44.2	2.13	1.10
Turkey	1 451	1 998	5.74	3.01	17.3	21.4	4.37	2.03
LEAST DEVELOPED COUNTRIES (LDC)	2 900	4 168	7.01	3.27	3.0	3.4	4.65	1.09
OECD⁴	38 967	43 496	1.32	1.11	26.8	28.3	0.64	0.62
BRICS	34 623	44 360	4.60	1.97	10.2	12.1	3.67	1.29

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD and FAO Secretariats.

Table A.23.1. Sheep meat projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	13 854	15 782	2.15	1.25	812	978	0.65	1.62	867	971	0.41	1.62
DEVELOPED COUNTRIES	3 179	3 418	-0.12	0.67	372	394	-2.33	0.53	768	933	0.09	1.95
NORTH AMERICA	91	77	-3.07	-0.78	94	95	-0.49	0.14	5	12	0.67	0.73
Canada	15	17	-1.72	0.71	20	16	1.15	-0.17	0	0	0.90	0.00
United States	75	60	-3.33	-1.15	74	79	-0.91	0.20	5	12	0.72	0.74
EUROPE	1 290	1 186	-0.82	-0.75	235	235	-2.18	0.23	24	24	12.29	-0.73
European Union	982	832	-1.73	-1.48	216	208	-2.60	0.39	17	20	21.27	-0.94
Russian Federation	191	238	4.24	1.80	9	14	8.89	-2.73	0	0	..	..
Ukraine	21	22	3.66	0.12	0	0	26.38	0.39	0	0	-48.27	-0.38
OCEANIA DEVELOPED	1 043	1 246	-1.73	1.46	3	3	-2.90	0.00	738	896	-0.18	2.06
Australia	582	753	-1.52	2.19	0	0	..	..	316	452	0.70	2.96
New Zealand	461	494	-1.99	0.44	3	3	-2.90	0.00	422	445	-0.80	1.21
OTHER DEVELOPED ¹	755	908	4.72	1.80	40	61	-6.31	2.56	1	0	16.14	-1.14
Japan	0	0	..	..	30	30	-5.16	-0.22	0	0	..	..
South Africa	175	178	3.03	0.53	7	28	-12.21	6.82	0	0	3.84	-0.70
DEVELOPING COUNTRIES	10 675	12 364	2.91	1.42	440	584	3.83	2.44	99	38	2.97	-4.40
AFRICA	2 727	3 352	3.68	2.09	26	68	1.74	10.67	25	1	2.90	-20.74
NORTH AFRICA	586	728	2.82	1.89	5	8	-12.65	1.55	0	0	4.96	-0.63
Algeria	196	236	0.80	1.82	1	3	-46.13	0.51	0	0	-3.87	-0.35
Egypt	119	143	8.04	2.77	2	3	12.48	1.74	0	0	4.09	-0.62
SUB-SAHARAN AFRICA	2 141	2 623	3.93	2.14	21	60	11.79	12.60	24	1	2.88	-20.97
LATIN AMERICA and CARIBBEAN	363	382	0.39	0.65	26	33	-11.82	3.03	25	8	2.94	-7.65
Argentina	56	52	-1.31	-0.90	0	0	-8.68	0.00	6	5	-0.66	0.28
Brazil	81	84	1.53	0.68	4	3	..	..	0	0	..	..
Chile	16	14	1.28	-0.75	0	0	-19.11	1.16	6	1	1.24	-14.73
Mexico	56	73	3.60	2.30	11	3	-17.94	-10.50	0	0	..	..
Uruguay	31	25	-1.38	-1.37	0	0	57.00	1.13	13	2	6.33	-13.10
ASIA and PACIFIC	7 585	8 630	2.77	1.21	388	483	6.20	1.61	49	29	2.69	-0.91
Bangladesh	203	274	3.54	2.07	0	1	-12.02	3.34	0	0	-18.74	-2.84
China ²	4 075	4 281	3.04	0.52	85	63	13.52	0.94	8	16	-15.92	9.60
India	897	1 120	3.33	2.14	0	0	13.58	2.47	11	3	4.06	-6.76
Indonesia	135	158	0.22	1.39	1	3	8.15	6.27	0	0	-12.88	-3.27
Iran, Islamic Republic of	536	547	2.01	0.40	9	23	218.36	7.06	0	0	-6.10	-1.62
Korea	1	1	-9.89	0.00	5	5	7.92	0.00	0	0	-12.08	0.36
Malaysia	1	0	1.25	-6.35	20	26	5.13	2.84	0	0	41.70	-0.40
Pakistan	541	725	1.00	1.91	0	0	-28.79	1.04	15	5	17.13	-7.62
Saudi Arabia	33	51	26.33	1.66	55	87	-0.72	1.01	4	3	3.45	-1.00
Turkey	280	324	-1.80	1.56	1	1	85.36	2.22	0	0	-12.40	-1.73
LEAST DEVELOPED COUNTRIES (LDC)	2 008	2 607	4.70	2.64	10	15	9.42	1.46	13	0	2.86	-25.35
OECD³	2 507	2 608	-1.66	0.37	370	356	-3.04	0.10	766	929	0.07	1.92
BRICS	5 419	5 901	3.10	0.86	105	109	7.85	1.49	19	19	-6.81	4.14

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD and FAO Secretariats.

Table A.23.2. Sheep meat projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ⁴		PER CAPITA (kg rwt) ⁵		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	13 804	15 774	2.15	1.26	1.7	1.8	0.97	0.26
DEVELOPED COUNTRIES	2 713	2 800	-0.44	0.31	1.7	1.7	-0.90	-0.03
NORTH AMERICA	176	160	-1.61	-0.34	0.4	0.4	-2.51	-1.14
Canada	36	33	0.35	0.28	0.9	0.8	-0.68	-0.56
United States	140	127	-2.07	-0.49	0.4	0.3	-2.95	-1.29
EUROPE	1 482	1 362	-1.25	-0.62	1.8	1.6	-1.44	-0.68
European Union	1 162	1 000	-2.25	-1.17	2.0	1.7	-2.63	-1.36
Russian Federation	200	237	5.64	1.58	1.2	1.5	5.80	1.75
Ukraine	21	22	3.87	0.12	0.4	0.5	4.55	0.67
OCEANIA DEVELOPED	260	308	-4.50	0.41	8.5	8.8	-5.99	-0.72
Australia	216	251	-3.24	1.35	8.4	8.6	-4.83	0.17
New Zealand	44	57	-9.91	-2.91	8.8	10.2	-10.93	-3.82
OTHER DEVELOPED ¹	794	970	3.58	1.85	2.7	3.1	3.02	1.50
Japan	30	30	-5.16	-0.22	0.2	0.2	-5.18	-0.02
South Africa	182	206	0.94	1.18	3.2	3.4	-0.01	0.74
DEVELOPING COUNTRIES	11 091	12 974	2.87	1.48	1.7	1.8	1.50	0.32
AFRICA	2 685	3 375	3.69	2.28	2.4	2.3	1.26	-0.02
NORTH AFRICA	591	735	2.47	1.89	3.1	3.4	0.92	0.64
Algeria	197	238	0.21	1.80	4.8	5.1	-1.28	0.65
Egypt	121	146	7.87	2.75	1.3	1.3	5.97	1.27
SUB-SAHARAN AFRICA	2 094	2 639	4.06	2.39	2.2	2.1	1.44	-0.11
LATIN AMERICA and CARIBBEAN	368	410	-1.25	1.04	0.5	0.5	-2.39	0.10
Argentina	50	48	-1.38	-1.00	1.1	0.9	-2.24	-1.77
Brazil	88	89	1.91	0.71	0.4	0.4	0.94	0.01
Chile	10	14	1.14	1.59	0.5	0.6	0.16	0.85
Mexico	69	76	-5.38	1.11	0.5	0.5	-6.55	0.14
Uruguay	18	23	-2.19	0.97	4.7	5.8	-2.43	0.59
ASIA and PACIFIC	8 039	9 190	2.83	1.23	1.8	1.8	1.68	0.34
Bangladesh	203	274	3.46	2.08	1.2	1.4	2.25	0.96
China ²	4 151	4 329	3.27	0.51	2.7	2.7	2.75	0.25
India	883	1 116	3.24	2.18	0.6	0.7	1.77	0.99
Indonesia	135	160	0.25	1.46	0.5	0.5	-0.84	0.62
Iran, Islamic Republic of	509	532	1.64	0.63	6.0	5.7	0.45	-0.16
Korea	6	7	1.12	0.00	0.1	0.1	0.65	-0.28
Malaysia	22	27	5.27	2.52	0.7	0.7	3.47	1.07
Pakistan	525	721	0.72	2.03	2.6	3.0	-1.07	0.41
Saudi Arabia	142	181	-0.68	0.96	4.4	4.6	-3.36	-0.90
Turkey	291	332	-1.27	1.52	3.5	3.6	-2.54	0.56
LEAST DEVELOPED COUNTRIES (LDC)	1 961	2 580	4.68	2.69	2.0	2.1	2.38	0.53
OECD³	2 055	1 981	-2.47	-0.28	1.4	1.3	-3.12	-0.76
BRICS	5 504	5 975	3.24	0.87	1.6	1.6	2.32	0.20

Note: Calendar year: Year ending 30 September for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD and FAO Secretariats.

ANNEX A

Table A.24. Main policy assumptions for meat markets

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ARGENTINA												
Beef export tax	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
CANADA												
Beef tariff-quota	kt pw	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
In-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Poultry meat tariff-quota	kt pw	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
In-quota tariff	%	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Out-of-quota tariff	%	196.6	196.6	196.6	196.6	196.6	196.6	196.6	196.6	196.6	196.6	196.6
EUROPEAN UNION¹												
Beef budget ceiling ²	'000 EUR	1 308 667	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000	1 135 000
Beef basic price ^{3,4}	EUR/kg dw	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Beef buy-in price ^{4,5}	EUR/kg dw	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Pigmeat basic price	EUR/kg dw	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sheep basic rate ⁶	EUR/head	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Beef tariff-quota	kt cwe	276.7	313.4	313.4	313.4	313.4	313.4	313.4	313.4	313.4	313.4	313.4
Pig tariff-quota	kt cwe	113.8	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2
Poultry tariff-quota	kt rtc	856.3	959.4	959.4	959.4	959.4	959.4	959.4	959.4	959.4	959.4	959.4
Sheep meat tariff-quota	kt cwe	285.2	285.2	285.2	285.2	285.2	285.2	285.2	285.2	285.2	285.2	285.2
Subsidised export limits												
Beef ⁷	kt cwe	989.6	989.6	989.6	989.6	989.6	989.6	989.6	989.6	989.6	989.6	989.6
Pigmeat ⁷	kt cwe	588.4	588.4	588.4	588.4	588.4	588.4	588.4	588.4	588.4	588.4	588.4
Poultry meat	kt cwe	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8	430.8
JAPAN⁸												
Beef stabilisation prices												
Upper price	JPY/kg dw	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0	1 060.0
Lower price	JPY/kg dw	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0
Beef tariff	%	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Pigmeat stabilisation prices												
Upper price	JPY/kg dw	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0
Lower price	JPY/kg dw	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0
Pigmeat import system ⁹												
Tariff	%	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Standard import price	JPY/kg dw	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
Poultry meat tariff	%	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
KOREA												
Beef tariff	%	39.1	34.7	32.0	29.3	26.7	18.0	16.0	14.0	12.0	10.0	8.0
Beef mark-up	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pigmeat tariff	%	22.5	22.5	22.5	22.5	22.5	15.8	14.6	13.5	12.4	11.3	11.3
Poultry meat tariff	%	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
MEXICO												
Pigmeat tariff	%	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Pigmeat NAFTA tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poultry meat tariff-quota	kt pw	40.5	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
In-quota tariff	%	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	234.0	175.0	150.0	125.0	100.0	75.0	75.0	75.0	75.0	75.0	75.0
RUSSIAN FEDERATION												
Beef tariff-quota	kt pw	563.3	570.0	570.0	570.0	570.0	570.0	570.0	570.0	0.0	0.0	0.0
In-quota tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	0.0	0.0	0.0
Out-of-quota tariff	%	50.0	50.0	55.0	55.0	55.0	55.0	55.0	55.0	27.5	27.5	9.2
Pigmeat tariff-quota	kt pw	476.7	430.0	430.0	430.0	430.0	430.0	430.0	430.0	0.0	0.0	0.0
In-quota tariff	%	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	71.7	65.0	65.0	65.0	65.0	65.0	65.0	65.0	25.0	25.0	25.0
Poultry tariff-quota	kt pw	502.7	378.0	378.0	378.0	378.0	378.0	378.0	378.0	0.0	0.0	0.0
In-quota tariff	%	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0.0	0.0	0.0
Out-of-quota tariff	%	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	37.5	37.5	37.5
UNITED STATES												
Beef tariff-quota	kt pw	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6
In-quota tariff	%	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Out-of-quota tariff	%	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4

Table A.24. Main policy assumptions for meat markets (cont.)

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINA												
Beef tariff	%	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	16.5	16.5
Pigmeat tariff	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Sheep meat tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Poultry meat tariff	%	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
INDIA												
Beef tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pigmeat tariff	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sheep meat tariff	%	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
Poultry meat tariff	%	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
Eggs tariff	%	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
SOUTH AFRICA												
Sheep meat tariff-quota	kt pw	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0

Note: Average 2010-12est: Data for 2012 are estimated.

1. EU farmers also benefit from the Single Farm Payment (SFP) Scheme, which provides flat-rate payments independent from current production decisions and market developments. For the new member states, payments are phased in with the assumption of maximum top-ups from national budgets up to 2013 through the Single Area Payment (SAP), and through the (SFP) from 2014. Due to modulation, an increasing share of the total SFP will go to rural development spending rather than directly to farmers.
2. EU budget ceiling for coupled suckler cow premium, applicable to Belgium, Spain, France, Austria and Portugal.
3. Payments for private storage can be made when the average price on the Community market falls below 103% of this basic price.
4. Price for R3 grade male cattle.
5. Safety-net trigger.
6. 80% of this basic rate is granted to milk ewes and goats; an additional premium of EUR 3.5/head is granted in Less Favoured Areas. This payment scheme applies only in Portugal and Finland.
7. Includes live trade.
8. Year beginning 1 April.
9. Pig carcass imports. Emergency import procedures triggered from November 1995 to March 1996, from July 1996 to June 1997, from August 2001 to March 2002, from August 2002 to March 2003, from August 2003 to March 2004 and from August 2004 to March 2005.

Source: OECD and FAO Secretariats.

Table A.25. World fish and seafood projections

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
FISH												
World												
Production	kt	153 940	161 876	164 904	165 171	169 363	171 941	173 853	175 684	175 582	179 234	181 070
of which aquaculture	kt	62 924	68 262	70 682	72 529	74 705	76 584	78 380	80 144	81 593	83 515	85 124
Consumption	kt	154 193	161 830	164 979	165 245	169 438	172 016	173 928	175 758	175 656	179 309	181 145
of which for food	kt	131 741	138 923	142 506	144 594	147 676	150 510	152 715	154 734	156 103	158 644	160 514
of which for reduction	kt	15 941	16 798	16 583	14 992	16 231	16 106	15 943	15 834	14 433	15 605	15 573
Price												
Aquaculture ¹	USD/t	2 034.8	2 047.6	2 092.0	2 225.1	2 224.9	2 221.5	2 273.0	2 422.4	2 568.2	2 658.3	2 700.9
Capture ²	USD/t	1 324.5	1 386.3	1 431.8	1 501.8	1 513.7	1 555.2	1 601.5	1 681.3	1 750.2	1 798.1	1 842.8
Product traded ³	USD/t	2 671.3	2 698.1	2 769.9	2 933.0	2 870.8	2 923.0	2 990.8	3 187.4	3 335.4	3 408.1	3 462.7
Developed countries												
Production	kt	28 452	29 139	29 431	29 232	29 313	29 352	29 391	29 462	29 448	29 493	29 478
of which aquaculture	kt	4 133	4 249	4 351	4 213	4 334	4 406	4 491	4 601	4 608	4 665	4 666
Consumption	kt	36 741	37 498	37 833	37 914	38 135	38 242	38 395	38 385	38 434	38 532	38 817
of which for food	kt	32 120	32 671	33 101	33 260	33 578	33 765	33 985	34 035	34 122	34 300	34 587
of which for reduction	kt	3 685	4 058	4 013	3 945	3 858	3 788	3 731	3 681	3 653	3 583	3 539
Developing countries												
Production	kt	125 488	132 737	135 473	135 939	140 050	142 589	144 462	146 222	146 134	149 741	151 592
of which aquaculture	kt	58 791	64 014	66 332	68 316	70 370	72 177	73 889	75 543	76 985	78 850	80 457
Consumption	kt	117 452	124 332	127 146	127 331	131 303	133 773	135 533	137 374	137 222	140 777	142 328
of which for food	kt	99 621	106 252	109 405	111 334	114 098	116 745	118 730	120 699	121 980	124 344	125 927
of which for reduction	kt	12 256	12 740	12 570	11 047	12 374	12 318	12 212	12 153	10 780	12 022	12 033
OECD												
Production	kt	31 613	32 689	32 881	32 236	32 715	32 913	32 948	33 061	32 545	33 008	33 113
of which aquaculture	kt	5 629	5 975	6 059	6 020	6 177	6 282	6 429	6 611	6 730	6 857	6 953
Consumption	kt	39 451	40 339	40 601	40 332	40 855	41 043	41 118	41 137	40 859	41 306	41 689
of which for food	kt	32 286	32 713	33 191	33 443	33 776	34 041	34 278	34 367	34 484	34 712	35 059
of which for reduction	kt	5 978	6 417	6 350	5 941	6 190	6 173	6 071	6 011	5 626	5 856	5 850
FISHMEAL												
World												
Production	kt	6 103.4	6 468.5	6 530.4	6 198.7	6 605.3	6 678.8	6 727.3	6 771.9	6 527.8	6 929.7	7 021.0
from whole fish	kt	3 572.3	3 826.1	3 787.2	3 426.9	3 718.6	3 697.2	3 671.1	3 652.8	3 335.0	3 613.7	3 613.8
Consumption	kt	6 212.3	6 656.4	6 666.0	6 600.1	6 582.4	6 783.6	6 821.7	6 855.4	6 901.9	6 888.1	7 062.8
Variation in stocks	kt	-42.5	1.1	43.6	-232.2	182.0	44.3	44.7	45.5	-255.0	140.7	27.3
Price ⁴	USD/t	1 594.2	1 824.8	1 648.4	1 691.6	1 534.7	1 496.5	1 514.8	1 620.7	1 727.6	1 655.2	1 700.0
Developed countries												
Production	kt	1 335.4	1 400.0	1 412.2	1 402.0	1 397.8	1 391.7	1 394.6	1 394.1	1 398.5	1 397.4	1 400.5
from whole fish	kt	828.8	941.5	937.4	923.6	905.2	890.9	883.1	872.9	868.1	853.2	844.4
Consumption	kt	1 923.5	1 971.5	1 934.4	1 828.9	1 818.2	1 833.5	1 814.2	1 792.3	1 755.9	1 743.2	1 743.5
Variation in stocks	kt	-9.5	6.1	7.6	-43.2	39.0	1.3	1.7	0.5	-42.0	37.7	2.3
Developing countries												
Production	kt	4 768.0	5 068.5	5 118.2	4 796.7	5 207.5	5 287.1	5 332.7	5 377.7	5 129.3	5 532.3	5 620.5
from whole fish	kt	2 743.6	2 884.7	2 849.8	2 503.3	2 813.5	2 806.3	2 788.0	2 780.0	2 466.9	2 760.6	2 769.4
Consumption	kt	4 288.8	4 685.0	4 731.5	4 771.1	4 764.2	4 950.1	5 007.5	5 063.2	5 146.0	5 144.8	5 319.3
Variation in stocks	kt	-33.0	-5.0	36.0	-189.0	143.0	43.0	43.0	45.0	-213.0	103.0	25.0
OECD												
Production	kt	1 798.4	1 871.0	1 873.9	1 784.8	1 850.6	1 854.1	1 843.8	1 837.9	1 760.1	1 820.4	1 828.8
from whole fish	kt	1 327.7	1 418.9	1 407.7	1 315.9	1 369.1	1 365.8	1 346.2	1 332.0	1 246.1	1 293.6	1 291.3
Consumption	kt	2 084.9	2 184.5	2 148.6	2 028.1	2 008.6	2 038.3	2 023.9	1 988.7	1 942.8	1 942.6	1 946.1
Variation in stocks	kt	50.5	-24.9	-45.4	-78.2	45.0	-2.7	-2.3	-0.5	-58.0	43.7	15.3

Table A.25. World fish and seafood projections (cont.)

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
FISH OIL												
World												
Production	kt	979.5	1 086.8	1 088.4	988.6	1 084.5	1 085.1	1 081.3	1 080.1	987.4	1 077.5	1 079.2
from whole fish	kt	682.5	750.6	741.5	656.6	727.1	722.7	716.0	711.9	634.7	703.0	701.9
Consumption	kt	1 008.8	1 023.0	1 042.2	1 008.0	1 035.3	1 060.0	1 079.1	1 075.3	1 047.3	1 050.3	1 052.1
Variation in stocks	kt	-45.6	18.8	6.2	-49.4	29.2	15.2	2.2	4.7	-59.9	27.2	27.1
Price ⁵	USD/t	1 514.7	2 004.9	1 772.8	1 844.5	1 725.2	1 730.0	1 767.4	1 782.3	1 978.3	1 840.4	1 864.1
Developed countries												
Production	kt	368.5	398.8	400.8	397.4	395.3	392.2	390.2	388.2	387.3	384.7	383.2
from whole fish	kt	159.3	174.6	172.2	169.0	164.9	161.7	159.2	156.8	155.4	151.9	149.8
Consumption	kt	631.0	639.8	621.4	590.6	590.5	591.9	590.8	582.6	568.5	559.8	552.7
Variation in stocks	kt	-12.3	3.3	0.7	-4.9	9.7	-0.3	-0.3	-0.3	-9.9	7.2	12.1
Developing countries												
Production	kt	611.0	688.0	687.6	591.2	689.2	693.0	691.2	691.9	600.1	692.7	696.0
from whole fish	kt	523.2	576.1	569.4	487.6	562.2	561.0	556.8	555.1	479.3	551.1	552.1
Consumption	kt	377.8	383.2	420.8	417.4	444.8	468.1	488.4	492.8	478.7	490.5	499.4
Variation in stocks	kt	-33.3	15.5	5.5	-44.5	19.5	15.5	2.5	5.0	-50.0	20.0	15.0
OECD												
Production	kt	539.4	612.7	619.4	579.3	619.8	622.5	618.5	616.7	577.0	612.4	613.5
from whole fish	kt	292.8	334.4	331.7	307.8	324.4	323.5	318.0	314.8	292.1	307.2	307.0
Consumption	kt	816.2	816.9	809.6	771.6	765.5	768.0	770.0	763.0	747.5	731.9	726.4
Variation in stocks	kt	-1.6	10.3	-1.3	-26.9	21.7	7.7	-0.3	-0.3	-29.9	17.2	17.1

Note: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants.

Average 2010-12est: Data for 2012 are estimated.

1. World unit value of aquaculture fisheries production (live weight basis).
2. FAO estimated value of world ex vessel value of capture fisheries production excluding for reduction.
3. World unit value of trade (sum of exports and imports).
4. Fishmeal, 64-65% protein, Hamburg, Germany.
5. Fish oil, any origin, N.W. Europe.

Source: OECD and FAO Secretariats.

Table A.26.1. Fish and seafood projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ³		IMPORTS (kt)		Growth (%) ³		EXPORTS (kt)		Growth (%) ³	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	153 940	181 070	2.17	1.23	37 012	45 082	3.16	1.83	36 994	45 082	3.14	1.83
DEVELOPED COUNTRIES	28 452	29 478	-0.89	0.10	20 519	23 936	1.34	1.61	12 368	14 598	1.52	1.97
NORTH AMERICA	6 369	6 475	-0.99	-0.02	5 456	6 434	1.58	1.65	2 862	3 413	0.79	2.18
Canada	1 048	1 098	-2.92	0.74	653	722	1.77	1.55	843	919	-2.00	2.41
United States	5 321	5 377	-0.58	-0.17	4 803	5 712	1.56	1.66	2 019	2 494	2.14	2.10
EUROPE	16 069	16 682	-0.29	0.35	10 260	12 568	2.19	2.05	8 264	9 712	2.10	1.96
European Union	6 456	6 487	-1.55	0.06	7 710	9 568	2.10	2.28	2 231	2 783	-0.78	1.94
Norway	3 457	3 742	1.44	0.77	250	241	2.04	-1.11	2 873	3 337	4.72	1.40
Russian Federation	4 265	4 456	3.78	0.39	1 205	1 483	3.11	2.31	1 760	2 267	2.85	4.14
OCEANIA DEVELOPED	788	787	-1.92	-0.01	534	677	3.33	2.47	459	389	-2.47	-1.01
Australia	241	270	-1.40	1.05	476	629	3.00	2.68	59	29	-4.12	-5.49
New Zealand	547	516	-2.14	-0.52	58	48	6.58	0.00	400	360	-2.22	-0.54
OTHER DEVELOPED ¹	5 226	5 535	-2.35	-0.44	4 270	4 258	-0.93	0.21	783	1 085	0.97	2.54
Japan	4 512	4 748	-2.11	-0.55	3 801	3 688	-1.71	0.07	560	844	1.44	2.76
South Africa	576	608	-5.28	-0.34	160	260	12.94	3.56	175	189	-0.32	2.26
DEVELOPING COUNTRIES	125 488	151 592	2.98	1.47	16 494	21 146	5.87	2.10	24 626	30 484	4.03	1.76
AFRICA	8 461	9 819	2.41	1.24	3 716	4 429	6.12	1.75	1 698	1 744	0.79	0.83
NORTH AFRICA	2 651	3 325	3.42	2.04	589	691	7.26	-0.18	433	400	3.09	1.00
Egypt	1 358	1 814	6.10	2.47	356	390	5.14	-1.13	16	3	14.97	-18.78
SUB-SAHARAN AFRICA	5 810	6 494	1.98	0.84	3 127	3 738	5.88	2.14	1 265	1 344	0.08	0.77
Ghana	362	372	-1.26	0.10	281	376	4.35	4.05	14	12	-19.56	-2.00
Nigeria	845	1 060	6.78	2.09	1 318	1 387	5.55	1.29	32	50	27.84	5.07
LATIN AMERICA and CARIBBEAN	15 906	17 321	-1.86	0.39	2 202	2 924	9.92	2.51	3 736	4 884	0.63	2.54
Argentina	786	803	-2.74	0.54	61	78	8.80	2.00	644	716	-1.71	1.54
Brazil	1 372	1 707	4.58	1.99	654	1 070	12.57	4.02	47	100	-12.03	7.78
Chile	3 868	4 404	-2.86	0.47	157	115	18.07	0.00	1 118	1 690	-1.58	3.36
Mexico	1 660	1 776	2.33	-0.05	278	418	7.72	3.05	228	305	5.43	2.83
Peru	5 846	6 156	-4.12	0.02	114	41	11.90	-7.56	577	752	9.80	2.73
ASIA and PACIFIC	101 121	124 452	4.01	1.64	10 576	13 793	5.09	2.13	19 192	23 857	5.19	1.68
China ²	54 631	68 640	4.15	1.75	3 246	4 436	6.15	2.15	7 801	9 951	6.07	1.99
India	9 108	11 338	5.22	2.03	24	363	15.64	40.34	1 104	1 352	10.79	0.49
Indonesia	8 197	9 969	5.14	1.40	244	464	26.47	5.26	1 239	1 195	3.26	-3.17
Korea	2 250	2 338	1.37	0.67	1 599	1 579	0.16	-0.52	776	681	7.35	-0.71
Philippines	3 260	3 862	2.63	1.27	228	325	11.07	0.22	305	282	6.13	0.41
Thailand	2 928	3 438	-4.53	2.13	1 703	2 063	4.59	1.19	2 520	3 580	2.58	3.92
Viet Nam	5 335	6 459	8.09	1.36	200	325	23.07	3.67	2 155	2 768	13.88	2.13
LEAST DEVELOPED COUNTRIES (LDC)	11 979	14 930	5.86	1.70	717	698	10.64	-0.17	1 441	1 795	1.91	2.36
OECD	31 613	33 113	-1.28	0.14	20 249	23 229	1.17	1.45	12 398	14 652	1.34	1.71
BRICS	69 952	86 748	4.15	1.70	5 290	7 613	6.21	3.05	10 887	13 859	5.59	2.19

Note: Fish: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants. Imports and exports refer to trade of food fish i.e. for human consumption.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.26.2. Fish and seafood projections: Reduction, food use, per capita

Calendar year

	REDUCTION (kt)		Growth (%) ³		FOOD USE (kt)		Growth (%) ³		PER CAPITA (kg)		Growth (%) ³	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	15 941	15 573	-3.85	-0.83	131 741	160 514	3.00	1.58	18.9	20.6	1.81	0.57
DEVELOPED COUNTRIES	3 685	3 539	-5.86	-1.54	32 120	34 587	0.24	0.57	23.3	24.2	-0.22	0.24
NORTH AMERICA	778	850	0.84	-0.49	7 938	8 416	-0.14	0.42	22.8	22.1	-1.04	-0.39
Canada	52	73	-6.45	1.10	789	797	0.47	-0.28	23.0	21.1	-0.57	-1.12
United States	726	777	1.57	-0.63	7 149	7 618	-0.20	0.49	22.8	22.3	-1.09	-0.31
EUROPE	1 986	1 668	-8.01	-1.32	15 913	17 609	1.55	0.89	21.5	23.6	1.35	0.82
European Union	665	541	-5.76	-1.92	11 120	12 581	0.92	1.37	22.1	24.4	0.53	1.18
Norway	471	326	-10.46	-2.33	265	279	2.36	-0.09	53.9	52.6	1.34	-0.76
Russian Federation	333	301	3.47	-1.08	3 321	3 310	4.03	-0.75	23.3	23.6	4.19	-0.57
OCEANIA DEVELOPED	116	105	-3.68	-2.15	739	970	2.37	2.48	27.4	31.6	0.77	1.33
Australia	37	34	-4.57	-1.58	620	837	2.51	2.76	27.5	32.4	0.82	1.56
New Zealand	79	71	-3.08	-2.41	119	134	1.66	0.92	26.9	27.2	0.52	-0.03
OTHER DEVELOPED ¹	804	917	-6.81	-2.72	7 530	7 592	-1.95	-0.19	28.7	27.8	-2.47	-0.52
Japan	545	527	-8.72	-4.60	6 830	6 865	-2.21	-0.24	54.0	55.3	-2.23	-0.04
South Africa	259	390	-3.52	0.62	302	289	-3.85	-0.12	6.0	5.4	-4.75	-0.56
DEVELOPING COUNTRIES	12 256	12 033	-3.19	-0.61	99 621	125 927	4.03	1.88	17.8	19.8	2.65	0.71
AFRICA	573	666	-1.00	0.87	9 640	11 672	4.16	1.70	9.7	9.1	1.72	-0.58
NORTH AFRICA	359	437	2.91	1.08	2 244	3 075	3.34	2.49	13.4	15.9	1.78	1.23
Egypt	0	0	..	..	1 495	2 100	4.10	2.85	18.1	21.6	2.26	1.37
SUB-SAHARAN AFRICA	214	229	-5.61	0.49	7 396	8 597	4.42	1.43	8.9	7.9	1.79	-1.04
Ghana	0	0	..	..	628	735	1.78	1.99	25.2	23.3	-0.63	-0.13
Nigeria	0	0	..	..	2 132	2 397	5.83	1.57	13.1	11.2	3.21	-0.94
LATIN AMERICA and CARIBBEAN	7 847	7 895	-4.15	-0.59	6 009	7 167	2.87	1.46	10.1	10.8	1.69	0.52
Argentina	0	0	..	..	203	165	-4.36	-2.46	5.0	3.7	-5.20	-3.22
Brazil	63	47	3.91	-2.70	1 916	2 631	7.90	2.69	9.7	12.4	6.86	1.98
Chile	2 258	2 331	-4.28	-0.28	400	449	0.92	1.43	23.1	23.9	-0.06	0.69
Mexico	441	448	6.14	-1.10	1 269	1 441	1.56	0.59	11.1	11.2	0.30	-0.36
Peru	4 685	4 665	-5.68	-0.79	681	779	3.22	1.96	23.2	23.5	2.10	0.88
ASIA and PACIFIC	3 836	3 472	-1.21	-0.90	83 972	107 089	4.10	1.92	21.0	24.2	2.94	1.03
China ²	1 025	1 019	-8.39	-1.37	46 052	59 106	4.28	1.90	34.2	42.5	3.75	1.63
India	573	541	9.13	1.00	7 305	9 708	4.29	2.85	5.9	6.9	2.81	1.66
Indonesia	71	65	14.24	0.00	6 924	9 173	5.52	2.36	28.6	34.4	4.38	1.51
Korea	77	60	-9.29	-0.35	2 786	3 076	1.06	0.66	57.6	61.5	0.59	0.38
Philippines	0	0	..	..	3 183	3 905	2.83	1.24	33.6	34.5	1.04	-0.34
Thailand	625	543	-6.00	-2.61	1 486	1 377	-4.67	-0.78	21.4	19.0	-5.37	-1.12
Viet Nam	381	344	11.47	-1.93	2 999	3 673	5.40	1.35	33.8	37.6	4.25	0.51
LEAST DEVELOPED COUNTRIES (LDC)	293	302	16.28	0.00	9 974	13 123	5.99	2.10	11.7	12.2	3.66	-0.05
OECD	5 978	5 850	-5.12	-1.07	32 286	35 059	0.04	0.70	25.3	26.0	-0.63	0.21
BRICS	2 253	2 298	-3.31	-0.52	58 895	75 043	4.31	1.90	19.8	23.3	3.38	1.23

Note: Fish: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants. Imports and exports refer to trade of food fish i.e. for human consumption.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

ANNEX A

Table A.27.1. World dairy projections: Butter and cheese

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BUTTER												
World												
Production	kt pw	9 899	11 025	11 276	11 569	11 845	12 046	12 287	12 536	12 797	13 059	13 348
Consumption	kt pw	9 908	11 009	11 281	11 580	11 871	12 073	12 303	12 552	12 802	13 064	13 352
Stock changes	kt pw	-24	20	0	-6	-21	-22	-12	-12	-2	-2	-1
Price ¹	USD/t	3 943	3 500	3 577	3 548	3 544	3 632	3 659	3 709	3 722	3 718	3 688
Developed countries												
Production	kt pw	4 395	4 576	4 583	4 659	4 761	4 788	4 839	4 885	4 945	4 988	5 055
Consumption	kt pw	3 942	4 084	4 098	4 157	4 255	4 275	4 298	4 332	4 365	4 392	4 439
Developing countries												
Production	kt pw	5 504	6 449	6 693	6 910	7 085	7 257	7 448	7 651	7 852	8 071	8 293
Consumption	kt pw	5 966	6 924	7 183	7 423	7 615	7 798	8 006	8 220	8 437	8 673	8 913
OECD²												
Production	kt pw	4 013	4 132	4 140	4 207	4 296	4 308	4 348	4 382	4 431	4 474	4 523
Consumption	kt pw	3 485	3 566	3 569	3 619	3 708	3 720	3 743	3 761	3 784	3 811	3 839
Stock changes	kt pw	-18	20	0	-6	-21	-22	-12	-12	-2	-2	-1
CHEESE												
World												
Production	kt pw	20 357	21 011	21 283	21 548	21 801	22 050	22 327	22 588	22 860	23 094	23 357
Consumption	kt pw	20 425	21 034	21 298	21 571	21 829	22 080	22 357	22 618	22 890	23 123	23 387
Stock changes	kt pw	53	8	18	9	5	2	2	2	3	3	3
Price ³	USD/t	4 047	3 866	3 946	4 005	4 061	4 168	4 286	4 335	4 394	4 438	4 445
Developed countries												
Production	kt pw	16 389	16 872	17 050	17 266	17 463	17 642	17 822	17 997	18 188	18 354	18 555
Consumption	kt pw	15 887	16 235	16 393	16 571	16 711	16 856	17 015	17 184	17 358	17 495	17 653
Developing countries												
Production	kt pw	3 968	4 139	4 233	4 282	4 339	4 408	4 505	4 590	4 672	4 740	4 802
Consumption	kt pw	4 538	4 799	4 905	5 000	5 118	5 224	5 342	5 434	5 532	5 628	5 734
OECD²												
Production	kt pw	15 729	16 185	16 331	16 544	16 712	16 852	17 033	17 203	17 390	17 550	17 739
Consumption	kt pw	15 091	15 437	15 583	15 740	15 866	15 996	16 153	16 301	16 458	16 592	16 735
Stock changes	kt pw	3	13	18	9	5	2	2	2	3	3	3

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand in OECD aggregate.

Average 2010-12est: Data for 2012 are estimated.

1. F.o.b. export price, butter, 82% butterfat, Oceania.
2. Excludes Iceland but includes all EU27 member countries.
3. F.o.b. export price, cheddar cheese, 39% moisture, Oceania.

Source: OECD and FAO Secretariats

Table A.27.2. World dairy projections: Powders and casein

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SKIM MILK POWDER												
World												
Production	kt pw	3 617	3 948	4 011	4 073	4 159	4 233	4 300	4 381	4 487	4 556	4 668
Consumption	kt pw	3 648	3 923	4 000	4 058	4 147	4 215	4 282	4 366	4 473	4 543	4 655
Stock changes	kt pw	-41	13	-6	-2	-4	2	3	0	-1	-1	-3
Price ¹	USD/t	3 317	3 472	3 498	3 502	3 503	3 600	3 673	3 704	3 728	3 755	3 733
Developed countries												
Production	kt pw	3 076	3 371	3 413	3 459	3 541	3 608	3 665	3 724	3 792	3 855	3 966
Consumption	kt pw	1 726	1 823	1 828	1 838	1 873	1 897	1 913	1 941	1 973	1 993	2 048
Developing countries												
Production	kt pw	542	577	598	613	619	625	635	656	696	702	702
Consumption	kt pw	1 922	2 100	2 172	2 220	2 274	2 318	2 369	2 425	2 499	2 550	2 607
OECD²												
Production	kt pw	2 967	3 214	3 252	3 297	3 372	3 431	3 486	3 543	3 610	3 672	3 780
Consumption	kt pw	1 846	1 924	1 932	1 943	1 980	2 007	2 025	2 055	2 088	2 112	2 165
Stock changes	kt pw	-74	12	0	-3	-4	1	2	0	-1	-1	-3
WHOLE MILK POWDER												
World												
Production	kt pw	4 576	4 973	4 998	5 062	5 146	5 218	5 302	5 386	5 470	5 547	5 639
Consumption	kt pw	4 709	4 972	4 998	5 062	5 146	5 218	5 302	5 386	5 470	5 547	5 639
Stock changes	kt pw	69	1	0	0	0	0	0	0	0	0	0
Price ³	USD/t	3 600	3 670	3 727	3 717	3 737	3 863	3 930	3 992	4 020	4 056	4 054
Developed countries												
Production	kt pw	2 084	2 280	2 300	2 317	2 349	2 344	2 367	2 387	2 429	2 472	2 529
Consumption	kt pw	557	600	605	606	611	614	619	625	631	634	640
Developing countries												
Production	kt pw	2 492	2 693	2 698	2 745	2 796	2 874	2 935	2 998	3 041	3 075	3 109
Consumption	kt pw	4 152	4 373	4 393	4 456	4 535	4 604	4 683	4 761	4 840	4 913	4 998
OECD²												
Production	kt pw	2 359	2 534	2 558	2 582	2 617	2 617	2 647	2 675	2 724	2 772	2 838
Consumption	kt pw	864	862	874	881	893	906	917	929	940	949	960
Stock changes	kt pw	2	0	0	0	0	0	0	0	0	0	0
WHEY POWDER												
Wholesale price, United States ⁴	USD/t	1 042	1 139	1 169	1 173	1 176	1 200	1 209	1 231	1 244	1 265	1 273
CASEIN												
Price ⁵	USD/t	8 464	8 707	8 820	8 823	8 935	9 127	9 331	9 436	9 508	9 570	9 674

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand in OECD aggregate.

Average 2010-12est: Data for 2012 are estimated.

1. F.o.b. export price, non-fat dry milk, 1.25% butterfat, Oceania.
2. Excludes Iceland but includes all EU27 member countries.
3. F.o.b. export price, WMP 26% butterfat, Oceania.
4. Dry whey, West Region, United States.
5. Export price, New Zealand.

Source: OECD and FAO Secretariats.

Table A.28.1. Butter projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	9 899	13 348	2.46	2.11	822	1 008	-2.67	1.65	842	1 004	-1.20	1.66
DEVELOPED COUNTRIES	4 395	5 055	0.75	1.14	269	275	-8.70	-0.78	749	891	-2.06	1.65
NORTH AMERICA	872	1 076	3.99	1.90	22	18	-5.74	-3.56	56	85	26.38	8.80
Canada	86	86	0.70	0.01	8	8	-5.53	0.00	0	0	-6.86	0.00
United States	786	990	4.41	2.08	14	10	-5.90	-5.67	55	85	27.55	8.82
EUROPE	2 764	3 116	-0.05	1.01	185	183	-10.98	-1.03	212	247	-8.58	2.43
European Union	2 195	2 352	-0.06	0.66	34	44	-12.47	1.52	135	164	-11.93	3.14
Russian Federation	293	433	-0.26	2.78	137	125	-11.56	-1.24	4	3	-7.27	0.00
Ukraine	80	96	-6.17	2.11	6	6	115.96	-9.55	2	1	-33.43	3.13
OCEANIA DEVELOPED	612	685	0.40	0.62	21	24	13.35	0.46	479	557	0.83	0.53
Australia	124	132	-2.89	0.99	20	24	12.74	0.47	59	63	-6.33	1.84
New Zealand	489	553	1.46	0.53	1	1	..	..	419	493	2.23	0.37
OTHER DEVELOPED ¹	147	178	1.15	1.23	42	49	-2.48	0.89	2	2	-1.93	0.71
Japan	68	71	-2.26	0.02	10	12	-4.25	-2.35	0	0	..	..
South Africa	12	13	0.42	0.83	4	3	2.38	-1.99	1	1	3.05	1.86
DEVELOPING COUNTRIES	5 504	8 293	4.00	2.74	553	733	1.97	2.73	94	113	10.26	1.73
AFRICA	267	364	3.18	2.94	159	256	4.16	3.46	7	4	36.72	-1.44
NORTH AFRICA	171	245	2.53	3.22	126	216	3.24	2.92	5	3	71.08	-1.74
Algeria	3	4	3.33	2.39	16	24	1.25	1.92	0	0	0.00	-0.27
Egypt	134	194	2.14	3.29	82	143	8.03	2.51	5	3	107.33	-1.78
SUB-SAHARAN AFRICA	96	119	4.39	2.39	33	40	5.95	6.97	2	1	15.60	-0.69
LATIN AMERICA and CARIBBEAN	247	310	2.61	2.07	48	46	-4.55	-0.74	47	68	12.53	3.39
Argentina	54	64	5.32	1.63	1	0	..	..	20	34	40.16	3.35
Brazil	79	92	0.85	1.31	2	5	15.85	0.80	2	1	19.90	-5.08
Chile	22	32	7.42	3.37	1	1	-14.02	-5.92	3	8	38.55	9.32
Mexico	14	15	-2.64	0.57	23	24	-8.73	1.23	1	1	-2.98	15.16
Uruguay	20	26	2.07	1.72	0	0	44.97	-0.26	17	22	4.91	1.82
ASIA and PACIFIC	4 990	7 618	4.12	2.76	347	431	2.25	2.74	40	41	6.74	-0.23
Bangladesh	1	2	3.77	4.37	1	1	-11.15	-0.47	0	0	-8.33	0.47
China ²	110	133	1.93	1.38	36	56	17.01	1.12	3	4	112.28	0.00
India	3 755	5 988	4.83	2.84	7	0	-9.78	0.18	9	9	17.34	-0.19
Indonesia	0	0	-11.75	-55.63	15	19	1.22	2.16	1	0	42.52	-0.31
Iran, Islamic Republic of	183	253	0.09	2.06	49	51	-10.28	9.25	2	2	59.24	0.04
Korea	5	7	-3.30	2.57	7	8	26.16	1.27	0	0	..	..
Malaysia	0	0	-11.75	-16.24	14	20	4.60	1.74	4	2	19.57	-0.25
Pakistan	653	840	2.24	2.60	0	0	-5.40	0.32	0	0	54.85	-0.33
Saudi Arabia	5	0	-0.58	-31.24	51	85	0.93	4.53	4	3	-24.17	-0.63
Turkey	156	215	2.98	2.71	13	1	13.16	-18.08	1	1	28.68	1.93
LEAST DEVELOPED COUNTRIES (LDC)	148	197	2.24	2.79	11	10	-0.65	1.75	6	7	42.39	0.35
OECD³	4 013	4 523	0.90	1.03	134	137	-5.24	-0.36	680	822	-2.19	1.75
BRICS	4 249	6 660	4.24	2.78	186	190	-8.18	-0.56	19	18	7.27	-0.34

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.28.2. Butter projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	9 908	13 352	2.39	2.11	1.4	1.7	1.20	1.10
DEVELOPED COUNTRIES	3 942	4 439	0.55	0.94	2.9	3.1	0.09	0.60
NORTH AMERICA	839	1 009	2.65	1.32	2.4	2.7	1.72	0.51
Canada	93	92	0.21	-0.19	2.7	2.4	-0.82	-1.03
United States	746	916	2.99	1.48	2.4	2.7	2.07	0.67
EUROPE	2 760	3 053	-0.34	0.80	3.7	4.1	-0.53	0.73
European Union	2 109	2 232	0.71	0.56	4.2	4.3	0.32	0.36
Russian Federation	433	555	-4.64	1.75	3.0	4.0	-4.49	1.93
Ukraine	84	101	-1.73	0.79	1.9	2.4	-1.09	1.34
OCEANIA DEVELOPED	151	153	7.31	0.93	5.6	5.0	5.64	-0.22
Australia	82	93	3.28	0.31	3.6	3.6	1.58	-0.86
New Zealand	70	60	13.65	2.06	15.8	12.2	12.37	1.10
OTHER DEVELOPED ²	191	225	0.52	1.16	0.7	0.8	-0.02	0.82
Japan	83	83	-1.35	-0.37	0.7	0.7	-1.37	-0.16
South Africa	15	15	0.77	0.01	0.3	0.3	-0.18	-0.43
DEVELOPING COUNTRIES	5 966	8 913	3.75	2.76	1.1	1.4	2.36	1.58
AFRICA	418	616	3.33	3.19	0.4	0.5	0.90	0.87
NORTH AFRICA	291	457	2.60	3.12	1.7	2.4	1.05	1.85
Algeria	18	28	1.57	1.98	0.5	0.7	0.06	0.82
Egypt	211	334	3.70	3.00	2.5	3.4	1.87	1.52
SUB-SAHARAN AFRICA	127	159	4.81	3.41	0.2	0.1	2.17	0.89
LATIN AMERICA and CARIBBEAN	251	289	0.11	1.29	0.4	0.4	-1.04	0.35
Argentina	36	30	1.16	0.00	0.9	0.7	0.28	-0.78
Brazil	80	97	0.95	1.38	0.4	0.5	-0.02	0.68
Chile	19	25	3.24	1.77	1.1	1.3	2.24	1.02
Mexico	36	38	-6.82	0.78	0.3	0.3	-7.98	-0.18
Uruguay	5	4	2.24	1.13	1.6	1.2	1.99	0.75
ASIA and PACIFIC	5 297	8 008	3.98	2.78	1.3	1.8	2.82	1.88
Bangladesh	2	2	-3.78	3.05	0.0	0.0	-4.91	1.91
China ³	142	185	4.10	1.33	0.1	0.1	3.58	1.06
India	3 753	5 979	4.82	2.85	3.0	4.2	3.33	1.65
Indonesia	14	19	0.41	2.19	0.1	0.1	-0.68	1.34
Iran, Islamic Republic of	230	301	0.34	3.00	3.1	3.7	-0.83	2.19
Korea	12	16	6.88	1.85	0.3	0.3	6.39	1.57
Malaysia	11	18	2.03	1.98	0.4	0.5	0.28	0.53
Pakistan	652	840	2.23	2.60	3.7	4.0	0.41	0.97
Saudi Arabia	53	82	4.49	3.96	1.9	2.4	1.67	2.04
Turkey	168	215	3.57	2.30	2.3	2.6	2.24	1.33
LEAST DEVELOPED COUNTRIES (LDC)	153	200	1.54	2.83	0.2	0.2	-0.70	0.66
OECD⁴	3 485	3 839	1.42	0.85	2.7	2.8	0.73	0.36
BRICS	4 423	6 831	3.41	2.68	1.5	2.1	2.49	2.00

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.29.1. Cheese projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	20 357	23 357	1.98	1.18	2 356	2 869	5.08	2.11	2 332	2 836	5.70	2.13
DEVELOPED COUNTRIES	16 389	18 555	1.68	1.06	1 102	1 121	2.15	0.92	1 600	2 021	2.24	2.17
NORTH AMERICA	5 204	6 296	2.51	1.66	158	155	-5.42	0.23	160	213	12.63	3.19
Canada	381	407	1.33	0.67	22	21	0.83	0.00	9	8	-2.63	-0.47
United States	4 823	5 890	2.61	1.74	136	134	-6.18	0.27	151	205	14.52	3.36
EUROPE	10 189	10 970	1.37	0.62	592	625	4.20	1.38	1 001	1 248	3.36	1.95
European Union	8 998	9 594	1.23	0.52	78	78	-5.12	0.56	705	932	2.73	2.00
Russian Federation	447	554	2.82	1.61	385	435	5.47	2.23	16	25	13.55	0.00
Ukraine	215	220	-0.65	0.90	13	16	20.93	-2.39	73	56	-0.99	2.46
OCEANIA DEVELOPED	658	851	-0.19	2.08	79	84	5.96	1.33	431	552	-2.03	2.28
Australia	343	392	-1.68	0.95	74	80	5.15	1.41	164	181	-3.95	0.77
New Zealand	316	459	1.54	3.17	5	5	..	0.00	267	370	-0.72	3.12
OTHER DEVELOPED ¹	338	438	2.77	1.98	273	257	3.28	0.19	7	9	-1.46	2.83
Japan	46	85	3.66	4.36	212	182	0.24	-0.67	0	0	..	..
South Africa	46	70	2.63	3.87	9	6	9.05	-8.28	2	5	2.42	7.31
DEVELOPING COUNTRIES	3 968	4 802	3.31	1.68	1 255	1 748	8.41	2.96	732	815	20.30	2.05
AFRICA	873	1 002	0.03	1.38	196	330	1.73	6.18	180	210	27.26	4.94
NORTH AFRICA	657	778	-0.19	1.72	128	248	-1.50	5.90	180	210	27.43	4.95
Algeria	2	2	0.00	1.46	22	29	-16.87	1.74	0	0	-19.10	-0.25
Egypt	611	726	-0.43	1.79	51	165	27.12	7.91	157	208	46.22	5.04
SUB-SAHARAN AFRICA	217	223	0.75	0.26	68	82	25.15	7.09	0	0	-4.76	-2.75
LATIN AMERICA and CARIBBEAN	1 937	2 295	5.28	1.35	302	424	9.91	2.61	151	163	5.83	-0.66
Argentina	537	583	5.25	0.27	3	0	..	..	53	46	5.79	-3.74
Brazil	674	838	5.07	1.98	30	17	29.47	-4.80	3	2	-7.17	-0.76
Chile	84	115	3.42	2.60	12	15	10.55	-0.87	10	10	-0.02	0.87
Mexico	174	189	3.68	0.90	92	128	2.33	2.44	0	1	-5.05	0.56
Uruguay	82	103	13.99	1.70	1	1	16.82	-0.49	43	56	9.28	1.74
ASIA and PACIFIC	1 158	1 504	3.15	2.44	757	993	18.44	2.22	401	442	30.08	2.00
Bangladesh	1	1	0.00	3.40	0	0	41.35	1.36	0	0	2.94	-1.35
China ²	304	391	2.68	2.29	30	102	24.56	9.54	0	0	-12.76	1.27
India	1	1	7.45	-1.73	2	3	57.21	1.08	2	2	26.12	-1.06
Indonesia	0	0	0.00	-3.53	17	25	9.18	3.37	1	1	15.68	-0.47
Iran, Islamic Republic of	251	259	-0.53	0.53	0	0	50.54	0.25	23	19	40.26	-2.98
Korea	26	30	0.73	1.27	71	99	8.25	2.37	0	0	..	..
Malaysia	0	0	0.00	-3.59	13	20	10.59	3.11	0	0	32.93	-0.44
Pakistan	0	0	0.00	8.32	2	3	50.36	1.57	0	0	-20.28	-1.55
Saudi Arabia	75	243	140.73	11.73	194	140	43.01	-3.71	287	350	37.76	3.60
Turkey	169	206	3.07	1.87	11	10	46.90	-2.25	31	41	15.78	2.34
LEAST DEVELOPED COUNTRIES (LDC)	317	354	2.07	0.87	60	123	33.22	6.92	0	0	9.30	-1.96
OECD³	15 729	17 739	1.62	1.02	776	822	-0.01	0.67	1 413	1 823	1.83	2.11
BRICS	1 472	1 854	3.76	1.99	456	562	7.12	2.71	25	35	6.61	0.67

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.29.2. Cheese projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	20 425	23 387	1.85	1.19	2.9	3.0	0.67	0.18
DEVELOPED COUNTRIES	15 887	17 653	1.53	0.93	11.5	12.3	1.06	0.60
NORTH AMERICA	5 204	6 235	1.99	1.60	15.0	16.4	1.06	0.79
Canada	395	419	1.63	0.67	11.5	11.1	0.58	-0.17
United States	4 809	5 816	2.02	1.67	15.4	17.0	1.11	0.86
EUROPE	9 777	10 348	1.18	0.51	13.2	13.8	0.98	0.44
European Union	8 371	8 739	0.87	0.37	16.6	17.0	0.48	0.18
Russian Federation	813	963	3.81	1.89	5.7	6.9	3.97	2.07
Ukraine	155	181	0.49	0.13	3.4	4.3	1.14	0.68
OCEANIA DEVELOPED	301	384	2.54	1.64	11.2	12.5	0.94	0.49
Australia	248	290	0.81	1.19	11.0	11.3	-0.85	0.01
New Zealand	54	94	11.80	3.19	12.1	19.1	10.54	2.21
OTHER DEVELOPED ²	604	686	3.08	1.23	2.3	2.5	2.52	0.89
Japan	258	267	0.84	0.50	2.0	2.2	0.82	0.71
South Africa	53	71	3.63	2.02	1.0	1.3	2.66	1.57
DEVELOPING COUNTRIES	4 538	5 734	3.01	2.00	0.8	0.9	1.64	0.84
AFRICA	890	1 122	-2.63	1.95	0.9	0.9	-4.92	-0.33
NORTH AFRICA	605	817	-4.50	2.05	3.6	4.2	-5.95	0.79
Algeria	23	31	-16.47	1.72	0.7	0.8	-17.71	0.57
Egypt	504	683	-3.01	2.05	6.1	7.0	-4.72	0.58
SUB-SAHARAN AFRICA	284	305	3.28	1.71	0.3	0.3	0.68	-0.77
LATIN AMERICA and CARIBBEAN	2 087	2 556	5.83	1.69	3.5	3.9	4.61	0.75
Argentina	487	537	5.25	0.72	11.9	12.1	4.33	-0.06
Brazil	701	853	5.67	1.82	3.6	4.0	4.66	1.12
Chile	85	120	4.85	2.24	4.9	6.4	3.84	1.49
Mexico	265	317	3.20	1.49	2.3	2.5	1.92	0.52
Uruguay	40	47	21.45	1.62	11.8	13.5	21.15	1.24
ASIA and PACIFIC	1 562	2 056	4.26	2.43	0.4	0.5	3.10	1.53
Bangladesh	1	2	1.73	3.12	0.0	0.0	0.53	1.99
China ³	334	493	3.72	3.41	0.2	0.4	3.19	3.14
India	1	1	3.73	3.51	0.0	0.0	2.26	2.31
Indonesia	17	25	8.95	3.52	0.1	0.1	7.77	2.66
Iran, Islamic Republic of	228	240	-1.63	0.87	3.0	2.9	-2.78	0.08
Korea	97	129	5.90	2.10	2.0	2.6	5.41	1.82
Malaysia	13	20	10.32	3.18	0.4	0.6	8.44	1.72
Pakistan	2	3	50.42	1.61	0.0	0.0	47.74	0.00
Saudi Arabia	29	33	-20.68	1.46	1.0	1.0	-22.82	-0.41
Turkey	149	175	2.09	1.47	2.0	2.1	0.77	0.51
LEAST DEVELOPED COUNTRIES (LDC)	377	476	3.81	2.14	0.4	0.4	1.53	-0.01
OECD⁴	15 091	16 735	1.38	0.90	11.8	12.4	0.71	0.41
BRICS	1 901	2 382	4.44	2.16	0.6	0.7	3.51	1.49

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.30.1. Skim milk powder projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	3 617	4 668	1.43	1.87	1 624	2 156	3.98	2.13	1 704	2 171	4.72	2.11
DEVELOPED COUNTRIES	3 076	3 966	0.98	1.80	124	120	-4.04	0.16	1 566	2 039	5.09	2.25
NORTH AMERICA	974	1 372	3.51	3.57	3	3	-2.37	0.00	438	707	9.69	5.23
Canada	75	74	-1.15	0.84	3	3	1.80	0.00	10	9	-7.48	-2.51
United States	899	1 298	4.01	3.75	0	0	..	..	428	699	11.12	5.37
EUROPE	1 219	1 571	-0.99	1.05	56	64	-7.74	1.39	579	765	6.35	1.68
European Union	1 036	1 302	0.04	0.89	2	1	-38.20	0.96	485	664	9.68	1.54
Russian Federation	50	111	-8.39	1.55	44	54	-4.16	2.41	1	1	-12.40	0.00
Ukraine	48	50	-10.68	1.77	3	5	70.49	-2.64	19	20	-14.34	2.75
OCEANIA DEVELOPED	712	808	2.59	0.69	9	7	11.03	-0.16	542	560	1.63	0.01
Australia	214	251	1.71	0.85	5	4	3.98	-0.34	141	163	-1.21	1.33
New Zealand	497	557	3.01	0.62	4	3	..	0.08	401	397	2.86	-0.50
OTHER DEVELOPED¹	172	215	-2.49	1.27	56	46	-1.74	-1.16	7	6	-2.72	-1.26
Japan	144	182	-3.41	1.32	30	9	-3.99	-6.80	0	0	..	..
South Africa	15	20	4.69	2.78	6	8	4.22	-0.67	3	3	17.71	0.68
DEVELOPING COUNTRIES	542	702	4.43	2.28	1 501	2 036	4.89	2.27	138	132	1.68	0.22
AFRICA	3	0	0.00	-32.09	253	318	4.30	2.71	5	4	4.34	-0.52
NORTH AFRICA	0	0	0.00	-4.46	180	222	5.34	2.44	1	1	7.60	-0.44
Algeria	0	0	0.00	1.27	112	120	4.35	2.22	0	0	0.30	-0.31
Egypt	0	0	0.00	-21.01	54	89	11.72	3.14	1	1	8.44	-0.44
SUB-SAHARAN AFRICA	3	0	0.00	-33.36	73	96	3.26	3.37	3	3	3.06	-0.56
LATIN AMERICA and CARIBBEAN	261	325	3.32	1.86	276	376	3.58	1.15	45	46	4.75	0.67
Argentina	35	38	0.94	0.16	0	0	..	..	18	18	1.23	0.33
Brazil	135	169	2.91	1.97	0	26	..	3.14	0	1	-62.06	-0.77
Chile	19	29	8.59	3.66	6	7	-0.08	1.52	3	4	44.83	-1.50
Mexico	33	36	0.62	1.46	209	278	5.01	1.39	1	0	26.97	-21.21
Uruguay	20	24	4.71	1.88	0	0	57.03	-0.27	21	22	7.31	1.90
ASIA and PACIFIC	278	377	5.68	2.81	972	1 342	5.50	2.50	88	81	0.37	0.01
Bangladesh	0	0	0.00	0.35	19	28	8.20	3.66	0	0	-13.97	-0.51
China ²	56	58	130.56	0.25	129	256	14.40	4.28	0	0	-23.36	0.00
India	210	289	5.18	2.57	26	10	64.24	-10.61	7	0	-39.00	-4.34
Indonesia	0	2	0.00	18.09	134	185	7.63	2.76	1	1	-11.43	-0.39
Iran, Islamic Republic of	0	0	0.00	8.10	9	9	5.76	0.48	6	4	55.42	-0.48
Korea	6	6	-18.97	2.91	20	23	13.18	2.10	1	1	91.71	0.00
Malaysia	0	0	0.00	-0.82	96	129	9.29	2.04	9	11	0.00	-0.29
Pakistan	0	0	0.00	4.44	24	39	23.02	2.09	0	0	-9.54	-0.29
Saudi Arabia	0	18	0.00	75.77	46	47	-1.70	-2.65	35	41	27.51	0.38
Turkey	0	0	0.00	7.73	5	2	-9.36	1.26	3	0	44.37	-1.25
LEAST DEVELOPED COUNTRIES (LDC)	0	0	0.00	-26.99	94	132	3.41	3.45	3	3	8.26	-0.47
OECD³	2 967	3 780	1.46	1.79	289	338	1.78	0.90	1 491	1 953	5.90	2.20
BRICS	466	646	2.92	2.01	206	353	9.61	3.33	11	5	-14.29	0.26

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.30.2. Skim milk powder projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	3 648	4 655	1.10	1.89	0.5	0.5	1.53	0.97
DEVELOPED COUNTRIES	1 726	2 048	-2.10	1.30	1.0	1.2	-0.34	1.09
NORTH AMERICA	541	671	-1.46	2.05	1.5	1.7	0.44	1.36
Canada	69	69	2.52	1.43	1.1	1.2	-1.29	1.96
United States	471	602	-1.66	2.13	1.5	1.8	0.78	1.32
EUROPE	792	870	-4.11	0.57	0.8	0.8	-2.16	0.41
European Union	635	640	-4.03	0.29	0.8	0.8	-1.33	-0.23
Russian Federation	93	164	-6.09	1.83	0.7	1.2	-5.95	2.01
Ukraine	32	36	-4.44	0.49	0.7	0.8	-3.83	1.04
OCEANIA DEVELOPED	167	252	13.26	2.26	6.1	8.2	11.50	1.11
Australia	67	92	9.38	0.01	2.9	3.6	7.58	-1.16
New Zealand	100	160	16.61	3.80	22.6	32.7	15.29	2.82
OTHER DEVELOPED ²	227	255	-2.06	0.99	0.8	0.8	-2.22	0.80
Japan	180	191	-3.28	0.68	1.2	1.3	-3.06	1.04
South Africa	18	24	2.39	1.86	0.4	0.5	1.43	1.41
DEVELOPING COUNTRIES	1 922	2 607	5.02	2.38	0.3	0.4	3.86	1.21
AFRICA	252	314	4.28	2.56	0.3	0.2	1.83	0.26
NORTH AFRICA	179	221	5.33	2.46	1.1	1.1	3.74	1.20
Algeria	112	120	4.35	2.22	3.1	2.9	2.80	1.06
Egypt	52	88	11.85	3.20	0.6	0.9	9.88	1.72
SUB-SAHARAN AFRICA	73	94	3.21	2.81	0.1	0.1	0.61	0.31
LATIN AMERICA and CARIBBEAN	493	655	3.02	1.49	0.8	0.9	1.86	0.50
Argentina	14	20	-1.42	-1.37	0.4	0.4	-2.28	-2.13
Brazil	136	194	3.04	2.11	0.5	0.6	2.18	1.45
Chile	22	32	3.95	3.99	1.3	1.7	2.94	3.23
Mexico	240	313	4.33	1.43	2.1	2.4	3.04	0.47
Uruguay	4	2	4.32	1.60	1.3	0.7	4.06	1.21
ASIA and PACIFIC	1 177	1 638	6.18	2.71	0.3	0.4	5.36	1.82
Bangladesh	19	28	8.34	3.66	0.1	0.2	7.07	2.52
China ³	184	314	16.62	3.39	0.1	0.2	16.03	3.12
India	229	298	8.96	2.20	0.2	0.2	7.40	1.02
Indonesia	133	186	8.02	2.85	0.5	0.7	6.85	2.00
Iran, Islamic Republic of	3	5	-7.81	1.49	0.0	0.1	-8.89	0.69
Korea	25	28	-4.51	2.36	0.0	0.0	..	..
Malaysia	87	118	10.84	2.28	3.0	3.5	8.95	0.83
Pakistan	24	39	24.50	2.09	0.1	0.2	22.29	0.48
Saudi Arabia	24	24	-12.02	2.77	0.8	0.7	-14.40	0.87
Turkey	5	2	-8.09	1.86	0.1	0.0	-9.28	0.90
LEAST DEVELOPED COUNTRIES (LDC)	91	129	3.37	3.37	0.1	0.1	1.09	1.18
OECD⁴	1 846	2 165	-1.23	1.32	1.2	1.4	0.60	0.94
BRICS	661	994	5.31	2.47	0.2	0.3	4.56	1.82

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.31.1. Whole milk powder projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	4 576	5 639	2.85	1.47	2 225	2 559	2.75	1.14	2 164	2 559	3.49	1.14
DEVELOPED COUNTRIES	2 084	2 529	1.49	1.06	49	82	-8.62	3.35	1 591	1 971	3.31	1.25
NORTH AMERICA	40	37	2.54	0.67	10	12	-14.01	0.00	10	13	10.81	3.40
Canada	11	9	-5.72	-1.90	4	4	-22.91	0.00	0	1	-5.45	0.00
United States	29	28	8.07	1.62	6	8	3.72	0.00	10	13	..	3.57
EUROPE	829	857	-3.04	0.28	17	42	-11.37	5.10	446	413	-3.00	0.13
European Union	713	695	-2.65	-0.05	2	2	-13.17	-0.12	399	366	-3.43	-0.29
Russian Federation	57	86	-6.56	0.99	9	36	-15.08	7.50	1	3	-12.63	0.00
Ukraine	12	14	-9.78	6.39	1	0	41.13	-17.87	3	3	-21.77	29.38
OCEANIA DEVELOPED	1 172	1 592	6.08	1.55	11	14	6.89	2.46	1 131	1 542	6.96	1.57
Australia	139	150	-4.03	0.99	10	14	6.95	2.60	101	104	-2.48	1.07
New Zealand	1 032	1 442	8.42	1.61	1	1	..	..	1 030	1 439	8.48	1.61
OTHER DEVELOPED ¹	44	44	0.06	-0.04	11	12	-6.92	3.04	3	2	-2.73	-2.46
Japan	13	12	-1.59	-0.36	0	0	..	..	0	0	..	..
South Africa	15	16	-0.11	0.72	2	3	5.91	2.52	3	2	-3.32	-2.46
DEVELOPING COUNTRIES	2 492	3 109	4.14	1.80	2 176	2 477	3.17	1.07	573	588	4.29	0.78
AFRICA	9	1	3.83	-24.71	575	586	3.26	1.19	15	14	7.88	-0.34
NORTH AFRICA	0	0	-9.26	0.21	228	212	4.16	-0.25	1	1	32.08	-0.42
Algeria	0	0	-11.75	2.17	183	163	3.02	-0.98	0	0	3.26	0.14
Egypt	0	0	-11.75	-13.51	29	30	19.14	3.09	1	1	71.18	-0.43
SUB-SAHARAN AFRICA	9	1	3.86	-24.84	347	374	2.95	2.11	14	12	6.68	-0.33
LATIN AMERICA and CARIBBEAN	1 316	1 570	3.82	1.44	345	416	-0.27	1.08	293	336	4.03	1.45
Argentina	264	313	1.96	1.33	1	0	..	..	189	253	3.62	1.67
Brazil	520	629	3.22	1.59	75	55	13.12	-2.76	2	8	-31.23	7.79
Chile	121	151	9.03	2.26	3	7	-14.67	4.51	12	6	7.26	-9.27
Mexico	280	329	7.23	1.87	32	21	-13.91	0.97	8	11	52.44	4.79
Uruguay	38	52	3.35	1.49	0	0	-0.10	-0.21	56	52	11.46	1.49
ASIA and PACIFIC	1 167	1 539	4.53	2.25	1 256	1 475	4.54	1.03	264	238	4.43	-0.06
Bangladesh	0	0	0.00	-3.81	27	30	-1.75	1.91	0	0	0.91	-0.27
China ²	1 095	1 451	3.85	2.32	349	465	22.17	0.94	6	7	-6.63	2.20
India	3	2	-0.58	1.52	6	6	23.63	2.85	2	1	-6.73	-2.77
Indonesia	66	79	208.22	1.00	59	70	1.37	0.73	12	9	-6.96	-0.73
Iran, Islamic Republic of	0	2	-5.93	3.34	3	2	-11.01	-0.54	2	2	62.47	0.54
Korea	2	5	-9.93	5.30	3	2	3.39	4.21	0	0	-41.82	0.00
Malaysia	0	0	0.00	-3.64	26	30	-12.65	1.40	12	13	-3.56	-0.20
Pakistan	0	0	0.00	2.50	3	2	3.61	0.14	2	2	31.90	-0.14
Saudi Arabia	0	0	0.00	-0.06	113	135	2.98	1.79	19	15	3.75	-0.25
Turkey	0	0	0.00	-0.14	1	1	-37.34	1.65	1	0	18.40	-1.63
LEAST DEVELOPED COUNTRIES (LDC)	0	0	-2.38	-3.25	227	255	1.08	1.88	7	7	6.22	-0.20
OECD³	2 359	2 838	2.77	1.17	66	63	-10.87	1.49	1 565	1 940	3.47	1.16
BRICS	1 689	2 185	3.05	2.04	442	566	16.81	0.78	14	22	-11.83	2.33

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.31.2. Whole milk powder projections: Consumption, per capita

Calendar year

	CONSUMPTION (kt)		Growth (%) ¹		PER CAPITA (kg)		Growth (%) ¹	
	Average 2010-12 ^{est}	2022	2003-12	2013-22	Average 2010-12 ^{est}	2022	2003-12	2013-22
WORLD	4 709	5 639	2.69	1.47	0.7	0.7	1.51	0.46
DEVELOPED COUNTRIES	557	640	-3.30	0.73	0.4	0.4	-3.75	0.40
NORTH AMERICA	40	36	-5.63	-0.41	0.1	0.1	-6.48	-1.21
Canada	14	13	-13.27	-1.36	0.4	0.3	-14.17	-2.19
United States	25	23	4.39	0.13	0.1	0.1	3.46	-0.66
EUROPE	412	486	-3.04	0.75	0.6	0.7	-3.23	0.69
European Union	315	331	-1.69	0.23	0.6	0.6	-2.08	0.03
Russian Federation	65	119	-7.96	2.58	0.5	0.8	-7.82	2.76
Ukraine	10	12	-0.77	1.39	0.2	0.3	-0.13	1.94
OCEANIA DEVELOPED	53	64	-4.76	1.28	2.0	2.1	-6.24	0.13
Australia	50	60	-4.88	1.19	2.2	2.3	-6.45	0.01
New Zealand	3	4	-2.54	2.60	0.7	0.8	-3.64	1.63
OTHER DEVELOPED ²	52	54	-1.59	0.73	0.2	0.2	-2.12	0.39
Japan	13	12	-1.63	-0.36	0.1	0.1	-1.65	-0.16
South Africa	14	17	1.69	1.63	0.3	0.3	0.73	1.18
DEVELOPING COUNTRIES	4 152	4 998	3.75	1.56	0.7	0.8	2.39	0.40
AFRICA	569	573	3.16	1.08	0.6	0.4	0.74	-1.18
NORTH AFRICA	227	211	4.09	-0.25	1.4	1.1	2.52	-1.47
Algeria	183	162	3.02	-0.98	5.1	4.0	1.49	-2.10
Egypt	28	28	18.28	3.31	0.3	0.3	16.18	1.82
SUB-SAHARAN AFRICA	342	362	2.85	1.95	0.4	0.3	0.26	-0.53
LATIN AMERICA and CARIBBEAN	1 386	1 650	2.69	1.34	2.3	2.5	1.50	0.40
Argentina	76	60	-0.73	0.00	1.9	1.3	-1.59	-0.78
Brazil	593	677	4.23	1.10	3.0	3.2	3.23	0.40
Chile	112	152	7.41	3.16	6.5	8.1	6.37	2.41
Mexico	303	339	2.42	1.73	2.6	2.6	1.15	0.76
Uruguay	0	0	-58.92	1.51	0.0	0.0	-59.02	1.13
ASIA and PACIFIC	2 197	2 775	4.73	1.80	0.5	0.6	3.59	0.90
Bangladesh	27	30	-1.75	1.91	0.2	0.2	-2.90	0.79
China ³	1 438	1 908	6.54	1.97	1.1	1.4	6.00	1.71
India	7	8	6.87	3.06	0.0	0.0	5.35	1.86
Indonesia	113	141	18.57	0.98	0.5	0.5	17.29	0.14
Iran, Islamic Republic of	3	2	-6.81	1.70	0.0	0.0	-7.90	0.91
Korea	5	7	-4.21	4.92	0.0	0.0	..	..
Malaysia	14	17	-17.81	2.79	0.5	0.5	-19.21	1.33
Pakistan	4	0	-1.94	2.24	0.0	0.0	-3.69	0.62
Saudi Arabia	94	120	3.61	2.07	3.4	3.5	0.81	0.19
Turkey	2	1	-8.01	1.68	0.0	0.0	-9.20	0.72
LEAST DEVELOPED COUNTRIES (LDC)	221	250	0.93	1.95	0.3	0.2	-1.30	-0.21
OECD⁴	864	960	0.01	1.23	0.7	0.7	-0.63	0.72
BRICS	2 118	2 729	5.08	1.77	0.7	0.8	4.15	1.10

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12^{est}: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.32. Milk projections: Production, inventories, yield

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		INVENTORIES ('000 hd)		Growth (%) ⁴		YIELD (t/hd)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	737 135	905 166	2.34	1.78	650 352	748 610	1.95	1.21	1.1	1.2	0.38	0.57
DEVELOPED COUNTRIES	368 043	412 228	0.77	0.98	77 179	77 022	-0.52	0.02	4.8	5.4	1.30	0.96
NORTH AMERICA	97 394	112 629	1.65	1.49	10 121	9 793	0.07	-0.33	9.6	11.5	1.58	1.82
Canada	8 596	9 247	0.57	0.56	968	898	-0.98	-0.85	8.9	10.3	1.57	1.42
United States	88 798	103 382	1.76	1.57	9 154	8 894	0.19	-0.27	9.7	11.6	1.57	1.85
EUROPE	211 646	227 312	0.07	0.58	43 424	39 454	-2.08	-0.66	4.9	5.8	2.19	1.25
European Union	151 304	158 974	0.21	0.34	22 877	22 206	-1.37	-0.12	6.6	7.2	1.61	0.47
Russian Federation	31 649	36 217	-0.19	0.96	8 944	7 383	-1.97	-2.24	3.5	4.9	1.82	3.28
Ukraine	11 178	12 465	-2.82	1.79	3 891	3 254	-4.19	-0.79	2.9	3.8	1.43	2.60
OCEANIA DEVELOPED	27 811	34 425	1.80	1.32	6 306	7 143	0.78	0.63	4.4	4.8	1.02	0.68
Australia	9 486	10 844	-1.39	1.03	1 605	1 649	-3.12	-0.09	5.9	6.6	1.78	1.12
New Zealand	18 324	23 581	3.83	1.46	4 701	5 494	2.46	0.86	3.9	4.3	1.34	0.59
OTHER DEVELOPED ¹	31 192	37 862	2.18	1.69	17 327	20 632	3.42	1.41	1.8	1.8	-1.20	0.28
Japan	7 619	7 523	-1.22	-0.27	939	874	-1.70	-0.70	8.1	8.6	0.48	0.44
South Africa	3 245	3 783	2.41	1.47	1 036	1 145	4.14	0.71	3.1	3.3	-1.66	0.76
DEVELOPING COUNTRIES	369 093	492 938	4.14	2.50	583 926	684 790	2.36	1.36	0.6	0.7	1.74	1.12
AFRICA	39 092	50 818	3.59	2.37	220 520	263 131	2.73	1.47	0.2	0.2	0.83	0.88
NORTH AFRICA	12 085	16 496	4.26	2.56	42 105	51 512	4.25	1.19	0.3	0.3	0.01	1.35
Algeria	2 839	4 310	7.65	2.34	16 593	22 709	7.85	1.08	0.2	0.2	-0.18	1.25
Egypt	5 825	7 520	2.99	2.65	6 375	6 314	-0.03	0.52	0.9	1.2	3.02	2.11
SUB-SAHARAN AFRICA	27 007	34 322	3.30	2.28	178 415	211 620	2.40	1.54	0.2	0.2	0.88	0.73
LATIN AMERICA and CARIBBEAN	84 178	106 646	3.35	1.96	47 852	52 841	1.27	0.87	1.8	2.0	2.05	1.08
Argentina	11 014	15 378	3.19	2.69	2 375	2 651	2.02	0.95	4.6	5.8	1.14	1.72
Brazil	32 235	38 838	3.68	1.67	23 212	27 622	2.19	1.49	1.4	1.4	1.45	0.17
Chile	2 628	3 601	2.24	2.81	1 311	1 103	-4.63	-1.05	2.0	3.3	7.20	3.90
Mexico	11 183	12 166	1.41	0.58	2 375	2 457	1.09	0.37	4.7	5.0	0.31	0.21
Uruguay	2 134	2 886	4.84	1.65	797	880	0.96	0.60	2.7	3.3	3.85	1.05
ASIA and PACIFIC	245 822	335 473	4.51	2.69	315 554	368 818	2.27	1.36	0.8	0.9	2.20	1.32
Bangladesh	3 588	6 003	5.35	4.30	38 208	57 815	6.38	3.33	0.1	0.1	-0.96	0.94
China ²	42 832	57 968	7.10	2.38	13 037	15 988	5.87	1.62	3.3	3.6	1.16	0.75
India	127 182	176 404	4.90	2.85	112 348	130 344	1.98	1.18	1.1	1.4	2.86	1.65
Indonesia	1 315	1 723	6.48	1.87	12 236	13 555	4.88	0.46	0.1	0.1	1.53	1.40
Iran, Islamic Republic of	7 451	9 549	1.73	1.74	38 253	40 167	1.70	0.50	0.2	0.2	0.03	1.23
Korea	1 959	2 092	-2.17	0.78	229	244	-3.09	0.67	8.6	8.6	0.94	0.11
Malaysia	60	69	3.95	2.10	150	137	6.52	0.28	0.4	0.5	-2.41	1.82
Pakistan	33 264	41 539	2.08	2.60	27 014	27 769	1.81	1.02	1.2	1.5	0.26	1.56
Saudi Arabia	2 007	3 594	8.31	5.24	4 302	3 593	-2.52	-0.87	0.5	1.0	11.10	6.16
Turkey	15 035	22 349	4.65	2.60	18 171	20 834	-0.11	0.61	0.8	1.1	4.77	1.97
LEAST DEVELOPED COUNTRIES (LDC)	30 085	40 932	3.32	2.83	227 366	285 726	3.43	1.95	0.1	0.1	-0.10	0.86
OECD³	321 966	360 961	0.96	0.93	63 564	65 822	-0.61	0.14	5.1	5.5	1.58	0.78
BRICS	237 144	313 211	4.21	2.36	158 577	182 482	2.02	1.10	1.5	1.7	2.15	1.25

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

Table A.33. Whey powder and casein projections

Calendar year

		Average 2010-12est.	2022	Growth (%) ²	
				2003-12	2013-22
AUSTRALIA					
Net trade, whey	kt pw	84.5	84.0	1.28	-0.42
Exports, casein	kt pw	6.2	5.1	-14.40	1.03
CANADA					
Net trade, whey	kt pw	17.2	20.7	29.22	0.03
EUROPEAN UNION					
Net trade, whey	kt pw	301.9	362.0	1.06	1.26
Casein					
Production	kt pw	141.0	175.3	-3.25	2.39
Consumption	kt pw	94.3	109.3	-6.18	2.68
Net trade	kt pw	46.7	66.0	4.27	1.92
JAPAN					
Net trade, whey	kt pw	-53.9	-78.0	0.32	3.53
Casein imports	kt pw	13.8	12.7	-3.55	0.00
KOREA					
Net trade, whey	kt pw	-31.5	-30.7	-2.99	0.87
MEXICO					
Net trade, whey	kt pw	-32.0	-25.9	-3.77	-1.36
NEW ZEALAND					
Net trade, whey	kt pw	6.9	11.4	6.32	4.04
Exports, casein	kt pw	146.0	168.2	-0.17	0.16
UNITED STATES					
Whey					
Production	kt pw	483.0	500.1	-0.02	0.31
Consumption	kt pw	291.6	208.8	-0.98	-2.94
Exports	kt pw	192.3	291.3	1.97	3.46
Imports, casein	kt pw	98.0	148.5	-1.64	2.36
ARGENTINA					
Net trade, whey	kt pw	52.1	124.9	34.09	6.18
BRAZIL					
Net trade, whey	kt pw	-25.6	-31.2	-0.08	2.41
CHINA¹					
Net trade, whey	kt pw	-329.0	-585.4	9.93	4.43
RUSSIAN FEDERATION					
Net trade, whey	kt pw	-54.3	-70.7	6.18	2.39

Note: Calendar year: Year ending 30 June for Australia and 31 May for New Zealand.

Average 2010-12est: Data for 2012 are estimated.

1. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
2. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

ANNEX A

Table A.34. Main policy assumptions for dairy markets

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CANADA												
Milk target price ¹	CADc/litre	73.9	76.2	77.6	78.5	79.7	81.1	82.4	83.8	85.1	86.1	87.2
Butter support price	CAD/t	7 194.6	7 398.8	7 509.7	7 622.4	7 736.7	7 852.8	7 970.6	8 090.1	8 211.5	8 334.7	8 459.7
SMP support price	CAD/t	6 311.3	6 461.6	6 442.1	6 414.5	6 607.5	6 851.3	6 984.4	7 139.6	7 256.5	7 363.8	7 487.4
Cheese tariff-quota	kt pw	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
In-quota tariff	%	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Out-of-quota tariff	%	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6
Subsidised export limits ²												
Cheese	kt pw	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
SMP	kt pw	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
EUROPEAN UNION³												
Milk quota	kt pw	147 912	150 446	150 446	0	0	0	0	0	0	0	0
Butter reference price ⁴	EUR/t	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9	2 463.9
SMP intervention price	EUR/t	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0	1 698.0
Butter tariff-quotas	kt pw	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
Cheese tariff-quotas	kt pw	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
SMP tariff-quota	kt pw	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
Subsidised export limits ²												
Butter	kt pw	411.6	411.6	411.6	411.6	411.6	411.6	411.6	411.6	411.6	411.6	411.6
Cheese	kt pw	331.7	331.7	331.7	331.7	331.7	331.7	331.7	331.7	331.7	331.7	331.7
SMP	kt pw	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4
JAPAN												
Direct payments	JPY/kg	12.0	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
Cheese tariff ⁵	%	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
Tariff-quotas												
Butter	kt pw	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
In-quota tariff	%	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Out-of-quota tariff	%	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
SMP	kt pw	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
In-quota tariff	%	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Out-of-quota tariff	%	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4
WMP	kt pw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In-quota tariff	%	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Out-of-quota tariff	%	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2
KOREA												
Tariff-quotas												
Butter	kt pw	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
In-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Out-of-quota tariff	%	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
SMP	kt pw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0
WMP	kt pw	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
In-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Out-of-quota tariff	%	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0

Table A.34. Main policy assumptions for dairy markets (cont.)

Calendar year

		Average 2010-12est	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
MEXICO												
Butter tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff-quotas												
Cheese	kt pw	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
In-quota tariff	%	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Out-of-quota tariff	%	125.1	100.0	75.0	60.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
SMP	kt pw	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
In-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	104.4	63.0	60.0	60.0	50.0	45.0	45.0	45.0	45.0	45.0	45.0
Liconsa social program	MXN mn	1 176.8	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0	1 180.0
RUSSIAN FEDERATION												
Butter tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Cheese tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
UNITED STATES												
Milk support price ¹	USDc/litre	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Target price ⁶	USDc/litre	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
Butter support price	USD/t	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0	2 315.0
SMP support price	USD/t	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7	1 763.7
Butter tariff-quota	kt pw	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
In-quota tariff	%	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
Out-of-quota tariff	%	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0
Cheese tariff-quota	kt pw	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0
In-quota tariff	%	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Out-of-quota tariff	%	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
Subsidised export limits ²												
Butter	kt pw	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
SMP	kt pw	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
INDIA												
Milk tariff	%	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Butter tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Cheese tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Whole milk powder tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
SOUTH AFRICA												
Milk powder tariff-quota	kt pw	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8

Note: The source for tariffs and Tariff Rate Quotas (except Russia) is AMAD (Agricultural market access database). The tariff and TRQ data are based on Most Favoured Nation rates scheduled with the WTO and exclude those under preferential or regional agreements, which may be substantially different. Tariffs are simple averages of several product lines. Specific rates are converted to ad valorem rates using world prices in the Outlook. Import quotas are based on global commitments scheduled in the WTO rather than those allocated to preferential partners under regional or other agreements.

Average 2010-12est: Data for 2012 are estimated.

1. For manufacturing milk.
2. It is assumed that no export subsidies will be granted for dairy products over the projection period.
3. EU farmers also benefit from the Single Farm Payment (SFP) Scheme, which provides flat-rate payments independent from current production decisions and market developments. For the new member states, payments are phased in with the assumption of maximum top-ups from national budgets up to 2013 through the Single Area Payment Scheme (SAPS). Due to modulation, an increasing share of the total SFP will go to rural development spending rather than directly to farmers.
4. Intervention can take place when the butter price is below 90% of the reference price.
5. Excludes processed cheese.
6. The counter-cyclical payment for milk is determined as a percentage difference between the target price and the Boston class I price. The difference is set at 34% in 2007 and 2008, at 45% in 2009-2012 and 34% thereafter. The target price is adjusted by 45% of the percentage difference between the National Average Dairy Feed Rations Cost and the target cost of feed rations of 16.20USD/100kg between 2009 and 2012 and 20.94USD/100kg thereafter.

Source: OECD and FAO Secretariats.

Table A.35. World cotton projections

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
WORLD												
Production	mt	26.2	23.5	24.4	24.6	24.8	25.0	25.7	26.3	26.6	26.9	27.2
Area	mha	33.1	31.6	32.6	32.8	32.9	33.2	34.0	34.6	34.8	35.1	35.4
Yield	t/ha	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Consumption	mt	23.5	23.9	24.4	24.8	25.2	25.6	26.1	26.6	27.1	27.4	27.7
Closing stocks	mt	13.4	16.6	16.9	17.1	17.0	16.6	16.5	16.5	16.3	16.2	16.0
Price ¹	USD/t	2 344.2	1 788.4	1 795.5	1 914.8	1 954.0	1 947.9	1 923.7	1 892.3	1 890.7	1 885.3	1 935.2
DEVELOPED COUNTRIES												
Production	mt	6.5	5.6	6.1	6.1	6.0	5.9	6.1	6.2	6.2	6.3	6.3
Consumption	mt	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0
Closing stocks	mt	2.2	2.5	2.6	2.6	2.7	2.5	2.6	2.6	2.6	2.6	2.6
DEVELOPING COUNTRIES												
Production	mt	19.6	17.8	18.4	18.5	18.7	19.1	19.6	20.1	20.3	20.6	20.9
Consumption	mt	21.9	22.2	22.7	23.0	23.4	23.8	24.3	24.7	25.2	25.5	25.8
Closing stocks	mt	11.2	14.2	14.4	14.4	14.3	14.1	14.0	13.9	13.7	13.5	13.4
OECD²												
Production	mt	5.9	4.9	5.3	5.3	5.2	5.1	5.3	5.4	5.4	5.4	5.4
Consumption	mt	3.0	3.1	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.5
Closing stocks	mt	2.0	2.2	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.3

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010/11-2012/13est: Data for 2012/13 are estimated.

1. Cotlook A index, Middling 1 3/32, c.f.r. far Eastern ports (August/July)
2. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.36.1. Cotton projections: Production and trade

Crop year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22	Average 2010-12est	2022	2003-12	2013-22
WORLD	26 160	27 220	0.70	1.59	8 490	8 482	0.71	1.02	8 436	8 164	0.54	1.02
DEVELOPED COUNTRIES	6 528	6 270	-2.33	0.86	418	406	-14.41	-0.16	4 816	4 742	-1.70	0.28
NORTH AMERICA	3 710	3 663	-3.98	1.21	4	2	-34.95	-2.07	2 735	2 821	-2.56	0.95
Canada	0	0	..	..	1	1	-41.61	-5.37	0	0	..	..
United States	3 710	3 663	-3.98	1.21	2	1	..	0.29	2 735	2 821	-2.56	0.95
EUROPE	305	293	-6.58	-0.43	316	309	-14.69	-0.10	276	270	-4.98	-0.37
European Union	304	292	-6.61	-0.43	206	202	-15.63	-0.39	274	269	-4.98	-0.37
Russian Federation	1	1	0.16	0.30	105	101	-13.00	0.51	0	0	..	0.00
Ukraine	1	1	0.00	-0.20	1	1	0.00	0.19	1	1	0.00	-0.19
OCEANIA DEVELOPED	1 013	891	10.84	0.86	0	0	21.27	0.24	870	883	9.06	0.22
Australia	1 013	891	10.84	0.86	0	0	21.27	0.24	870	883	9.06	0.22
New Zealand	0	0	..	..	0	0	..	..	0	0	..	..
OTHER DEVELOPED ¹	1 500	1 422	-2.24	0.34	98	96	-10.70	-0.31	935	769	-4.69	-1.55
Japan	0	0	..	..	68	61	-12.01	-0.10	0	0	..	..
South Africa	13	10	-8.23	2.33	22	28	-6.58	-0.95	16	20	107.24	0.14
DEVELOPING COUNTRIES	19 632	20 950	1.84	1.82	8 072	8 075	2.45	1.08	3 619	3 422	4.22	2.16
AFRICA	1 347	2 242	-4.27	5.29	91	76	-4.58	-3.35	1 055	2 116	-4.96	5.90
NORTH AFRICA	145	132	-7.70	2.01	71	60	-4.59	-3.72	90	116	-3.16	4.06
Algeria	0	0	-13.20	-0.48	4	4	-17.83	-0.76	0	0	0.00	0.76
Egypt	145	132	-7.70	2.01	67	57	-2.98	-3.90	90	116	-3.16	4.06
SUB-SAHARAN AFRICA	1 203	2 110	-3.83	5.53	20	15	-5.35	-1.70	965	2 000	-5.11	6.02
LATIN AMERICA and CARIBBEAN	2 320	2 337	3.04	2.22	457	499	-6.55	1.45	840	798	9.05	2.91
Argentina	223	208	6.47	2.46	8	13	-18.78	-0.70	50	15	22.29	-5.77
Brazil	1 778	1 810	3.66	2.38	59	5	-17.53	0.16	715	696	12.76	3.39
Chile	0	0	0.00	-0.21	1	1	-32.69	0.17	0	0	0.00	-0.17
Mexico	211	208	8.69	1.03	244	328	-6.16	2.25	61	61	5.53	-0.36
Uruguay	1	1	0.00	-0.22	1	1	0.00	0.20	1	1	0.00	-0.19
ASIA and PACIFIC	15 964	16 371	2.33	1.36	7 524	7 500	3.33	1.11	1 724	508	14.27	-7.07
Bangladesh	14	17	0.18	2.56	771	1 275	7.43	5.56	0	0	0.00	-0.40
China ²	6 933	5 780	1.38	-0.88	3 617	1 947	6.43	-1.51	13	4	-9.99	-1.38
India	5 810	7 267	6.27	3.30	124	261	-2.48	10.85	1 363	123	25.46	-17.16
Indonesia	6	7	0.79	0.58	462	502	0.48	0.33	4	4	116.98	-0.05
Iran, Islamic Republic of	59	71	-9.23	1.42	69	63	20.81	-0.70	0	0	-59.93	0.05
Korea	0	0	..	..	245	303	-1.15	0.82	0	0	..	..
Malaysia	0	0	0.00	-0.09	154	191	16.56	-0.61	119	171	153.16	0.09
Pakistan	2 116	2 500	0.57	2.73	304	564	-4.13	-0.23	173	86	15.76	0.22
Saudi Arabia	1	1	0.00	-0.33	1	1	0.00	0.24	1	1	0.00	-0.24
Turkey	610	331	-5.80	-2.52	675	1 190	0.77	2.64	7	6	-20.82	-0.52
LEAST DEVELOPED COUNTRIES (LDC)	1 071	1 716	-2.32	4.94	784	1 289	7.37	5.46	655	1 413	-6.54	6.35
OECD³	5 861	5 400	-2.54	0.76	1 447	2 091	-5.80	1.87	3 962	4 052	-0.92	0.65
BRICS	14 535	14 867	3.37	1.38	3 927	2 341	4.07	-0.54	2 107	844	17.98	-3.29

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
3. Excludes Iceland but includes all EU27 member countries.
4. Least-squares growth rate (see glossary).

Source: OECD and FAO Secretariats.

ANNEX A

Table A.36.2. Cotton projections: Consumption

Crop year

	CONSUMPTION (kt)		Growth (%) ¹	
	Average 2010-12est	2022	2003-12	2013-22
WORLD	23 528	27 710	-0.02	1.70
DEVELOPED COUNTRIES	1 675	1 960	-8.51	1.54
NORTH AMERICA	771	869	-8.50	1.53
Canada	2	1	-40.88	-5.40
United States	769	868	-7.99	1.54
EUROPE	339	332	-15.48	-0.49
European Union	222	225	-16.85	-1.01
Russian Federation	112	102	-12.51	0.74
Ukraine	1	1	0.00	0.17
OCEANIA DEVELOPED	8	9	-7.35	0.61
Australia	8	9	-7.35	0.61
New Zealand	0	0	..	..
OTHER DEVELOPED ²	557	749	-0.50	2.60
Japan	69	61	-11.98	-0.41
South Africa	20	17	-14.00	-0.50
DEVELOPING COUNTRIES	21 853	25 750	0.97	1.71
AFRICA	240	190	-7.88	-2.28
NORTH AFRICA	118	76	-7.87	-4.21
Algeria	4	4	-17.55	-0.76
Egypt	113	72	-7.31	-4.36
SUB-SAHARAN AFRICA	123	114	-7.95	-0.69
LATIN AMERICA and CARIBBEAN	1 713	1 964	-0.80	1.32
Argentina	172	204	2.36	1.44
Brazil	914	1 047	0.27	1.30
Chile	2	1	-28.47	0.17
Mexico	388	474	-1.97	1.78
Uruguay	1	1	0.00	0.16
ASIA and PACIFIC	19 899	23 596	1.30	1.78
Bangladesh	764	1 292	7.44	5.52
China ³	8 843	7 954	0.81	-0.44
India	4 516	7 404	4.51	4.59
Indonesia	464	505	0.09	0.33
Iran, Islamic Republic of	132	134	1.69	0.38
Korea	241	303	-1.62	0.92
Malaysia	37	20	-3.90	-4.87
Pakistan	2 200	2 978	-0.30	2.19
Saudi Arabia	1	1	0.00	0.15
Turkey	1 278	1 514	-2.19	1.25
LEAST DEVELOPED COUNTRIES (LDC)	1 052	1 581	7.76	4.23
OECD⁴	2 983	3 463	-6.13	1.17
BRICS	14 404	16 524	1.57	1.67

Note: Crop year: Beginning crop marketing year - see Glossary of Terms for definitions.

Average 2010-12est: Data for 2012 are estimated.

1. Least-squares growth rate (see glossary).
2. Includes Israel and also transition economies: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan and Georgia.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Other Asia Pacific aggregate.
4. Excludes Iceland but includes all EU27 member countries.

Source: OECD and FAO Secretariats.

Table A.37. Main policy assumptions for cotton markets

Crop year

		Average 2010/11- 2012/13est	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
ARGENTINA												
Export tax equivalent of export barriers	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Tariff equivalent of import barriers	%	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
BRAZIL												
Producer Minimum Price, lint cotton	BRL/t	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3	2 973.3
Tariff equivalent of import barriers	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
EUROPEAN UNION												
Area for coupled payment	Kha	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7
Coupled payment per ha ¹	EUR/ha	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INDIA												
Minimum support price	INR/t	32 833.3	38 500.0	38 500.0	38 500.0	40 271.1	41 452.8	43 061.4	44 677.5	46 327.2	48 169.3	51 031.4
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KOREA												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEXICO												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RUSSIAN FEDERATION												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNITED STATES												
ACRE participation rate	%	0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Loan rate, upland cotton	USD/t	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4	1 146.4
Production flexibility contract payments	USD/t	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0
CRP area	Mn ha	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Economic Adjustment Assistance payment level	USD/t	80.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
TRQ	kt	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
In-quota tariff	USD/t	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
Out-of-quota tariff	USD/t	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0
CHINA												
TRQ	kt	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0
In-quota tariff	%	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Out-of-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
TURKEY												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Average 2010/11-2012/13est; Data for 2012/13 are estimated.

1. If the area is higher than the ceiling, the amount is proportionally reduced.

Source: OECD and FAO Secretariats.

Part II. Annex B

Information on food price changes..... 76

Table B.1. Information on food price changes

	Total inflation % change (year-on-year)		Food inflation % change (year-on-year) ²		Expenditure share of food		Food contribution to total change in inflation ³	
	2012	2013	2012	2013	2012	2013	2012	2013
OECD								
Australia ¹	1.6	..	-4.9	..	12.8	12.8	-0.6	..
Austria	2.8	2.6	3.6	3.9	12.0	12.0	0.4	0.5
Belgium	3.6	1.5	2.7	3.7	17.4	17.4	0.5	0.6
Canada	2.5	0.5	4.9	0.6	11.5	11.5	0.6	0.1
Chile	4.2	1.6	8.9	5.3	18.9	18.9	1.7	1.0
Czech Republic	3.5	1.9	7.0	5.7	17.0	17.0	1.2	1.0
Denmark	2.8	1.3	5.7	2.3	11.5	11.5	0.7	0.3
Estonia	4.5	3.4	4.0	5.5	21.7	21.7	0.9	1.2
Finland	3.2	1.6	5.0	5.3	13.4	13.4	0.7	0.7
France	2.3	1.2	3.6	2.0	14.7	14.7	0.5	0.3
Germany	2.1	1.7	3.2	4.0	10.4	10.4	0.3	0.4
Greece	2.3	0.2	3.0	0.2	17.1	17.1	0.5	0.0
Hungary	5.4	3.8	5.5	6.1	19.6	19.6	1.1	1.2
Iceland	6.5	4.2	6.2	5.3	14.9	14.9	0.9	0.8
Ireland	2.2	1.2	0.3	2.4	11.7	11.7	0.0	0.3
Israel	2.0	1.5	0.7	3.0	14.3	14.3	0.1	0.4
Italy	3.2	2.2	2.4	3.1	16.3	16.3	0.4	0.5
Japan	0.1	-0.3	1.4	-0.8	19.0	19.0	0.3	-0.2
Korea	3.4	1.5	5.9	2.0	14.4	14.4	0.8	0.3
Luxembourg	2.9	2.1	1.7	4.1	11.1	11.1	0.2	0.5
Mexico	4.0	3.3	7.7	5.4	18.9	18.9	1.5	1.0
Netherlands	2.5	3.0	2.3	3.8	11.3	11.3	0.3	0.4
New Zealand ¹	1.6	..	0.3	..	17.4	17.4	0.1	..
Norway	0.5	1.3	2.2	0.0	13.3	13.3	0.3	0.0
Poland	4.0	1.6	4.5	3.5	24.1	24.1	1.1	0.8
Portugal	3.5	0.2	3.3	2.3	18.1	18.1	0.6	0.4
Slovak Republic	3.9	2.4	3.5	5.9	18.4	18.4	0.6	1.1
Slovenia	2.3	2.4	3.9	5.2	17.0	17.0	0.7	0.9
Spain	2.0	2.7	2.3	3.2	18.2	18.2	0.4	0.6
Sweden	1.9	0.0	1.1	2.3	13.9	13.9	0.2	0.3
Switzerland	-0.8	-0.3	-2.3	1.0	10.8	10.8	-0.2	0.1
Turkey	10.6	7.3	11.7	6.8	26.8	26.8	3.1	1.8
United Kingdom	3.6	2.7	3.5	4.2	11.8	11.8	0.4	0.5
United States	2.9	1.6	5.3	1.1	7.8	7.8	0.4	0.1
OECD Total	2.8	1.7	4.2	2.1	..	..	..	..
Enhanced Engagement								
Brazil	6.2	6.2	6.9	11.1	22.5	22.5	8.9	6.5
China	4.5	2.0	10.5	2.9	33.6	33.6	3.5	1.0
India ¹	..	10.7	..	13.2	35.4	35.4	..	1.8
Indonesia	3.7	4.6	3.3	7.3	19.6	19.6	0.6	1.4
Russian Federation	4.1	7.1	2.1	8.6	32.8	32.8	0.7	2.8
South Africa	6.4	5.5	10.4	5.9	18.3	18.3	1.9	1.1

Table B.1. Information on food price changes (cont.)

	Total inflation % change (year-on-year)		Food inflation % change (year-on-year) ²		Expenditure share of food		Food contribution to total change in inflation ³	
	2012	2013	2012	2013	2012	2013	2012	2013
Non OECD								
Algeria	12.3	8.1	12.3	9.3	43.8	43.8	5.4	4.1
Argentina	8.1	11.1	8.1	9.5	20.3	20.3	1.6	1.9
Bangladesh	10.9	7.4	10.9	1.2	28.6	28.6	3.1	0.3
Bolivia	5.9	4.9	4.8	6.0	39.3	39.3	1.9	2.4
Botswana	8.9	7.5	8.9	7.0	23.7	23.7	2.1	1.7
Bulgaria	4.6	4.4	4.6	6.5	37.2	37.2	1.7	2.4
Columbia	4.9	2.0	4.9	1.7	34.7	34.7	1.7	0.6
Costa Rica	2.0	5.7	2.0	4.6	25.7	25.7	0.5	1.2
Ivory Coast	1.2	3.4	1.2	4.6	24.8	24.8	0.3	1.1
Dominican Republic	8.8	4.8	8.8	6.9	29.2	29.2	2.6	2.0
Ecuador	6.1	4.1	6.1	5.4	31.7	31.7	1.9	1.7
Egypt	11.4	6.3	11.4	7.2	26.3	26.3	3.0	1.9
El Salvador	1.2	0.8	1.2	1.9	38.1	38.1	0.5	0.7
Ethiopia	41.4	12.5	32.0	11.3	57.0	57.0	18.2	6.4
Ghana	4.5	8.8	4.5	3.8	37.0	37.0	1.7	1.4
Guatemala	11.3	3.9	11.3	6.6	28.6	28.6	3.2	1.9
Haiti	7.7	7.2	7.7	7.4	50.4	50.4	3.9	3.7
Honduras	3.4	5.7	3.4	4.1	31.8	31.8	1.1	1.3
Hong Kong, China	10.9	3.0	10.9	3.6	16.1	16.1	1.8	0.6
Iraq	3.9	2.8	3.9	-0.4	35.0	35.0	1.4	-0.1
Jordan	3.9	6.7	3.9	3.8	35.2	35.2	1.4	1.3
Kenya	24.6	3.7	24.6	2.4	36.0	36.0	8.9	0.9
Laos	6.7	5.7	8.8	7.5	41.0	41.0	3.6	3.1
Madagascar	6.0	5.8	6.6	3.0	60.0	60.0	4.0	1.8
Malawi	5.2	31.4	5.2	27.3	25.0	25.0	1.3	6.8
Malaysia	4.8	1.3	4.8	2.2	56.3	56.3	2.7	1.2
Mali	3.7	0.1	7.3	-1.7	60.0	60.0	4.4	-1.0
Moldavia	6.9	4.6	5.1	6.4	60.0	60.0	3.1	3.8
Morocco	1.7	2.6	1.7	4.0	40.4	40.4	0.7	1.6
New Caledonia	2.5	1.9	2.5	2.5	21.0	21.0	0.5	0.5
Nicaragua	8.7	7.6	9.6	10.3	26.1	26.1	2.5	2.7
Niger	-1.8	1.0	-1.8	3.5	29.0	29.0	-0.5	1.0
Nigeria	13.1	9.0	13.1	9.1	51.8	51.8	6.8	4.7
Pakistan	9.2	8.1	9.2	7.1	45.5	45.5	4.2	3.2
Panama	6.1	4.7	7.0	7.1	33.6	33.6	2.4	2.4
Paraguay	2.0	4.1	2.0	2.8	39.1	39.1	0.8	1.1
Peru	7.5	2.9	7.5	4.1	29.0	29.0	2.2	1.2
Philippines	3.2	3.0	3.2	2.3	39.0	39.0	1.2	0.9
Romania	0.1	3.2	0.1	6.6	37.4	37.4	0.0	2.5
Rwanda	7.9	5.7	12.8	8.3	48.4	48.4	6.2	4.0
Senegal	2.0	1.1	2.0	1.1	53.4	53.4	1.1	0.6
Singapore	3.8	3.4	3.8	1.0	8.5	8.5	0.3	0.1
Sri Lanka	-0.2	9.8	-0.2	9.7	41.0	41.0	-0.1	4.0
Chinese Taipei	4.5	1.1	4.5	2.4	16.6	16.6	0.8	0.4
Tanzania	19.7	10.9	26.2	11.9	33.6	33.6	8.8	4.0
Thailand	7.7	3.4	7.7	4.1	33.0	33.0	2.5	1.4
Tunisia	6.5	6.0	6.5	8.0	33.8	33.8	2.2	2.7
Uganda	27.3	4.9	27.3	0.0	27.2	27.2	7.4	0.0
Uruguay	8.0	8.7	7.7	10.8	19.2	19.2	1.5	2.1
Venezuela	26.3	21.6	30.1	22.0	29.5	29.5	8.9	6.5
Zambia	6.4	7.0	6.1	7.6	52.5	52.5	3.2	4.0

1. No data available for January 2013 in Australia and New Zealand and for 2012 in India.

2. CPI food: definition based on national sources

3. Contribution is food inflation multiplied by expenditure share, expressed in %

Source: OECD and national sources (for details, see the online version of tables).