Food and Agriculture Organization of the United Nations

Food Outlook

BIANNUAL REPORT ON GLOBAL FOOD MARKETS

November 2017

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HIGHLIGHTS

Food commodity markets remain well supplied but the cost of importing food is set to rise by 6 percent from last year's level to reach USD 1.413 trillion in 2017. Sharp increases in freight rates, stronger import demand and firmer prices of most food commodities are expected to elevate the global food import bill to its second highest level on record.

WHEAT

Even though world wheat production in 2017 is forecast to fall below last year's record level, wheat supplies in 2017/18 remain relatively large. Stocks are set to increase for the fifth consecutive season, reaching an all-time high. Trade is expected to contract, with international prices still mostly above last year levels.

COARSE GRAINS

With global production projected at a new record while total utilization grows at a slower pace than in the previous season, world stocks are heading for a further increase, reaching an all-time high. Trade is also expanding, underpinned by brisker purchases as buyers try to take advantage of large export availabilities and weak prices.

RICE

Although weather disruptions are set to stall production growth this season, global rice supplies are still forecast to exceed utilization, enabling a small expansion of world rice inventories. After staging an 8 percent recovery in 2017, global trade is expected to rise only modestly in 2018. Price gains since June have been limited by stiff export competition.

CASSAVA

World cassava production could dip in 2017, on account of lower plantings in the major producing countries induced by a combination of policy changes, drought conditions and depressed root prices. Cassava trade flows are expected to remain firm, owing to poor prospects for China's maize supply with which cassava competes.

OILCROPS

Although global oilseed production is forecast to remain flat in 2017/18, world supplies of both meals/cakes and oils/fats are expected to expand further, aided by large carry-in stocks. In both markets, output could essentially match demand, allowing closing stocks to remain steady at comfortable levels.

MEAT

A modest growth in global wheat production is forecast for 2017, supported by expansions in bovine, pig and poultry meats and some gain in ovine meat. Trade is anticipated to grow too, albeit at a slower rate than in 2016 due to falling import demand by China.

DAIRY

World milk production in 2017 is forecast to exceed last year's level on favourable weather conditions and more attractive prices. A moderate expansion is expected in world trade in 2017 with increases in cheese and skimmed milk powder more than offsetting declining trade in butter and whole milk powder.

FISHERIES

Global production of fish and fishery products is expected to expand in 2017, but prices have risen across all seafood commodity categories as increased supply is being more than offset by the demand stimulus resulting from an improving global economy.

GLOBAL PROSPECTS FOR MAJOR TROPICAL FRUITS

Growth in tropical fruit trade has outpaced that of most other food commodities. Innovations in distribution, trade agreement measures, population growth, and shifting consumer preferences driven by rising incomes, will continue to support further expansion ahead. However, with tropical regions particularly susceptible to extreme climate-related events, uninterrupted supplies to international markets will be a significant challenge.

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FAO Food Commodity Price Indices
(Oct 2016 - Oct 2017)

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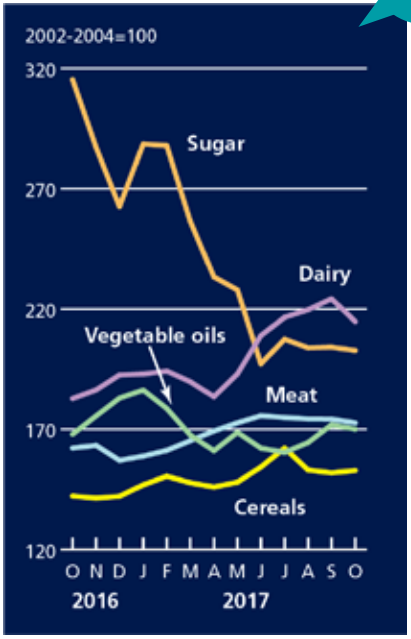

MARKET SUMMARIES

CEREALS

World cereal markets are likely to be comfortably balanced in 2017/18, with total supplies exceeding projected demand and inventories on the rise. Global cereal production in 2017 is forecast to surpass the 2016 peak by a small margin. Total production of coarse grains is set to reach a new record, with most of the expansion taking place in South America and Southern Africa. However, wheat production is forecast to decline slightly from last year in spite of an upward adjustment since October driven by a larger-than-earlier anticipated harvest in the Russian Federation. The decline in wheat production from 2016 mostly reflects a lower harvest in the United States, as well as a projected fall in Australia's wheat crop after a record output in 2016. Global rice production in 2017 is expected to remain broadly stable.

World cereal utilization in 2017/18 is set to expand by 1 percent from the previous year. Overall, food consumption of cereals is forecast to grow by 1.3 percent and feed use by 0.4 percent, while industrial utilization is projected to rise by 1.2 percent. Based on the latest forecasts for cereal production and utilization, world cereal stocks by the close of seasons in 2018 are set to reach a new record level. This would result in the global cereal stock-to-use ratio remaining stable at a 15-year high of 27 percent, with the ratio for wheat up slightly and those for coarse grains and rice down marginally. World wheat inventories are currently pegged at an all-time high despite a downward revision since October. Global stocks of rice and coarse grains are also set to reach record levels. The increase in wheat and rice stocks largely reflects an anticipated accumulation of inventories in China, whereas for coarse grains, the expansion reflects higher end-of-season maize stocks in South America and the United States.

World trade in cereals in 2017/18 is forecast to remain close to the 2016/17 estimated volume, with an expected decline in wheat trade largely offset by larger shipments of maize, sorghum and rice. Overall, given the ample size of export supplies, competition among major exporters in 2017/18 is expected to remain stiff.

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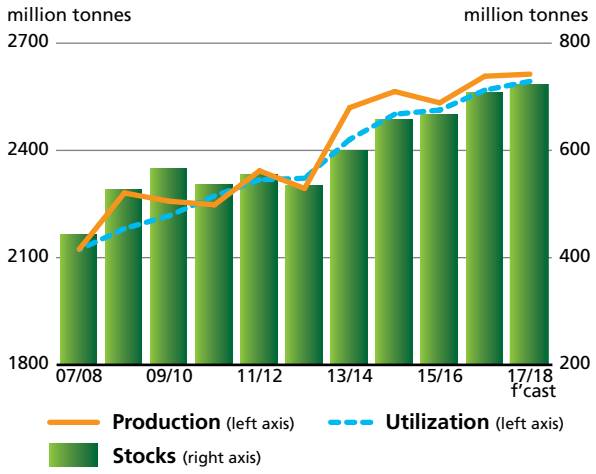
CEREAL PRODUCTION, UTILIZATION AND STOCKS



WORLD CEREAL MARKET AT A GLANCE [1]

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
		million tonnes		%
WORLD BALANCE				
Production	**2 533.1**	**2 607.5**	**2 613.5**	**0.2**
Trade[2]	**391.3**	**403.4**	**404.3**	**0.2**
Total utilization	**2 512.9**	**2 568.5**	**2 593.2**	**1.0**
Food	1 088.3	1 103.1	1 117.2	1.3
Feed	887.2	904.6	908.6	0.4
Other uses	537.4	560.8	567.5	1.2
Ending stocks[3]	**664.8**	**702.9**	**718.7**	**2.2**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	147.4	147.7	148.0	0.2
LIFDC[4] (kg/yr)	145.8	146.4	146.5	0.1
World stock-to-use ratio (%)	*25.9*	*27.1*	*27.0*	
Major exporters stock-to-disappearance ratio (%)	*15.7*	*17.0*	*16.4*	

FAO CEREAL PRICE INDEX (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Oct*	**Change: Jan-Oct 2017 over Jan-Oct 2016 %**
	162	147	151	2.3

[1] Rice in milled equivalent.
[2] Trade refers to exports based on a July/June marketing season for wheat and coarse grains and on a January/December marketing season for rice.
[3] May not equal the difference between supply and utilization due to differences in individual country marketing years.
[4] Low-Income Food-Deficit countries.

WHEAT

Even though world wheat production in 2017 is forecast to fall below last year's record level, wheat supplies in 2017/18 remain relatively large. Stocks are set to increase for the fifth consecutive season, reaching an all-time high. Trade is expected to contract, while prices, which still exceed last year's levels, have remained under general downward pressure since the start of the season.

Global wheat production in 2017 is forecast at 752.8 million tonnes, down slightly from 2016. Most of the decrease is associated with significant production cuts in the United States and Australia. However, global output is still forecast to be the second highest on record. Global wheat trade is also seen to decline a slight 1.2 percent below the 2016/17 record level, amounting to 175.2 million tonnes. The forecast contraction in world trade in 2017/18 is largely the result of reduced import demand in Asia, more than offsetting higher expected imports by Europe and North America.

Wheat utilization is forecast to increase for the second consecutive season, reaching 738.2 million tonnes, some 0.7 percent above the previous season's record high level. After a contraction in 2015/16, wheat utilization rebounded in 2016/17, helped by improved global supplies and lower international prices. With projected supplies in 2017/18 exceeding the previous season's level, total wheat utilization is set to rise further, albeit at a slower pace because of firmer prices.

Inventories are forecast to increase further in 2017/18, boosted by large supplies in China. Global wheat stocks are forecast to reach 258 million tonnes by the close of seasons in 2018, an all-time high and 5 percent above their opening levels. World wheat inventories have increased continuously since 2013/14, as growth in global production exceeded expansion in total world consumption. Overall, the bulk of this season's projected expansion in world wheat reserves is expected to take place in China, where wheat inventories are forecast to increase by at least 18 million tonnes, or 20 percent, to around 110 million tonnes.

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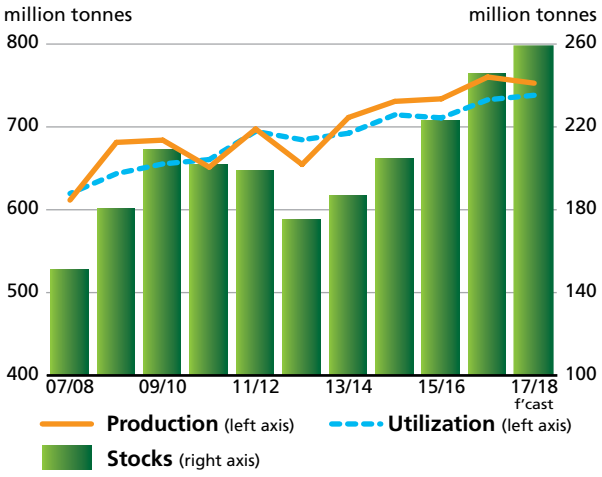
WHEAT PRODUCTION, UTILIZATION AND STOCKS



WORLD WHEAT MARKET AT A GLANCE

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
		million tonnes		%
WORLD BALANCE				
Production	**733.9**	**760.2**	**752.8**	**-1.0**
Trade[1]	**166.7**	**177.4**	**175.2**	**-1.2**
Total utilization	**710.9**	**732.8**	**738.2**	**0.7**
Food	491.8	497.7	503.1	1.1
Feed	134.4	136.3	137.8	1.1
Other uses	84.7	98.8	97.3	-1.5
Ending stocks[2]	**222.4**	**245.2**	**258.2**	**5.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	66.6	66.7	66.6	-0.1
LIFDC (kg/yr)	52.9	52.9	52.9	0.0
World stock-to-use ratio (%)	*30.4*	*33.2*	*34.4*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*16.1*	*18.7*	*17.4*	

FAO WHEAT PRICE INDEX[4] **(2002-2004=100)**	**2015**	**2016**	**2017** *Jan-Oct*	**Change: Jan-Oct 2017 over Jan-Oct 2016 %**
	144	125	133	5.8

[1] Trade refers to exports based on a common July/June marketing season.
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.
[4] Derived from the International Grains Council (IGC) wheat index.

COARSE GRAINS

A record production in 2017 amid a slow rising utilization is likely to contribute to a further expansion in world inventories. FAO forecasts global coarse grain production in 2017 to exceed the previous year. Most of the increase is associated with higher maize production in Southern Africa and South America, more than offsetting the expected reduction in the United States.

Total utilization of coarse grains in 2017/18 is forecast to increase rather marginally with the feed use growing by only 0.3 percent from 2016/17. While feed demand for maize is expected to remain relatively firm, declines in feed use of barley and sorghum in China and the United States are seen to push down the year-on-year growth in total feed utilization. Industrial use of coarse grains is also expected to experience a below-average increase, largely because of a weaker intake of maize for production of biofuels. Based on latest forecasts for global production and utilization, world stocks could rise to a new record level. Maize and barley inventories are behind this projected rise, mostly in Brazil, South Africa and the United States, while sorghum stocks are heading for a decline, mostly in Argentina, Australia and China. Overall, the major exporters' stock-to-disappearance ratio is forecast to increase further in 2017/18, which indicates more abundant export availabilities of coarse grains for world markets during the current season. This, in turn, should comfortably meet the current projected rise in import demand.

Ample supplies in major exporting countries are forecast to drive up world trade volume slightly to nearly 184 million tonnes. Bigger maize exports account for most of the overall increase. International trade in barley and sorghum is likely to contract while trade in oats and rye is likely to stay subdued. Among the world's leading maize exporters, the biggest year-on-year rise in exports is forecast for Brazil, more than offsetting an equally significant fall in shipments by the United States. Large export supplies in South America have, in fact, contributed not only to weaker prices but, even more importantly, to lower price volatility so far this season.

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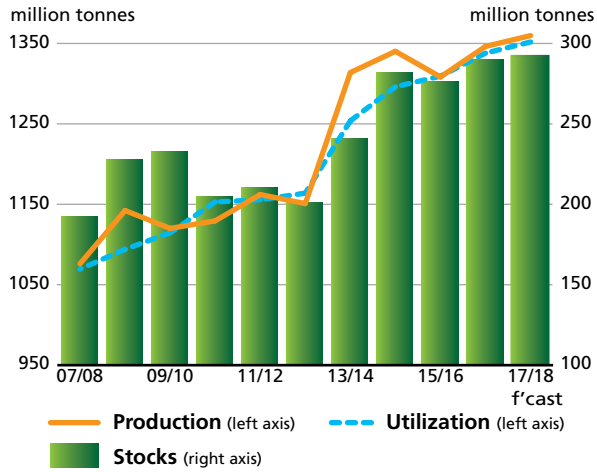
COARSE GRAIN PRODUCTION, UTILIZATION AND STOCKS



WORLD COARSE GRAIN MARKET AT A GLANCE

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes			%
WORLD BALANCE				
Production	**1 308.3**	**1 346.3**	**1 359.7**	**1.0**
Trade[1]	**184.7**	**181.9**	**183.7**	**1.0**
Total utilization	**1 309.3**	**1 338.0**	**1 351.8**	**1.0**
Food	200.7	204.5	207.5	1.5
Feed	734.6	750.6	753.0	0.3
Other uses	374.0	382.9	391.3	2.2
Ending stocks[2]	**275.9**	**289.1**	**291.3**	**0.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	27.2	27.4	27.5	0.4
LIFDC (kg/yr)	37.8	38.3	38.4	0.3
World stock-to-use ratio (%)	*20.6*	*21.4*	*20.9*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*11.9*	*13.7*	*14.8*	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Oct*	**Change: Jan-Oct 2017 over Jan-Oct 2016 %**
	161	151	147	-3.1

[1] Trade refers to exports based on a common July/June marketing season.
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

RICE

Global production prospects were marred by a series of climatic setbacks affecting main-crops in the Northern Hemisphere during the critical summer months. Although strong production incentives in Asia and Africa permitted plantings to remain largely unaffected, the weather disruptions are now anticipated to limit world rice production growth in 2017, keeping output marginally below the 2016 record outcome of 501 million tonnes (milled basis).

International trade in rice is forecast to expand by 1 percent in 2018 to reach 45.4 million tonnes, underpinned by larger Asian purchases, namely by Indonesia, the Philippines and Saudi Arabia. Import demand is forecast to be less lively elsewhere, limited by larger local availabilities and higher international prices. Among exporters, India and Thailand are expected to retain their positions as the top global rice suppliers, although tighter availabilities could undermine their ability to compete. Sales by China, Myanmar and Viet Nam are predicted to continue progressing in 2018.

World rice utilization is forecast to reach around 503 million tonnes in 2017/18, up 1.1 percent from 2016/17. Food use is expected to account for all of this expansion, permitting a modest increase in global per capita consumption to 53.8 kg.

Despite expectations of stagnating output this season, global rice supplies are still predicted to exceed utilization, enabling a small (0.4 percent) expansion in world rice inventories at the close of the 2017/18 marketing years to 169.2 million tonnes. Continued accumulations in China are anticipated to sustain this increase, while drawdowns in Thailand and the United States could drive a 9 percent contraction in the stocks of the major exporting countries to a ten-year low.

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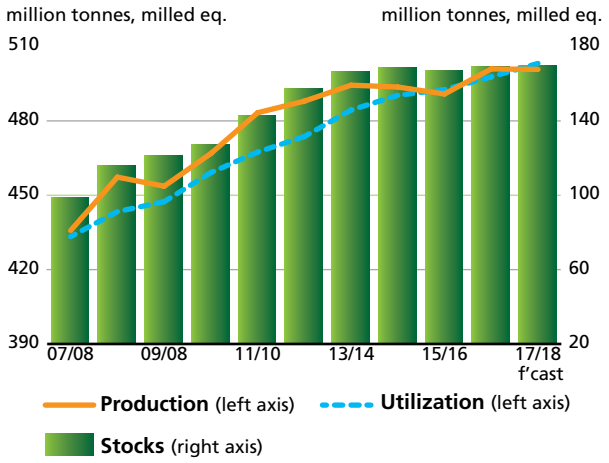
RICE PRODUCTION, UTILIZATION AND STOCKS



WORLD RICE MARKET AT A GLANCE

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes, milled equivalent			*%*
WORLD BALANCE				
Production	**490.9**	**501.0**	**500.8**	**0.0**
Trade [1]	**41.5**	**45.0**	**45.4**	**1.0**
Total utilization	**492.6**	**497.8**	**503.2**	**1.1**
Food	395.8	400.9	406.6	1.4
Ending stocks[2]	**166.5**	**168.5**	**169.2**	**0.4**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	53.6	53.7	53.8	0.2
LIFDC (kg/yr)	55.1	55.1	55.2	0.2
World stock-to-use ratio (%)	*33.4*	*33.5*	*33.1*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*19.3*	*18.5*	*16.9*	

FAO RICE PRICE INDEX (2002-2004=100)	2015	2016	2017 *Jan-Oct*	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	211	194	204	4.5

[1] Calendar year exports (second year shown).
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

CASSAVA

After two decades of uninterrupted growth, world cassava production is forecast to undergo a slight contraction in 2017. A combination of policy changes, depressed root prices and adverse weather in the major producing countries is thought to have been responsible for lowering plantings in 2017 resulting in a decline in production.

The volume of world trade in cassava in 2017 is expected to remain stable, matching the positive outcomes of the two preceding years. International flows of cassava, primarily confined to East and Southeast Asia, are very much contingent on industrial and feed demand, particularly from China, the world's leading cassava importer, and on the competitiveness of supplies in Thailand, the world's leading exporter. However, a downturn in China's maize supply prospects, the domestic substitute for imported cassava, has paved the way for sustained cassava deliveries to the country. The revival in cassava demand has given support to international product quotations, which had fallen to multi-year lows in the past 12 months.

The current positive trade prospects may only provide a temporary stimulus to cassava sectors in the region. A bumper maize crop in China in the following season would pose a significant threat to cassava demand as would a more active policy of de-stocking maize in the country.

The potential for cassava to compete in markets beyond China is also uncertain, given that international maize prices are currently hovering at relatively very low levels. While cassava root prices in Southeast Asia have firmed in recent months, the outlook for next year and beyond will much depend on whether producers would be willing to accept the risks of a possible strong decline in cassava demand in China. Already some indication is provided by way of a recent official survey in Thailand, which points to 9 percent drop in cassava area in 2018.

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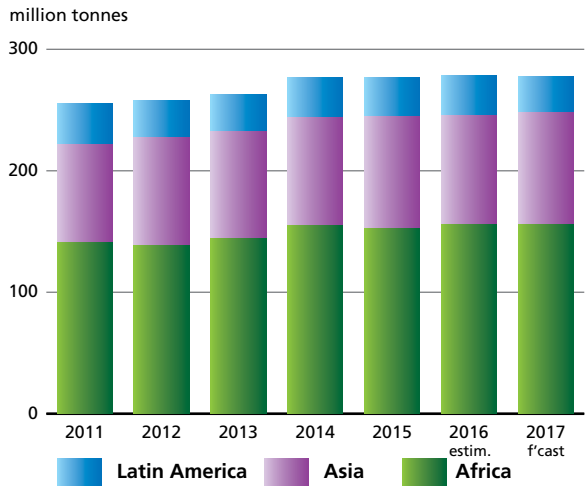
WORLD PRODUCTION OF CASSAVA



WORLD CASSAVA MARKET AT A GLANCE

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017
	million tonnes, fresh root eq.			%
WORLD BALANCE				
Production	**277.0**	**278.8**	**278.0**	**-0.3**
Trade	**44.1**	**43.5**	**43.7**	**0.4**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	20.4	20.3	20.0	-1.3
Developing (kg/year)	33.4	33.1	32.5	-1.7
LDC (kg/year)	66.1	67.6	68.1	0.8
Sub-Saharan Africa (kg/year)	108.8	107.6	105.1	-2.3
Trade share of prod. (%)	15.9	15.6	15.7	0.7

CASSAVA PRICES [1] (USD/tonne)	**2015**	**2016**	**2017 *Jan-Oct***	**Change: Jan-Oct 2017 over Jan-Oct 2016**
Chips to China (f.o.b. Bangkok)	212.2	176.8	165.3	-6.8
Starch (f.o.b. Bangkok)	421.0	350.9	328.1	-8.1
Thai domestic root prices (20-25% starch content)	68.1	49.8	48.9	-2.5

[1] Source: Thai Tapioca Trade Association

OILCROPS

The 2016/17 season saw an easing in the global oilseeds and oilmeal supply and demand situation, while vegetable oil fundamentals remained relatively tight. Accordingly, during the recently ended October/September marketing year, international prices for oilseeds and oilmeals remained subdued, while those of oils/fats maintained their strength.

Preliminary forecasts for 2017/18 point to a broadly balanced global supply and demand situation, in both the oilseed and meal markets as well as in the oils/fats segment. Global oilseed production is forecast to match last season's record level, with small year-on-year contractions in soybean and sunflowerseed compensated by improvements in other oilcrops. While the global area of the seven major oilseeds is anticipated to expand further, average yields are expected to retreat to trend levels, following last season's unparalleled highs. For soybeans, individual countries' prospects are mixed, with year-on-year gains concentrated in the Northern Hemisphere, notably the United States, China and Canada, while, in South America, possible drops are looming in Brazil and Argentina.

World oils/fats production is forecast to expand moderately in 2017/18. Growth would be led by palm oil, with production in Southeast Asia reverting to average growth, after the last two seasons' El Niño-related swings. Global oils/fats utilization could grow less than last season, assuming moderate income growth in a number of countries and only limited expansion in demand from the biodiesel sector. International meal output, on the other hand, is forecast to remain flat, given the anticipated drop in soybean production. Based on current forecasts, global supplies of both meals and oils/fats would be adequate to meet global demand, thus allowing end-of-season stocks to remain at comfortable levels. World trade in oils/fats and meals/cakes is anticipated to keep expanding in 2017/18, albeit at a somewhat reduced pace compared with the previous season.

In the coming months, international prices of oilseeds, oils and meals will be influenced by changes in the production forecasts for soybeans in South America and palm oil in Southeast Asia. Uncertainties remain regarding the actual course of global oil and meal demand, including, in the case of oils/fats, the impact of recent policy changes concerning the biodiesel market.

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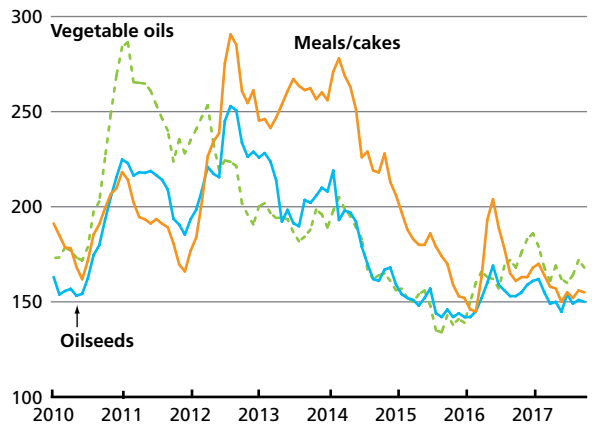
FAO MONTHLY INTERNATIONAL PRICE INDICES FOR OILSEEDS, VEGETABLE OILS AND MEALS/CAKES (2002-2004=100)



WORLD OILCROP AND PRODUCT MARKET AT A GLANCE

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes			%
TOTAL OILCROPS				
Production	534.8	582.6	585.7	0.5
OILS AND FATS				
Production	206.1	223.3	226.5	1.4
Supply	244.9	257.7	263.5	2.2
Utilization	212.1	219.8	226.0	2.8
Trade	115.1	122.8	125.3	2.1
Global stock-to-use ratio (%)	*16.2*	*16.8*	*16.6*	
Major exporters stock-to-disappearance ratio (%)	*10.0*	*10.5*	*10.8*	
MEALS AND CAKES				
Production	137.8	151.5	150.8	-0.4
Supply	163.9	176.6	179.2	1.5
Utilization	139.2	145.6	150.4	3.3
Trade	90.3	96.2	99.0	2.9
Global stock-to-use ratio (%)	*25.1*	*28.3*	*28.6*	
Major exporters stock-to-disappearance ratio (%)	*11.1*	*13.0*	*12.1*	
FAO PRICE INDICES (Jan-Dec) (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Sep*	**Change: Jan-Sep 2017 over Jan-Sep 2016 %**
Oilseeds	149	154	153	-0.2
Meals/cakes	179	169	159	-6.9
Vegetable oils	147	164	169	5.7

NOTE: Refer to footnote 1 on page 40 and to table 2 on page 42 for explanations regarding definitions and coverage.

MEAT AND MEAT PRODUCTS

After stagnating in 2016, world meat production is forecast to recover in 2017, increasing by 1.1 percent, or 3.5 million tonnes, to 324.8 million tonnes, amid moderate increases in bovine, pig and poultry meats and a modest gain in ovine meat. Much of the global meat output expansion is forecast to originate in the United States, Brazil, the Russian Federation, Mexico and India, but also in Argentina, Turkey and Thailand. After two years of downsizing associated with an on-going process of farm restructuration and consolidation, meat production in China, the world's largest meat producer, is expected to remain stable around the 2016 level, as expansions in ovine, pig and bovine meats are anticipated to compensate for a marked decline in poultry meat, constrained mainly by the spread of the highly pathogenic avian influenza (HPAI).

World trade in meat is forecast to reach 31.5 million tonnes in 2017, 1.2 percent above last year, but the growth is slower than the 4.4 percent registered in 2016. World trade in bovine meat is expected to record the fastest expansion, followed by poultry, while pigmeat and ovine meat trade may fall somewhat. On the demand side, Japan, Angola, Cuba and Mexico, as well as the Republic of Korea, Iraq, Chile, the United Arab Emirates and Viet Nam are all expected to step up imports. By contrast, meat imports by China, the EU, Egypt, Saudi Arabia, South Africa and Canada may decline, in some cases a reflection of larger domestic supplies and, in others, of falling demand in the wake of relatively high international prices. Among exporters, the United States, Thailand, India, Argentina, Ukraine and Brazil are all anticipated to step up meat exports in 2017, while the EU, Australia, New Zealand, Paraguay and Chile may see theirs fall. The spread of the HPAI is expected to affect the direction and pace of poultry meat production and trade across different regions.

International prices of all meat categories firmed moderately over the first half of the year but levelled off in recent months due to intensified competition and sluggish import demand. Across the various meat categories, the ovine meat prices gained as much as 39 percent, while bovine, poultry and pigmeat prices individually increased by nearly 7 percent. The FAO Meat Price Index gained 9 percent, or 14 points, between January and October 2017, mainly reflecting the price movements of bovine, pig and poultry meats, which have larger weights in the index.

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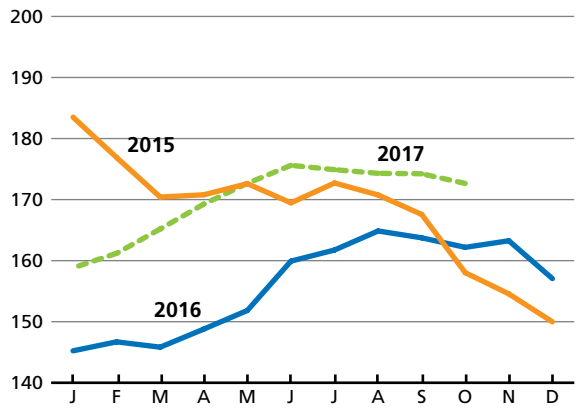
FAO INTERNATIONAL MEAT PRICE INDEX (2002-2004 = 100)



WORLD MEAT MARKET AT A GLANCE

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017 over 2016
	million tonnes			%
WORLD BALANCE				
Production	**320.5**	**321.3**	**324.8**	**1.1**
Bovine meat	67.6	68.3	69.5	1.7
Poultry meat	116.9	117.2	118.2	0.9
Pigmeat	116.1	115.8	117.0	1.0
Ovine meat	14.4	14.4	14.5	0.6
Trade	**29.8**	**31.2**	**31.5**	**1.2**
Bovine meat	9.2	8.9	9.1	2.2
Poultry meat	12.2	12.8	13.1	2.0
Pigmeat	7.2	8.3	8.2	-0.7
Ovine meat	1.0	0.9	0.9	-0.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	43.3	43.0	42.9	-0.1
Trade - share of prod. (%)	*9.3*	*9.7*	*9.7*	*0.1*

FAO MEAT PRICE INDEX (2002-2004=100)	2015	2016	2017 *Jan-Oct*	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	168	156	170	9.3

MILK AND MILK PRODUCTS

World milk production is set to reach 833.5 million tonnes in 2017, 1.4 percent more than in 2016. Much of the anticipated rise is expected in Asia and the Americas, while the sector might stagnate in Europe and Africa and possibly face a decline in Oceania.

World trade in dairy products is forecast to increase by 1.3 percent in 2017 to 71.6 million tonnes (in milk equivalent) marking a second year of modest growth. Most of the export growth is expected to come from North America and Europe. Despite a slow growth in milk production, the EU is anticipated to account for the largest export expansion, underpinned by increased sales of cheese and skim milk powder (SMP). Likewise, greater shipments of cheese, but also of SMP, are expected to boost exports from the United States. In contrast, exports from South America, Oceania, Asia and Africa are forecast to decline in 2017, largely reflecting supply constraints.

On the demand side, Asia is anticipated to drive the expansion, with imports by the region predicted at around 41 million tonnes, 1.5 percent more than in 2016. Within Asia, China is behind much of that expected increase, with its purchases fuelled by demand for higher value-added dairy products, in particular cheese and SMP. Elsewhere, imports are forecast to rise in Algeria, Australia, the Russian Federation, Mexico, Indonesia, the Republic of Korea, Japan, Thailand and Pakistan. Conversely, imports are foreseen to decline significantly in Brazil, Saudi Arabia, Oman, the United States, the EU, the Philippines, Egypt, Malaysia, the United Arab Emirates, Cuba, Belarus and Turkey.

Among the various dairy products, world trade in cheese and SMP is expected to increase in 2017, while trade in butter and WMP may contract.

After continuously rising for nine months from May 2016, international dairy prices tapered off for a short while in early 2017, when increased deliveries by the EU and the United States eased supply concerns. However, prices strenghthened from May to September 2017, reflecting a surge in butter prices and moderate increases in cheese and whole milk powder, while skim milk powder prices remained subdued. In October, the index declined by 4 percent as importers held back purchases awaiting the emerging trend for export availabilities from Oceania.

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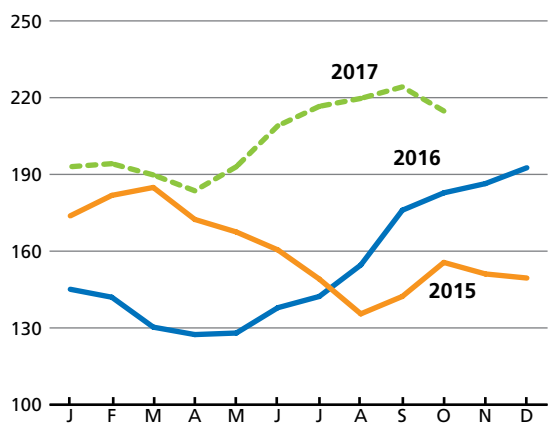
FAO INTERNATIONAL DAIRY PRICE INDEX (2002-2004 = 100)



WORLD DAIRY MARKET AT A GLANCE

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017 over 2016
	million tonnes, milk equiv.			%
WORLD BALANCE				
Total milk production	**815.4**	**821.8**	**833.5**	**1.4**
Total trade	**70.0**	**70.7**	**71.6**	**1.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	110.4	110.1	110.4	0.3
Trade - share of prod. (%)	*8.6*	*8.6*	*8.6*	*-0.1*

FAO DAIRY PRICE INDEX (2002-2004=100)	2015	2016	2017 *Jan-Oct*	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	160	154	204	39.0

FISH AND FISHERY PRODUCTS

Global production of fish and fishery products is expected to expand by 2.3 percent in 2017, a faster growth rate than last year, primarily accounted for by a recovery in catches of anchoveta in South America and by a further expansion of aquaculture production, which continues to rise at some 4–5 percent a year. The aquaculture sector is estimated to be the world's primary source of fish for all purposes within 5 years.

Despite higher production in 2017, the additional demand generated by improving economic conditions globally has lifted seafood prices. The FAO Fish Price Index was 10 points higher in August, the most recent available month, with all commodity groups higher than the same month in 2016. Together with higher traded volumes, this is expected to translate into an 8 percent increase in the value of world exports in US dollar terms for the year, with higher export revenues for many producing countries.

Recent OECD-FAO projections show accelerating world gross domestic product (GDP) growth in 2017 and 2018 after years of sluggish economic performance globally, which represents a positive development for the seafood sector. Although the large established markets of the United States of America, the EU and Japan still account for a substantial proportion of seafood imports, it is demand growth in Asia, and particularly China, that will be the most important single factor in shaping the global seafood market for the foreseeable future.

There are two important events for the seafood sector taking place in late 2017, both focused on key topics relating to Sustainable Development Goal (SDG) 14: Life Below Water. The first is the 11th World Trade Organization (WTO) Ministerial taking place in Buenos Aires on 17 December, where it is hoped progress will be made towards addressing the need to limit harmful fisheries. The second is the VI edition of the CONXEMAR-FAO World Congress that was hosted in Vigo, Spain on 2 October, where participants discussed climate change and how to mitigate its negative effects on our oceans.

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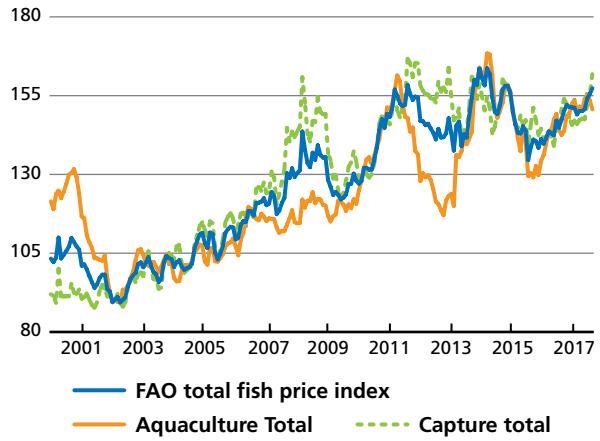
FAO FISH PRICE INDEX (2002-2004 = 100)



Source: Norwegian Seafood Council (NSC)

WORLD FISH MARKET AT A GLANCE

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017 over 2016
	million tonnes			%
WORLD BALANCE				
Production	**169.2**	**170.1**	**174.0**	**2.3**
Capture fisheries	92.6	90.1	90.4	0.3
Aquaculture	76.6	80.0	83.6	4.5
Trade value (exports USD billion)	**133.2**	**142.4**	**153.5**	**7.8**
Trade volume (live weight)	**59.6**	**60.3**	**60.7**	**0.6**
Total utilization	**169.2**	**170.1**	**174.0**	**2.3**
Food	148.8	150.6	153.3	1.8
Feed	15.1	14.3	15.6	8.7
Other uses	5.2	5.1	5.1	-0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	20.2	20.2	20.3	0.7
From capture fisheries (kg/year)	9.8	9.5	9.2	-2.4
From aquaculture (kg/year)	10.4	10.7	11.1	3.3

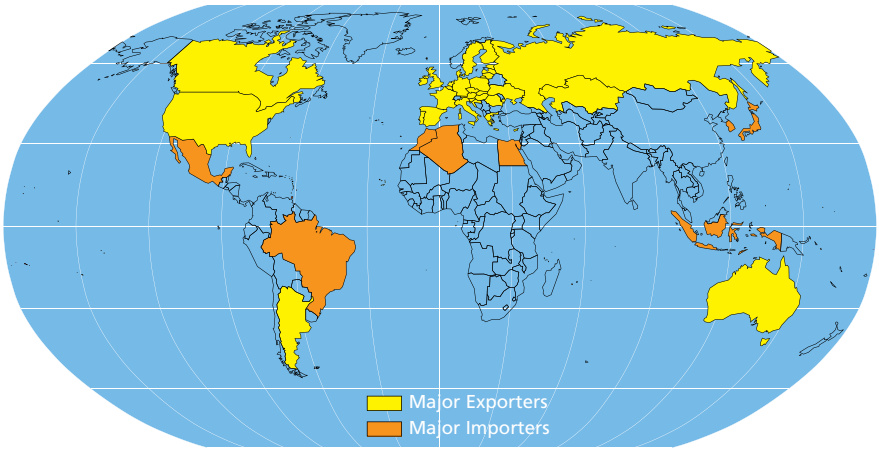
FAO FISH PRICE INDEX (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Aug*	**Change: Jan-Aug 2017 over Jan-Aug 2016 %**
	142	146	152	5.9

Source: Norwegian Seafood Council (NSC)
Totals may not add up due to rounding

MARKET ASSESSMENTS

WHEAT

Major Wheat Exporters and Importers



PRICES

International prices have decreased but still above last year

Worries over unfavourable weather affecting crops in Canada and the United States, combined with uncertainty about production prospects in several other major producing countries, resulted in firmer prices during the closing months of the 2016/17 marketing season. However, wheat quotations fell steadily from the beginning of the 2017/18 marketing season on indication of better than anticipated harvests, especially in the EU and the Russian Federation. As the season progressed, weather concerns affecting growing conditions in Argentina and Australia as well as winter wheat plantings in the Northern Hemisphere, combined with storm-induced disruptions at US Gulf ports, provided occasional support to prices. However, in October, the benchmark **US wheat (No.2 Hard Red Winter), f.o.b. Gulf** averaged USD 214 per tonne, down 10 percent from the beginning of the season in July, but still nearly 11 percent above October 2016. In fact, since the beginning of the season, the United States' wheat export quotations have remained above

Figure 1. IGC Wheat Price Index

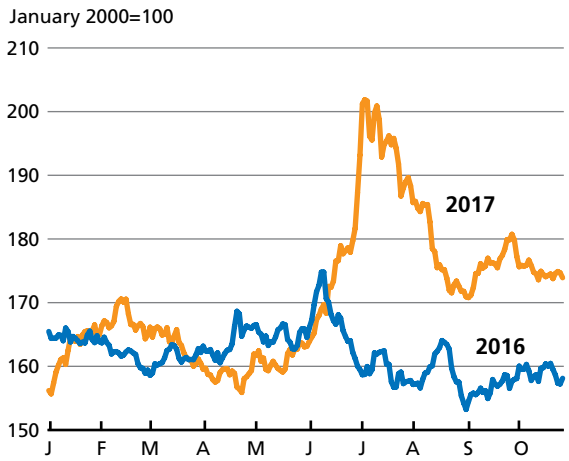
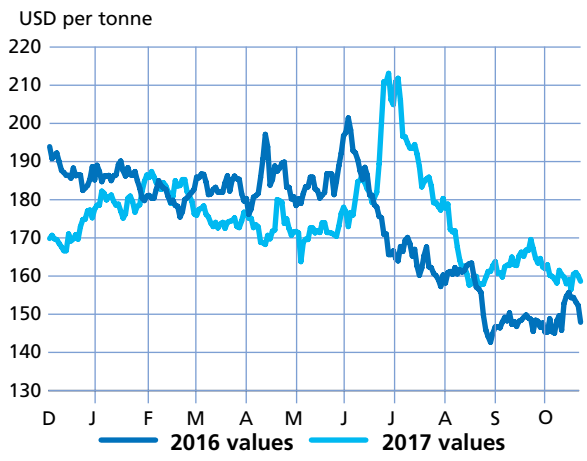


Figure 2. CBOT wheat futures for December



last year's levels. This is primarily because of tighter supplies of high quality wheat in the face of rising world demand, as illustrated in Box 1. Wheat futures have followed a similar movement since the beginning of the current season. In October, the **Chicago Board of Trade (CBOT)** quotation for December delivery averaged USD161 per tonne, up 7 percent from October 2016. More detailed analysis of the futures markets can be found in Box 1 as well as in the *Market Indicators* section of this report.

PRODUCTION

Wheat production down slightly from last year

FAO's current forecast for world wheat production in 2017 stands at 752.8 million tonnes, which is 7.4 million tonnes, or 1.0 percent, below the previous year's level. Most of the decrease this year is associated with significant production cuts expected in Australia and the United States. However, the global output is still forecast to be the second highest on record.

In the **United States**, wheat production in 2017 is forecast to decrease by 25 percent to 47.4 million tonnes. The decline is principally due to a significant cut in the winter-wheat-planted area and a return to trend yields from last year's above-average highs. Similarly, the spring and durum outputs are also forecast to fall due to unfavourable weather, although the impact of dryness was not as serious as first expected, prompting slight upward production revisions in recent months. **Canada** is forecast to harvest a reduced crop of 27.1 million tonnes, about 15 percent down from 2016, with a reduction in both plantings and yields contributing to the contraction.

In *Europe*, harvesting of the 2017 wheat crop is nearly complete. Production in the **EU** is forecast to increase by 4 percent to 150 million tonnes in 2017. Much of this increase rests on an improved output in **France**, while an upturn in overall yields also supported the year-on-year production gain. Moreover, the generally favourable weather improved overall wheat quality compared to 2016, although rains at harvest time in Germany and Poland adversely affected crop quality in these countries. In the **Russian Federation**, improved weather conditions over the course of the season led to several upward revisions of the production forecast. With the harvest expected to be complete by mid-November, the output is forecast at a record high of 83.6 million tonnes, up 10 million tonnes from 2016. In **Ukraine**, higher yields are expected to have fostered a 2 percent increase in wheat production, estimated at 26.6 million tonnes, with the bulk of the crop already harvested in spring. In **Kazakhstan**, where the bulk of this year's crop has already been gathered, our latest estimates

Table 1. World wheat market at a glance

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes			%
WORLD BALANCE				
Production	**733.9**	**760.2**	**752.8**	**-1.0**
Trade[1]	**166.7**	**177.4**	**175.2**	**-1.2**
Total utilization	**710.9**	**732.8**	**738.2**	**0.7**
Food	491.8	497.7	503.1	1.1
Feed	134.4	136.3	137.8	1.1
Other uses	84.7	98.8	97.3	-1.5
Ending stocks[2]	**222.4**	**245.2**	**258.2**	**5.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	66.6	66.7	66.6	-0.1
LIFDC (kg/yr)	52.9	52.9	52.9	0.0
World stock-to-use ratio (%)	*30.4*	*33.2*	*34.4*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*16.1*	*18.7*	*17.4*	

FAO WHEAT PRICE INDEX[4] **(2002-2004=100)**	**2015**	**2016**	**2017** *Jan-Oct*	**Change: Jan-Oct 2017 over Jan-Oct 2016 %**
	144	125	133	5.8

[1] Trade refers to exports based on a common July/June marketing season.
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.
[4] Derived from the International Grains Council (IGC) wheat index.

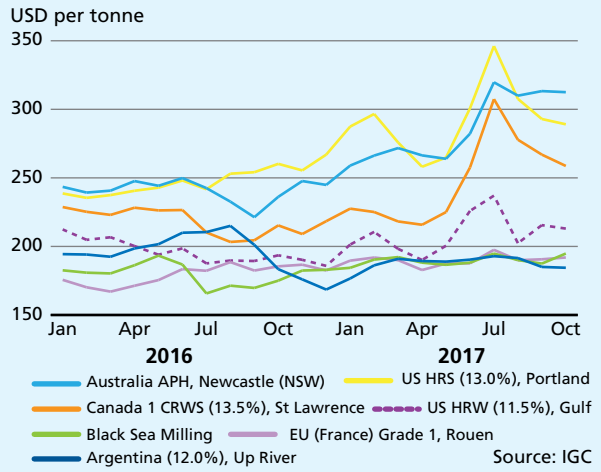
Table 2. Wheat production: leading producers*

	2015	2016 *estim.*	2017 *f"cast*	Change: 2017 over 2016
	million tonnes			%
European Union	160.5	144.5	150.0	3.8
China (Mainland)	130.2	128.9	130.2	1.0
India	86.5	92.3	98.4	6.6
Russian Federation	61.8	73.3	83.6	14.1
United States	56.1	62.8	47.4	-24.6
Canada	27.6	31.7	27.1	-14.5
Ukraine	26.5	26.0	26.6	2.0
Pakistan	25.1	25.5	26.0	2.0
Turkey	22.6	20.6	21.8	5.8
Australia	22.3	35.0	21.6	-38.3
Argentina	11.3	18.4	19.0	3.3
Kazakhstan	13.7	15.0	13.9	-7.5
Iran Islamic Rep. of	11.5	13.5	13.5	0.0
Egypt	9.0	9.0	8.8	-2.2
Other countries	69.1	63.7	65.0	2.0
World	**733.9**	**760.2**	**752.8**	**-1.0**

* Countries listed according to their position in global production (average 2015-2017)

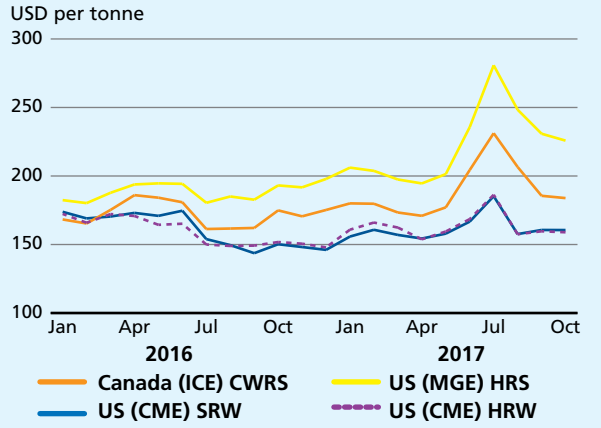
BOX 1: High quality wheat commands high premium

Export prices of high quality wheat



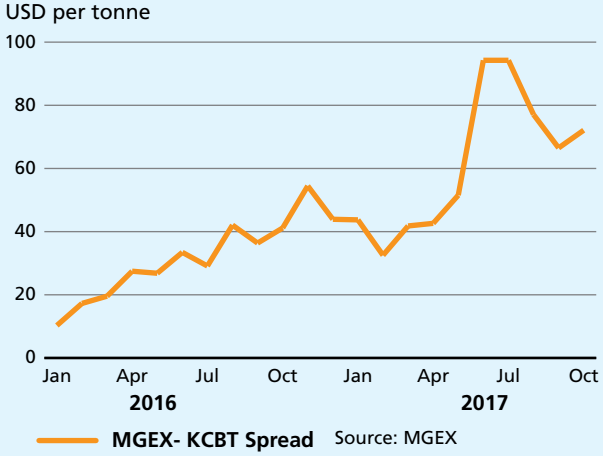
Source: IGC

Wheat futures



Source: IGC

Wheat spreads



Source: MGEX

High quality wheat, containing protein levels between 13 and 15 percent, is essential for making specialty breads and most varieties of pasta. Price volatility for this type of wheat surged this summer, as shifts in the weather outlook between dry and rainy forecasts caused wheat prices to move up and down. In particular, droughts have diminished high-quality wheat crops in key producing countries, namely the United States, Canada and Australia, sending prices to multi-year highs and bread makers scrambling for supplies.

The United States Hard Red Spring (HRS) wheat export prices jumped in July to USD 346, from USD 300 per tonne one month before and USD 241.7 per tonne in July 2016. Canada Western Red Spring (CWRS) wheat export prices followed the same trend, reaching USD 305 per tonne in July from USD 255.6 per tonne in the previous month. In July 2016, CWRS wheat prices stood at USD 208 per tonne. Australian Prime Hard (APH) wheat export prices increased from USD 282 in June to USD 319.7 in July.

Because of their lower protein content and "softer" quality, European, Argentinian and Russian wheats sell at a lower price than the US, Canadian and Australian origins.

As wheat prices gained ground over the Northern Hemisphere's summer period, wheat futures followed the same trend. Poor crop conditions drove prices for high quality spring wheat (HRS) in July to four-year highs on the Minneapolis Grain Exchange (MGEX) market. The HRS wheat futures soared over 50 percent, from USD 182 per tonne in January 2016 to a peak of USD 280.8 per tonne in July 2017, falling back to USD 226.4 in October 2017, as weather conditions improved and the spring wheat production estimate was revised upward.

Nearby September futures traded at a rare premium to deferred December for most of June and early July, with the nearby contract peaking on July 3 at a premium of more than USD 12 per tonne. The CWRS wheat futures on the Intercontinental Exchange (ICE) jumped from USD 177 in May 2017 to USD 231 in July 2017, then fell as the spring wheat harvest was projected larger than expected.

Unfavourable weather conditions and uncertainty about wheat yields during the summer sharply increased the spread between HRS wheat futures sold on the MGEX and the Hard Red Winter (HRW) wheat futures sold on the Kansas City Board of Trade (KCBT). In June and July 2017, the MGEX-KCBT spread was at USD 94 per tonne, respectively USD 61 and USD 65 more than the June 2016 and July 2016 periods. The spread recently narrowed, though continued showing a higher than average HRS premium over HRW wheat, amounting to USD 72.11 per tonne in October 2017.

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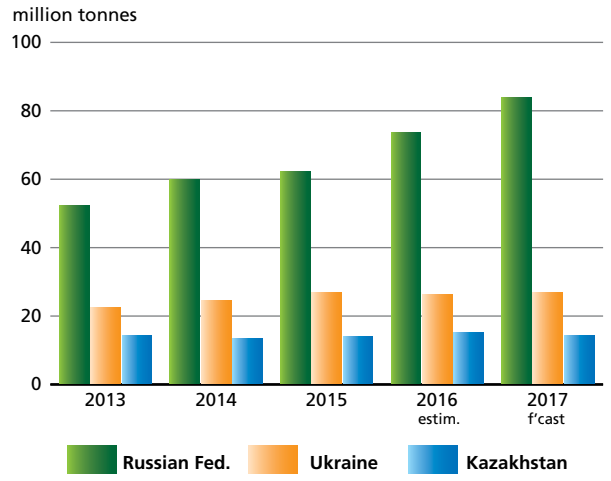
Figure 3 . Wheat production in major CIS producers



put the wheat production at around 14 million tonnes, down 7.5 percent from the previous year.

In *Asia*, with most of the crop harvested, a small increase in the regional output is forecast in 2017. Most of the increase concerns **India**, where a rise in the Government's procurement price and beneficial weather instigated a significant expansion in plantings. As a result, the country's 2017 wheat output is estimated at 98.4 million tonnes, 6.6 percent higher than the previous year. In **Pakistan**, a moderate production increase is foreseen, with output reaching 26 million tonnes this year, reflecting generally good weather and an expanded use of fertilizer that helped to boost yields and more than compensate for a contraction in sowings. In **China**, the world's largest wheat grower, production is forecast to increase by 1 percent to 130 million tonnes, putting it at a similar level to that of 2015.

In the *Near East*, wheat production in **Turkey** is forecast to rise by 6 percent to 21.8 million tonnes on account of well distributed rains, while production in the **Islamic Republic of Iran** is anticipated to remain almost unchanged relative to last year's output. On-going conflicts continue to constrain agricultural production in **Afghanistan**, **Iraq** and the **Syrian Arab Republic**. As a result, wheat output levels in all three countries are expected to remain below average, although favourable weather in Syria helped support a moderate yearly increase.

In *North Africa*, above-average and well distributed rains in **Morocco** resulted in a sharp recovery in wheat production in 2017, estimated at 7.1 million tonnes, more than double the 2016 output, which was adversely affected by dry weather. Similarly, **Algeria** registered a yearly production gain, mostly reflecting a larger harvested area.

In the *Southern Hemisphere*, the production outlook for **Australia** indicates a decline in the 2017 output, following the previous year's exceptionally high level. Preliminary forecasts put the 2017 output at 21.6 million tonnes, 38 percent down on a yearly basis. Dryness during the winter months is the main factor behind this year's drop, with yields expected at below-average levels, although a smaller harvested area is also expected to contribute to the decline.

In *South America*, the aggregate 2017 wheat production is forecast to fall by 6 percent. Most of this decline pertains to an expected 18 percent reduction in **Brazil's** wheat output, forecast at 5.5 million tonnes. Containing a larger decline at the regional level, **Argentina's** output is forecast at a well above average level of 19 million tonnes, resting on a price-driven expansion in sowings that more than offset a small decrease in yields.

Looking ahead, planting of the 2018 wheat crop is underway across northern hemisphere countries. In the **United States**, drier weather in some key growing states had slowed the pace of sowings compared with the previous year. Plantings are expected to continue until the end of November. In the **EU**, preliminary indications suggest that wheat sowings could rise in 2018, as earlier expectations of an area expansion for alternative oilseed crops dissipated due to unfavourable weather during the planting period, which comes before winter wheat sowings. In the **Russian Federation** and **Ukraine**, recent beneficial rains helped to replenish soil moisture and supported a quickening of winter wheat plantings, with sowing progress up compared to the previous year.

TRADE

Wheat trade to remain below the 2016/17 record level

FAO's forecast for world trade (including wheat flour in wheat equivalent) in 2017/18 (July/June) has been raised by 500 000 tonnes since October to 175.2 million tonnes, which is still down 2 million tonnes, or 1.2 percent, from the all-time high of 177.4 million tonnes in 2016/17. The latest upward revision reflects small adjustments to the projected imports by **Nigeria** and **Mexico**.

The forecast small contraction in world trade in 2017/18 is largely driven by expected lower imports by Asia, more than offsetting higher imports anticipated in Europe and North America.

In *Asia*, total wheat imports in 2017/18 are forecast at 88.7 million tonnes, down 2.3 million tonnes, or 2.5 percent, from 2016/17 with the bulk of the decrease expected in China and India. Wheat imports by **China** are currently forecast to reach 3.2 million tonnes, some

Table 3. Top 10 wheat importers*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
Egypt	11.6	12.0	0.4
Indonesia	9.0	9.7	0.7
Algeria	8.2	8.2	0.0
Brazil	6.5	7.5	1.0
Japan	5.8	6.4	0.5
Bangladesh	4.6	6.0	1.4
Viet Nam	3.6	5.7	2.1
Philippines	5.1	5.5	0.4
Turkey	4.9	5.3	0.4
European Union	5.7	5.3	-0.4

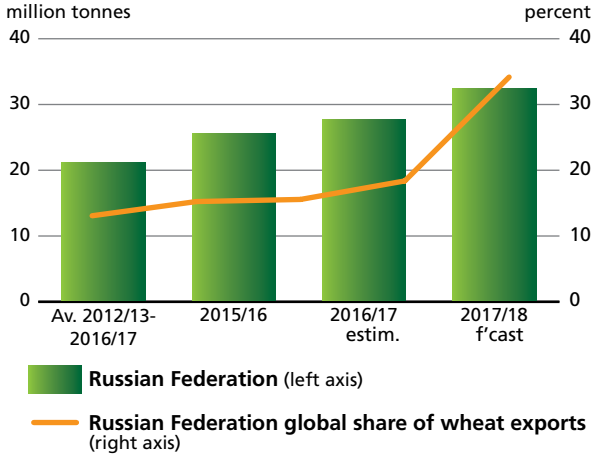
* Imports are based on a common July/June marketing season

Table 4. Top 10 wheat exporters*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
Russian Federation	25.0	32.2	7.2
European Union	31.3	28.4	-2.9
United States	24.6	26.3	1.7
Canada	22.4	21.0	-1.4
Australia	18.2	18.2	0.0
Ukraine	15.6	16.5	0.9
Argentina	8.2	12.0	3.8
Kazakhstan	6.8	7.3	0.5
Turkey	4.2	4.0	-0.2
Mexico	1.2	1.2	0.0

* Exports are based on a common July/June marketing season

Figure 4. Wheat exports from the Russian Federation



1 million tonnes less than in 2016/17. Large domestic supplies, especially following this year's record harvest, are the reason for the lower projected wheat purchases by China from abroad. Similarly, wheat imports by **India** are seen to decline by 2 million tonnes in 2017/18, to 4 million tonnes, in view of this year's bumper harvest. Wheat purchases by **Thailand** are also forecast to decrease, by some 800 000 tonnes to 3 million tonnes, with the main reason being the Government's decision to restrict imports of feed wheat, effective since the beginning of this year. By contrast, several countries in Asia are likely to import more wheat in 2017/18, in particular the **Syrian Arab Republic,** where the ongoing conflict has greatly increased the country's reliance on imports, despite some increase in this year's domestic production level.

In *Africa*, aggregate wheat imports in 2017/18 are projected at around 49 million tonnes, slightly lower than the 2017/18 record level. Imports by **Egypt**, the world's largest wheat importer, are forecast at 12 million tonnes, some 400 000 tones above the 2016/17 estimated level. The small drop in this year's production, increasing demand and high domestic prices are among the main factors behind the anticipated high level of imports by Egypt. As of October, foreign wheat deliveries with a moisture level of up to 13.5 percent will be allowed for a nine-month period; previously, the permissible moisture level was set at 13 percent. However, as in 2016/17, uncertainties remain as to the eventual size of Egypt's import purchases, due to the changing policies. Higher wheat imports are also forecast for **South Africa**, primarily because of the decline in domestic production but also because of strong demand which induced the Government to lower the import tariff by 60 percent as of early October. The new tariff is the lowest since February 2015. By contrast, wheat imports by **Morocco** are set to decrease by 1 million tonnes, or 18 percent, to 4.5 million tonnes, as a result of a recovery in domestic production this year.

In *Latin America and the Caribbean*, imports in 2017/18 are forecast to change little in most countries. Smaller purchases are anticipated for Bolivia and Brazil. Higher domestic wheat production is seen to result in a nearly 44 percent drop in wheat imports by **Bolivia**, to 360 000 tonnes. In **Brazil**, large domestic supplies, due to high carryover stocks from the previous season, could result in imports declining by 260 000 tonnes to stand at 7.5 million tonnes. By contrast, wheat imports by **Mexico** are anticipated to exceed the previous season's level by 300 000 tonnes to reach 5.3 million tonnes. Lower production and strong demand are the main factors behind this anticipated increase.

In *Europe*, aggregate wheat imports in 2017/18 are forecast to reach 7.7 million tonnes, up 460 000 tonnes from the 2016/17 estimate, with most of the increase in the EU. Total wheat imports by the **EU** are forecast at 5.3 million tonnes, slightly higher than in 2016/17, despite this year's sharp recovery in production. Strong demand for durum wheat is the main reason behind the expectation for higher imports.

In *North America*, tight domestic supplies of premium wheat in the **United States** are likely to drive up imports to 4.1 million tonnes, 800 000 tonnes more than in 2016/17 and the highest level since 2013/14.

Regarding exports, overall supplies of wheat in 2017/18 should be more than adequate to meet the global import demand. Aggregate wheat exports by the major exporting countries[3] in 2017/18 (July/June) are forecast to amount to just under 162 million tonnes, some 1.5 million tonnes less than in 2016/17.

Among the major exporters, competition for markets is expected to remain stiff, as has been the case over the past few seasons. Large supplies from the Black Sea region, in particular from the **Russian Federation** following this year's bumper crop, are expected to further intensify this competition for market shares. Wheat shipments from the Russian Federation are forecast to increase to at least 32 million tonnes, 17 percent above the 2016/17 level and an all-time high, which places the country as the world's largest wheat exporter. The increase in exports from the Russian Federation will more than offset reduced sales by **Ukraine** and **Kazakhstan**, the other two regional players.

Exports from the **EU** are also set to increase, by around 9 percent to just over 28 million tonnes. This year's strong recovery in production and more favourable exchange rate are seen to boost sales from the EU, although the overall shipments would remain well below the record 34 million tonnes attained in 2014/15. While **Canada** is seen to export 21 million tonnes of wheat, slightly more than last season, wheat sales by **Argentina** are pegged at 12 million tonnes, nearly unchanged from the previous year's high level. By contrast, shipments from the **United States** are forecast to fall, by almost 11 percent, to around 26 million tonnes. Reduced domestic production and a stronger US dollar are expected to weigh on sales by the United States this season, although demand for the United States' high protein wheat is expected to continue unabated (see Box 2).

[3] Major exporters of wheat include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.

UTILIZATION

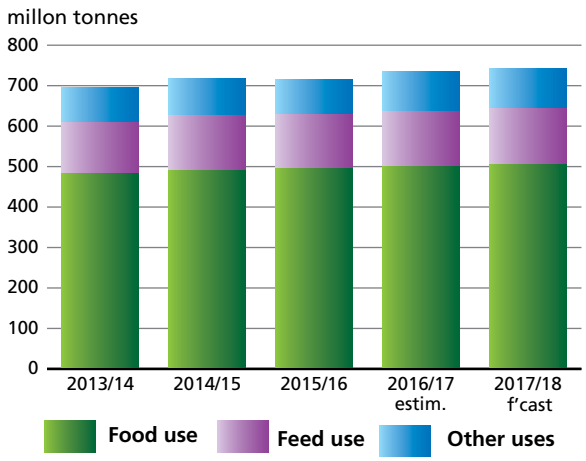
Wheat utilization to increase for the second consecutive season

At the current forecast level of just over 738 million tonnes, world wheat utilization in 2017/18 stands at some 5 million tonnes, or 0.7 percent, above the previous season's record high level. After a contraction in 2015/16, wheat utilization rebounded in 2016/17, helped by improved global supplies and lower international prices. With projected supplies in 2017/18 exceeding the previous season's level, total wheat utilization is set to rise further, albeit at a slower pace because of firmer prices so far this season compared to last year.

The main use of wheat is for **direct human food consumption**, which represents over 70 percent of its total utilization. Food use of wheat in 2017/18 is forecast at 503 million tonnes, around 1.1 percent, or 5.4 million tonnes, higher than in the previous season. The projected increase contributes to a relatively stable average per capita consumption level at the global level, which is expected to remain at around 67 kg. Variations at country levels are expected to follow their long-term trends in most cases, although in some countries, they could be affected by domestic price developments. In Egypt, for example, due to elevated food inflation, per capita wheat consumption is likely to decrease slightly, to 184.5 kg, which is still among the world's highest.

Total **feed use** of wheat, forecast at nearly 138 million tonnes, is also seen higher than in 2016/17 by around 1 percent. The anticipated small increase is largely concentrated in the EU and the Russian Federation, where ample wheat supplies are seen to further boost the usage

Figure 5. Global wheat utilization



of wheat for animal feed, more than offsetting anticipated reductions in Canada and the United States, where supplies are expected to be reduced because of lower production.

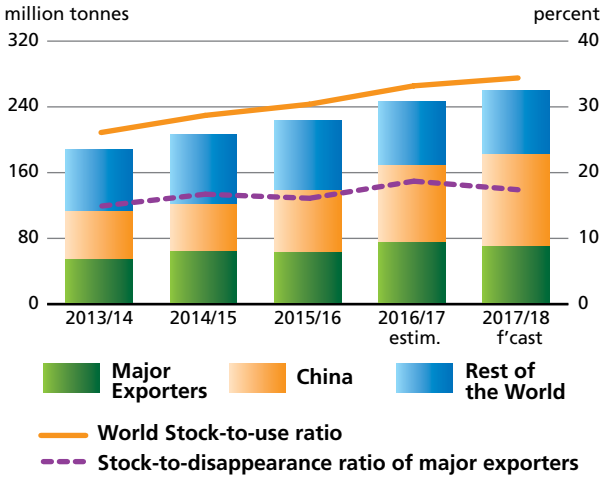
By contrast, total **other uses** of wheat (which includes industrial use, seeds and post-harvest losses) is set to remain close to the previous season's level, at around 97 million tonnes. Based on derived estimates from recent reports of the International Grains Council, total wheat used for industrial production in 2017/18 could reach 23 million tonnes, just slightly higher than in 2016/17. Starch manufacturing, which represents the primary industrial use of wheat, is forecast to hover around 12 million tonnes, marginally above the 2016/17 estimated level. Total wheat use for the production of biofuels (excluding non-fuel uses) is also seen to remain stable, at just below 9 million tonnes.

STOCKS

Wheat inventories to increase further, boosted by large supplies in China

Global wheat stocks are forecast to reach 258 million tonnes by the close of seasons in 2018, an all-time high and 13 million tonnes, or 5 percent, above their opening levels. However, this forecast is 3 million tonnes below the previous FAO forecast published in October, with most of the downward revision in the Russian Federation. World wheat inventories have increased continuously since 2013/14, as growth in global production has exceeded expansion in total world utilization. Based on the current prospects, the **world wheat stock-to-use ratio** in 2017/18 would reach a high of 34.4 percent, up slightly from the previous season. However, the **ratio of major wheat exporters' closing stocks to their total disappearance** (defined as domestic utilization plus exports), which is considered to be a better measure of availability in global markets, is set to decrease to 17.4 percent in 2017/18 from 18.7 percent in 2016/17. This slight decrease reflects a cut in the total end-season inventory level held by the major exporting countries to 70 million tonnes, down 5 million tonnes from their opening levels. Most of the decline is expected in **Australia**, **Canada** and the **United States,** due to reduced production levels, and in the **EU**, reflecting higher utilization and exports. By contrast, following this year's record output in the **Russian Federation**, the country's end-season wheat inventories are set to reach 15 million tonnes, up 5 million tonnes from their revised opening levels but 2.6 million tonnes below the October forecast, mostly on account of an expected increase in domestic use.

Figure 6. Wheat stocks and ratios

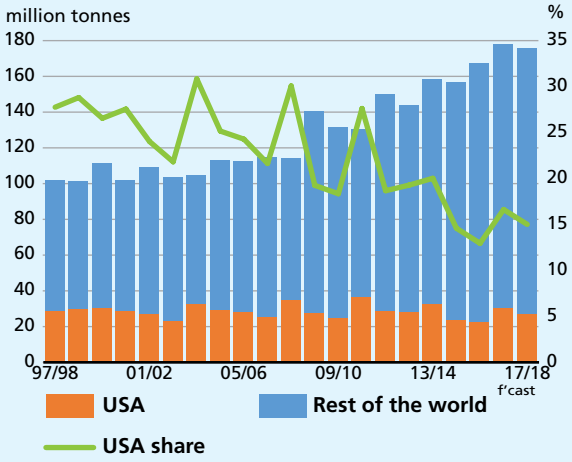


Overall, the bulk of this season's projected expansion in world wheat reserves is expected to take place in **China**, where wheat inventories are forecast to increase by at least 18 million tonnes, or 20 percent, to around 110 million tonnes. After a decade of relative stability in the level of wheat stocks in China, within the range of 50 to 55 million tonnes, inventories started to rise sharply from 2015/16, boosted by the increase in domestic production. At the current forecast level, wheat stocks held in China would represent some 43 percent of the world total.

BOX 2: United States' share in global wheat trade declining but demand for the US hard red wheat remains strong

A decline in the United States' wheat planted area and increased competition from other exporters contributed to a sharp decline in the United States' share of global wheat trade over the past two decades. Between 1997/98 and 2016/17, the United States' share of world wheat exports fluctuated from a high of 31 percent in 2003/04, to a low of 13 percent in 2015/16. Total wheat exports from the United States are forecast at around 26 million tonnes in 2017/18, which would represent 15 percent of the world total.

US wheat exports compared with the rest of the world



Hard red wheat shipments averaged 64 percent of total wheat exported from the United States over the past two decades, with a low share of just over 50 percent in 2005/06 and a high of 74 percent in 2010/11. The United States' hard red wheat main markets are in Asia and Latin American, with Mexico the largest importer of HRW and the Philippines the major importer of HRS.

- The United States' HRW wheat exports are set to reach almost 11 million tonnes in 2017/18 (July/June), representing 42.3 percent of total wheat exports from the United States. This compares to a low of 28 percent in 2005/06 and a peak of almost 48 percent in 2010/11.

- The United States' HRS wheat shipments, forecast to reach 7 million tonnes in 2017/18 (July/June), represent 27 percent of total wheat exports from the United States, compared to a low of 20.4 percent in 2000/01 and a high of almost 33 percent in 2015/16.

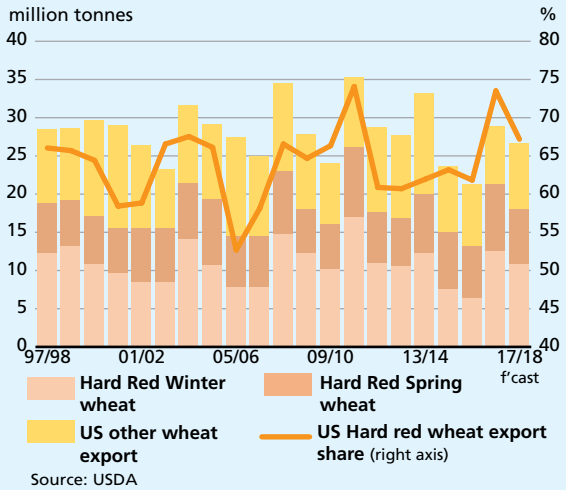
- The United States' Soft Red Winter (SRW) wheat exports are projected at 2.5 million tonnes in 2017/18 (July/June), accounting for some 9 percent of total wheat exports from the United States. This compared to a low of 7.6 percent in 2005/06 and a peak of 24 percent in 2013/14.

Hard red wheat (Hard Red Winter and Hard Red Spring) traditionally represents the highest share in total wheat exports from the United States. Hard red wheat is characterized by higher protein content than the soft varieties.

- Hard Red Winter (HRW) wheat, predominantly a bread wheat, has witnessed a rising importance as an all-purpose flour and in the noodle industry. It accounts, on average, for around 38 percent of total wheat exports from the United States.

- Hard Red Spring (HRS) wheat, characterized by its high protein content of over 13.5 percent, is used primarily for baking. It accounts for around 25 percent of the United States' total wheat exports.

US wheat exports by type of wheat

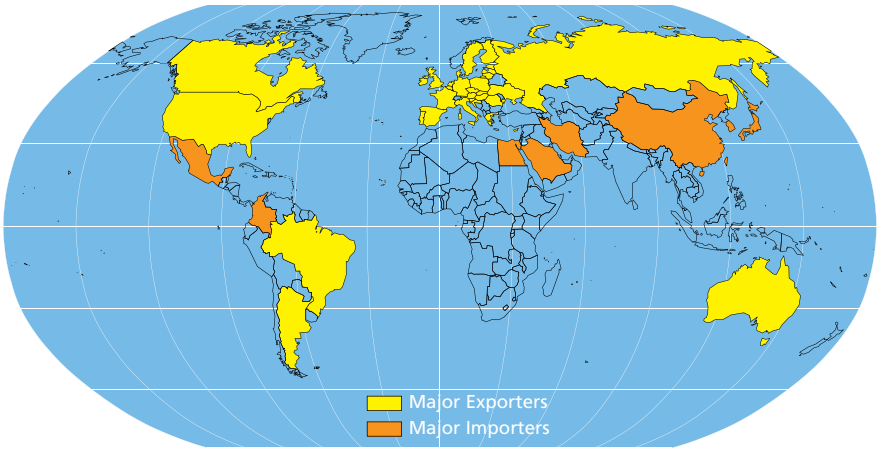


Source: USDA

Contact:
Lavinia.Lucarelli@fao.org

COARSE GRAINS*

Major Coarse Grain Exporters and Importers



** Coarse grains include maize, barley, sorghum, millet, rye, oats and NES (not elsewhere specified)*

PRICES

Maize quotations remain under downward pressure

Ample global availabilities have continued to put downward pressure on international maize prices since the current marketing season began in July. Large export supplies in Argentina and Brazil, the two leading Southern Hemisphere maize producers, contributed not only to weaker prices but, even more importantly, to lower price volatility. In fact, worries over yield prospects in the United States and hurricane-affected logistical transport interruptions at US Gulf ports provided only limited and short-lived support to export quotations. The benchmark **US maize price (yellow, No. 2, f.o.b.)** averaged USD 148 per tonne in October, down by 6 percent from the start of the season in July and 2 percent below the corresponding period last year. By contrast, prices of the other two major coarse grains, barley and sorghum, remained generally firmer and above their last year levels, mostly with a brisker pace in trade than during the same period last year. In October, feed barley prices of France

Figure 1. Maize export price (US No. 2 yellow, Gulf)

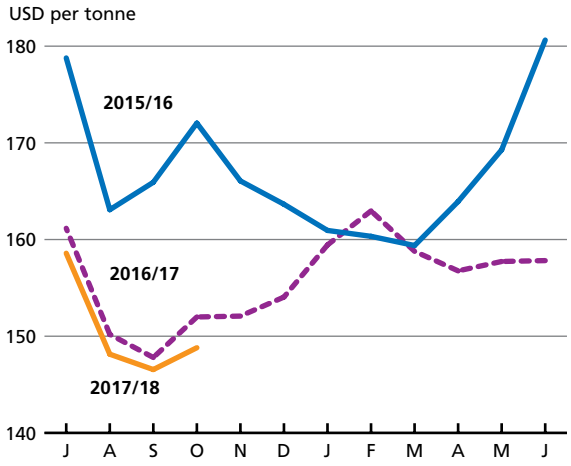
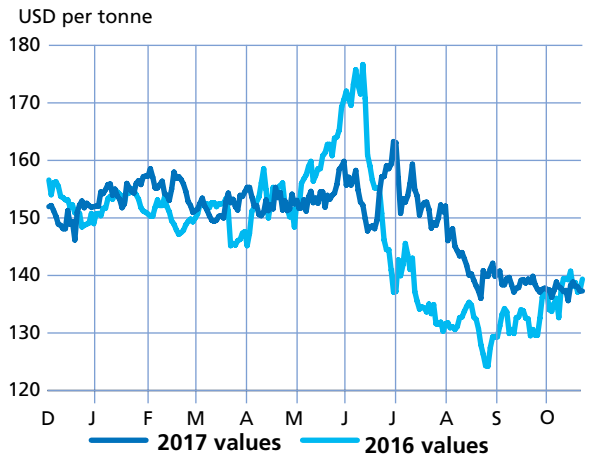


Figure 2. CBOT maize December futures



and the Black Sea origins averaged some 20 percent above October 2016, while sorghum quotations (US Gulf) were up 10 percent from last year.

Turning to the futures markets, the **CBOT maize futures for delivery in December 2017**, the benchmark delivery month for the new US crop, averaged USD 138 per tonne in October, down 10 percent from the start of the season but almost at par with the same period last year. Large world supplies and the favourable weather over the summer period which improved yield prospects, especially in the United States, contributed to a sharp decline in maize futures from their one-year high at the beginning of the season. Stiffer competition among the major exporters also limited the upside. *More detailed analysis of the futures markets can be found in the Market Indicators section of this report.*

PRODUCTION

Global production of coarse grains to reach a record in 2017

FAO forecasts global coarse grains production in 2017 to reach 1359.7 million tonnes, 13.4 million tonnes, or 1.0 percent, higher than the previous year marking a new record high. The annual growth is mainly driven by strong recoveries in maize production in Southern Africa and South America that more than outweighed a large production cut in the United States.

Global maize production in 2017 is forecast at 1 063.6 million tonnes, 22.9 million tonnes, or 2.2 percent, higher than the previous year.

In the **United States**, improved weather conditions in the latter part of the season resulted in higher than expected yields, triggering an upward revision of the production forecast that now stands at 362.7 million tonnes, although still 6 percent down from the previous year. The yearly decrease stems from a contraction in plantings that more than offset the positive impact of above-average yields. In **Canada**, in contrast to a subdued early-season production outlook, the latest estimate puts the 2017 output at a record high of 13.6 million tonnes, reflecting above-average yields and a larger planted area.

In *Europe*, drier weather in southern parts of the **EU** dampened yields prospects and in combination with a decrease in overall plantings, maize production in 2017 is forecast to fall by 2 percent to 60 million tonnes. Similarly, yields are estimated to fall in **Ukraine**, pushing this year's maize output to 26.7 million tonnes, down 5 percent from 2016. In the **Russian Federation**, the maize output is also forecast to decline by 9 percent from the record high of 2016 to 14 million tonnes. Dry weather conditions in the summer and excessive rainfall during the harvest period are the main factors driving the decrease.

In *Asia*, aggregate production in 2017 is forecast to fall. Most of this decline is associated with **China**, where a lower maize procurement price established by the government triggered a contraction in plantings and resulted in an output of 212.5 million tonnes, down 3 percent from 2016. Elsewhere in Asia, maize production in 2017 is expected to remain close to the previous year's levels, except in **Indonesia**, where robust demand from the domestic feed industry spurred an expansion in plantings, causing production to increase by 1.5 million tonnes to reach an overall level of 21.5 million tonnes.

In the Southern Hemisphere, harvesting of the bulk of the 2017 crop is complete.

In *South America*, production in **Brazil** is estimated at 99.4 million tonnes, 57 percent above the drought-reduced output of 2016 and a record high. The sharp rebound is driven by higher yields for both the first and second season crops, and a larger planted area. **Argentina** also registered a record output of 49.5 million tonnes. An expansion in the sown area, instigated by high prices and by good weather, which also helped boost yields, has driven this year's increase.

In *Southern Africa*, good weather raised yield levels above previous year's levels, and higher prices encouraged an increase in plantings in **South Africa**, supporting a record output of 17.5 million tonnes, more than double the drought-affected production of 2016. Similarly, favourable weather conditions in the neighbouring countries of **Malawi**, **Zambia** and **Zimbabwe** resulted in strong production rebounds this year.

Figure 3. Maize production in Southern Africa - leading producers

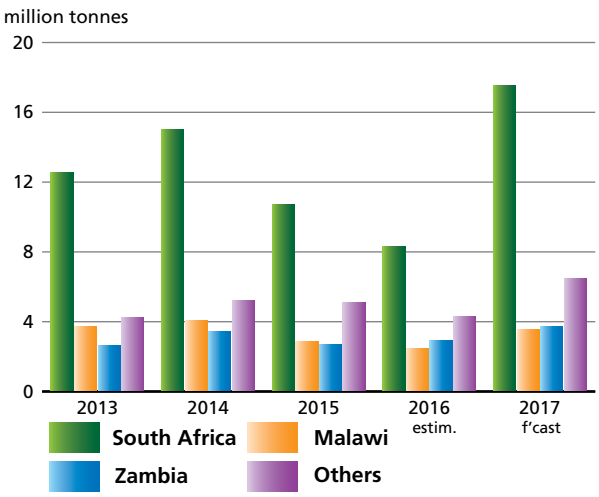


Table 1. World coarse grain market at a glance

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes			%
WORLD BALANCE				
Production	**1 308.3**	**1 346.3**	**1 359.7**	**1.0**
Trade[1]	**184.7**	**181.9**	**183.7**	**1.0**
Total utilization	**1 309.3**	**1 338.0**	**1 351.8**	**1.0**
Food	200.7	204.5	207.5	1.5
Feed	734.6	750.6	753.0	0.3
Other uses	374.0	382.9	391.3	2.2
Ending stocks[2]	**275.9**	**289.1**	**291.3**	**0.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	27.2	27.4	27.5	0.4
LIFDC (kg/yr)	37.8	38.3	38.4	0.3
World stock-to-use ratio (%)	*20.6*	*21.4*	*20.9*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*11.9*	*13.7*	*14.8*	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	2015	2016	2017 *Jan-Oct*	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	161	151	147	-3.1

[1] Trade refers to exports based on a common July/June marketing season.
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

Table 2. Coarse grain production: leading producers*

	2015	2016 *estim.*	2017 *f"cast*	Change: 2017 over 2016
	million tonnes			%
United States	367.3	402.9	376.4	-6.6
China (Mainland)	234.0	229.2	222.6	-2.9
European Union	151.8	153.2	150.5	-1.7
Brazil	88.2	65.8	102.3	55.5
Argentina	42.5	47.0	55.7	18.4
India	38.7	43.9	44.2	0.8
Russian Federation	39.5	43.4	43.7	0.8
Ukraine	33.4	39.4	37.0	-6.1
Mexico	30.8	33.5	31.9	-4.8
Canada	25.7	25.9	25.4	-2.1
Indonesia	19.6	20.0	21.5	7.5
Nigeria	16.8	19.4	19.0	-2.0
Ethiopia	18.8	19.0	18.9	-0.5
South Africa	11.1	8.7	18.0	106.3
Turkey	15.1	13.8	14.2	3.2
Other countries	175.0	181.3	178.6	-1.5
World	**1 308.3**	**1 346.3**	**1 359.7**	**1.0**

* Countries listed according to their position in global production (average 2015-2017)

FAO forecasts global barley production at 142.7 million tonnes, 4.8 million tonnes, or 3.3 percent down from 2016. The bulk of the decline rests on a lower output in **Australia**, forecast at 8 million tonnes, 40 percent down from 2016, which reflects below average rains in key growing areas and some frost damage. Smaller reductions forecast in **Canada**, the **EU** and the **United States** mainly reflect price-induced cuts to the sown areas. The decreases more than outweighed the estimated production gains in **Morocco** and the **Russian Federation**, which were due to beneficial weather.

World sorghum production is forecast by FAO at 59 million tonnes, 3.4 million tonnes, or 5.4 percent, below the previous year. The lower forecast reflects a smaller crop expected in the **United States**, where reduced prices led to a cut in the sown area. Minor year-on-year gains are expected in Asia and South America.

TRADE

Global trade in coarse grains at a new peak in 2017/18

FAO's latest forecast for world trade in coarse grains in 2017/18 (July/June) stands at a record high volume of nearly 184 million tonnes, 1.8 million tonnes, or 1.0 percent, above the 2016/17 estimated level. Larger trade in maize accounts for all of the anticipated expansion in world trade in coarse grains in 2017/18, while international trade in barley and sorghum is likely to contract. Trade in other coarse grains – oats, rye and millet – is seen to remain steady.

Total world trade in maize is expected to approach 144 million tonnes in 2017/18, up almost 3 percent from the previous season, marking an all-time high. The increase would be largely associated with stronger import demand in several Asian countries, the EU and Mexico. Maize imports by *Asia* are currently forecast at 70.5 million tonnes, up as much as 6.3 million tonnes, or 9.8 percent, from 2016/17, mostly due to bigger maize purchases from international markets by **China**, **Islamic Republic of Iran**, the **Republic of Korea**, **Saudi Arabia** and **Vietnam**. In all cases, demand from vibrant domestic livestock sectors is behind the increase in those countries' imports of maize. In China, in spite of large domestic supplies, the forecast indicates an increase in imports, reflecting the faster pace of the country's foreign purchases since the beginning of the season, as domestic prices remained above international levels, making imports still profitable.

In *Central America*, total maize imports in 2017/18 are forecast at just over 21 million tonnes, 800 000 tonnes, or 4 percent higher than in 2016/17, with higher imports by

Figure 4. Global trade of coarse grains by type

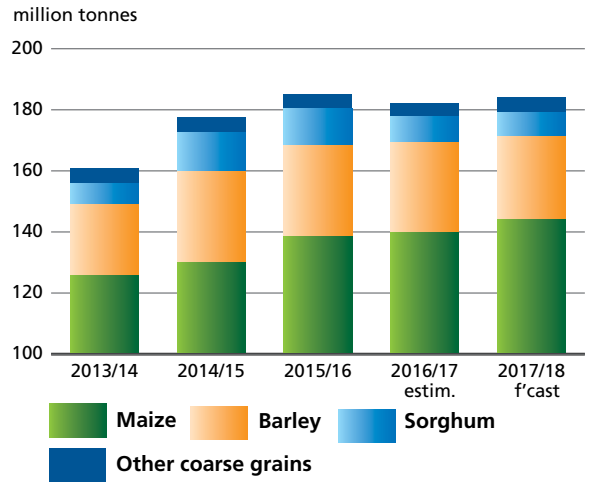
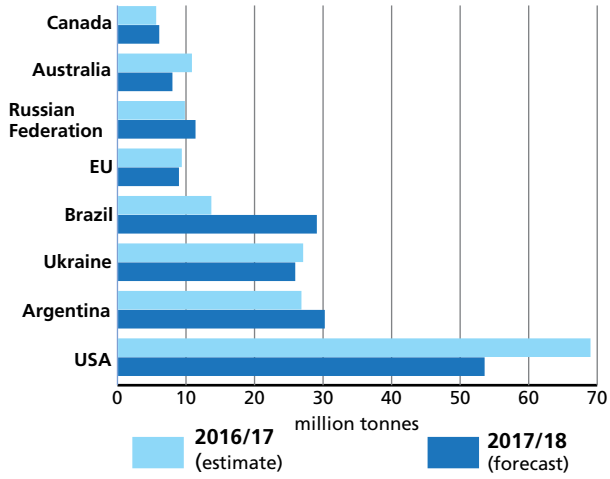


Figure 5. Coarse grain exports: major exporters



Mexico accounting for all of the rise. This year's decline in production amid strong domestic feed demand is likely to push maize imports by Mexico to a new high of 15.5 million tonnes.

Total maize imports in *Europe* are also forecast to increase, by 2 million tonnes, or 14.6 percent, to 16.5 million tonnes. This increase would be almost entirely due to higher purchases by the **EU**. Total maize imports by the EU are projected to increase to an all-time high of 15.6 million tonnes, 15 percent more than in 2016/17 because of strong feed demand and competitive prices.

By contrast, maize imports in *Africa* in 2017/18 are projected to decline by 1.9 million tonnes, or 8.3 percent, to just under 21 million tonnes. This decrease is primarily driven by a sharp cut in purchases by several countries in *Southern Africa*, mainly because of production recoveries. In **South Africa**, traditionally a leading regional exporter, no imports will be needed following a strong rebound in domestic production. Two years of consecutive poor harvests forced the country to import nearly 2 million tonnes of maize annually. Imports by **Zimbabwe** are also seen to drop, from over 900 000 tonnes in 2016/17 to almost nil, reflecting this year's bumper crop and a government ban on maize imports that was announced in June.

World trade in barley, the second largest traded coarse grain after maize, is set to drop by 2 million tonnes, or 7 percent, from the previous season, to 27 million tonnes. However, with nearly steady imports in all major markets, the decline is mainly driven by the anticipated fall in barley purchases by China, more than offsetting an increase in imports by Saudi Arabia. In **China**, imports of barley are projected to decline by 2.7 million tonnes in 2017/18, reaching a more normal level of 4.6 million tonnes. China has imported exceptionally large volumes of barley, as well as sorghum, since 2014/15, in response to elevated domestic prices of feed grains and a slowdown in maize purchases. By contrast, **Saudi Arabia**, the world's largest barley importer, is anticipated to increase its purchases this season by 500 000 tonnes to 11 million tonnes, in order to meet the growth in domestic feed demand. Similarly, global trade in sorghum is seen to contract in 2017/18, falling by nearly 900 000 tonnes, or 10.5 percent, to 7.6 million tonnes. While small increases in imports of sorghum are anticipated in few countries, the decline in world trade reflects a significant cut in sorghum imports by **China** – which decreased from 5.6 million tonnes in 2016/17 to 4.5 million tonnes in 2017/18 – and smaller imports also by **Mexico**, which decreased by 110 000 tonnes to 670 000 tonnes.

Turning to export prospects in 2017/18 (July/June), larger export availabilities of coarse grains are seen to comfortably meet the current projected rise in import demand. Among the world's leading maize exporters, the biggest year-on-year rise in exports is forecast for **Brazil**, where a record maize crop and a favourable exchange rate are likely to drive up the country's maize sales this season by as much 15 million tonnes, or 120 percent, to around 28 million tonnes, representing the second highest level on record. The sharp increase in exports by Brazil more than offset an equally significant fall in exports by the **United States**, the world's largest maize exporter. Total maize sales from the United States in 2017/18 are seen to drop to 47 million tonnes, nearly 15 million tonnes, or 24 percent down from the 2016/17 record level of just under 62 million tonnes. However, a

Table 3. Top 10 maize importers*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
European Union	12.1	15.6	3.5
Mexico	13.0	15.5	2.5
Japan	15.0	15.2	0.2
Korea Rep. of	9.9	10.5	0.6
Viet Nam	7.4	9.7	2.4
Iran Islamic Rep. of	6.7	9.5	2.8
Egypt	8.2	8.7	0.5
Colombia	4.7	4.9	0.2
Algeria	4.3	4.7	0.4
Chinese prov. of Taiwan	4.2	4.7	0.5

* Imports are based on a common July/June marketing season

Table 4. Top 10 maize exporters*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
United States	51.7	47.0	-4.7
Brazil	23.1	28.2	5.1
Argentina	20.3	27.0	6.7
Ukraine	19.0	20.2	1.2
Russian Federation	4.4	5.5	1.1
South Africa	1.1	2.5	1.4
Paraguay	2.5	2.5	0.0
Canada	1.3	1.7	0.4
European Union	2.8	1.5	-1.3
Mexico	0.8	1.0	0.2

* Exports are based on a common July/June marketing season

Table 5. Top 10 sorghum importers*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
China	8.0	4.6	-3.5
Mexico	0.4	0.7	0.2
Japan	0.7	0.6	-0.2
Colombia	0.2	0.3	0.0
European Union	0.1	0.2	0.1

* Imports are based on a common July/June marketing season

Table 6. Top 10 sorghum exporters*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
United States	8.0	5.4	-2.6
Sudan	0.3	0.6	0.3
Argentina	0.8	0.6	-0.3
Australia	1.1	0.4	-0.7
Ethiopia	0.4	0.3	-0.1

* Exports are based on a common July/June marketing season

Table 7. Top 10 barley importers*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
Saudi Arabia	10.0	11.0	1.0
China	7.7	4.6	-3.1
Iran Islamic Rep. of	1.7	1.3	-0.4
Japan	1.1	1.1	-0.1
Libya	0.9	1.0	0.1
Jordan	0.9	0.8	-0.1
Algeria	0.8	0.7	-0.1
Morocco	0.6	0.6	0.0
Tunisia	0.6	0.6	-0.1
Turkey	0.5	0.5	0.0

* Imports are based on a common July/June marketing season

Table 8. Top 10 barley exporters*

	2014/15-2016/17 average	2017/18 f'cast	Change
	million tonnes		%
Australia	6.4	6.7	0.3
European Union	8.7	6.2	-2.5
Russian Federation	4.3	4.9	0.6
Ukraine	4.7	4.7	0.0
Argentina	2.4	1.8	-0.6
Canada	1.4	1.3	-0.1
Kazakhstan	0.6	0.8	0.2
India	0.4	0.3	-0.1
United States	0.2	0.1	-0.1
Uruguay	0.1	0.1	0.0

* Exports are based on a common July/June marketing season

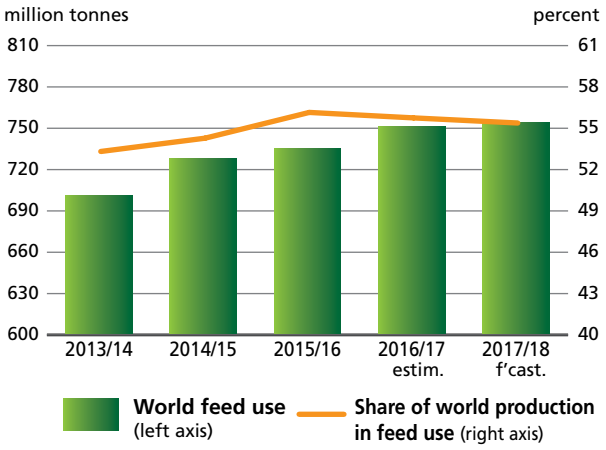
record harvest in **Argentina** is forecast to boost its maize sales to 27 million tonnes, up sharply from the previous season's high of 22.6 million tonnes. Maize shipments from **Ukraine** are seen at around 20 million tonnes, down slightly from the previous season's record volume, while **South Africa**, which is showing a recovery in maize production, is expected to return to international markets with at least 2.5 million tonnes of exports this season. In the barley market, the anticipated contraction in world trade is seen to weigh on shipments from **Argentina**, **Canada** and **Ukraine**, while the anticipated drop in sorghum trade could result in decreased sales by **Australia** and the **United States**, and more than offset increases in exports from **Argentina** and **Sudan**.

UTILIZATION

Utilization of coarse grains to increase marginally in 2017/18

Global utilization of coarse grains in 2017/18 is forecast to reach nearly 1 352 million tonnes, representing an expansion of around 1 percent from 2016/17. Total **feed utilization** of coarse grains in 2017/18 is pegged at 753 million tonnes, only 0.3 percent up from 2016/17. This compares with an over 2 percent expansion in 2016/17. This apparent slowdown in growth is largely a reflection of anticipated reduced feed use in a handful of countries, namely Serbia which had a sharp fall in its maize harvest, several CIS countries, particularly Kazakhstan and Ukraine, which also have had lower outputs, and the Russian Federation, where more abundant wheat supplies following this year's record harvest are likely to partially substitute maize in animal feed rations. Smaller feed use of coarse grains is also seen in the United States, mainly driven by a cut in sorghum feed more than offsetting an increase in feed use of maize. However, feed usage of coarse grains is set to rise in the Republic of Korea, Saudi Arabia and Vietnam, supported by a growing demand from their livestock sectors. In China, the expansion is likely to be modest. Total use of coarse grains for feed in China in 2017/18 is projected to approach 149 million tonnes, only 0.3 percent above the 2016/17 level. However, given its large supplies, feed use of maize is set to rise by 1.4 percent, or 2 million tonnes, to reach 140 million tonnes, more than offsetting a decline in feed barley intakes of 22 percent, or 1 million tonnes. Brazil and Mexico are among the other countries where feed use of coarse grains is set to increase. In Brazil, record maize production and, consequently, large domestic supplies are seen to drive up feed use by 4 percent, to nearly 44 million tonnes. In Mexico, ample domestic maize supplies, following above-average production coupled with large carryovers from the previous season, will contribute to its feed use rising by 5.8 percent to around 19 million tonnes.

Figure 6. Global coarse grain production and feed use



World **food consumption** of coarse grains is forecast to reach almost 208 million tonnes in 2017/18, 1.5 percent more than in 2016/17. Africa and Asia account for most of the food consumption of coarse grains. Total food use of coarse grains in Africa is projected at nearly 91 million tonnes, 2.0 percent higher than in 2016/17, with most of the anticipated increase in Ethiopia, Nigeria, Sudan and Tanzania. In Asia, total food use of coarse grains is projected to rise to

Table 9. Maize use for ethanol (excluding non-fuel) in the United States

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17 estim.	2017/18 (f'cast)
Maize production	332 550	316 166	313 956	273 188	351 270	361 101	345 504	384 774	362 726
Ethanol use	116 616	127 538	127 005	117 886	130 155	132 085	132 695	138 131	139 070
Yearly change (%)	25	9.4	-0.4	-7.2	10.4	1.5	0.5	4.1	0.7
As % of production	35	40.3	40.5	43.2	37.1	36.6	38.4	35.9	38.3

Source: WASDE-USDA. * 12 October 2017

over 62 million tonnes, with the biggest year-on-year growth to occur in China and India. At the global level, per capita consumption of coarse grains is expected to remain stable at around 28 kg per capita, with maize at 17.4 kg, followed by sorghum at 3.8 kg and millet at 3.1 kg.

After a strong 5 percent expansion in 2016/17, total **industrial use** of coarse grains is forecast to register only a modest increase in 2017/18, rising by 1.2 percent, to reach nearly 327 million tonnes. Total industrial use of maize – for production of ethanol, starch and sweeteners – is expected to reach 289 million tonnes, 2.5 percent higher than in the previous season. This forecast is largely derived from recent reports published by the International Grains Council. Most of the year-on-year increase is expected in China, where total industrial use of maize is set to reach an all-time high of at least 63 million tonnes in 2017/18, 5.3 percent higher than in 2016/17. In addition to starch, of which China is the world's largest producer, the government recently announced new plans to boost the nationwide use of maize for production of biofuels. One aim of this measure is to reduce the stock of low quality maize kept in the country's inventories.

The United States remains the largest user of coarse grains for industrial applications – largely of maize for production of starch and biofuels (ethanol). According to the latest official USDA forecast (October 2017), the use of maize for production of ethanol in the United States stands at 139 million tonnes in 2017/18, representing a 0.7 percent increase. This compares with a 4 percent year-on-year growth in 2016/17 (see Table 3). This slowdown is mostly due to less favourable export prospects. The leading market for the exports of ethanol from the United States is Brazil but shipments to Brazil are expected to fall sharply in 2017/18 because of import restriction measures in place since May, including a more recent imposition of a 20 percent tariff (Tariff Rate Quota) on ethanol imports above 600 million litres. In addition, China, another major market for the ethanol industry of the United States, has imposed a series of new tariffs on fuel ethanol and distiller's dried grains (DDG) imports since the start of the current year.

STOCKS

Inventories of coarse grains continue rising in 2017/18

Based on the latest forecasts for global production in 2017 and utilization in 2017/18, by the close of crop seasons in 2018, world stocks are forecast to reach an all-time high of 291 million tonnes, up 0.8 percent from their already very large opening levels. Out of this total, maize inventories are forecast at nearly 237 million tonnes, up slightly from the previous season with most of the increase in **Brazil**, **South Africa** and the **United States**. Barley stocks are forecast to total over 31 million tonnes, some 4 percent higher than in the previous season, mostly driven up by higher inventories in the **Russian Federation**. By contrast, sorghum stocks are heading for a decline of nearly 9 percent to around 8 million tonnes, with the bulk of this decline occurring in **Argentina**, **Australia** and **China**, .

Overall, this season's global **stock-to-use-ratio** is projected at 20.9 percent, down from 21.4 percent in 2016/17 but still remaining a relatively high ratio historically. In fact, **major exporters' stock-to-disappearance ratio** (domestic utilization plus exports) is forecast to increase – from 13.7 percent in 2016/17 to 14.8 percent in 2017/18 – which indicates more abundant export availabilities of coarse

Figure 7. Maize stocks in China

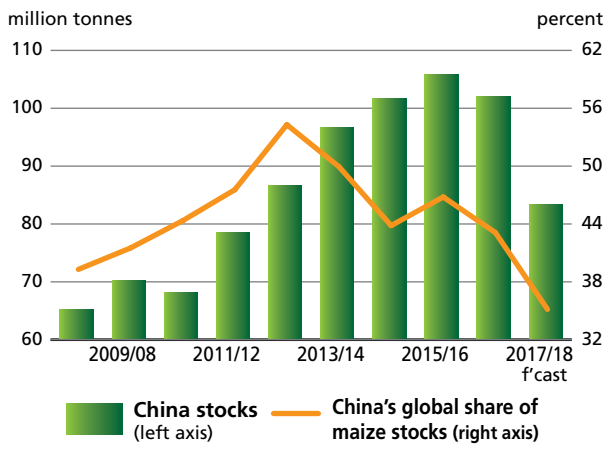
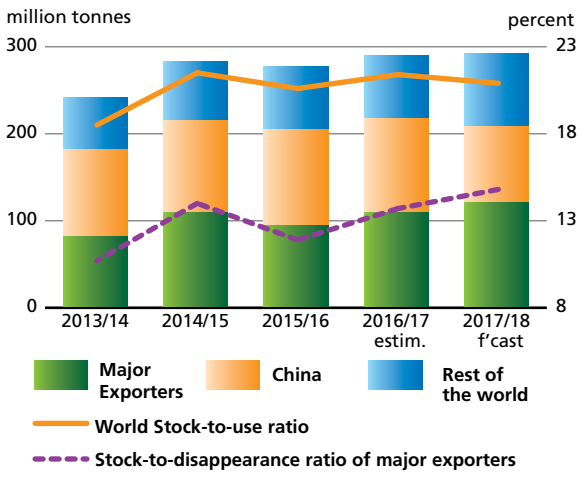


Figure 8. Coarse grain stocks and ratios

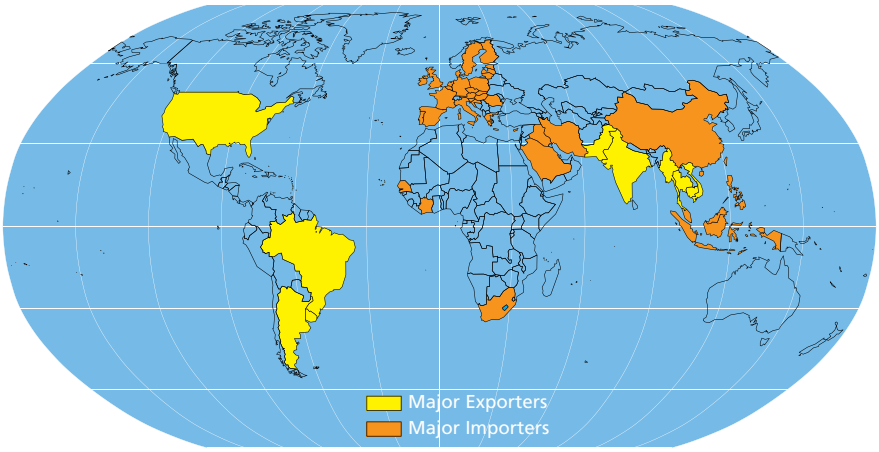


grains for world markets during the current season. Among the major exporters, the biggest year-on-year increase in inventories involves **Brazil** where, following a bumper maize crop, ending stocks are projected to triple in size and reach an all-time high of 15 million tonnes. To a much smaller extent, total inventories of coarse grains in **Argentina** and the **Russian Federation** are also heading for some increases in 2017/18, more than offsetting projected drawdowns in **Australia** and the **EU**.

On a regional basis, *Asia* ranks first in terms of total stocks of coarse grains held, currently projected at nearly 118 million tonnes. At this forecast level, Asian inventories would be some 16 million tonnes, or 12 percent, down from their opening levels, mostly because of a sharp reduction anticipated in **China** maize stocks. The largest Asian and world stock holder of maize is, in fact China, which has nearly 83 million tonnes in its inventories. This represents 81 percent of all maize held in Asia and 35 percent of the world total. However, at 83 million tonnes, China stocks would be down almost 19 million tonnes, or 18 percent, below their opening levels. The sharp reduction is due, in part, to this year's fall in production as well as recent attempts by the government to boost domestic maize utilization.

RICE

Major Rice Exporters and Importers



PRICES

Generally firm, although patterns vary across market segments

International rice prices have made moderate increases in the past five months, as depicted by the FAO All Rice Price Index (2002–2004=100), rising from a June value of 209 points to 216 points in October. Despite this general firmness, quotations have not followed consistent patterns across the various rice market segments. After a prolonged period of weakness, Japonica prices have regained momentum, as prospects of a smaller US harvest have amplified the support lent by seasonal tightness and the resumption of trading activities in the Far East. In the fragrant market, the strength manifested by Basmati prices earlier in the year spread to Thai Hom Mali rice values, causing aromatic prices to reach multi-year highs.

However, in the Indica market, price firmness during the first half of the year was followed by considerably weaker patterns. This was especially the case in Asia, where prices fell amid signs that ample exportable availabilities existed to meet reviving demand from African buyers and the

Figure 1. Export prices for higher-quality Indica rice in selected countries

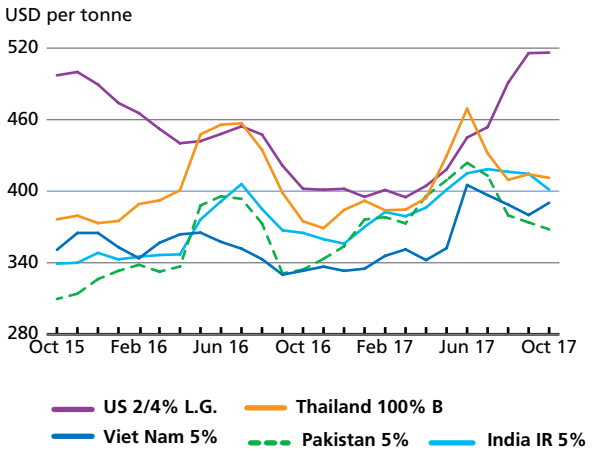
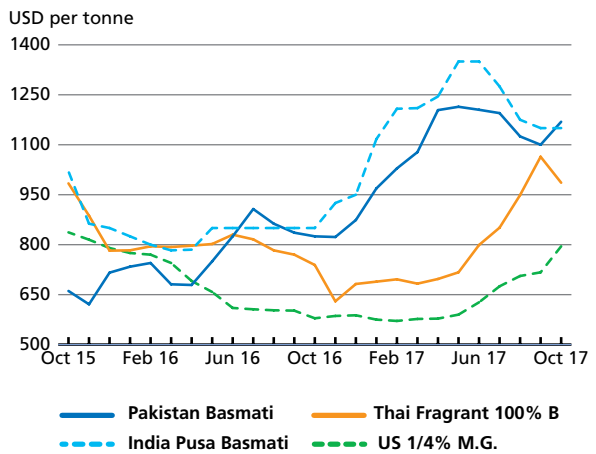


Figure 2. Export prices for Aromatic and Japonica rice in selected countries



surge in orders from South Asian countries affected by poor weather. In Thailand, the price of benchmark 100% B white rice dropped by 12 percent below its June value to arrive at USD 411 per tonne in October, notwithstanding a general strengthening of the Thai baht. Among the major rice exporters, only the United States saw long-grain prices continue their upward trajectory, sustained primarily by expectations of a steep production decline and an upbeat pace of foreign sales.

On an annual basis, these tendencies brought the January–October average of the FAO All Rice Price Index to 204 points, up 4 percent from its value in the corresponding period of 2016. Most of this increase was the result of a 32 percent surge in aromatic quotations, although lower quality Indica values also posted a 3 percent increase. Prices in the other rice market segments remained slightly below their corresponding levels in the previous year.

PRODUCTION

Growth prospects undermined by weather setbacks

Since the previous Food Outlook report, a series of unfavourable climate-related events have affected main paddy crops in the Northern Hemisphere, which have now reached the harvesting stage. This has been the case in Asia, where, unlike 2016, the critical Northern Hemisphere summer months were characterized by mixed growing conditions that inhibited planting expansions. As a result, FAO's latest forecast of world rice production in 2017 points to a broadly stable output level of 500.8 million tonnes (milled basis).

Production in *Asia* is now forecast to fall 550 000 tonnes below the 2016 bumper harvest to 452.5 million tonnes. Within the region, the **Republic of Korea**, **Japan**, **Nepal** and **Viet Nam** are all set to see output negatively affected by excess rains or cloudy conditions, whereas reductions in the **Democratic People's Republic of Korea** and **Sri Lanka** would be linked to abnormal dryness. A sequence of floods also dampened the outlook for **Bangladesh**, likely translating into a third successive season of little or negative production growth. In **India**, although government incentives kept Kharif crop plantings at above-normal levels, the uneven distribution of the rains caused main-crop acreage to decline by 0.9 percent year-on-year. The monsoon also left behind a mixed water supply situation that could preclude a sizeable increase in secondary crop plantings. As a result, FAO anticipates 2017 output in India to fall 1 percent below the 2016 all-time high to 109.5 million tonnes. In **China (Mainland)**, even though this year's cut in the government purchasing prices reduced Indica plantings, most of the area contraction is likely to be compensated by yield improvements and a shift away from maize cultivation in favour of still profitable Japonica rice. Thus, the country's 2017 output is seen little changed year-to-year, at 141.8 million tonnes. Among the countries that have benefitted from more favourable weather, particularly positive results are expected in **Indonesia**, where the sector continues to draw support from the Government, but also in **Thailand**, where improved price prospects and ample water supplies are likely to allow another output expansion. Record-breaking crops are also anticipated in **Cambodia**, **Pakistan** and the **Philippines**, with the **Islamic Republic of Iran**, **Iraq**, **the Lao People's Democratic Republic**, **Malaysia**, **Myanmar** and **Turkey** all set to gather larger crops.

Figure 3. Global paddy production and area

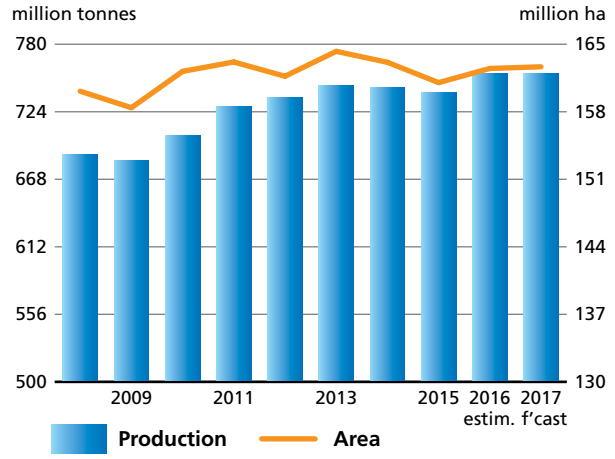


Figure 4. Paddy production in Asia

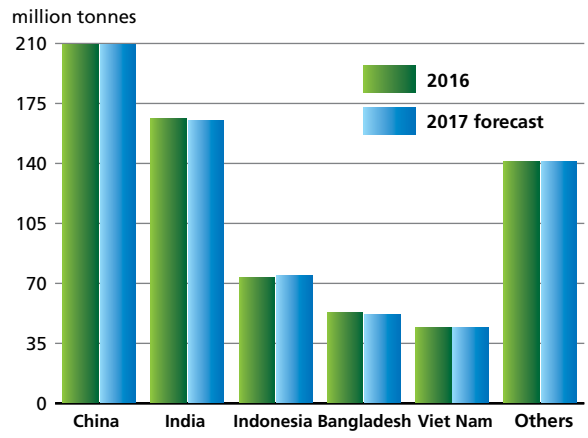


Table 1. World rice market at a glance

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes, milled equivalent			%
WORLD BALANCE				
Production	**490.9**	**501.0**	**500.8**	**0.0**
Trade [1]	**41.5**	**45.0**	**45.4**	**1.0**
Total utilization	**492.6**	**497.8**	**503.2**	**1.1**
Food	395.8	400.9	406.6	1.4
Ending stocks[2]	**166.5**	**168.5**	**169.2**	**0.4**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	53.6	53.7	53.8	0.2
LIFDC (kg/yr)	55.1	55.1	55.2	0.2
World stock-to-use ratio (%)	*33.4*	*33.5*	*33.1*	
Major exporters stock-to-disappearance ratio[3] *(%)*	*19.3*	*18.5*	*16.9*	

FAO RICE PRICE INDEX (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Oct*	**Change: Jan-Oct 2017 over Jan-Oct 2016 %**
	211	194	204	4.5

[1] Calendar year exports (second year shown).
[2] May not equal the difference between supply (defined as production plus carryover stocks) due to differences in individual country marketing years.
[3] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

Table 2. Rice Production: leading producers *

	2015	2016 *estim.*	2017 *f.cast*	Change: 2017 over 2016
	million tonnes, milled equivalent			%
China (Mainland)	142.6	141.7	141.8	0.0
India	104.4	110.2	109.5	-0.6
Indonesia	45.8	45.6	46.6	2.1
Bangladesh	35.0	34.7	34.1	-1.7
Viet Nam	29.3	28.3	28.2	-0.6
Thailand	18.2	21.6	22.3	3.2
Myanmar	16.5	17.1	17.3	1.2
Philippines	11.4	12.1	12.6	3.7
Brazil	8.5	7.2	8.4	16.3
Japan	7.6	7.7	7.6	-1.8
Pakistan	6.8	6.8	7.2	4.9
United States	6.1	7.1	5.7	-20.3
Cambodia	5.6	6.0	6.1	1.9
Egypt	4.1	4.3	4.4	1.3
Korea Rep. of	4.3	4.2	4.0	-5.8
World	**490.9**	**501.0**	**500.8**	**0.0**

* Countries listed according to their position in global production (average 2015-2017).

Aggregate output in *Africa* is forecast to reach 20.3 million tonnes in 2017, 1 percent more than the 2016 all-time high. Most of the region's growth is predicted to concentrate in West Africa, as generally plentiful rains have enabled producers in the subregion to respond to attractive prices and government assistance programmes by expanding plantings. With the exception of **Burkina Faso**, **Guinea Bissau** and **Mauritania**, most West African countries are anticipated to end the season with positive results. Particularly strong gains are likely in **Ghana**, **Nigeria**, **Mali** and **Senegal**. After two successive years of unseasonable dryness, more normal rainfall patterns allowed output to recover in **Malawi**, **Mozambique** and **Zambia**, while better yields are expected to be behind a small expansion in **Egypt**. The outlook is more downcast elsewhere in the continent. This would be namely the case of **Madagascar**, where production is seen falling to a 13-year low of 2.2 million tonnes as a result of severe dryness and damages caused by cyclone Enawo. Crops in the **United Republic of Tanzania** were similarly marred by erratic rains early in the season, fueling expectations of output falling to 2.0 million tonnes, 10 percent short of heights attained in 2016.

In *Latin America and the Caribbean,* 2017 production is predicted to reach a record level of 19.2 million tonnes, 7 percent more than the 2016 level. In South America, where most countries have already concluded the season, generally favourable growing conditions boosted yields, more than offsetting area cuts instigated by tight profit margins. In **Brazil**, production rebounded by 16 percent to 8.4 million tonnes. Output also expanded in **Colombia**, **Guyana** and **Uruguay**, more than compensating for reductions in **Argentina**, **Chile**, **Ecuador** and **Peru**. The outlook is also positive for countries located in Central American and the Caribbean, especially for **Haiti**, **Mexico** and the **Dominican Republic**, even if an intense Atlantic hurricane season has caused crop damages in several countries in the subregion.

In **Australia**, notwithstanding some initial setbacks associated with untimely rains, production staged a three-fold recovery to 543 000 tonnes, as ample water supplies and attractive producer margins permitted plantings to rebound. By contrast, in the **United States** the 2017 season is likely to end with a 20 percent reduction in output to total 5.7 million tonnes, as competition with other crops caused plantings to contract sharply and extensive flooding problems led to additional area losses. Growth prospects for the **EU** and the **Russian Federation** were similarly dampened by area cuts in response to unattractive prices, although yield improvements may help stabilize the 2017 output in the EU at around 1.8 million tonnes.

TRADE

Trade growth to decelerate in 2018

After rebounding by 8 percent in 2017, world trade in rice is forecast to expand by a mere 1 percent in 2018 to reach 45.4 million tonnes. All of the expected growth would rely on larger imports by countries in *Asia*, where 21.9 million tonnes are forecast to be imported on aggregate, up 3 percent from 2017. Within the region, purchases by **China (Mainland)** are envisaged to remain sizeable, at 5.9 million tonnes, given the persistently large differentials between Chinese prices and international quotations. On the other hand, the need to replenish stockpiles may encourage **Indonesia**, the **Philippines** and **Saudi Arabia** to step up imports next year, even if purchases in Indonesia and the Philippines will likely depend on policy decisions. In Indonesia, the planned expansion of the voucher-based food assistance programme (*Bantuan Pangan Non Tunai)* could diminish the need to rely on foreign supplies for in-kind rice distribution in the event that domestic procurement targets are not met as in 2017. In the Philippines, final decisions regarding the rice tariffication process are still pending, while announced plans to raise public domestic procurement five-fold could curb state purchases from abroad. Barring major setbacks, production recoveries could instead permit **Bangladesh** and **Sri Lanka** to slightly lower their 2018 imports to 1.1 million and 450 000 tonnes, respectively.

Rice imports by *Africa* are forecast to remain close to the 2017 high of 15.6 million tonnes, sustained by larger purchases by **Burkina Faso**, **Guinea Bissau**, **Mauritania**, **Togo** and, in particular, **Nigeria**. In the latter, despite expectations of a larger domestic crop, some 2.9 million tonnes may still be required from abroad to meet demand from a fast-expanding population and to quell persistently high domestic prices. At the same time, a number of countries are expected to have sufficient local availabilities to reduce reliance on imports next year, namely **Benin**, **Mali**, **Senegal**, **Sierra Leone** and, to a lesser extent, **Kenya** and **Madagascar**.

Deliveries to *Latin America and the Caribbean* are forecast to contract by 5 percent in 2018 to 3.9 million tonnes. Much of this decrease would be on account of **Brazil**, where large carry-in stocks and less attractive prices in neighbouring countries could lower imports to more normal levels of 670 000 tonnes. Ample availabilities from good crops and large 2017 purchases are also seen to lower imports by **Cuba**, **Haiti**, **Mexico** and **Peru**, more than offsetting increases in **Bolivia**, **Costa Rica** and **Venezuela**.

In the *other regions*, firm demand for fragrant and broken rice is expected to keep imports by the **EU** at an

Figure 5. Rice imports by region

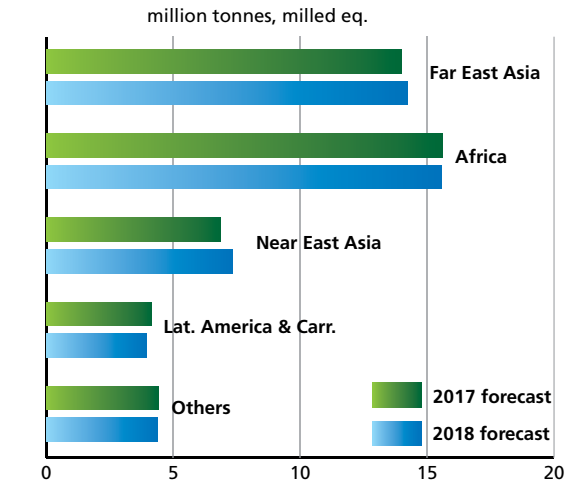


Figure 6. Rice exports by the major exporters

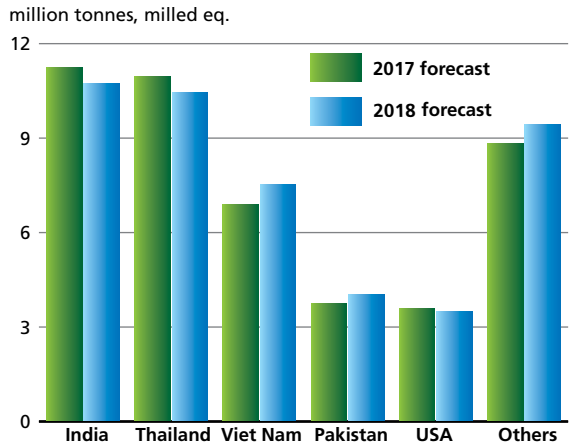
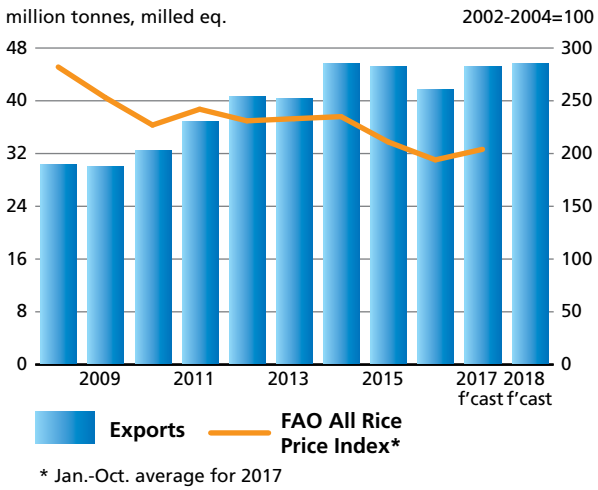


Figure 7. World rice trade and FAO all rice price index



ample level of 1.8 million tonnes, while purchases by the **United States** hold steady at 750 000 tonnes.

As for exports, although **India** and **Thailand** are predicted to remain the world's leading suppliers of rice in 2018, both countries could see their ability to compete eroded by more limited exportable availabilities. In the case of India, a somewhat smaller 2017 crop is expected to result in a 4 percent year-on-year contraction in foreign sales to 10.7 million tonnes. As for Thailand, a 5 percent reduction in exports to 10.4 million tonnes would stem from the depletion of government inventories, which is likely to prevent the country from maintaining sales of lower-grade rice at the above-average levels sustained since 2014. Based on current prospects of reduced crops, **Argentina**, the **United States** and **Uruguay** are all forecast to see their rice exports reduced in 2018.

Meanwhile, the resumption of **Chinese** exports to Africa, which had essentially come to a stop over the 2012–2015 period, has been an emerging feature of rice trade in recent months, along with **Myanmar**'s headway in diversifying its outlets thanks to competitive pricing. Given prospects of ample availabilities due to generally positive harvests, FAO anticipates these trends to continue in 2018, with shipments by China (Mainland) reaching an 11-year high of 1.2 million tonnes, and those of Myanmar striking a new record of 2.2 million tonnes. Provided no major production setback is incurred next year, **Viet Nam** is forecast to see increased demand from its traditional Asian markets. Combined with the approval of more lenient export terms for rice traders, this could sustain a 9 percent increase in 2018 deliveries by Viet Nam to 7.5 million tonnes. Export recoveries are also foreseen for **Pakistan** and **Brazil** next year, adding to expected increases in **Australia**, **Cambodia**, **Guyana** and **Paraguay**.

UTILIZATION

Per capita consumption to increase modestly

Global rice utilization is forecast to expand by 1.1 percent in 2017/18 to 503.2 million tonnes (milled basis). All of this growth would be sustained by greater **food consumption**, which is expected to reach 406.6 million tonnes, 1.4 percent more than in 2016/17. This would place world per capita rice consumption at 53.8 kg, compared to 53.7 kg a year earlier. The modest expansion mirrors expectations that somewhat tighter supplies would steady rice intake in Asia, while causing it to fall in North America. Consumption growth is predicted to be more upbeat in the other regions, especially in Africa, where demand for rice remains strong despite persistently high domestic prices in eastern and southern parts of the continent. All non-food uses of rice are forecast to change little year-on-year. For instance, feed use is seen close to the 2016/17 level at 17.8 million tonnes. Although use of rice as **animal feed** is being sustained by the release of supplies from government granaries in Japan, the Republic of Korea and Thailand, more affordable feedstuffs are expected to displace rice in most other countries, especially in Bangladesh, China (Mainland) and Viet Nam.

STOCKS

China to sustain a small expansion in global rice inventories

Despite expectations of stagnating production growth, world rice supplies are predicted to exceed utilization in 2017/18, giving rise to a small (0.4 percent) expansion in global rice inventories by the close of 2017/18 marketing years to 169.2 million tonnes (milled basis). This level would be sufficient to cover four months of projected global rice use, while keeping the world rice stock-to-use ratio at a comfortable level of 33.1 percent in 2017/18.

To a large extent, the forecast expansion in global rice inventories hinges on expectations of a 3 percent build-up in **China** (Mainland) to 102.2 million tonnes. Chinese rice reserves are gauged to have risen steadily since 2007/08, as high domestic prices encouraged successive large harvests and imports. The same factors are expected to be at play this season, although the stock buildup is likely to be moderated by a considerable pick-up in export activity and more success in finding a market for the large supplies stored in government granaries. Among other rice importers, **Bangladesh**, **Iraq**, **Nigeria** and the **Philippines** are all similarly predicted to replenish their inventories. However, these gains are likely to be offset by stock reductions in the **Republic of Korea**, **Madagascar**, **Sri Lanka** and the **United Republic of Tanzania**, all linked to output shortfalls. A steep cut in the **Republic of Korea** would be further associated with ongoing government efforts to destine surplus production to the industrial and animal feed sectors.

Among net-exporting countries, sizeable state acquisitions are forecast to keep rice inventories in **India** broadly steady year-to-year, while bumper harvests should allow **Brazil**, **Cambodia**, **Myanmar** and **Pakistan** to add to their reserves. By contrast, rice stocks are seen ending lower in **Argentina** and **Viet Nam**, in view of expected drops in domestic production, and in **Uruguay**, due to the fast pace of exports. Still, the largest drawdown is forecast for **Thailand**, where reserves may contract by 2.1 million tonnes to stand at 6.0 million tonnes, as a

Figure 8. Global closing stocks and stock-to-use ratio

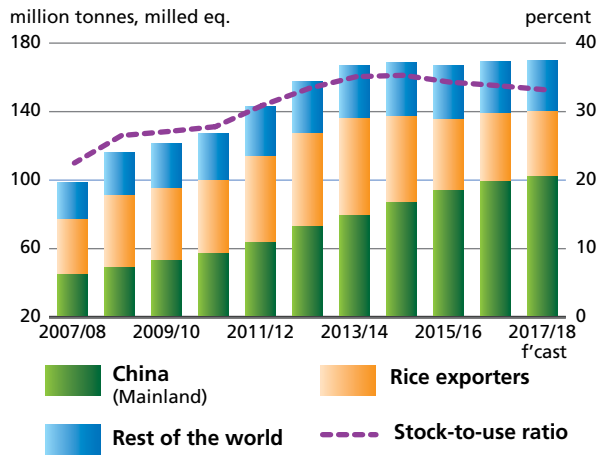
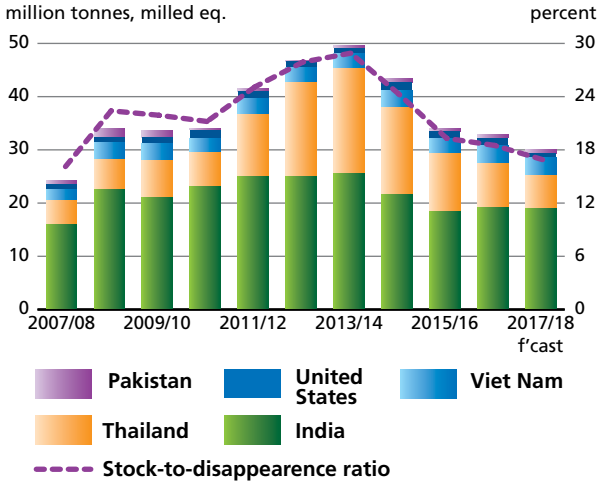


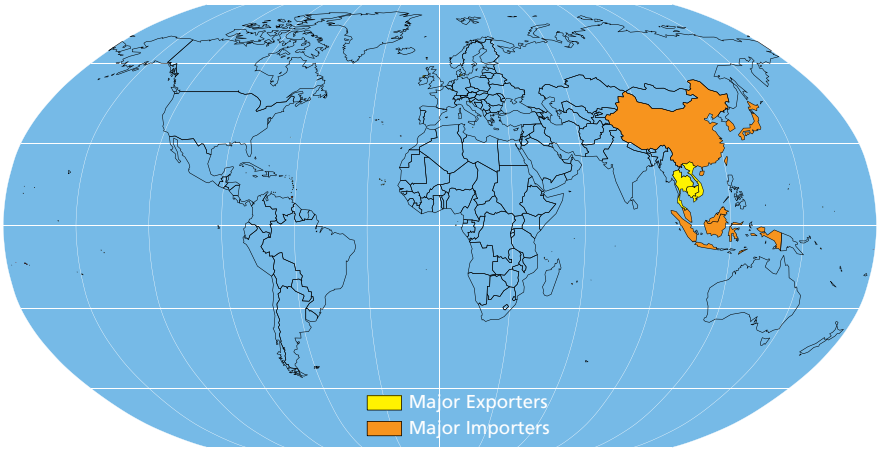
Figure 9. Stocks held by the five major rice exporters and stock-to-disappearance ratio



result of a robust pace of exports and the depletion of state reserves. A sizeable reduction is also envisaged for the **United States**, where inventories may drop to a 14-year low of 880 000 tonnes, following a sharp decline in production. Mostly on account of these large expected falls in Thailand and the United States, the major exporters' **stock-to-disappearance ratio** is predicted to drop from 18.5 percent in 2016/2017 to a ten-year low of 16.9 percent in 2017/18.

CASSAVA

Major Cassava Exporters and Importers



PRICES

International quotations of cassava products in 2017 reverse earlier sharp falls

Monthly reference prices of internationally traded cassava, a market that is mostly confined to East and Southeast Asia, have recovered in the latter half of 2017, after having fallen to multi-year lows.

Thai chips prices (f.o.b. Bangkok) were quoted at around USD 185 per tonne in October 2017, some 8 percent higher than in the corresponding month of last year and 19 percent more than in May 2017, when they plummeted to a 8-year low. Thai flour and starch prices (Super High Grade, f.o.b. Bangkok) were being quoted at around USD 350 per tonne, 11 percent higher than in October 2016, when they also fell to a 7-year low.

The turnaround to the trend in quotations is entirely on account of developments in China – the major destination for internationally traded cassava products. Last year, the country began to implement measures to lower its accumulated stockpiles of maize, with the state grain reserves body auctioning large volumes, which were deemed unfit for human consumption, to its feed and industrial sectors. As imported cassava and maize compete fiercely in these sectors, China's maize stock release had a significant effect on cassava quotations, especially given the thinness of the international market for cassava. The removal of minimum support prices for maize in China also made domestic maize more competitive with imported substitutes, further pressurizing cassava quotations. However, drought-induced lower plantings and logistical constraints in supply have significantly disrupted the 2017/18 maize season in China, resulting in prices of domestic maize climbing well above counterpart international quotations. This resurgence

Table 1. World cassava market at a glance

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017
	million tonnes, fresh root eq.			%
WORLD BALANCE				
Production	**277.0**	**278.8**	**278.0**	**-0.3**
Trade	**44.1**	**43.5**	**43.7**	**0.4**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	20.4	20.3	20.0	-1.3
Developing (kg/year)	33.4	33.1	32.5	-1.7
LDC (kg/year)	66.1	67.6	68.1	0.8
Sub-Saharan Africa (kg/year)	108.8	107.6	105.1	-2.3
Trade share of prod. (%)	15.9	15.6	15.7	0.7
CASSAVA PRICES [1] (USD/tonne)	**2015**	**2016**	**2017 *Jan-Oct***	**Change: Jan-Oct 2017 over Jan-Oct 2016**
Chips to China (f.o.b. Bangkok)	212.2	176.8	165.3	-6.8
Starch (f.o.b. Bangkok)	421.0	350.9	328.1	-8.1
Thai domestic root prices (20-25% starch content)	68.1	49.8	48.9	-2.5

[1] Source: Thai Tapioca Trade Association

Figure 1. International cassava and Thai domestic prices (Oct 2014 - Oct 2017)

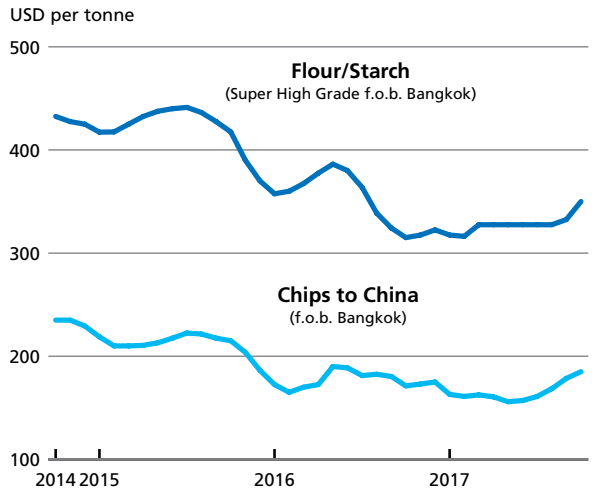


Figure 2. China maize and Thai cassava chips prices (Oct 2014 - Oct 2017)

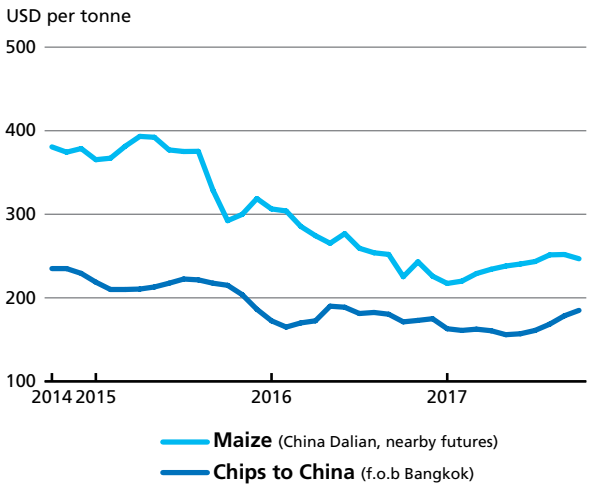


Figure 3. Thai root producer prices (Oct 2014 - Oct 2017)

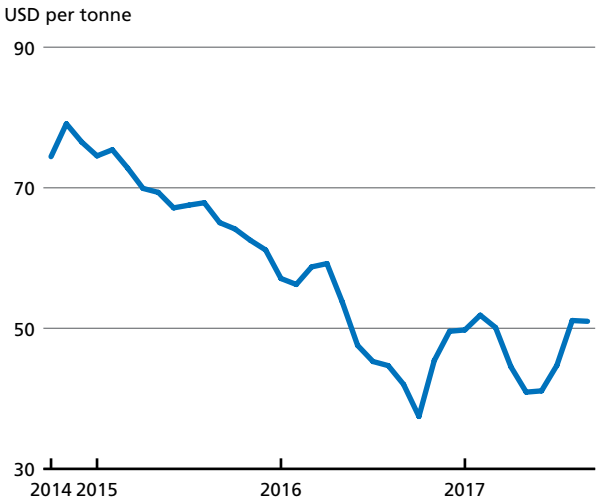


Table 2. World cassava production

	2014	2015	2016*	2017**
	(000 tonnes)			
World	**276 766**	**276 995**	**278 754**	**277 957**
Africa	**154 900**	**152 833**	**155 398**	**155 962**
Nigeria	56 328	57 643	57 855	55 000
Congo, Democratic Republic of	16 817	15 300	15 200	14 550
Ghana	16 524	17 213	17 798	19 139
Angola	7 639	7 727	7 788	7 140
Mozambique	12 700	8 103	9 100	10 920
Tanzania, United Republic of	4 993	5 886	6 000	5 500
Uganda	2 812	2 898	2 400	2 450
Malawi	5 013	4 997	5 000	5 050
Benin	4 067	3 421	4 096	4 150
Cameroon	4 836	5 000	5 170	5 345
Rwanda	3 117	3 000	3 060	3 200
Madagascar	2 930	2 677	2 629	2 700
Côte d'Ivoire	4 239	5 087	4 548	5 367
Other Africa	*12 885*	*13 881*	*14 753*	*15 451*
Latin America	**32 334**	**32 299**	**32 908**	**29 407**
Brazil	23 254	23 060	23 710	20 110
Paraguay	3 000	3 000	3 167	3 168
Colombia	2 186	2 092	2 117	2 125
Other Latin America	*3 894*	*4 147*	*3 914*	*4 004*
Asia	**89 365**	**91 689**	**90 274**	**92 418**
Thailand	30 022	32 358	31 161	30 936
Indonesia	23 436	21 801	20 745	20 330
Viet Nam	10 210	10 740	10 201	10 650
India	8 139	4 373	4 421	4 645
China, mainland	4 593	4 500	4 548	5 000
Cambodia	7 933	11 944	13 298	14 820
Philippines	2 540	2 711	2 755	2 825
Other Asia	*2 490*	*3 261*	*3 145*	*3 212*
Oceania	**249**	**252**	**252**	**247**

* Estimate
** Forecast

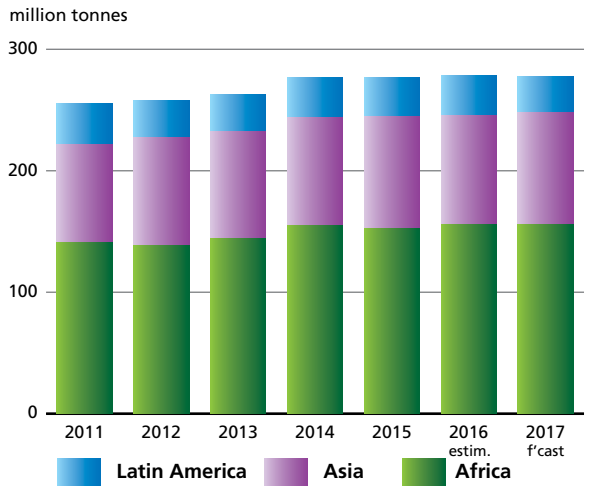
in import demand for domestic maize substitutes has given some support to cassava prices.

PRODUCTION

Global cassava production to fall in 2017

After two decades of uninterrupted growth, world cassava production is forecast to undergo a slight contraction in 2017, dropping to 278 million tonnes, around 1 million tonnes lower than the level of last year. Hitherto, cassava held the status of being one of the fastest expanding staple crops at the global level, registering annual average growth well above 3 percent over the past decade, but a combination of policy changes, depressed root prices and adverse weather in the major producing countries was behind lower plantings and consequently lower harvest prospects for 2017.

Figure 4. World production of cassava



Forecasting cassava production is difficult, owing to the widespread lack of data on harvest expectations and negligible information on planting intentions. Even in countries where the crop is known to play a critical role in food security and rural development, or where its trade carries importance, little effort is made to regularly survey the crop, as is done for other staple crops. This holds especially true in *sub-Saharan Africa* (SSA), the world's largest cassava growing region. Nevertheless, with rising demand for the staple and with enhancing food security and the rural economy high on the agenda of the region, 2017 cassava production in SSA could reach a record 156 million tonnes, around 0.6 million tonnes more than the level of 2016.

The crop is the subject of many expansion programmes in the region, as commercializing cassava and domestically producing staple crops – in order to limit imports – remains a key objective of many West African governments. In **Nigeria**, the regional production leader, the "Anchor Borrower's Programme" (ABP), initiated by the country's central bank, provides preferential loans to smallholder farmers who provide their product to the processing sector. However, while cassava is one of the many commodities listed in the programme, the implementation of ABP has, in effect, made rice more lucrative to cultivate and led to farmers shifting out of cassava. As a result, Nigeria's cassava crop is set to contract by 5 percent from last year to 55 million tonnes in 2017.

Supported by favourable growing conditions and an enabling environment for investment, cassava production in **Ghana**, the region's second largest cassava producer, could rise by 8 percent to a record 19 million tonnes in 2017. Current year prospects also remain positive in other important producing countries in West Africa, especially **Benin**, **Côte d'Ivoire**, **Cameroon** and **Sierra Leone** where, owing to good weather, either all-time high or near-high harvests are anticipated.

Cassava's tolerance to erratic weather conditions spares production from considerable contraction – compared to other crops – has put cassava expansion high on the agendas of many governments in *eastern* and *southern African* countries. In **Angola**, **Burundi**, **United Republic of Tanzania** and **Uganda** drought has marred 2017 production prospects to some degree, while better growing conditions in **Madagascar** and **Rwanda** are expected to lift production back to trend levels, with **Mozambique** officially forecast to gather a record crop of almost 11 million tonnes, some 20 percent higher than in 2016. In central Africa, ongoing conflict in the **Democratic Republic of the Congo**, the subregion's largest producer, could spell yet another large-scale contraction in cassava output.

In *Asia*, industrial demand for cassava in the ethanol, starch and animal feed sectors, and their lucrative export markets, have underpinned a strong expansion of the crop in the past decade, particularly in Southeast Asia. The 2017 cassava production for the entire continent is forecast to recover from last year, rising by 2 percent to a record of 92 million tonnes. This is in spite of a cessation of output growth in **Thailand**, Asia's largest producer. At the beginning of the season, low root prices and favourable weather conducive to competing crops prompted a shift from cassava, resulting in a fall in Thailand's cassava acreage. Official sources point to an output level of 31 million tonnes in 2017, around 1 percent lower than last year. The decline would have been more pronounced had it not been for an improvement in yields.

Elsewhere in Southeast Asia, cassava output in **China** is forecast to rise to around 5 million tonnes, on account of good weather. However, the country largely sources its cassava needs in processed form (mainly dry chips and flour) from Thailand and neighbouring countries, namely Cambodia, Lao People's Democratic Republic and Viet Nam, where it has engaged in efforts to secure long-term supplies from them. Of all these countries, only **Cambodia**'s production is expected to increase significantly in 2017. According to official reports, the country is anticipated to gather a record crop of some 15 million tonnes, 11 percent more than in 2016. Buoyed by rising regional demand, the expansion of cassava cultivation in Cambodia has been remarkable, increasing almost twice-fold in the space of three years.

By contrast, in **Indonesia** and the **Philippines,** cassava is more important for food security than for industry. Dietary diversification programmes in the two countries

have targeted cassava as a substitute for rice, which both countries import heavily. In Indonesia, however, the sector remains subdued. With exceptionally low root prices at the start of the season, lower plantings will likely limit the prospect of any output growth. The country is expected to gather a crop of around 20 million tonnes in 2017, slightly lower than last year, but some 4 million tonnes short of the levels registered at the beginning of the decade. In the Philippines, based on the pace of the harvest for the first six months of the year, cassava output is expected to reach 2.8 million tonnes in 2017, marginally above the level of 2016.

In *South Asia*, cassava plays a role in food security in **India**, particularly in the major growing states of Kerala (consumption of fresh roots) and Tamil Naidu (starch for food manufacturing). Combined, the two states account for 98 percent of national output. At around 4.6 million tonnes, officials foresee production largely unchanged from last year, and less than half of the record crop that was harvested in 2009. Cassava output is on a gradual decline in India, as farmers are opting to cultivate more remunerative crops, such as rubber, black pepper and coffee.

The cassava production outlook for *Latin America and the Caribbean* points to a significant contraction in 2017. Led by **Brazil**, the region's principal producer, drought at the beginning of the season has lowered plantings considerably, resulting in an officially forecast crop of 20.1 million tonnes, a decline of 15 percent or 3.6 million tonnes from last year. This is in spite of higher market prices for root as well as an increase in the minimum price in 2017.

Concerning the region's other sizable producing countries, **Paraguay** and **Colombia**, higher prices at the beginning of the season are expected to have sustained production in 2017, while in **Peru**, conducive policy and favourable growing conditions could lift cassava production in 2017.

UTILIZATION

Lower food availability drives cassava utilization down in 2017

Cassava is utilized in a multitude of ways. Food constitutes the major end use of the crop, but local and regional markets for animal feed, industrial use and energy feature prominently. Assessing the levels of uptake by different markets is virtually impossible, as again, little concerted effort is made at the country level to assess utilization. On the other hand, because cassava roots are highly perishable once harvested, they are utilized almost entirely within the crop year, making market assessments somewhat easier.

Cassava is mainly utilized as a **foodstuff**. As a staple, the root crop has little importance in the global diet (typically around 20 kg per capita per year in fresh root equivalent) owing to its perishability and bulkiness which preclude its widespread trade. However, cassava has major dietary significance in the tropical areas where it is grown. This is particularly evident in sub-Saharan Africa, where cassava is an important dietary staple in root form, but also in processed form. Indeed, fermented and non-fermented granulated and flour-based cassava products have become established forms of consumption of the staple in the region, where many countries have launched value-addition initiatives in the cassava food chain, promoting the rural economy and helping meet rising dietary needs.

In a similar vein, measures to promote added-value cassava at the expense of imported staples are also active. Nigeria, for example, continues to encourage the processing of cassava into flour as a substitute for wheat in making bread, in order to enable the country to curb its high dependency on imported wheat. The policy objective to reduce by half wheat imports by 2018 requires the mandatory blending of wheat flour with cassava flour. While the policy should act as a growth stimulus for Nigeria's cassava production and processing sectors, domestic cassava prices are reported to have increased significantly on the back of scarcity of the raw material, and the country's wheat imports are still expected to reach a record in 2017. Pressure in Ghana for policy-makers to instil a 10 percent mandatory cassava-wheat flour blending ratio is gathering momentum, and is deemed feasible, given the low quantities of wheat that the country currently imports.

Since non-food markets for cassava are of little significance in sub-Saharan Africa, production levels effectively translate into levels of food availability in the region. As a result, per capita food availability is estimated at approximately 105 kg in fresh root equivalent in 2017, down 2.3 percent from last year. The prospective sizeable fall in per capita food availability stems from negligible production growth in 2017, mainly in Nigeria, coupled with extremely robust population growth in the subregion.

Cassava also features prominently in diets in Latin America and the Caribbean, especially in Brazil, where the blending of cassava flour with wheat flour is mandatory. Likewise, in south Asia (India) and Southeast Asia (Indonesia and Philippines), cassava is widely consumed as food. However, as non-food markets for cassava are also well established in these regions, it is difficult to assess precise changes in utilization for direct human consumption.

Demand for cassava as a raw material in the **energy** sector, particularly in East and Southeast Asia, is likely to increase. Generally, falling gasoline prices in Southeast Asia

have put ethanol at a competitive disadvantage and, where mandatory blending rates are in force, competition among agricultural feedstocks for energy conversion is fierce. However, in China, the largest utilizer of cassava in ethanol production, a resurgence in imports of cassava-based feedstocks in the latter half of the year could see energy applications of cassava on the rise in 2017.

Based on analysis in countries that have established markets for cassava feedstuffs, the global use of cassava as an animal **feed** could also fall in 2017, where it is in direct competition with other feeding stuffs, particularly maize, and where annual supplies are expected to fall, such as in Brazil. Thailand could partake in this tendency, given the prospect of low cassava availabilities in the country.

TRADE

Cassava trade in 2017 unchanged

At just under 22 million tonnes (chip and pellet weight equivalent), the volume of world trade in cassava in 2017 is expected to match the levels of the two preceding years. Mostly confined to East and Southeast Asia, international flows of cassava are hugely contingent on industrial and feed demand for the product, particularly from China, and on the competitiveness of Thai exports. The importance of the two countries in shaping international trade is noteworthy, with China typically accounting for two-thirds of world imports, and Thailand for around 70 percent of world exports.

A policy change in China last year that began promoting the increased use of domestic substitutes, principally maize from stockpiles, has had little influence on cassava inflows to the country in 2017. After falling to a multi-year low in January, internal maize prices have been steadily rising throughout the year in China on the back of supply disruptions, according imported cassava products with improved competitiveness. International demand for cassava flour/starch, commonly referred to as tapioca, is expected to attain new heights in 2017, with flows reaching almost 10 million tonnes (chip and pellet weight equivalent). Based on the annual pace of shipments to date, once again Thailand is expected to dominate tapioca export market, where demand in China could rise by as much as 25 percent to a record 5 million tonnes. Purchases in 2017 by Japan, the Taiwan Provence of China and Malaysia are also expected to increase, albeit moderately. On the other hand, shipments to Indonesia – the second largest market for starch – could fall by as much as 25 percent to around 1 million tonnes.

As for cassava chips and pellets, growth in trade is forecast to be less vibrant in 2017, reaching just short of

Table 3. World exports of cassava (product weight of chips and pellets)

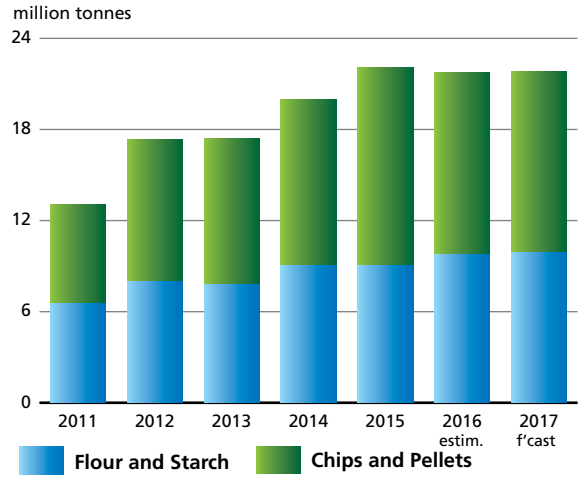
	2013	2014	2015	2016	2017
	000 tonnes				
Total	**17 403**	**19 948**	**22 061**	**21 765**	**21 848**
Flour and Starch	**7 769**	**9 068**	**9 040**	**9 749**	**9 888**
Thailand	6 686	7 919	7 657	8 446	8 600
Viet Nam	730	788	1 011	1 055	1 048
Cambodia	3	29	56	64	120
Others	*350*	*333*	*316*	*183*	*92*
Chips and Pellets	**9 634**	**10 880**	**13 021**	**12 016**	**11 960**
Thailand	6 006	6 927	7 458	6 411	6 400
Viet Nam	2 776	2 995	3 607	3 241	3 200
Cambodia	671	808	1 805	2 182	2 210
Others	*180*	*150*	*150*	*181*	*150*

Table 4. Thai trade in cassava (product weight of chips and pellets)

	2013	2014	2015	2016	2017
	000 tonnes				
Total	**14 829**	**17 404**	**17 996**	**16 808**	**17 085**
Flour and Starch					
Total	**6 786**	**8 228**	**8 282**	**8 545**	**9 440**
Japan	872	916	851	884	980
China	2 843	3 813	3 640	4 147	5 180
Chinese Provence of Taiwan	660	675	648	655	700
Indonesia	647	888	1 256	1 339	1 000
Malaysia	436	525	586	580	600
Others	1 329	1 412	1 302	940	980
Chips and Pellets					
Total	**8 042**	**9 176**	**9 713**	**8 263**	**7 645**
China	7 388	8 651	9 376	7 705	7 075
South Korea	577	517	310	323	260
Others	77	9	27	235	310

Source: Thai Tapioca Trade Association (TTTA), FAO

Figure 5. World trade in cassava products (chip and pellet equivalent)



12 million tonnes and nearly matching the volume of 2016. Demand by China for cassava chips is expected to remain robust, on account of cassava's revived competitiveness as a feedstock in its ethanol distilleries and as a feed ingredient in its livestock sector. While Thailand is set to be the dominant chip exporter, Viet Nam and Cambodia – the other important suppliers in the region – are also forecast to sustain their export shares of last year.

Prospects for an international cassava market expanding beyond Asia remain largely elusive, with no sign of re-emerging demand for substantial cassava volumes in Europe (which once imported pellets in large quantities for its feed sectors), or of significant exports from the major producing regions of Africa or Latin America and the Caribbean. This is in spite of Ghana and Nigeria having been granted a duty free quota to export 4 million tonnes of cassava chips to China on an annual basis.

OUTLOOK

Uncertainties prevail in non-food markets

Growth prospects for world cassava sectors appear delimited along the lines of geography that characterize the role of cassava in the agricultural economy. For instance, as cassava is principally a food crop in Africa, the sector is providing a strong stimulus for rural development, poverty alleviation, economic growth and, ultimately, food security. There is also wider recognition of cassava as a choice crop in the context of climate change adaptation strategies, particularly in eastern and southern African countries that have recently endured sustained periods of drought. These considerations are providing cassava sectors in the continent with a more assured long-term footing and are, by and large, behind an annual average production growth rate, which except for 2017, has outpaced population growth for the past decade and beyond. The current year anomaly is on account of a new policy in Nigeria that has incentivized the cultivation of other crops at the expense of cassava, resulting in cassava's scarcity and very high prices. Notwithstanding the prospect of higher root prices going into the next season, given the importance of cassava to Nigeria's economy, official intervention could see production growth back on track next year.

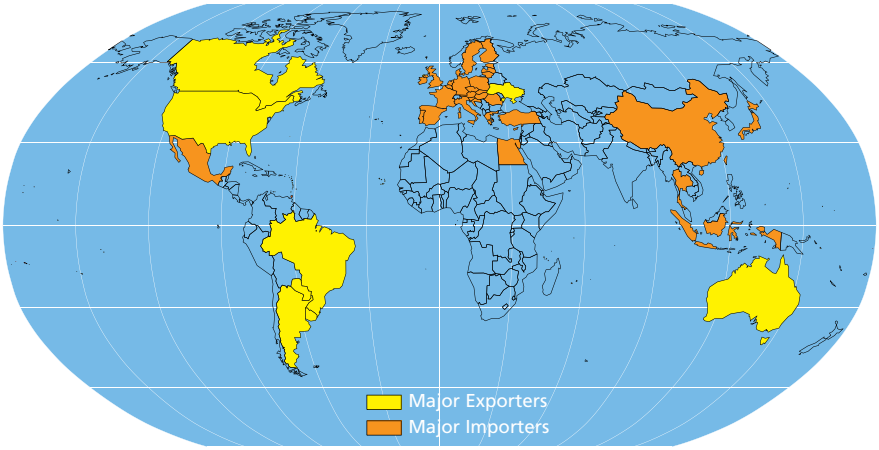
By contrast, cassava sectors in Asia are strongly susceptible to developments in China, the principal destination for cassava products. In fact, almost all cassava sectors in Southeast Asia have been geared to meet China's high import demand, expanding in tandem with trade growth. However, with highly competitive industrial and feed procurement, the immediate future for cassava had appeared bleak on account of China's policy change to promote domestically stockpiled maize to meet internal demand. But because of supply problems of maize in the country – poor crop prospects and logistical disruptions in distribution – respite to regional cassava sectors was provided by way of unfilled demand in China.

The downgrading of China's 2017/18 maize supply prospects may only provide a temporary stimulus to cassava in the region. A bumper maize crop in the following season or overcoming supply hurdles would pose a significant threat to the cassava sector. So would a more active policy of de-stocking maize. Given the thinness of international cassava trade, even a minor recovery in China's maize supply would bring about serious ramifications to the international market for cassava, as witnessed in the latter half of last year.

The potential for cassava to compete in markets beyond China is also uncertain, given that international maize prices are currently hovering at relatively very low levels. While cassava root prices in Southeast Asia have firmed in recent months, the outlook for next year and beyond will much depend on whether producers would be willing to accept the risks of a possible strong decline in cassava demand in China. Already some indication is provided by way of a recent official survey in Thailand, which points to 9 percent drop in cassava area in 2018.

OILCROPS, OILS AND MEALS [1]

Major Oilseed Exporters and Importers



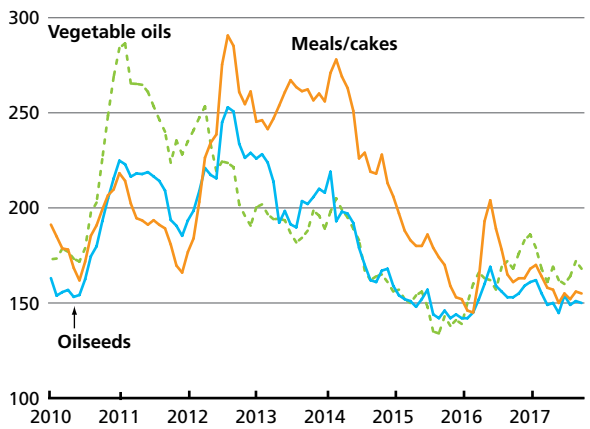
PRICES [2]

Current supply and demand forecasts point to steady prices

The 2016/17 season saw an easing in the global oilseeds and oilmeal supply and demand situation, while vegetable oil fundamentals remained relatively tight. Accordingly, during the recently ended season, international prices for oilseeds and oilmeals remained close to the previous season's subdued level, whereas oils/fats values maintained their strength – as reflected by FAO's price indices trailing the oilseed complex.

FAO's price index for oilseeds averaged 154 points 2016/17, close to the subdued level witnessed in 2015/16 and well below the 2011/12 peak. The index' course level primarily reflects developments in the soybean market that saw bumper soy crops from the world's two key suppliers, Brazil and the United States, concur with moderate growth in global demand – a situation that drove global soy inventories to unprecedented highs. Moreover, early forecasts for the forthcoming 2017/18 season pointed to another record-breaking soy crop in the Northern Hemisphere, raising the chances for a further expansion in world soybean supplies, hence adding to downward pressure on prices. FAO's price index for oilmeals, which primarily reflects soymeal values, followed the path of the

Figure 1. FAO monthly international price indices for oilseeds, vegetable oils and meals/cakes (2002-2004=100)



[1] Almost the entire volume of oilcrops harvested worldwide is crushed to obtain oils and fats for human nutrition or industrial purposes, and to obtain cakes and meals that are used as feed ingredients. Therefore, rather than referring to oilseeds, the analysis of the market situation is mainly undertaken in terms of oils/fats and cakes/meals. Production data for oils and meals are derived from domestic production of the relevant oilseeds in a specific year, i.e. they do not reflect the outcome of actual oilseed crushing in a given country and period. Regarding oilseed trade, situations where oilseeds are produced in one country but crushed in another one are reflected in national oil/meal consumption figures. It is important to note that data on trade in oils (meals) refer to the sum of trade in oils (meals) plus the oil (meal) equivalent of oilseeds traded. Similarly, stock figures for oils (meals) refer to the sum of oil (meal) stocks plus the oil (meal) equivalent of oilseed inventories.

[2] For details on prices and corresponding indices, see Statistical appendix table 23

Figure 2. FAO monthly price index for oilseeds (2002-2004=100)

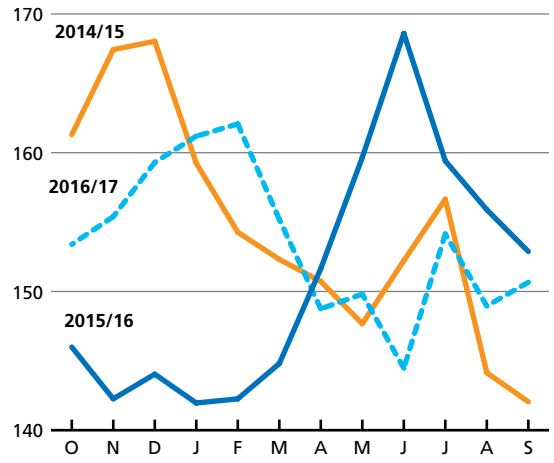


Figure 3. FAO monthly price index for oilmeals/cakes (2002-2004=100)

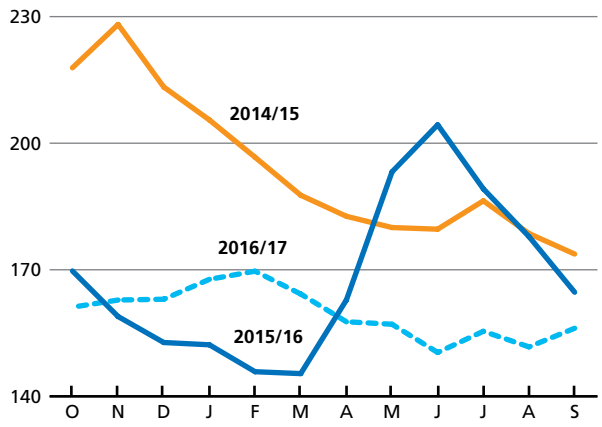


Figure 4. FAO monthly price index for vegetable oils (2002-2004=100)

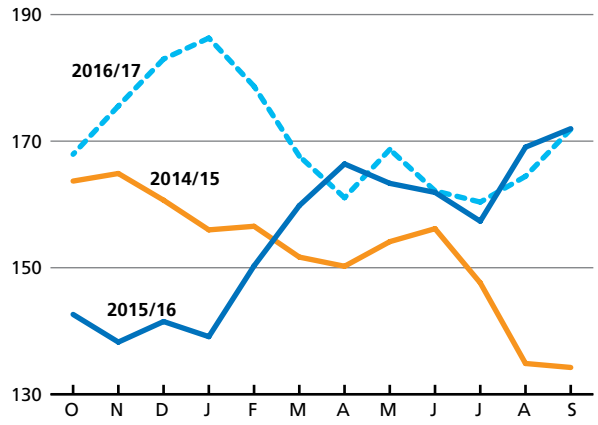
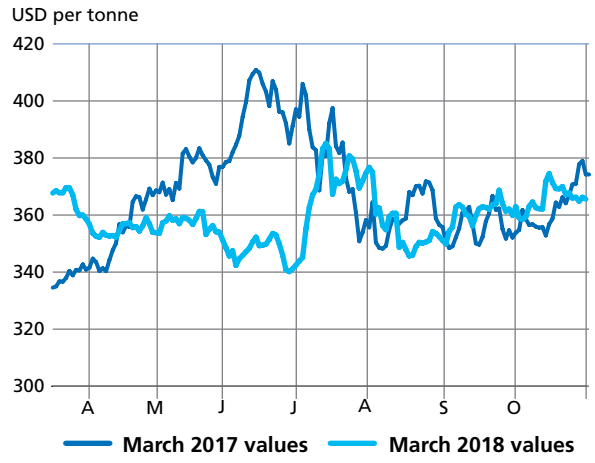


Figure 5. CBOT soybean futures for March



oilseeds index very closely, recording a slight fall compared with 2015/16. Besides spill-over weakness from soybeans, the softening in meal prices was driven by developments in two closely related markets. Firstly, in 2016/17, meal-rich soybeans were predominantly crushed for oil rather than meal, a situation that has led to burdensome soymeal supplies. Secondly, strong competition from competitively priced feedgrains weighed on oilmeal prices throughout 2016/17.

FAO's price index for vegetable oils averaged 171 points in 2016/17, up 16 points compared with 2015/16, though well below the peaks recorded earlier in the decade. The overall supply and demand balance of oils/fats remained relatively tight, especially during the first half of 2016/17, driving prices upward. International quotations for palm oil, the world's most consumed oil, climbed to two-and-a-half year highs, underpinned by a slower than anticipated recovery in palm oil production. This, combined with robust global import demand, slowed the replenishment of stocks in the world's top suppliers, Indonesia and Malaysia.

Preliminary forecasts for 2017/18 point to a broadly balanced global supply and demand situation in both the oilseed and meal market as well as in the oils segment. If confirmed, this would provide limited scope for marked upward or downward movements in prices. Stock-to-use ratios similar to those observed in the last two seasons and the convergence, during the last two to three months, of the current Chicago Board of Trade futures price for soybeans with that recorded last year seem to confirm this picture. In the coming months, international oilseed, oil and meal values will be influenced in particular by changes in the production forecasts for soybeans in South America and palm oil in Southeast Asia. Uncertainties

remain regarding the actual course of global oil and meal demand, including, in the case of oils/fats, the impact of recent policy changes concerning the market for biodiesel.

OILSEEDS

2017/18 production forecast marginally above last season's record level

After surging by 9 percent in 2016/17, global oilseed production is tentatively pegged at 586 million tonnes in 2017/18 – marginally above last season's level. Based on current forecasts, year-on-year contractions in global soybean and sunflowerseed production would be offset by sizeable gains in cottonseed and, to a lesser extent, groundnut, rapeseed and palmkernel.

Global 2017/18 soybean production is forecast at 346 million tonnes – 1 percent below last season's all-time high, but still the second largest output on record. The anticipated drop would stem from a return to trend yields, after near optimal weather propelled yields to record-highs last season. Global plantings, on the other hand, are projected to expand by about 4 percent. In the Northern Hemisphere, where harvests are about to near completion, production is pegged at record or near-record levels in all key producing countries except India. In the **United States**, the world's leading soybean producer, latest estimates peg production at an unprecedented 121 million tonnes. The increase would mainly originate from record-high soy plantings (as farmers trimmed wheat and coarse grains acreage), while yields would retreat from last season's peak. In **China**, production is anticipated to rise for the second consecutive year. The reversal from the prior, downward trend was supported by reforms of China's maize policy regime, with lower support payments for maize enticing farmers to shift to alternative crops, in particular soybeans. A record-breaking harvest is also reported from **Canada**, where farmers raised soy plantings on the back of attractive prices. In **India**, by contrast, production is poised to drop sharply, following a sizeable contraction in area sown and less favourable weather conditions than last year. In South America, where sowings of the 2017/18 crop are now underway, aggregate output is anticipated to drop by almost 5 percent from last season's record level on expectations of only modest gains in plantings and a return to trend yields, assuming average weather conditions. Based on these forecasts, **Brazil**'s output could retreat by 6 percent, albeit the country would still harvest the second-largest crop on record. On the other hand, in **Argentina**, area planted could decline further, influenced by crop rotation requirements and government policies favouring competing crops as well as poor weather, which, together, could drive production to a four-year low.

Global rapeseed production is currently forecast to exceed last season's all-time high by a small margin. While global area planted would be close to record levels, average yields could trail behind last season's top level, thus limiting production gains. The anticipated production rise would stem from larger crops in the **EU** and **CIS** countries, reflecting yield improvements in the case of the EU and the Russian Federation, and higher plantings in Ukraine. Meanwhile, in **Canada**, plantings surged but yields remained low, keeping production about unchanged. By contrast, production is forecast to fall in **India** and **China**, where farmers have cut plantings in response to, respectively, low domestic prices and the termination of public support programmes. In **Australia**, production is expected to drop sharply, following unfavourable weather.

Global sunflowerseed production is projected to trail behind last season's record. Based on current forecasts, sizeable contractions in the **CIS** and the **United States** would be partly offset by gains in the **EU**, **Argentina** and **Turkey**. Meanwhile, global cottonseed production is set to expand under the lead of the **United States**, **Pakistan** and **India**, underpinned by higher plantings. Also global groundnut production could grow, boosted by top yields, with production gains in the **United States** and **China** expected to more than offsett losses in **India**.

Table 1. World production of major oilcrops

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change 2017/18 over 2016/17
		million tonnes		%
Soybeans	314.7	348.7	346.4	-0.7
Rapeseed	69.9	71.4	72.1	1.0
Cottonseed	37.7	39.8	42.5	6.8
Groundnuts (unshelled)	37.9	40.7	41.7	2.5
Sunflower seed	43.2	49.1	48.4	-1.4
Palm kernels	14.6	16.2	17.1	5.5
Copra	5.2	5.3	5.8	9.4
Total	**523.2**	**571.3**	**574.1**	**0.5**

Note: The split years bring together northern hemisphere annual crops harvested in the latter part of the first year shown, with southern hemisphere annual crops harvested in the early part of the second year shown. For tree crops, which are produced throughout the year, calendar year production for the second year shown is used.

OILS AND FATS [3]

2017/18 oils/fats production to grow less than last season

FAO's current 2017/18 crop forecasts translate into a further, albeit modest, expansion in global oils/fats production to 226.5 million tonnes, as opposed to last season, when global output increased sharply due to palm oil's recovery from the 2015 El Niño episode.

As for individual oils, in 2017/18, further growth in palm oil production and, to a lesser extent, rape, cottonseed and lauric oils, would compensate a fall in soybean and sunflowerseed oil. Global palm oil production is expected to revert to an average growth pace. In **Indonesia**, palm oil production would keep expanding, allowing the country to consolidate its position as the world's leading producer. By contrast, **Malaysia**'s output is pegged only marginally above the country's 2014/15 record, as growth continues to be affected by slow expansion in mature area and limited productivity gains, partly stemming from a protracted shortage in plantation workers.

Global oils/fats supplies in 2017/18, which comprise 2017/18 production and 2016/17 carry-out stocks, are forecast to outstrip last season's level by 2–3 percent, with last year's rise in global inventories contributing to this season's supply growth.

Supply improvements will be concentrated in **Indonesia**, **Malaysia**, the **United States** and the **EU**, mostly reflecting good crops. Conversely, domestic availabilities are projected to expand only scantily in **Argentina**, **Canada** and **China**, and to drop compared with last season in **Australia**, **Brazil**, the **CIS** and **India**, due to either poor harvests or reduced carry-in stocks.

Global oils/fats utilization set to keep expanding

World consumption of oils/fats in 2017/18 is pegged at 226 million tonnes, implying a year-on-year growth of about 3 percent, slightly less than in the past three seasons.

With regard to individual oils, soy and palm oil are expected to lead consumption growth, supported by ample supplies and by price discounts relative to other vegetable oils. The two oils' joint share in total consumption is set to increase further, reaching 57 percent. Moderate consumption improvements are expected for the other oils/fats, except for rapeseed oil, which could fall on the back of reduced 2016/17 carry-out stocks.

[3] This section refers to oils from all origins, which – in addition to products derived from the oil crops discussed under the section on oilseeds – includes palm oil, marine oils as well as animal fats.

While population and economic growth remain the key drivers behind the rising uptake of oils/fats for food and other traditional uses, especially in Asia, subdued economic growth in a number of countries, together with limited growth in oils/fats demand by the biodiesel industry could temper growth in oils/fats consumption in 2017/18. Biodiesel production and, with it, oils/fats uptake would depend primarily on mandatory national consumption targets, which are anticipated to remain unchanged in most countries, except for **Brazil** and the **United States**, where higher consumption targets are set to be introduced in 2018. Meanwhile, demand for feedstock other than vegetable oil – especially used cooking oil – continues to gain ground in several countries, aided by policy incentives.

Table 2. World oilcrops and product market at a glance

	2015/16	2016/17 *estim.*	2017/18 *f'cast*	Change: 2017/18 over 2016/17
	million tonnes			%
TOTAL OILCROPS				
Production	534.8	582.6	585.7	0.5
OILS AND FATS [1]				
Production	206.1	223.3	226.5	1.4
Supply [2]	244.9	257.7	263.5	2.2
Utilization [3]	212.1	219.8	226.0	2.8
Trade [4]	115.1	122.8	125.3	2.1
Global stock-to-use ratio (%)	*16.2*	*16.8*	*16.6*	
Major exporters stock-to-disappearance ratio (%) [5]	*10.0*	*10.5*	*10.8*	
MEALS AND CAKES [6]				
Production	137.8	151.5	150.8	-0.4
Supply [2]	163.9	176.6	179.2	1.5
Utilization [3]	139.2	145.6	150.4	3.3
Trade [4]	90.3	96.2	99.0	2.9
Global stock-to-use ratio (%)	*25.1*	*28.3*	*28.6*	
Major exporters stock-to-disappearance ratio (%) [7]	*11.1*	*13.0*	*12.1*	
FAO PRICE INDICES (Oct-Sept) (2002-2004=100)	**2014/15**	**2015/16**	**2016/17**	**Change: Oct-Sept 2016/17 over Oct-Sept 2015/16 %**
Oilseeds	155	151	154	1.8
Oilmeals/cakes	194	168	160	-5.0
Vegetable oils	153	155	171	10.0

Note: Refer to footnote 1 on page 40 for overall definitions and methodology.

[1] Includes oils and fats of vegetable, animal and marine origin.
[2] Production plus opening stocks.
[3] Residual of the balance.
[4] Trade data refer to exports based on a common October/September marketing season.
[5] Major exporters include Argentina, Brazil, Canada, Indonesia, Malaysia, Ukraine and the United States.
[6] All meal figures are expressed in protein equivalent; meals include all meals and cakes derived from oilcrops as well as meals of marine and animal origin.
[7] Major exporters include Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, the Russian Federation, Ukraine, Uruguay and the United States.

Figure 6. Global production and utilization of oils/fats

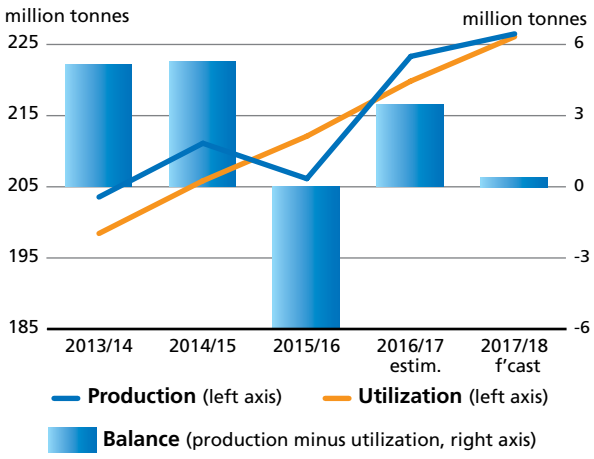
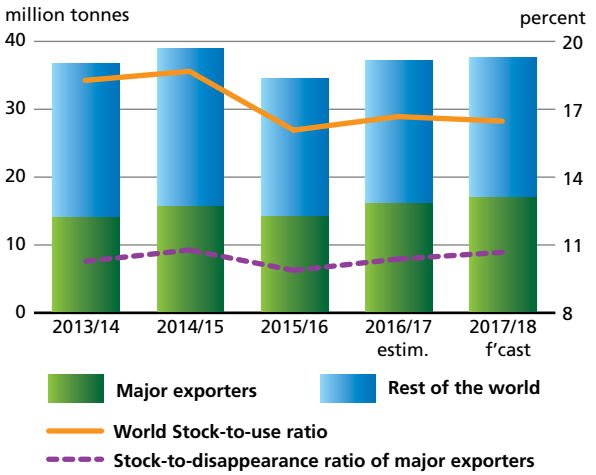


Figure 7. World stocks and ratios of oils/fats (including the oil contained in seeds stored)



Furthermore, discretionary blending of transport fuels with biodiesel is anticipated to remain negligible, as its profitability continues to be eroded by persistently high price premiums of vegetable oils relative to crude mineral oils.

Developing nations in Asia are anticipated to continue driving growth in global oils/fats uptake. While average or above-average growth is anticipated in **China**, **Indonesia**, **Malaysia** and **Pakistan**, a slowdown is possible in **India**, given the projected drop in local supplies. In the United States, Brazil, the EU and Argentina, changes in biodiesel policies could affect oils/fats demand. In the **United States** and **Brazil**, biodiesel production and, with it, oils/fats uptake could expand as higher domestic consumption targets are introduced. Furthermore, the United States recently restricted biodiesel imports from its main foreign supplier, **Argentina**, a measure that, in turn, could hit Argentina's biodiesel production. By contrast, the **EU**'s recent decision to lift its import barriers on Argentine biodiesel could weigh on the bloc's biodiesel production, as local refiners are affected by competitively priced imports.

Global oils/fats inventories to remain ample in 2017/18

In 2017/18, overall production is forecast to essentially match global utilization. Accordingly, global inventories – including the oil contained in stored oilseeds – would remain close to last season's above-average level. Commodity-wise, palm oil stocks are projected to rise (although inventories would remain below the level observed before El Niño hit production) and more than offset drops in soyoil inventories. As for the other oils, reserves of groundnut oil could climb to record levels while sunflower oil inventories may drop, mirroring the respective crop outturns. Among main stock-holding countries, sizeable draw-downs in inventories are forecast for **India**, **Brazil** and **Argentina** due to reduced harvests and, in Argentina's case, also in order to support exports. By contrast, noticeable stock replenishments are expected in **Indonesia**, **Malaysia**, the **United States** and the **EU**.

While the above forecasts would lead to a fractional drop in the global stock-to-use ratio in 2017/18, the stock-to-disappearance ratio for the major exporting countries[4] would inch up, hence remaining at near-record levels.

Growth in oils/fats transactions to slowdown in 2017/18

Global trade in oils/fats – including the oil contained in traded oilseeds – is forecast to expand less strongly than last season, when a rebound in palm oil shipments propelled global transactions upward. Palm and soybean oil, the two most traded oils, would lead the year-on-year expansion in global trade, backed by production gains in palm and record-large opening stocks in soy. On the other hand, sunflower and rapeseed oil shipments could fall on reduced national availabilities. Aided by its more competitive price, palm oil should be able to regain market share lost to other oils, especially soyoil, in the last two seasons.

On the import side, demand growth will remain concentrated in developing countries in Asia, led by **China** and **India**, reflecting relatively slow growth in domestic supplies. In India, imports would rise despite recent hikes in the country's import tariffs, as steady population and

[4] Argentina, Brazil, Canada, Indonesia, Malaysia, Ukraine and the United States.

Figure 8. Oils/fats imports by region or major country (including the oil contained in seed imports)

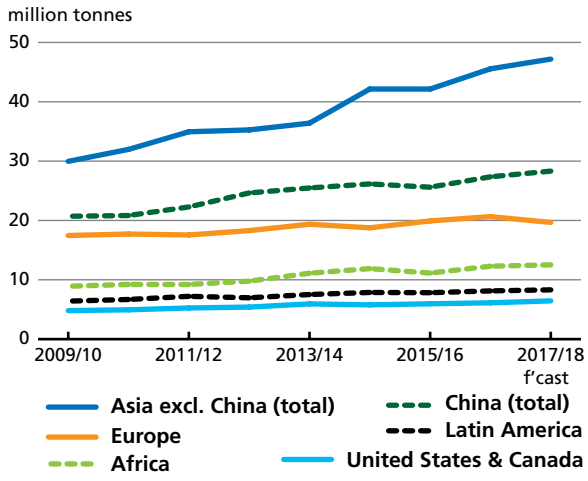
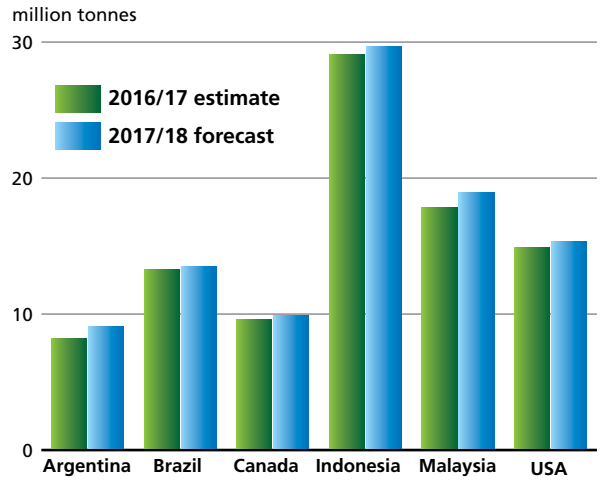


Figure 9. Oils/fats exports by major exporters (including the oil contained in seed exports)



income growth underpin food demand. Among developed countries, net purchases by the **EU** are forecast to drop by almost 1 million tonnes on account of improved domestic availabilities.

Global export growth would rest primarily on record sales of palm oil by **Indonesia** and a marked rebound in shipments from **Malaysia**. Modest increases in deliveries are also expected in **Argentina**, **Brazil**, the **United States** and **Canada**, in part entailing inventory drawdowns. In Argentina, the rise in exportable supplies would also stem from possible cuts in domestic biodiesel production. On the other hand, export contractions are expected in **Ukraine** and **Australia**, reflecting prospective declines in oils/fats production.

MEALS AND CAKES [5]

Global meal production to remain flat in 2017/18

Based on current crop forecasts, 2017/18 global meal production is pegged at 151 million tonnes (expressed in protein equivalent), which would be fractionally below last season's all-time record. Contractions in soymeal and, to a lesser extent, sunflower meal, would be offset by rises in other meals/cakes.

Notwithstanding the portended stagnation in production, global oilmeal supplies would grow by 1 to 2 percent, reflecting a conspicuous rise in carry-in stocks. The most sizeable supply gain would occur in the **United States**, the world's leading meal supplier. Underpinned by record-large opening stocks and another bumper crop, US supplies are set to swell to an unprecedented 47 million tonnes (expressed in protein equivalent), marking the fifth consecutive year-on-year growth. Following good crop outturns, moderate expansions are also expected in **China**, the world's top consumer, **Canada** and the **EU**. Conversely, availabilities could contract in **India**, **Brazil**, **Ukraine** and **Australia**, mirroring drops in domestic output. **Argentina**'s supplies are forecast to decrease only marginally, as ample carry-in stocks would compensate prospective production drops.

Meal consumption set to expand further in 2017/18

Tentatively pegged at 150 million tonnes (expressed in protein equivalent), global consumption would expand further in 2017/18, albeit at a lower rate than last season. In many countries, livestock and aquaculture industries are expected to continue expanding, with a parallel expansion in oilmeal uptake. However, global meat production could grow at a reduced pace, which, combined with record-large supplies of competitively priced feed grains, could weigh on growth in meal utilization.

As in previous years, prospective utilization growth would be mainly covered by soybean meal, with smaller gains also forecast for cottonseed, rapeseed and groundnut meal. Developing countries in Asia – led by China – should remain the main engine of overall growth. However, in **China**, the world's largest meal consumer, uptake by feed millers could grow less than last season, when domestic soymeal consumption received a boost from the government's decision to restrict imports of DDGs (distiller's

[5] This section refers to meals from all origins; in addition to products derived from the oil crops discussed under the section on oilseeds, also fishmeal and meals of animal origin are included.

Figure 10. Global production and utilization of meals/cakes (in protein equivalent)

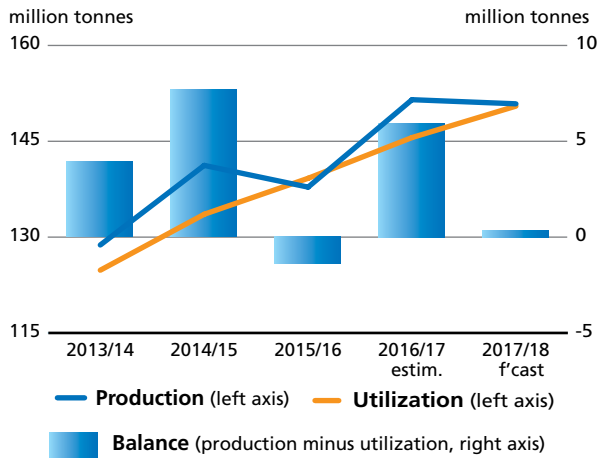
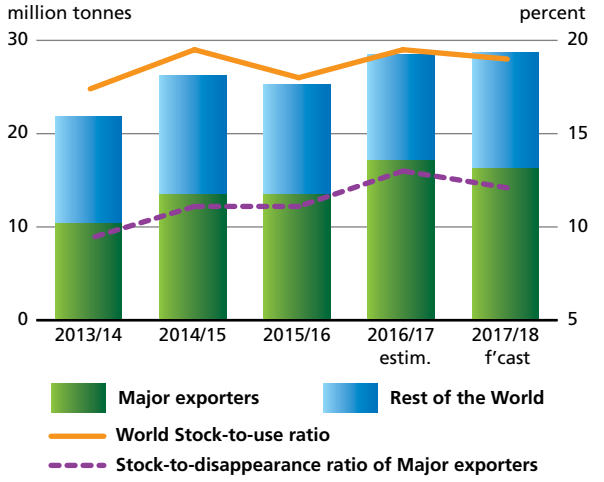


Figure 11. World stocks and ratios of meals/cakes (in protein equivalent and including the meal contained in seeds stored)



dried grains). Domestic meal demand could also be trimmed by sluggish growth in the country's pig and poultry sectors, where oilmeal use is concentrated. Elsewhere in Asia, consumption is anticipated to rise at about average rates, including in **India**, **Indonesia**, the **Islamic Republic of Iran**, **Pakistan**, the **Philippines**, **Thailand**, **Viet Nam** and **Turkey**.

In the **EU** and the **United States**, the world's second and third largest consumers, meal consumption is forecast to expand further, sustained by ample domestic supplies. In **Brazil**, the prospective drop in domestic supplies could constrain meal uptake.

Global meal inventories to remain about unchanged

Based on current forecasts, in 2017/18, global meal output would essentially match consumption, as opposed to last season, when production outstripped demand, triggering a sizeable rise in inventories. Therefore, in the current season, global oilmeal stocks (including the meal contained in stored seeds) are forecast to remain close to last season's record level, including stable reserves of soymeal, the world's dominant meal.

In **Brazil** and **Argentina**, sizeable stock drawdowns could be required to make up for poor domestic supplies as well as to support higher exports. The above reductions would be offset by additional replenishments in the **United States** where, boosted by another bumper soybean crop, carry-out stocks are forecast to climb to an 11-year high. In **China**, where inventories have fallen in the last two years, in part aided by government efforts to cut state reserves, inventories could expand again, given the prospective rebound in local soybean production and further increases in imports.

Based on the above forecasts, both the global stock-to-use ratio and the stock-to-disappearance ratio for the major exporting countries[6] would drop only slightly from last season's high level.

Expansion in global meal transactions could slow down

International meal trade (including the meal contained in traded oilseeds) is forecast to grow at a below-average pace in 2017/18. As in previous years, soybean meal would continue to drive growth. Sustained by record-high supplies and, hence, competitive prices, soymeal transaction would rise for the tenth consecutive year. Trade in all other meals/cakes would advance marginally, except for global sunflower meal shipments, which could contract following this season's reduced crops.

With regard to imports, Asian countries would continue to dominate demand. In contrast to past years, **China** could account for only around one-third of Asia's anticipated import expansion, with purchases by the world's top importer forecast to rise by only 2 percent. Factors contributing to such below-average growth include the anticipated rebound in local soy production, relatively weak growth in domestic meal demand, the continued release of state reserves, and a marked acceleration of imports in the final stretch of the 2016/17 marketing season. Elsewhere in Asia, steady growth in import demand is expected,

[6] Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, the Russian Federation, Ukraine, the United States and Uruguay.

Figure 12. Meal/cake imports by region or major country (in protein equivalent and including the meal contained in seed imports)

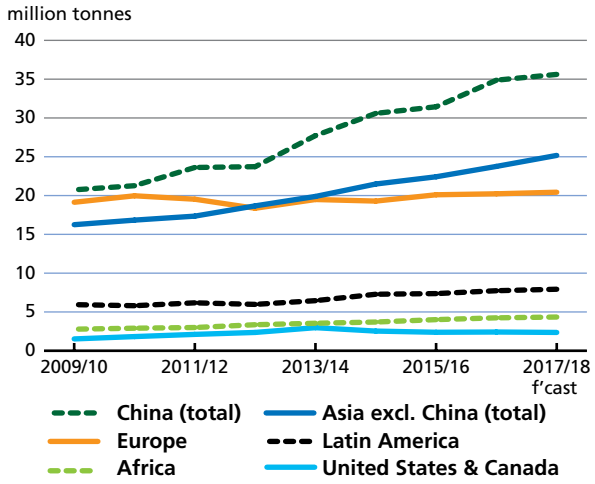
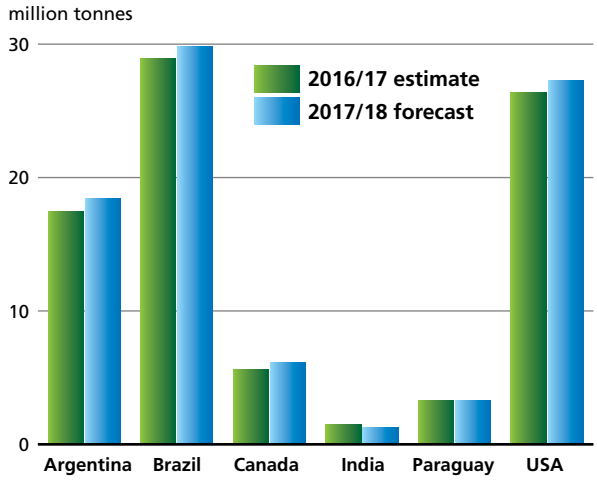


Figure 13. Meal/cake exports by major exporters (in protein equivalent and including the meal contained in seed exports)

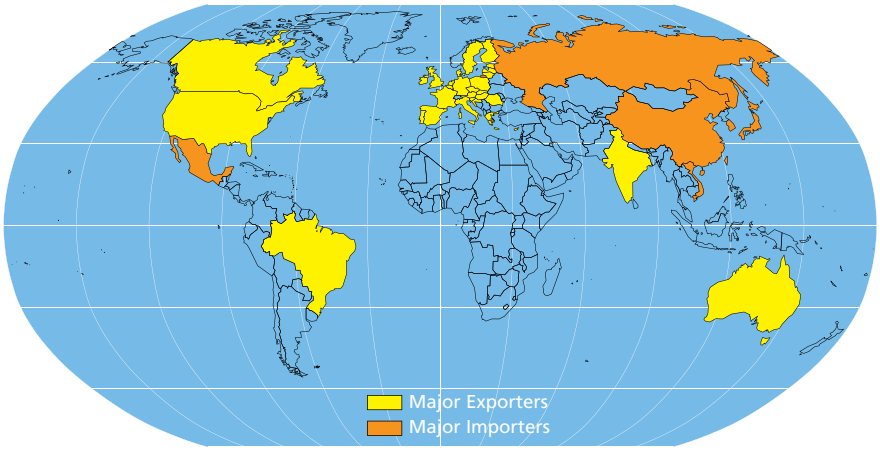


especially in **Thailand**, **Pakistan**, the **Republic of Korea**, the **Philippines** and **Viet Nam**. As for developed countries, in the **EU**, the world's second largest buyer, imports would record only a small increase, as domestic supply gains would help meet local requirements.

Export growth is expected to concentrate in the United States, Canada and, providing current production forecasts materialize, also in Brazil and Argentina – the world's four largest suppliers. Compared with last season, sales by the **United States** and **Canada** are projected to expand by, respectively, 2.0 million tonnes and 1.2 million tonnes (expressed in product weight and including the meal contained in seed shipments), supported by bumper crops as well as, in the case of the United States, largest-ever opening stocks. South America's export expansion is pegged at 4.2 million tonnes, divided about equally between **Argentina** and **Brazil**. In both countries, the rise in shipments would rest on the release of domestic stocks. Similar to last season, Brazil, the United States and Argentina, the world's top three suppliers of soybean meal, can be expected to strongly compete for market share. With regard to other suppliers, deliveries by **Paraguay**, **Uruguay** and the **Russian Federation** could remain about unchanged, whereas the contraction in sales forecast for **India**, **Ukraine** and **Australia** mainly reflects poor domestic crops. In the case of India, soy processors continue to face difficulties in exporting soymeal at internationally competitive prices.

MEAT AND MEAT PRODUCTS

Major Meat Exporters and Importers



PRICES

Moderate price increases

After increasing from January to June 2017, international meat prices levelled off. In the first half of the year, the price increases were underpinned by a lively import demand for most meat categories. Short availabilities for export were also behind steeply rising ovine meat price, also providing support to bovine prices. Since July, increased competition and more sluggish import demand have weighed on international meat prices of all meats. Across the various meat categories, the ovine meat prices gained as much as 39 percent, while bovine, poultry and pigmeat prices individually increased by nearly 7 percent. The FAO Meat Price Index gained 9 percent, or 14 points, between January and October 2017, mainly reflecting the price movements of bovine, pig and poultry meats, which have larger weights in the index.

Figure 1. FAO monthly meat price index (2002-2004=100)

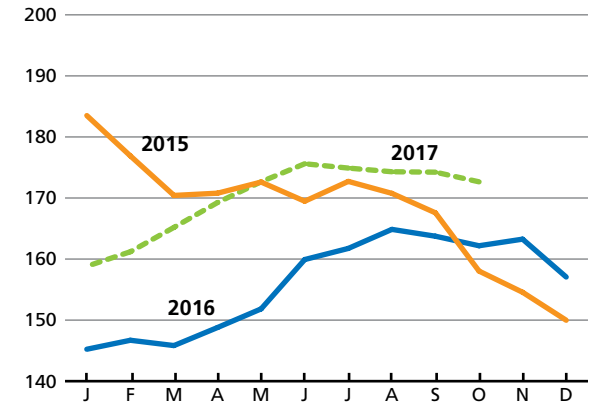
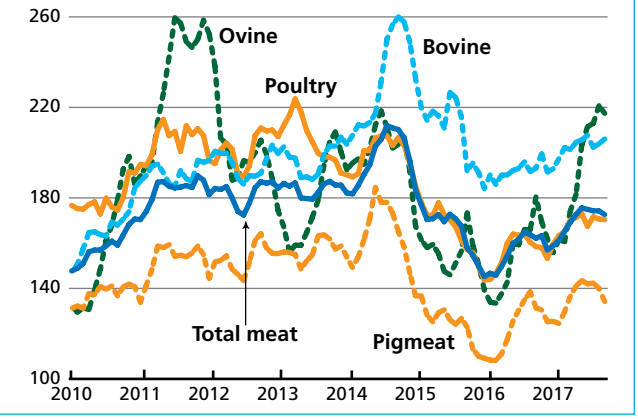


Figure 2. FAO monthly international price indices for bovine, ovine, pigmeat and poultry meat (2002-2004=100)



MEAT PRODUCTION AND TRADE

Production to recover growth, but the trade expansion to slow down

After stagnating in 2016, world meat production is forecast to recover in 2017, increasing by 1.1 percent, or 3.5 million tonnes, to 324.8 million tonnes, amid moderate increases in bovine, pig and poultry meats and a modest gain in ovine meat. Much of the global meat output expansion is forecast to originate in the United States, Brazil, the

Table 1. World meat market at a glance

	2015	2016 estim.	2017 f'cast	Change: 2017 over 2016
	million tonnes			%
WORLD BALANCE				
Production	**320.5**	**321.3**	**324.8**	**1.1**
Bovine meat	67.6	68.3	69.5	1.7
Poultry meat	116.9	117.2	118.2	0.9
Pigmeat	116.1	115.8	117.0	1.0
Ovine meat	14.4	14.4	14.5	0.6
Trade	**29.8**	**31.2**	**31.5**	**1.2**
Bovine meat	9.2	8.9	9.1	2.2
Poultry meat	12.2	12.8	13.1	2.0
Pigmeat	7.2	8.3	8.2	-0.7
Ovine meat	1.0	0.9	0.9	-0.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	43.3	43.0	42.9	-0.1
Trade - share of prod. (%)	*9.3*	*9.7*	*9.7*	*0.1*

FAO MEAT PRICE INDEX (2002-2004=100)	2015	2016	2017 Jan-Oct	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	168	156	170	9.3

Russian Federation, Mexico and India, but also in Argentina, Turkey and Thailand. After two years of downsizing associated with an on-going process of reforms including farm consolidation, meat production in China, the world's largest meat producer, is expected to remain stable around the 2016 level, as expansions in ovine, pig and bovine meats are anticipated to compensate for a marked decline in poultry meat, constrained mainly by the spread of the highly pathogenic avian influenza (HPAI).

Global trade in meat in 2017 is forecast to reach 31.5 million tonnes, 1.2 percent above last year, but the growth is slower than the 4.4 percent growth registered in 2016. World trade in bovine meat is expected to record the fastest expansion, followed by poultry, while trade in pigmeat and ovine meat may fall somewhat. On the demand side, Japan, Angola, Cuba and Mexico, as well as the Republic of Korea, Iraq, Chile, the United Arab Emirates and Viet Nam are all expected to step up imports. By contrast, meat imports by China, the EU, Egypt, Saudi Arabia, South Africa and Canada may decline, in some cases a reflection of larger domestic supplies and, in others, of falling demand in the wake of relatively high international prices. Among exporters, the United States, Thailand, India, Argentina, Ukraine and Brazil are all anticipated to step up meat sales abroad in 2017, unlike the EU, Australia, New Zealand, Paraguay and Chile which may see theirs fall.

BOVINE MEAT

Production: growth concentrated in the Americas

After stagnating between 2013 and 2015 and growing by 1.1 percent in 2016, bovine meat output is forecast to increase by 1.7 percent to nearly 70 million tonnes in 2017, adding 1.2 million tonnes to world supply. The **United States**, **Brazil**, **Argentina**, **Turkey** and **China** are expected to see the most sizeable gains, while declines are expected in **South Africa,** the **Russian Federation** and **Australia**.

In *North America*, meat output in the **United States** is forecast to reach a 9-year high of 12.1 million tonnes, an increase of 5.3 percent. Likewise, **Canada** may see production rise by nearly 3 percent to 1.2 million tonnes. In both countries, the expansions will be sustained by increases in carcass weight as well as slaughter numbers.

After three years of continuous declines, output in *South America* is forecast to recover by 2.1 percent to nearly 16 million tonnes, boosted by sizeable gains in Brazil and Argentina. In **Brazil**, producers have been able to benefit from a competitive production environment, including the availability of feed at relatively cheaper prices, reinforced by this year's good weather. In **Argentina**, a period of herd rebuilding lasting nearly four years has resulted in an expanded herd. In addition, even though some regions continue to experience excess water following extensive flooding in 2016/17, pasture conditions have generally improved and feed prices have dropped. In **Colombia** and **Uruguay**, output is projected to increase, as the recent cycle in herd rebuilding has ended, offering a basis for increased slaughtering and output.

In *Central America and the Caribbean,* weather conditions have become generally more favourable in 2017, compared with the extreme conditions linked to *El Niño* in 2015 and 2016. As a result, output in the sub-region is expected to recover by about 2 percent this year. In **Mexico**, bovine meat production is expected to be up this year, as heavier carcass weights should more than offset a decline in slaughtered cattle numbers. However, the rather positive outlook for the country and, more generally, for the sub-region might be marred by the recent setbacks, namely hurricanes and earthquakes.

In *Asia*, **India**'s bovine meat output is expected to continue growing, but less vigorously than in 2016. The expected slowdown would be mainly driven by the informal sector, the production of which might be negatively

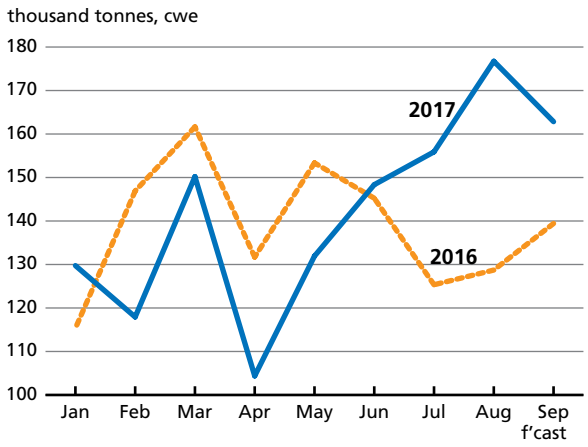
affected by the ban imposed on selling cattle for slaughter. The same ban is unlikely to impair production in the relatively large, organized livestock operations, approved by the government. In **China**, bovine meat production is anticipated to rise by 1 percent to 7.1 million tonnes, supported by stable domestic prices and increased slaughter of uneconomical dairy cows. Moreover, China's restructuring of its livestock operations has encouraged some small-scale farm owners to exit the sector, providing more cattle for slaughter. Output in **Japan** is set to decline, as heavier carcass weights will not suffice to offset a decline in slaughter numbers. In the **Republic of Korea**, a rise in cattle numbers and a drop in cattle prices are expected to result in increased slaughtering and meat output.

In *Africa*, bovine meat production is unlikely to rebound, as poor pasture conditions persist in some eastern parts of the continent including in **Kenya**, **Somalia**, **Ethiopia** and **Tanzania.** A sharp production decline is even anticipated in **South Africa**, where the 2016 drought has fostered the culling of cattle, while the improved rainfall in 2017 encouraged herd rebuilding, all likely to contribute to a reduction of cattle slaughtering and bovine meat output this year. Meanwhile, **Malawi**, and **Zambia**, where weather conditions are expected to improve this year, may experience a rebound in production.

In *Oceania*, bovine meat production is forecast to contract for a third consecutive year, albeit by only 1.2 percent in 2017, compared with a staggering 14.4 percent reduction in 2016. In **Australia**, notwithstanding the slow growth in national cattle herd, indicating an end to the herd-rebuilding phase, bovine output in 2017 is expected to fall by 1 percent to 2.1 million tonnes. However, much will depend on the weather conditions over the coming months, with current predictions indicating equal chances of dry and wet conditions. Similarly, **New Zealand** may witness a 1.9 percent reduction of bovine meat output to 604 000 tonnes, as the expected slight increase of carcass weights, especially evident in recent months, is unlikely to offset the reduction of slaughter numbers. Moreover, improved pasture conditions have prompted retention of cattle for longer periods and, in turn, reduced the availability of cattle for slaughter.

In the **EU,** bovine meat output is expected to remain stable, as relatively high dairy prices are discouraging farmers from selling cattle for slaughter. In the **Russian Federation**, bovine meat output may drop by about 1 percent to 1 581 thousand tonnes.

Figure 3. Brazil's bovine meat exports



Trade recovery likely

World trade in bovine meat is anticipated to recover by 2.2 percent to 9.1 million tonnes in 2017, after two years of decline. The increase would be fostered by an upturn in import demand, especially in **China, Japan, Viet Nam, Indonesia** and **the Republic of Korea**, while significant declines are anticipated in **Egypt**, the **United States, Canada** and the **EU**. **China**'s imports could reach 1.5 million tonnes in 2017, a rise of 6.3 percent, which is far below the 16.2 percent increase of 2016. Meanwhile, bovine imports by the **United States** are anticipated to decline by 1.9 percent to 1.2 million tonnes, mainly owing to a continuous expansion in domestic output. Among international suppliers, the **United States**, **India**, **Argentina**, the **EU** and **Brazil** are anticipated to be responsible for much of the 2017 increase in world bovine meat exports, along with **Canada**, **Mexico** and **Ukraine**. In contrast, exports from **Australia**, **New Zealand**, **Paraguay** and **Belarus** are forecast to decline. The **United States** is predicted to record a 6.9 percent growth in bovine meat exports to 1.3 million tonnes, underpinned by more abundant domestic supplies and limited availabilities in Oceania. US market access to Japan, however, will be restricted by the tariff quota triggered by Japan in July and continuing until March 2018. **Brazil** is also anticipated to witness a lively export growth, supported by its increased production and improved market access to large markets such as China, especially driven by existing bilateral agreements. **India** is expected to see its exports rise by 3.2 percent, to 1.7 million tonnes, supported by continuing import demand from its traditional markets, including Viet Nam, Malaysia, Egypt and Saudi Arabia, but also from Indonesia, which recently granted

quota access. The **EU,** building on last year's export expansion, may see bovine meat exports jump by a further 10 percent in 2017, which would bring them back to their 2011 level. Bovine meat exports by **Australia** are forecast to fall by only 2 percent, following a 20 percent dip in 2016, a reflection of easing production constraints and improved market access through bilateral agreements with, for example, Japan and the Republic of Korea. In contrast, **New Zealand**'s bovine meat exports are predicted to fall for a second year to about half a million tonnes, 3.4 percent less than in 2016. Bovine meat exports by **Belarus** may also undergo a contraction following the ban imposed by the Russian Federation on the allegation that Belarus sourced its beef from Ukraine.

PIGMEAT

Production to recover and reach a new record

World pigmeat output is forecast to rise by 1 percent, or over 1.2 million tonnes, to nearly 117 million tonnes in 2017, recovering from a slight decline in 2016 and setting a new record. Expanded output is forecast to originate in **China**, the **United States**, the **Russian Federation** and the **Philippines,** but also **Canada, Viet Nam, Mexico,** and the **Republic of Korea**. However, pigmeat output is likely to decline in the **EU**, **Ukraine** and **Japan.**

China's pigmeat output is anticipated to rise by 1.3 percent to nearly 53 million tonnes or 655 000 tonnes more than in 2016. The recovery of output, after two years of downsizing, reflects a largely positive outcome of the strict enforcement of environmental and sanitary regulations, especially the need to limit the pollution of water supplies, that have resulted in deep reforms including the closure of many unviable small farms or their consolidation, relocation of farms away from sources of water supply and modernisation of manure management. In the **United States,** pigmeat output is anticipated to rise by 3.6 percent to 11.7 million tonnes, bolstered by higher slaughter numbers and carcass weights, supported by efficient piggery operations, integrated with those of Canada and Mexico**.** Similarly, **Mexico**'s output is expected to grow by 3.2 percent, to nearly 1.4 million tonnes, underpinned by the use of new genetics and economies of scale. In the **Russian Federation**, the modernization of large operations and new investments into the sector are expected to boost pigmeat output by 3.1 percent to 3.5 million tonnes.

In contrast, **EU** pigmeat production is likely to stabilize around 23.4 million tonnes, constrained by reduced sow herd numbers and falling import demand, especially from China. In **Ukraine**, output may contract by 18 percent, to about 623 000 tonnes, due to low profitability, and a sharp drop in its pig herd due to the African Swine Fever.

Trade likely to fall

World trade in pigmeat is forecast to decline marginally, by 0.7 percent, to 8.2 million tonnes, as compared with its hefty 14 percent increase in 2016. The considerable slow down reflects a decline in pigmeat imports by **China** by nearly 14 percent in 2017, to 2.2 million tonnes, which would still keep China as the most important international market for pigmeat. The reduction of China's pigmeat purchases would mirror the combination of increased domestic production and depressed consumer demand.

Figure 4. Feed prices are relatively favourable for poultry and pigmeat producers

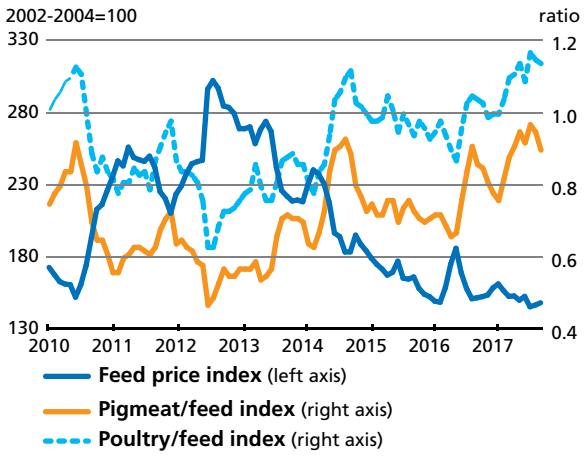
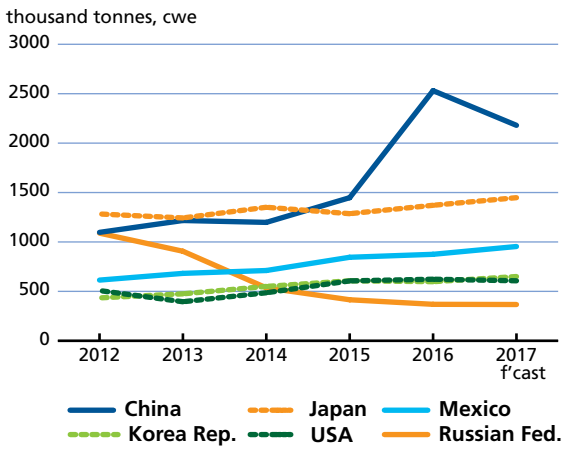


Figure 5. Pigmeat: Major importers



Imports are also expected to decline in **Viet Nam** and the **Russian Federation.** These reductions are expected to more than compensate increased imports elsewhere, especially by **Mexico, Japan** and the **Republic of Korea,** but also **Chile, Colombia** and the **Philippines**.

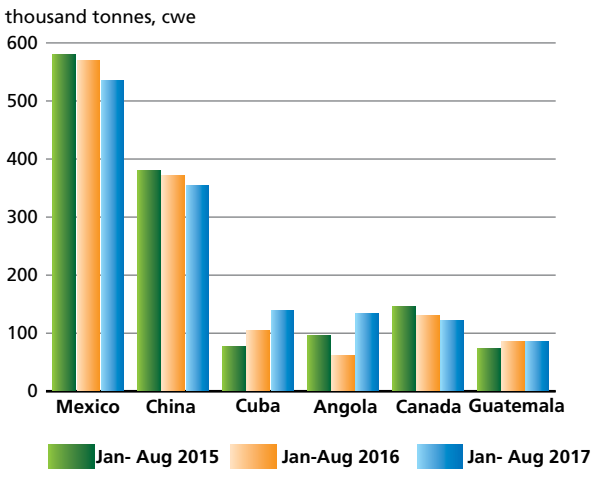
Among exporters, the **United States**, **Mexico**, **Canada** and **Chile** are anticipated to increase their deliveries to foreign markets, while the **EU, Brazil** and **Thailand** may face some contraction. Exports by the **United States** are predicted to increase by 8.2 percent, to 2.5 million tonnes, centred on rising trade with Japan, the Republic of Korea and Mexico, among others. In contrast, overall shipments by **Brazil** are set to decline by 2.7 percent to 866 000 tonnes, as softening import demand from China would lead to an overall decline despite higher import orders by the Russian Federation, Angola, Argentina and Uruguay. Exports by the **EU** are also forecast to decline by 9.6 percent to 2.8 million tonnes, mainly due to production constraints and reduced import demand, especially from China.

POULTRY MEAT

Production: marginal expansion for the second year in a row

World poultry meat output in 2017 is projected to record a growth of 0.9 percent, or 1.1 million tonnes, to 118.2 million tonnes. Outbreaks of HPAI in 2016/17 significantly influenced the global poultry outlook in 2017. In **China**, closure of the live-bird market to contain the spread of HPAI, along with limited availability of grandparent stock, is expected to prompt its poultry output to drop by 5.2 percent to 16.3 million tonnes in 2017,

Figure 6. Poultry meat exports: US major destinations



the lowest level since 2009. Excluding China, aggregate growth in poultry output of the rest of the world would be around 2 percent. The spread of HPAI appears to have had a limited impact on poultry meat output in the EU, which saw a 4 percent growth in 2016 and is now forecast to progress by a further 1 percent to 14.8 million tonnes in 2017.

Much of the expanded poultry output is anticipated to come from the **United States**, **Brazil**, the **EU**, the **Russian Federation, India, Thailand** and **Mexico.** In the **United States**, genetic improvements that favour producing larger birds and raising production efficiencies have bolstered poultry meat output, which is now expected to grow by 1.8 percent in 2017 to a record of almost 22 million tonnes. Production is expected to grow by 2.6 percent in **Brazil,** fuelled by competitive production costs, stable feed prices and growing external demand, as it is an HPAI-free country. A sizeable increase of production is also forecast in **India**, as the sector continues to expand in response to a growing domestic demand, driven by an increasingly urbanized population.

Slow trade growth

Trade in poultry meat in 2017 is forecast to grow by 2 percent, to 13.1 million tonnes, far slower than the 4.6 percent growth seen last year. Imports are anticipated to increase in **Angola**, **Cuba**, **Japan**, **Iraq** and the **United Arab Emirates**. In **Japan,** the increase reflects a growing demand for value-added products, mainly sourced from Thailand, an emerging player in value-added, ready-to-eat poultry products. By contrast, poultry imports are anticipated to decline in the **EU**, **China**, **Viet Nam**, **Mexico**, **Saudi Arabia** and the **Philippines**. The **EU** is expected to see some declines in poultry imports from Brazil and Thailand, which are attributed to voluntary suspension of exports by Brazil to EU member states and Thailand's preference to export more to Asian markets. In **China**, high poultry meat prices have weighed on consumer demand, which, in turn, is likely to lower imports. Larger domestic supplies are behind the expected decline in imports by **Viet Nam**.

On the export side, the **United States**, **Thailand**, **Brazil**, **Ukraine**, **Argentina**, the **Russian Federation**, and **China** are expected to account for most of the increase in shipments**.** Competitive international prices, increased output and HPAI-free status since August 2017 have enabled the **United States** to boost its exports, especially to Cuba, Angola and South Africa. However, its shipments to Mexico, Canada and China might fall. The **Islamic Republic of Iran, Chile** and the **EU** are likely to see their export declines.

OVINE MEAT

Production continued modest growth

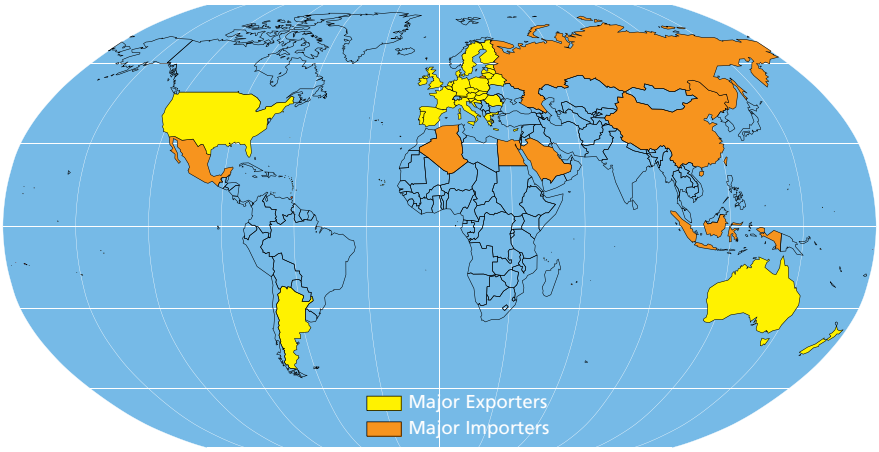
Ovine meat production is forecast to increase by a modest 0.6 percent, to 14.5 million tonnes, confirming a trend of small year-to-year gains. Asia and Africa account for 80 percent of production, and where traditional systems are largely dominant. **China, India, Pakistan, Nigeria, Algeria** and countries of sub-Saharan Africa (SSA) are among the largest ovine meat producers, but output in Oceania continues to play the most critical role in world trade. In 2017, as in the preceding two years, outputs in both **Australia** and **New Zealand** have come under pressure which may depress their joint output by as much as 3.8 percent, despite a positive performance in the first half of 2017. The contraction is expected to arise from the process of herd rebuilding, which reduced the number of lambs available for slaughtering. Meanwhile, in the **EU**, output is projected to grow by 2.6 percent.

Trade to contract marginally

World trade in ovine meat is forecast to fall marginally in 2017, to 905 000 tonnes, 0.5 percent less than in 2016. The small decline principally reflects a nearly 2 percent decrease of exports from **Australia** and **New Zealand**, primarily due to supply constraints. Import demand is expected to rise slightly across main markets, especially in **China**, **Saudi Arabia** and **Malaysia**, but to fall in the **EU**.

MILK AND MILK PRODUCTS

Major Dairy Exporters and Importers



PRICES

The price gap between butter and other dairy commodities widens

International dairy prices strengthened between May 2016 and February 2017, primarily on continued concerns about whether export supplies in the EU and Oceania would be sufficient to meet import demand. The situation eased when it became clear that Northern Hemisphere producers have enough to export and that milk output in Oceania would be larger than anticipated. As a result, prices stabilized, with a slight downward adjustment towards March and April 2017. International price quotations for dairy products rallied from May to September, driven by increased demand for butterfat in North America and Europe. Supply constraints in Oceania and South America, together with strong import demand in Asia, also provided support. In October, the index declined by 4 percent as importers held back purchases awaiting the emerging trend for export availabilities from Oceania.

In recent months, butterfat has been the dairy commodity in highest demand in international markets, propelling butter quotations to record highs and widening its price differential relative to the other dairy products. In contrast, quotations for skim milk powder remained subdued, weighed down by slack demand and the availability of ample intervention stocks in the EU.

Figure 1. FAO monthly dairy price index (2002-2004=100)

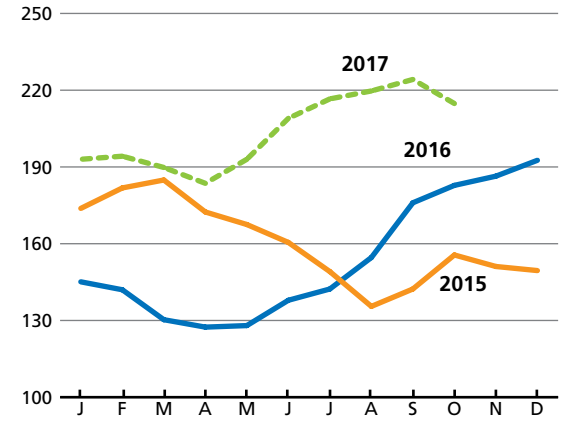


Figure 2. FAO monthly international price indices for butter, cheese, SMP and WMP (2002-2004=100)

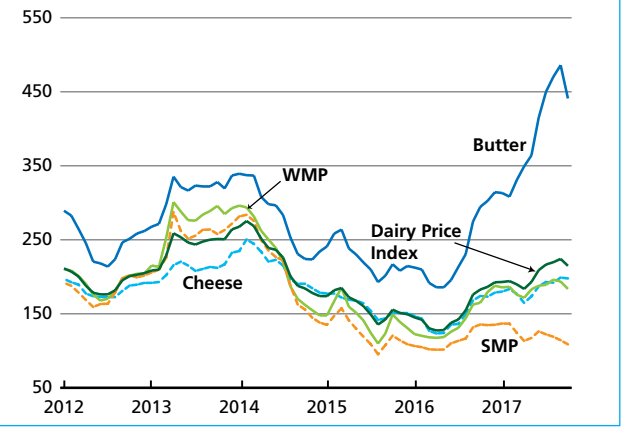


Table 1. World dairy market at a glance

	2015	2016 estim.	2017 f'cast	Change: 2017 over 2016
	million tonnes, milk equiv.			%
WORLD BALANCE				
Total milk production	**815.4**	**821.8**	**833.5**	**1.4**
Total trade	**70.0**	**70.7**	**71.6**	**1.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	110.4	110.1	110.4	0.3
Trade - share of prod. (%)	*8.6*	*8.6*	*8.6*	*-0.1*

FAO DAIRY PRICE INDEX (2002-2004=100)	2015	2016	2017 Jan-Oct	Change: Jan-Oct 2017 over Jan-Oct 2016 %
	160	154	204	39.0

PRODUCTION

India to drive the expansion in world dairy production

World milk production in 2017 is currently predicted to grow by 12 million tonnes, or 1.4 percent, to 833.5 million tonnes. Output is seen to expand in *Asia* and the *Americas*, stagnate in *Europe* and *Africa,* and decline in *Oceania*. Most of the global increase would originate in *Asia,* principally in **India**, where production is forecast to progress by nearly 4 percent to 169 million tonnes. Although localized floods have affected some dairying regions in the country, improved water availability and generally normal monsoons have benefitted pasture growth, which should support milk output. Production increases are also anticipated in **Bangladesh**, the **Islamic Republic of Iran**, **Pakistan** and **Saudi Arabia.** On the other hand, output may still contract in **China,** where the dairy sector is undergoing reform, but only by 1 percent, as compared with a 4 percent drop in 2016. China's restructuring of its dairy industry encompasses a consolidation and relocation of dairy farms away from urban centres as well as imposition of stringent environmental regulations and stricter quality controls, a set of measures that have forced some smallholder dairy farmers to leave the sector, reducing dairy animal numbers in the short-run. In **Japan** and the **Republic of Korea**, stable to lower milk production is expected, due to the effects of herd reduction.

In *South America*, milk output is forecast to grow by 3.4 percent to 63.3 million tonnes, with almost all the countries in the region contributing to the increase. In **Brazil**, average farmgate milk prices were higher in the first six months of the year, providing incentives for producers to raise output. In addition, weather conditions have been generally favourable in the main dairying areas of the central and northeastern parts of the country. Consequently, Brazil's milk production is expected to recover in 2017 and likely to surpass 34 million tonnes, 5.2 percent higher than in 2016. In **Argentina**, milk output declined by nearly 12 percent in 2016, depressed by low farmgate prices, poor weather and increased production costs. In 2017, thanks to higher milk prices and more conducive weather conditions, Argentina may see production recover by 0.4 percent, reaching 10.2 million tonnes, which is still short of the average 11.5 million tonnes gathered annually between 2011 and 2015. Elsewhere in the region, more favourable weather and growing demand are expected to boost milk production in **Colombia**, **Uruguay**, **Chile** and **Ecuador**.

In *Central America*, the outlook for milk output is generally positive. In **Mexico,** production is forecast to continue its modest growth in 2017, supported by herd rebuilding, improvements in genetics and more extensive use of technology in dairy operations.

North America's milk output is anticipated to rise by 2 percent to 107.6 million tonnes in 2017, making a significant contribution to the global expansion. Production in the **United States** may reach 98 million tonnes, 1.8 percent more than in 2016, underpinned by an increase in the number of dairy cows and yield per cow. In **Canada**, output is expected to rise by nearly 4 percent to 9.5 million tonnes, as dairy quota limits for milk have been raised in response to increased demand for butterfat.

In *Europe*, milk output is seen expanding by 0.5 percent to 223.1 million tonnes, underpinned by

Figure 3. EU intervention and export prices

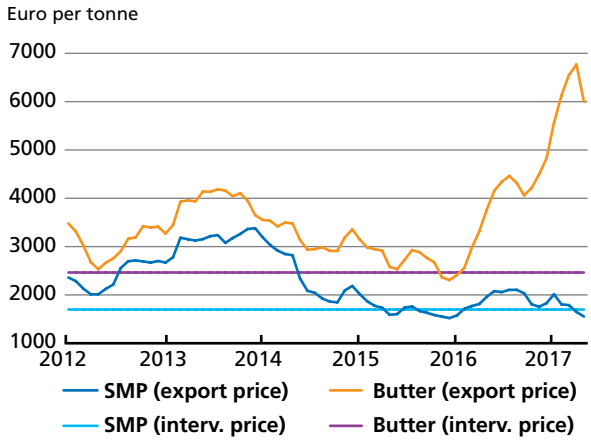


Figure 4. FAO dairy and feed price indices

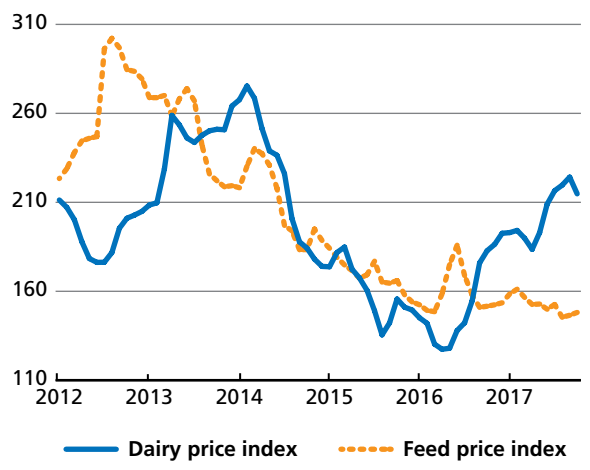


Table 2. Trade in dairy products: Principal exporting countries

	Average 2013-15	2016 *prelim.*	2017 *f'cast*	Change 2017 over 2016
	thousand tonnes (product weight)			%
WHOLE MILK POWDER				
World	**2 538**	**2 465**	**2 408**	**-2.3**
New Zealand	1 365	1 344	1 357	1.0
European Union*	385	380	371	-2.5
Uruguay	76	126	108	-14.6
Argentina	155	110	78	-28.8
SKIM MILK POWDER				
World	**2083**	**2187**	**2333**	**6.7**
European Union*	581	574	697	21.4
United States	556	593	643	8.4
New Zealand	395	444	408	-8.1
Australia	161	164	165	0.8
BUTTER				
World	**947**	**963**	**929**	**-3.5**
New Zealand	490	503	514	2.2
European Union*	151	208	166	-19.9
Belarus	74	84	88	4.8
Australia	65	29	29	0.4
United States	42	31	23	-26.1
CHEESE				
World	**2 376**	**2 478**	**2 573**	**3.8**
European Union*	742	800	848	6.0
New Zealand	294	355	350	-1.4
United States	336	289	342	18.2
Belarus	161	204	199	-2.6
Australia	162	167	170	1.9
Saudi Arabia	118	131	129	-1.5

* Excluding trade between the EU member countries. From 2013: EU-28

gains in the **EU**, the **Russian Federation** and **Belarus**, whereas **Ukraine** could face a contraction. In the **EU,** milk production is projected to increase by 0.4 percent to 164.5 million tonnes, even though milk deliveries between January and July 2017 were somewhat lower than last year. Improved weather conditions, the availability of forage, and higher international and domestic milk prices are anticipated to boost output over the rest of 2017, resulting in a modest growth for the year as a whole, also offsetting the effects of an expected 1.6 percent reduction in herd size. Milk production in the **Russian Federation** is forecast to increase by 0.7 percent in 2017, reflecting increased milk production in large-scale dairy operations, moderated by a decline in production performance at small, backyard farms. In **Belarus**, higher domestic prices are expected to sustain a 1.7 percent growth of output this year.

In *Africa*, milk production in 2017 is forecast to reach 46.8 million tonnes, marginally above the 2016 level. Increases are expected in **South Africa, Algeria**, **Morocco**, **Tunisia, Zimbabwe** and **Egypt**, where more favourable weather conditions resulted in pasture improvements. However, the effects of the prolonged drought that afflicted the continent last year are still lingering in some parts of the region. For instance, milk production may fall in some countries such as **Sudan**, **Ethiopia**, **Somalia** and **Kenya**, amid disruptions stemming from climate-related extreme events, such as inadequate rain and flooding, but also from conflicts.

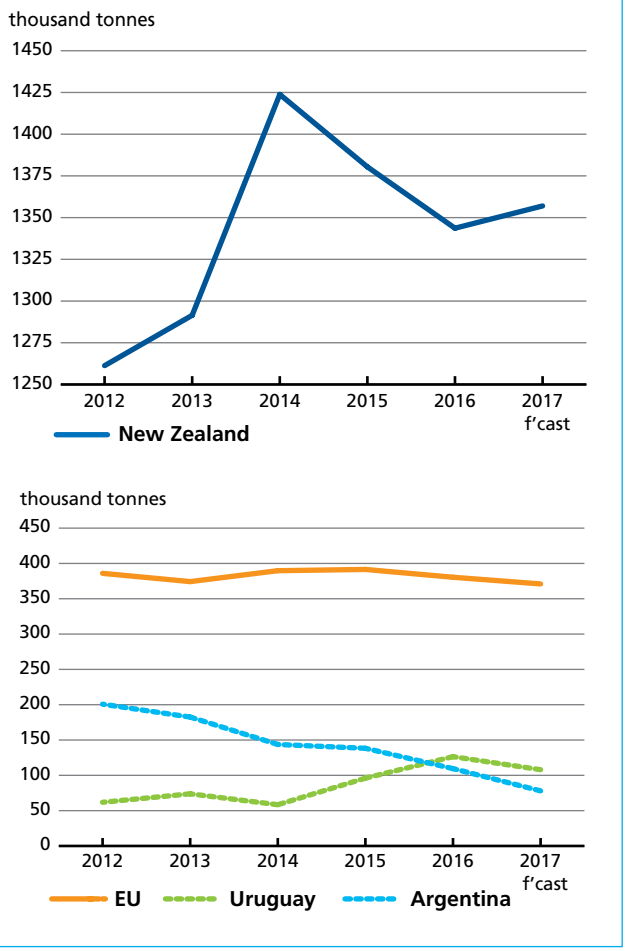
In *Oceania,* the 2016/17 cycle came to an end with a 2.9 percent reduction in milk output to 30.7 million tonnes. In **New Zealand,** milk output over the June/May 2016/17 dairy cycle declined by 1 percent to 21.3 million tonnes. In 2017/18, the country is anticipated to see a recovery due to improved weather and pastures conditions, a larger number of dairy cows and significantly higher average farmgate prices for raw milk. In **Australia**, milk output plummeted by 6.9 percent to 9.3 million tonnes over the 2016/17 dairy cycle, reflecting the low international prices for dairy products that prevailed in 2015 and 2016, the excessive rainfall and an unforeseen downward adjustment of producer payments. As for 2017/18, relatively lower input costs and a recovery in import demand should provide incentives for farmers to produce more milk. However, much will depend on the rainfall. As of now, weather forecasts suggest equal chances of wet and dry conditions.

TRADE

A second year of modest growth expected

World trade in dairy products is projected to reach 71.6 million tonnes of milk equivalent in 2017, or slightly more than 1 percent above 2016. Asia is anticipated to account for much of world import growth. **China,** in particular, may step up its purchases by 4.2 percent to 12.5 million tonnes, in response to the expected contraction in domestic milk output and a lively domestic demand for dairy products. Similarly, shipments to the **Russian Federation** are predicted to increase, reaching close to 4.4 million tonnes, or 3.9 percent more than last year. The country is pursuing a policy of source diversification, which has favoured New Zealand, Kyrgyzstan, Chile and Uruguay. Elsewhere, imports are forecast to rise in **Algeria**, **Australia**, the **Russian Federation**, **Mexico, Indonesia,** the **Republic of Korea, Japan, Thailand** and **Pakistan**. Conversely, imports are foreseen to decline significantly in **Brazil**, **Saudi Arabia**, **Oman**, the **United States**, the **EU**, the **Philippines**, **Egypt**, **Malaysia** the **United Arab Emirates, Cuba**, **Belarus** and **Turkey**.

Figure 5. WMP: Major exporters



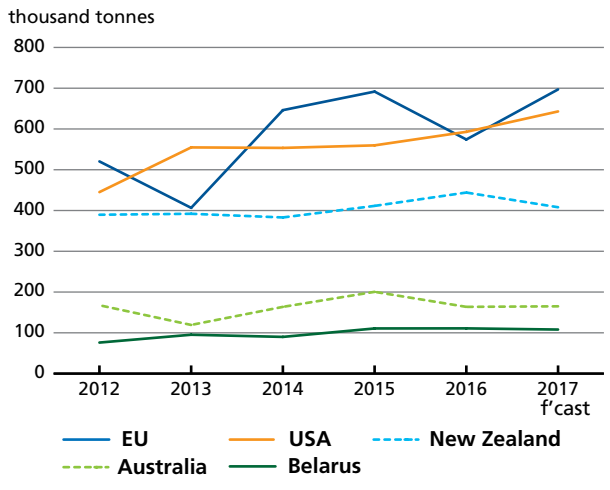
Among suppliers, and based on the export performance for the first six months of 2017, the **United States** is expected to increase shipments of SMP and cheese, which could boost its overall dairy sales to 10.7 million tonnes, around 8 percent more than in 2016. Despite its muted growth in milk production and a significant rise in domestic demand for some dairy products, the **EU** is also anticipated to export more this year, with volumes forecast at 19.3 million tonnes, almost 5 percent more than in 2016. Among other important suppliers, **Canada** and **Ukraine** are also expected to raise exports, whereas **Belarus** may see some contraction due to less buoyant prospects for sales to the Russian Federation, its principal market. In contrast, dairy shipments by **New Zealand** and **Australia** are expected to drop by nearly 1 percent and 2 percent, respectively, primarily because of supply constraints.

Among the internationally traded dairy products, the volumes of trade in butter and WMP are anticipated to decline in 2017, whereas trade in cheese and SMP may increase.

Trade in whole milk powder (WMP) continues to decline

World trade in WMP is projected to reach 2.4 million tonnes in 2017, 2.3 percent less than in 2016. Declines in WMP imports are likely to be prominent in some middle-eastern oil-dependent economies, such as **Saudi Arabia, Oman,** the **United Arab Emirates, Kuwait** and **Lebanon,** as relatively low oil prices weigh heavily on consumers' purchasing power. **Brazil**, which saw imports more than double in 2016, is predicted to buy less this year, as recoveries in milk deliveries and WMP production are underway. **Cuba**, **Bangladesh** and **Indonesia** are

Figure 6. SMP: Major exporters



also expected to import less in 2017. In **China**, WMP purchases are projected to reach 538 700 tonnes, barely 0.4 percent above 2016 and far below the 2014 peak of 785 000 tonnes, yet still sufficient for the country to retain the status of largest WMP importer. **Algeria**, **Thailand**, **Malaysia** and the **Russian Federation** are all predicted to buy more in 2017.

Among WMP suppliers, **New Zealand** may see its WMP exports rise by about 1 percent to 1.4 million tonnes in 2017, supported by the expected rebound in milk deliveries in the coming months. WMP shipments from **Mexico**, **Australia, Brazil** and **Canada** are also anticipated to increase, while they may contract in **Argentina**, **Uruguay**, the **EU**, **Belarus,** the **United States** and **Chile**.

Trade in skim milk powder (SMP) to recover in 2017

World trade in SMP is forecast to hover around 2.3 million tonnes, an increase of 6.7 percent from 2016, when exports declined by 1.5 percent. Among importers, **China**, **Mexico**, **Algeria**, **Thailand, Indonesia** and the **Russian Federation** are foreseen to maintain their generally high pace of purchases throughout the year, while lower relative prices of SMP are likely to encourage other countries to import more. In contrast, a few countries that generally tend to buy large volumes of SMP, such as the **Philippines**, **Malaysia, Saudi Arabia** and **Egypt,** are foreseen to cut their imports.

The **EU** and the **United States** are likely to sustain much of the expansion in SMP world exports, with **Canada**, the **Islamic Republic of Iran** and **Mexico** also anticipated to increase deliveries**.** On the other hand, overseas sales from **New Zealand** may drop, as producing more SMP is relatively less profitable for producers than alternative product combinations under New Zealand's processing arrangements and low international SMP prices. Exports from **Australia**, the fourth major source of SMP after the **EU**, the **United States** and **New Zealand**, are expected to remain stable, at around their 2016 level.

With increased profitability of processing cheese, the **EU** is expected to reduce the production of SMP in 2017, which, along with increased exports, could lead to a reduction in SMP inventories. However, disposing of the nearly 370 000 tonnes of SMP held in the EU public intervention stocks will require some time.

Butter trade to fall as supplies tighten

World trade in butter in 2017 is forecast to reach around 929 000 tonnes, 3.5 percent lower than in 2016. The decrease is mostly due to limited available supplies and rising world prices, which propelled the FAO Butter Price Index up by 41 percent in the first ten months of 2017, resulting in the widest gap between butter and other dairy commodities prices on record.

Reflecting both price sensitivity and declines in purchasing power, butter imports in 2017 are anticipated to contract in **Saudi Arabia**, **Turkey** and the **Islamic Republic of Iran**. The same factors are likely to depress deliveries to African countries, especially **Egypt** and **Morocco**. By contrast, recent trends in **China**, the largest destination of butter exports, suggest that inflows to the country may rise by 0.8 percent in 2017, reaching 118 000 tonnes. Butter imports by the **Russian Federation**, **Australia**, the **Philippines** and **Canada** are also forecast to increase.

The **EU** is predicted to account for much of the fall in this year's world butter exports, with shipments from the

Figure 7. Butter exports: EU major markets

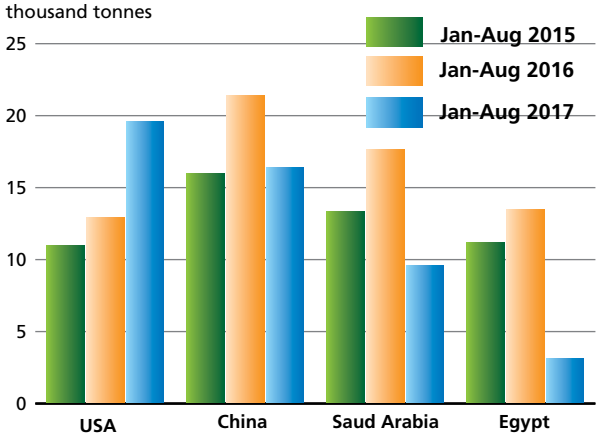
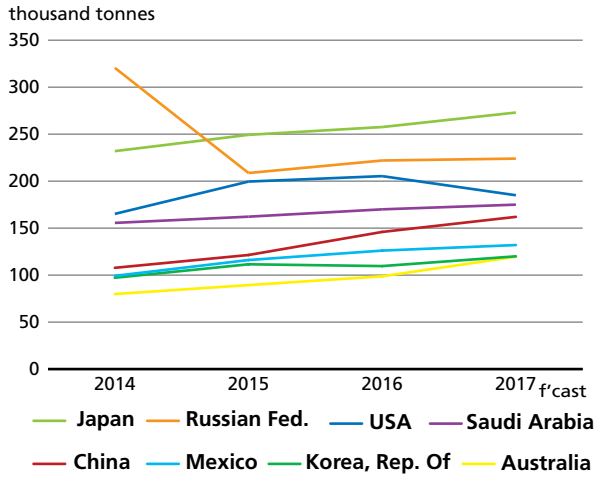


Figure 8. Cheese major importers



region now forecast at 166 200 tonnes, nearly 20 percent less than in 2016. EU's contraction would be largely the result of a strong internal demand for butterfat and a reduction in butter processing in favour of cheese, which has become more profitable. Tight export availabilities are also likely to depress butter exports from **Australia**, **Mexico, Uruguay** and **Argentina**. By contrast, despite a drop of nearly 11 percent from January to August 2017, butter exports from **New Zealand** over the full year are forecast to progress by about 2 percent, to nearly 514 000 tonnes, spurred by improved weather and pasture conditions, and higher international prices.

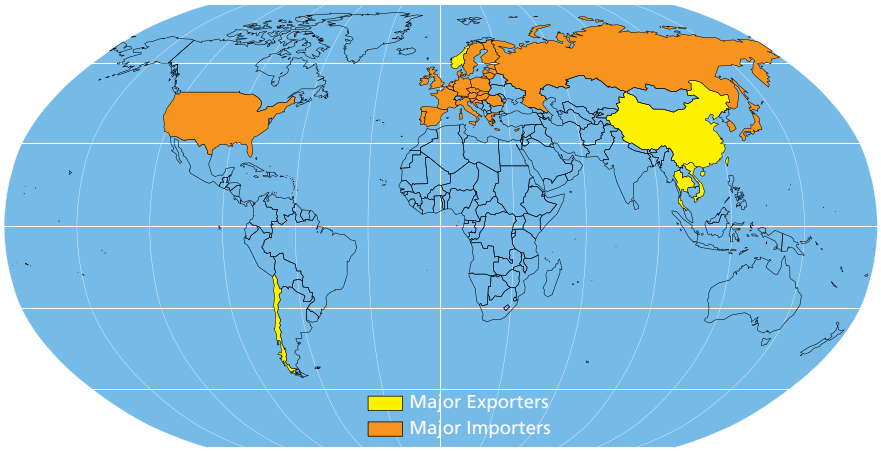
Lively import demand to boost trade in cheese to a new record

International trade in cheese is forecast to increase by 3.8 percent to a record 2.6 million tonnes. Much of the growth in world demand is forecast to come from **Australia**, **China**, **Japan**, the **Republic of Korea**, **Chile**, **Mexico** and **Saudi Arabia,** along with some support from **El Salvador**, the **Russian Federation** and **Kuwait**. By contrast, imports by the **United States**, **Brazil**, the **EU** and **Algeria** are likely to decline.

Of the various sources of supply, the **United States** and the **EU** are projected to account for much of the increase in world cheese exports in 2017. Shipments from the **United States** are expected to expand by as much as 18 percent, supported by a weaker US dollar and strong demand in a number of markets, especially Mexico, the Republic of Korea, Japan, Australia and Canada. As for the **EU**, its cheese exports may grow by nearly 6 percent this year to a historic high of 848 000 tonnes, underlining the resilience of the EU's dairy industry. Continuing with the successful re-orientation that began with the imposition of the Russian embargo in 2014, the EU is forecast to expand its cheese exports to several destinations in 2017, namely the United States, Japan, Switzerland, the Republic of Korea, Saudi Arabia, Chile, Australia and Algeria. Cheese exports by the **Islamic Republic of Iran**, **Turkey** and **Australia** are also anticipated to rise, while supply constraints may cause exports to fall in **New Zealand** and **Argentina**. **Belarus**, which has been the main cheese supplier to the Russian Federation since 2014, may also export less this year.

FISH AND FISHERY PRODUCTS

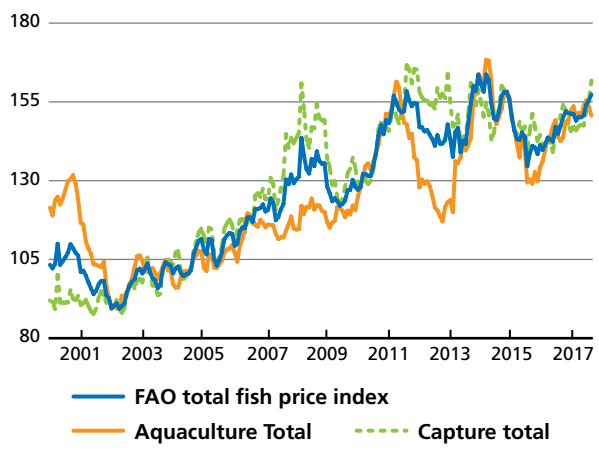
Major Exporters and Importers of Fish and Fishery Products



GLOBAL FISH ECONOMY

According to the latest forecasts, global production of fish and fishery products is expected to expand by 2.3 percent in 2017, a faster growth rate than last year. This acceleration is primarily accounted for by a recovery in catches of anchoveta in South America following the end of El Niño and by a further expansion of aquaculture production, which continues to rise at some 4–5 percent a year. Although this growth is expected to slow gradually in the longer term, this year's OECD-FAO projections estimate that aquaculture will be the world's primary source of fish for all purposes within five years, while the proportion of fish utilized for human consumption supplied by aquaculture will also continue to rise. Both production and consumption growth will be increasingly driven by developing countries, particularly those in Asia, a region whose already considerable importance as a producer and market will only continue to grow.

Figure 1. The FAO Fish Price Index (2002-2004=100)



Source: Norwegian Seafood Council (NSC)

In 2017, despite higher production, the demand stimulus resulting from improving economic conditions worldwide has lifted prices for many important seafood commodities. As a result, the total value of world exports is expected to rise by some 8 percent this year in US dollar terms, building on a similar increase in 2016. Higher prices for salmon, shrimp, tuna, cod, cephalopods and some small pelagic species have boosted export revenues for many large producers, particularly India, Norway and a number of Central and South American countries. The FAO Fish Price Index was 10 points higher in August, the most recent available month, with all commodity groups higher than the same month in 2016. On the market side, the most important individual contributors to trade value growth are China, the United States, the EU and Japan. The economic revival of Brazil and the Russian Federation, two large emerging markets, will represent an additional boost to aggregate seafood demand if it continues into 2018 and beyond.

OECD-FAO projections published in 2017 anticipate accelerating world GDP growth in 2017 and 2018 after

Table 1. World fish market at a glance

	2015	2016 *estim.*	2017 *f'cast*	Change: 2017 over 2016
	million tonnes			%
WORLD BALANCE				
Production	**169.2**	**170.1**	**174.0**	**2.3**
Capture fisheries	92.6	90.1	90.4	0.3
Aquaculture	76.6	80.0	83.6	4.5
Trade value (exports USD billion)	**133.2**	**142.4**	**153.5**	**7.8**
Trade volume (live weight)	**59.6**	**60.3**	**60.7**	**0.6**
Total utilization	**169.2**	**170.1**	**174.0**	**2.3**
Food	148.8	150.6	153.3	1.8
Feed	15.1	14.3	15.6	8.7
Other uses	5.2	5.1	5.1	-0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	20.2	20.2	20.3	0.7
From capture fisheries (kg/year)	9.8	9.5	9.2	-2.4
From aquaculture (kg/year)	10.4	10.7	11.1	3.3

FAO FISH PRICE INDEX (2002-2004=100)	**2015**	**2016**	**2017** *Jan-Aug*	**Change: Jan-Aug 2017 over Jan-Aug 2016 %**
	142	146	152	5.9

Source: Norwegian Seafood Council (NSC)
Totals may not match due to rounding.

years of sluggish economic performance in multiple world regions, which is a positive development for the seafood sector. However, this growth is not evenly distributed geographically, as steady but slow economic expansion in the EU and Japan has been contrasted with more robust economic performance in the United States and rapid growth in developing regions, particularly Asia. Seafood demand is highly sensitive to increases in income, and thus it is these economic trends, combined with population growth rates, that will be the major determinants of future trade flows and consumption patterns. While Latin America and Africa are increasing their shares of the world market relative to the United States, the EU and Japan, it is the rapid transformation of large sections of the Asian population into urbanized, middle-class consumers that will be the most important single factor in shaping the global seafood market for some time to come.

International cooperation in protecting the long-term health of marine environments remains a priority. At the Eleventh WTO Ministerial Conference taking place in Buenos Aires on 10–13 December, discussions will continue among participants regarding the need to limit harmful fisheries subsidies. An agreement between WTO members that addresses the issue of overcapacity and overfishing resulting from such subsidy schemes is considered an essential component of Sustainable Development Goal (SDG) 14: Life Below Water, which concerns the wellbeing of the world's oceans. Another crucially important aspect of SDG 14 is climate change and how to mitigate its negative effects on fisheries and other marine-based resources, which was the topic of central focus at the VI edition of the CONXEMAR-FAO World Congress that was hosted in Vigo, Spain, on 2 October.

SHRIMP

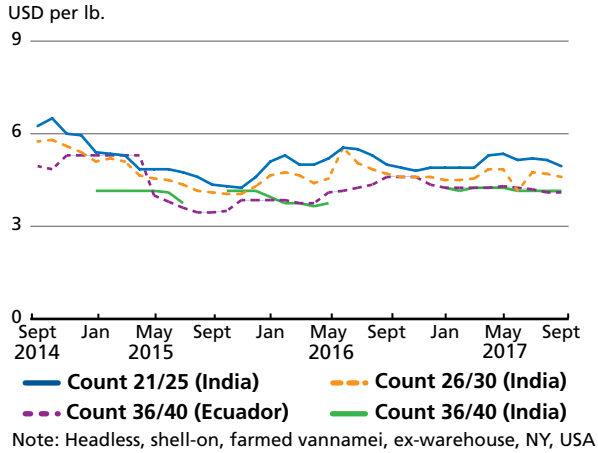
Global farmed shrimp supplies were low during the first half of 2017, in balance with low to moderate demand in the traditional and emerging markets. Starting from July, however, the supply of farmed shrimp from Asia picked up. China, the largest producer of shrimp, saw lower production in 2017 compared with 2016 due to persistent disease issues, while in Indonesia, unfavourable weather

Table 2. Japanese imports of shrimp (by product)

	2012	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)					
Frozen, raw	85.7	84.5	63.4	59.7	65.8	69.8
Cooked, frozen	11.3	12.4	9.5	8.5	8.7	8.9
Prepared/preserved*	23.2	23.1	17.0	16.9	16.4	18.9
Sushi (with rice)	0.9	1.2	0.8	1.6	1.2	1.3
Total*	**122.8**	**122.2**	**94.1**	**86.9**	**92.8**	**99.7**

(*Including other)
Source: Japan Ministry of Finance /INFOFISH

Figure 2. Ex-warehouse prices of shrimp in New York, USA*



Note: Headless, shell-on, farmed vannamei, ex-warehouse, NY, USA

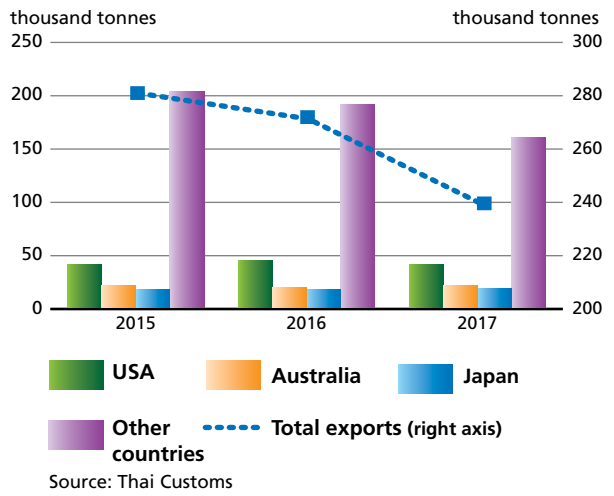
Source: INFOFISH Trade News * Farmed vannamei, headless shell-on

has affected harvests. India, Viet Nam and Thailand should see increased production, and in Argentina, a bumper catch of wild shrimp has been reported for 2017 with landings totalling 139 000 tonnes, 34.7 percent higher than last year. November to March is the low farming season in Asia, and overall availability of raw material will be limited until the new season in Asia begins in April 2018. The positive import trend in Japan is likely to continue through the year-end celebration into early 2018. Year-end is also one of the high consumption periods for shrimp in the United States, but the effects of the hurricanes, together with weaker overall demand, stagnant inventories and increased imports may mean lower prices in the coming months. In the EU, prices for Ecuadorian shrimp can be expected to fall if there is a weakening of interest from East Asian buyers.

TUNA

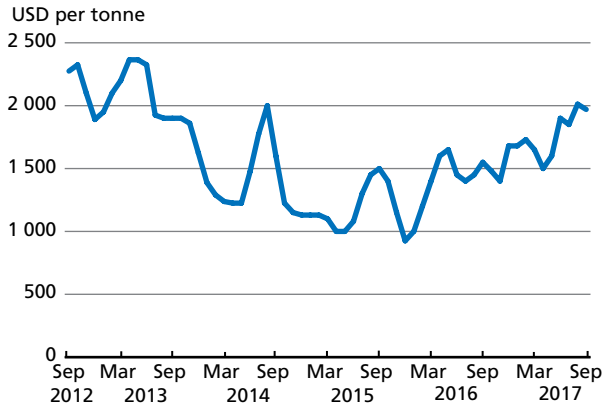
Due to low inventories of raw material at canneries in Thailand and Ecuador, demand for frozen skipjack is likely to increase in the coming months. However, the catch outlook remains unclear until after the fish aggregating device (FAD) and "veda" fishing bans in the Pacific Ocean are lifted in October. As of September, the delivery price of frozen skipjack to Thailand had crossed USD 2 000 per tonne, and if landings do not improve in the last quarter of 2017, particularly in the Pacific Ocean, prices may increase further. On the market side, imports of canned tuna in the US market are likely to improve during early 2018, as buyers take advantage of the annual import quota for canned tuna at the lower tariff rate. In the EU, importers will continue to depend on and favour Ecuador and the Philippines due to their duty-free status to this market. Meanwhile, canned tuna producers in Thailand and Indonesia are focusing more on emerging markets as exports to the EU and United States are trending downwards, although the EU remains the economically logical choice for Ecuador for the time being. Overall, any further rise in raw material prices can be expected to have a negative impact on consumer demand for canned tuna worldwide.

Figure 3. Thailand exports tuna canned



Source: Thai Customs

Figure 4. Prices skipjack: Thailand

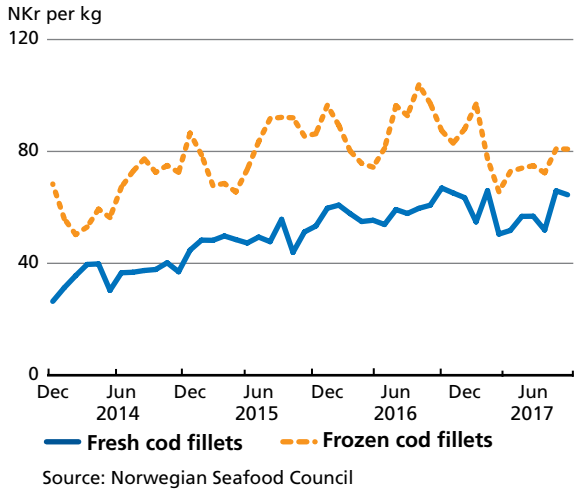


Note: 4 lb/pc & up, CFR Bangkok, origin: Western Pacific
Source: INFOFISH Trade News

GROUNDFISH

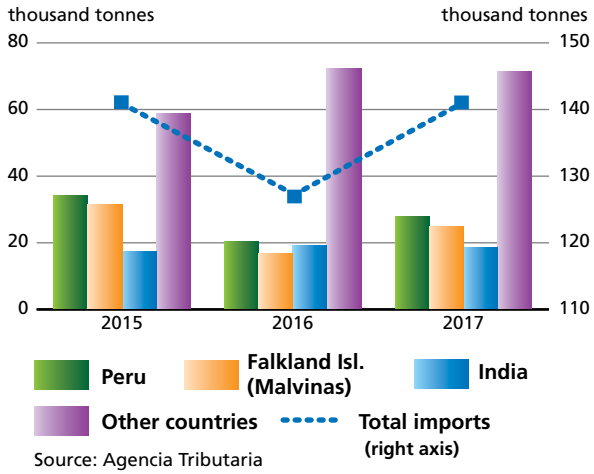
According to figures presented at the Groundfish Forum 2017, total global groundfish supplies, excluding Northern Blue Whiting, are forecast to fall by some 3 percent in 2018. The Barents Sea cod quota is expected to be reduced, with the International Council for the Exploration of the Sea (ICES) recommending a 20 percent cut in the 2018 quota. While such a cut may appear drastic, researchers are confident that the long-term outlook is very positive. The Joint Russian Federation-Norwegian Fisheries Commission, which will set the final quotas in November, is expected to take a cautionary approach, and some price increases can be expected as a consequence. In the pollock market, demand is increasing in Asia, North America and Europe, aided by the high prices for cod brought on by the supply shortage. Overall, pollock prices are expected to edge upwards, as will cod prices, which most likely will continue their upward trend. Meanwhile, the market for surimi also appears to be picking up. It is expected that there will be a general shortage of surimi this year, as production is stagnant and demand is increasing, both in Japan and on the US market.

Figure 5. Export prices of cod in Norway



Source: Norwegian Seafood Council

Figure 6. Spain imports of squid and cuttlefish



Source: Agencia Tributaria

Table 3. Chinese exports of Alaska pollock

	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)				
Russian Federation	385.6	388.8	402.9	363.5	414.0
USA	24.6	25.9	23.7	18.8	31.3
Japan	24.5	25.3	14.3	6.9	3.2
Canada	0.2	1.0	0.8	0.9	0.1
Dem. People's Rep. of Korea	0.1	0.0	0.0	0.0	0.1
Others	4.5	2.0	0.0	0.6	0.1
Total	**439.5**	**443.1**	**441.5**	**390.7**	**448.8**

Source: National Marine Fisheries Service (NMFS)

CEPHALOPODS

Demand for octopus and squid is growing stronger, but poorer landings mean limited supplies. Inventories are also low and observers expect prices to continue increasing over the coming months. With low catches in Morocco and Mauritania, the main market for octopus, Japan, will be looking for supplies from alternative sources such as China, Viet Nam, Mexico and Southeast Asia. For squid, stocks off the coast of Argentina are reported to be in poor condition, contributing to upward pressure on prices, especially for Illex squid. China, which also imports large quantities of squid from the Democratic People's Republic of Korea, is likely to see a sharp drop in shipments in the medium term as pressure mounts to isolate the Democratic People's Republic of Korea from international trade. Overall, cephalopod trade volumes are set to contract and prices will remain high.

PANGASIUS

During the first half of 2017, global imports of frozen pangasius fell slightly, mainly due to lower imports into the single largest market, the United States, while demand also continues to weaken in the EU. Imports into Latin America and Asia, however, comprised approximately 51 percent of the world's total over the same period, increasing from a 42 percent share the previous year. Overall, prices remain relatively strong. In Viet Nam, by far the largest pangasius producing country, the Ministry of Agriculture and Rural Development is actively promoting the consumption of pangasius domestically as well as targeting expansion in international markets, particularly China.

TILAPIA

In total, during the first half of 2017, approximately 170 000 tonnes of tilapia (whole, fillets and breaded) entered the international market. While the US market grapples with weak demand, some recovery in the tilapia

Table 4. US imports of fresh and frozen catfish fillets (by origin)

	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)				
Viet Nam	52.3	46.7	54.8	64.4	51.9
China	3.9	4.7	3.6	2.8	3.4
Panama	0.0	0.0	0.0	0.0	0.0
Others	0.3	0.1	0.1	0.0	0.0
Total	**56.5**	**51.6**	**58.5**	**67.2**	**55.2**

Source: US Department of Commerce, Bureau of Census

Table 5. Chinese exports of tilapia

	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)				
FROZEN WHOLE					
Côte d'Ivoire	8.2	5.9	4.4	13.1	14.7
USA	10.7	9.6	10.8	11.5	9.4
Zambia	4.6	6.4	8.0	4.5	4.2
Other countries	35.6	38.8	36.4	28.2	35.7
Subtotal	**59.1**	**60.6**	**59.5**	**57.2**	**64.0**
FROZEN FILLETS					
USA	38.9	40.3	37.1	30.8	28.6
Mexico	12.8	9.4	9.8	12.0	9.4
Iran (Islamic Rep. of)	1.3	4.3	5.0	8.4	6.9
Other countries	18.0	16.4	16.8	15.7	18.0
Subtotal	**71.1**	**70.4**	**68.8**	**66.9**	**62.9**
Total	**130.1**	**131.0**	**128.3**	**124.1**	**126.9**

Source: NMFS

market is being observed in the EU market, although prices remain weak. In contrast, the markets in Asia and Latin America continue to exhibit strong growth as more production enters domestic markets, supplemented by imports from China. In order to offset the declining interest from US buyers, Chinese companies are also increasingly seeking opportunities for expansion in Africa, as well as taking advantage of the strong and growing demand for tilapia in the Chinese domestic market. Overall, considering the current demand situation in the major markets, imports are not expected to increase substantially in the near future nor should a significant price increase be expected despite firm demand in Asia, Latin America and Africa.

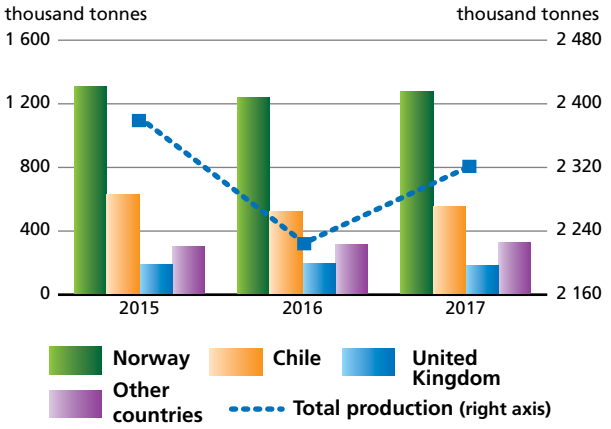
SEABASS AND SEABREAM

Total farmed seabass and seabream production is expected to grow a further 5 to 7 percent in 2018, and all industry participants will be mindful of the potential impact that this continued growth will have on price levels, which have already been negatively affected by supply growth. That said, it must be recognized that there are a number of positive developments in production, processing, logistics and marketing that will help to boost company margins through demand generation and cost savings. There have also been improvements in the economic outlook for a number of key markets, and a sustained increase in prices for some competing seafood items such as salmon. Together, these developments represent an improved long-term outlook for the sector, but for 2018, it is still not clear that the positive effects will outweigh the downward pressure on prices resulting from continued supply growth.

SALMON

World prices for farmed salmon remain high but have fallen back somewhat due to higher harvest volumes in the second half of 2017. Further stability will depend both on the absence of a severe supply shock and on the ability of producing countries to keep pace with rapid demand expansion in an increasingly diversified range of markets. At present, consensus forward prices suggest downward pressure exerted by the expected increase of 7 to 8 percent in global production next year should be sufficient to keep the average 2018 price for fresh whole Atlantic salmon from Norway at around

Figure 7. Top three global producers of farmed Atlantic salmon



Source: FAO (until 2015), Estimate (2016 & 2017)

Table 6. Chilean exports of salmon (by product and destination)

	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)				
FROZEN WHOLE					
USA	44.3	49.3	50.2	52.9	48.8
Brazil	27.6	35.8	40.4	34.0	35.0
China	0.2	0.9	1.8	4.3	4.0
Other countries	4.7	5.7	6.3	6.1	6.3
Subtotal	**76.8**	**91.8**	**98.7**	**97.4**	**94.0**
FROZEN FILLETS					
Japan	65.4	54.5	51.3	44.1	44.3
USA	13.8	16.6	14.8	18.2	16.6
Russian Federation	15.6	13.8	23.5	21.3	14.6
Other countries	56.0	64.4	58.6	68.5	51.3
Subtotal	**150.9**	**149.3**	**148.1**	**152.2**	**126.8**
Total	**227.7**	**241.2**	**246.8**	**249.6**	**220.8**

Source: Chile customs
(small shares of product type like salted not included)

NOK 60 (USD 7.56) per kg. In the wild salmon sector, meanwhile, total catches are expected to come in above harvest but below the last equivalent year, 2015. On the market side, while consumer sensitivity to price hikes has dampened import growth in the more mature markets of the United States, the EU and Japan, the share of global salmon import volume and value claimed by urbanizing middle-class demographics in developing countries continues to increase. The flattening price trend, if it continues, together with product innovation focused on portion sizing and convenience, will be key in preventing consumers from making a long-term shift towards alternative protein sources, particularly in the larger, established markets.

SMALL PELAGICS

The supply outlook for small pelagics in 2018 is for an increase in global landings, mainly driven by higher landings of Peruvian anchoveta, although the ICES has recommended cuts in the North Atlantic mackerel and herring quotas. For the 2018 mackerel quota, ICES has recommended a 35 percent cut to 550 948 tonnes, and for herring, the recommendation is for a 15 percent cut to 546 472 tonnes. There has been speculation that, as a result of global warming, Atlantic mackerel stocks would move farther north in the Barents Sea. However, while some movement has been observed, the mackerel have not yet moved as far north as expected and the autumn mackerel season started with good catches, pushing prices lower. Total trade volumes of mackerel and herring are expected to go up, but there have been and will likely continue to be shifts in the respective shares of the main suppliers.

Table 7. Norwegian exports of small pelagics (by product and destination)

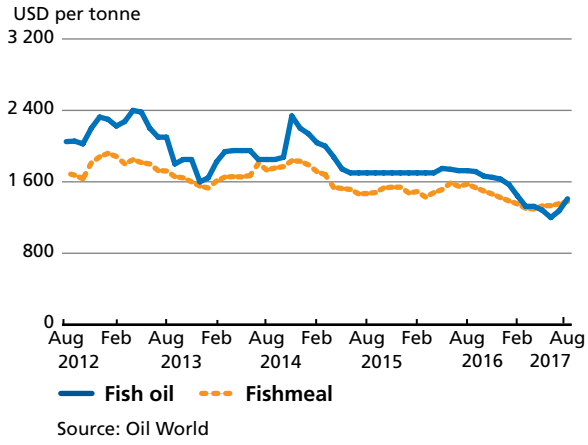
	2013	2014	2015	2016	2017
	Jan-June (thousand tonnes)				
FROZEN WHOLE					
China	9.8	13.0	7.7	9.7	21.3
Turkey	4.9	5.2	7.8	4.5	9.2
Belarus	1.1	0.4	2.1	4.8	6.2
Other countries	43.2	51.3	55.5	80.0	56.3
Subtotal	**59.1**	**69.9**	**73.2**	**99.0**	**93.1**
FROZEN FILLETS					
Ukraine	15.7	13.5	6.9	17.8	16.3
Egypt	9.4	2.8	9.6	12.0	9.7
Lithuania	10.5	13.3	5.5	6.2	9.4
Other countries	50.3	50.6	22.2	22.4	32.4
Subtotal	**86.0**	**80.1**	**44.2**	**58.3**	**67.8**
Total	**145.0**	**150.0**	**117.4**	**157.3**	**160.9**

Source: Statistics Norway

FISHMEAL AND FISH OIL

Global supply of fishmeal is expected to be more stable than in previous years in the first half of 2018, due to better climatic conditions and higher projected pelagic catches. Prices are likely to follow an overall downward trend but with seasonal fluctuations. A quota of 2.8 million tonnes for the first anchoveta fishing season in Peru, the highest since 2011, ended with a total catch of 2.37 million tonnes in 2017, representing 85 percent of the total allowable catch (TAC) and clearly giving buyers the advantage in price negotiations. The outlook also looks positive for the second fishing season in Peru, set to begin in late 2017. However, the overall downward trend of Peruvian fishmeal price resulting from more plentiful supply will be softened in the longer term by continued demand growth, particularly from China.

Figure 8. Prices of fish oil/fishmeal in Europe

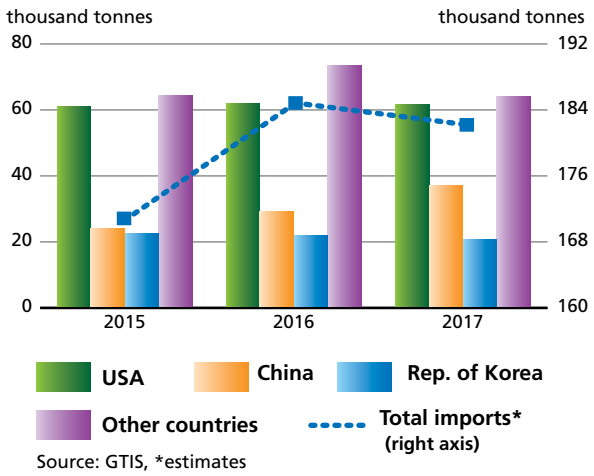


Source: Oil World

CRAB

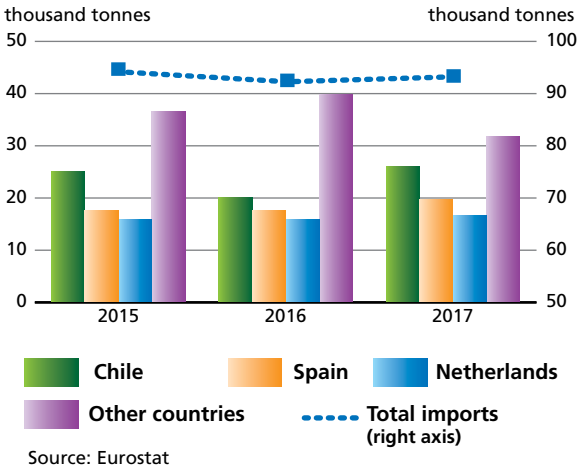
The Russian Federation Far East has seen increased quotas for 2017, and supplies are expected to improve. Russian Federation Illegal, Unreported and Unregulated (IUU) crab production appears to have been curbed and total Russian Federation Far East crab catches are expected to reach about 73 500 tonnes for the year. In the United States, the coming months should provide strong supplies from California and possible declining prices for dungeness crab. However, snow crab prices have been high and king crab prices even higher. International trade in crab has declined a bit lately, but the Russian Federation is expecting to export more moving into 2018, especially to East Asia where demand is strong.

Figure 9. Top three importers of crab



Source: GTIS, *estimates

Figure 10. EU imports of mussels



Source: Eurostat

BIVALVES

Chilean mussel production seems to have recovered from the difficulties of last year, when red tides hit the main cultivation areas, but global production of mussels, as well as clams, is not growing fast enough to keep pace with the improving market environment. In France, the oyster season for 2018 is forecast to be good, as the mortality of juveniles this year is relatively low. In general, supply competition in the EU can be expected from developing countries, which are seeking to invest in good infrastructure and quality control in order to be able to export to the lucrative EU live bivalves market. At present, this market is only open to a small selection of countries. Overall, demand for bivalve species is likely to stay strong in 2018 and supply will be tight, supporting high prices for the major bivalve species with the exception of scallops and oysters.

LOBSTER

Lobster landings in the United States are forecast to be down by 20 percent in New England this year, and by as much as 30 percent in Maine. Some traders are now worried that a shortage may develop by early 2018, although there seems to be enough lobster meat on the market at the moment. Current high prices for lobster this season are to a large extent due to very good demand in China. Paradoxically, strong Chinese demand is the result of low prices and plentiful supply in 2012, which allowed North American exporters access to the Chinese market.

GLOBAL PROSPECTS FOR MAJOR TROPICAL FRUITS[1]

Short-term outlook, challenges and opportunities in a vibrant global marketplace

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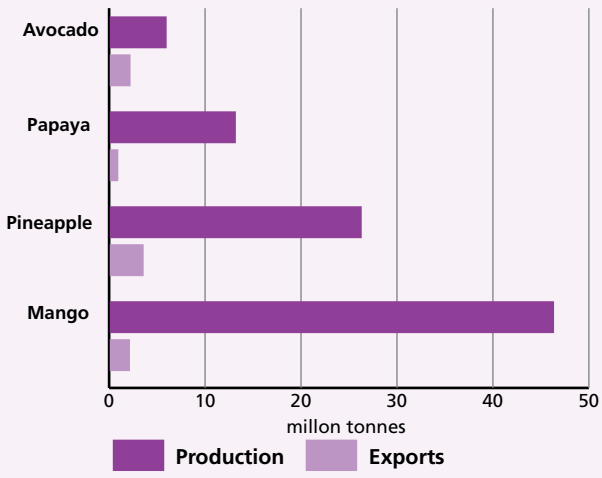
Tropical fruits constitute a comparatively new group in global commodity trade, having emerged on the international marketplace in significance only from 1970 onwards, thanks to advances in transportation, trade agreements and shifting consumer preferences in favour of these fruits. Export volumes of the four major fresh tropical fruits – mango, pineapple, avocado and papaya – have displayed the fastest average annual growth rates among internationally traded food commodities, significantly outpacing growth in major food markets, notably cereals, livestock products, vegetable oils, sugar, and other fruits and vegetables. These major tropical fruits are furthermore among the most valuable agricultural food commodities when measured on a value basis, with preliminary estimates for 2017 pointing to a total combined global export value of around USD 10 billion from a volume of around 7 million tonnes.[2]

An estimated 99 percent of tropical fruit production takes place in developing countries, mostly cultivated by smallholder farmers who typically are endowed with, or have access to, less than 5 ha of land. On the back of an average annual increase of 3.6 percent in the past decade, preliminary estimates indicate that the trajectory of total global production of the four major tropical fruits combined could reach 92 million tonnes in 2017, compared to 69 million tonnes in 2008. A great deal of this expansion is explained by sizeable increases in area planted. Viewed by region, currently 58 percent of world tropical fruit production originates in Asia, 25 percent in Latin America and 16 percent in Africa.

In most producing zones, tropical fruits continue to be cultivated mainly at the subsistence rather than commercial level and contribute importantly to food security. In regions that engage more in trade of tropical fruits, these commodities do play a role in the generation of rural employment and income, and they are hence important for GDP growth. With some of the poorest countries located in the tropics, the sector's capacity to contribute to overall economic development becomes even more pronounced.

Global production and trade 2017 (forecast)



Source: Official and unofficial sources including author's estimates

[1] An overview and analysis of global production and trade in minor tropical fruits as well as processed forms of tropical fruit, including juice, dried and canned tropical fruits, will be published in FAO's forthcoming Tropical Fruits Market Review, to be released in December 2017.

[2] Data and information used in this outlook were compiled from the responses to the annual questionnaire of the FAO Sub-Group on Tropical Fruits, data from FAOSTAT and COMTRADE, and secondary data from desk research. Predictions for 2017 production and trade data were produced using a seasonally adjusted forecast model and expert considerations on current and most recent market developments.

When countries are in a position to supply international markets, the tropical fruits sector can be important in generating foreign exchange earnings. For example, Costa Rica's exports of tropical fruits account for approximately one-fifth of its entire agricultural export earnings.

Combined exports of the four major tropical fruits represent only 5 percent of total production volume, with the remainder destined for domestic utilization. This is evident in the large number of countries engaging in the production of tropical fruits in comparison with the very small number of exporting nations. Changing consumer preferences as incomes rise will likely set the share of traded production on a higher trajectory in the future. Indeed, freer trade, and particularly better market access, could stimulate further technological gains in distribution, leading to lower prices and thereby enabling tropical fruits to reach more markets in larger quantities than before. However, the threat of climate change and associated extreme weather events looms heavily over the sector, given that tropical zones have acute vulnerability to the phenomenon.

PRODUCTION

After sustained growth that has been extremely robust over much of the past decade, the pace of global aggregate production of major tropical fruits is expected to slow in 2017. Global production is estimated to reach 92.2 million tonnes in 2017. This translates into a year-to-year increase of 1.9 percent from 2016, compared to an annual average growth rate of 3.6 percent over the previous ten years.

The slowdown in production growth has been observed for all major tropical fruits and is chiefly attributable to adverse – and at times severely disruptive – weather conditions in the main growing regions (see Box 1). However, on the back of fast growing global demand, producing countries have continued to increase the area under tropical fruits, providing an extent of counterbalance to weather-related supply disruptions in susceptible regions, thus averting more serious supply shortages.

In terms of individual production volume by major tropical fruit, mango ranks as the predominant variety, due to the commodity's popularity in India, where an estimated 40 percent of global production originates. Total production of mango is forecast to reach a volume share of 51 percent of total global major tropical fruit production in 2017. Pineapple ranks second in global production importance, with an expected share of 28 percent in 2017, thanks to robust international demand, largely met by Costa Rica, the

Box 1: Environmental challenges

Given the highly perishable nature of tropical fruits in production and in distribution, environmental challenges are among the key obstacles to sustaining production and ensuring international markets are supplied. This is a particularly acute challenge since the vast majority of tropical fruits are produced on smallholder farms of less than 5 ha, where cultivation is highly dependent on rainfall and prone to the adverse effects of increasingly erratic weather events.

In 2016 and 2017, adverse weather conditions have caused considerable disruptions to global production for all major tropical fruits. Production of mango has been affected by drought in some of the major producing countries in Asia, South America and Africa, while pineapple and avocado production has undergone damage from flooding in the key producing countries in Central and South America. Drought has also hampered the production of papaya in the largest producing regions in South America, as well as the production of avocado in the southern part of Africa.

On average, new avocado plantings only bear fruits after four years, making avocado considerably vulnerable. Similarly, pineapple production is prone to adverse weather due to the fact that each plant bears only one fruit per year. More critically, long-lived mango trees bear fruit only after some 6 years and take between three and six months for fruits to ripen. Conversely, papaya plants can be grown in a plethora of topical soils, are fast growing and more resilient to changing weather conditions than most other tropical fruits. This makes papaya less prone to weather effects.

The intensity of the tropical storms in the Caribbean in September and October 2017 was particularly alarming to the tropical fruits industry, as devastating damage to harvests occurred in several small island states, including Cuba, Dominica and the Dominican Republic, where tropical fruits provide important sources of nutrition and income. In the Dominican Republic , for instance, measures to boost the country's exports of tropical fruits were significantly undermined by poor weather in the first half of 2017 and, subsequently, by significant hurricane damage in September/October. A similar situation was observed in Cuba, which recently began an export campaign to support trade in the MD2 variety of "supersweet" pineapples. By contrast, in the important avocado-producing regions of Central and South America, which have widely installed more weather resilient systems, production has proven better able to withstand disruptive climatic events, highlighting the potential that adaptation measures may provide.

world's leading exporter of pineapple, and by significant domestic consumption in Brazil, the second largest producer of pineapple. Papaya and avocado meanwhile account for significantly lower volume shares, at an estimated 15 percent and 6 percent, respectively, in 2017. Papaya is mainly produced and consumed in India and Brazil, where population growth has sustained domestic demand.

When viewed in terms of producing countries, the leading producer of major tropical fruits is India, accounting for an estimated 28 percent of total global major tropical fruit production in 2017, due to its strong position in the production of mango and papaya. India produces approximately 40 percent of total global mango and papaya production, which is predominantly destined for its domestic market. Other significant producers of tropical fruits include China and Brazil, where again produce is mainly destined for domestic consumption, and Mexico, which is set to rank as the largest exporter of major tropical fruits again in 2017.

TRADE

Seemingly, trade volumes of major tropical fruits stand to be less affected by production shocks on a global level, as only a small fraction of total output is traded in international markets. However, the competitive landscape for major tropical fruits is rather concentrated, with few countries engaging in large-scale global trade. Consequently, supply disturbances for producers who are required to comply with strict certification and phytosanitary standards can lead to short-term disruptions in the supply to international markets. Against this, global trade in major tropical fruits is expected to reach a new peak in 2017 of around 7 million tonnes, up 5.2 percent or 350 000 tonnes from last year. Trade prospects overall would have been higher, had it not been for adverse weather conditions in the leading exporting countries of Mexico (avocado, mango and papaya) and Costa Rica (pineapple), where supply shortages led to subsequent disruptions in the pace of shipments during the first three quarters of 2017 and also in recent months owing to hurricane damage to production.

Globally, avocado and mango are the two tropical fruits that have witnessed the strongest growth in popularity. Between 1990 and 2017, world import demand for avocado increased at an annual average growth rate of 14 percent, significantly outperforming supply and, thereby, driving up export, wholesale and retail prices. Similarly, import demand for pineapple, mango and papaya grew at annual average growth rates of 11 percent, 10 percent and 9 percent, respectively, during the same time period.

In the past, trade flows were governed by the proximity to markets, but this is no longer the case. Demand has been greatly fostered by significant innovations in distribution technology and logistics, where economies of scale have lowered transport costs and delivery time, making tropical fruits available and affordable year-round in major destinations in the world. Policy has also played an important role in the form of lower trade barriers, bilateral and multilateral trade agreements, and the harmonization of sanitary and phytosanitary regulations.

Rising demand in developed country markets has been the predominant factor fuelling the expansion in global shipments, particularly in the United States and the EU, the two largest importing blocs, where increasing health consciousness and more widespread awareness of the

Box 2: The role of technology in facilitating trade

Technology has been at the forefront of changes, making tropical fruits available to consumers globally at affordable prices. Advances in transportation, in combination with other technological developments that have complemented the progress in transportation, have helped reduce delivery time, maintain product quality and cut shipping costs. In recent decades, it has become easier for shippers to deliver produce to purchasers thousands of miles away, with no substantial loss in freshness. The feasibility of long-distance trade in perishable products will likely increase further as shipping technologies continue to improve. In particular, advances in controlled atmosphere (CA) technologies have extended the shelf life of perishable products and continue to improve product quality and variety worldwide. With CA, products hold up better during transportation. CA technologies allow operators to lower the respiration rate of produce by monitoring and adjusting oxygen, carbon dioxide and nitrogen levels within a refrigerated container. In this way, CA can slow ripening, retard discolouration and maintain freshness of highly perishable tropical fruits that would not remain fresh during ordinary refrigerated ocean transport.

Source: Huang, Sophia (2010), "Global Trade of Fruits and Vegetables and the Role of Consumer Demand", in Hawkes et al., Trade, Food, Diet and Health: Perspectives and Policy Options, Wiley Blackwell.

Box 3: Economic drivers of global tropical fruit demand

Global demand for tropical fruits is shaped by relatively high elasticities for price as well as for income. Available data show a strong relationship between changes in income and demand for tropical fruits in the major import destinations, namely the United States of America and the EU, particularly for pineapple, mango and, to some extent, papaya. On the back of rising incomes in both importing zones, per capita availability of the four major fresh tropical fruits in terms of retail weight has increased at annual average rates ranging from 6 to 10 percent between 1990 and 2017. Similarly, demand for fresh tropical fruits in major consuming regions has been supported by rising incomes, as for example witnessed in India and Brazil, where mango and papaya consumption is expanding among an increasingly affluent population. Accordingly, demand for tropical fruits is observed to be particularly susceptible to income shocks and changes in own prices relative to those of other fruits, including temperate varieties, or other food items, whereby a sudden increase in the relative price of a tropical fruit or a shock in income could lead to substitution by other fruits or food items. By contrast, import demand for avocado has exhibited much more resilience to changes in income, especially over the past decade, as demonstrated by its uninterrupted robust growth in both major import destinations, the United States of America and the EU.

“....demand for fresh tropical fruits in major consuming regions has been supported by rising incomes.....”

Box 4: Organic tropical fruits

Food safety and environmental concerns in developed countries are driving demand for organic fruits and vegetables. Still a niche market at present, organic tropical fruits continue to see very strong growth rates and are expected to witness growing consumer interest, not only in developed country markets such as the United States and the EU, but also in emerging economies, such as China.

Data on organic tropical fruits remain scarce because most exporting and importing countries do not routinely report them. However, estimates indicate that exports of organic tropical fruit account for approximately 8 percent of total global pineapple shipments, and 4 percent of total global avocado and mango shipments. With regards to papaya, organic shipments remain at an almost negligible level. The main destinations for organic tropical fruits are the United States, Canada and the EU. In producing countries, commercial organic tropical fruit production is almost entirely destined for export markets, which offer higher earning potential.

Wholesale and retail price data for major tropical fruits in the United States show that organic varieties are typically priced 50 to 70 percent higher than their conventional varieties. However, prices of organic major tropical fruits display a higher sensitivity to the workings of supply and demand and are thus prone to higher price fluctuations. This is particularly evident in the volatile movements of wholesale and retail prices of organic avocado in the United States. Concerning pineapple, demand for organic pineapple continues to outpace supply, accounting for a steady upward movement in the commodity's export prices.

nutritional benefits of tropical fruits is contributing to increasing consumption. Campaigns promoting the health benefits of nutrient-rich tropical fruits and the growing availability of ready-to-eat products have further stimulated demand. Indeed, changing consumer preferences are manifest in the year-round availability of tropical fruits once regarded as highly seasonal. As a result, major tropical fruits have started to shift away from niche into mainstream markets, as particularly evidenced in the United States, the United Kingdom and Germany.

Rising incomes and expanding markets in developing countries – most prominently in India and China – are paving the way for higher consumption of tropical fruits, particularly in the increasingly prosperous urban areas of the emerging economies. Tropical fruits have seen fast growth in demand in China, supported by the growing number of affluent consumers displaying a keen interest in novelty products, which are being branded as premium food items. Trade opportunities with China are particularly evident for imports of avocado and pineapple. Against the backdrop of shifting consumer preferences, domestic pineapple production in China has not kept pace with the fast growth in demand, which has resulted in an increase in pineapple imports with an estimated average annual growth rate of 25 percent between 2013 and 2017. More strikingly – albeit from a negligible base – shipments of avocado to China had an estimated 124 percent annual average growth rate over the same period, reaching an estimated 44 thousand tonnes in 2017.

PRICES

Price movements of major tropical fruits are influenced by various factors, but are invariably intrinsic to the supply and demand conditions of the respective commodity. While indicative export prices for mango and avocado display strong seasonal variation and responsiveness to fluctuations in supply and demand, intense competition in the global value chain for pineapple has pressured prices for the commodity. Papaya prices, meanwhile, have trended downwards on the back of fast growing supplies and a more widespread availability of the fruit.

Wholesale prices in the United States, the largest importer of tropical fruits, have shown a tendency to reflect global market developments. As such, wholesale prices of pineapples experienced a strong upward movement between May and August 2017, when supplies from Costa Rica were particularly low and demand in the United States high. Similarly, wholesale prices of avocado have registered a steep rise in response to severe supply shortages from Mexico, reaching USD 6.20/kg on average

in September 2017, up from an average of USD 2.00/kg in December 2016.

At the retail level, novelty price premiums are the main driver of retail prices in developing country import markets, notably in China, where recently introduced fruits, such as avocado, are considered luxury items. In developed country markets, the effects of novelty price premiums are being gradually replaced by quality based price premiums. As tropical fruits are becoming more widely available in developed countries, consumers have started to display a higher propensity to spend on tropical fruits that are ripe and ready-to-eat, tree-ripened instead of warehouse-ripened, and organic, allowing for higher price levels and profit margins at the retail level. As with other maturing food markets, demand for organic produce is burgeoning.

OUTLOOK

With around 2 700 species, tropical fruits provide promising potential as a source of nutrition, but also of income generation for those engaged in production beyond subsistence. Projections for world GDP by the IMF point to further growth in income, especially in the major international market destinations of the United States and the EU.[3] Combined with rising incomes and changing consumer preferences – including growing health consciousness in some of the key developing country markets – plentiful opportunities exist for the further commercial development of tropical fruits. Especially given their high export unit value and thus the potential to achieve high profit margins, tropical fruits may represent a viable option for diversification away from traditional export crops, some of which have been exposed to downward trends in prices caused by lacklustre demand and high levels of competition in export markets.

Indeed, recent market developments in global trade of major tropical fruits, particularly on the demand side, point to a strongly positive outlook. Mango and avocado are particularly well positioned to benefit from a sizeable expansion in import demand. Both fruits are being widely promoted as nutritional "super fruits" in developed country markets. Trade volumes in pineapples are likely to continue to be driven by relatively low unit prices, while papaya is expected to benefit from more widespread availability and higher consumer awareness in developed countries.

Marketing strategies tailored towards consumer preferences as well as the positive nutritional characteristics of major tropical fruits should support consumer demand. This also applies to the plethora of minor tropical fruits, for which consumer awareness remains limited in developed countries. Research and development efforts by multinational trading companies targeted to align major tropical fruits to consumer preferences in developed country markets have recently resulted in innovations such as vitamin-fortified mangoes, fat-reduced avocados, and sweeter, small-sized pineapples. In this regard, product diversification in terms of variety and clear positioning will be of increasing importance for small producers to be able to compete in the global market.

Notwithstanding prospects of increased demand in developed countries, exporters should also target potential demand in emerging economies, notably India and China, where increasingly affluent populations could give rise to greater product inflows. Costa Rica and Malaysia signed trade agreements with China in 2015 and 2013, respectively, and recent ratification of these agreements has provided pineapple exporters from both countries with access to a large and fast-growing consumer base. The first Costa Rican pineapple shipments reached China in the the thrid quarter of 2017, diverting volumes away from the exporter's traditional destinations. Such a shift in export flows may present an opportunity for smaller producers to supply more shipments to the United States and Europe. With regard to pineapple, this could be particularly beneficial to shipments from Côte d'Ivoire and Ghana, potentially enabling both exporters to re-gain share in the European market. Future trade opportunities also present themselves on the backdrop of increasing flows of international migration, which may give rise to higher import demand for exotic or ethnic food items in previously untapped markets.

Mexico, as the largest exporter of tropical fruits globally, faces uncertainty in light of the pending outcome of the NAFTA renegotiations, which threatens to result in the implementation of an ad valorem tariff rate as high as 35 percent to imports from Mexico. Approximately 75 percent of Mexico's major tropical fruit exports are destined to the United States. The application of an ad valorem tax to shipments from Mexico would have significant implications for price developments in the US, since more than likely any tariff would be conferred to the consumers.

Regarding organic tropical fruits, rising consumer awareness of the potentially harmful effects of pesticide-heavy production methods, particularly in pineapple, is expected to support further substantial growth in the demand for these products. However, a major obstacle to export growth lies on the supply side, notably the considerable costs of compliance involved with obtaining certification, and the associated lower yields and higher

[3] IMF World Economic Outlook, October 2017

costs for inputs and labour. The currently prevailing and highly competitive structure of the global value chain for tropical fruits pushes small producers to weigh the costs of compliance of organic production against earning potential.

Advances in post-harvest technologies will enable more efficient trade of fresh fruits, increasing its share compared with processed fruits. Fresh fruits typically achieve higher unit prices than processed fruits, allowing for enhanced profit margins. Improvements in infrastructure will facilitate access to export markets to a wider number of producing regions, with higher potential to initiate trade flows from more remote locations.

Unpredictable climatic events, the brunt of which are being felt in the tropics, remain a major concern. Because normal temperature ranges in tropical zones fall within a narrower range than those in temperate climates, any deviations in temperature will have more pronounced effects. Consequently, climate change renders tropical fruit supply extremely vulnerable to weather disruptions. More compelling is that the bulk of global production is for subsistence, and tropical fruits are very important for food security for some of the world's most economically vulnerable countries. Concerted international effort to design and apply adaptation and mitigation measures are vitally advisable, considering that most tropical fruit producing countries do not possess the economic and structural capacities that would allow them to cope with crop damages and subsequent impacts on export earnings. Strategic adaptation may also have positive spill-over effects on importing countries, as improvements in the regularity of supply flows should bring more stability to prices.

COMMODITY BRIEF: MANGO, MANGOSTEEN AND GUAVA

Mango, mangosteen and guava comprise by far the world's most prolifically produced group of tropical fruits, thanks to the large volumes of mango production. Preliminary estimates for 2017 forecast that world production would reach 47.1 million tonnes, an increase of 2 percent over 2016. This would mark a slowdown from the average annual growth rate of 3.5 percent between 2007 and 2016, mainly due to adverse weather in India, the major producing country, where 2017 production is forecast to show a 1.7 percent decrease from 2016.

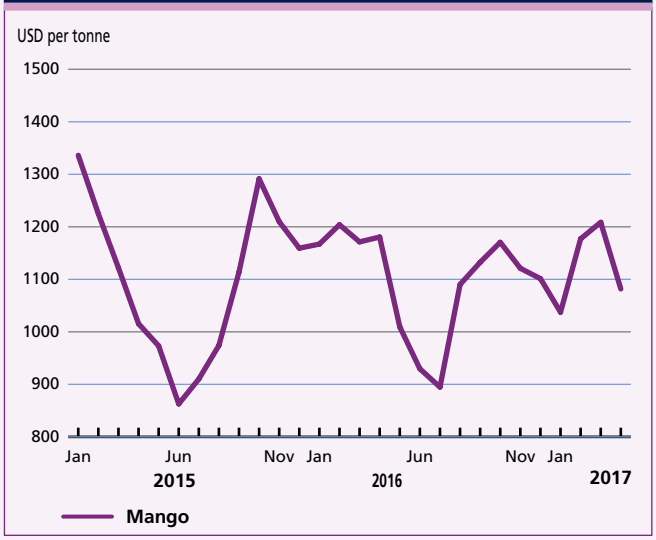
Given that international commodity classification schemes for production and trade do not require countries to report the fruits within this cluster separately, official data remain sparse. It is estimated that mango accounts for approximately 75 percent of total production volume, guava for 15 percent and mangosteen for the remaining 10 percent. In terms of regional distribution, approximately 74 percent of mango, mangosteen and guava production originate in Asia, 15 percent in Africa and 11 percent in Latin America and the Caribbean.

With an estimated output of 18.5 million tonnes in 2017, India currently accounts for approximately 40 percent of total global production, almost exclusively mango and guava. Production in India is primarily destined for consumption within the country, thanks to strong domestic demand and remunerative prices for producers. This also applies to guava, of which only a negligible fraction is exported. Mangosteen production remains low in India; nevertheless, it has displayed fast growth in recent years due to the crop's assumed health benefits and ease of cultivation.

Global exports of mango, guava and mangosteen are estimated to reach 1.7 million tonnes in 2017. This would represent a 6.3 percent increase from 2016, considerably faster than the 4.6 percent average annual growth registered between 2007 and 2016. The expansion follows strong growth in demand in the main import destinations, namely the United States, which has a 31 percent global import share, and the EU, which has a 27 percent global share. Of the commodity cluster, mango's main importers have found growing consumer interest, thanks to favourable preferences and increased nutritional awareness. Latest available figures indicate that per capita availability of mangoes will reach 1.3 kg in the United States and 0.8 kg in the EU in 2017, up from 0.9 kg and 0.6 kg in 2007, respectively.

In terms of export volumes, mango is estimated to account for 90 percent of global shipments, with guava and particularly mangosteen displaying a low availability in import markets. Mexico is forecast to remain the undisputed leading exporter, with an estimated volume share of 23 percent in 2017, followed by Brazil (13 percent), Thailand (12 percent)

Indicative export price of Mango



Source: Calculated as the weighted export unit value of major exporters' shipments

Mango production												
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World Total	**35 503**	**36 397**	**35 595**	**38 067**	**40 067**	**41 707**	**43 877**	**45 210**	**45 888**	**46 141**	**47 133**	**3.48**
Asia	**26 313**	**27 197**	**26 278**	**28 221**	**29 669**	**31 602**	**33 364**	**34 535**	**34 269**	**34 385**	**34 897**	**3.68**
Africa	**4 408**	**4 612**	**4 857**	**4 966**	**5 137**	**4 952**	**4 964**	**5 370**	**6 214**	**6 128**	**7 212**	**3.40**
Latin America & the Caribbean	**4 716**	**4 533**	**4 414**	**4 830**	**5 219**	**5 103**	**5 503**	**5 258**	**5 361**	**5 581**	**4 977**	**2.41**
India	13 734	13 997	12 750	15 027	15 188	16 196	18 002	18 431	18 527	18 779	18 458	4.48
China	3 715	3 977	4 140	4 254	4 430	4 506	4 645	4 675	7 945	4 783	4 870	4.97
Thailand	2 303	2 374	2 470	2 551	2 794	3 296	3 421	3 598	3 331	3 701	3 839	5.97
Indonesia	1 819	2 105	2 243	1 287	2 131	2 376	2 193	2 431	2 179	1 815	2 239	1.42
Mexico	1 911	1 717	1 509	1 633	1 827	1 761	1 902	1 755	2 070	2 197	1 582	2.29
Pakistan	1 719	1 754	1 728	1 846	1 888	1 700	1 659	1 717	1 636	1 574	1 525	-1.05
Egypt	532	466	534	506	598	787	713	927	1 214	1 260	1 397	11.87
Bangladesh	767	803	828	1 048	889	945	957	992	1 018	1 162	1 156	3.76
Kenya	384	449	529	554	453	520	581	757	830	925	1 025	9.05
Brazil	1 272	1 155	1 198	1 190	1 249	1 176	1 163	1 132	977	963	904	-2.45

Source: Official and unofficial sources including author's estimates

Mango exports												
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World	**1 149**	**1 022**	**1 223**	**1 372**	**1 530**	**1 631**	**1 672**	**1 561**	**1 495**	**1 595**	**1 695**	**4.64**
Latin America & the Caribbean	**527**	**416**	**498**	**612**	**712**	**697**	**777**	**698**	**748**	**827**	**886**	**6.61**
Asia	**504**	**500**	**613**	**642**	**677**	**798**	**756**	**668**	**573**	**571**	**574**	**1.93**
Africa	**88**	**73**	**84**	**83**	**88**	**96**	**88**	**121**	**128**	**131**	**153**	**5.97**
Mexico	223	114	222	263	291	304	343	293	311	352	394	8.41
Brazil	139	148	120	150	165	172	159	174	197	205	227	4.67
Thailand	121	135	251	241	221	252	291	243	216	149	207	3.53
Peru	78	95	55	115	149	105	146	120	132	157	197	8.07
India	103	77	88	86	91	97	144	116	99	159	132	5.36

Source: Data are based on official and unofficial sources, including reflected data.This information has been further validated to ensure consistency between trade flows

and Peru (12 percent). Mexico primarily exports mangoes to the United States (approximately 80 percent of the country's entire shipments) and is forecast to benefit strongly from higher import demand for the fruit in 2017. Mango exports from Brazil are mainly destined for the EU market and are similarly benefitting from expanding import demand. Brazil maintains its strong position through its ability to produce mangoes perennially, including a number of varieties that are popular in European markets, among them Tommy Atkins, Keitt and Kent. Mango shipments from Thailand primarily reach Southeast Asian markets. Thailand, which also ranks as one of the leading exporters of mangosteen, ships the bulk of its production to foreign markets. Peru exports mainly fresh mango and mangosteen, with approximately 40 percent of shipments going to the Netherlands, 30 percent to the United States and 10 percent to the United Kingdom. The Republic of Korea granted Peru preferential access to its market in 2015, and extended this to India and Brazil in 2017. Shipments from all three exporters to the Republic of Korea are expected to grow at a fast pace in 2017, in response to strong demand for mango in the country.

Indicative export prices of mango, mangosteen and guava strongly reflect seasonal fluctuations in supply and demand, with prices typically peaking between September and May, when there is less competition from locally produced fruits in the main export destinations of the United States and the EU.

While traded volumes are currently very low at the global level, mangosteen has demonstrated the potential for robust demand growth from diverse sources, thanks to its antioxidant properties and versatile uses that span nutritional, pharmaceutical and industrial applications. Consequently, for

producing countries, mangosteen may present an attractive crop as its cultivation requires few inputs and displays virtually no susceptibility to pests and diseases.

COMMODITY BRIEF: PINEAPPLE

Pineapple, the second-ranked tropical fruit in terms of importance in world production, is expected to register a 0.6 percent year-to-year increase in output in 2017, smaller than average, due to weather-related crop damages in Costa Rica, the main producer of pineapple in the world. This marks a significant slowdown in global production growth compared to the average annual rate of 3.6 percent seen over the previous decade up to 2016. Overall, global pineapple production is expected to reach a total of 25.9 million tonnes in 2017.

Costa Rica, which is estimated to account for about 10 percent of total global production in 2017, suffered severe disruptions to the harvest in the first half of the year, which would suggest an overall 7.5 percent decline in production in 2017 from 2016. The country's prolonged and intense 2016 rainy season, which lasted until December, followed by drought in January and February of 2017, caused significant harm to production. While the flooding resulted in delays to the flowering period of the plants, the subsequent drought affected the brix (sweetness) level of the harvest. Other major producers of pineapple include Brazil and the Philippines, with an estimated volume share of 10 percent each in 2017, followed by China, India and Thailand. Production in Brazil, China and India is primarily destined for the domestic fresh market owing to strong internal demand and competitive retail prices. Thailand is the leading producer and exporter of processed pineapple.

Pineapple production

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World Total	**20 085**	**19 731**	**19 969**	**21 065**	**22 923**	**24 082**	**24 527**	**25 439**	**25 928**	**25 740**	**25 888**	**3.62**
Asia	**10 156**	**9 771**	**9 697**	**9 644**	**10 602**	**10 973**	**10 928**	**11 165**	**11 399**	**10 944**	**11 048**	**1.75**
Latin America & the Caribbean	**6 776**	**6 878**	**6 833**	**7 434**	**8 011**	**8 647**	**8 916**	**9 364**	**9 486**	**9 615**	**9 515**	**4.71**
Africa	**2 782**	**2 701**	**3 044**	**3 645**	**4 014**	**4 169**	**4 401**	**4 606**	**4 753**	**4 888**	**5 032**	**7.35**
Costa Rica	1 547	1 668	1 946	2 313	2 469	2 616	2 685	2 916	2 772	2 931	2 712	7.44
Brazil	2 676	2 569	2 206	2 206	2 365	2 547	2 484	2 646	2 702	2 602	2 669	0.88
Philippines	2 016	2 209	2 198	2 169	2 247	2 398	2 459	2 507	2 583	2 612	2 651	2.78
India	1 362	1 245	1 341	1 387	1 415	1 500	1 571	1 737	1 984	1 964	2 031	5.15
China	1 382	1 386	1 477	1 496	1 592	1 679	1 800	1 889	1 989	1 993	1 951	4.75
Thailand	2 815	2 278	1 895	1 966	2 593	2 400	2 068	1 915	1 734	1 681	1 601	-3.82
Nigeria	900	900	1 000	1 487	1 482	1 433	1 442	1 465	1 487	1 474	1 478	6.08
Indonesia	1 396	1 433	1 558	1 406	1 541	1 782	1 883	1 835	1 730	1 396	1 452	1.93
Mexico	671	718	749	702	743	760	772	817	840	876	897	2.60
Colombia	435	436	327	444	512	487	640	653	741	794	856	8.62

Source: Official and unofficial sources including author's estimates

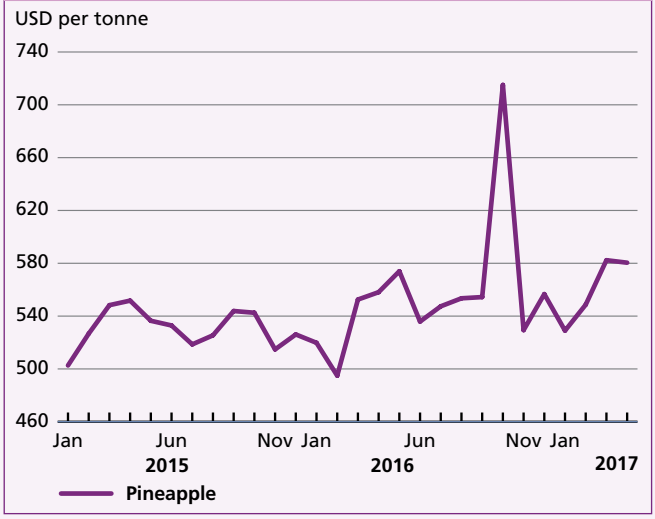
Pineapple exports

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World	**2 482**	**2 290**	**2 302**	**2 608**	**2 823**	**2 930**	**3 013**	**3 147**	**2 763**	**3 013**	**3 088**	**3.13**
Latin America & the Caribbean	**1 796**	**1 654**	**1 781**	**2 002**	**2 098**	**2 195**	**2 237**	**2 388**	**2 114**	**2 345**	**2 325**	**3.68**
Asia	**370**	**348**	**273**	**326**	**407**	**451**	**487**	**501**	**440**	**462**	**490**	**4.97**
Africa	**191**	**169**	**138**	**139**	**142**	**131**	**139**	**107**	**82**	**79**	**125**	**-8.38**
Costa Rica	1 447	1 372	1 459	1 716	1 799	1 894	1 944	2 132	1 819	2 019	1 938	4.52
Philippines	304	279	222	261	326	350	389	408	361	393	387	5.23
Ecuador	108	86	101	101	95	64	57	61	72	96	105	-4.15
Mexico	29	18	47	51	39	57	58	42	79	88	95	13.10

Source: Data are based on official and unofficial sources, including reflected data.This information has been further validated to ensure consistency between trade flows

Source: Official and unofficial sources including authors estimates

Indicative export price of Pineapple



Source: Calculated as the weighted export unit value of major exporters' shipments

Global exports of pineapple are estimated to reach 3.1 million tonnes in 2017, representing a 2.5 percent growth from 2016. Costa Rica's share in global exports of pineapple is expected to register a 4 percentage point decline from 2016, dropping to 63 percent in 2017, down from 67 percent in the previous year, as adverse weather rendered a significant share of the country's produce unfit for export. The Philippines, the second largest exporter, is estimated to account for 13 percent of total volume shipments, destined primarily to East Asia, with a large share exported in processed form. African ACP[4] exporters, which previously accounted for a large share of shipments to the EU, continue to experience large reductions in trade volumes due to the difficulty of competing with the very low prices of Costa Rican pineapples.

Shipments from Costa Rica are mainly destined to the United States. Following the supply shortages in Costa Rica, imports by the United States, the largest importer of pineapple globally, are expected to be 0.6 percent lower than in 2016. Imports by the EU (excl. intra-trade) are estimated to see a 3 percent decline from 2016. Per capita availability of pineapple is expected to stand at 3.3 kg in the United States and 2 kg in the EU in 2017.

On the back of supply shortages, indicative export prices have exhibited a slight upward movement in 2017 from the virtually flat trend observed over the previous 36 months. Prices of standard pineapple have been affected by strong competition in the global value chain as the fruit is sold at low prices in key export markets, such as the United Kingdom and Germany. Indicative export prices of organic pineapple are meanwhile displaying a higher responsiveness to global supply- and demand variations and are expected to follow a steady upward movement for the rest of 2017.

[4] African, Caribbean and Pacific Group of States

COMMODITY BRIEF: AVOCADO

Global production of avocado is estimated to reach 5.8 million tonnes in 2017, which would represent a 3.4 percent increase from 2016. On the back of rapidly growing global demand, avocado, among all the major tropical fruits, has seen the fastest production growth over the last decade, with an estimated 5.6 percent average annual increase between 2007 and 2016, primarily due to increases in harvested area in the major producers. Nevertheless, in global production terms, avocado remains the smallest of the major tropical fruits.

Nearly half of all production takes place in Central America and the Caribbean, largely owing to the strong position of Mexico and the Dominican Republic. Production in Mexico alone is estimated to account for one-third of global output in 2017. Adverse weather conditions in the country have affected both the quantity and quality of the harvest in the first nine months of the year, pointing to a substantial slowdown in production growth. Overall, 2017 Mexican production is forecast to increase by only 1 percent from 2016 – compared to an average annual growth rate of 5.5 percent between 2007 and 2016. Production in the Dominican Republic, hitherto the world's second leading producer of avocado, experienced significant hurricane damage in October 2017 and is estimated to incur a 35 percent output decline in 2017 compared to 2016. Accordingly, the share of the Dominican Republic in global production is estimated to drop to 6 percent in 2017. Peak harvest period in the Dominican Republic is between October and March, when approximately 80 percent of production is harvested, making the crop particularly vulnerable to hurricane damage. Production in Peru, meanwhile, is expected to register a 22 percent increase over 2016, following a near equivalent increase in area harvested, both stimulated by strong import demand from the EU, the largest export destination for supplies from Peru. Consequently, Peru is forecast to stand as the second leading producer of avocado, with an estimated 10 percent volume share in 2017.

Global exports of avocado are estimated to reach 1.9 million tonnes in 2017, posting an 8 percent increase from 2016. Mexico is forecast to account for 55 percent of global avocado exports, with shipments predominantly destined to the United States. In the period 2010 to 2016, Mexico shipped an average of 77 percent of its avocado exports to the United States. Mexico's strength lies in its ability to produce avocado in all seasons and also its close proximity to the United States, which gives the country a unique competitive advantage. However, on the back of weather-related production disruptions, 2017 shipments from Mexico are estimated to increase by a mere 2 percent from 2016, a significant slowdown compared to the

15.6 percent annual average growth rate achieved between 2007 and 2016. Other significant exporters are Peru, Chile, South Africa, Israel and Kenya, which all primarily export to the EU and have benefitted from fast growth in its import demand for avocado. Mexico is a less prolific exporter of avocado to the EU, as its prices are not competitive. The Dominican Republic primarily engages in the production of tropical avocados, which are considerably more susceptible to damage in transit than the more resilient Hass variety, due to their softer peel. Furthermore, its exports of tropical avocados have been subject to an import ban in the United States since March 2015, following a Mediterranean fruit fly outbreak. Accordingly, exports by the Dominican Republic represent only a small fraction of its production.

The main export destinations for avocado in the world are the United States, with an estimated share of 51 percent in 2017 and the EU, with a 27 percent share. Between 1990 and 2015, per capita fresh fruit retail availability of avocado grew at an average rate of 7 percent in the United States and is estimated to reach 3.6 kg in 2017. Latest available data for the EU indicate a per capita avocado availability of 1 kg on average in 2017, although the key avocado-consuming markets of France and the United Kingdom outperform this, with an estimated 1.6 kg and 1.3 kg per capita, respectively. Demand for avocado has been supported by the fruit's assumed health benefits related to its very high nutritional value.

Import demand for avocado has also shown a strong performance in Asia, particularly in China,

Avocado production

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World Total	**3 625**	**3 461**	**3 990**	**3 946**	**4 230**	**4 491**	**4 742**	**5 030**	**5 456**	**5 632**	**5 823**	**5.55**
Latin America & the Caribbean	**2 358**	**2 250**	**2 457**	**2 457**	**2 679**	**2 853**	**3 179**	**3 327**	**3 615**	**4 008**	**4 062**	**6.53**
Africa	**480**	**513**	**624**	**709**	**682**	**705**	**684**	**792**	**809**	**680**	**767**	**4.61**
Asia	**423**	**436**	**487**	**442**	**501**	**521**	**540**	**566**	**645**	**587**	**639**	**4.39**
Mexico	1 143	1 162	1 231	1 107	1 264	1 316	1 468	1 521	1 644	1 889	1 907	5.54
Peru	122	136	157	184	214	269	288	349	367	455	556	15.91
Colombia	194	184	189	205	215	255	295	289	310	403	483	8.59
Indonesia	202	244	258	224	276	294	290	307	383	305	352	5.34
Dominican Rep	183	188	184	289	295	290	388	428	526	537	349	14.23
Kenya	94	104	145	202	149	167	178	219	230	252	274	10.37
Brazil	154	147	139	153	160	160	157	157	181	174	178	1.97
United States	193	105	271	158	205	238	166	179	203	173	168	1.11
Chile	210	123	232	166	156	160	165	160	146	151	149	-2.15
China	92	95	100	103	105	108	112	116	118	122	126	3.13

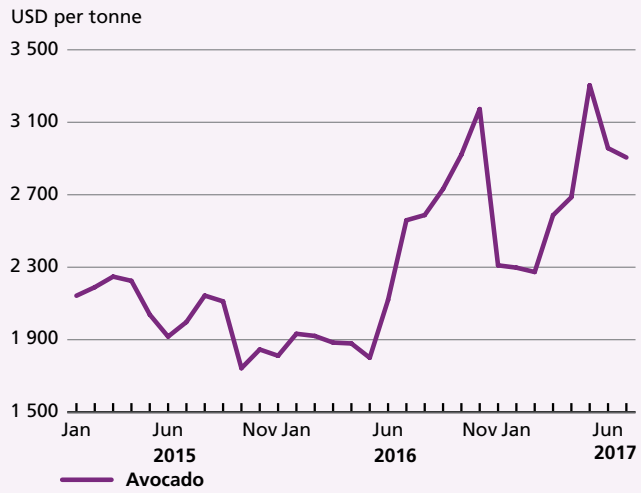
Source: Official and unofficial sources including author's estimates

Avocado exports

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World	**690**	**655**	**805**	**792**	**822**	**1 021**	**1 161**	**1 411**	**1 637**	**1 778**	**1 920**	**12.27**
Latin America & the Caribbean	**522**	**497**	**648**	**583**	**629**	**800**	**919**	**1 123**	**1 317**	**1 496**	**1 595**	**13.34**
Africa	**61**	**78**	**66**	**78**	**57**	**89**	**85**	**122**	**117**	**114**	**124**	**7.69**
Asia	**72**	**36**	**49**	**71**	**61**	**62**	**70**	**70**	**76**	**73**	**82**	**4.45**
Mexico	297	346	387	368	396	562	652	752	986	1 029	1 050	15.59
Peru	45	61	56	72	91	99	138	207	194	225	281	20.76
Chile	148	68	171	116	109	100	100	128	103	187	210	1.86
South Africa	42	57	43	53	32	58	50	74	58	68	64	4.77
Israel	70	34	48	67	59	51	59	63	59	44	56	0.37
Kenya	16	17	20	21	19	25	29	35	43	32	44	10.74

Source: Data are based on official and unofficial sources, including reflected data.This information has been further validated to ensure consistency between trade flows

Indicative export price of Avocado



Source: Calculated as the weighted export unit value of major exporters' shipments

the Republic of Korea and Japan. Shipments to the Republic of Korea doubled in the first 8 months of 2017 compared with the same period in 2016, albeit from a small base. Imports by China are expected to increase 20 percent above its 2016 imports, reaching an estimated 44 000 tonnes in 2017. In light of the attractive remunerative opportunities that avocado offers, Chinese growers have started to expand the production of avocado for domestic consumption, with the first harvest from new plantations to take place in the autumn of 2017.

As a share of production, trade in fresh avocados is the highest of the major tropical fruits and is estimated to reach 33 percent in 2017. Avocado is also the only fruit for which developed countries account for a non-trivial share of production, with the United States estimated to account for approximately 3 percent of global volume in 2017, primarily for domestic consumption.

Indicative export prices of avocado have proven highly susceptible to changes in supply and demand. They also vary due to seasonality and to the different varieties of avocado, which feature different sizes and quality levels. The significant slowdown in production growth in 2016 and 2017, coupled with fast expansion in demand in the major importers, has given strong upward impetus to export prices since June 2016, with prices reaching over USD 3 000/tonne in May 2017.

COMMODITY BRIEF: PAPAYA

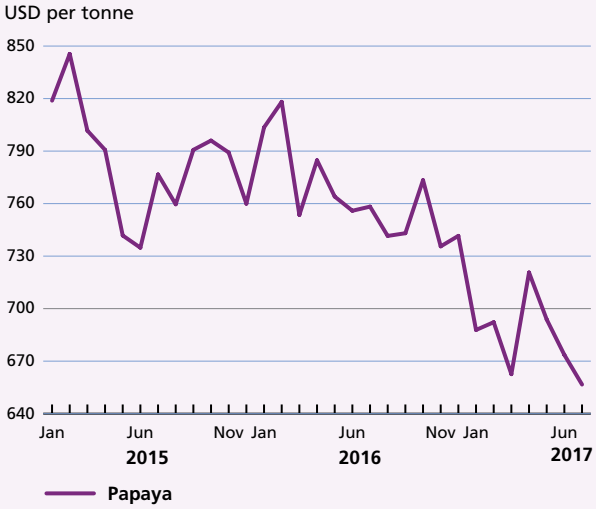
Global production of papaya is estimated to reach 13.3 million tonnes in 2017, up 2.7 percent from the 2016 level. Due to the crop's stronger resilience to adverse weather conditions, papaya production experienced significantly less disruption from adverse weather events than other tropical fruits in the first nine months of 2017, and it is on course to match the average annual growth rate of 3.3 percent registered over the past ten years. In terms of regional distribution, 55 percent of global papaya production is estimated to originate from Asia in 2017, 34 percent from Latin America and 11 from Africa.

India, the largest papaya producer in the world, with an estimated 43 percent output share in 2017, is forecast to post a 1.1 percent production growth from 2016, largely due to increases in area harvested. Indian papaya production is mainly destined for internal consumption, as domestic demand has been kept on a strong footing by rising incomes and changing consumer preferences. These factors have stimulated India's fast expansion of papaya production, which saw output double between 2007 and 2017.

Production growth in Brazil, the second largest producer in the world, is estimated to increase by 6.5 percent from 2016, after recovering from a drought-induced production decline estimated at 5 percent in 2016. While the largest share of production in Brazil is also destined for the domestic market, the country ranks as the second largest exporter behind Mexico and has achieved fast growth in export volumes in response to growing demand from the United States and the EU.

Global exports of papaya are estimated to reach 371 000 tonnes in 2017, which would represent an annual increase of 9 percent from 2016. This assessment points to a healthy recovery from the estimated 5 percent decline in export volumes experienced in 2016, caused by weather-related supply shortages in Brazil and Guatemala. Mexico, the leading international supplier, accounts for approximately half of all global papaya sales, with its 2017 exports forecast to increase 7 percent from 2016. Mexican export volumes are almost

Indicative export price of Papaya



Source: Calculated as the weighted export unit value of major exporters' shipments

exclusively destined to the United States. Fast growth in import demand from the United States has given Mexican producers a strong incentive to invest in technological advancements in recent years, resulting in a 6 percent improvement in average yields between 2010 and 2015. However, demand for Mexican papaya in the United States was somewhat disrupted by a widely reported nationwide salmonella outbreak in August 2017.

Of the major tropical fruits, papaya is the least traded fruit, but it has seen promising growth over the past decade. The largest importers of papaya in 2017 are the United States, with an estimated 64 percent volume share, and the EU, with an estimated 16 percent volume share. Estimates based on the latest available data indicate a per capita availability of 0.7 kg in the United States in 2017, up from 0.4 kg in 2005. Per capita availability of papaya in the EU remains negligible at an estimated 0.1 kg in 2017. Promotion of the fruit and its nutritional benefits has supported import demand and will be an important driver for further growth, particularly in the EU, where consumer awareness of the fruit remains low.

Indicative export prices displayed a tendency to decline during 2016 and the first half of 2017. On the back of fast growing export volumes, novelty-based price premiums have started to wear off, enabling a wider availability of papaya.

Papaya production

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World Total	**9 534**	**10 021**	**10 732**	**11 193**	**11 300**	**12 011**	**12 357**	**12 671**	**12 103**	**12 980**	**13 332**	**3.26**
Latin America & the Caribbean	**4 050**	**3 700**	**4 072**	**4 298**	**3 830**	**3 639**	**3 848**	**4 047**	**4 160**	**4 217**	**4 526**	**0.47**
Asia	**4 207**	**5 071**	**5 427**	**5 637**	**6 194**	**7 050**	**7 168**	**7 211**	**6 508**	**7 299**	**7 295**	**5.59**
Africa	**1247**	**1 220**	**1 205**	**1 232**	**1 250**	**1 296**	**1 317**	**1 386**	**1 406**	**1 439**	**1 484**	**1.97**
India	2 909	3 629	3 914	4 196	4 457	5 382	5 544	5 639	4 913	5 699	5 762	6.91
Brazil	1 812	1 890	1 793	1 872	1 854	1 518	1 583	1 603	1 464	1 396	1 486	-3.22
Mexico	919	653	707	616	634	713	765	836	884	952	1 054	2.47
Nigeria	765	750	754	750	760	775	800	850	871	900	930	2.03
Dominican Republic	430	259	681	908	498	521	532	705	758	814	884	7.45
Indonesia	622	718	773	676	958	906	910	840	852	904	845	3.59
Cuba	90	89	96	136	135	179	198	140	202	213	218	10.71
Congo, Dem Rep	220	222	224	226	228	225	219	220	220	216	214	-0.23
Colombia	224	208	186	158	153	144	168	155	176	177	182	-2.44
Peru	158	167	174	187	126	124	150	148	145	169	172	-1.12

Source: Official and unofficial sources including author's estimates

Papaya exports

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 *estim.*	2017 *f'cast*	2007-2016 Avg. growth rate %
	(thousand tonnes)											
World	**277**	**244**	**288**	**272**	**315**	**304**	**299**	**301**	**356**	**339**	**371**	**3.02**
Latin America & the Caribbean	**205**	**178**	**225**	**216**	**250**	**236**	**220**	**232**	**292**	**275**	**293**	**3.87**
Asia	**54**	**46**	**49**	**42**	**50**	**53**	**48**	**51**	**45**	**48**	**52**	**-0.36**
Africa	**7**	**10**	**5**	**3**	**2**	**2**	**4**	**5**	**4**	**4**	**7**	**-5.69**
Mexico	101	86	138	124	108	114	123	138	155	177	190	5.76
Brazil	36	34	29	30	32	30	31	38	45	43	52	3.22
Guatemala	7	10	7	13	13	25	29	27	41	32	37	21.80
Malaysia	27	28	24	28	22	21	28	27	24	24	27	-0.81
India	7	6	15	4	16	15	6	10	11	13	13	6.04

Source: Data are based on official and unofficial sources, including reflected data.This information has been further validated to ensure consistency between trade flows

MARKET POLICY DEVELOPMENTS

GRAINS: MAJOR POLICY DEVELOPMENTS MID-MAY TO MID-OCTOBER 2017*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Afghanistan	Wheat	Government procurement	Jun-17	Announced the National Procurement Commission's approval of imports of 138 tonnes of wheat from India.
Algeria	Grains	Import licences	Jun-17	Issued 167 import licences for feed maize, barley and soybean meal. Feed maize import licenses were awarded for 2.1 million tonnes, and feed barley licenses for 462 076 tonnes. These measures were in response to shortages in the domestic market.
	Grains	Government market intervention	Jul-17	Announced that commercial banks will suspend finances pending the imposition of import licenses for an extended list of products. The list includes processed wheat and maize products such as bread, pizza and pasta. The measure aims at discouraging import of these products as domestic production can cover consumer demand.
Argentina	Maize	Government market intervention	Jun-17	Increased the price of maize-based ethanol for oil refiners to blend into gasoline to ARS 12.9 (USD 0.8) per litre, 0.7 percent up from previous month.
	Maize	Government market intervention	Sep-17	Authorized a 1.7 percent increase in maize ethanol price for oil refiners blending it into gasoline. Maize-ethanol price was raised to ARS 13.6 (USD 0.78).
	Maize	Government market intervention	Oct-17	Increased the price of maize-based ethanol for oil refiners to blend into gasoline to ARS 13.623 (USD 0.8) per litre, 0.4 percent up from previous month.
Australia	Wheat		Jun-17	Announced CME Group launched the Australian wheat FOB (Platts) futures contract, to begin trading from 24 July 2017.
Bangladesh	Grains	Food subsidy	Jun-17	Raised the food grains subsidy under its (2017/18) financial year budget by 15 percent, to BDT 45.45 billion (USD 57 million).
	Maize and wheat	Production support	Jun-17	Established the "Bangladesh wheat and maize research institute bill, 2017" in order to increase production of both crops through research.
	Wheat	Bilateral agreement	Sep-17	Announced importation of 200 000 tonnes of wheat from the Russian Federation under a Government- to- Government (G2G) arrangement, at USD 252 per tonne.
Brazil	Maize	Import policy	May-17	Approved a new rule on ethanol imports in order to protect domestic producers from the market. The new requirement is in line with the existing rule applied to national ethanol producers with regard to minimum stocks needed to guarantee domestic supplies.
	Maize	Production support	Aug-17	Launched the country's first maize-based ethanol processing plant in Mato Grosso. The plant will produce about 240 million litres of ethanol from maize each year, along with 6 200 tonnes of maize oil and 60 000 megawatts of power.
	Maize	Import tax	Aug-17	Approved a 20 percent tax (above a 600 million litre Tariff Rate Quota) on ethanol imports from the United States to protect domestic producers.
	Wheat	Marketing measures	Sep-17	Announced a BRL 100 million (USD 32 million) plan to support wheat and rice marketing. The price support mechanisms are activated when the prices of grains fall below a certain level (currently BRL 34.97 per 50 kg – USD 234 per tonne).
Burundi	Maize	Import tariff	May-17	Removed import tariffs for maize and maize products, effective from 15 May.
China	Grains	Value added tax	May-17	Reduced the VAT on agricultural products including grains, from 13 to 11 percent as of 1 July.
	Maize and wheat	Government market intervention	Jun-17	Removed restrictions on foreign investment in the processing of flour and deep processing of maize.
	Maize	GMO policy	Jun-17	Approved 16 genetically modified (GMO) crop varieties for import. Among the four maize varieties included are Sygenta's MIR 162 maize and Dow Agrisciences Enlist maize, for animal feeding. Approvals are valid for three years.
	Maize	Production subsidies	Jun-17	Announced it will spend CNY 2.56 billion (USD 374.95 million) to subsidize farmers to rotate their maize plantings with other crops every other year as well as to leave some land fallow. This subsidy is 78 percent higher than in 2016.
	Wheat	Bilateral agreement	Jul-17	Agreed to strengthen trade and cooperation in the area of agriculture with Kazakhstan. The agreement includes Kazakhstan's commitment to supply 200 000 tonnes of wheat and 100 000 tonnes of oil crops to China; the construction of a wheat terminal at the Kazakh-Chinese border; and enhanced investment, technology transfer and innovation in agriculture production, wheat processing and food safety infrastructure.
	Maize	GMO policy	Jul-17	Approved two new GMO maize varieties (insect-resistant and glyphosate-resistant) for imports during a three-year period, which brings the total number of China's GMO approvals to 18 (including four maize crops).

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
China	Maize and oats	Producer subsidies	Aug-17	Published subsidies for silage maize up to CNY 60 (USD 8.9 per tonne) and for half-dried silage feed oats up to CNY 120 (USD 17.9 per tonne).
	Maize	Production support	Sep-17	Announced its plan to boost the nationwide use of maize for production of biofuels. One aim of the measure is to reduce the stock of low quality maize kept in the country's inventories.
	Maize	Government market intervention	Sep-17	Announced a cut in maize planting area to around 670 000 ha, mainly in favour of soybeans.
	Wheat	Stock release	Oct-17	Authorized the sale of 2 500 tonnes of imported wheat from state reserves at an average price of CNY 2 564 (USD 387) per tonne.
	Maize	Producer subsidy	Oct-17	Reduced subsidy for maize growers in Heilongjiang province to CNY 133.46 per mu (0.067 ha), which would be around USD 303.2 per ha, down sharply from CNY 153.92 (USD 342.9 per ha) last year.
	Wheat	Government market intervention	Oct-17	Announced its plan to adjust minimum state purchase prices for wheat and increase the flexibility of the wheat reserve system.
	Maize	Government market intervention	Oct-17	Suspended, effective from end October 2017, public auctions of old-crop maize and soybeans from state reserves, with a view not to hinder the marketing of the new crop being harvested.
	Maize and wheat	Import quota	Oct-17	Announced wheat and maize import quotas for 2018 at 9.64 million tonnes and 7.2 million tonnes, respectively.
	Wheat	Government procurement	Oct-17	Decreased wheat minimum purchase price for 2018 to CNR 2 300 (USD 345.6) per tonne, down by 2.5 percent from this year.
Egypt	Wheat	Government procurement	May-17	Announced it will grant wheat farmers EGP 15 (USD 0.83) per tonne for wheat in jute bags, and EGP 10 (USD 0.55) per tonne for wheat destined for silos which are far from production areas but have significant storage capacity.
	Wheat	Government market intervention	Jun-17	Provided the state grains buyer GASC with letters of credit, worth USD 64.3 million, for imports of 395 000 tonnes.
	Maize	Government procurement	Jul-17	Announced it will almost double the intervention prices of maize during 2017-2018 fiscal year beginning in July, from EGP 1 700 (USD 95.24) per tonne to EGP 3 400 (USD 190.48) per tonne.
	Flour	Producer subsidy	Jul-17	Announced that as of August, it will stop providing subsidies to millers and bakeries that produce subsidized bread.
	Wheat	Government market intervention	Jul-17	Announced that the Agriculture Quarantine Service will resume its traditional inspector role in controlling the quality of wheat imports.
	Wheat	Government procurement	Aug-17	Signed an agreement with the Chamber of Cereal Industries, fixing a price for the GASC supplied wheat. The agreement calls for the GASC to sell wheat at EGP 4 000 (USD 227) per tonne to public and private sector mills, and millers agreed to sell flour at EGP 4 700 (USD 267) per tonne.
	Wheat	Import requirements	Aug-17	Announced that, effective from 3 October, wheat shipments with a moisture level of up to 13.5 percent will be allowed for a nine-month period. Previously, the permissible moisture level was set at 13 percent.
Ethiopia	Wheat	Government procurement	Oct-17	Announced the procurement of 400 000 tonnes of wheat, in order to relieve the 8.5 million people who are in need of urgent food assistance in the country.
EU	Maize	GMO policy	Jul-17	Authorized three GMO varieties for food and feed use for a 10-year period, among which is Monsanto's GM maize MON 810.
	Wheat	Government market intervention	Jul-17	Announced Euronext will add the Simarex grain silo in Rouen as an additional delivery point for its wheat futures contract from September 2018.
	Grains	Import duty	Jul-17	Established additional duty-free tariff quotas for several agricultural products from Ukraine, including wheat 65 000 tonnes, maize 625 000 tonnes, barley 325 000 tonnes and oats 4 000 tonnes.
	Maize, sorghum and rye	Import tariff	Aug-17	Reintroduced import tariff on maize of EUR 5.16 (USD 6.13) per tonne, reversing the duty-free conditions in place since November 2014. Sorghum and rye are subject to the same policy change.
	Maize	Import duty	Aug-17	Announced an increase in maize duty imports from EUR 5.16 (USD 6.13) per tonne to EUR 10.95 (USD 13.10) per tonne, effective 1 September 2017.
	Maize	Import tariff	Aug-17	Lowered the anti-dumping duties applied on Argentine biodiesel to between 4.5 percent and 8.1 percent.
	Maize, sorghum and rye	Import tariff	Oct-17	Lowered the import duty for maize, sorghum and rye to EUR 5.61 (USD 6.07) per tonne, due to stronger US dollar. Import duties are fixed from 10 October until a further notice.
	Maize and wheat	Import quota	Oct-17	Increased the quantities of tariff-free agricultural products exported from Ukraine to the EU. The annual common wheat import quota was raised by 16 000 tonnes and maize by 625 000 tonnes.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
India	Wheat	Government market intervention	Jun-17	Cancelled the licences of eight flourmills for not supplying subsidized wheat flour to the market. They had sold wheat flour at a price higher than the one set by the government at INR 500 per 20 kg (USD 388 per tonne).
	Maize	Procurement price	Jun-17	Increased the minimum support price for maize by 4.4 percent from INR 13 650 (USD 211.6) to INR 14 250 (USD 220.8) per tonne.
	Wheat	Import requirements	Jun-17	Extended the exemption of fumigation quarantine rules until end-December, allowing imported wheat cargoes to be fumigated with methyl bromide at the port of unloading instead of at the port of origin.
	Wheat	Government procurement	Oct-17	Announced raising the 2018 local wheat purchase price by 6.8 percent per quintal, IRD 110 (USD 1.69), in order to boost domestic wheat output.
Italy	Wheat	Marketing measures	Jul-17	Introduced a new labelling policy for durum wheat in pasta (Decree No. 17A05704). The packaging and labelling must indicate where wheat crops were grown and milled. The new requirements enter into force on 17 February 2018 for a trial period until 30 September 2020.
Japan	Wheat	Government market intervention	Jun-17	Extended its Simultaneous Buy-and-Sell (SBS) import scheme to cover all wheat classes as of October 2017.
	Wheat	Government procurement	Sep-17	Announced that from October, the price of imported wheat for millers would increase to JPY 52 510 (USD 482) per tonne, 3.6 percent above the previous six-month period. The increase reflects the rise in FOB prices of wheat from the US and Australia (Japan's main suppliers of milling wheat) as well as higher freight rates and a weaker yen.
Jordan	Barley and wheat	Procurement price	Jun-17	Raised procurement price for wheat and barley by JOD 50 (USD 70.5) per tonne, from JOD 450 to JOD 500 (from USD 635.1 to USD 705.6) per tonne, in order to support farmers after a poor production season.
Kazakhstan	Wheat	Government procurement	Sep-17	Announced new procurement prices for 2017. Purchasing prices for wheat fall under selected ranges, according to quality. The price for wheat 3rd grade ranges from KZT 42 000 (USD 124) to KZT 54 000 (USD160) per tonne, against KZT 41 000 (USD 121) to KZT 50 000 (USD 148) in 2016. Prices for wheat 4th grade vary from 37 000 (USD 109) to KZT 39 000 (USD 115) per tonne, while in 2016 it was purchased at KZT 34 000 (USD 100) to KZT 36 000 (USD 106) per tonne. The procurement price for barley was set at KZT 40 000 (USD 118) per tonne for volumes up to 1 000 tonnes and KZT 41 000 (USD 121) per tonne for volumes over 1 000 tonnes, after remaining unchanged in the past two years at KZT 25 000 (USD 74) per tonne. All prices are inclusive of VAT.
Kenya	Maize	Import duty	Jul-17	Extended duty waiver on imported yellow maize from 31 August 2017 to 30 June 2018, and on imported white maize from 31 July to 30 September 2017. The goal is to boost market supplies and ease maize prices.
	Wheat	Bilateral agreement	Aug-17	Agreed to allow wheat imports from Tanzania.
	Maize	Subsidies support	Sep-17	Extended the maize subsidy programme, which started in May and was intended to be concluded at the end of September. The programme will continue until markets are adequately supplied.
Morocco	Wheat	Storage subsidy	May-17	Decided to provide a bi-weekly storage premium of MAD 20 (USD 2.1) per tonne for wheat traders and Moroccan agricultural cooperatives for storage of their wheat at facilities licensed by Morocco's National Cereal Office (ONICL). The measure was effective from 15 May to 15 October 2017.
	Wheat	Import duty	May-17	Announced the increase of the most favoured nation (MFN) import duty on common wheat from 30 percent to 135 percent. The new customs duty will be effective until 31 December 2017.
	Wheat	Import duty	May-17	Adjusted the preferential duties on common wheat from the US and the EU from 9.9 percent to 83.7 percent, with validity until 31 December 2017.
	Wheat	Subsidies support	Jun-17	Fixed the annual quota of subsidized common wheat flour at 650 000 tonne, down from 1 million tonnes in 2016.
	Wheat	Import duty	Oct-17	Announced a cut in the custom duty for soft wheat imports to 30 percent from 135 percent. The new custom duty will be effective from 1 December 2017.
Pakistan	Wheat	Export policy	Jun-17	Extended the wheat export period beyond 15 March, until 31 August 2017.
	Wheat	Export subsidy	Oct-17	Extended the wheat export subsidy period to 30 October 2017.
	Wheat	Import ban	Oct-17	Decided to ban imports of wheat because of large domestic supplies.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Russian Fed.	Grains	Government market intervention	May-17	Announced top 23 traders of Russian grain signed the "Charter on Grain Turnover", which was developed to discipline the procedures for VAT reimbursement on exported agricultural products. According to the Russian legislation, companies that export products are eligible for VAT refunds on any purchases they make for exports.
	Wheat	Government procurement	Aug-17	Approved new prices for grain purchasing interventions in the 2017/18 marketing year. It sets the price for 1-grade soft milling wheat at RUR 12 500 (USD 216) per tonne, 2-grade wheat at RUR 11 500 (USD 199) per tonne, 3-grade wheat at RUR 10 300 (USD 178 per tonne), 4-grade wheat at RUR 9 000 (USD 156) per tonne, and 5-grade wheat at RUR 7 600 (USD 132) per tonne.
	Grains	Transport measure	Sep-17	Announced a 10.3 percent discount on transportation charges for export shipments from 12 regions when grain is transported through the Russian ports. The discount is effective from 1 October 2017 until 30 June 2018.
	Wheat	Stock release	Oct-17	Announced the selling of 1.5 million tonnes of wheat from state reserves in order to reduce expenditures on maintaining stockpiles.
Rwanda	Wheat	Import tariff	Jun-17	Waived 35 percent external tariff on wheat imports for Rwanda. The East African Community (EAC) waiver was approved on condition that Rwanda would not export these crops to Burundi, Kenya, Tanzania or Uganda. The tariff on wheat was removed in an effort to ease domestic supply pressure and curb food inflation.
	Grains	Production support	Jun-17	Invested USD 50 million in a factory to produce cereal-based fortified foods in Kigali. The joint venture aims to reach more than 1 million people annually.
South Africa	Wheat	Import tariff	Sep-17	Lowered its wheat import tariff to ZAR 379.34 (USD 28.74) per tonne, down 60 percent from the previous tariff. The new tariff is at the lowest level since February 2015, and it comes after a decline in South Africa's wheat crop production in 2017/18.
Sri Lanka	Maize and wheat	Import duty	Aug-17	Reduced import duty on wheat and wheat flour, respectively from LKR 9 to LKR 6 per kg (from USD 58 to USD 39 per tonne) and from LKR 25 to LKR 15 per kg (from USD 162.6 to USD 97.6). In addition, maize import duty was reduced from LKR 60/70 to LKR 10 per kg (from USD 390/455 to USD 65 per tonne).
Sudan	Wheat	Import ban	Oct-17	Approved a temporary ban on wheat flour imports.
Tanzania	Maize	Export ban	Jun-17	Announced a ban on the exports of unprocessed food crops, including maize. The measure aims to ease supply pressure and curb food prices, as well as support the domestic food-processing industry.
Turkey	Wheat	Import duty	Jun-17	Lifted all restrictions on imports of wheat from the Russian Federation, that Turkey had put in place in May 2017.
	Grains	Import duty	Jun-17	Reduced wheat, barley and maize custom duties from 130 percent to 45, 35 and 25 percent respectively.
	Maize	GMO policy	Aug-17	Approved one type of genetically modified maize (MON87460 type) and its products for feed use.
	Maize and wheat	Import requirements	Sep-17	Imposed a requirement that agricultural imports from the Russian Federation receive approval from Turkish authorities starting from 9 October. Approvals will be sought for nine products, including maize and wheat.
Ukraine	Wheat	Export quota	Oct-17	Agreed with traders the maximum volume of wheat exports for July 2017 – June 2018 at 16.5 million tonnes.
Uzbekistan	Wheat	Import duty	Aug-17	Reduced import duties on wheat flour import from 30 percent to 10 percent.
Venezuela	Maize	Government procurement	Oct-17	Fixed the price of maize at VEF 2 100 (USD 210.5).
Vietnam	Maize and wheat	Import policy	Sep-17	Announced the resumption of imports of Distiller's Dried Grains (DDGs) which had been suspended since December 2016.
Zambia	Maize	Export duty	Jun-17	Reintroduced a 10 percent tax on white maize exports. The export duty was first approved in January, but has not been effective due to the export ban that was in place until April 2017.
	Maize	Government procurement	Aug-17	Announced new maize purchasing price for the 2017/18 MY (May/April) at MWK 60 (USD 0.08) per 50 kg bag, 30 percent lower than in the previous year. The procurement target is set at 500 000 tonnes.
	Maize	Stock release	Aug-17	Authorized 100 000 tonnes of maize from the Food Reserve Agency (FRA) for export to East African countries and the Great Lakes region.
Zimbabwe	Maize	Import ban	Jun-17	Banned maize import for unspecified period after recording a bumper crop
	Maize	Government market intervention	Sep-17	Signed USD 600 million credit line with African Export-Import Bank in an effort to stave off a foreign-currency shortage that has afflicted importers of several commodities, including maize.

* A collection of major grain policy developments starting in July 2010 is available at: http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=grains

RICE: MAJOR POLICY DEVELOPMENTS MID-MAY TO MID-OCTOBER 2017*

COUNTRY	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Bangladesh	May-17 to Sep-17	Import tender	Issued seven international tenders since mid-May, seeking a combined 350 000 tonnes of non-Basmati parboiled rice.
	May-17	Import agreement	Renewed an MOU with Viet Nam, giving Bangladesh the option to import up to 1.0 million tonnes of Vietnamese rice per year, until 2022. The agreement was soon followed by the purchase of 250 000 tonnes of Vietnamese rice.
	Jun-17	Budgetary allocations, production support, Government procurement	Announced that allotments for agricultural subsidies would be kept steady at BDT 90 billion (USD 1.1 billion) in its 2017/2018 budgetary allocations. In support of the agricultural sector, steps would be taken to arrest encroachment of agricultural land, reduce post-harvest losses, expand irrigation coverage, and advance research and supply of improved seed varieties, including through genetic engineering. Incentives to promote mechanization would also continue. A rice import target of 600 000 tonnes was set for the 2017/2018 fiscal year (July-June). The government would seek to purchase a separate 1.6 million tonnes of rice locally in 2017/18, compared with 1.85 million tonnes the previous year.
	Jun-17	Food subsidies, tax policy	Set aside BDT 45.5 billion (USD 556 million) to provide food subsidies during the 2017/2018 fiscal year (July-June), up from a revised budget of BDT 37.2 billion (USD 455 million) for the previous year. The foodgrain distribution target was set at 2.74 million tonnes, up 16 percent from a revised target for the previous year. Of this volume, 2.16 million tonnes would be in the form of rice, compared with 1.86 million tonnes in 2016/2017. In addition, VAT exemptions would continue for local rice along with other basic foodstuffs and be extended to imported rice, under a revised VAT regime.
	Jun-17	Finance and credit facilities	Instructed banks to issue Letters of Credit (LC) to rice importers at a zero margin. The measure seeks to facilitate imports of rice in order to compensate for flood-related output losses and will be effective until 31 December 2017.
	Jun-17	Import tariff	Reduced customs duties on imported husked, semi/wholly milled and broken rice to 10 percent, down from a previous level of 25 percent. The 3 percent Regulatory Duty, imposed on top of customs duties, was also rescinded for rice. The measure went into effect on 21 June 2017.
	Jul-17	Finance and credit facilities	Allowed banks to issue letters of credit to rice importers on a deferred payment or usance basis, or under buyer's credit. The measure seeks to facilitate private sector imports of rice and will be effective until 31 December 2017.
	Aug-17	Import agreement	Signed an MOU with Cambodia, giving Bangladesh the option to import up to 1 million tonnes of rice until 2022.
	Aug-17	Import agreement	Signed an MOU with Thailand, allowing Bangladesh to purchase up to 1.0 million tonnes of Thai rice per year until 2021.
	Aug-17	Import tariff	Reduced customs duties on imported husked, semi/wholly milled and broken rice from 10 percent to 2 percent, effective 17 August 2017.
	Sep-17	Import agreement	Signed an MOU with Myanmar, giving it the option to purchase 250 000 tonnes of white rice and 50 000 tonnes of parboiled rice, per year, until 2022. An October decision authorized the first purchase under the agreement, for a total of 100 000 tonnes.
	Oct-17	Import agreement	Reached deals with officials in India and Thailand to purchase a total of 250 000 tonnes of rice, according to official statements to the press.
Brazil	Jul-17	Minimum support prices	Approved minimum support prices (MSPs) for the 2018/19 season (2017/18 season for Brazil), effective from February 2018 to January 2019. The MSP for fine long-grain paddy was raised by 3 percent to BRL 720.20 (USD 227.54) per tonne for the Southern region (except Paraná) and to BRL 720.17 (USD 227.53) for all other regions. The MSPs for long-grain paddy were instead left unvaried at BRL 378.0 (USD 119.4) per tonne for the Southern region (except Paraná) and at BRL 407.5 (USD 128.7) per tonne for other regions.
Cambodia	Aug-17	Production support, credit facilities	Announced that a credit line for rice millers and exporters would be raised from USD 27 million to USD 50 million. The funds will provide processors and traders with low-interest loans through the Rural Development Bank (RDB) in order to assist them in purchasing paddy from the 2017 main crop harvest and stabilize prices. Additional funds would go to bolster storage and drying capacity.
China (Mainland)	May-17 to Oct-17	Stock release	Sold 9.5 million tonnes of paddy from state reserves, out of a total of 67.9 million tonnes of paddy offered through 37 auctions held between 17 May 2017 and 13 October 2017.

COUNTRY	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Colombia	Jun-17	Warehouse receipts programme, marketing assistance	Announced that it would offer a COP 28 890 (USD 9.5) per tonne assistance to cover the monthly storage costs of up to 284 855 tonnes of paddy harvested during the second semester of 2016, from 9 June 2017 to 30 June 2017. In addition, COP 20 000 (USD 6.6) per tonne would be offered to aid rice producers in marketing some 30 000 tonnes.
	Aug-17	Support prices, warehouse receipts program	Decided that the storage incentive programme for 2017 second-semester crops would be implemented from 11 August 2017 to 30 December 2017. The scheme will extend a COP 28 890 (USD 9.6) outlay to cover the cost of storing a tonne of paddy per month, for up to 400 000 tonnes, provided that these volumes are purchased at reference paddy prices of COP 106 250–157 000 per 125 kg (USD 283-418 per tonne). Volumes purchased under the programme will determine potential rice import requirements for 2018 and their allocation among participants, as well as entities' eligibility to participate in public procurement campaigns, special credit lines and export negotiations, should the need for these arise.
	Aug-17	Production support	Decided to extend a marketing assistance package for up to 161 800 tonnes of paddy from the 2017 second-semester harvest, in order to aid rice producers coping with declines in local quotations ensuing from successive bumper harvests. The package will consist of a COP 64 000 (USD 21.3) outlay per tonne of paddy marketed by producers between 24 August and 15 November 2017, except for farmers in Caquetá, Casanare, Tolima, Huila and Meta, who will receive an additional COP 50 000 (USD 16.6) per tonne of paddy sold for up to 116 000 tonnes.
Costa Rica	May-17	Support prices	Lowered the reference producer price of paddy by 3 percent to CRC 21 457 per 73.6 kg bag (USD 503 per tonne). A successive decision made the revised rate effective as of 1 July 2017.
	Sep-17	Safeguard measures	Put in place safeguard measures on selected classes of husked rice imports (SAC codes 100620000091 and 1006200099), originating in countries not party to a preferential trade agreement with Costa Rica. Effective from 6 September 2017 to 31 December 2017, an additional import tariff of 11.67 percent will be levied on these classes, since cumulative imports from 1 January 2017 surpassed a 3 805.2 tonne threshold that activates the measure. The surcharge will be applied on top of a 35 percent import duty accrued by these classes.
Cote d'Ivoire	Jul-17	Price controls	Set price caps on various commodities, including imported rice, for a period of six months. Price ceilings on imported rice range from XOF 307 to 397 (USD 0.55-0.71) per kg at the retail level in Abidjan, but vary depending on the origin and quality of supplies and place of sale, as well as the stage of the marketing chain.
Egypt	Jul-17	Export ban	Announced that the ban on rice exports would remain in place, in order to ensure sufficient local availabilities and build strategic reserves. The aim would be to stabilize consumer prices at EGP 6.5 (USD 0.4) per kg during the 2017 season.
Guinea-Bissau	Aug-17	Price controls	Set a maximum retail price of XOF 16 500 per 50 kg of fully broken rice (USD 0.59 per kg) in Bissau, and of XOF 17 000 per 50 kg (USD 0.61 per kg) for other parts of the country. The government would also take other steps to quell increases in domestic rice prices, including temporary tax relief measures, according to press reports.
India	Jun-17	Support prices, Government procurement	Raised minimum support prices by 5.4 percent for common paddy to INR 15 500 (USD 239) per tonne and by 5.3 percent for Grade A paddy to INR 15 900 (USD 245) per tonne.
	Jun-17	Trade agreement	Decided to allow 67 640 tonnes of rice, along with other products, to be exported to the Republic of Maldives in 2017/18, without any existing or future restrictions. The measure went into effect in April 2017.
Indonesia	Aug-17	Government procurement, purchasing prices	Announced that the state enterprise, Bulog, had been allowed to pay up to IDR 4 070–8 030 per kg (USD 296–584 per tonne) for supplies purchased from the local market, 10 percent more than the applicable government purchase prices. The move is geared at enabling the agency to step-up local procurement during the 2017 offseason harvest, as higher market prices relative to government prices had slowed its pace of state purchases from the domestic market.
	Aug-17	Price controls	Set the maximum retail price (MRP) for medium quality rice at IDR 9 450–10 250 (USD 0.69–0.75) per kg, depending on the various provinces. Price ceilings ranging from IDR 12 800 to 13 600 (USD 0.93 to 0.99) per kg were instead set for premium qualities, while no ceiling would apply for specialty rice. The MRPs went into effect on 1 September 2017 and compare to a ceiling of IDR 9 500 (USD 0.69) per kg that applied to all rice qualities between September 2016 and July 2017.
Iraq	Jun-17	Import agreement	Extended an MOU on the purchase of rice from the United States for its public distribution system until January 2018.
Italy	Aug-17	Origin labelling	Issued a decision requiring that labels of all rice (products falling under HS code 1006) marketed in Italy indicate the country in which the product was grown, processed and packaged. The measure will be effective from 16 February 2018 until 31 December 2020, on a trial basis, or until rules on origin labelling are implemented at the European Union level.
Japan	Sep-17	Import regulation	Issued rules prohibiting the sale or transfer of imported rice among entities participating in simultaneous buy and sell tenders, unless the supplies are otherwise processed, packaged or transformed.

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Kenya	Jun-17	Production support	Announced that it would waive KES 100 million (USD 0.9 million) worth of service charges payable by rice farmers in the Mwea Irrigation Scheme, in order to assist them in coping with losses incurred in 2016 as a result of drought.
	Jun-17	Import tariff	Renewed exemptions to the 75 percent rice import duty applicable under the Common External Tariff of the East African Community. Import tariffs for paddy, husked, milled and broken rice will continue to be 35 percent (or USD 200 per tonne, whichever is higher) for a period of one year, effective 1 July 2017.
Liberia	Aug-17	Import tariff	Renewed import tariff exemptions on semi/wholly milled and broken rice, with immediate effect.
Pakistan	May-17	Budgetary allocations, production support	Announced that it would maintain subsidies on fertilizer prices and electricity rates for agricultural tube wells in 2017/2018, as part of its budgetary allocations. Among other measures to promote agricultural production growth, it would also reduce customs duties levied on combine harvesters, along with sales taxes on agricultural diesel engines. In addition to raising the agriculture credit target for 2017/2018 by 43 percent to PKR 1 001 billion (USD 9.5 billion), it also announced that it would launch a new credit scheme providing smallholders cultivating up to 12.5 acres (5.1 ha) with up to PKR 50 000 (USD 473.5) of credit at a concessionary rate of 9.9 percent per year.
	May-17	Export promotion	Announced that it would allow rice to be warehoused outside Pakistan in order to facilitate rice exports.
Philippines	May-17	Import quota	Announced that volumes imported as part of its 2016 Minimum Access Volume (MAV) commitments would be allowed to enter the country until 30 June 2017.
	Jun-17	Import regulation, import tender	According to official statements to the press, decided that international rice purchases by the state-owned National Food Authority would not be limited to government-to-government (G2G) transactions. Instead, private sector suppliers would be invited to participate in import tenders launched by the agency. Moreover, total volumes sought would be subdivided into lots to encourage competition, and deliveries would be staged in order to avoid peak harvest periods, while the terms of payment are reduced from 365 days to 15 days.
	Jul-17	Import tender	Issued an international tender to purchase 250 000 tonnes of 25 percent broken rice, open to private sector entities. Suppliers were invited to submit their bids by 25 July 2017 for eight lots consisting of 25 000–50 000 tonnes of rice from any origin. Of the total volume, 120 000 tonnes were required to arrive no later than August 2017 and the remainder the following month.
	Aug-17	Import quota	Opened applications for private sector imports of 805 200 tonnes of rice, under WTO-mandated Minimum Access Volume (MAV) quotas. Volumes imported should comprise specialty rice and/or well-milled rice with maximum broken content of 25 percent. Quantities imported under the quota will accrue a 35 percent import tariff and must be delivered between 20 December 2017 and 28 February 2018, or from 1 June 2018 to 31 August 2018.
Republic of Korea	Sep-17	Food aid	Announced that it would expand its food aid deliveries of rice, upon completing its accession to the Food Assistance Convention at the end of 2017. To these effects, it aimed to provide up to 50 000 tonnes of rice as food aid through the World Food Program in 2018.
	Sep-17	Government procurement	Announced that the government would purchase 720 000 tonnes of rice from the 2017 harvest. The volume would include 350 000 tonnes as part of the Public Rice Stockholding Program, and 370 000 tonnes geared at stabilizing domestic prices.
Rwanda	Jun-17	Import tariff	Decided that the 75 percent rice import duty applicable under the Common External Tariff of the East African Community would not be applied for another year. Accordingly, imports of paddy, husked, milled and broken rice would continue to accrue a 45 percent (or USD 345 per tonne, whichever is higher) tariff until 30 June 2018.
Senegal	Jul-17	Production support	Announced that paddy prices would be fixed at XOF 125 per kg (USD 225 per tonne) in order to ensure sufficient returns for rice farmers.
Sri Lanka	May-17	Import tariff	Decided that the Special Commodity Levy (SCL) of LKR 5 per kg (USD 32 per tonne) imposed on imports of semi/wholly milled rice would be valid until 31 August 2017.
	Jun-17	Import quota	Announced that the government would import 100 000 tonnes of rice, in order to ensure sufficient local availabilities and refurbish stockpiles.
	Jun-17 and Aug-17	Import tariff	Decided that imported broken rice would accrue a Special Commodity Levy (SCL) of LKR 5 per kg (USD 32 per tonne) for 3 months, starting from 1 July 2017. An August decision lowered the SCL on broken rice to LKR 0.25 per kg (USD 2 per tonne), effective until 31 December 2017.
	Aug-17	Price controls	Raised the maximum retail price of imported Nadu rice by 4 percent to LKR 75 (USD 0.5) per kg and lowered the price ceiling for imported raw rice by 7 percent to LKR 65 (USD 0.4) per kg. The revised rates took effect on 4 August 2017, while price caps for locally produced rice and for imported Samba rice were left unvaried. The maximum retail prices of all locally produced and imported rice were successively removed, effective from 16 August 2017.
	Sep-17	Consumer prices	Lowered prices of eight qualities of rice sold through Lak Sathosa outlets by 2–8 percent to LKR 60–90 (USD 0.4–0.6) per kg, effective 29 September 2017.

COUNTRY	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Thailand	May-17	Stock release	Sold 1.66 million tonnes of food-grade rice through an auction held on 24 May 2017. The tender offered a total of 1.82 million tonnes for sale, including 1.5 million tonnes of fragrant rice, 0.2 million tonnes of white rice and 0.1 million tonnes of glutinous and broken rice.
	Jun-17	Stock release	Offered 2.2 million tonnes of rice fit for non-food uses through a tender held on 15 June 2017. Sales from this tender were suspended in July, after the Administrative Court ordered a temporary stop to government stock auctions of non-food grade rice.
	Jun-17	Production support	Approved a budget of THB 1.84 billion (USD 54 million) to extend crop insurance for the 2017 main paddy crop. Under the programme, compensation for damages caused by natural disasters would be raised by 13 percent to THB 1 260 per rai (USD 232 per ha) and by 14 percent in the case of pest- or disease-related losses to THB 630 per rai (USD 116 per ha). Insurance premiums would also be lowered by 9 percent to THB 97.37 per rai (USD 18 per ha). The scheme is expected to cover up to 30 million rai (4.8 million ha) of paddies and will run between 1 June 2017 to 31 August 2017, except in southern provinces, where it will be implemented until 15 December 2017.
	Jul-17	Stock release	Announced that it would offer 160 000 tonnes of food-grade rice from government reserves, through an auction on 18 July 2017.
	Jul-17	Production support	Approved a budget of THB 2.87 billion (USD 84 million) to promote production of rice grown organically and according to good agricultural practices (GAP). The programme will be implemented between 2017 and 2021, with the aim of assisting producers in finding a market for 600 000 tonnes of organic paddy and 10.3 million tonnes of GAP certified paddy. For the purpose, it will provide a 3 percent interest subsidy on soft loans to entities agreeing to enter into purchase agreements with producers, provided that they pay 15 percent more than market prices for organic rice or 4 percent more in the case of GAP certified rice.
	Aug-17	Stock release	Lifted a July 2017 sales suspension order for 2.6 million tonnes of non-food grade rice from government reserves that had been tendered off in April and June 2017. The decision, by the Supreme Administrative Court, allowed sales of 0.5 million tonnes of rice for industrial use to proceed, along with the release of 2.1 million tonnes of feed quality rice.
	Sep-17	Production support	Approved a budget of THB 87.2 billion (USD 2.6 billion) to implement three schemes geared at assisting rice producers and easing downward pressure on prices at harvest time. The first scheme, an on-farm mortgaging programme for 2.0 million tonnes of main-crop paddy, will run from 1 November 2017 to 28 February 2018. Under the programme, participating farmers would receive THB 10 800 (USD 322) per tonne for Hom Mali and glutinous paddy, while producers of white paddy and Pathum Thani fragrant paddy would receive THB 7 200 (USD 215) and 8 500 (USD 253) per tonne, respectively. Another THB 1 500 per tonne (USD 45) would be availed to compensate farmers for storage costs, while THB 1 200 per rai (USD 223 per ha) would go to support harvesting and quality improvements, for a maximum of THB 12 000 (USD 358) per household. Two separate schemes, each running from 1 October 2017 to 30 September 2018, would avail credit to cooperatives and farmer groups to encourage them to delay the sale of 2.5 million tonnes of paddy, and target to stockpile another 8.0 million tonnes of paddy by providing interest subsidies to processors and traders agreeing to store supplies for two to six months.
Turkey	Oct-17	Import requirements	Released official statements that imports of nine agricultural products from the Russian Federation, including paddy, would require government approval as of 9 October 2017.
Viet Nam	Jul-17	Export strategy	Approved a rice export development strategy for 2017–2020, with a vision to 2030. The document lays out an annual export target of 4.5–5.0 million tonnes of rice for 2020, valued at USD 2.2–2.3 billion. The country would strive to shore up the value of its rice exports to USD 2.5 billion between 2021 and 2030, while gradually reducing volumes shipped to 4.0 million tonnes. The composition of rice shipments would be restructured, with deliveries of Indica white rice to account for 25 percent of overall exports by 2030, while the share of fragrant, Japonica and other specialty rice was raised to a combined 40 percent, the share of glutinous rice to 25 percent, and of other types to 10 percent. In addition, the country would seek to reduce the share of Asian shipments in overall exports to 50 percent by 2030, while raising its market share in all other regions, especially the Americas, Africa and the Near East.

* The full collection starting in January 2011 is available at: http://www.fao.org/economic/est/est commodities/commodity policy archive/en/?groupANDcommodity=rice

OILCROPS: MAJOR POLICY DEVELOPMENTS MID-MAY TO MID-OCTOBER 2017*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Argentina	Agricultural Policy	May-17	Soybeans	Set the level of subsidies provided to soybean farmers in the country's disadvantaged northern regions at ARS 290 per tonne.
	Seed policy	Jun-17	Agricultural crops	Urged farmers to declare the quantity and origin of seeds kept on-farm for planting, so as to ensure full transparency in the domestic seed market and facilitate the collection of royalties by seed producers.
	Biofuel policy	June-17 to Oct-17	Biodiesel	Temporarily suspended the country's export duty on biodiesel, with a view to improve the competitiveness of Argentine biodiesel on the world market.
Australia/ European Union	Free trade agreement	May-17	Rapeseed	Conducted a joint scoping exercise on a future free trade agreement between Australia and the European Union, which could facilitate exports of Australian rapeseed to the EU.
Australia	GMO policy	Jun-17	Rapeseed	Issued a parliamentary petition calling for compensation of farmers when GM-rapeseed contamination causes them to lose their GM-free or organic certification.
Bolivia	Export policy	May-17	Soybeans	Raised annual soybean export quota, in a bid to promote foreign sales while continuing to guarantee that domestic consumption requirements are met.
Brazil	Pest control	May-17	Soybeans	Set up a working group with counterparts from Paraguay and Bolivia to develop joint programmes on controlling the spread of Asian soybean rust in South America.
Brazil/China	Bilateral cooperation	May-17	Soybeans	Set up a Brazilian-Chinese investment fund for infrastructure projects, with a view to allow China to invest in Brazilian railroad, highway and port ventures that would lower the cost of shipping raw agricultural products such as soybeans to China.
Brazil	Agricultural Policy	Jun-17	Agricultural crops	Presented the agricultural support programme for 2017/18 that grants increased loans for commercial farming (focusing on investments in on-farm stock-holding facilities and improved production technologies) and raises public outlays for crop insurance subsidies.
	Pest control	Jul-17	Soybeans	Envisaged to extend an annual soybean-free period to the State of Mato Grosso do Sul. This is meant to help control the spread of Asian soybean rust from one growing season to the next.
	Transport infrastructure	Aug-17	Soybeans, grains	Allocated funds for upgrading the last unpaved stretch of highway BR163, the key artery linking the State of Mato Grosso to Brazil's newly opened ports on the north-Atlantic coast.
	Biofuel policy	Sep-17	Biodiesel	Considered raising mandatory blending of biodiesel into regular transport diesel from 8 percent to 10 percent in March 2018, one year earlier than originally planned.
Canada	Feed standards	May-17	Camelina oil	Approved the use of mechanically extracted camelina oil as a feed ingredient for farmed fish.
	GMO policy	May-17	GM food	Rejected a draft parliamentary bill calling for mandatory labelling of genetically modified foods.
	Health policy	May-17	Hydrogenated vegetable oils	Announced plans to prohibit the use of partially hydrogenated oils by summer 2018, in a bid to reduce the population's trans-fat intake to the lowest level possible.
	Sector development measures	May-17	Rapeseed	Set up a public-private research partnership to develop advanced high-yielding rapeseed varieties, with a view to uphold the competitiveness of the country's rapeseed sector.
	Market regulation	May-17	Grains and oilseeds	Planned extending, beyond its expiry date of 1 August 2017, a temporary revenue cap on rail transports of grains and oilseeds from Canada's Western regions to the country's main ports.
	Pesticide regulation	Sep-17	Insecticide 'Matador'	Proposed, based on safety concerns, the complete phase-out of Matador, an insecticide widely used in rapeseed cultivation.
	Health policy	Sep-17	Hydrogenated vegetable oils	Confirmed a country-wide ban on partially hydrogenated oils. With entry into force in September 2018, the ban will include imported products and foods prepared and served in restaurants.
Canada/European Union	Free trade agreement	Sep-17	Rapeseed oil	Announced the provisional implementation, from 21 September 2017, of the Comprehensive Economic Trade Agreement (CETA), which entails the elimination of the EU's tariffs on Canadian rapeseed oil imports.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
China	Agricultural Policy	May-17	All crops	Planned introducing new agricultural insurance programmes in selected counties to compensate farmers for crop losses resulting from natural disasters.
	Food standards	May-17	Edible oilmeals	Announced that a new safety standard for edible oilmeals would come into force on 23 June 2017.
	Agricultural Policy	May-17	Arable crops	Issued guidelines concerning the future distribution of arable land as part of the country's national food security strategy, with a view to optimize the country's agricultural production pattern, while making agricultural support programmes more effective.
China/Brazil	Bilateral cooperation	May-17	Soybeans	Set up a Brazilian-Chinese investment fund for infrastructure projects, with a view to allow China to invest in Brazilian railroad, highway and port ventures that would lower the cost of shipping raw agricultural products such as soybeans to China.
China/Indonesia	Bilateral cooperation	Jun-17	Biodiesel	Conducted bilateral talks to explore the possibility of i) Indonesia assisting China in its efforts to raise domestic biodiesel consumption, and ii) China investing in Indonesia's downstream palm oil processing sector.
China	Import policy	Jun-17	GM rapeseed, soybean	Renewed import approvals for 14 GMO crops (including three rapeseed and four soybean varieties) and approved two new GMO crops (including a new soybean variety), under broader efforts to promote economic and trade ties with the United States.
	Agricultural Policy	Jun-17	Soybeans	Announced an increase in public outlays for farmer subsidy payments meant to encourage crop rotation, notably between maize and soybeans.
	Import policy	Aug-17	Soybean oil	Agreed to resume imports of soybean oil from Argentina, as part of comprehensive bilateral talks on balancing trade between the two countries.
	Import policy	Sep-17	Vegetable oil	Granted a two-year transitional period – until 30 September 2019 – for the implementation of new food import regulations requiring importers of bulk vegetable oils to review relevant health certificates and conduct on-site inspections of foreign establishments from which products are sourced.
	Public stock policy	Sep-17	Soybeans	Resumed sales of old-crop soybeans from state reserves.
	Agricultural policy	Sep-17	Soybeans	Set subsidy payments granted to soybean producers in Heilongjiang Province for the 2016/17 season at CNY 118.58 per mu (USD 267 per ha).
China/Ukraine	Trade standards	Sep-17	Sunflowerseed cake	Agreed on sanitary and biosafety protocols regulating imports of Ukrainian sunflowerseed cake into China.
China	Agricultural policy	Oct-17	Maize, soybeans	Lowered subsidy payments provided to maize growers in an effort to curb national maize production and eventually cut domestic stocks, simultaneously encouraging farmers to plant alternative crops, including soybeans.
	Public stock policy	Oct-17	Soybeans, maize	Suspended, from end October 2017, public auctions of old-crop maize and soybeans from state reserves, with a view not to interfere with the marketing of the new 2017/18 crop.
European Union	Pesticide regulation	May-17	Neonicotinoid-based insecticides	Considered converting the EU's temporary moratorium on neonicotinoid-based insecticides (which used to be widely employed in rapeseed cultivation) into a permanent ban.
European Union/ Australia	Free trade agreement	May-17	Rapeseed	Conducted a joint scoping exercise on a future free trade agreement between Australia and the EU, which could facilitate exports of Australian rapeseed to the EU.
European Union	Sector development measures	Jul-17	Soybeans	Launched an EU-wide initiative promoting the production of non-GM soybeans and other legume crops for food and feed. The programme is meant to contribute to the development of more sustainable and resilient agricultural systems, while taking into account growing demand for GM-free foods and possibly curbing the EU's dependence on imported soybeans.
	Import policy (anti-dumping duties)	Sep-17	Biodiesel	Lowered, effective 19 September 2017, the EU's anti-dumping duties on biodiesel imports from Argentina from 22.0–25.7 percent to 4.5–8.1 percent.
	Pesticide regulation	Sep-17	Herbicide 'Glyphosate'	Postponed the decision on the proposed 10-year renewal of the license for glyphosate-based herbicides, which are widely used in oilseed cultivation.
European Union/ Canada	Free trade agreement	Sep-17	Rapeseed oil	Announced the provisional implementation, from 21 September 2017, of the Comprehensive Economic Trade Agreement (CETA), which entails the elimination of the EU's tariffs on Canadian rapeseed oil imports.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
France	Environmental policy	Jul-17	Palm oil	Considered introduction of measures restricting the use of palm oil in biofuels, based on the alleged prevalence of unsustainable production methods in countries of origin.
Germany	Sector development measures	Jul-17	Coconut palm	Supported a public-private initiative aimed at enhancing the production of coconut oil in selected regions of the Philippines and Indonesia, focusing on the establishment of certified sustainable coconut supply chains.
Ghana	Sector development measures	Sep-17	Palm oil	Contracted the national association of small-scale palm oil producers to supply palm oil to schools for cooking oil use, as part of the government's free education programme.
India	Sector development measures	May-17	Oil palm	Stepped up efforts to promote oil palm cultivation across the country, in a bid to reduce reliance on imported edible oils. Measures included granting oil palm plantations access to public support programmes.
	Sector development measures	May-17	Oil palm	Expanded the distribution of subsidized palm seedlings in the State of Telangana, with a view to promote the establishment of oil palm plantations.
	Agricultural policy	Jun-17	Farm loans	Announced agreement by the States of Maharashtra, Punjab and Uttar Pradesh to partially waive farm loans to address growing rural distress caused by low crop prices, as last year's record harvest led to burdensome food grain supplies.
	Agricultural policy	Jun-17	Agricultural input prices	Urged private companies to lower the prices of pesticides, seeds and other agricultural inputs to support public initiatives taken to assist farmers affected by low crop prices.
	Agricultural policy	Jun-17	Kharif oilcrops	Raised the minimum support prices for Kharif oilcrops, with a view to protect farmers from fresh price declines and to prevent a shift in plantings away from soybeans and other oilseeds to competing crops.
	Food standards	Jul-17	Vegetable oils	Invited public comments on proposed regulatory amendments concerning i) the removal of test requirements for blended edible vegetable oils, and ii) provisions regulating the sale of hydrogenated vegetable oils/fats.
	Food standards	Jul-17	Oils and fats	Confirmed that a revised standard for edible oils and fats would come into force on 1 July 2017, including a redefinition of inter-esterified vegetable fat and new rules regarding the use of food grade enzymes in oil refining processes.
	Food standards	Jul-17	Food product labels	Postponed to 30 September 2017 the compliance date for mandatory declaration of trans-fat and saturated fat content on food product labels, with a view to allow manufacturers to utilize existing stocks of packaging material.
	Public procurement	Aug-17	Oilseeds, pulses	Announced the launch of an electronic platform for countrywide procurement of oilseeds and pulses, with a view to help growers obtain more remunerative prices, while also containing consumer prices.
	Import policy	Aug-17	Vegetable oils	Raised import duties on selected crude and refined oils with a view to protect local farmers and oil processors from low-priced imports and thereby encourage domestic oilseed production and refining.
	Price support	Aug-17	Oilseeds, pulses	Announced the launch of a nationwide scheme to compensate farmers for distress sales at prices below the official minimum support prices. The scheme would only apply to oilseeds and pulses, where physical procurement by public entities tends to be limited.
	Sector development measures	Sep-17	Coconut palm	Granted financial support to 30 projects promoting development of the coconut sector in five different states, focusing on research initiatives and projects on processing and product diversification.
	Sector development measures	Sep-17	Coconut palm	Announced a 10-year plan to foster the development of coconut production in the State of Kerala, and considered setting up a committee to coordinate coconut-related activities of central and state-level agencies.
	GMO policy	Sep-17	GM oilseeds	Postponed a decision on the commercial release of GM oilseeds, notably of a locally developed mustard seed variety, stating that more time was required to examine newly released expert studies on the subject.
	Public procurement	Oct-17	Groundnuts, soybeans	Initiated public procurement of i) groundnuts in the State of Gujarat, and ii) soybeans and groundnuts in the State of Rajasthan.
Indonesia	Public procurement	May-17	Soybeans	Released public funds for the procurement – on either the domestic or import market – of rice, soybeans and sugar, with the aim of stabilizing domestic consumer prices.
	Environmental policy	May-17 / July-17	Oil palm	Approved a two-year extension (until May 2019) of a moratorium on issuing new licenses for the use of land designated as primary forest and peatland, thereby curbing plantation development in the oil palm wood and paper sectors. Subsequently proposed to turn the temporary moratorium into a permanent ban.
	Export policy	June-17 to Oct-17	Palm oil	Left in place the country's sliding export tax regime for palm oil, which is aimed at protecting the interests of domestic producers and consumers.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Indonesia/China	Bilateral cooperation	Jun-17	Biodiesel	Conducted bilateral talks to explore the possibility of i) Indonesia assisting China in its efforts to raise domestic biodiesel consumption, and ii) China investing in Indonesia's downstream palm oil processing sector.
Indonesia/Nigeria	Bilateral cooperation	Jun-17	Oil palm	Jointly explored possibilities for Indonesia to collaborate in the development of Nigeria's palm oil industry. Furthermore, Indonesia encouraged Nigeria to join the Council of Palm Oil Producing Countries, a body set up by Indonesia and Malaysia to promote price stabilization and sustainable palm oil production.
	Bilateral cooperation	Jul-17	Palm oil	Initiated talks with Nigerian counterparts to relax restrictions on imports of Indonesian crude palm oil into Nigeria.
Indonesia	Export promotion	Jul-17	Palm oil	Promoted business between Indonesia and Viet Nam, aiming at, inter alia, increased shipments of Indonesian palm oil to the Vietnamese market.
Indonesia/ Malaysia	Bilateral cooperation	Jul-17	Palm oil	Announced that Malaysia and Indonesia would consider a joint challenge at WTO level of any measure the EU might take to restrict palm oil imports on sustainability grounds.
Indonesia	Sector development measures	Aug-17	Oil palm	Released a long-term nationwide oil palm replanting plan involving up to 4.7 million ha, with a view to boost productivity in the sector.
Indonesia/ Malaysia	Bilateral cooperation	Aug-17	Palm oil	Agreed to jointly explore the possibility of i) supplying China, India and other countries with palm oil for their nascent biodiesel industries, and ii) conducting joint campaigns in key import markets to publicize palm oil's environmental credentials.
Indonesia/Russian Federation	Bilateral trade arrangements	Aug-17	Palm oil, copra	Informed that a preliminary deal to barter Russian military jets for Indonesian commodities – including palm oil and copra – had been signed between the countries' state trading companies.
Indonesia/ Uzbekistan	Bilateral cooperation	Sep-17	Coconut, palm oil, soybeans	Agreed to strengthen bilateral cooperation in the agriculture and fisheries sectors. Reportedly, Indonesia viewed Uzbekistan as a potential export market for palm oil and coconut, while Uzbekistan was interested in Indonesia's expertise in soybean cultivation.
Indonesia	Sector development measures	Oct-17	Oil palm	Launched an oil palm rejuvenation scheme for small oil palm growers, in a bid to improve yields in smallholder plantations.
Islamic Republic of Iran	Sector development measures	Jun-17	Oilseeds, soybeans	Launched a two-year project on the promotion of sustainable oilseed production, with particular attention given to the soybean value chain.
Jamaica	Biofuel policy	Jun-17	Biodiesel	Supported the development and commercial launch of castor oil-based biodiesel, with a view to cut the country's energy import bill and contribute to the reduction of GHG emissions.
Japan	Feed standards	May-17	Oilmeals	Allowed the mixing of selected oilmeals with feed maize in the production of compound feed.
Malawi	Tax policy	Sep-17	Vegetable and animal oils/fats	Exempted, effective 1 July 2017, vegetable and animal oils/fats and their derived products from paying value-added tax, with a view to help the indigenous edible oil industry grow and domestic oilseed production expand.
Malaysia	Trade standards	May-17	Palm oil	Considered revising the principles and criteria for MSPO, the government-backed sustainability certification scheme for oil palm, with a view to make it more compatible with international standards.
	Export promotion	May-17	Palm oil	Signed a Memorandum of Understanding with Indian government officials, aimed at helping raise the presence of Malaysian palm oil in the Indian market.
	Export policy	June-17 to Oct-17	Palm oil	Left in place the country's sliding export tax regime for palm oil, which is aimed at protecting the interests of domestic producers and consumers.
Malaysia/ Indonesia	Bilateral cooperation	Jul-17	Palm oil	Announced that Malaysia and Indonesia would consider a joint challenge at WTO level of any measure the EU might take to restrict palm oil imports on sustainability grounds.
Malaysia/ Philippines	Bilateral trade arrangements	Jul-17	Palm oil, biodiesel	Conducted bilateral talks with the Philippines, agreeing to target a 50 percent increase in Malaysian shipments of palm oil and palm oil-based products (including biodiesel) to the Philippines over the next three years.
Malaysia	Trade standards	Aug-17	Palm oil	Confirmed that certification through the Malaysian Sustainable Palm Oil (MSPO) scheme would become mandatory for all palm oil growers by the end of 2019, and agreed to subsidize audit costs so as to help palm oil producers comply with the new standard.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Malaysia/ Indonesia	Bilateral cooperation	Aug-17	Palm oil	Agreed to jointly explore the possibility of i) supplying China, India and other countries with palm oil for their nascent biodiesel industries, and ii) conducting joint campaigns in key import markets to publicize palm oil's environmental credentials.
Malaysia/ Philippines	Bilateral cooperation	Sep-17	Oil palm	Conducted bilateral talks with the Philippines to examine the possibility of setting up joint ventures for oil palm plantations in the Philippines, with a view to cater to the country's rising demand for vegetable oil for both food and industrial uses.
Mexico	Agricultural Policy	May-17	Agricultural crops, oilseeds	Announced cuts in the amount of subsidies provided to farmers in 2017, including reduced payments under the country's specific support programme for oilseeds.
Morocco	Sector development measures	May-17	Olive oil	Backed a multilateral technical cooperation project aimed at strengthening Morocco's olive oil sector, in particular by setting up inter-professional organizations and promoting production of high-quality olive oil.
Nigeria	Sector development measures	Jun-17	Oil palm	Distributed seedlings of a high-yield oil palm variety to farmer associations and cooperatives, as part of efforts to boost the country's production of raw materials, diversify agricultural production, and lower reliance on commodity imports.
Nigeria/Indonesia	Bilateral cooperation	Jun-17	Oil palm	Jointly explored possibilities for Indonesia to collaborate in the development of Nigeria's palm oil industry. Nigeria was also encouraged to join the Council of Palm Oil Producing Countries, a body set up by Indonesia and Malaysia to promote price stabilization and sustainable palm oil production.
	Bilateral cooperation	Jul-17	Palm oil	Initiated talks with Indonesian counterparts to relax restrictions on imports of Indonesian crude palm oil into Nigeria.
Norway	Biofuel policy	Jun-17	Biodiesel	Released a parliamentary resolution recommending to end – on environmental grounds – public procurement of palm oil-based biodiesel, while promoting the use of sustainably produced, advanced biofuels.
Peru	Land rights policy	May-17	Oil palm	Committed to consult indigenous people prior to approving oil palm development concessions that would affect them.
Philippines/ Malaysia	Bilateral trade arrangements	Jul-17	Palm oil, biodiesel	Conducted bilateral talks with Malaysia, agreeing to target a 50 percent increase in Malaysian shipments of palm oil and palm oil-based products (including biodiesel) to the Philippines over the next three years.
	Bilateral cooperation	Sep-17	Oil palm	Conducted bilateral talks with Malaysia to examine the possibility of setting up joint ventures for oil palm plantations in the Philippines, with a view to cater to the country's rising demand for vegetable oil for both food and industrial uses.
Philippines	Sector development measures	Sep-17	Coconut palm	Renewed public funding for the country's Coconut Authority in calendar year 2018, with the bulk of funds earmarked for countrywide coconut palm replanting programmes.
Russian Federation/ Indonesia	Bilateral trade arrangements	Aug-17	Palm oil, copra	Informed that a preliminary deal to barter Russian military jets for Indonesian commodities – including palm oil and copra – had been signed between the countries' state trading companies.
Sri Lanka	Import policy	May-17	Coconut products	Considered liberalizing the importation of husked coconut and fresh coconut kernel, given the prevailing shortage of coconut in the domestic market.
	Market regulation	Sep-17	Coconut products	Informed that public stocks of coconut would be released into the market in an effort to check fresh surges in domestic prices.
	Sector development measures	Sep-17	Coconut palm	Released funds for the development of coconut production in the country's Northern and Eastern Provinces, with a focus on i) identifying suitable land, ii) setting up nurseries and distributing seedlings, iii) creating model coconut gardens, and iv) developing local infrastructure.
Thailand	Market regulation / biofuel policy	May-17	Biodiesel	Reinstated the country's mandatory biodiesel blending rate of 7 percent, in a bid to reduce burdensome domestic palm oil supplies.
	Market regulation / biofuel policy	Jun-17	Biodiesel	Urged retailers of palm oil-based biodiesel to raise their stocks of the fuel by 40 percent so as to help absorb excess palm oil supplies and lend support to domestic palm oil prices.
Turkey	Import policy	May-17	Sunflower oil and meal	Readmitted the Russian Federation to Turkey's list of accepted import tax-free origins for agricultural products, including sunflower oil and sunflower meal.
	GMO policy	Aug-17	Soybeans	Approved the importation of three genetically modified soybean varieties and their products for domestic feed use.
	Food standards	Oct-17	Vegetable oils	Postponed implementation of new labelling rules for selected agricultural commodities, including vegetable oils, to 31 December 2017.
	Import policy	Oct-17	Sunflower oil and meal	Introduced non-tariff measures applying to the importation of selected agricultural commodities (including sunflower oil and meal) from the Russian Federation.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Ukraine	Price control	Jun-17	Sunflower oil, butter	Discontinued, from 1 July 2017, state controls of food prices (including prices of sunflower oil and butter) that were meant to check rises in local retail prices.
Ukraine/China	Trade standards	Sep-17	Sunflowerseed cake	Agreed on sanitary and biosafety protocols regulating imports of Ukrainian sunflowerseed cake into China.
United Arab Emirates	Biofuel policy	Sep-17	Biodiesel	Launched a biodiesel blend destined for the country's commercial and industrial segment, in a bid to help reduce the country's GHG emissions. The fuel contains 5 percent biodiesel produced from vegetable oil, used cooking oil or animal fat.
United Kingdom	Biofuel policy	Sep-17	Biodiesel	Published a long-term strategy for raising the supply and sustainability of renewable transport fuels in the country, with a view to lower the GHG intensity of transport fuels, while providing a stable policy environment for investments into renewable low-carbon fuels.
United States	Biofuel policy	Jun-17	Biodiesel	Announced mandatory 5 percent biodiesel blends in home heating oil in New York City and downstate New York counties.
	Biofuel policy	Jul-17	Biofuels	Published proposals for mandatory consumption of total, conventional and advanced renewable fuels in 2018, as well as biomass-based diesel in 2019.
	Biofuel policy	Jul-17	Biodiesel	Released a US court rule establishing that the methodology used by the country's Environmental Protection Agency to justify past reductions in biofuel consumption mandates was incorrect.
	Import policy (countervailing duties)	Aug-17	Biodiesel	Introduced preliminary countervailing duties on imports of biodiesel from Argentina and Indonesia, claiming that Argentina and Indonesia received subsidies of, respectively, 50–64 percent and 41–68 percent. Final duty determinations would be due on 7 November 2017.
	Biofuel policy	Aug-17	Biodiesel	Announced that, in the state of Minnesota, the mandatory biodiesel blending rate would be raised from 10 to 20 percent in May 2018.
	Health policy	Aug-17	Soybean oil	Allowed food manufacturers and restaurants to make qualified health claims linking soybean oil consumption to a reduced risk of coronary heart disease.
	Pesticide regulation	Sep-17	Herbicide 'Dicamba'	Considered restricting the use of dicamba-based herbicides, which are extensively used in soybean cultivation. This consideration came after reports of possible damage to crops not resistant to the chemical.
	Biofuel policy	Sep-17 / Oct-17	Biodiesel	Considered lowering the mandatory renewable fuel consumption targets for 2018–2019 proposed in July 2017, on concerns that the originally proposed targets could lead to inadequate domestic supplies of biofuel to consumers. In October 2017, after meeting resistance from lawmakers, the initiative was abandoned.
	Import policy (countervailing duties)	Oct-17	Biodiesel	Introduced (in addition to the preliminary countervailing duties imposed in August 2017) anti-dumping duties on imports of biodiesel from Argentina and Indonesia, claiming that Argentina and Indonesia sold this merchandise in the United States at dumping margins of 70 and 51 percent respectively. Final duty determinations would be due on 3 January 2018.
Uzbekistan/ Indonesia	Bilateral cooperation	Sep-17	Coconut, palm oil, soybeans	Agreed to strengthen bilateral cooperation in the agriculture and fisheries sectors. Reportedly, Indonesia viewed Uzbekistan as a potential export market for palm oil and coconut, while Uzbekistan was interested in Indonesia's expertise in soybean cultivation.
Uzbekistan	Market regulation	Oct-17	Vegetable oils, cottonseed meal	Instructed state agencies to step up efforts to combat unreasonable and artificial overstating of prices for a number of basic food and feed stuffs, including vegetable oil and cottonseed meal.
Vanuatu	Sector development measures	Aug-17	Coconut palm	Committed to support the planting of 1 million coconut trees by 2026, in an effort to revive the country's coconut industry.
Zambia	Sector development measures	Sep-17	Palm oil	Allocated public funds to a local palm oil venture in a bid to help reduce the country's dependence on imports of crude palm oil and cooking oils.
Zimbabwe	Sector development measures	Jul-17	Oilseeds, soybeans	Considered launching, jointly with the private sector, a loan facility to support local oilseed farmers, with a view to stimulate domestic production, especially of soy.
	Market regulation	Aug-17	Soybeans	Fixed the price for soybeans delivered to the state-owned Grain Marketing Board above the prevailing market price, in a bid to stimulate domestic soybean production and reduce the country's dependence on imported edible oil.
	Import policy	Sep-17	Soybeans	Lifted a temporary ban on soybean imports, in an effort to ensure adequate supplies of cooking oil in the country.
Global	WTO/FAO Codex Alimentarius Commission	Jul-17	Fish oil	Issued a detailed standard for fish oil intended for human consumption, including provisions for differentiating certain wild origin fish oils from their farmed counterparts.

* A detailed description of major policy developments from January 2011 onwards is available at http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=Oilseeds,%20oils%20and%20meals.

MEAT: MAJOR POLICY DEVELOPMENTS MID-MAY TO MID-OCTOBER 2017*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Argentina	All	May-17	Free Trade Agreement	Ratified the Free Trade Agreement between Egypt and Mercosur (South American Common Market), signed in 2010, as the final member country to approve the agreement. The FTA will reduce custom tariffs between the two parties by 90 percent and cancel custom duties on agriculture products, including meat and meat products.
Belarus	All	Jul-17	Trade agreement	Signed a protocol for delivering frozen beef and poultry meat to China and a memorandum of understanding with the General Administration of Quality Supervision, Inspection and Quarantine in China on cooperation in providing safety when importing and exporting food products.
Canada	All	Aug-17	Free trade agreement	Issued a customs notice on 1 August 2017 to implement the Canada-Ukraine Free Trade Agreement (CUFTA), under which tariffs will be eliminated on 99.9 percent of agricultural imports from Ukraine, excluding supply-managed products.
China (mainland)	Bovine meat	Jul-17	Import ban lifted	Announced the lifting of a 13-year import ban on some US bovine meat products. The ban had been introduced in 2003 due to concerns over the spread of an outbreak of bovine spongiform encephalopathy (BSE) or mad cow disease.
China (Hong Kong – SAR)	Poultry meat	May-17	Import ban	Banned the imports of poultry meat and products (including poultry eggs) from the Democratic Republic of the Congo, due to outbreaks of highly pathogenic H5 avian influenza.
	All	Jul-17	Food safety standards	Launched a Strategy and Action Plan on Antimicrobial Resistance (2017–2022) to combat the threat of growing antimicrobial resistance (AMR) in the community. The plan calls for strengthening monitoring and control of the use of veterinary drugs in food animals.
China (Taiwan province of China)	Bovine meat	Sep-17	Import ban lifted	Lifted an import ban on Japanese bovine meat exports. The ban, in existence since 2001, was introduced following the outbreak of bovine spongiform encephalopathy.
Colombia	Bovine meat	Jul-17	Export limitation	Suspended exports of bovine meat to the Russian Federation, Chile and Peru after discovering an outbreak of foot-and-mouth disease.
Egypt	Bovine meat	Aug-17	Import ban lifted	Lifted a ban on the import of Irish meat, introduced 20 years ago following an outbreak of bovine spongiform encephalopathy.
European Union	All	Sep-17	Free Trade Agreement	Approved the Canada-EU Trade Agreement which entered into force provisionally on 21 September 2017 after its approval by EU Member States, expressed in the Council, and by the European Parliament. Under the agreement, the EU will grant Canada tariff rate quotas (TRQs) over six years for almost 50 000 metric tonnes (MT) for beef, 3 000 MT for bison, and 75 000 MT for pigmeat. For Canadian beef exported to the EU within the existing high-quality beef quota, the duty will drop from 20 percent to zero. All beef imports to the EU will continue to be subject to EU requirements regarding growth promotants, antimicrobial treatments and sanitary inspection equivalence.
India	Bovine meat	May-17	State Market Intervention	Imposed a ban on the sale and purchase of cattle for slaughter in all animal markets.
Japan	Bovine meat	Jul-17	Tariff	Raised tariffs on frozen beef from 38.5 percent to 50 percent – from 1 August until the end of March next year to protect domestic producers from countries without free trade agreements.
Kenya	Poultry meat	Aug-17	Import ban lifted	Partially lifted the ban on poultry meat from three large Ugandan export firms after an eight-month embargo imposed, following an outbreak of avian influenza disease.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Republic of Korea	Poultry meat	Aug-17	Import ban lifted	Lifted its ban on imports of US poultry and poultry products, including fresh eggs. The ban had been imposed in response to a recent detection of highly pathogenic avian influenza (HPAI).
	Pigmeat	Sep-17	Market access	Authorized imports of pigmeat from three plants in the Brazilian state of Santa Catarina for the first time.
Namibia	Poultry meat	Jun-17	Import ban	Imposed a ban on poultry imports from South Africa, due to an outbreak of HPAI.In July however, conditions have been eased.
Oman	Poultry meat	Jul-17	Import ban lifted	Lifted a ban on imports of poultry and poultry products from the Netherlands, Denmark, Ukraine, Greece, Macedonia, Bosnia and Herzegovina, Spain and Kuwait. The ban had been introduced in the aftermath of outbreaks of HPAI.
	Poultry meat	Sep-17	Import ban	Banned import of poultry meat from the Philippines, Laos, South Africa, Togo and Zimbabwe according to a ministerial decision.
Philippines	All	Jul-17	Import ban	Temporarily banned all meat imports from Brazil after nearly 500 kg of a recent shipment tested positive for salmonella.
Russian Federation	All	Jun-17	Import ban extended	Extended the ban on the import of agricultural products until end of 2018. This includes meat and meat products from the countries that applied economic sanctions against the Russian Federation.
	All	Aug-17	Tariff rate quota	Established tariff-rate quotas (TRQs) for import of certain agricultural goods into the Customs Territory of the Eurasian Economic Union (EAEU) and respective volumes for import of meat and meat products. The TRQ volumes for the Russian Federation, Belarus and Kazakhstan are unchanged from 2016.
Rwanda	Poultry meat	Jun-17	Import ban	Banned importation of poultry products, including chicken, eggs and chicken meat, from South Africa and Zimbabwe, following an outbreak of HPAI.
Saudi Arabia	Poultry meat	May-17	Import ban	Banned poultry meat imports from a Brazilian company after inspections uncovered public health concerns, unsanitary conditions and animal health issues. This is the fifth Brazilian enterprise banned in the Kingdom due to similar safety concerns.
South Africa	Poultry meat	Jul-17	Export limitation	Suspended exports of live birds, poultry meat, table eggs and other unprocessed poultry product, due to an outbreak of HPAI, to southern African countries, including Botswana, Malawi, Mozambique, Namibia, Zambia and Zimbabwe.
Tanzania	Pigmeat	Jun-17	Import ban	Banned importation of live pigs and their products for one year, following an outbreak of Africa swine fever (ASF) in some regions of the country.
United Arab Emirates	Poultry meat	Aug-17	Import ban	Restricted imports from an affected province of the Philippines following an outbreak of HPAI.
United States	Bovine meat	Jun-17	Import ban	Halted imports of fresh beef from Brazil over recurring safety concerns.

* A collection of major dairy policy developments starting in January 2012 is available at: http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=Milk,%20Dairy%20products

DAIRY: MAJOR POLICY DEVELOPMENTS MID-MAY TO MID-OCTOBER 2017*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Canada	Cheese	Aug-17	Tariff rate quota	Announced a new tariff rate quota (TRQ) administration policy applicable to the 16 000 metric tonnes (MT) of cheese that will be allowed to be imported under the Canada-EU Comprehensive Economic and Trade Agreement (CETA). Of the total TRQ, 60 percent will be allocated to small and medium-sized enterprises with the remaining 40 percent allocated to large companies. In both cases, 50 percent will be allocated to manufacturers and the balance to distributers and retailers. The 1 700 MT of bulk EU industrial cheese TRQ will be allocated entirely to manufacturers of further processed food products.
China (mainland)	Cheese	Oct-17	Import ban	Banned, temporarily, imports of soft cheese products from the EU.
	Dairy products	Oct-17	Food safety standards	Applied the Administrative Measures for the Registration of Recipes for Formula Powder Products for Infants and Young Children, which mandate domestic and overseas producers to: i) register their facilities with the China Food and Drug Administration (CFDA) and the Certification and Accreditation Administration of the People's Republic of China (CNCA); and ii) limit the number of products and brands produced.
European Union	Dairy products	Sep-17	Free trade agreement	Approved the free trade agreement with Canada, which entered into force 21 September 2017, after its approval by EU Member States, expressed in the Council, and by the European Parliament.
India	Dairy products	Jun-17	Import ban extended	Extended the prohibition on import of milk and milk products (including chocolates and chocolate products, and candies/confectionary/food preparations with milk or milk solids as an ingredient) effective until 23 June 2018 or until further orders. The prohibition has been in place since 2008.
Indonesia	Dairy products	Aug-17	Import policy	Introduced a requirement that US dairy-product establishments must pay a fee to undergo the review process to export dairy products to Indonesia. The review process consists of three phases: document review, onsite review and evaluation of onsite audits.
Mexico	Dairy products	Jul-17	Import ban	Suspended all dairy imports from Colombia after new outbreaks of foot-and-mouth disease were detected in the Andean country.
Russian Federation	Dairy products	Jun-17	Import ban extended	Extended until the end of 2018 the ban on the import of agricultural products including milk and milk products from the countries that applied economic sanctions against the Russian Federation.
	Dairy products	Aug-17	Tariff rate quota	Established tariff-rate quotas (TRQs) and respective volumes for 2018 imports of a number of products, such as whey, into the Eurasian Economic Union (EAEU). The volume of whey and modified whey products that will be allowed to enter into the Russian Federation is set at 15 000 metric tonnes.

* A collection of major dairy policy developments starting in January 2012 is available at: http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=Milk,%20Dairy%20products

Statistical appendix tables

NOTES

General

- FAO estimates and forecasts are based on official and unofficial sources.
- Unless otherwise stated, all charts and tables refer to FAO data as source.
- Estimates of world imports and exports may not always match, mainly because shipments and deliveries do not necessarily occur in the same marketing year.
- Tonnes refer to metric tonnes.
- All totals are computed from unrounded data.
- Regional totals may include estimates for countries not listed. The countries shown in the tables were chosen based on their importance of either production or trade in each region. The totals shown for Central America include countries in the Caribbean.
- Estimates for China also include those for the Taiwan Province, Hong Kong SAR and Macao SAR, unless otherwise stated.
- Up to 2012/13, the European Union includes 27 member states. From 2013/14, the European Union includes 28 member states.
- '-' means nil or negligible.
- Cereals include wheat, rice and coarse grains. Coarse grains include maize, barley, sorghum, millet, rye, oats and NES (not elsewhere specified).

Production

- **Cereals**: Data refer to the calendar year in which the whole harvest or bulk of harvest takes place.

Utilization

- **Cereals**: Data are on individual country's marketing year basis.

Trade

- Trade between **European Union** member states is excluded, unless otherwise stated.
- **Wheat**: Trade data include wheat flour in wheat grain equivalent. The time reference period is July/June, unless otherwise stated.
- **Coarse grains**: The time reference period is July/June, unless otherwise stated.
- **Rice**, **dairy** and **meat products**: The time reference period is January/December.
- **Oilseeds**, **oils and fats and meals**: The time reference period is October/September, unless otherwise stated.

Stocks

- **Cereals**: Data refer to carry-overs at the close of national crop seasons ending in the year shown.

Price indices

- The FAO price indices are calculated using the Laspeyres formula; the weights used are based on the average export value of each commodity for the 2002-2004 period.

COUNTRY CLASSIFICATION

In the presentation of statistical material, countries are subdivided according to geographical location as well as into the following two main economic groupings: "developed countries" (including the developed market economies and the transition markets) and "developing countries" (including the developing market economies and the Asia centrally planned countries). The designation "Developed" and "Developing" economies is intended for statistical convenience and does not necessarily express a judgement about the stage reached by a particular country or area in the development process.

References are also made to special country groupings: Low-Income Food-Deficit Countries (LIFDCs), Least Developed Countries (LDCs). The LIFDCs include 54 countries that are net importers of basic foodstuffs with per caput income below the level used by the World Bank to determine eligibility for International Development Aid (IDA) assistance (i.e. USD 1 945 in 2011). The LDCs group currently includes 48 countries with low income as well as weak human resources and low level of economic diversification. The list is reviewed every three years by the Economic and Social Council of the United Nations.

DISCLAIMER

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

APPENDIX TABLE 1(A): **CEREAL STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	2016 *estim.*	2017 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*
	million tonnes								
ASIA	**1 117.4**	**1 134.9**	**1 137.9**	**194.8**	**207.8**	**209.2**	**58.3**	**57.1**	**57.1**
Bangladesh	38.4	39.0	38.6	5.0	7.9	8.0	0.1	-	-
China	497.6	501.0	495.9	34.7	32.1	28.8	0.8	1.3	1.7
India	239.1	246.3	252.1	0.4	6.1	4.1	16.2	12.6	12.2
Indonesia	64.0	65.6	68.1	12.6	10.8	11.1	0.2	0.2	0.2
Iran, Islamic Republic of	16.3	19.0	19.2	13.5	11.4	13.4	-	-	0.3
Iraq	4.7	4.1	4.0	4.3	4.4	4.4	-	-	-
Japan	8.9	8.7	8.6	23.8	24.3	24.4	0.3	0.2	0.2
Kazakhstan	17.3	19.8	18.5	0.5	0.1	0.1	7.7	8.6	8.3
Korea, Republic.of	4.5	4.4	4.2	14.6	14.8	15.3	0.1	0.1	0.1
Myanmar	18.7	19.2	19.5	0.3	0.4	0.4	2.1	2.6	2.8
Pakistan	37.5	38.2	39.3	0.6	0.3	0.3	4.6	4.6	4.7
Philippines	19.3	20.2	20.9	6.6	7.0	7.3	-	-	-
Saudi Arabia	0.7	0.4	0.4	17.5	18.8	20.7	-	-	-
Thailand	26.0	26.4	26.7	3.8	4.2	3.4	10.8	11.5	10.6
Turkey	35.9	34.9	36.6	6.6	7.1	7.6	3.9	5.0	4.1
Viet Nam	34.3	33.6	33.3	8.7	14.9	16.0	7.7	7.0	7.7
AFRICA	**170.0**	**164.2**	**183.6**	**85.7**	**91.5**	**89.4**	**9.3**	**7.3**	**9.4**
Algeria	4.1	3.3	3.5	12.9	13.4	13.8	-	-	-
Egypt	22.0	21.2	21.2	19.5	20.0	20.8	0.4	0.2	0.2
Ethiopia	22.7	23.4	23.3	1.4	1.7	1.6	2.4	1.9	2.0
Morocco	9.5	3.5	9.9	6.9	8.2	7.7	0.2	0.1	0.1
Nigeria	20.6	22.4	22.3	7.3	7.8	8.2	0.7	0.7	0.7
South Africa	14.9	10.6	19.7	3.8	4.1	2.9	1.8	0.9	2.6
Sudan	4.7	7.9	7.4	3.0	2.8	2.7	0.5	0.4	0.6
CENTRAL AMERICA	**40.0**	**42.9**	**41.4**	**29.1**	**33.3**	**34.2**	**2.1**	**2.4**	**2.3**
Mexico	34.8	37.5	35.7	17.7	21.4	22.7	1.9	2.3	2.2
SOUTH AMERICA	**180.8**	**173.4**	**218.1**	**29.3**	**33.5**	**31.3**	**60.5**	**58.6**	**77.2**
Argentina	53.7	66.3	75.6	0.1	0.1	0.1	25.3	38.6	41.8
Brazil	98.9	79.7	116.2	8.2	12.8	9.4	28.4	14.1	29.7
Chile	3.5	3.6	3.0	2.6	2.8	3.3	0.1	0.2	0.2
Colombia	2.7	3.5	3.7	7.2	7.3	7.6	0.1	0.2	0.2
Peru	4.2	4.1	4.0	4.9	5.2	5.7	0.1	-	-
Venezuela	3.0	2.1	2.6	4.3	2.9	3.4	-	-	-
NORTH AMERICA	**490.7**	**530.5**	**481.9**	**9.8**	**10.3**	**10.3**	**109.5**	**126.2**	**108.7**
Canada	57.1	57.6	52.5	1.9	2.4	1.7	27.7	25.0	26.2
United States of America	433.7	472.9	429.4	7.9	7.9	8.6	81.8	101.2	82.4
EUROPE	**502.2**	**507.7**	**516.6**	**24.5**	**25.2**	**28.3**	**114.9**	**120.4**	**124.0**
European Union	316.9	299.5	302.3	20.3	21.3	24.1	45.1	34.9	36.7
Russian Federation	98.3	117.4	128.0	0.9	0.7	0.8	30.3	36.7	42.9
Serbia	9.6	10.9	6.9	0.1	0.1	0.1	2.9	3.4	1.9
Ukraine	62.2	65.5	63.6	0.2	0.2	0.2	35.6	44.3	41.6
OCEANIA	**38.0**	**53.9**	**33.8**	**1.7**	**1.8**	**1.7**	**23.9**	**32.3**	**25.7**
Australia	37.1	53.0	32.9	0.2	0.2	0.2	23.9	32.3	25.7
WORLD	**2 539.1**	**2 607.5**	**2 613.3**	**374.9**	**403.4**	**404.3**	**378.5**	**404.2**	**404.3**
Developing countries	1 450.8	1 459.6	1 517.8	300.7	326.7	326.0	119.5	114.9	134.1
Developed countries	1 088.3	1 147.9	1 095.5	74.2	76.7	78.4	259.0	289.3	270.3
LIFDC	461.0	475.1	483.7	55.4	68.6	65.7	27.9	23.7	23.4
LDC	166.9	173.8	175.5	33.4	38.5	37.6	9.6	9.4	10.2

APPENDIX TABLE 1(B): **CEREAL STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(million tonnes)						(Kg/year)		
ASIA	**1 234.1**	**1 276.2**	**1 287.2**	**406.3**	**432.6**	**434.9**	**156.0**	**156.1**	**156.6**
Bangladesh	42.9	45.1	45.9	8.4	9.2	10.8	208.4	210.9	212.3
China	510.6	513.1	519.9	253.7	297.1	299.8	147.8	147.6	148.2
India	226.4	244.0	242.5	46.3	35.7	36.8	148.1	147.8	148.2
Indonesia	76.6	78.6	79.1	10.1	9.0	9.2	188.4	189.3	189.6
Iran, Islamic Republic of	28.7	32.0	32.4	5.4	5.7	5.2	202.0	202.5	203.2
Iraq	9.2	9.1	9.3	2.2	1.2	0.2	195.7	191.9	192.0
Japan	32.5	32.1	32.0	7.2	7.1	6.9	93.9	93.2	92.3
Kazakhstan	10.4	10.6	9.9	2.8	3.8	4.2	157.4	156.9	157.0
Korea, Republic.of	18.9	19.5	19.8	4.0	4.5	4.4	129.2	127.1	125.1
Myanmar	17.2	16.9	17.2	2.8	2.5	2.5	211.0	210.8	211.5
Pakistan	33.2	34.1	35.8	5.2	4.7	3.8	148.3	149.0	149.7
Philippines	25.8	26.7	27.5	3.5	3.9	4.7	157.0	156.2	157.1
Saudi Arabia	17.3	19.9	21.0	6.9	6.8	6.7	147.6	146.4	147.5
Thailand	21.5	21.6	22.3	17.0	10.4	7.9	118.5	118.5	120.5
Turkey	38.4	39.2	39.3	5.3	3.1	3.7	239.6	238.8	238.6
Viet Nam	34.5	40.8	41.8	4.2	5.9	6.6	176.9	177.1	177.5
AFRICA	**242.1**	**252.4**	**258.0**	**42.3**	**40.3**	**45.1**	**147.1**	**147.1**	**146.6**
Algeria	16.0	17.1	17.4	4.7	5.1	4.9	230.6	230.1	229.3
Egypt	40.7	41.2	42.0	6.3	6.3	6.0	268.1	268.5	267.4
Ethiopia	21.4	22.9	23.2	2.4	2.9	2.6	169.6	171.0	171.0
Morocco	14.4	14.6	16.0	6.5	5.9	7.3	253.1	253.3	253.6
Nigeria	27.5	28.9	29.0	1.6	1.0	1.2	120.6	120.1	121.0
South Africa	16.1	15.9	16.3	3.0	1.8	5.3	166.5	164.3	164.0
Sudan	7.5	8.8	8.9	1.8	2.7	2.8	176.4	181.3	178.2
CENTRAL AMERICA	**66.1**	**69.7**	**71.2**	**8.8**	**13.0**	**13.3**	**155.1**	**156.1**	**156.5**
Mexico	50.2	53.3	54.6	3.8	7.2	7.7	186.3	187.1	187.4
SOUTH AMERICA	**142.0**	**147.6**	**153.7**	**36.2**	**36.6**	**51.8**	**120.2**	**119.6**	**119.4**
Argentina	24.5	28.8	29.1	7.6	7.9	11.1	134.6	134.8	134.6
Brazil	78.0	78.5	84.1	13.3	8.4	19.5	113.7	112.0	112.4
Chile	5.5	5.7	5.7	3.2	4.0	3.9	144.8	146.3	146.9
Colombia	10.0	10.7	11.0	0.9	1.7	1.5	99.2	103.7	106.6
Peru	8.0	8.5	8.6	3.4	5.0	5.8	151.1	151.7	152.2
Venezuela	7.1	6.1	6.0	1.8	0.3	0.3	140.9	125.2	123.2
NORTH AMERICA	**375.5**	**394.1**	**391.3**	**77.3**	**108.3**	**99.1**	**109.7**	**110.2**	**110.1**
Canada	29.1	30.3	29.2	11.8	12.5	9.9	96.5	97.9	98.8
United States of America	346.4	363.8	362.2	65.5	95.8	89.1	111.2	111.6	111.4
EUROPE	**406.0**	**410.6**	**414.7**	**59.6**	**61.9**	**67.8**	**133.3**	**133.3**	**133.5**
European Union	288.1	290.4	291.8	36.3	32.6	30.4	133.7	134.1	134.3
Russian Federation	68.4	73.6	78.4	8.0	15.8	23.2	126.3	125.6	125.6
Serbia	6.6	7.1	5.4	0.9	1.4	1.2	162.3	163.4	163.9
Ukraine	26.3	23.0	22.5	8.9	5.4	5.1	146.0	143.8	143.7
OCEANIA	**15.6**	**17.9**	**17.0**	**6.7**	**10.2**	**6.6**	**90.6**	**90.6**	**90.8**
Australia	13.3	15.5	14.6	6.2	9.7	6.0	99.7	100.3	100.7
WORLD	**2 481.5**	**2 568.5**	**2 593.2**	**637.2**	**702.9**	**718.7**	**147.7**	**147.7**	**148.0**
Developing countries	1 600.6	1 661.7	1 686.5	474.2	502.0	520.6	152.7	152.7	153.0
Developed countries	880.9	906.8	906.7	163.0	200.9	198.1	126.2	126.2	126.1
LIFDC	490.2	520.2	523.0	89.5	79.4	81.5	146.3	146.4	146.5
LDC	189.7	199.6	202.7	34.7	36.1	37.3	152.4	152.5	152.4

APPENDIX TABLE 2(A): **WHEAT STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	**2016** *estim.*	**2017** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*
	million tonnes								
ASIA	**317.0**	**322.4**	**329.9**	**78.2**	**91.0**	**88.7**	**16.7**	**15.7**	**15.5**
Bangladesh	1.3	1.4	1.4	3.6	5.7	6.0	-	-	-
China	126.1	128.8	130.2	5.8	6.2	5.1	0.3	0.2	0.3
of which Taiwan Prov.	-	-	-	1.3	1.4	1.4	-	-	-
India	91.9	92.3	98.4	0.3	6.0	4.0	2.6	0.3	0.5
Indonesia	-	-	-	8.2	9.7	9.7	0.1	0.1	0.1
Iran, Islamic Republic of	10.5	13.5	13.5	5.0	1.0	1.2	-	-	0.3
Iraq	3.3	3.0	2.8	3.1	3.0	2.9	-	-	-
Japan	0.9	0.8	0.8	5.7	6.4	6.4	0.2	0.2	0.2
Kazakhstan	13.5	15.0	13.9	0.4	0.1	0.1	7.1	7.5	7.3
Korea, Republic of	-	-	-	4.1	4.7	4.2	-	-	-
Pakistan	25.1	25.5	26.0	0.6	-	-	0.6	0.9	0.7
Philippines	-	-	-	4.5	5.5	5.5	-	-	-
Saudi Arabia	0.6	-	-	3.4	3.7	3.9	-	-	-
Thailand	-	-	-	3.3	3.8	3.0	-	-	-
Turkey	21.2	20.6	21.8	4.7	4.8	5.3	3.7	4.8	4.0
AFRICA	**27.4**	**22.7**	**27.1**	**47.1**	**49.4**	**49.0**	**1.2**	**0.9**	**0.9**
Algeria	2.8	2.2	2.4	7.9	8.4	8.2	-	-	-
Egypt	9.3	9.0	8.8	11.2	11.6	12.0	-	-	-
Ethiopia	4.1	4.2	4.2	1.0	1.4	1.3	-	-	-
Morocco	6.7	2.7	7.1	4.2	5.5	4.5	0.2	-	0.1
Nigeria	0.1	0.1	0.1	4.5	5.0	5.1	0.4	0.4	0.4
South Africa	1.7	1.9	1.7	2.0	1.1	1.8	0.3	0.1	0.1
Tunisia	1.1	0.9	1.1	1.9	2.0	1.9	-	0.1	0.1
CENTRAL AMERICA	**3.6**	**3.9**	**3.6**	**8.7**	**9.0**	**9.4**	**1.3**	**1.3**	**1.3**
Cuba	-	-	-	0.8	0.8	0.8	-	-	-
Mexico	3.6	3.9	3.6	4.7	5.0	5.3	1.2	1.2	1.2
SOUTH AMERICA	**21.6**	**29.2**	**27.5**	**13.6**	**15.7**	**15.2**	**7.1**	**14.4**	**13.5**
Argentina	11.5	18.4	19.0	-	-	-	4.6	12.1	12.0
Brazil	5.8	6.7	5.5	6.2	7.8	7.5	1.4	0.7	0.8
Chile	1.5	1.7	1.2	0.8	1.0	1.0	-	-	-
Colombia	-	-	-	1.8	2.0	2.0	-	0.1	0.1
Peru	0.2	0.2	0.2	1.9	1.9	1.9	-	-	-
Venezuela	-	-	-	1.6	1.2	1.4	-	-	-
NORTH AMERICA	**88.0**	**94.6**	**74.5**	**3.6**	**3.6**	**4.4**	**48.3**	**49.7**	**47.3**
Canada	31.5	31.7	27.1	0.3	0.3	0.3	23.0	20.2	21.0
United States of America	56.4	62.8	47.4	3.3	3.3	4.1	25.3	29.5	26.3
EUROPE	**243.8**	**252.1**	**268.2**	**7.7**	**7.2**	**7.7**	**68.8**	**73.3**	**78.6**
European Union	153.7	144.5	150.0	5.3	5.0	5.3	32.7	26.1	28.4
Russian Federation	57.9	73.3	83.6	0.5	0.4	0.4	22.0	27.6	32.2
Ukraine	24.3	26.0	26.6	-	-	-	12.8	18.1	16.5
OCEANIA	**24.1**	**35.3**	**21.9**	**0.9**	**0.9**	**0.9**	**16.9**	**22.1**	**18.2**
Australia	23.8	35.0	21.6	-	-	-	16.9	22.1	18.2
WORLD	**725.4**	**760.2**	**752.8**	**159.8**	**176.8**	**175.2**	**160.4**	**177.4**	**175.2**
Developing countries	340.9	348.0	359.4	131.9	149.4	145.9	17.9	23.6	22.8
Developed countries	384.5	412.2	393.4	27.9	27.5	29.3	142.5	153.7	152.5
LIFDC	141.9	141.2	148.0	33.0	42.9	41.6	4.6	2.5	2.5
LDC	13.8	13.3	13.2	19.7	22.7	23.0	0.2	0.1	0.1

APPENDIX TABLE 2(B): **WHEAT STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(million tonnes)						(Kg/year)		
ASIA	**370.2**	**386.1**	**384.2**	**117.2**	**140.4**	**157.6**	**64.5**	**64.9**	**65.2**
Bangladesh	4.6	6.1	6.5	0.9	2.4	3.3	23.8	25.5	26.7
China	124.2	117.0	116.4	62.1	91.9	110.4	62.5	62.3	62.3
of which Taiwan Prov.	1.3	1.4	1.4	0.4	0.4	0.4	45.4	45.4	45.3
India	90.2	104.1	100.9	21.3	13.5	14.0	59.4	59.8	60.0
Indonesia	7.9	9.7	10.0	1.0	1.2	1.0	24.6	25.4	25.8
Iran, Islamic Republic of	14.8	15.2	15.4	3.1	3.5	2.3	166.4	166.9	167.6
Iraq	6.4	6.6	6.7	1.8	1.0	-	152.8	153.2	152.8
Japan	6.5	6.4	6.4	1.6	1.6	1.5	40.5	40.6	40.6
Kazakhstan	7.3	7.1	6.8	2.4	2.9	2.7	143.1	142.1	142.0
Korea, Republic of	4.1	4.6	4.4	0.7	0.9	1.0	47.5	47.8	47.9
Pakistan	24.7	24.9	26.2	3.0	2.7	1.8	125.3	125.5	125.6
Philippines	4.5	5.3	5.3	0.6	0.8	1.0	23.0	23.2	23.4
Saudi Arabia	3.5	3.6	3.9	2.8	2.9	2.9	101.2	100.2	101.3
Thailand	3.1	3.4	3.0	0.9	1.7	1.7	15.9	16.4	18.5
Turkey	22.2	22.4	22.6	2.9	1.2	1.7	210.3	210.0	209.9
AFRICA	**70.2**	**73.1**	**74.3**	**18.7**	**18.2**	**18.0**	**50.4**	**49.9**	**49.3**
Algeria	10.0	10.7	10.8	2.9	3.5	3.3	208.9	208.7	208.1
Egypt	20.3	21.0	21.1	4.2	4.0	3.7	184.9	186.0	184.5
Ethiopia	5.1	5.6	5.7	0.6	0.8	0.7	41.9	43.0	43.1
Morocco	9.4	9.8	10.8	4.9	4.8	5.5	201.1	201.3	201.5
Nigeria	4.0	4.0	4.1	0.2	0.2	0.2	20.5	19.2	19.2
South Africa	3.2	3.3	3.2	0.6	0.3	0.5	57.4	57.0	57.0
Tunisia	3.0	3.1	3.0	0.6	0.3	0.2	210.7	210.5	210.3
CENTRAL AMERICA	**10.7**	**11.3**	**11.4**	**1.9**	**2.2**	**2.4**	**43.9**	**44.2**	**44.3**
Cuba	0.8	0.8	0.8	0.1	0.1	0.1	55.3	56.1	56.4
Mexico	7.0	7.4	7.4	0.7	0.8	1.0	48.3	48.6	48.8
SOUTH AMERICA	**26.4**	**27.0**	**27.1**	**7.7**	**9.2**	**10.6**	**59.2**	**58.9**	**58.6**
Argentina	5.7	6.1	6.2	2.6	1.7	2.6	117.5	117.5	117.6
Brazil	11.2	11.3	11.3	1.4	2.8	3.4	52.5	52.5	52.6
Chile	2.2	2.2	2.3	1.0	1.4	1.3	108.7	109.1	109.4
Colombia	1.5	1.6	1.6	0.4	1.0	0.8	28.4	29.4	29.5
Peru	2.0	2.0	2.0	0.6	0.6	0.6	60.3	60.4	60.5
Venezuela	1.6	1.2	1.3	0.3	-	0.1	53.1	37.4	40.7
NORTH AMERICA	**41.0**	**41.8**	**39.3**	**28.6**	**39.0**	**30.9**	**82.4**	**82.7**	**82.8**
Canada	8.5	10.0	8.4	7.6	6.9	4.8	80.5	81.3	81.9
United States of America	32.5	31.8	30.9	21.1	32.1	26.1	82.7	82.9	82.9
EUROPE	**179.4**	**184.2**	**192.8**	**25.9**	**29.5**	**33.9**	**107.3**	**107.6**	**107.8**
European Union	123.2	125.8	128.0	14.6	14.8	13.5	108.9	109.3	109.6
Russian Federation	36.4	40.6	46.7	4.5	9.6	14.7	100.1	100.0	100.0
Ukraine	11.6	9.7	9.7	3.6	1.0	1.5	112.2	112.0	112.0
OCEANIA	**8.0**	**9.3**	**9.1**	**4.3**	**6.7**	**4.8**	**67.0**	**66.6**	**66.4**
Australia	6.9	8.2	7.9	3.9	6.4	4.4	79.8	80.0	80.2
WORLD	**705.9**	**732.8**	**738.2**	**204.4**	**245.2**	**258.2**	**66.6**	**66.7**	**66.6**
Developing countries	441.4	461.6	461.4	137.2	161.0	179.8	59.9	60.0	60.0
Developed countries	264.5	271.2	276.8	67.2	84.2	78.3	95.1	95.3	95.4
LIFDC	169.3	186.7	185.1	37.3	29.8	29.4	52.9	52.9	52.9
LDC	32.3	35.4	35.7	8.1	9.2	9.2	29.1	29.6	29.5

APPENDIX TABLE 3(A): **COARSE GRAIN STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	2016 estim.	2017 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	million tonnes								
ASIA	**354.1**	**359.4**	**355.5**	**94.9**	**95.7**	**98.7**	**5.5**	**4.4**	**4.0**
China	229.1	229.3	222.6	22.3	19.5	17.3	0.1	0.1	0.1
of which Taiwan Prov.	0.1	0.1	0.1	4.4	4.3	4.9	-	-	-
India	41.7	43.9	44.2	0.2	0.1	0.1	2.7	1.2	1.0
Indonesia	19.0	20.0	21.5	3.2	0.7	0.7	0.2	-	-
Iran, Islamic Republic of	4.3	3.9	4.0	7.2	9.2	10.8	-	-	-
Japan	0.2	0.2	0.2	17.4	17.3	17.3	-	-	-
Korea, D.P.R.	2.6	2.5	2.6	0.2	0.2	0.2	-	-	-
Korea, Republic of	0.2	0.2	0.2	10.1	9.6	10.6	-	-	-
Malaysia	0.1	0.1	0.1	3.7	3.8	3.9	-	-	-
Pakistan	5.6	5.9	6.1	0.2	0.3	0.3	-	-	-
Philippines	7.3	8.1	8.3	0.6	0.4	0.3	-	-	-
Saudi Arabia	0.3	0.4	0.4	12.7	13.8	15.3	-	-	-
Thailand	4.9	4.8	4.5	0.2	0.2	0.2	0.6	0.6	0.2
Turkey	14.2	13.8	14.2	1.6	2.0	2.0	0.2	0.1	0.1
Viet Nam	5.2	5.2	5.2	5.7	8.8	9.8	0.2	0.1	0.1
AFRICA	**124.1**	**121.4**	**136.2**	**24.2**	**26.5**	**24.8**	**7.4**	**5.9**	**8.0**
Algeria	1.3	1.1	1.1	5.0	4.8	5.4	-	-	-
Egypt	8.6	7.8	8.0	8.2	8.3	8.8	-	-	-
Ethiopia	18.5	19.0	18.9	0.2	-	-	2.4	1.9	2.0
Morocco	2.8	0.8	2.7	2.7	2.7	3.2	-	-	-
Nigeria	17.7	19.4	19.0	0.2	0.2	0.2	0.2	0.2	0.2
South Africa	13.2	8.7	18.0	1.0	2.1	0.2	1.6	0.8	2.5
Sudan	4.3	7.4	7.0	0.4	0.2	0.2	0.5	0.4	0.6
Tanzania, United Rep. of	7.2	6.6	6.7	-	-	-	0.6	0.4	0.1
CENTRAL AMERICA	**34.6**	**37.2**	**35.9**	**18.2**	**21.9**	**22.5**	**0.7**	**1.0**	**1.0**
Mexico	31.1	33.5	31.9	12.4	15.7	16.8	0.7	1.0	1.0
SOUTH AMERICA	**142.3**	**128.1**	**173.3**	**14.0**	**16.1**	**14.4**	**50.3**	**41.1**	**60.7**
Argentina	41.1	47.0	55.7	0.1	0.1	0.1	20.2	26.0	29.4
Brazil	84.9	65.8	102.3	1.4	4.3	1.2	26.7	12.8	28.2
Chile	2.0	1.8	1.7	1.7	1.7	2.1	0.1	0.2	0.2
Colombia	1.4	1.7	1.7	5.2	5.2	5.5	0.1	0.1	0.1
Peru	1.9	1.8	1.8	2.7	3.0	3.5	-	-	-
Venezuela	2.3	1.5	2.1	2.4	1.4	1.6	-	-	-
NORTH AMERICA	**396.3**	**428.8**	**401.7**	**5.0**	**5.5**	**4.7**	**57.9**	**72.9**	**57.9**
Canada	25.5	25.9	25.4	1.3	1.7	1.0	4.7	4.8	5.2
United States of America	370.8	402.9	376.4	3.8	3.8	3.8	53.2	68.1	52.7
EUROPE	**255.9**	**253.0**	**245.8**	**14.4**	**15.6**	**18.2**	**45.6**	**46.6**	**45.0**
European Union	161.4	153.2	150.5	13.3	14.5	17.0	12.0	8.5	8.1
Russian Federation	39.7	43.4	43.7	0.1	0.1	0.2	8.2	9.0	10.5
Serbia	7.0	7.9	4.4	-	-	-	2.1	2.4	0.8
Ukraine	37.9	39.4	37.0	0.1	0.1	-	22.8	26.2	25.1
OCEANIA	**13.3**	**18.3**	**11.3**	**0.3**	**0.3**	**0.3**	**6.7**	**10.0**	**7.1**
Australia	12.8	17.8	10.7	-	-	-	6.7	10.0	7.1
WORLD	**1 320.8**	**1 346.3**	**1 359.7**	**171.1**	**181.6**	**183.7**	**174.1**	**181.9**	**183.7**
Developing countries	634.8	628.9	674.6	130.4	138.1	140.4	61.8	50.6	70.2
Developed countries	686.0	717.4	685.1	40.7	43.5	43.3	112.3	131.3	113.5
LIFDC	152.2	160.4	163.6	6.9	8.6	7.2	8.2	6.0	5.9
LDC	79.5	84.4	86.9	3.6	4.4	3.9	6.2	5.7	6.3

APPENDIX TABLE 3(B): **COARSE GRAIN STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(million tonnes)						(Kg/year)		
ASIA	**435.9**	**455.7**	**464.6**	**131.8**	**133.4**	**117.6**	**13.8**	**13.8**	**13.8**
China	245.0	252.5	258.5	104.7	106.2	86.9	9.4	9.4	9.4
of which Taiwan Prov.	4.5	4.9	5.0	0.3	0.3	0.3	6.9	7.0	7.0
India	39.5	41.7	42.3	3.2	3.1	3.8	19.6	19.3	19.5
Indonesia	22.6	22.1	22.0	2.6	1.0	1.5	29.2	29.0	29.1
Iran, Islamic Republic of	10.9	13.8	14.0	1.6	1.7	2.4	1.3	1.3	1.3
Japan	17.6	17.4	17.4	2.1	2.1	2.0	3.2	3.3	3.3
Korea, D.P.R.	2.7	2.6	2.6	0.2	0.3	0.4	82.9	84.1	84.1
Korea, Republic.of	10.3	10.1	10.5	1.9	2.1	2.4	4.3	4.4	4.3
Malaysia	3.7	3.8	3.9	0.1	0.1	0.1	1.6	1.6	1.7
Pakistan	5.6	6.1	6.4	1.5	1.4	1.2	10.5	11.1	11.1
Philippines	8.0	8.0	8.4	0.4	0.8	1.1	18.3	18.5	18.5
Saudi Arabia	12.5	14.9	15.6	3.9	3.6	3.6	3.1	3.0	2.9
Thailand	4.3	4.6	4.8	0.6	0.6	0.2	2.7	2.7	2.6
Turkey	15.5	16.0	15.9	2.2	1.9	2.0	20.0	19.8	19.7
Viet Nam	10.6	13.9	14.8	1.0	1.5	1.6	5.9	6.4	6.7
AFRICA	**139.5**	**145.0**	**148.0**	**18.8**	**17.5**	**22.5**	**72.3**	**72.5**	**72.1**
Algeria	5.9	6.2	6.5	1.7	1.6	1.6	18.8	18.2	17.9
Egypt	16.5	16.1	16.7	1.6	1.6	1.6	45.3	44.4	44.0
Ethiopia	16.0	16.9	17.1	1.8	2.1	1.9	124.8	124.4	124.1
Morocco	5.0	4.8	5.2	1.5	1.0	1.8	51.1	51.1	51.2
Nigeria	17.7	19.4	19.0	0.5	0.4	0.4	71.8	74.8	74.6
South Africa	11.9	11.7	12.2	2.1	1.4	4.7	92.3	91.7	91.4
Sudan	4.7	6.0	6.2	0.7	1.4	1.8	103.9	109.6	110.7
Tanzania, United Rep. of	6.4	6.4	6.5	1.4	1.5	1.6	86.8	86.2	86.6
CENTRAL AMERICA	**51.4**	**54.3**	**55.7**	**6.4**	**10.2**	**10.3**	**93.9**	**94.2**	**94.4**
Mexico	42.5	45.1	46.3	3.1	6.3	6.7	131.7	132.2	132.2
SOUTH AMERICA	**100.3**	**105.4**	**111.0**	**26.5**	**25.5**	**39.0**	**28.0**	**28.3**	**28.1**
Argentina	18.2	22.2	22.4	4.8	5.9	8.4	7.2	7.0	7.0
Brazil	58.7	59.5	64.8	11.2	5.3	15.2	25.0	25.2	25.2
Chile	3.1	3.2	3.2	2.2	2.5	2.6	24.4	24.8	25.1
Colombia	7.0	7.3	7.4	0.3	0.3	0.1	40.4	40.9	41.4
Peru	3.8	4.1	4.2	2.5	4.0	4.9	26.1	26.2	26.4
Venezuela	4.4	3.9	3.7	1.4	0.1	0.1	60.7	61.3	56.4
NORTH AMERICA	**330.2**	**347.7**	**347.9**	**47.4**	**67.7**	**67.2**	**17.9**	**17.9**	**17.9**
Canada	20.2	19.8	20.3	4.2	5.5	5.0	4.7	4.7	4.6
United States of America	310.0	327.9	327.6	43.1	62.2	62.1	19.4	19.4	19.4
EUROPE	**222.3**	**222.0**	**217.4**	**32.9**	**31.5**	**33.1**	**20.8**	**20.5**	**20.4**
European Union	161.7	161.3	160.4	21.2	17.2	16.2	19.4	19.1	19.1
Russian Federation	31.2	32.2	30.9	3.5	6.1	8.4	21.3	20.7	20.6
Serbia	4.9	5.5	3.7	0.5	0.5	0.5	22.4	22.9	22.9
Ukraine	14.6	13.3	12.7	5.2	4.4	3.6	30.9	29.4	29.0
OCEANIA	**6.9**	**7.9**	**7.2**	**2.2**	**3.3**	**1.5**	**8.1**	**8.1**	**8.1**
Australia	6.1	7.1	6.4	2.1	3.1	1.4	9.7	9.7	9.6
WORLD	**1 286.4**	**1 338.0**	**1 351.8**	**265.9**	**289.1**	**291.3**	**27.2**	**27.4**	**27.5**
Developing countries	689.3	721.9	741.0	176.3	178.5	177.2	28.9	29.2	29.3
Developed countries	597.1	616.0	610.8	89.6	110.6	114.1	20.0	19.7	19.7
LIFDC	151.7	160.3	162.4	17.8	18.8	20.9	38.0	38.3	38.4
LDC	77.3	81.7	83.6	11.4	12.3	13.1	56.9	57.0	57.2

APPENDIX TABLE 4(A): **MAIZE STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	2016 estim.	2017 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	million tonnes								
ASIA	**306.2**	**311.1**	**304.8**	**63.1**	**64.2**	**70.5**	**4.3**	**2.9**	**2.6**
China	219.6	219.6	212.5	8.3	6.2	7.8	0.1	-	-
of which Taiwan Prov.	-	-	-	4.2	4.2	4.7	-	-	-
India	23.7	26.3	26.0	0.2	0.1	0.1	2.1	0.7	0.6
Indonesia	19.0	20.0	21.5	3.1	0.6	0.6	0.2	-	-
Iran, Islamic Republic of	1.6	0.9	0.9	5.8	8.0	9.5	-	-	-
Japan	-	-	-	14.9	15.2	15.2	-	-	-
Korea, D.P.R.	2.4	2.4	2.4	0.2	0.2	0.2	-	-	-
Korea, Republic.of	0.1	0.1	0.1	10.0	9.5	10.5	-	-	-
Malaysia	0.1	0.1	0.1	3.7	3.8	3.9	-	-	-
Pakistan	4.9	5.3	5.5	-	-	-	-	-	-
Philippines	7.3	8.1	8.3	0.6	0.4	0.3	-	-	-
Thailand	4.7	4.6	4.3	0.1	0.1	0.2	0.6	0.6	0.2
Turkey	6.1	6.4	6.0	1.3	1.3	1.5	0.2	0.1	0.1
Viet Nam	5.2	5.2	5.2	5.7	8.8	9.7	0.2	0.1	0.1
AFRICA	**74.5**	**68.5**	**81.7**	**20.1**	**22.6**	**20.7**	**4.7**	**3.2**	**5.0**
Algeria	-	-	-	4.2	4.1	4.7	-	-	-
Egypt	7.7	7.0	7.1	8.1	8.2	8.7	-	-	-
Ethiopia	7.0	7.2	7.1	-	-	-	0.8	0.6	0.6
Kenya	3.6	3.2	2.9	0.8	1.0	1.1	-	-	-
Morocco	0.1	0.2	0.2	2.1	2.1	2.5	-	-	-
Nigeria	10.3	10.8	10.8	0.2	0.2	0.2	0.2	0.2	0.2
South Africa	12.7	8.2	17.5	0.9	1.9	-	1.5	0.8	2.5
Tanzania, United Rep. of	6.0	5.5	5.5	-	-	-	0.6	0.4	0.1
CENTRAL AMERICA	**26.9**	**30.9**	**29.7**	**17.4**	**20.4**	**21.3**	**0.7**	**1.0**	**1.0**
Mexico	23.8	27.6	26.0	11.5	14.3	15.5	0.7	1.0	1.0
SOUTH AMERICA	**128.8**	**116.4**	**162.1**	**12.3**	**14.1**	**12.6**	**46.7**	**37.6**	**58.1**
Argentina	33.0	39.8	49.5	-	-	-	16.9	22.6	27.0
Brazil	81.9	63.4	99.4	0.8	3.2	0.5	26.7	12.8	28.2
Chile	1.3	1.1	1.1	1.4	1.6	2.0	0.1	0.1	0.1
Colombia	1.4	1.6	1.7	4.7	4.6	4.9	0.1	0.1	0.1
Peru	1.7	1.5	1.5	2.6	2.9	3.4	-	-	-
Venezuela	2.2	1.4	2.0	2.4	1.3	1.6	-	-	-
NORTH AMERICA	**365.7**	**398.0**	**376.4**	**2.3**	**3.0**	**2.1**	**46.8**	**63.4**	**48.7**
Canada	13.1	13.2	13.6	1.1	1.6	0.8	1.3	1.6	1.7
United States of America	352.6	384.8	362.7	1.3	1.4	1.3	45.4	61.8	47.0
EUROPE	**117.3**	**115.3**	**108.3**	**13.3**	**14.4**	**16.5**	**28.1**	**31.6**	**28.4**
European Union	67.7	61.0	60.0	12.5	13.6	15.6	2.9	2.6	1.5
Russian Federation	12.0	15.3	14.0	0.1	-	0.1	3.9	5.5	5.5
Serbia	6.6	7.5	4.0	-	-	-	2.1	2.4	0.8
Ukraine	27.6	28.1	26.7	0.1	0.1	-	18.8	20.7	20.2
OCEANIA	**0.7**	**0.6**	**0.6**	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**
WORLD	**1 020.1**	**1 040.7**	**1 063.6**	**128.7**	**138.8**	**143.9**	**131.3**	**139.8**	**143.9**
Developing countries	521.7	516.5	559.2	95.3	102.3	108.2	54.8	43.9	64.2
Developed countries	498.5	524.1	504.4	33.5	36.5	35.6	76.6	95.9	79.7
LIFDC	87.0	89.7	92.8	5.2	6.9	5.5	4.8	2.9	2.5
LDC	44.0	44.3	47.1	2.9	3.8	3.3	3.6	3.1	3.4

APPENDIX TABLE 4(B): **MAIZE STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(. . . . . million tonnes . . . . .)						(. . . . . Kg/year . . . . .)		
ASIA	**357.7**	**377.4**	**387.7**	**118.2**	**119.4**	**102.8**	**8.3**	**8.4**	**8.4**
China	221.6	230.4	237.9	101.5	102.1	83.4	6.1	6.0	6.1
of which Taiwan Prov.	4.4	4.7	4.8	0.3	0.3	0.2	5.4	5.5	5.5
India	21.6	24.5	24.5	1.9	2.7	3.3	7.0	7.2	7.1
Indonesia	22.5	22.0	21.9	2.6	1.0	1.5	28.8	28.7	28.8
Iran, Islamic Republic of	6.8	9.3	9.6	0.9	1.0	1.8	1.0	0.9	0.9
Japan	14.6	15.0	15.0	1.7	1.8	1.7	0.8	0.8	0.8
Korea, D.P.R.	2.6	2.5	2.5	0.2	0.3	0.4	79.7	81.6	81.6
Korea, Republic.of	10.1	9.9	10.3	1.8	2.1	2.3	1.9	2.0	2.0
Malaysia	3.7	3.8	3.9	0.1	0.1	0.1	1.6	1.6	1.7
Pakistan	4.9	5.3	5.6	1.5	1.4	1.2	8.0	8.0	8.1
Philippines	7.9	7.9	8.3	0.4	0.8	1.1	18.2	18.5	18.4
Thailand	4.1	4.4	4.6	0.6	0.6	0.2	1.2	1.2	1.2
Turkey	7.0	7.7	7.2	1.0	0.9	0.9	16.2	16.1	16.1
Viet Nam	10.5	13.8	14.7	1.0	1.5	1.6	5.8	6.3	6.7
AFRICA	**88.7**	**90.8**	**93.1**	**12.5**	**10.4**	**14.7**	**40.2**	**40.2**	**39.9**
Algeria	3.8	4.3	4.7	1.1	1.2	1.2	3.6	3.4	3.4
Egypt	15.6	15.2	15.8	1.5	1.5	1.5	42.1	41.3	41.0
Ethiopia	6.2	6.6	6.6	0.4	0.5	0.4	42.4	42.5	42.4
Kenya	4.2	4.4	4.4	0.4	0.4	0.2	80.8	80.9	80.5
Morocco	2.2	2.3	2.4	0.7	0.6	1.0	10.2	9.9	10.5
Nigeria	10.4	10.8	10.8	0.4	0.3	0.3	34.7	35.5	35.6
South Africa	11.3	11.0	11.5	1.8	1.1	4.4	88.4	87.5	87.3
Tanzania, United Rep. of	5.2	5.2	5.3	1.1	1.3	1.4	67.8	67.7	68.2
CENTRAL AMERICA	**42.8**	**46.7**	**48.2**	**6.0**	**9.8**	**9.9**	**92.4**	**92.8**	**92.9**
Mexico	34.2	37.9	39.2	2.7	6.0	6.4	130.6	130.8	130.8
SOUTH AMERICA	**88.8**	**93.6**	**99.5**	**22.9**	**22.0**	**35.6**	**26.5**	**26.8**	**26.6**
Argentina	13.6	17.3	18.0	3.5	5.0	7.5	7.0	6.8	6.8
Brazil	55.1	56.0	61.1	10.7	5.0	15.0	23.9	24.1	24.1
Chile	2.4	2.5	2.5	1.7	2.0	2.0	20.9	21.2	21.3
Colombia	6.0	6.2	6.3	0.3	0.2	0.1	39.0	39.5	39.9
Peru	3.4	3.7	3.8	2.4	4.0	4.8	19.8	20.3	20.5
Venezuela	4.3	3.8	3.6	1.3	-	-	60.2	60.8	56.0
NORTH AMERICA	**310.5**	**326.3**	**328.6**	**41.6**	**60.8**	**62.0**	**14.8**	**14.8**	**14.8**
Canada	12.7	12.5	12.7	1.7	2.6	2.6	3.2	3.2	3.1
United States of America	297.9	313.8	315.9	39.8	58.3	59.4	16.1	16.1	16.2
EUROPE	**101.3**	**99.1**	**98.2**	**15.6**	**13.6**	**11.7**	**8.3**	**8.3**	**8.3**
European Union	76.7	73.5	75.1	9.8	8.0	7.0	9.8	9.8	9.7
Russian Federation	8.1	9.6	8.9	0.6	0.9	0.5	1.3	1.4	1.4
Serbia	4.5	5.1	3.2	0.5	0.5	0.5	20.7	21.2	21.2
Ukraine	8.5	7.5	7.6	3.6	2.8	1.8	11.0	11.2	11.2
OCEANIA	**0.7**	**0.7**	**0.7**	**0.1**	**0.1**	**0.1**	**2.3**	**2.3**	**2.3**
WORLD	**990.6**	**1 034.6**	**1 056.1**	**216.8**	**236.2**	**236.7**	**17.1**	**17.4**	**17.4**
Developing countries	548.5	578.4	598.4	154.7	157.2	155.6	18.4	18.6	18.6
Developed countries	442.0	456.2	457.7	62.0	78.9	81.1	11.9	11.9	11.9
LIFDC	87.3	92.5	93.9	11.2	11.5	13.0	18.6	18.9	18.9
LDC	43.2	45.0	46.1	7.3	6.5	7.2	28.1	28.1	28.2

APPENDIX TABLE 5(A): **BARLEY STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	**2016** *estim.*	**2017** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*
	million tonnes								
ASIA	**20.6**	**20.6**	**22.3**	**22.4**	**24.0**	**21.6**	**1.0**	**1.3**	**1.1**
China	1.8	1.8	2.0	6.6	7.4	4.7	-	-	-
India	1.7	1.4	1.7	-	-	-	0.4	0.4	0.3
Iran, Islamic Republic of	2.7	3.0	3.1	1.5	1.2	1.3	-	-	-
Iraq	0.9	0.8	0.8	-	-	-	-	-	-
Japan	0.2	0.2	0.2	1.2	1.1	1.1	-	-	-
Kazakhstan	2.5	3.2	3.5	-	-	-	0.5	0.9	0.8
Saudi Arabia	-	-	-	9.5	10.5	11.0	-	-	-
Syrian Arab Republic	0.8	0.7	0.8	0.4	0.4	0.4	-	-	-
Turkey	7.4	6.7	7.5	0.5	0.7	0.5	-	-	-
AFRICA	**6.9**	**4.6**	**6.5**	**2.9**	**2.8**	**3.0**	**-**	**-**	**-**
Algeria	1.2	1.0	1.0	0.8	0.6	0.7	-	-	-
Ethiopia	1.9	1.9	1.9	-	-	-	-	-	-
Libya	0.1	0.1	0.1	0.8	1.0	1.0	-	-	-
Morocco	2.6	0.6	2.5	0.5	0.5	0.6	-	-	-
Tunisia	0.5	0.3	0.5	0.6	0.6	0.6	-	-	-
CENTRAL AMERICA	**0.8**	**0.8**	**0.8**	**0.1**	**0.2**	**0.2**	**-**	**-**	**-**
Mexico	0.8	0.8	0.8	0.1	0.2	0.2	-	-	-
SOUTH AMERICA	**5.1**	**4.4**	**4.0**	**1.0**	**1.4**	**1.0**	**2.4**	**3.0**	**1.9**
Argentina	4.2	3.3	3.0	-	-	-	2.3	2.9	1.8
NORTH AMERICA	**13.0**	**13.1**	**10.4**	**0.5**	**0.3**	**0.4**	**1.7**	**1.4**	**1.4**
Canada	8.5	8.8	7.3	0.1	0.1	0.1	1.4	1.3	1.3
United States of America	4.5	4.4	3.1	0.5	0.2	0.4	0.3	0.1	0.1
EUROPE	**89.7**	**90.3**	**90.4**	**0.4**	**0.6**	**0.8**	**16.7**	**14.4**	**15.9**
Belarus	1.8	1.3	1.7	-	-	-	-	-	-
European Union	60.3	60.0	58.5	0.2	0.4	0.5	8.7	5.7	6.2
Russian Federation	17.8	18.0	20.3	0.1	-	-	4.0	3.4	4.9
Ukraine	8.3	9.4	8.4	-	-	-	3.8	5.4	4.7
OCEANIA	**9.3**	**13.7**	**8.3**	**-**	**-**	**-**	**5.6**	**8.9**	**6.7**
Australia	8.9	13.4	8.0	-	-	-	5.6	8.9	6.7
WORLD	**145.3**	**147.5**	**142.7**	**27.4**	**29.3**	**27.0**	**27.2**	**29.0**	**27.0**
Developing countries	28.6	24.6	27.6	24.7	26.6	24.0	2.9	3.4	2.2
Developed countries	116.7	122.9	115.1	2.7	2.7	3.0	24.4	25.6	24.8
LIFDC	5.8	5.6	6.0	0.6	0.7	0.7	0.4	0.4	0.3
LDC	2.5	2.4	2.5	-	-	-	-	-	-

APPENDIX TABLE 5(B): **BARLEY STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(million tonnes)						(Kg/year)		
ASIA	**40.9**	**43.9**	**42.5**	**10.3**	**11.0**	**12.2**	**0.6**	**0.6**	**0.6**
China	8.1	8.9	7.9	1.9	2.2	1.8	0.2	0.2	0.2
India	1.3	1.1	1.4	-	-	-	0.9	0.7	0.9
Iran, Islamic Republic of	4.0	4.5	4.4	0.6	0.7	0.6	0.3	0.3	0.3
Iraq	0.9	0.8	0.8	-	-	-	3.7	3.5	3.4
Japan	1.4	1.4	1.4	0.2	0.2	0.2	2.3	2.3	2.4
Kazakhstan	2.0	2.1	1.9	0.3	0.6	1.4	1.1	1.1	1.1
Saudi Arabia	9.0	11.2	11.0	3.6	3.3	3.3	0.9	0.9	0.9
Syrian Arab Republic	1.3	1.3	1.1	0.5	0.3	0.5	14.5	15.2	15.3
Turkey	7.7	7.6	7.9	1.2	0.9	1.0	1.1	1.0	1.0
AFRICA	**9.3**	**8.9**	**9.1**	**2.1**	**1.4**	**1.8**	**3.3**	**3.2**	**3.2**
Algeria	2.0	1.8	1.7	0.6	0.4	0.4	15.2	14.8	14.5
Ethiopia	1.9	1.9	1.9	0.1	0.1	-	16.3	16.2	16.0
Libya	0.9	1.1	1.1	-	-	-	13.4	13.2	13.0
Morocco	2.7	2.4	2.7	0.9	0.4	0.8	40.8	41.1	40.6
Tunisia	1.1	1.0	1.0	0.4	0.3	0.4	8.1	7.9	7.8
CENTRAL AMERICA	**0.9**	**0.9**	**0.9**	**0.1**	**0.1**	**0.1**	**-**	**-**	**-**
Mexico	0.9	0.9	0.9	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	**3.4**	**3.5**	**3.2**	**0.7**	**0.5**	**0.6**	**0.5**	**0.5**	**0.5**
Argentina	1.7	1.3	1.3	0.6	0.3	0.5	-	-	-
NORTH AMERICA	**10.7**	**10.2**	**10.1**	**3.4**	**4.4**	**2.9**	**0.5**	**0.5**	**0.5**
Canada	6.2	5.8	6.0	1.5	2.1	1.4	0.3	0.3	0.3
United States of America	4.5	4.4	4.1	1.9	2.3	1.5	0.6	0.5	0.5
EUROPE	**72.4**	**76.3**	**73.0**	**10.9**	**11.0**	**13.3**	**1.0**	**1.0**	**0.9**
Belarus	1.7	1.6	1.6	0.4	0.3	0.4	-	-	-
European Union	51.4	55.7	53.3	7.7	6.0	5.5	0.8	0.7	0.7
Russian Federation	13.4	13.2	12.9	1.5	3.5	6.1	1.2	1.2	1.2
Ukraine	4.4	4.2	3.6	1.1	0.9	1.0	3.2	2.8	2.6
OCEANIA	**3.8**	**4.4**	**4.1**	**1.0**	**1.8**	**0.6**	**0.2**	**0.2**	**0.1**
Australia	3.4	4.0	3.7	0.9	1.7	0.5	0.3	0.2	0.2
WORLD	**141.5**	**148.1**	**142.9**	**28.5**	**30.2**	**31.4**	**1.1**	**1.0**	**1.1**
Developing countries	48.9	51.3	50.0	11.0	9.5	9.9	1.1	1.1	1.1
Developed countries	92.6	96.8	92.9	17.4	20.7	21.5	1.0	0.9	0.9
LIFDC	6.0	6.0	6.0	1.0	1.0	1.3	1.2	1.2	1.3
LDC	2.5	2.5	2.5	0.2	0.2	0.2	1.9	1.8	1.8

APPENDIX TABLE 6(A): **SORGHUM STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	2016 estim.	2017 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	million tonnes								
ASIA	**8.8**	**8.4**	**9.1**	**8.4**	**6.3**	**5.3**	**0.1**	**-**	**-**
China	2.9	3.0	3.3	7.3	5.7	4.6	-	-	-
India	5.0	4.6	5.0	-	-	-	0.1	-	-
Japan	-	-	-	1.0	0.5	0.6	-	-	-
AFRICA	**25.1**	**28.4**	**28.0**	**1.0**	**1.0**	**1.0**	**1.0**	**0.9**	**1.2**
Burkina Faso	1.7	1.7	1.7	-	-	-	0.2	-	-
Ethiopia	4.1	4.4	4.3	0.1	-	-	0.4	0.3	0.3
Nigeria	5.9	6.9	6.5	-	-	-	-	-	-
Sudan	3.6	5.9	5.6	0.3	0.2	0.1	0.5	0.4	0.6
CENTRAL AMERICA	**6.8**	**5.4**	**5.3**	**0.6**	**0.8**	**0.7**	**-**	**-**	**-**
Mexico	6.5	5.0	5.0	0.6	0.8	0.7	-	-	-
SOUTH AMERICA	**6.6**	**5.0**	**5.2**	**0.4**	**0.3**	**0.4**	**1.1**	**0.4**	**0.6**
Argentina	3.4	3.0	2.5	-	-	-	1.0	0.4	0.6
Brazil	2.2	1.2	1.9	-	-	-	-	-	-
Venezuela	0.1	0.1	0.1	-	-	-	-	-	-
NORTH AMERICA	**12.1**	**12.2**	**9.3**	**0.1**	**0.1**	**-**	**7.4**	**6.1**	**5.4**
United States of America	12.1	12.2	9.3	0.1	-	-	7.4	6.1	5.4
EUROPE	**1.2**	**1.2**	**1.1**	**0.1**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**
European Union	0.6	0.6	0.7	0.1	0.2	0.2	-	-	-
OCEANIA	**1.9**	**1.8**	**1.0**	**0.1**	**-**	**-**	**1.0**	**1.0**	**0.4**
Australia	1.9	1.8	1.0	-	-	-	1.0	1.0	0.4
WORLD	**62.4**	**62.4**	**59.0**	**10.5**	**8.7**	**7.6**	**10.6**	**8.5**	**7.6**
Developing countries	47.1	47.0	47.5	9.2	7.8	6.7	2.1	1.4	1.8
Developed countries	15.3	15.3	11.5	1.3	0.9	0.9	8.5	7.2	5.9
LIFDC	29.8	32.7	32.5	1.0	0.8	0.8	1.0	0.9	1.2
LDC	17.1	19.7	19.4	0.7	0.6	0.6	0.9	0.8	1.1

APPENDIX TABLE 7(A): **OTHER COARSE GRAIN STATISTICS: MILLET, RYE, OATS AND OTHER GRAINS**

	Production			Imports			Exports		
	2013-2015 average	2016 estim.	2017 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	million tonnes								
ASIA	18.5	19.3	19.3	0.9	1.2	1.3	0.1	0.2	0.3
AFRICA	17.6	19.9	20.0	0.1	0.1	0.1	1.8	1.8	1.8
CENTRAL AMERICA	0.1	0.1	0.1	0.1	0.5	0.3	-	-	-
SOUTH AMERICA	1.8	2.3	2.0	0.3	0.3	0.4	0.1	0.1	0.1
NORTH AMERICA	5.5	5.5	5.6	2.1	2.1	2.2	2.1	2.0	2.4
EUROPE	47.7	46.2	46.0	0.6	0.4	0.7	0.7	0.5	0.6
OCEANIA	1.5	2.2	1.4	-	0.1	0.1	-	-	-0.1
WORLD	**93.0**	**95.7**	**94.4**	**4.5**	**4.8**	**5.2**	**5.0**	**4.6**	**5.2**

APPENDIX TABLE 6(B): **SORGHUM STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(. . . . . million tonnes . . . . .)						(. . . . . Kg/year . . . . .)		
ASIA	**17.5**	**14.1**	**14.1**	**1.4**	**1.9**	**1.7**	**1.4**	**1.2**	**1.3**
China	10.3	8.1	7.7	0.9	1.5	1.2	0.5	0.5	0.5
India	5.0	4.6	5.0	-	-	-	3.7	3.3	3.6
Japan	1.1	0.6	0.6	0.2	0.1	0.1	-	-	-
AFRICA	**25.6**	**27.7**	**27.8**	**2.0**	**2.6**	**2.6**	**17.9**	**17.7**	**17.7**
Burkina Faso	1.6	1.6	1.7	0.1	-	-	77.7	75.1	75.1
Ethiopia	3.7	4.0	4.0	0.4	0.6	0.6	29.1	28.8	28.9
Nigeria	5.9	6.9	6.5	-	-	-	31.0	30.7	30.6
Sudan	4.0	4.9	5.0	0.5	0.9	1.0	88.6	93.1	93.5
CENTRAL AMERICA	**7.2**	**6.0**	**6.0**	**0.3**	**0.3**	**0.3**	**0.7**	**0.6**	**0.6**
Mexico	6.8	5.7	5.6	0.2	0.2	0.2	-	-	-
SOUTH AMERICA	**6.1**	**5.7**	**6.0**	**2.4**	**2.4**	**2.2**	**0.1**	**0.1**	**0.1**
Argentina	2.2	2.6	2.4	0.7	0.6	0.4	-	-	-
Brazil	2.2	1.4	1.9	0.4	0.1	0.1	-	-	-
Venezuela	0.1	0.1	0.1	-	-	-	-	-	-
NORTH AMERICA	**4.3**	**6.2**	**4.1**	**0.8**	**0.9**	**0.7**	**-**	**0.0**	**0.0**
United States of America	4.3	6.2	4.1	0.8	0.9	0.7	-	-	-
EUROPE	**1.1**	**1.3**	**1.2**	**0.4**	**0.5**	**0.5**	**0.3**	**0.2**	**0.2**
European Union	0.8	0.8	0.9	0.2	0.2	0.2	0.4	0.3	0.3
OCEANIA	**0.8**	**0.9**	**0.8**	**0.9**	**0.9**	**0.6**	**0.2**	**0.2**	**0.2**
Australia	0.8	0.9	0.8	0.9	0.8	0.5	-	-	-
WORLD	**62.6**	**61.9**	**59.9**	**8.2**	**9.4**	**8.6**	**3.7**	**3.7**	**3.8**
Developing countries	55.0	52.7	53.0	5.9	7.0	6.6	4.5	4.5	4.6
Developed countries	7.6	9.2	6.9	2.3	2.3	2.0	0.3	0.3	0.3
LIFDC	30.2	31.7	32.2	2.0	2.7	2.7	9.4	9.2	9.4
LDC	17.3	18.5	18.9	1.7	2.5	2.5	14.6	14.4	14.5

APPENDIX TABLE 7(B): **OTHER COARSE GRAIN STATISTICS: MILLET, RYE, OATS AND OTHER GRAINS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	(. . . . . million tonnes . . . . .)						(. . . . . Kg/year . . . . .)		
ASIA	19.7	20.3	20.3	2.0	1.1	0.9	3.6	3.6	3.5
AFRICA	15.9	17.6	18.0	2.2	3.1	3.4	10.9	11.4	11.3
CENTRAL AMERICA	0.5	0.7	0.6	-	-	-	1.4	1.4	1.5
SOUTH AMERICA	2.0	2.6	2.3	0.5	0.6	0.6	0.9	0.9	0.9
NORTH AMERICA	4.7	5.0	5.1	1.6	1.6	1.6	2.6	2.6	2.6
EUROPE	47.4	45.3	45.0	6.0	6.4	7.6	11.2	11.0	11.0
OCEANIA	1.5	1.9	1.6	0.2	0.5	0.2	5.4	5.4	5.5
WORLD	**91.8**	**93.4**	**92.9**	**12.5**	**13.3**	**14.6**	**5.2**	**5.3**	**5.2**

APPENDIX TABLE 8(A): **RICE STATISTICS**

	Production			Imports			Exports		
	2013-2015 average	2016 *estim.*	2017 *f'cast*	2014-2016 average	2017 *f'cast*	2018 *f'cast*	2014-2016 average	2017 *f'cast*	2018 *f'cast*
	million tonnes, milled equivalent								
ASIA	**446.2**	**453.0**	**452.5**	**21.8**	**21.1**	**21.9**	**36.2**	**37.1**	**37.6**
Bangladesh	34.5	34.7	34.1	0.8	1.5	1.0	-	-	-
China	142.4	142.9	143.0	6.6	6.4	6.4	0.4	0.9	1.2
of which Taiwan Prov.	1.2	1.2	1.2	0.1	0.1	0.1	0.1	-	-
India	105.5	110.2	109.5	-	-	-	10.9	11.2	10.7
Indonesia	45.0	45.6	46.6	1.2	0.4	0.8	-	-	-
Iran, Islamic Republic of	1.5	1.6	1.7	1.2	1.2	1.4	-	-	-
Iraq	0.2	0.1	0.2	1.0	1.1	1.2	-	-	-
Japan	7.8	7.7	7.6	0.7	0.7	0.7	0.1	-	-
Korea DPR	1.6	1.7	1.4	0.1	-	-	-	-	-
Korea, Republic of	4.2	4.2	4.0	0.4	0.4	0.5	-	-	-
Malaysia	1.9	1.9	2.0	1.0	0.8	1.0	0.1	-	-
Myanmar	16.8	17.1	17.3	-	-	-	1.6	2.0	2.2
Pakistan	6.9	6.8	7.2	-	-	-	4.0	3.7	4.0
Philippines	12.0	12.1	12.6	1.5	1.1	1.4	-	-	-
Saudi Arabia	-	-	-	1.4	1.3	1.5	-	-	-
Sri Lanka	2.9	3.0	1.7	0.5	0.6	0.4	-	-	-
Thailand	21.1	21.6	22.3	0.2	0.2	0.2	10.2	10.9	10.4
Viet Nam	29.0	28.3	28.2	0.5	0.5	0.5	7.5	6.8	7.5
AFRICA	**18.5**	**20.1**	**20.3**	**14.4**	**15.6**	**15.6**	**0.7**	**0.6**	**0.5**
Cote D'ivoire	0.5	0.5	0.5	1.3	1.5	1.5	-	-	-
Egypt	4.2	4.3	4.4	0.1	0.1	-	0.4	0.2	0.2
Madagascar	2.5	2.6	2.2	0.3	0.4	0.4	-	-	-
Nigeria	2.8	3.0	3.2	2.6	2.6	2.9	-	-	-
Senegal	0.4	0.7	0.8	1.3	1.2	1.2	-	-	-
South Africa	-	-	-	0.8	0.9	0.9	-	-	-
Tanzania, United Rep. of	1.7	2.2	2.0	0.2	0.1	0.1	0.2	0.2	0.2
CENTRAL AMERICA	**1.8**	**1.8**	**1.9**	**2.2**	**2.4**	**2.3**	**0.1**	**0.1**	**-**
Cuba	0.4	0.3	0.3	0.5	0.5	0.5	-	-	-
Mexico	0.2	0.2	0.2	0.7	0.7	0.6	-	0.1	-
SOUTH AMERICA	**16.9**	**16.0**	**17.3**	**1.6**	**1.8**	**1.7**	**3.1**	**3.0**	**3.1**
Argentina	1.1	1.0	0.9	-	-	-	0.4	0.5	0.4
Brazil	8.2	7.2	8.4	0.5	0.8	0.7	0.8	0.5	0.7
Peru	2.1	2.2	2.0	0.2	0.3	0.3	0.1	-	-
Uruguay	1.0	0.9	1.0	-	-	-	0.8	0.9	0.8
NORTH AMERICA	**6.4**	**7.1**	**5.7**	**1.2**	**1.2**	**1.2**	**3.3**	**3.6**	**3.4**
Canada	-	-	-	0.4	0.4	0.4	-	-	-
United States of America	6.4	7.1	5.7	0.8	0.8	0.8	3.3	3.6	3.4
EUROPE	**2.5**	**2.6**	**2.6**	**2.3**	**2.4**	**2.4**	**0.5**	**0.5**	**0.4**
European Union	1.8	1.8	1.8	1.7	1.8	1.8	0.3	0.3	0.2
Russian Federation	0.7	0.7	0.7	0.2	0.2	0.2	0.2	0.2	0.2
OCEANIA	**0.6**	**0.2**	**0.6**	**0.5**	**0.5**	**0.5**	**0.3**	**0.2**	**0.4**
Australia	0.6	0.2	0.5	0.2	0.2	0.2	0.3	0.2	0.4
WORLD	**493.0**	**501.0**	**500.8**	**44.0**	**45.0**	**45.4**	**44.0**	**45.0**	**45.4**
Developing countries	475.1	482.7	483.8	38.4	39.2	39.7	39.9	40.7	41.1
Developed countries	17.9	18.2	17.0	5.6	5.8	5.8	4.1	4.3	4.4
LIFDC	166.9	173.5	172.1	15.5	17.2	16.9	15.1	15.3	15.0
LDC	73.6	76.1	75.4	10.1	11.3	10.6	3.3	3.6	3.8

APPENDIX TABLE 8(B): **RICE STATISTICS**

	Total Utilization			Stocks ending in			Per caput food use		
	13/14-15/16 average	2016/17 estim.	2017/18 f'cast	2014-2016 average	2017 estim.	2018 f'cast	13/14-15/16 average	2016/17 estim.	2017/18 f'cast
	million tonnes, milled equivalent						Kg/year		
ASIA	**428.1**	**434.3**	**438.4**	**157.2**	**158.8**	**159.7**	**77.6**	**77.4**	**77.5**
Bangladesh	35.2	35.7	35.8	7.2	6.4	6.9	179.8	180.5	180.8
China	141.4	143.5	145.0	86.9	99.0	102.5	75.9	75.9	76.5
of which Taiwan Prov.	1.3	1.3	1.3	0.2	0.2	0.3	48.0	48.1	48.4
India	96.7	98.2	99.2	21.8	19.1	19.0	68.9	68.7	68.8
Indonesia	46.1	46.7	47.1	6.6	6.8	6.7	134.6	134.9	134.7
Iran, Islamic Republic of	3.0	3.0	3.1	0.7	0.5	0.5	34.3	34.4	34.4
Iraq	1.3	1.2	1.3	0.3	0.1	0.1	37.1	33.4	33.9
Japan	8.5	8.4	8.2	3.5	3.4	3.4	50.3	49.3	48.4
Korea DPR	1.7	1.6	1.5	0.2	0.2	0.1	57.9	55.6	54.8
Korea, Republic of	4.5	4.8	4.9	1.4	1.5	1.0	77.4	74.9	72.9
Malaysia	2.8	2.9	2.9	0.3	0.4	0.3	82.7	83.0	83.0
Myanmar	15.5	15.1	15.3	2.6	2.4	2.4	194.9	193.8	194.0
Pakistan	2.9	3.0	3.2	0.6	0.7	0.8	12.5	12.5	12.9
Philippines	13.3	13.5	13.8	2.4	2.3	2.6	115.7	114.5	115.3
Saudi Arabia	1.4	1.4	1.4	0.3	0.3	0.2	43.2	43.2	43.3
Sri Lanka	3.0	3.1	2.7	0.5	0.6	0.2	122.8	124.1	120.6
Thailand	14.0	13.6	14.5	15.5	8.1	6.0	99.9	99.5	99.5
Viet Nam	21.4	22.2	22.0	2.9	3.4	3.2	155.9	154.8	154.2
AFRICA	**32.5**	**34.3**	**35.7**	**4.8**	**4.7**	**4.6**	**24.4**	**24.7**	**25.2**
Cote D'ivoire	1.8	1.9	2.0	0.3	0.4	0.4	74.1	76.8	77.5
Egypt	3.9	4.0	4.2	0.6	0.7	0.7	37.9	38.2	38.9
Madagascar	2.9	2.8	2.8	0.4	0.2	0.1	102.4	100.2	99.3
Nigeria	5.7	5.5	5.9	0.8	0.4	0.5	28.3	26.0	27.1
Senegal	1.7	1.9	2.0	0.3	0.4	0.4	108.2	111.3	113.1
South Africa	1.0	0.9	0.9	0.2	0.1	0.1	16.8	15.6	15.6
Tanzania, United Rep. of	1.8	2.2	2.1	0.3	0.4	0.3	26.1	28.1	28.2
CENTRAL AMERICA	**3.9**	**4.1**	**4.1**	**0.5**	**0.6**	**0.6**	**17.4**	**17.7**	**17.8**
Cuba	0.8	0.8	0.8	0.1	0.1	0.1	66.3	68.2	69.1
Mexico	0.8	0.8	0.8	0.1	0.1	0.1	6.3	6.3	6.4
SOUTH AMERICA	**15.4**	**15.3**	**15.7**	**2.0**	**1.9**	**2.3**	**32.9**	**32.4**	**32.7**
Argentina	0.5	0.5	0.5	0.2	0.2	0.1	9.9	10.3	10.1
Brazil	8.2	7.8	8.0	0.7	0.3	0.9	36.3	34.3	34.6
Peru	2.2	2.3	2.3	0.4	0.4	0.3	64.7	65.2	65.4
Uruguay	0.1	0.1	0.1	0.2	0.1	-	7.9	8.3	8.5
NORTH AMERICA	**4.4**	**4.6**	**4.1**	**1.4**	**1.6**	**1.0**	**9.3**	**9.6**	**9.4**
Canada	0.4	0.4	0.4	0.1	0.1	0.1	11.3	12.0	12.3
United States of America	4.0	4.2	3.6	1.4	1.5	0.9	9.1	9.4	9.1
EUROPE	**4.3**	**4.4**	**4.5**	**0.7**	**0.8**	**0.8**	**5.2**	**5.3**	**5.3**
European Union	3.2	3.3	3.3	0.5	0.6	0.6	5.4	5.6	5.6
Russian Federation	0.7	0.8	0.8	0.1	0.1	0.1	4.9	4.9	4.9
OCEANIA	**0.7**	**0.7**	**0.7**	**0.2**	**0.2**	**0.3**	**15.4**	**15.9**	**16.3**
Australia	0.3	0.3	0.3	0.2	0.2	0.2	10.1	10.6	10.9
WORLD	**489.1**	**497.8**	**503.2**	**166.9**	**168.5**	**169.2**	**53.8**	**53.7**	**53.8**
Developing countries	469.8	478.1	484.1	160.7	162.4	163.5	64.0	63.6	63.7
Developed countries	19.3	19.6	19.1	6.2	6.1	5.6	11.2	11.2	11.0
LIFDC	169.2	173.1	175.5	34.4	30.9	31.1	55.5	55.1	55.2
LDC	80.1	82.4	83.4	15.2	14.7	15.0	66.3	65.9	65.7

Note: Totals and percentage change computed from unrounded data.

APPENDIX TABLE 9: **CEREAL SUPPLY AND UTILIZATION IN SELECTED EXPORTERS** (*million tonnes*)

	Wheat [1]			Coarse Grains [2]			Rice (milled basis)		
	2015/16	2016/17 *estim.*	2017/18 *f'cast*	2015/16	2016/17 *estim.*	2017/18 *f'cast*	2015/16	2016/17 *estim.*	2017/18 *f'cast*
	UNITED STATES (June/May)			**UNITED STATES**			**UNITED STATES** (Aug/July)		
Opening Stocks	20.5	26.6	32.1	46.9	48.1	62.2	1.6	1.5	1.5
Production	56.1	62.8	47.4	367.3	402.9	376.4	6.1	7.1	5.7
Imports	3.1	3.2	4.1	4.0	3.6	3.7	0.8	0.7	0.8
Total Supply	**79.7**	**92.6**	**83.6**	**418.2**	**454.6**	**442.3**	**8.5**	**9.3**	**8.0**
Domestic use	31.9	31.8	30.9	312.9	327.9	327.6	3.6	4.2	3.6
Exports	21.2	28.7	26.5	57.3	64.6	52.6	3.4	3.7	3.4
Closing stocks	26.6	32.1	26.1	48.1	62.2	62.1	1.5	1.5	0.9
	CANADA (August/July)			**CANADA**			**THAILAND** (Aug/July)		
Opening Stocks	7.1	5.2	6.9	3.3	4.7	5.5	16.2	10.7	8.1
Production	27.6	31.7	27.1	25.7	25.9	25.4	18.2	21.6	22.3
Imports	0.1	0.1	0.1	1.4	1.0	0.7	0.2	0.2	0.2
Total Supply	**34.8**	**37.0**	**34.1**	**30.4**	**31.6**	**31.6**	**34.6**	**32.5**	**30.6**
Domestic use	7.9	10.0	8.4	19.7	19.8	20.3	13.9	13.6	14.5
Exports	21.7	20.1	20.9	6.1	6.2	6.3	10.0	10.8	10.2
Closing stocks	5.2	6.9	4.8	4.7	5.5	5.0	10.7	8.1	6.0
	ARGENTINA (Dec./Nov.)			**ARGENTINA**			**INDIA** (Oct./Sept.)		
Opening Stocks	4.9	0.9	1.7	5.5	5.1	5.9	21.5	18.3	19.1
Production	11.3	18.4	19.0	42.5	47.0	55.7	104.4	110.2	109.5
Imports	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Total Supply	**16.2**	**19.3**	**20.7**	**48.1**	**52.2**	**61.7**	**125.9**	**128.5**	**128.6**
Domestic use	5.8	6.1	6.2	20.3	22.2	22.4	97.2	98.2	99.2
Exports	9.5	11.5	12.0	22.6	24.0	30.8	10.4	11.2	10.3
Closing stocks	0.9	1.7	2.6	5.1	5.9	8.4	18.3	19.1	19.0
	AUSTRALIA (Oct./Sept.)			**AUSTRALIA**			**PAKISTAN** (Sept./Aug.)		
Opening Stocks	4.3	3.4	6.4	2.3	1.9	3.1	0.7	0.5	0.7
Production	22.3	35.0	21.6	13.3	17.8	10.7	6.8	6.8	7.2
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Supply	**26.6**	**38.4**	**28.0**	**15.6**	**19.7**	**13.8**	**7.5**	**7.3**	**7.9**
Domestic use	7.1	8.2	7.9	6.2	7.1	6.4	2.8	3.0	3.2
Exports	16.1	23.9	15.7	7.5	9.5	6.1	4.2	3.7	4.0
Closing stocks	3.4	6.4	4.4	1.9	3.1	1.4	0.5	0.7	0.8
	EU (July/June)			**EU**			**VIET NAM** (Jan./Dec.)		
Opening Stocks	14.2	17.5	14.8	25.3	18.4	17.2	3.2	2.8	3.4
Production	160.5	144.5	150.0	151.8	153.2	150.5	29.3	28.3	28.2
Imports	6.5	5.0	5.3	14.4	15.2	17.0	0.5	0.6	0.5
Total Supply	**181.2**	**167.0**	**170.1**	**191.5**	**186.8**	**184.7**	**33.0**	**31.7**	**32.1**
Domestic use	130.0	125.8	128.0	159.9	161.3	160.4	21.7	22.2	22.0
Exports	33.8	26.3	28.6	13.2	8.2	8.1	8.4	6.1	6.8
Closing stocks	17.5	14.8	13.5	18.4	17.2	16.2	2.8	3.4	3.2
	TOTAL OF ABOVE			**TOTAL OF ABOVE**			**TOTAL OF ABOVE**		
Opening Stocks	51.0	53.6	61.9	83.3	78.2	93.9	43.2	33.8	32.8
Production	277.8	292.4	265.1	600.6	646.8	618.7	164.8	174.0	172.9
Imports	9.7	8.3	9.5	19.9	19.9	21.5	1.5	1.5	1.5
Total Supply	**338.5**	**354.3**	**336.5**	**703.8**	**744.9**	**734.1**	**209.5**	**209.3**	**207.2**
Domestic use	182.7	181.9	181.4	519.0	538.3	537.1	139.2	141.2	142.5
Exports	102.3	110.5	103.7	106.7	112.5	103.9	36.4	35.5	34.7
Closing stocks	53.6	61.9	51.4	78.2	93.9	93.1	33.8	32.8	29.9

[1] Trade data include wheat flour in wheat grain equivalent. For the **EU** semolina is also included

[2] **Argentina** (December/November) for rye, barley and oats, (March/February) for maize and sorghum. **Australia** (November/October) for rye, barley and oats, (March/February) for maize and sorghum. **Canada** (August.July), **EU** (July/June), **United States** (June/May) for rye, barley and oats, (September/August) for maize and sorghum

APPENDIX TABLE 10: **TOTAL OILCROPS STATISTICS** (*million tonnes*)

	Production [1]			Imports			Exports		
	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*
ASIA	**130.5**	**135.0**	**136.9**	**111.1**	**131.7**	**136.8**	**3.3**	**3.9**	**3.4**
China	58.7	58.6	61.2	82.5	98.1	100.5	1.1	1.0	1.0
of which Taiwan Prov.	0.1	0.1	0.1	2.5	2.6	2.7	-	-	-
India	34.7	38.9	35.9	0.4	0.3	0.3	0.8	1.3	1.0
Indonesia	11.2	11.4	12.3	2.5	2.8	3.0	0.1	0.1	0.1
Iran, Islamic Republic of	0.7	0.7	0.7	1.3	2.2	2.5	0.1	0.1	0.1
Japan	0.3	0.3	0.3	5.8	6.1	6.2	-	-	-
Korea, Republic.of	0.2	0.1	0.2	1.6	1.5	1.7	-	-	-
Malaysia	4.8	5.0	5.2	0.8	0.9	1.1	0.1	0.1	0.1
Pakistan	4.9	4.3	4.9	1.8	2.9	3.2	-	-	-
Thailand	0.8	1.1	1.2	2.4	2.8	3.3	-	-	-
Turkey	3.2	3.2	3.6	3.0	3.3	3.3	0.1	0.1	0.1
AFRICA	**17.9**	**18.0**	**18.5**	**3.8**	**4.9**	**4.9**	**0.7**	**0.7**	**0.7**
Nigeria	5.1	5.0	5.0	-	-	0.1	0.1	0.1	0.1
CENTRAL AMERICA	**1.7**	**2.0**	**1.9**	**6.5**	**6.6**	**6.7**	**0.2**	**0.2**	**0.2**
Mexico	1.3	1.5	1.4	5.7	5.9	5.9	-	-	-
SOUTH AMERICA	**174.7**	**196.2**	**188.8**	**2.3**	**3.8**	**4.2**	**69.6**	**81.3**	**83.2**
Argentina	61.9	61.1	60.6	0.2	1.6	1.6	10.4	8.1	9.7
Brazil	96.1	117.1	110.5	0.4	0.3	0.4	50.8	63.9	64.4
Paraguay	9.4	10.6	10.1	-	-	-	5.0	6.0	5.7
Uruguay	3.3	3.6	3.4	-	-	-	3.0	3.1	3.3
NORTH AMERICA	**136.1**	**154.8**	**162.0**	**3.0**	**2.3**	**2.3**	**65.5**	**76.6**	**80.3**
Canada	25.2	27.3	29.2	0.6	0.7	0.6	14.4	16.4	18.0
United States of America	110.9	127.5	132.8	2.4	1.7	1.7	51.1	60.2	62.3
EUROPE	**66.5**	**70.6**	**72.9**	**21.3**	**23.8**	**22.2**	**6.1**	**6.9**	**6.9**
European Union	33.7	31.7	34.9	18.5	21.1	19.6	1.1	1.0	1.0
Russian Federation	13.4	16.0	16.3	2.1	2.0	1.9	0.5	1.0	1.0
Ukraine	17.0	20.7	19.4	-	-	-	3.9	4.4	4.3
OCEANIA	**4.9**	**6.0**	**4.7**	**-**	**-**	**-**	**2.8**	**3.7**	**2.4**
Australia	4.5	5.6	4.2	-	-	-	2.7	3.6	2.3
WORLD	**532.3**	**582.6**	**585.7**	**147.9**	**173.2**	**177.2**	**148.1**	**173.2**	**177.1**
Developing countries	325.0	351.3	346.2	117.8	140.9	146.5	73.8	86.1	87.6
Developed countries	207.3	231.3	239.5	30.1	32.3	30.7	74.3	87.1	89.5
LIFDC	58.5	62.3	59.8	4.0	5.4	6.3	1.6	2.1	1.8
LDC	10.8	11.0	10.9	1.1	1.5	2.1	0.5	0.5	0.5

[1] The split years bring together northern hemisphere annual crops harevested in the latter part of the first year shown, with southern hemisphere annual crops harvested in the early part of the second year shown; for tree crops which are produced throughout the year, calendar year production for the second year shown is used.

APPENDIX TABLE 11: **TOTAL OILS AND FATS STATISTICS** [1] (*million tonnes*)

	Imports			Exports			Utilization		
	13/14-15/16 average	**2016/17** *estim.*	**2017/18** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*	**13/14-15/16** average	**2016/17** *estim.*	**2017/18** *f'cast*
ASIA	**44.7**	**48.3**	**50.0**	**49.5**	**50.9**	**52.6**	**105.8**	**115.7**	**121.4**
Bangladesh	1.9	2.3	2.5	-	-	-	2.3	2.7	2.9
China	9.4	8.5	9.0	0.4	0.4	0.3	36.7	38.8	40.7
of which Taiwan Prov.	0.5	0.5	0.5	-	-	-	0.9	1.0	1.0
India	13.8	15.5	16.2	0.3	0.2	0.2	22.9	25.3	26.0
Indonesia	0.1	0.1	0.1	26.4	28.9	29.5	10.7	12.1	13.3
Iran, Islamic Republic of	1.3	1.5	1.5	0.2	0.1	0.2	1.8	2.0	2.1
Japan	1.3	1.3	1.4	-	-	-	3.2	3.3	3.3
Korea, Republic.of	1.1	1.2	1.3	-	-	-	1.4	1.6	1.7
Malaysia	1.4	1.4	1.4	18.5	17.7	18.8	4.6	4.6	5.3
Pakistan	3.0	3.5	3.6	0.1	0.1	0.1	4.7	5.2	5.5
Philippines	0.9	1.2	1.3	0.8	0.8	0.9	1.7	2.0	2.2
Singapore	0.8	0.8	0.9	0.2	0.2	0.2	0.7	0.7	0.7
Turkey	1.8	2.0	2.0	0.7	0.7	0.7	3.1	3.4	3.3
AFRICA	**10.6**	**11.3**	**11.6**	**1.8**	**1.7**	**1.8**	**16.9**	**18.1**	**18.2**
Algeria	0.8	0.9	1.0	0.1	0.1	0.1	1.0	1.0	1.1
Egypt	2.0	2.2	2.3	0.3	0.2	0.2	2.3	2.8	2.7
Nigeria	1.5	1.6	1.6	0.2	0.1	0.1	3.4	3.5	3.5
South Africa	0.9	0.9	0.8	0.1	-	-	1.3	1.5	1.5
CENTRAL AMERICA	**2.6**	**2.6**	**2.7**	**1.2**	**1.4**	**1.4**	**5.1**	**5.3**	**5.4**
Mexico	1.5	1.5	1.6	0.1	-	-	3.4	3.6	3.7
SOUTH AMERICA	**3.2**	**3.2**	**3.3**	**9.8**	**10.5**	**11.4**	**17.5**	**18.5**	**18.5**
Argentina	0.1	0.1	0.1	5.8	6.4	7.0	4.0	4.3	4.0
Brazil	0.6	0.7	0.6	1.8	1.7	1.8	8.7	9.1	9.3
Paraguay	-	-	-	0.7	0.7	0.7	0.1	0.1	0.1
Uruguay	0.1	0.1	0.1	-	-	-	0.1	0.1	0.2
NORTH AMERICA	**5.1**	**5.5**	**5.8**	**6.6**	**7.4**	**7.4**	**20.4**	**21.2**	**22.0**
Canada	0.5	0.5	0.5	3.3	3.8	3.8	1.5	1.5	1.6
United States of America	4.7	5.0	5.4	3.4	3.5	3.6	18.9	19.7	20.4
EUROPE	**14.3**	**14.7**	**14.5**	**10.5**	**12.6**	**11.9**	**38.6**	**39.7**	**39.2**
European Union	11.7	12.0	11.7	3.3	3.2	3.1	31.9	32.6	32.2
Russian Federation	1.3	1.3	1.4	2.3	2.9	2.8	4.5	4.7	4.7
Ukraine	0.3	0.3	0.3	4.5	6.1	5.5	1.0	0.9	0.8
OCEANIA	**0.6**	**0.7**	**0.7**	**1.9**	**1.9**	**1.9**	**1.2**	**1.3**	**1.3**
Australia	0.5	0.5	0.6	0.7	0.7	0.7	0.8	0.9	0.9
WORLD	**81.1**	**86.4**	**88.5**	**81.4**	**86.4**	**88.5**	**205.5**	**219.8**	**226.0**
Developing countries	59.8	64.1	66.1	63.0	65.2	67.9	142.2	154.5	160.3
Developed countries	21.3	22.2	22.3	18.4	21.2	20.5	63.2	65.3	65.7
LIFDC	26.2	29.2	30.3	2.2	2.1	2.1	42.7	46.7	48.0
LDC	6.9	7.7	8.0	0.6	0.7	0.7	9.8	10.7	11.1

[1] Includes oils and fats of vegetable, marine and animal origin.

APPENDIX TABLE 12: **TOTAL MEALS AND CAKES STATISTICS** [1] (*million tonnes*)

	Imports			Exports			Utilization		
	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*	13/14-15/16 average	2016/17 *estim.*	2017/18 *f'cast*
ASIA	**35.1**	**37.7**	**38.8**	**14.2**	**14.0**	**14.3**	**152.0**	**171.7**	**179.2**
China	2.3	3.0	2.9	2.3	1.9	2.0	80.8	93.4	96.6
of which Taiwan Prov.	0.5	0.5	0.5	-	-	-	2.5	2.5	2.6
India	0.2	0.4	0.5	2.6	2.6	2.4	12.8	13.9	14.3
Indonesia	4.2	4.5	4.6	4.3	4.5	4.7	6.5	7.0	7.4
Iran, Islamic Republic of	2.1	2.0	1.9	0.1	0.1	0.1	3.4	3.8	4.1
Japan	2.3	2.2	2.2	-	-	-	6.4	6.4	6.6
Korea, Republic.of	3.9	3.5	3.8	0.2	0.1	0.1	5.0	4.8	4.9
Malaysia	1.3	1.4	1.5	2.6	2.6	2.8	2.0	2.1	2.4
Pakistan	0.7	0.7	0.8	0.2	0.3	0.3	3.6	4.1	4.6
Philippines	2.5	2.9	3.1	0.5	0.4	0.4	3.0	3.5	3.8
Saudi Arabia	0.9	1.1	1.1	0.1	0.1	0.1	1.4	1.5	1.7
Thailand	3.2	3.2	3.4	0.2	0.2	0.2	5.7	6.4	6.6
Turkey	1.9	2.2	2.2	0.1	0.1	0.1	5.1	5.9	6.3
Viet Nam	4.7	5.5	6.0	0.3	0.3	0.3	5.9	7.3	7.7
AFRICA	**5.8**	**6.0**	**6.2**	**1.0**	**1.0**	**1.0**	**13.1**	**14.2**	**14.6**
Egypt	1.6	1.5	1.7	-	-	-	3.0	3.4	3.5
South Africa	1.0	1.0	0.9	0.1	0.1	0.1	2.1	2.3	2.3
CENTRAL AMERICA	**4.0**	**4.4**	**4.5**	**0.2**	**0.2**	**0.2**	**9.1**	**10.1**	**10.1**
Mexico	2.2	2.4	2.5	0.1	0.1	0.1	6.7	7.5	7.5
SOUTH AMERICA	**5.5**	**5.4**	**5.4**	**49.1**	**51.7**	**54.4**	**28.4**	**30.9**	**31.9**
Argentina	-	-	-	29.2	32.6	33.4	4.1	5.0	5.2
Bolivia	-	-	-	1.8	1.6	1.8	0.2	0.4	0.4
Brazil	-	-	-	14.3	13.8	15.2	16.6	17.6	18.2
Chile	1.2	1.2	1.2	0.2	0.2	0.2	1.6	1.7	1.7
Paraguay	-	-	-	2.6	2.3	2.5	0.4	0.5	0.6
Peru	1.0	1.2	1.3	0.8	1.0	1.0	1.3	1.6	1.7
Uruguay	0.2	0.2	0.2	-	-	-	0.2	0.2	0.2
Venezuela	1.2	0.7	0.7	-	-	-	1.4	1.0	0.9
NORTH AMERICA	**5.1**	**5.1**	**5.0**	**16.3**	**16.5**	**16.8**	**37.1**	**39.0**	**39.5**
Canada	1.0	0.9	0.8	4.8	5.5	5.5	2.2	2.2	1.9
United States of America	4.1	4.2	4.1	11.5	11.0	11.3	34.9	36.8	37.5
EUROPE	**30.5**	**30.8**	**32.3**	**7.9**	**8.9**	**8.6**	**67.5**	**70.6**	**72.0**
European Union	27.9	28.0	29.5	1.3	1.4	1.4	57.5	59.0	60.5
Russian Federation	0.6	0.5	0.5	2.2	2.0	2.0	5.6	6.8	6.9
Ukraine	-	-	-	3.9	5.1	4.7	1.7	1.8	1.7
OCEANIA	**3.1**	**3.2**	**3.3**	**0.3**	**0.2**	**0.2**	**3.8**	**4.0**	**4.3**
Australia	1.1	1.2	1.2	0.1	0.1	0.1	1.8	1.9	2.0
WORLD	**89.0**	**92.5**	**95.4**	**89.1**	**92.6**	**95.5**	**311.1**	**340.5**	**351.6**
Developing countries	48.1	51.3	52.7	64.7	67.0	70.0	196.3	220.5	229.4
Developed countries	40.9	41.2	42.7	24.4	25.5	25.5	114.8	120.0	122.2
LIFDC	3.0	3.5	3.6	3.8	3.9	3.6	24.3	26.7	27.9
LDC	0.8	1.0	0.9	0.5	0.5	0.5	4.4	5.0	5.3

[1] Expressed in product weight; includes meals and cakes derived from oilcrops as well as fish meal and other meals from animal origin.

APPENDIX TABLE 13: **TOTAL MEAT STATISTICS**[1]
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*
ASIA	**133 231**	**134 019**	**17 290**	**17 305**	**4 177**	**4 305**	**146 386**	**147 013**
China	81 942	81 834	5 776	5 486	538	555	87 190	86 775
India	6 987	7 166	1	1	1 665	1 717	5 323	5 450
Indonesia	3 471	3 486	170	196	5	5	3 637	3 678
Iran, Islamic Republic of	2 667	2 690	122	136	86	68	2 703	2 758
Japan	3 987	3 991	3 292	3 478	15	16	7 278	7 466
Korea, Republic of	2 454	2 448	1 239	1 292	40	13	3 663	3 716
Malaysia	1 877	1 902	338	333	65	67	2 150	2 169
Pakistan	3 252	3 285	33	34	66	66	3 219	3 254
Philippines	3 493	3 612	516	522	11	11	3 998	4 123
Saudi Arabia	884	918	1 092	1 072	103	103	1 873	1 887
Singapore	116	118	365	374	35	32	447	460
Thailand	3 188	3 333	21	20	1 020	1 102	2 193	2 235
Turkey	3 413	3 565	9	7	343	365	3 082	3 207
Viet Nam	4 895	4 985	1 550	1 563	32	37	6 414	6 511
AFRICA	**17 846**	**17 909**	**2 718**	**2 735**	**272**	**270**	**20 293**	**20 374**
Algeria	752	760	85	90	1	1	835	849
Angola	289	294	369	446	-	-	658	740
Egypt	2 417	2 445	358	313	9	7	2 767	2 751
Nigeria	1 446	1 441	3	3	1	1	1 449	1 443
South Africa	3 267	3 242	626	617	168	168	3 726	3 691
CENTRAL AMERICA	**9 415**	**9 648**	**3 228**	**3 371**	**549**	**584**	**12 094**	**12 435**
Cuba	337	349	288	352	-	-	626	701
Mexico	6 614	6 814	2 063	2 126	325	348	8 352	8 592
SOUTH AMERICA	**42 233**	**43 038**	**1 103**	**1 157**	**8 469**	**8 546**	**34 867**	**35 649**
Argentina	5 352	5 524	46	55	454	505	4 944	5 074
Brazil	26 356	26 893	70	63	6 896	6 935	19 530	20 022
Chile	1 477	1 469	495	522	335	327	1 637	1 664
Colombia	2 634	2 700	158	181	14	15	2 777	2 866
Uruguay	657	669	55	57	395	404	317	322
Venezuela	1 540	1 524	161	158	-	-	1 701	1 682
NORTH AMERICA	**49 225**	**50 760**	**2 825**	**2 808**	**9 004**	**9 396**	**43 056**	**44 145**
Canada	4 595	4 734	735	726	1 838	1 865	3 478	3 585
United States of America	44 629	46 025	2 078	2 071	7 166	7 531	39 567	40 548
EUROPE	**63 026**	**63 159**	**2 917**	**2 865**	**5 875**	**5 688**	**60 073**	**60 336**
Belarus	1 167	1 177	47	52	307	303	907	926
European Union	48 063	48 039	1 337	1 259	5 002	4 740	44 398	44 558
Russian Federation	9 634	9 881	1 073	1 080	215	243	10 497	10 718
Ukraine	2 380	2 256	94	105	272	315	2 202	2 047
OCEANIA	**6 311**	**6 282**	**482**	**489**	**2 814**	**2 757**	**3 992**	**4 021**
Australia	4 423	4 426	246	253	1 852	1 822	2 829	2 863
New Zealand	1 379	1 347	76	77	958	932	498	492
WORLD	**321 288**	**324 814**	**30 563**	**30 729**	**31 159**	**31 546**	**320 761**	**323 972**
Developing countries	199 248	201 132	21 206	21 249	13 455	13 692	207 027	208 671
Developed countries	122 040	123 683	9 357	9 480	17 705	17 855	113 735	115 301
LIFDCs	23 530	23 763	1 302	1 274	1 892	1 952	22 941	23 085
LDCs	10 538	10 612	1 321	1 402	23	22	11 835	11 992

[1] including "other meat"

APPENDIX TABLE 14: **BOVINE MEAT STATISTICS**
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*
ASIA	**18 257**	**18 523**	**4 855**	**5 091**	**1 881**	**1 924**	**21 238**	**21 697**
China	7 015	7 086	1 404	1 491	33	27	8 356	8 560
India	2 642	2 674	-	-	1 638	1 690	1 004	984
Indonesia	510	505	154	181	-	-	664	686
Iran, Islamic Republic of	195	205	115	127	4	5	306	327
Japan	465	460	706	764	3	3	1 202	1 228
Korea, Republic of	277	282	451	471	7	6	721	737
Malaysia	31	32	202	195	10	9	224	218
Pakistan	1 759	1 789	4	4	34	35	1 729	1 758
Philippines	310	313	154	158	3	3	461	468
AFRICA	**6 300**	**6 277**	**659**	**625**	**115**	**116**	**6 844**	**6 786**
Algeria	137	138	78	84	-	-	215	222
Angola	111	113	70	75	-	-	181	188
Egypt	923	930	340	296	6	5	1 257	1 221
South Africa	952	902	26	26	55	58	922	870
CENTRAL AMERICA	**2 568**	**2 611**	**390**	**401**	**337**	**358**	**2 620**	**2 654**
Mexico	1 880	1 915	206	209	165	176	1 921	1 948
SOUTH AMERICA	**15 309**	**15 626**	**420**	**415**	**2 614**	**2 666**	**13 115**	**13 376**
Argentina	2 650	2 760	-	-	234	266	2 416	2 494
Brazil	9 284	9 450	58	52	1 617	1 641	7 725	7 861
Chile	215	210	277	285	10	11	482	484
Colombia	786	814	4	4	13	14	777	804
Uruguay	550	560	6	6	375	383	181	183
Venezuela	522	524	54	50	-	-	576	574
NORTH AMERICA	**12 632**	**13 269**	**1 479**	**1 438**	**1 597**	**1 691**	**12 469**	**13 037**
Canada	1 130	1 160	259	241	394	405	987	991
United States of America	11 502	12 109	1 217	1 194	1 203	1 286	11 479	12 043
EUROPE	**10 494**	**10 480**	**837**	**830**	**496**	**526**	**10 834**	**10 784**
European Union	7 773	7 795	326	309	297	327	7 802	7 777
Russian Federation	1 605	1 581	427	433	42	42	1 990	1 972
Ukraine	385	375	2	2	24	34	364	344
OCEANIA	**2 753**	**2 719**	**54**	**53**	**1 882**	**1 837**	**938**	**937**
Australia	2 117	2 095	15	15	1 344	1 317	802	795
New Zealand	616	604	12	11	535	517	92	98
WORLD	**68 312**	**69 505**	**8 693**	**8 853**	**8 922**	**9 118**	**68 059**	**69 270**
Developing countries	41 988	42 597	5 644	5 795	4 946	5 063	42 659	43 329
Developed countries	26 324	26 908	3 049	3 058	3 976	4 055	25 399	25 941
LIFDCs	9 818	9 880	111	106	1 798	1 859	8 131	8 127
LDCs	3 531	3 544	133	138	4	4	3 661	3 678

APPENDIX TABLE 15: **OVINE MEAT STATISTICS**
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*
ASIA	**8 531**	**8 621**	**545**	**552**	**37**	**37**	**9 039**	**9 136**
Bangladesh	216	218	-	-	-	-	216	218
China	4 372	4 443	245	248	1	1	4 616	4 690
India	728	725	-	-	21	22	707	703
Iran, Islamic Republic of	295	296	3	5	-	-	298	301
Pakistan	477	478	-	-	7	6	470	472
Saudi Arabia	133	132	45	47	2	2	176	177
Turkey	380	382	1	1	-	-	381	383
AFRICA	**2 887**	**2 901**	**32**	**30**	**32**	**31**	**2 887**	**2 900**
Algeria	313	316	4	4	-	-	317	320
Nigeria	387	385	-	-	-	-	387	385
South Africa	213	216	9	8	1	1	221	223
Sudan	365	362	-	-	6	6	360	357
CENTRAL AMERICA	**123**	**124**	**20**	**20**	**-**	**-**	**143**	**144**
Mexico	94	95	10	10	-	-	104	105
SOUTH AMERICA	**311**	**316**	**6**	**6**	**15**	**16**	**303**	**306**
Brazil	118	120	6	6	-	-	124	126
NORTH AMERICA	**97**	**96**	**124**	**133**	**3**	**3**	**217**	**226**
United States of America	76	75	104	112	3	3	177	184
EUROPE	**1 290**	**1 318**	**173**	**153**	**24**	**36**	**1 439**	**1 434**
European Union	918	942	161	142	16	28	1 063	1 055
Russian Federation	224	225	3	2	-	-	227	227
OCEANIA	**1 143**	**1 099**	**27**	**25**	**798**	**781**	**373**	**344**
Australia	655	635	-	-	428	419	227	216
New Zealand	488	464	3	3	370	362	121	105
WORLD	**14 383**	**14 476**	**928**	**920**	**910**	**905**	**14 400**	**14 491**
Developing countries	11 852	11 962	607	610	84	84	12 375	12 488
Developed countries	2 530	2 513	320	310	825	820	2 025	2 003
LIFDCs	4 181	4 194	26	23	55	55	4 152	4 162
LDCs	1 624	1 636	7	7	17	16	1 614	1 627

APPENDIX TABLE 16: **PIGMEAT STATISTICS**
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*
ASIA	**63 630**	**64 462**	**4 967**	**4 727**	**192**	**205**	**68 449**	**68 987**
China	51 856	52 511	2 530	2 180	102	108	54 324	54 582
India	357	358	1	1	-	-	357	359
Indonesia	782	784	7	5	-	-	789	789
Japan	1 279	1 275	1 371	1 448	3	3	2 636	2 726
Korea, D.P.R.	101	99	3	4	-	-	104	103
Korea, Republic of	1 266	1 305	623	650	2	2	1 902	1 951
Malaysia	218	218	30	31	5	6	242	244
Philippines	1 866	1 950	115	128	3	3	1 978	2 075
Thailand	940	945	2	2	28	25	915	922
Viet Nam	3 665	3 710	56	46	31	36	3 689	3 720
AFRICA	**1 383**	**1 399**	**268**	**264**	**27**	**27**	**1 624**	**1 636**
Madagascar	58	57	-	-	-	-	58	57
Nigeria	256	255	1	-	-	-	257	255
South Africa	254	261	31	32	23	24	262	269
Uganda	118	118	1	1	-	-	118	118
CENTRAL AMERICA	**1 920**	**1 974**	**1 099**	**1 189**	**172**	**184**	**2 847**	**2 979**
Cuba	214	223	22	23	-	-	236	246
Mexico	1 376	1 420	875	954	150	162	2 101	2 212
SOUTH AMERICA	**5 917**	**5 992**	**273**	**319**	**1 058**	**1 043**	**5 133**	**5 268**
Argentina	519	549	35	45	2	2	552	592
Brazil	3 700	3 725	2	2	890	866	2 812	2 861
Chile	508	510	75	93	163	172	420	431
Colombia	349	365	66	81	-	-	415	446
Venezuela	170	162	33	33	-	-	203	195
NORTH AMERICA	**13 400**	**13 852**	**845**	**860**	**3 552**	**3 749**	**10 736**	**10 905**
Canada	2 081	2 130	243	249	1 264	1 274	1 065	1 105
United States of America	11 319	11 722	598	607	2 287	2 475	9 667	9 796
EUROPE	**29 061**	**28 796**	**501**	**506**	**3 233**	**2 962**	**26 329**	**26 341**
Belarus	398	412	9	10	41	47	366	375
European Union	23 679	23 419	13	14	3 107	2 810	20 586	20 623
Russian Federation	3 403	3 509	369	367	49	58	3 724	3 818
Serbia	330	335	28	35	17	22	341	348
Ukraine	760	623	4	4	4	7	761	620
OCEANIA	**524**	**540**	**295**	**302**	**35**	**39**	**782**	**808**
Australia	385	399	212	218	34	37	562	585
Papua New Guinea	72	71	8	8	-	-	80	79
WORLD	**115 836**	**117 015**	**8 247**	**8 167**	**8 269**	**8 209**	**115 899**	**116 924**
Developing countries	71 666	72 646	5 258	5 072	1 446	1 457	75 533	76 260
Developed countries	44 170	44 369	2 989	3 095	6 823	6 753	40 366	40 664
LIFDCs	1 603	1 605	149	145	3	3	1 749	1 748
LDCs	1 837	1 855	160	161	1	1	1 997	2 016

APPENDIX TABLE 17: **POULTRY MEAT STATISTICS**
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*	2016 *estim.*	2017 *f'cast*
ASIA	**40 857**	**40 458**	**6 873**	**6 884**	**2 043**	**2 115**	**45 678**	**45 210**
China	17 214	16 311	1 591	1 562	387	405	18 419	17 469
India	3 111	3 260	-	-	4	3	3 107	3 257
Indonesia	2 071	2 090	4	4	-	-	2 074	2 094
Iran, Islamic Republic of	2 160	2 172	-	-	78	58	2 082	2 114
Japan	2 230	2 243	1 179	1 228	9	9	3 390	3 462
Korea, Republic of	900	850	144	149	31	4	1 008	995
Kuwait	50	53	129	133	-	-	179	186
Malaysia	1 625	1 650	73	72	50	52	1 648	1 670
Saudi Arabia	638	670	903	885	70	70	1 471	1 485
Singapore	96	98	176	182	13	14	258	266
Thailand	2 056	2 194	3	2	955	1 042	1 108	1 138
Turkey	1 913	1 963	-	-	327	342	1 586	1 621
Yemen	144	137	78	83	-	-	222	220
AFRICA	**5 835**	**5 890**	**1 727**	**1 782**	**90**	**87**	**7 471**	**7 585**
Angola	35	33	218	288	-	-	253	321
South Africa	1 825	1 840	560	551	81	79	2 304	2 312
CENTRAL AMERICA	**4 684**	**4 818**	**1 701**	**1 742**	**38**	**39**	**6 347**	**6 521**
Cuba	35	36	242	303	-	-	277	339
Mexico	3 161	3 281	959	940	8	9	4 112	4 212
SOUTH AMERICA	**20 488**	**20 896**	**402**	**415**	**4 715**	**4 754**	**16 174**	**16 557**
Argentina	1 984	2 014	11	9	187	205	1 808	1 818
Brazil	13 223	13 567	3	3	4 364	4 403	8 862	9 167
Chile	728	722	143	144	153	135	718	731
Venezuela	840	830	74	75	-	-	914	905
NORTH AMERICA	**22 870**	**23 316**	**368**	**368**	**3 833**	**3 935**	**19 418**	**19 760**
Canada	1 364	1 423	213	215	179	186	1 386	1 447
United States of America	21 506	21 893	151	149	3 654	3 749	18 028	18 308
EUROPE	**20 988**	**21 372**	**1 240**	**1 209**	**2 037**	**2 079**	**20 195**	**20 502**
European Union	14 651	14 841	737	693	1 500	1 492	13 888	14 042
Russian Federation	4 312	4 476	226	230	124	142	4 419	4 564
Ukraine	1 190	1 213	85	97	244	273	1 032	1 037
OCEANIA	**1 459**	**1 492**	**102**	**105**	**57**	**60**	**1 504**	**1 537**
Australia	1 244	1 275	18	18	34	36	1 229	1 257
New Zealand	187	189	1	1	23	24	165	166
WORLD	**117 181**	**118 241**	**12 412**	**12 506**	**12 814**	**13 069**	**116 787**	**117 672**
Developing countries	69 662	69 846	9 606	9 682	6 877	6 986	72 390	72 526
Developed countries	47 519	48 395	2 805	2 824	5 937	6 083	44 397	45 146
LIFDCs	6 224	6 379	988	970	31	30	7 180	7 319
LDCs	2 862	2 894	994	1 069	2	2	3 854	3 962

APPENDIX TABLE 18: **MILK AND MILK PRODUCTS STATISTICS** (*thousand tonnes, milk equivalent*)

	Production			Imports			Exports		
	2013-2015 average	2016 estim.	2017 f'cast	2013-2015 average	2016 estim.	2017 f'cast	2013-2015 average	2016 estim.	2017 f'cast
ASIA	**316 603**	**337 466**	**344 433**	**39 480**	**40 294**	**40 908**	**6 709**	**6 658**	**6 554**
China	41 976	40 936	40 531	12 063	11 998	12 500	75	52	49
India [1]	146 501	162 964	169 320	89	124	136	706	276	213
Indonesia	1 265	1 230	1 250	2 573	2 839	2 863	87	55	50
Iran, Islamic Republic of	6 344	6 440	6 530	490	416	401	478	542	704
Japan	7 407	7 420	7 400	1 845	1 909	1 997	6	8	8
Korea, Republic.of	2 159	2 126	2 083	922	1 022	1 115	21	23	25
Malaysia	84	86	87	2 061	2 169	2 137	612	693	689
Pakistan	50 233	53 000	53 700	484	638	717	66	35	33
Philippines	20	21	22	1 650	2 518	2 456	119	211	46
Saudi Arabia	2 359	2 410	2 450	2 942	3 015	2 880	1 393	1 447	1 460
Singapore	-	-	-	1 787	1 576	1 585	629	573	531
Thailand	1 071	1 080	1 110	1 500	1 490	1 570	198	253	252
Turkey	18 719	19 900	19 980	214	160	115	541	930	873
AFRICA	**46 610**	**46 737**	**46 833**	**10 234**	**10 098**	**10 451**	**1 151**	**993**	**979**
Algeria	4 206	4 612	4 700	2 776	2 895	3 265	3	-	-
Egypt	5 580	5 630	5 650	1 683	1 612	1 562	473	363	361
Kenya	4 882	4 830	4 820	61	69	103	14	8	10
South Africa	3 299	3 180	3 280	244	265	279	337	342	346
Sudan	7 616	7 540	7 440	231	258	247	-	-	-
Tunisia	1 222	1 235	1 265	95	80	85	47	31	29
CENTRAL AMERICA	**16 937**	**17 299**	**17 598**	**5 012**	**5 718**	**5 801**	**703**	**849**	**931**
Costa Rica	1 081	1 120	1 140	55	64	66	162	160	161
Mexico	11 321	11 780	12 027	3 048	3 693	3 789	186	326	387
SOUTH AMERICA	**64 720**	**61 179**	**63 253**	**3 174**	**3 634**	**3 508**	**4 457**	**4 063**	**3 607**
Argentina	11 466	10 191	10 232	41	22	25	2 236	1 817	1 496
Brazil	34 810	32 725	34 427	854	1 659	1 462	293	180	194
Colombia	6 848	7 000	7 100	182	431	392	39	3	14
Uruguay	2 218	1 954	2 030	24	31	34	1 286	1 472	1 308
Venezuela	2 008	2 100	2 120	1 210	502	563	-	-	-
NORTH AMERICA	**101 680**	**105 444**	**107 551**	**2 386**	**2 806**	**2 689**	**10 603**	**10 585**	**11 629**
Canada	8 551	9 100	9 450	661	666	640	530	613	895
United States of America	93 127	96 343	98 100	1 710	2 124	2 032	10 071	9 971	10 733
EUROPE	**217 471**	**222 070**	**223 103**	**7 366**	**6 669**	**6 727**	**23 262**	**24 788**	**25 369**
Belarus	6 824	7 169	7 290	170	204	128	3 634	3 930	3 722
European Union	158 867	163 800	164 500	1 427	1 310	1 247	17 347	18 480	19 348
Russian Federation	30 527	30 350	30 563	4 833	4 271	4 438	247	302	270
Ukraine	11 069	10 407	10 334	144	50	52	663	650	713
OCEANIA	**30 655**	**31 629**	**30 712**	**1 116**	**1 340**	**1 515**	**21 922**	**22 719**	**22 491**
Australia [2]	9 688	9 991	9 301	720	889	1 098	3 274	3 341	3 280
New Zealand [3]	20 897	21 568	21 341	201	281	245	18 645	19 374	19 208
WORLD	**794 676**	**821 824**	**833 483**	**68 769**	**70 559**	**71 599**	**68 807**	**70 655**	**71 561**
Developing countries	411 533	428 668	438 163	55 160	56 890	57 671	12 598	12 140	11 639
Developed countries	383 143	393 156	395 795	13 609	13 670	13 928	56 208	58 516	59 921
LIFDC	247 389	267 126	274 090	5 958	6 219	6 398	1 381	875	827
LDC	33 448	33 784	33 671	3 990	4 016	4 055	174	138	136

[1] For production, the annual dairy cycle starting in April is applied
[2] For production, the annual dairy cycle starting in June is applied
[3] For production, the annual dairy cycle starting in May is applied

Note: Trade values that refer to milk equivalents were derived by applying the following weights: butter (6.60), cheese (4.40), skim/whole milk powder (7.60), skim condensed/evaporated milk (1.90), whole condensed/evaporated milk (2.10), yoghurt (1.0), cream (3.60), casein (7.40), skim milk (0.70), liquid milk (1.0), whey dry (7.6). The conversion factors cited refer to the solids content method. Refer to IDF Bulletin No. 390 (March 2004)

APPENDIX TABLE 19: FISH AND FISHERY PRODUCTS STATISTICS [1]

	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2014	2015	2014	2015	2015	2016 estim.	2017 f'cast	2015	2016 estim.	2017 f'cast
	Million tonnes (live weight equivalent)				USD billion			USD billion		
ASIA[2]	**50.5**	**50.7**	**65.5**	**68.4**	**51.8**	**54.4**	**57.8**	**41.6**	**43.8**	**48.2**
China	18.3	18.7	45.8	47.9	22.2	22.5	22.8	13.4	14.0	15.9
of which: Hong Kong SAR	0.2	0.1	-	-	0.8	0.8	0.7	3.6	3.8	3.4
Taiwan Prov.	1.1	1.0	0.3	0.3	1.6	1.6	1.7	1.2	1.3	1.3
India	5.0	4.8	4.9	5.2	4.9	5.6	7.6	0.1	0.1	0.1
Indonesia	6.4	6.5	4.3	4.3	3.6	3.9	3.8	0.3	0.4	0.4
Japan	3.6	3.5	0.6	0.7	1.9	2.0	2.0	13.5	13.9	15.0
Korea, Republic.of	1.7	1.6	0.5	0.5	1.5	1.7	1.7	4.3	4.6	5.1
Philippines	2.2	2.2	0.8	0.8	0.8	0.7	0.9	0.4	0.4	0.5
Thailand	1.7	1.7	0.9	0.9	5.7	5.8	6.0	2.5	3.1	3.6
Viet Nam	2.7	2.8	3.3	3.4	6.8	7.4	7.7	1.3	1.3	1.3
AFRICA	**8.6**	**8.8**	**1.7**	**1.8**	**6.0**	**6.3**	**6.5**	**5.3**	**5.5**	**5.6**
Egypt	0.3	0.3	1.1	1.2	-	-	0.1	0.8	0.7	0.5
Morocco	1.4	1.4	-	-	2.0	2.1	2.1	0.2	0.2	0.2
Namibia	0.4	0.5	-	-	0.6	0.7	0.8	-	0.1	0.1
Nigeria	0.8	0.7	0.3	0.3	0.1	0.1	0.1	1.2	1.2	1.3
Senegal	0.5	0.4	-	-	0.4	0.4	0.4	-	-	-
South Africa	0.6	0.6	-	-	0.5	0.6	0.6	0.3	0.4	0.4
CENTRAL AMERICA	**2.2**	**2.1**	**0.4**	**0.4**	**2.5**	**2.5**	**2.8**	**1.7**	**1.7**	**1.9**
Mexico	1.5	1.5	0.2	0.2	1.0	1.0	1.2	0.8	0.8	0.9
Panama	0.2	0.1	-	-	0.2	0.2	0.2	0.1	0.1	0.1
SOUTH AMERICA	**8.6**	**9.3**	**2.4**	**2.3**	**13.1**	**13.8**	**17.4**	**2.8**	**2.8**	**3.2**
Argentina	0.8	0.8	-	-	1.5	1.7	2.0	0.2	0.2	0.2
Brazil	0.8	0.7	0.6	0.6	0.2	0.2	0.2	1.2	1.2	1.4
Chile	2.2	1.8	1.2	1.0	4.8	5.1	6.3	0.4	0.3	0.4
Ecuador	0.7	0.6	0.4	0.4	3.7	3.9	4.8	0.1	0.1	0.1
Peru	3.6	4.8	0.1	0.1	2.4	2.2	3.5	0.2	0.3	0.3
NORTH AMERICA	**6.1**	**6.2**	**0.6**	**0.6**	**11.0**	**11.7**	**11.8**	**22.5**	**22.4**	**24.7**
Canada	0.9	0.9	0.1	0.2	4.7	5.0	5.4	2.7	2.8	3.0
United States of America	5.0	5.0	0.4	0.4	5.9	6.2	5.9	19.8	19.5	21.8
EUROPE	**13.7**	**14.1**	**2.9**	**3.0**	**46.0**	**50.7**	**54.1**	**51.9**	**56.9**	**60.1**
European Union[2]	5.4	5.3	1.3	1.3	29.8	32.8	34.7	47.2	52.1	54.9
of which extra-EU	-	-	-	-	5.4	5.7	6.4	25.0	27.2	28.6
Iceland	1.1	1.3	-	-	2.1	2.0	1.9	0.2	0.1	0.1
Norway	2.3	2.3	1.3	1.4	9.2	10.8	11.7	1.2	1.2	1.1
Russian Federation	4.3	4.5	0.2	0.2	3.7	3.8	4.3	1.6	1.7	2.0
OCEANIA	**1.3**	**1.4**	**0.2**	**0.2**	**2.9**	**3.0**	**3.1**	**1.8**	**1.8**	**2.0**
Australia	0.2	0.2	0.1	0.1	1.1	1.0	1.0	1.4	1.5	1.6
New Zealand	0.4	0.4	0.1	0.1	1.1	1.2	1.2	0.2	0.2	0.2
WORLD[3]	**91.1**	**92.6**	**73.7**	**76.6**	**133.2**	**142.4**	**153.5**	**127.6**	**134.9**	**145.7**
Excl. intra-EU	-	-	-	-	108.9	115.3	125.2	105.4	110.0	119.5
Developing countries	66.6	67.8	69.3	72.0	71.9	75.5	83.1	37.2	39.1	42.9
Developed countries	24.5	24.7	4.4	4.6	61.3	66.9	70.4	90.4	95.8	102.8
LIFDCs	12.3	12.2	7.6	8.1	8.1	9.0	11.1	3.2	3.4	3.6
LDCs	8.6	8.7	3.4	3.5	2.9	3.1	3.1	1.1	1.2	1.3
NFIDCs	16.4	17.8	5.0	5.1	9.9	10.1	11.9	4.1	4.4	4.4

[1] Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fishmeal and fish oil

[2] EU 28. Including intra-trade. Cyprus is included in Asia as well as in the European Union

[3] For capture fisheries production, the aggregate includes 3 782 tonnes in 2014 and 38 732 tonnes in 2015 from non-identified countries; these data are not included in any other aggregates

APPENDIX TABLE 20: **SELECTED INTERNATIONAL PRICES FOR WHEAT AND COARSE GRAINS**

Period	Wheat			Maize		Barley		Sorghum
	US No. 2 Hard Red Winter Ord. Prot. [1]	US Soft Red Winter No. 2 [2]	Argentina Trigo Pan [3]	US No. 2 Yellow [2]	Argentina [3]	France feed Rouen	Australia feed Southern States	US No. 2 Yellow [2]
	(USD/tonne)							
Annual (July/June)								
2006/07	212	176	188	150	145	185	185	155
2007/08	361	311	322	200	192	319	300	206
2008/09	270	201	234	188	180	178	179	170
2009/10	209	185	224	160	168	146	154	165
2010/11	316	289	311	254	260	266	248	248
2011/12	300	259	264	281	269	270	249	264
2012/13	348	310	336	311	277	297	298	281
2013/14	318	265	335	216	219	243	241	218
2014/15	266	221	246	173	177	205	242	210
2015/16	211	194	208	166	170	174	185	173
2016/17	197	170	190	156	172	157	161	151
2016 – October	193	164	184	152	174	155	153	146
2016 – November	191	167	176	152	178	159	154	143
2016 – December	187	162	168	154	181	150	155	154
2017 – January	201	173	177	159	183	147	161	155
2017 – February	210	180	186	163	179	157	165	157
2017 – March	198	176	192	159	163	162	163	150
2017 – April	191	173	189	157	164	161	160	150
2017 – May	200	175	189	158	161	166	167	158
2017 – June	226	182	190	158	155	167	193	164
2017 – July	240	206	193	159	150	171	213	173
2017 – August	201	173	190	148	149	172	198	170
2017 – September	215	176	181	147	149	182	207	169
2017 – October	214	178	182	149	150	186	203	171

[1] Delivered United States f.o.b Gulf; [2] Delivered United States Gulf; [3] Up River f.o.b.
Sources: International Grain Council and USDA.

APPENDIX TABLE 21: TOTAL **WHEAT AND MAIZE** FUTURES PRICES

	December		March		May		July	
	Dec. 2017	Dec. 2016	Mar. 2018	Mar. 2017	May 2018	May 2017	July 2018	July 2017
	(USD/tonne)							
Wheat								
Sept 19	163	148	170	156	176	161	180	165
Sept 26	167	146	174	154	179	159	186	163
Oct 3	165	145	171	153	176	158	180	162
Oct 10	160	148	167	156	172	161	177	165
Oct 17	160	156	167	162	172	167	177	172
Oct 24	161	148	168	156	173	162	177	167
Maize								
Sept 19	137	133	142	137	145	140	148	142
Sept 26	139	130	144	133	147	136	150	139
Oct 3	138	136	143	140	146	143	149	145
Oct 10	137	135	143	139	146	142	149	144
Oct 17	138	139	143	143	146	146	149	148
Oct 24	139	137	144	141	148	144	151	146

Source: Chicago Board of Trade (CBOT)

APPENDIX TABLE 22: **SELECTED INTERNATIONAL PRICES FOR RICE AND PRICE INDICES**

	International prices				FAO indices				
						Indica			
Period	Thai 100% B[1]	Thai broken [2]	US long grain [3]	Pakisan Basmati[4]	Total	Higher quality	Lower quality	Japonica	Aromatic
Annual (Jan/Dec)	*(USD per tonne)*				*(2002-2004=100)*				
2010	518	386	510	881	227	206	212	252	229
2011	565	464	577	1 060	242	232	250	258	220
2012	588	540	567	1 137	231	225	241	235	222
2013	534	483	628	1 372	233	219	226	230	268
2014	435	322	571	1 324	235	207	201	266	255
2015	395	327	490	849	211	184	184	263	176
2016	407	348	438	795	194	180	187	228	153
Monthly									
2016 – October	375	349	402	825	186	168	182	217	154
2016 – November	369	333	401	823	185	167	181	218	149
2016 – December	384	331	402	874	187	170	182	218	156
2017 – January	392	336	395	969	190	173	186	217	169
2017 – February	384	339	401	1 029	194	173	189	216	187
2017 – March	385	340	395	1 078	195	171	189	216	193
2017 – April	394	332	405	1 204	198	174	191	216	208
2017 – May	430	322	418	1 214	202	181	193	218	209
2017 – June	469	337	445	1 205	209	194	204	224	205
2017 – July	432	337	454	1 195	210	188	204	231	208
2017 – August	410	339	491	1 125	212	186	200	241	209
2017 – September	414	337	516	1 100	212	188	197	238	215
2017 – October	411	328	516	1169	216	188	195	250	216

[1] White rice, 100% second grade, f.o.b. Bangkok, indicative traded prices.
[2] A1 super, f.o.b. Bangkok, indicative traded prices.
[3] US No.2, 4% brokens f.o.b.
[4] Up to May 2011: Basmati ordinary, f.o.b. Karachi; from June 2011 onwards: Super Kernel White Basmati Rice 2%.

Note: The FAO Rice Price Index is based on 16 rice export quotations. 'Quality' is defined by the percentage of broken kernels, with higher (lower) quality referring to rice with less (equal to or more) than 20 percent brokens. The sub-index for Aromatic Rice follows movements in prices of Basmati and Fragrant rice.
Sources: FAO for indices. Rice prices: Livericeindex.com, Thai Department of Foreign Trade (DFT) and other public sources.

APPENDIX TABLE 23: SELECTED INTERNATIONAL PRICES FOR OILCROP PRODUCTS AND PRICE INDICES

Period	International prices[1]					FAO indices[7]		
	Soybeans [2]	Soybean oil [3]	Palm oil [4]	Soybean cake [5]	Rapeseed meal [6]	Oilseeds	Vegetable oils	Oilcakes/meals
	(USD per tonne)					(2002-2004=100)		
Annual (Oct/Sept)								
2004/05	275	545	419	212	130	104	103	101
2005/06	259	572	451	202	130	100	107	96
2006/07	335	772	684	264	184	129	150	128
2007/08	549	1325	1050	445	296	216	246	214
2008/09	422	826	627	385	196	157	146	179
2009/10	429	924	806	388	220	162	177	183
2010/11	549	1308	1147	418	279	214	259	200
2011/12	562	1235	1051	461	295	214	232	219
2012/13	563	1099	835	539	345	213	193	255
2013/14	521	949	867	534	324	194	189	253
2014/15	407	777	658	406	270	155	153	194
2015/16	396	773	655	351	232	151	155	168
2016/17	404	806	729	336	225	154	160	171
Monthly								
2015 - October	377	743	581	351	255	146	143	170
2015 - November	367	726	561	328	232	142	138	159
2015 - December	372	757	568	317	215	144	141	153
2016 - January	368	722	564	316	217	142	139	152
2016 - February	370	762	639	303	203	142	150	146
2016 - March	379	761	694	301	219	145	160	145
2016 - April	398	797	723	339	242	152	166	163
2016 - May	425	790	708	406	261	160	163	193
2016 - June	455	797	679	430	259	169	162	204
2016 - July	429	790	652	400	234	159	157	189
2016 - August	414	812	736	375	228	156	169	178
2016 - September	403	825	755	344	219	153	172	165
2016 - October	404	853	712	340	214	153	168	161
2016 - November	409	875	755	343	218	155	176	163
2016 - December	420	902	783	344	211	159	183	163
2017 - January	425	879	806	355	216	161	186	168
2017 - February	428	838	779	357	241	162	179	170
2017 - March	408	809	735	346	238	155	168	164
2017 - April	389	788	693	331	240	149	161	158
2017 - May	392	827	732	329	239	150	169	157
2017 - June	379	821	681	313	238	144	162	150
2017 - July	409	836	665	326	220	154	160	155
2017 - August	391	854	678	318	216	149	164	152
2017 - September	395	879	729	329	209	151	172	156
2017 - October	397	869	721	331	207	151	170	157

[1] Spot prices for nearest forward shipment

[2] Soybeans: US, No.2 yellow, c.i.f. Rotterdam.

[3] Soybean oil: Dutch, fob ex-mill.

[4] Palm oil: Crude, c.i.f. Northwest Europe.

[5] Soybean cake: Pellets, 44/45 percent, Argentina, c.i.f. Rotterdam.

[6] Rapeseed meal: 34 percent, Hamburg, f.o.b. ex-mill.

[7] The FAO indices are based on the international prices of five selected seeds, ten selected oils and five selected cakes and meals. The indices are calculated using the Laspeyres formula; the weights used are the export values of each commodity for the 2002-2004 period.

Sources: FAO and Oil World.

APPENDIX TABLE 24: SELECTED INTERNATIONAL PRICES FOR MILK PRODUCTS AND DAIRY PRICE INDEX

	International prices				FAO dairy price index
Period	Butter [1]	Skim milk powder [2]	Whole milk powder [3]	Cheddar cheese [4]	
Annual (Jan/Dec)	..... *(USD per tonne)*				... *(2002-2004=100)* ...
2007	3 337	4 336	4 354	4 055	220
2008	3 701	3 251	3 891	4 633	223
2009	2 736	2 332	2 556	2 957	150
2010	4 270	3 081	3 514	4 010	207
2011	4 876	3 556	4 018	4 310	230
2012	3 547	3 119	3 358	3 821	194
2013	4 484	4 293	4 745	4 402	243
2014	4 010	3 647	3 868	4 456	224
2015	3 212	2 113	2 509	3 340	160
2016	3 350	1 983	2 457	3 094	154
Monthly					
2016 – October	4 213	2 314	2 874	3 631	183
2016 – November	4 328	2 299	3 125	3 613	186
2016 – December	4 497	2 307	3 273	3 725	193
2017 – January	4 479	2 337	3 234	3 756	193
2017 – February	4 409	2 332	3 249	3 825	194
2017 – March	4 730	2 121	3 063	3 688	190
2017 – April	4 994	1 935	2 990	3 438	184
2017 – May	5 205	2 004	3 188	3 619	193
2017 – June	5 938	2 156	3 273	3 900	209
2017 – July	6 438	2 085	3 296	4 031	217
2017 – August	6 724	2 031	3 417	4 008	220
2017 – September	6 950	1 951	3 372	4 151	224
2017 – October	6 306	1 856	3 198	4 125	215

[1] Butter, 82% butterfat, f.o.b. Oceania and EU; average indicative traded prices
[2] Skim Milk Powder, 26% butterfat, f.o.b. Oceania and EU, average indicative traded prices
[3] Whole Milk Powder, 1.25% butterfat, f.o.b. Oceania and EU, average indicative traded prices
[4] Cheddar Cheese, 39% max. moisture, f.o.b. Oceania, indicative traded prices

Note: The FAO Dairy Price Index is derived from a trade-weighted average of a selection of representative internationally-traded dairy products
Sources: FAO for indices. Product prices: Mid-point of price ranges reported by Dairy Market News (USDA)

APPENDIX TABLE 25: **SELECTED INTERNATIONAL MEAT PRICES**

	Bovine meat prices			Ovine meat price	Pig meat prices			Poultry meat prices	
Period	Australia	United States	Brazil	New Zealand	United States	Brazil	Germany	United States	Brazil
Annual (Jan/Dec)	*(USD per tonne)*								
2007	2 544	4 023	2 367	2 498	2 117	2 200	1 907	935	1 443
2008	3 024	4 325	3 785	2 975	2 270	3 000	2 364	997	1 896
2009	2 562	3 897	3 118	3 495	2 202	2 223	2 035	989	1 552
2010	3 272	4 378	3 919	3 662	2 454	2 747	1 913	1 032	1 781
2011	3 944	4 516	4 816	5 370	2 648	3 023	2 169	1 147	2 083
2012	4 176	4 913	4 492	4 754	2 676	2 784	2 233	1 228	1 931
2013	4 009	5 535	4 326	4 130	2 717	2 872	2 311	1 229	2 014
2014	5 016	6 678	4 515	4 687	3 183	3 434	2 106	1 206	1 940
2015	4 638	6 201	4 130	3 641	2 576	2 499	1 582	1 003	1 642
2016	4 059	5 569	3 836	3 571	2 424	2 143	1 682	914	1 532
Monthly									
2016 – October	3 977	5 602	4 027	4 178	2 551	2 509	1 758	902	1 588
2016 – November	4 108	5 799	4 144	3 925	2 515	2 630	1 707	903	1 580
2016 – December	3 886	5 745	3 889	3 750	2 495	2 284	1 680	855	1 553
2017 – January	4 098	5 613	3 855	3 611	2 507	2 295	1 675	871	1 635
2017 – February	4 315	5 592	3 920	3 740	2 445	2 330	1 667	880	1 683
2017 – March	4 425	5 791	3 972	3 723	2 465	2 528	1 746	910	1 683
2017 – April	4 430	5 658	4 013	4 035	2 432	2 722	1 901	994	1 679
2017 – May	4 532	5 704	4 076	4 205	2 472	2 698	2 021	1 019	1 674
2017 – June	4 681	5 582	4 083	4 709	2 534	2 628	2 086	1 075	1 647
2017 – July	4 645	5 772	4 101	4 898	2 606	2 537	2 035	1 057	1 578
2017 – August	4 209	5 775	4 073	4 933	2 638	2 437	2 064	1 057	1 642
2017 – September	4 251	6 030	4 089	5 113	2 652	2 413	1 993	1 060	1 625
2017 – October	4 360	6 060	4 080	5 035	2 660	2 390	1 826	1 063	1 617

Bovine meat prices:
Australia: Cow 90CL export prices to the USA (FAS)
USA: Frozen beef, export unit value
Brazil: Frozen beef, export unit value

Ovine meat prices
New Zealand: Lamb 17.5kg cwt, export price

Pig meat prices:
USA: Frozen pigmeat, export unit value
Brazil: Frozen pigmeat, export unit value
Germany: Monthly market price for pig carcass grade E

Poultry meat prices:
USA: Broiler cuts, export unit value
Brazil: Export unit value for chicken (f.o.b.)

Prices for the two most recent months may be estimates and subject to revision.

APPENDIX TABLE 26: SELECTED INTERNATIONAL MEAT PRICES AND FAO MEAT PRICE INDICES

	FAO indices				
Period	**Total meat**	**Bovine meat**	**Ovine meat**	**Pig meat**	**Poultry meat**
Annual (Jan/Dec)	*(2002-2004=100)*				
2007	131	126	108	125	151
2008	161	158	128	152	184
2009	141	135	151	131	162
2010	158	165	158	138	179
2011	183	191	232	153	206
2012	182	195	205	153	201
2013	184	197	178	157	206
2014	198	231	202	164	200
2015	168	213	157	126	168
2016	156	191	154	123	156
Monthly					
2016 – October	162	193	180	131	158
2016 – November	163	200	169	130	158
2016 – December	157	191	162	125	153
2017 – January	159	193	156	125	160
2017 – February	161	197	161	125	163
2017 – March	165	202	161	130	165
2017 – April	169	201	174	137	170
2017 – May	173	205	182	141	171
2017 – June	176	206	203	143	173
2017 – July	175	208	211	142	167
2017 – August	174	202	213	142	172
2017 – September	174	204	221	140	171
2017 – October	173	206	217	134	170

The FAO Meat Price Indices consist of 2 poultry meat product quotations (the average weighted by assumed fixed trade weights), 3 bovine meat product quotations (average weighted by assumed fixed trade weights), 3 pig meat product quotations (average weighted by assumed fixed trade weights), 1 ovine meat product quotation (average weighted by assumed fixed trade weights): the four meat group average prices are weighted by world average export trade shares for 2002/2004.

Prices for the two most recent months may be estimates and subject to revision.

APPENDIX TABLE 27: **FISH PRICE INDICES**

Period	Total	Aquaculture	Capture	White fish	Salmon	Shrimp	Pelagic excl. tuna	Tuna	Other fish
Annual (Jan/Dec)					*(2002-2004=100)*				
2007	124	115	132	139	147	102	130	135	126
2008	136	120	148	151	151	109	148	162	133
2009	126	119	131	132	159	98	140	147	128
2010	137	137	136	138	187	109	144	146	146
2011	154	149	157	151	195	124	173	175	166
2012	144	124	157	145	146	107	207	195	176
2013	148	141	151	134	157	126	215	190	175
2014	157	158	153	142	159	148	210	175	185
2015	142	137	146	141	134	129	216	150	196
2016	146	145	146	141	162	129	207	153	194
Monthly									
2016 - January	140	136	141	137	141	126	189	142	193
2016 - February	142	140	142	140	144	123	201	150	191
2016 - March	144	144	143	140	151	124	204	148	188
2016 - April	143	144	142	143	157	122	209	146	183
2016 - May	142	147	139	144	162	117	169	150	192
2016 - June	147	149	145	145	170	125	201	150	197
2016 - July	145	144	145	142	172	125	232	152	194
2016 - August	147	143	151	142	162	129	228	166	197
2016 - September	150	144	154	140	160	134	215	174	196
2016 - October	152	149	152	139	170	141	228	155	200
2016 - November	151	149	148	139	173	143	204	150	194
2016 - December	151	152	146	137	182	138	197	149	201
2017 - January	151	154	147	138	190	131	228	153	205
2017 - February	149	150	146	133	180	129	227	161	187
2017 - March	150	152	147	136	176	131	242	159	188
2017 - April	150	151	148	138	179	133	241	154	191
2017 - May	151	154	148	140	185	131	202	159	204
2017 - June	154	155	152	147	185	132	198	167	210
2017 - July	156	153	155	148	185	136	213	167	219
2017 - August	157	151	162	146	174	141	230	175	225

Source= Norwegian Seafood Council (NSC).

Note: The FAO Fish Price Index is based on nominal import values expressed in CIF in the three major import markets; Japan, USA and EU. Separate indexes exist for products from aquaculture and from capture fisheries. Additional sub-indexes exist for the major commodity groups based on species.

APPENDIX TABLE 28: **SELECTED INTERNATIONAL COMMODITY PRICES**

	Currency and unit	Effective date	Latest quotation	One month ago	One year ago	Average 2011-2015
Sugar (ISA daily price)	US cents per lb	27-10-17	14.67	13.64	22.22	17.50
Coffee (ICO daily price)	US cents per lb	30-10-17	119.50	121.57	142.68	136.62
Cocoa (ICCO daily price)	US cents per lb	30-10-17	95.93	93.01	122.98	126.27
Tea (FAO Tea Composite Price)	USD per kg	29-09-17	3.24	3.21	2.66	2.71
Cotton (COTLOOK A index)	US cents per lb	30-10-17	79.10	80.60	78.52	81.65
Jute "BTD" (Fob Bangladesh Port)	USD per tonne	30-10-17	670.00	630.00	660.00	653.75

MARKET INIDCATORS

Futures markets

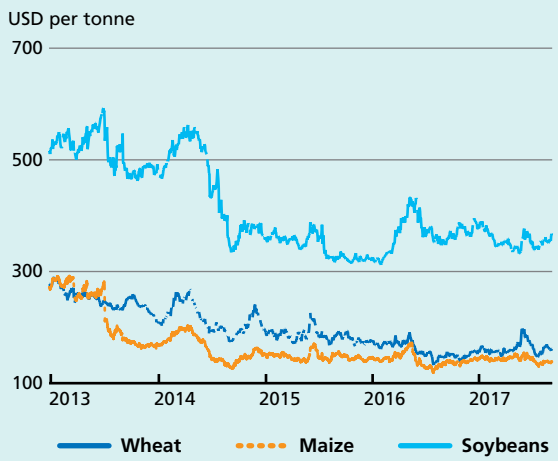
Contributed by Ann Berg (International Consultant)

Except for a brief upward spike during early July, futures prices for wheat, maize and soybeans traded in a relatively narrow channel over the past six months, as weather threats to global production and trade restrictions hinted by the US did not materialize. US wheat prices remained at the lower end of their five-year average as a result of burgeoning production elsewhere, despite crop year 2017/18 being the lowest US all-wheat production in 15 years. Maize futures prices similarly traded near the low end of their five-year average, tracking slightly above last year's values, which slid to multi-year lows following a record crop. Soybean prices followed a pattern similar to that of 2015, when they had declined by 30 percent in value before stabilizing.

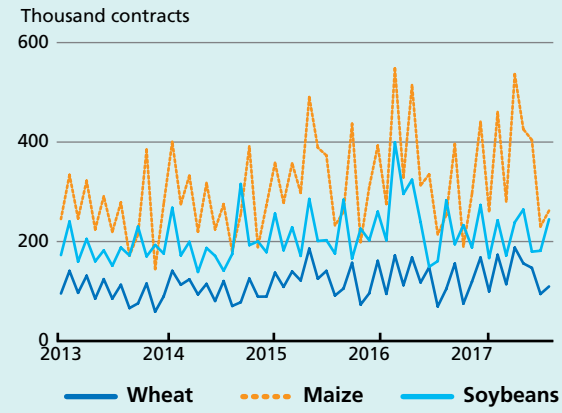
Record exports from the US for 2016/17 may indicate that prices at these low levels have found their equilibrium values, at least until planting season commences again in spring 2018. At a recent outlook conference, which included the US Department of Agriculture (USDA), the Congressional Budget Office (CBO), the Food and Agricultural Policy Research Institute (FAPRI) and the Chicago Mercantile Exchange (CME), economists forecast a five-year continuation of current prices at around USD 140 for maize and USD 350 for soybeans, while omitting a wheat price forecast, which is increasingly dependent on uncertain global factors.

Exogenous markets, such as foreign exchange and energy, exhibited small adjustments as the USD lost value from a multi-year high reached in late 2016 and crude oil price

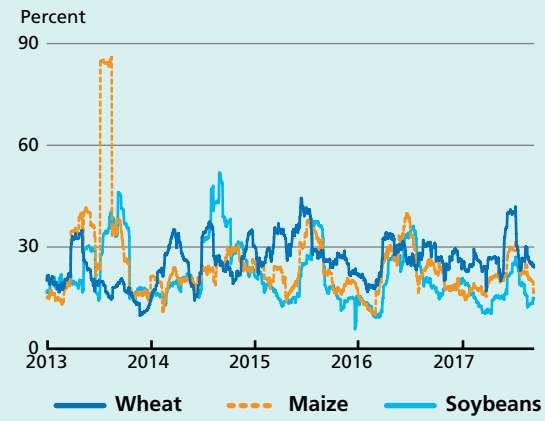
CME futures prices



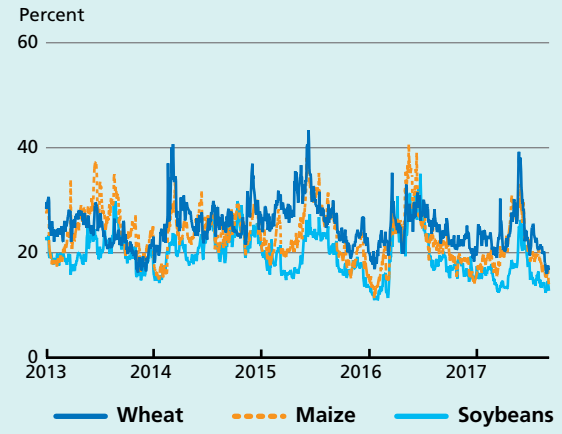
CME futures volumes



Historical volatility (30 days)



Implied volatility



recovered from its multi-year low around the same time to stabilize at about USD 50 per barrel. Record-setting equity prices in the US have seemingly had negligible effects on commodity prices. All in all, markets could be characterized as rather featureless, tinged by complacency.

FORWARD CURVES

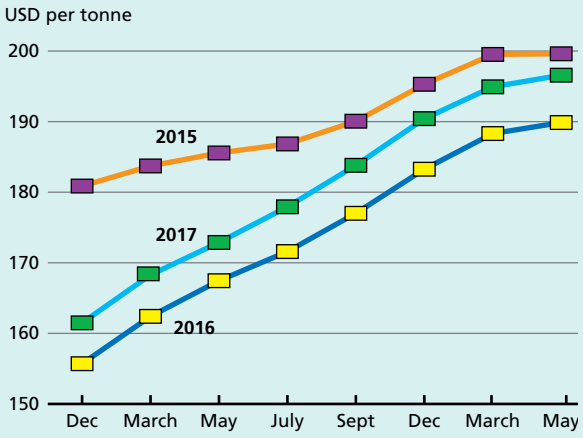
Forward curves for wheat and maize displayed abnormally steep upward sloping (contango) price configurations extending to December 2017. For maize, the December 2017/December 2018 spread exhibited USD 18 per tonne carry versus USD 16 and USD 8 per tonne carries respectively for the previous two years. For wheat, the 2017/December 2018 spread displayed USD 29 per tonne carry versus USD 28 per tonne and USD 14 per tonne carries, respectively, in the previous two years. These wide curves, besides reflecting ample inventories may also reflect three consecutive years of declining farm income. Very low basis levels in the domestic market indicate that producers have been willing sellers of wheat and maize (as well as soybeans) despite low prices, possibly indicative of tight cash flows. The forward curve for soybeans, reflecting the harvest-time norm over the last several years, was slightly inclined – exhibiting a USD 4 difference for the November 2017/November 2018 spread versus a small carry of USD 1 (contango) for the November 2016/ November 2017 spread.

VOLUMES

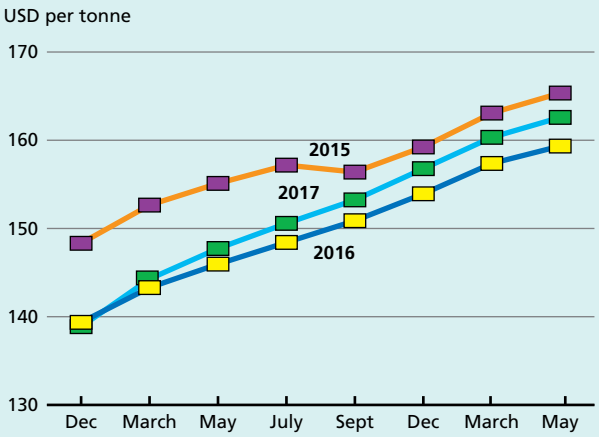
Trade volumes, which reached record or near record levels for wheat, maize and soybeans in 2016, were poised to match or exceed those levels for wheat and maize but projected to decline by about 15 percent for soybeans. Similar to last year, when prices were seeking market clearing levels while exhibiting low volatility, volumes defied the conventional wisdom that low prices deter trading interest. However, trading has been increasingly generated by algorithmic programs (about 50 percent according to the CME) which often seek small anomalies across several markets and increasingly operate without human supervision. Additionally, open interest (the number of outstanding contracts at a given point in time for a futures contract) increased for maize and soybeans futures markets year-on-year (y/y) and for all three commodities when options on futures were included. Options trading increased y/y by almost 30 percent for maize and soybeans, and 16 percent for wheat. This probably reflects the rising electronic trade in these markets – now representing 70 percent – which have been slow to migrate away from the "open outcry" mode of trading.

Forward curves snapshots as of October 2015, 2016 and 2017

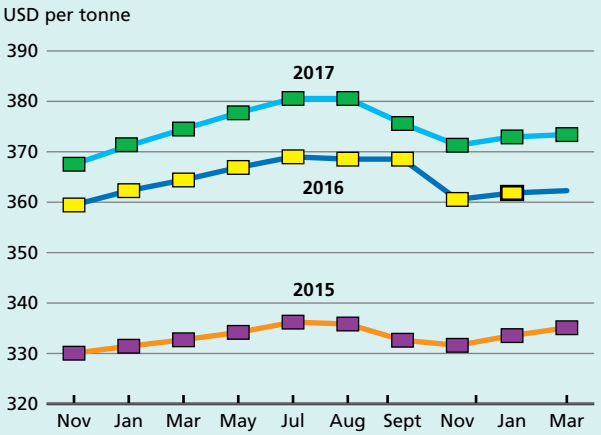
Wheat



Maize



Soybeans



VOLATILITY

Volatility levels for maize and soybeans tended to track US crop development, peaking in July and August when hot and dry weather in the US briefly drove prices to one-year highs. Historic volatility (based on 30 days) for wheat, maize and soybeans reached 38, 28 and 23, respectively, during summer months, with each declining by about 10 points by October. Implied volatility (calculated by the level of option premiums on underlying futures contracts) exhibited a similar peaking pattern for July and August, with wheat, maize and soybeans registering by October near historic low levels of 17, 16 and 13, respectively. Overall levels were mostly lower than the previous two years and disassociated from other commodity markets, such as cattle or cocoa futures which exhibited dramatic price swings and bouts of high volatility. Crude oil volatility, often linked with maize markets because of the amount of maize converted into ethanol fuel, remained subdued over the last six months.

INVESTMENT FLOWS

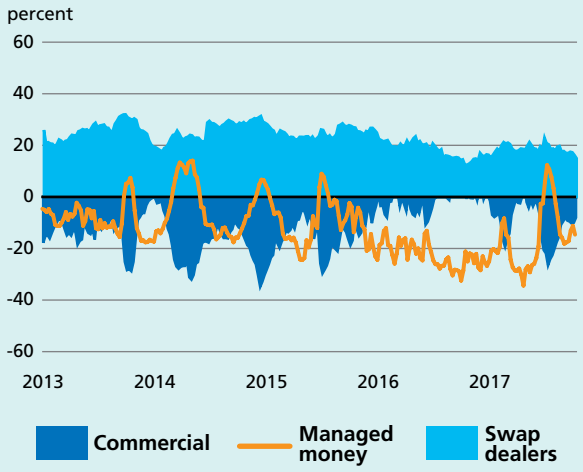
Managed money crisscrossed between long and short positioning as commercial traders took opposite strategies over the course of the past several months. After accumulating a record combined net short positon for wheat, maize and soybeans at the start of planting season in May, managed money swiftly covered its shorts to establish long bets, as weather concerns briefly drove prices 10 to 25 percent higher during July. Except for soybeans, these long bets were again abandoned for a return to short positioning as weather issues abated.

According to the hedge fund tracker Barclay Hedge, agricultural traders managing fund monies showed a return of 2.55 percent year-to-date compared to a loss of 2.40 percent in 2016. A long-term review found that the last double-digit return for these fund managers was 11.74 percent in 2011, and since then, returns have averaged about 2 percent per annum.

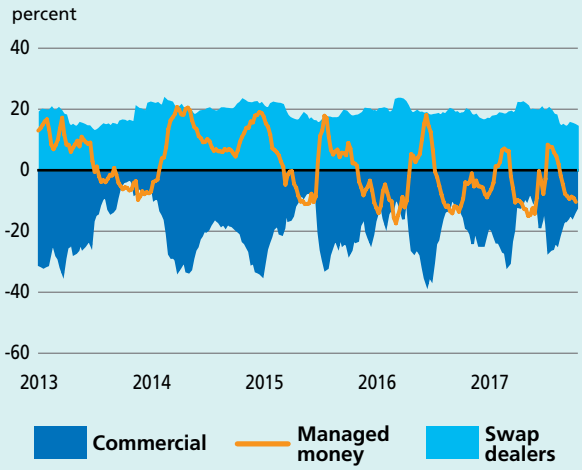
Swaps dealers, who manage passive funds that base returns on futures price performance, have gradually lessened their presence in the market over time. In 2010 and 2011, they were the focus of agricultural economists for their outsized net long open interest in maize and soybeans (over 30 percent) and wheat (over 40 percent). Most recently, swaps dealers have reduced their positions to the mid-teens or below as a percentage of open interest in all three commodities. The Deutsche Bank Agricultural Index Fund, which tracks 10 agricultural futures markets and is the largest agricultural fund by asset value, has foundered since 2011, reaching an all-time low of 18.66 in September 2017. By comparison, the most widely watched equity index, the S&P 500, has almost doubled in value over the last 6 years.

CME net-length as % of open interests (Jan 2013 - Oct 2017)

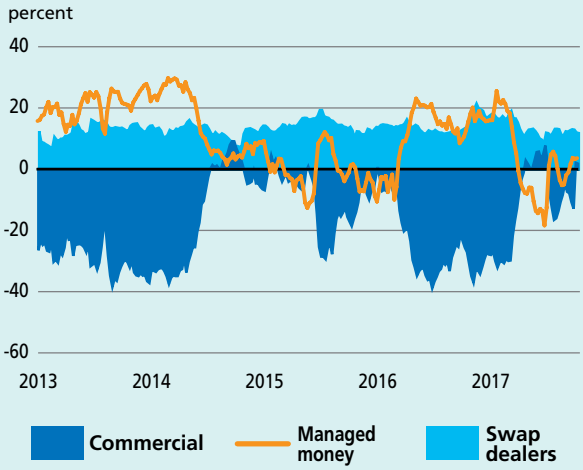
Wheat



Maize



Soybeans



Ocean freight rates

Contributed by the International Grains Council (IGC)
www.igc.int

OCEAN FREIGHT MARKET (OCTOBER 2016 - OCTOBER 2017)

The dry bulk freight market posted solid gains over the past six months, although trends were two-sided, with sectors for the largest vessels remaining distinctly volatile. Weakness initially reflected a seasonal slowdown in demand, coupled with uncertainties about global trade. However, markets edged higher since mid-July, with the Baltic Dry Index (BDI) – a composite measure of activity on key routes – reaching its highest since March 2014, on broad-based gains across constituent segments. Reflecting cautious optimism among market participants against a brighter economic backdrop and improved fundamentals, the BDI was up by 86% y/y.

Gains over the past six months were steepest for **Capesize** vessels, primarily associated with the shipment of heavy raw materials. Pressured by limited activity on key iron ore routes from Western Australia and Brazil, the corresponding Baltic sub-Index bottomed out in mid-July, dropping by more than two-thirds since late April. Values mostly soared thereafter on renewed buying interest from China, highlighted by record iron ore imports in September, with coal deliveries in the same month at a near-three year high. With occasional support from strength on transatlantic routes and an upturn in period fixing, the sub-Index was 92% higher y/y.

Panamax rates also exhibited mixed trends throughout the period. With steep losses in May-June followed by volatile growth, average values firmed slightly since late April, but registered a sharp y/y increase. Initial declines mainly stemmed from limited activity out of South America, particularly for new crop grains and oilseeds. A weaker tone in Australia and Indonesia amid increasing tonnage supply in the Pacific also weighed on sentiment.

Despite occasional pressure from excess tonnage in some regions, the market staged a recovery in the period since, the sub-Index touching a near four-year high more recently. Dispatches from South America and the USA ramped up in recent months, with Brazil a particularly active exporter

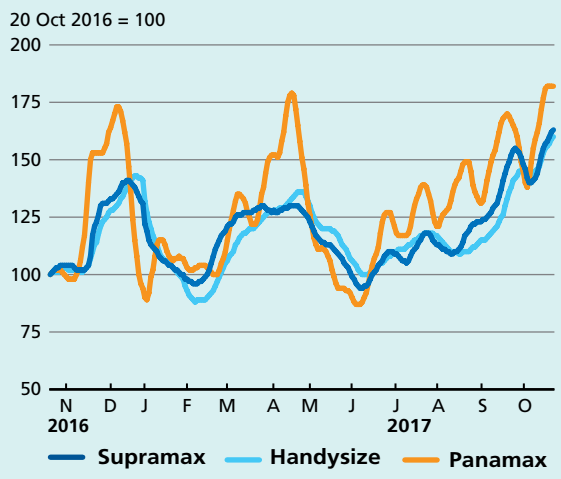
Summary of dry bulk freight markets

	20 October 2017	Changes	
		6 months	y/y
		%	
Baltic Dry Index (BDI)*	**1 578**	27	86
Sub-indices:			
Capesize	**3 145**	58	92
Panamax	**1 643**	6	82
Supramax	**1 126**	25	63
Handysize	**679**	19	60

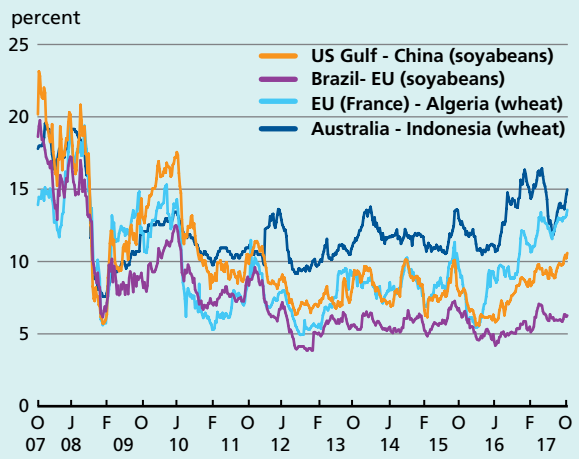
Source: Baltic Exchange, * 4 January 1985 = 1000

Baltic Capesize sub-Index (20 October 2016 - 20 October 2017)

Baltic Exchange sub-Indices – Grains and oilseeds carrying sectors (20 October 2016 - 20 October 2017)



Freight: share of C&F price on selected routes* (20 October 2007 - 20 October 2017)



* Nominal average weekly freight rates as a percentage of calculated cost and freight (c&f) export quotations. Source: IGC.

Summary of freight rates on selected routes

USD/t	20 Oct. 2017	Changes	
		6 months	y/y
US (Gulf) to:		%	
EU (ARAH)	**31**	24	55
China (Dalian)	**45**	18	36
Japan	**43**	16	34
Mexico	**29**	21	61
Canada (St. Lawrence) to:			
EU (ARAH)	**26**	4	86
Mexico	**45**	2	29
Japan	**43**	2	30
Argentina to:			
EU (ARAH)	**24**	20	60
Mexico	**25**	-4	19
Brazil to:			
EU (ARAH)	**26**	-4	18
China (Dalian)	**34**	13	100
EU (France, Rouen) to:			
Algeria	**30**	7	67
Egypt (Mediterranean)	**31**	7	55
Morocco	**34**	6	55
Black sea to:			
Egypt (Alexandria)	**25**	39	39
Tunisia	**28**	33	33
Australia (East Coast) to:			
China (Dalian)	**19**	36	46
Yemen	**37**	9	19

EU (ARAH) refers to Antwerp, Rotterdam, Hamburg

of maize and soyabeans. Underpinned by robust soyabean demand from China, nominal rates for trips from Brazil and the USA (Gulf) rose by 13% and 18%, respectively, during the past six months.

Ocean freight rates for smaller **Supramax** and **Handysize** vessels followed the broader market trend, with initial declines in late spring and early summer being more than offset by increases in more recent months. A build-up of tonnage in the Mediterranean, the USA and South America, coupled with reduced shipments of minerals in the Pacific, weighed on sentiment initially, although markets drew some support from brisk demand for scrap and fertilizers in Europe and the Baltic, as well as firmer interest in soyabean shipments from Brazil and Argentina.

Losses were reversed in recent months on the back of new crop grains business out of the Black Sea region and improved demand at the US Gulf and South America, with occasional support, too, from cement and clinker business in the Mediterranean. Over the past six months, the Baltic Supramax and Handysize sub-Indices rose by 25% and 19%, respectively, translating into increases of around 60% y/y in each sector.

Long-term dry bulk freight market developments

Ocean freight rates have posted notable gains over the past year, including particularly sizeable increases across the grains and oilseeds carrying segments. However, over the same period, average grains and oilseeds export quotations have firmed only slightly, as highlighted by a net 1% gain in the IGC Grains and Oilseeds Index, a trade-weighted composite index of physical cash values, spanning eight commodities. Accordingly, the average share of freight in calculated c&f prices has increased over the past twelve months, to around 10%, making transportation costs an increasingly important consideration in the trade in grains and oilseeds.

Underlying this trend are reports of a shift in soyabean shipments from Gulf to Pacific North West ports in the USA. However, despite higher rates, freight costs as a share of c&f values are still well below the peaks of 2007-2008, as the accompanying graphic illustrates for key selected routes.

Food import bills

World food import bill in 2017 second highest on record

The cost of importing food globally in 2017 could reach USD 1.413 trillion, which would represent a 6 percent, or USD 86 billion, increase from last year, while down some USD 30 billion from the record bill of 2014. The higher bill is driven by not only more expensive freight rates but also generally greater international demand for most foodstuffs.

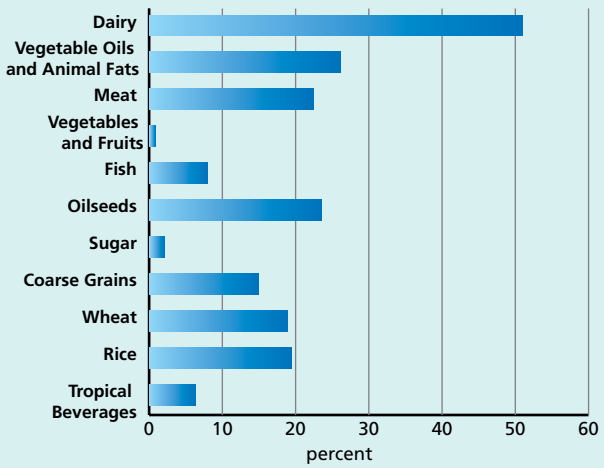
Rising and volatile freight rates were a prominent feature in 2016 and also have been a characteristic over much of 2017, as evidenced by movements in the Baltic Dry Index that show average shipping charges in the ten months to October 2017 almost twice as high as in the corresponding period of last year. Taking wheat originating from the US Gulf ports as an example, major Asian buyers have now to pay as much as USD 45 per tonne to take delivery of the grain, which is USD 12 or 36 percent more than what they paid last year.

Turning to developments at the product level, the import bills to undergo the largest absolute year-on-year increase are those for livestock commodities and for cereals. At the forefront, the expected rise in global dairy import bill from last year amounts to some USD 38 billion, or 51 percent, on the back of record global demand and considerably higher unit costs. The world dairy bill could approach USD 112 billion in 2017. For similar reasons, the meat import bill looks set to reach an all-time high of USD 176 billion, up 22 percent from 2016.

Stronger international demand in 2017 for maize is expected to drive up global expenditures on cereal imports by USD 25 billion to nearly USD 180 billion. The combination of higher volumes, higher benchmark prices and higher freights is also generally behind greater year-on-year bills for all other imported food categories, except for sugar. International purchases of the commodity are expected to decline this year and sugar prices to remain below the level of 2016, but the hike in shipping costs is likely to have an offsetting effect, with the overall sugar bill rising from last year, albeit modestly.

Of concern are the higher-than-average increases in the food import bills of many economically vulnerable nations. Expenditures by least-developed countries (LDCs), low-income food deficit countries (LIFDCs) and those geographically situated in sub-Saharan Africa (SSA) are set to climb considerably more than the global increase in 2017. For instance, the projected year-on-year rise of 12 percent in the aggregate bill for LIFDCs is twice the world average, while for LDCs, the most vulnerable country group, the food import bill could soar by 10 percent from 2016.

Forecast changes in global food import bills by type (2017 over 2016)



Cereal staples dominate imported foodstuffs for economically vulnerable countries. Improved domestic cereal production prospects, leading to lower purchases on the international marketplace, have not been sufficient to curb the strong growth in cereal import bills in 2017, as higher unit costs have driven up expenditures. However, the US dollar – the currency in which most transactions are priced – has weakened considerably in 2017. This ought to have given some respite to the cost of procuring from international markets for those countries that saw their currency appreciate; but, this has not been the case for several large LIFDCs, as shown overleaf.

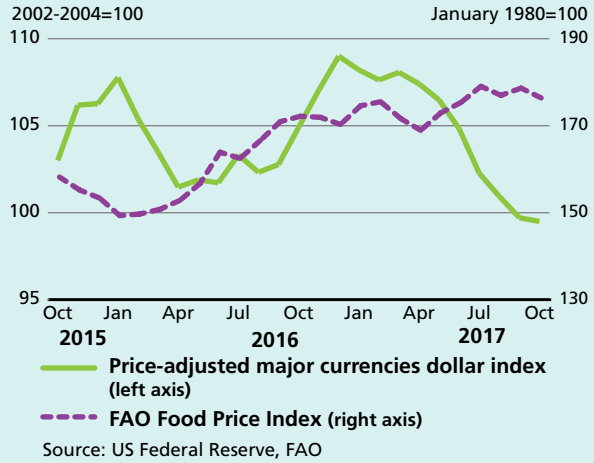
Contact:
Adam.Prakash@fao.org

Import bills of total food and major foodstuffs (USD billion)

	World		Developed		Developing		LDC		LIFDC		Sub-Saharan Africa	
	2016	2017 f'cast	2016	2017 f'cast	2016	2017 f'cast	2016	2017 f'cast	2016	2017 f'cast	2016	2017 f'cast
TOTAL FOOD	**1 326.7**	**1 412.7**	**802.6**	**830.5**	**524.1**	**582.2**	**38.3**	**42.0**	**75.2**	**84.3**	**42.6**	**45.9**
Vegetables and Fruits	244.7	246.8	172.9	175.0	71.8	71.8	3.6	3.4	12.3	12.1	3.2	3.2
Cereals	154.2	179.7	69.5	81.9	84.7	97.8	10.3	11.6	15.4	17.1	12.0	13.0
Fish	130.0	140.4	93.4	100.8	36.7	39.6	1.2	1.3	3.3	3.6	4.2	4.6
Meat	143.9	176.1	93.1	114.0	50.7	62.1	2.4	3.0	1.8	2.2	3.4	4.1
Dairy	74.5	112.4	45.8	69.2	28.6	43.1	1.9	2.9	2.5	3.8	1.9	2.9
Vegetable Oils and Animal Fats	94.5	119.3	41.4	51.6	53.2	67.7	7.0	9.0	20.3	25.7	4.7	6.2
Oilseeds	78.2	96.7	22.9	27.3	55.3	69.4	0.7	0.8	1.9	2.4	0.6	0.9
Sugar	48.9	49.9	23.2	25.1	25.7	24.9	4.2	4.1	6.0	6.4	3.8	4.1
Tropical beverages	103.0	109.7	78.3	83.3	24.7	26.3	1.5	1.6	3.5	3.8	1.5	1.6

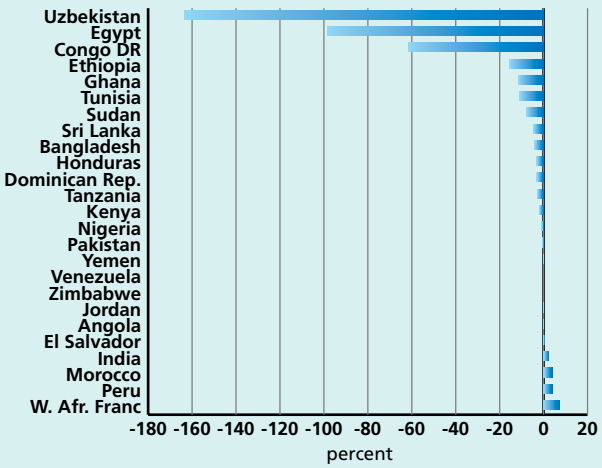
Exchange rates and food prices

USD slides as food prices climb (Oct 2016 - Oct 2017)



Source: US Federal Reserve, FAO

% changes in the currencies of selected LIFDCs against the USD (Oct 2016 - Oct 2017)



Source: US Federal Reserve

After reaching a 15-year high at the end of 2016, the US dollar has fallen considerably relative to major currencies, with the inflation-adjusted index dipping below 100 points in September and October 2017 for the first time in 34 months . While providing respite to the cost of importing, as most international transactions are priced in USD, numerous major food importing LIFDCs (those buying more than USD 1 billion worth of food annually from international markets), however, have seen their currency slide against the US dollar. Many of them, especially those situated in Africa, have experienced depreciation exceeding double-digit levels in percentage terms.

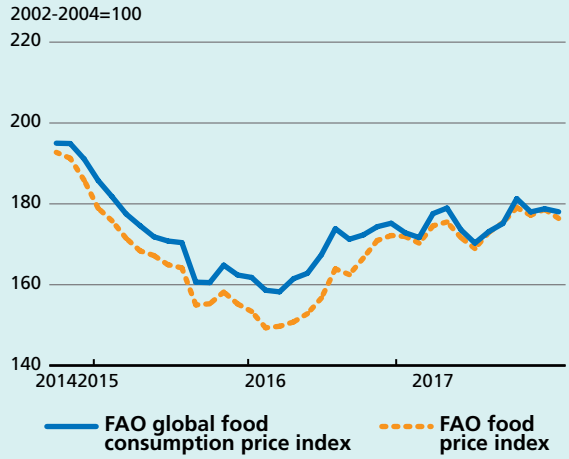
FAO price indices[1]

FAO Global Food Consumption Price Index higher but steady[2]

The **FAO Global Food Consumption Price Index** tracks changes in the cost of the global food basket as depicted by the latest FAO world food balance sheet (see http://faostat3.fao.org/download/FB/FBS/E).

After a sustained increase throughout much of 2016, the index has become more variable in 2017. It fell to a 12 month low in the first quarter of 2017 before climbing to a 30 month high of 181 points in July, where it has since stabilized slightly below this level. The index has also shown greater concordance with the trade-weighted FAO Food Price Index (FPI) in recent months. This is because international prices of foodstuffs that carry a large weight in each index - meat and dairy products in the FPI, and wheat and rice in the case of the FAO Global Food Consumption Price Index - have exhibited similar momentum.

The FAO Global Food Consumption and Food Price Indices (Oct 2014 - Sept 2017)



FAO Food Price Index edges down in October[3]

The **FAO Food Price Index** (FFPI) averaged 176.4 points in October 2017, down 2.2 points (1.3 percent) from September. Although at this level the FFPI was up 4 points (2.5 percent) from its value in October 2016, it remained 27 percent below its all-time high (in nominal terms) of 240 points registered in February 2011. With the exception of cereals, all the other indices used in the calculation of the FFPI fell in October.

The **FAO Cereal Price Index** averaged 152.8 points in October, up a notch from September and 10.5 points (7.4 percent) higher than the same month last year. Among the major cereals, wheat quotations were generally lower, pressured by large exportable supplies from the Back Sea Region and increased competition among exporters. Maize prices increased slightly in the US, although those from South America were weighed down by large supplies. Rice prices strengthened in October, amid seasonally tight Japonica and fragrant supplies, with additional support for Japonica prices stemming from a series of tenders in the Far East.

The **FAO Vegetable Oil Price Index** averaged 170 points in October, down 1.8 points (or 1.1 percent) compared to the previous month and close to the level recorded one year ago. The index' retreat was primarily driven by palm and soy oils. Palm oil values weakened on higher than anticipated inventory levels in Malaysia and the expectation of production gains in Southeast Asia, while soyoil prices eased on good soybean harvest progress in the United States and forecasts of ample global availabilities in 2017/18. Lower sunflower oil quotations, facilitated by large export availabilities in the Black Sea region, also weighed on the index.

The **FAO Dairy Price Index** averaged 214.8 points in October, down 9.4 points (4.2 percent) from September and marking the first drop since May 2017. At that level, the index was 32 points (17.5 percent) above its value in October 2016, but 22 percent below its peak reached in February 2014. International quotations for butter, skim

[1] All changes referred to in this section, in absolute or percentage terms, are calculated based on unrounded figures.

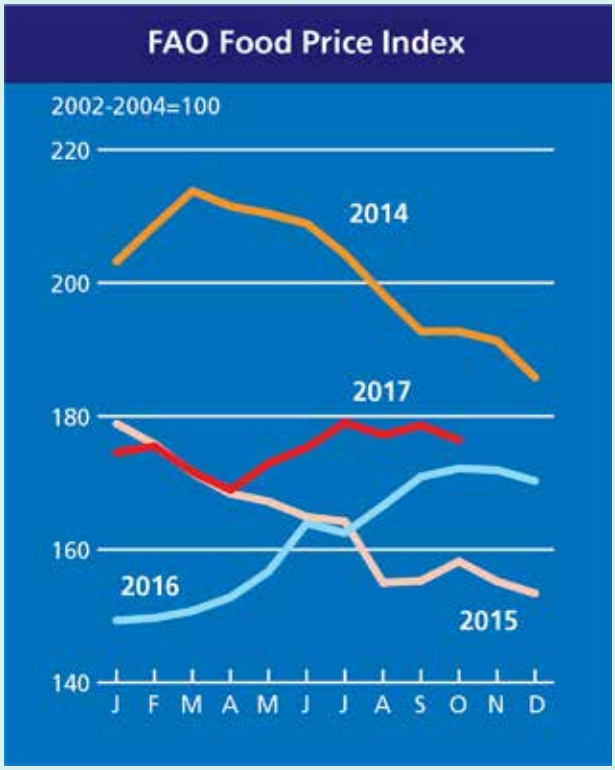
[2] The FAO Global Food Consumption Price Index is published twice a year in *Food Outlook*.

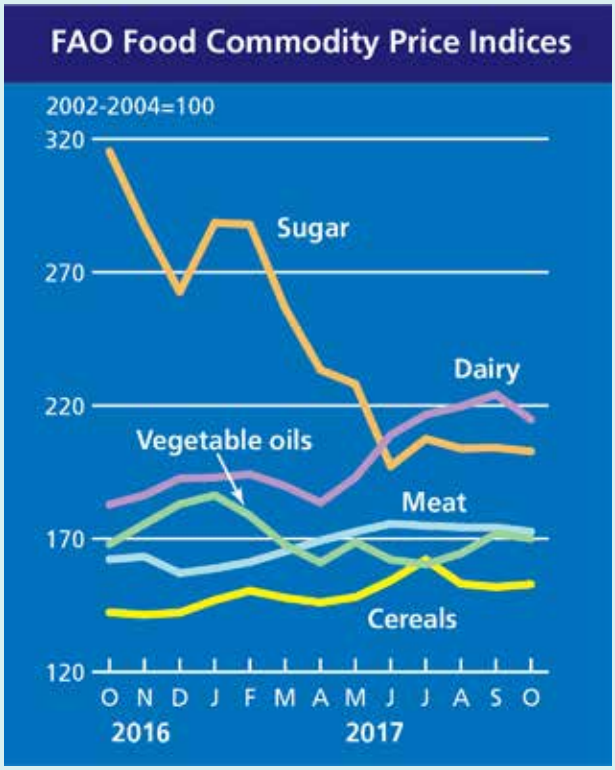
[3] The FAO food price indices are updated on a monthly basis and are available on: http://www.fao.org/worldfoodsituation

milk powder (SMP) and whole milk powder (WMP) eased in October, while those of cheese remained more stable. Butter and WMP prices fell as importers held back on purchases, awaiting arrival of new supplies from Oceania. Low demand and ample intervention stocks in the EU hastened the decline of SMP prices. A balanced cheese market contributed to more stable cheese quotations.

The **FAO Meat Price Index**[4] averaged 172.7 points in October, down 1.6 points (0.9 percent) from September and continuing a trend of moderate declines that began in July this year. International prices of pig and ovine meat declined in October, while those of bovine meat increased and of poultry were stable. Intense competition among exporters and sluggish import demand have been behind the declines in pigmeat prices observed in recent months. However, bovine meat prices rose for the third consecutive month due to limited spot offers from Oceania. A seasonal increase in ovine meat supplies in Oceania pushed down ovine prices, while poultry meat markets remained well balanced.

The **FAO Sugar Price Index** averaged nearly 203 points in October, down 1.4 points (0.7 percent) from September and as much as 112 points, or 36 percent, below the corresponding month last year. Sugar prices fell in October as the potential for higher supplies in 2017/18 was further reinforced with prospects for a larger beet crop in the EU and bigger output in the Russian Federation. Weaker Brazilian Real, increasing the potential for larger export sales from Brazil, also weighed on international prices, especially in view of a significant slowdown in purchases by China because of higher import tariffs.





[4] Unlike for other commodity groups, most prices utilized in the calculation of the FAO Meat Price Index are not available when the FAO Food Price Index is computed and published; therefore, the value of the Meat Price Index for the most recent months is derived from a mixture of projected and observed prices. This can, at times, require significant revisions in the final value of the FAO Meat Price Index which could in turn influence the value of the **FAO Food Price Index**.

FAO food price index

		Food Price Index[1]	Meat[2]	Dairy[3]	Cereals[4]	Vegetable Oils[5]	Sugar[6]
2000		91.1	96.5	95.3	85.8	69.5	116.1
2001		94.6	100.1	105.5	86.8	67.2	122.6
2002		89.6	89.9	80.9	93.7	87.4	97.8
2003		97.7	95.9	95.6	99.2	100.6	100.6
2004		112.7	114.2	123.5	107.1	111.9	101.7
2005		118.0	123.7	135.2	101.3	102.7	140.3
2006		127.2	120.9	129.7	118.9	112.7	209.6
2007		161.4	130.8	219.1	163.4	172.0	143.0
2008		201.4	160.7	223.1	232.1	227.1	181.6
2009		160.3	141.3	148.6	170.2	152.8	257.3
2010		188.0	158.3	206.6	179.2	197.4	302.0
2011		229.9	183.3	229.5	240.9	254.5	368.9
2012		213.3	182.0	193.6	236.1	223.9	305.7
2013		209.8	184.1	242.7	219.3	193.0	251.0
2014		201.8	198.3	224.1	191.9	181.1	241.2
2015		164.0	168.1	160.3	162.4	147.0	190.7
2016		161.5	156.2	153.8	146.9	163.8	256.0
2016	October	172.2	162.2	182.8	142.3	167.9	315.3
	November	171.9	163.3	186.4	141.4	175.6	287.1
	December	170.3	157.1	192.6	142.2	183.0	262.6
2017	January	174.6	158.8	193.0	146.9	186.3	288.5
	February	175.5	161.2	194.2	150.5	178.7	287.9
	March	171.6	165.2	189.8	147.8	167.6	256.5
	April	168.9	169.3	183.6	146.0	161.1	233.3
	May	172.9	172.7	193.0	148.0	168.7	227.9
	June	175.3	175.6	209.0	154.3	162.1	197.3
	July	179.0	174.9	216.6	162.2	160.4	207.5
	August	177.2	174.3	219.7	153.0	164.4	203.9
	September	178.6	174.2	224.2	151.9	171.9	204.2
	October	176.4	172.7	214.8	152.8	170.0	202.8

1 **Food Price Index:** Consists of the average of five commodity group price indices mentioned above, weighted with the average export shares of each of the groups for 2002-2004: in total 73 price quotations considered by FAO commodity specialists as representing the international prices of the food commodities are included in the overall index. Each sub-index is a weighted average of the price relatives of the commodities included in the group, with the base period price consisting of the averages for the years 2002-2004.

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2 **Meat Price Index:** Computed from average prices of four types of meat, weighted by world average export trade shares for 2002-2004. Commodities include two poultry products, three bovine meat products, three pig meat products, and one ovine meat product. There are 27 price quotations in total used in the calculation of the index. Where more than one quotation exists for a given meat type, a simple average is used. Prices for the two most recent months may be estimates and subject to revision.

3 **Dairy Price Index:** Consists of butter, SMP, WMP, and cheese price quotations; the average is weighted by world average export trade shares for 2002-2004.

4 **Cereals Price Index**: This index is compiled using the International Grains Council (IGC) wheat price index, itself an average of ten different wheat price quotations, 1 maize export quotation and 16 rice quotations. The rice quotations are combined into three groups consisting of Indica, Japonica and Aromatic rice varieties. Within each variety, a simple average of the relative prices of appropriate quotations is calculated; then the average relative prices of each of the three varieties are combined by weighting them with their assumed (fixed) trade shares. Subsequently, the IGC wheat price index, after converting it to base 2002-2004, the relative prices of maize and the average relative prices calculated for the rice group as a whole are combined by weighting each commodity with its average export trade share for 2002-2004.

5 **Vegetable Oils Price Index:** Consists of an average of ten different oils weighted with average export trade shares of each oil product for 2002-2004.

6 **Sugar Price Index:** Index form of the International Sugar Agreement prices with 2002-2004 as base.

New release!

FAO's Tropical Fruits Market Review provides an overview of the current status and short-term outlook in the global supply and demand of tropical fruits, as well as an assessment of the emerging issues and challenges facing the commodity group. It is published on an annual basis for the auspices of Members and Observers of the Sub-Group on Tropical Fruits of the Intergovernmental Group on Bananas and Tropical Fruits. While emphasis is on the four major tropical fruits – mango, pineapple, avocado and papaya, the Review also elaborates on market developments for processed products and minor tropical fruits. In addition, a detailed compilation of the latest statistics on tropical fruit production, imports, exports and prices are presented in the supplementary statistical annex.

The Market Review and its statistical annexes will be available at the FAO commodity website on tropical fruits:

http://www.fao.org/economic/est/est-commodities/tropical-fruits/en/

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