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Food Outlook

BIANNUAL REPORT ON GLOBAL FOOD MARKETS

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HIGHLIGHTS

Large supplies and a strong US dollar are keeping international food prices under downward pressure. The outlook for the coming season is unlikely to diverge much from the current situation, but currency movements and macroeconomic developments may have important implications for markets again in 2015/16. Against this backdrop, the world food import bill is forecast to reach a five-year low in 2015.

WHEAT

Overabundance of wheat supply is likely to continue into the 2015/16 season in spite of the forecast decline in 2015 production. Following two consecutive years of record crops, world wheat inventories are at sufficiently large levels. This, coupled with less buoyant growth in demand for feed wheat, could contribute to fairly stable market conditions in the new season.

COARSE GRAINS

World production of coarse grains in 2015 is forecast to fall below the 2014 record level. Total coarse grains inventories are likely to be drawn down to meet the expected utilization in 2015/16. Given ample inventories to be carried over from the current season, coarse grain markets are expected to remain well supplied in the new season.

RICE

A prolonged period of low international rice prices is prompting governments, especially in exporting countries, to shift to less supportive rice production policies, while also trimming public rice inventories, a stance that may dampen global production growth in 2015 and keep world trade in 2015 at near record levels.

OILCROPS

A further significant easing of oil and meal market fundamentals is expected in 2014/15, thanks to a record-high soybean production. Combined with forecasts of only tepid demand growth, inventories are expected to rise sharply. Accordingly, prices for oilseeds, oils and meals are on a marked downward trend.

SUGAR

World sugar production is forecast to increase marginally in 2014/15, and will still exceed global consumption for the fifth consecutive year, resulting in yet another, albeit small, increase in world sugar inventories. International trade in sugar is anticipated to remain relatively unchanged from last season, as a result of ample availabilities in traditional sugar importing countries.

MEAT

World meat production is forecast to expand by 1.3 percent in 2015, mostly driven by pig and poultry meat. The trade expansion is predicted to slow to 1.7 percent in 2015, constrained by limited export supplies and subdued import demand. The FAO Meat Price Index in the first four months of 2015, were well below 2014 with the decline affecting all categories of meat.

DAIRY

International dairy product prices stabilized during the first four months of 2015. Ample export supplies and uncertainty over import demand maintained prices at relatively low levels. Milk production continues to increase steadily in many countries.

FISHERIES

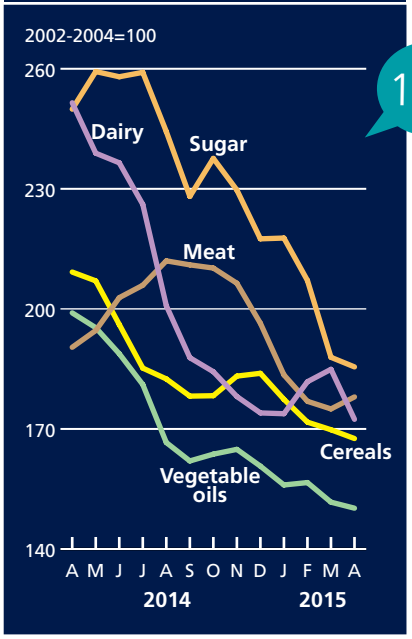
Aquaculture remains the main engine for growth of world fish supplies. Brisk import demand in the United States and European Union is forecast to boost international trade in fish in 2015. In 2014, human consumption of farmed fish overtook that of wild fish for the first time.

SPECIAL FEATURE: Has price volatility changed?

Understanding how and when price volatility has changed is critically important. Motivated by the recent calmness in markets, there is a need to investigate whether volatility has returned to "normal" levels predating the 2006/07 turmoil. However, there are important conceptual issues concerning measurement and policy inference that merit being highlighted.

CONTENTS

FAO Food Commodity Price Indices
(April 2014 - April 2015)



MARKET SUMMARIES

CEREALS

Early prospects point to a likely decline of 1.5 percent in global cereal production in 2015 from the previous year's record. Based on the conditions of crops already in the ground and on planting intentions for those still to be sown, and assuming normal weather for the remainder of the season, world cereal output is forecast at 2 509 million tonnes (including rice in milled equivalent), 39 million tonnes lower than in 2014, but still nearly 5 percent above the average of the past five years. Maize would account for the bulk of the decrease, with an expected contraction of 30 million tonnes to 995 million tonnes, mostly on reduced plantings.

World cereal utilization in 2015/16 is tentatively projected to expand by 1 percent (26 million tonnes), to 2 522 million tonnes, far slower than the 2.6 percent and 4.8 percent growth recorded in 2014/15 and 2013/14, respectively. The limited increase in 2015/16 reflects expectations of more modest expansions in feed utilization and industrial usage of coarse grains, in particular for the production of fuel ethanol, which may stall after several years of fast growth. By contrast, cereal food consumption is forecast to rise in tandem with world population, resulting in a stable annual average per capita level of nearly 153.0 kg; with wheat at around 67.0 kg and rice also steady at 57.5kg.

Based on the FAO's first forecasts for production in 2015 and consumption in 2015/16, world cereal stocks would need to be drawn down by nearly 3 percent from their exceptionally high opening levels, to almost 627 million tonnes by the close of crop seasons ending in 2016. Lower coarse grains and rice inventories would account for most of the anticipated contraction in world cereal reserves. However, the decline in cereal stocks would only result in a modest drop in the global cereal stock-to-use ratio.

World trade in cereals in 2015/16 is forecast at 349.4 million tonnes, down only 0.6 percent (2 million tonnes) from the 2014/15 trade estimate, but as much as 2 percent (8 million tonnes) below the 2013/14 high. Declines in the volumes of trade in wheat and barley are predicted to outweigh small increases in maize and rice. Against a background of large supplies and a strong US dollar, international prices of major cereals have fallen sharply in the on-going 2014/15 season.

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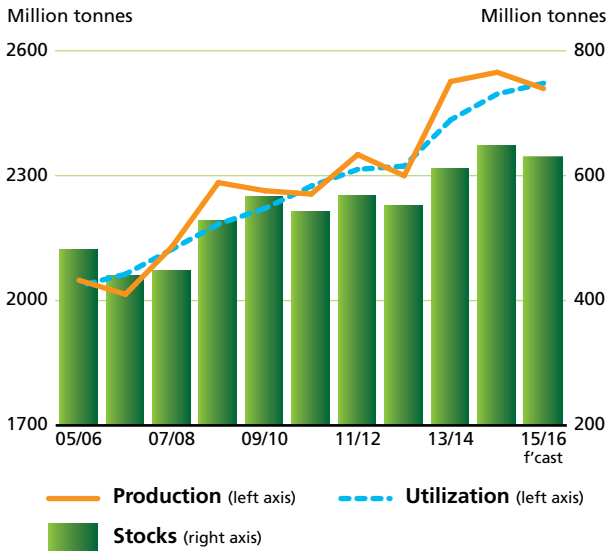
CEREAL PRODUCTION, UTILIZATION AND STOCKS



WORLD CEREAL MARKET AT A GLANCE [1]

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
		million tonnes		%
WORLD BALANCE				
Production	**2 526.1**	**2 548.3**	**2 509.2**	**-1.5**
Trade[2]	**357.8**	**351.4**	**349.4**	**-0.6**
Total utilization	**2 433.8**	**2 496.0**	**2 521.9**	**1.0**
Food	1 089.5	1 102.2	1 115.2	1.2
Feed	840.8	878.5	892.2	1.6
Other uses	503.4	515.3	514.6	-0.1
Ending stocks	**609.4**	**645.6**	**626.6**	**-2.9**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	152.4	152.6	152.7	0.1
LIFDC[3] (kg/yr)	149.9	150.1	150.3	0.1
World stock-to-use ratio (%)	*24.4*	*25.6*	*24.4*	
Major exporters stock-to-disappearance ratio (%)	*17.3*	*17.8*	*16.5*	

FAO CEREAL PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	219	192	172	-15.0

[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] Low-income Food-Deficit countries.

WHEAT

Overabundance of wheat supply is likely to continue into the 2015/16 season in spite of an anticipated decline in 2015 production. FAO's latest forecast for 2015 global wheat production stands at 719 million tonnes, 10 million tonnes (1.2 percent) below the record of 2014. The decline is largely attributable to a lower production in Europe, following a contraction in the area planted, which will more than outweigh small increases in Asia and North America. FAO's first forecast for world trade in wheat (including wheat flour in wheat equivalent) in 2015/16 (July/June) stands at 151 million tonnes, down marginally from the 2014/15 estimate. Imports by the developing countries are expected to fall most, whereas total imports by the developed countries are likely to remain at the same level as in 2014/15.

Early indications for world wheat utilization in the new season (2015/16) point to a continuing expansion, up 0.6 percent from the latest 2014/15 estimate. However, this increase would be much less significant than those of the previous two seasons, mostly because of a larger availability of coarse grains in many feed markets and their more competitive prices. Feed use of wheat is likely to increase marginally after an 8.5 percent expansion in 2014/15, while food use is set to increase at about the same rate as population, which will keep the annual per capita consumption level steady at around 67 kg.

Based on the latest production prospects for 2015 and the projected utilization in 2015/16, FAO's first forecast for world wheat stocks by the close of crop seasons in 2016 stands at nearly 199 million tonnes, marginally below this year. The largest drawdown is expected in China, but this decrease would be mostly offset by further build-ups of inventories in the United States and the EU. With world wheat stocks at sufficiently large levels to buffer against any unexpected production shortfall, international prices have remained under downward pressure. In fact, the overall favourable supply prospects for another season kept Chicago Board of Trade (CBOT) quotations at some 25 percent below the levels registered in the corresponding period last year.

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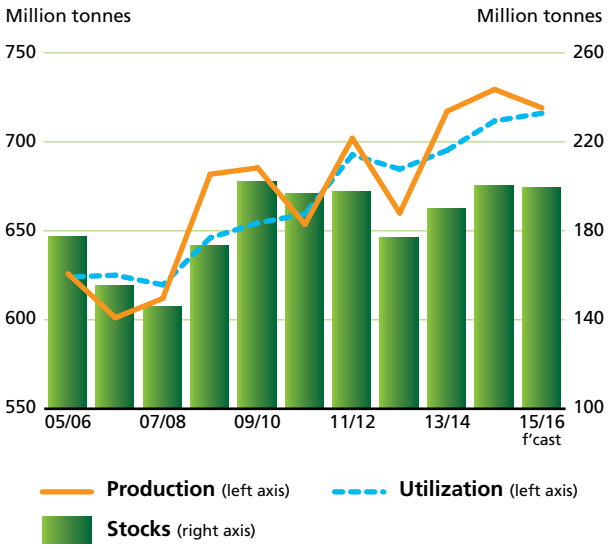
WHEAT PRODUCTION, UTILIZATION AND STOCKS



WORLD WHEAT MARKET AT A GLANCE

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
	million tonnes			%
WORLD BALANCE				
Production	**717.2**	**729.5**	**719.1**	**-1.4**
Trade[1]	**156.7**	**153.0**	**151.0**	**-1.3**
Total utilization	**695.2**	**711.7**	**716.1**	**0.6**
Food	480.8	484.6	488.8	0.9
Feed	128.1	139.0	139.4	0.3
Other uses	86.4	88.1	87.9	-0.2
Ending stocks	**189.4**	**200.0**	**198.9**	**-0.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	67.2	67.1	66.9	-0.3
LIFDC (kg/yr)	46.2	45.9	45.8	-0.2
World stock-to-use ratio (%)	*26.6*	*27.9*	*27.8*	
Major exporters stock-to-disappearance ratio[2] (%)	*13.6*	*15.5*	*16.5*	

FAO WHEAT PRICE INDEX[3] (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	194	181	157	-16.9

[1] Trade refers to exports based on a common July/June marketing season.
[2] Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.
[3] Derived from the International Grains Council (IGC) wheat index.

COARSE GRAINS

World coarse grains output in 2015 is forecast at 1 290 million tonnes, 2.6 percent below the record of 2014. Total maize production, in particular, is expected to contract by 3 percent to 995 million tonnes in the United States, the world's largest producer, largely reflecting a decline. World barley and sorghum outputs are also forecast to be smaller than in 2014. Most of the barley reduction is expected to occur in the EU, the Russian Federation and Ukraine.

Global trade in coarse grains in the new 2015/16 season could contract slightly, to 156 million tonnes, on weaker international demand for barley, which would more than offset anticipated rises in global maize, oats, rye and sorghum shipments. Much of the decline in world barley imports is expected to be concentrated in China where imports in 2014/15 soared to exceptionally high levels.

Based on preliminary indications, total utilization of coarse grains could expand by 1 percent in 2015/16, exceeding its 10-year trend value for the third consecutive season. Increased feed use, forecast to surpass 737 million tonnes globally, is behind the 2015/16 expected rise in world utilization.

After two consecutive seasons of build-up, global inventories of coarse grains by the close of crop seasons in 2016 are projected to decline by 3.7 percent. However, at the current projected level of nearly 260 million tonnes, world reserves would still be high, resulting in fairly comfortable world stock-to-use ratios. Among the major coarse grains, global maize ending stocks could decline to 217 million tonnes, down 2 percent (5 million tonnes) from their very high opening levels. In China, the size of coarse grains inventories may approach 100 million tonnes, exceeding their already high level of this season. The increase in coarse grains inventories in China largely reflects rising maize stocks, following several years of record crops stimulated by attractive price support measures.

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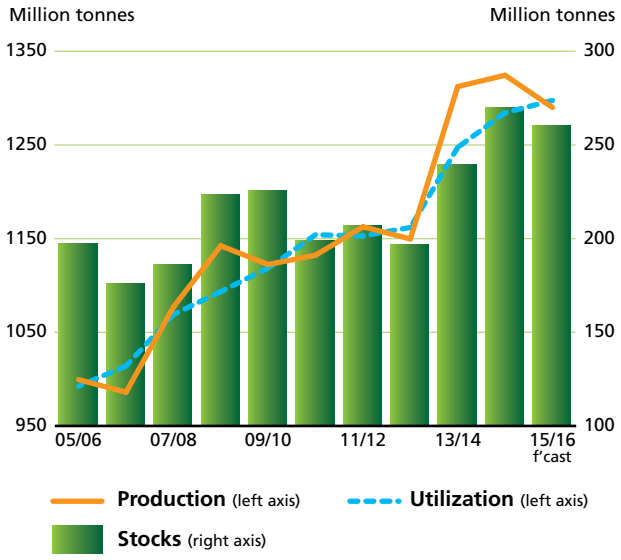
COARSE GRAIN PRODUCTION, UTILIZATION AND STOCKS



WORLD COARSE GRAIN MARKET AT A GLANCE

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
	million tonnes			%
WORLD BALANCE				
Production	**1 312.3**	**1 324.4**	**1 290.0**	**-2.6**
Trade[1]	**158.7**	**157.0**	**156.0**	**-0.6**
Total utilization	**1 247.4**	**1 284.5**	**1 297.5**	**1.0**
Food	199.7	202.7	206.1	1.7
Feed	698.7	724.9	737.3	1.7
Other uses	349.0	356.9	354.2	-0.8
Ending stocks	**238.9**	**269.5**	**259.6**	**-3.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	27.9	28.1	28.2	0.4
LIFDC (kg/yr)	39.6	39.7	40.1	1.0
World stock-to-use ratio (%)	*18.6*	*20.8*	*19.6*	
Major exporters stock-to-disappearance ratio[2] *(%)*	*11.5*	*14.6*	*13.7*	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	246	183	165	-18.3

[1] Trade refers to exports based on a common July/June marketing season.
[2] Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

RICE

A return to more normal weather conditions is behind an expected recovery of global rice production in 2015. Yet, the expansion is forecast to be modest, dampened by less attractive market prices and a shift towards less expansionary production policies, especially in exporting countries. Much of the increase in global production will likely stem from a 1 percent upturn in Asia. Subdued production growth is also expected in Africa, with output even seen falling in Oceania (Australia) and North America (the United States). Crop prospects are somewhat brighter in Latin America and the Caribbean.

Following an exceptional double-digit growth in 2014, international trade in rice is anticipated to dip by 2 percent in 2015, driven mainly by falling demand by countries in the Far East. Although still very tentative, trade in 2016 is anticipated to rebound, sustained by a recovery of imports by the traditional large buyers.

FAO foresees global rice stocks at the closure of marketing seasons ending in 2016 to shrink by 4.6 percent to 168.2 million tonnes, marking the second successive year of draw downs, after nine seasons of uninterrupted accumulation. The cut in world inventories would be needed, as global rice production in 2015, although recovering, is predicted to fall short of world consumption in 2015/16.

International rice prices have been falling steadily since September 2014, causing the FAO Rice Price Index in April 2015 to dip to its lowest value since August 2010. The slide reflects growing exporter competition for markets, as several of the major supplying countries try to reduce the size of their inventories. It also mirrors the weakening of local currencies, such as the ***naira*** in Nigeria, the ***CFC franc*** in the rest of Western Africa, or the ***real*** in Brazil, which is hindering the ability of several major importing countries to buy.

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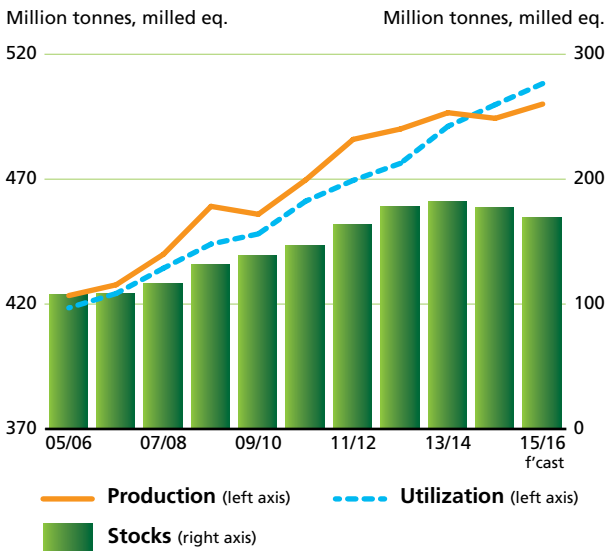
RICE PRODUCTION, UTILIZATION AND STOCKS



WORLD RICE MARKET AT A GLANCE

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
	million tonnes, milled equivalent			%
WORLD BALANCE				
Production	**496.6**	**494.4**	**500.1**	**1.2**
Trade [1]	**42.4**	**41.4**	**42.4**	**2.4**
Total utilization	**491.2**	**499.9**	**508.3**	**1.7**
Food	409.1	414.9	420.3	1.3
Ending stocks	**181.1**	**176.2**	**168.2**	**-4.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	57.3	57.4	57.5	0.2
LIFDC (kg/yr)	64.2	64.3	64.3	0.0
World stock-to-use ratio (%)	*36.2*	*34.7*	*32.4*	
Major exporters stock-to-disappearance ratio[2] (%)	*26.8*	*23.2*	*19.2*	

FAO RICE PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	233	235	220	-6.3

[1] Calendar year exports (second year shown).
[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

OILCROPS

The latest forecasts for the 2014/15 season point towards a further easing of the global supply and demand balance for oilseeds products. Driven by bumper soybean crops in the United States and South American countries, global oilseed production is expected to expand significantly for the third consecutive season. Such an increase, together with sizeable opening stocks, will facilitate a strong expansion in global supplies of oils/fats and even more so of meals/cakes.

On the demand side, growth in oils/fats consumption could slow in 2014/15, largely due to a subdued demand from the biodiesel sector, while global meal consumption is seen expanding at an about-average rate. As production of oilseed products is anticipated to exceed utilization by an ample margin, especially in the case of meals, a sharp rise in global inventories appears likely. Year-on-year, carry-out stocks are currently projected to increase by 11 percent for oils/fats and by a stunning 34 percent for meals/cakes, mainly due to soy/meal.

Responding to the positive supply and demand prospects, international prices for most oilseeds and oilseed products eased during the first half of 2014/15. In April 2015, FAO's price indices for the oilseed complex not only ranged 20–30 percent below their corresponding 2014 values, they also tumbled to 5–6 year lows. The latest harvest updates in the Southern Hemisphere and the first planting indications for next season in the Northern Hemisphere, suggest that international prices could remain under pressure for the next few months.

With regard to international trade, current forecasts indicate a deceleration in the volume of transactions in both oilseeds and oilseed products – despite the recent slide in prices.

Incomplete and highly tentative forecasts for 2015/16 suggest that, after three consecutive rises, global oilseed production could contract in the coming season, with the largest dip seen for soybeans. Nonetheless, considering the current season's prospective record-high carry-out stocks, a production decrease would not necessarily lead to tightness in global markets.

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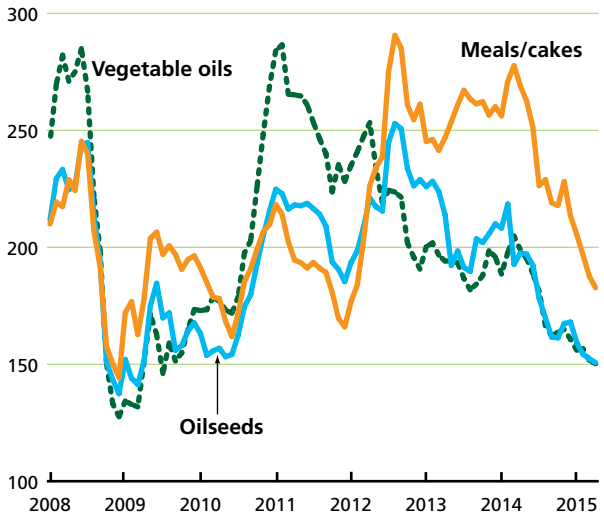
FAO MONTHLY INTERNATIONAL PRICE INDICES FOR OILSEEDS, VEGETABLE OILS AND MEALS/CAKES (2002-2004=100)



WORLD OILCROP AND PRODUCT MARKET AT A GLANCE

	2012/13	2013/14 *estim.*	2014/15 *f'cast*	Change: 2014/15 over 2013/14
		million tonnes		%
TOTAL OILCROPS				
Production	482.9	513.0	542.3	5.7
OILS AND FATS				
Production	189.9	202.7	209.6	3.4
Supply	222.2	234.7	244.3	4.1
Utilization	189.7	199.0	203.9	2.5
Trade	101.9	107.3	109.0	1.6
Global stock-to-use ratio (%)	*16.9*	*17.5*	*18.9*	
Major exporters stock-to-disappearance ratio (%)	*9.6*	*9.8*	*12.0*	
MEALS AND CAKES				
Production	120.0	128.9	139.2	8.0
Supply	137.6	146.9	160.6	9.3
Utilization	118.5	125.2	131.2	4.8
Trade	73.6	81.3	84.2	3.6
Global stock-to-use ratio (%)	*15.2*	*17.1*	*21.8*	
Major exporters stock-to-disappearance ratio (%)	*7.6*	*9.3*	*14.8*	
FAO PRICE INDICES (Jan/Dec) (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
Oilseeds	207	184	154	-24.5
Meals/cakes	255	243	193	-28.1
Vegetable oils	193	181	154	-22.2

NOTE: Refer to footnote 4 on page 34 and to table 2 on page 37 for explanations regarding definitions and coverage.

SUGAR

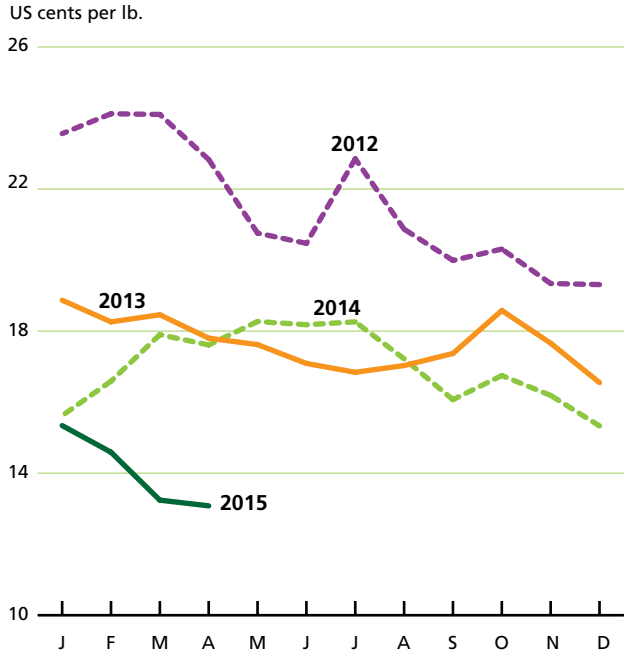
FAO estimates world sugar production will increase in 2014/15 (October/September) and surpass consumption for the fifth consecutive season, but the anticipated surplus is likely to be small. Decreases in sugar output in Brazil, Thailand and China are foreseen to be offset by expansions in India, the European Union and Australia.

World sugar consumption is set to grow in line with its long-term trend, reflecting increases in several developing countries, as a result of lower domestic sugar prices, ample domestic availabilities, as well as better expected economic performance in 2015. Sugar consumption growth will be particularly pronounced in Asia and Africa.

Sufficient domestic supplies in traditional importing countries are expected to keep global import demand relatively unchanged from the last marketing season. The implementation of import restriction measures in some main markets, such as China, is seen to limit global import demand. Exports are anticipated to remain unchanged in Brazil, the world's largest sugar producer and exporter, but to rise in Thailand, the second largest sugar exporter.

International sugar prices have followed a declining trend since the beginning of 2015, in line with the steady fall that has characterized the market since 2011. The price slide is attributed to the production expansion observed over the past four years, which has resulted in global sugar inventories rising to near record levels. Policy measures to curb imports, or boost exports, as well as the strength of the US dollar, particularly against the Brazilian currency, have further exacerbated the fall in international sugar quotations.

INTERNATIONAL SUGAR PRICES*



* As measured by the International Sugar Agreement (ISA)

WORLD SUGAR MARKET AT A GLANCE

	2012/13	2013/14 *estim.*	2014/15 *f'cast*	Change: 2014/15 over 2013/14
		million tonnes		%
WORLD BALANCE				
Production	**182.3**	**180.6**	**181.0**	**0.24**
Trade *	**54.7**	**55.4**	**55.3**	**-0.19**
Total utilization	**176.1**	**176.9**	**179.8**	**1.59**
Ending stocks	**74.7**	**78.4**	**79.4**	**1.28**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	24.7	25.0	25.3	1.11
LIFDC (kg/yr)	16.5	16.5	16.8	1.87
World stock-to-use ratio (%)	*42.4*	*44.3*	*44.2*	**-0.31**

ISA DAILY PRICE AVERAGE (US cents/lb)	2013	2014	2015 *Jan-Apr*	Change: Jan-Apr 2015 over Jan-Apr 2014 %
	18.53	16.70	14.39	-13.84

* Trade figures refer to exports

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MEAT AND MEAT PRODUCTS

World meat production is anticipated to record a modest expansion in 2015 to 318.7 million tonnes, 1.3 percent, or 4 million tonnes, above 2014, with the largest increases expected in China, the EU, United States and Brazil. The pigmeat sector is forecast to drive the global increase, followed by poultry. Only modest gains in bovine and sheepmeat production are currently foreseen.

Global meat trade is forecast to expand at a moderate rate of 1.7 percent in 2015, to 31.2 million tonnes, a significant slowdown from the 3.1 percent registered last year. There are diverging projected trade trends for the various types of meat, with growth forecast for bovine, pigmeat and poultry, and decline forecast for ovine meat. Poultry remains the main traded meat product, followed by bovine, pig and ovine meat, respectively.

Trade in poultry is forecast to grow at a limited pace, increasing by 2.6 percent to 13.1 million tonnes in 2015. Augmented production in importing countries continues to reduce their need for external poultry supplies. Additionally, outbreaks of highly pathogenic avian influenza (HPAI) in some areas of the United States from January onwards caused numerous countries to suspend imports either from the country as a whole or from affected states within the country, pending its containment and eradication. Bovine meat trade is also anticipated to expand at a limited rate, rising by 1.9 percent to 9.8 million tonnes. Supply limitations are forecast to be the principal factor behind restricted growth, although the pace of the increase in import demand may slacken as well. Meanwhile, trade in pigmeat is expected to recover by 1.6 percent to 7.1 million tonnes in 2015, following decreases in the previous two years. Expanding production in the main exporting countries is anticipated to be the main driver of growth, although trade restrictions imposed by the Russian Federation will continue to impinge on the market. Finally, trade in ovine meat may drop by 8.5 percent to 940 000 tonnes, as a result of production short-falls in Australia and New Zealand due to flock rebuilding in both countries.

The FAO Meat Price Index was generally lower during the first four months of 2015, declining from 183 points in January to 178 points in April. The price fall affected all categories of meat.

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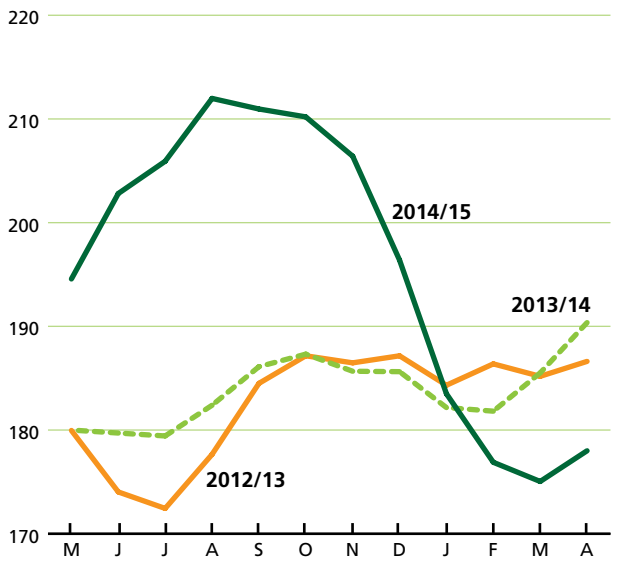
FAO INTERNATIONAL MEAT PRICE INDEX (2002-2004 = 100)



WORLD MEAT MARKET AT A GLANCE

	2013	2014 *estim.*	2015 *f'cast*	Change: 2015 over 2014
		million tonnes		%
WORLD BALANCE				
Production	**311.1**	**314.7**	**318.7**	**1.3**
Bovine meat	67.8	67.8	67.9	0.2
Poultry meat	108.6	110.2	111.8	1.4
Pigmeat	115.0	117.2	119.4	1.9
Ovine meat	13.9	13.9	14.0	0.8
Trade	**29.7**	**30.6**	**31.2**	**1.7**
Bovine meat	8.9	9.6	9.8	1.9
Poultry meat	12.5	12.7	13.1	2.6
Pigmeat	7.1	7.0	7.1	1.6
Ovine meat	1.0	1.0	0.9	-8.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	43.4	43.3	43.4	0.1

FAO MEAT PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	184	198	178	-3.6

MILK AND MILK PRODUCTS

World milk production is forecast to grow by 2 percent in 2015, a rate similar to previous years, to reach 805 million tonnes. Asia is expected to account for most of the increase, but production is projected to rise in all regions.

Trade in dairy products is forecast to grow by 2.7 percent to 74 million tonnes of milk equivalent, linked to a favourable milk production outlook in most of the major exporting countries. Asia is expected to remain the main centre for rising international demand, although growth may be slower than in recent years. Increased purchases are forecast for China, Saudi Arabia, Malaysia, the United Arab Emirates, Vietnam, the Philippines, Thailand and Oman. Elsewhere in Asia, Singapore, Japan, and the Republic of Korea will remain important markets, but the level of their imports is not expected to change markedly and, in some cases, could decrease. Reduced international prices should stimulate imports in Africa as a whole. The principal importers that could see growth are Algeria, Egypt and Nigeria. In Europe, imports by the Russian Federation are anticipated to fall for the second year in a row.

As for exports, the two principal suppliers, New Zealand and the European Union, are anticipated to see an increase in sales, while the United States may maintain shipments at a similar level to last year.

International dairy product prices began 2015 at low levels and, despite some upward movement in February and March, fell back in April. The FAO Dairy Price Index for April stood at 172, with muted quotations for all dairy products covered. A favourable opening to the April-March dairy year in the EU, combined with the abolition of the milk quota system, raised expectations of abundant export supplies. At the same time, uncertainty over the level of China's imports during 2015 and continued trade prohibitions imposed by the Russian Federation have tempered demand and prices.

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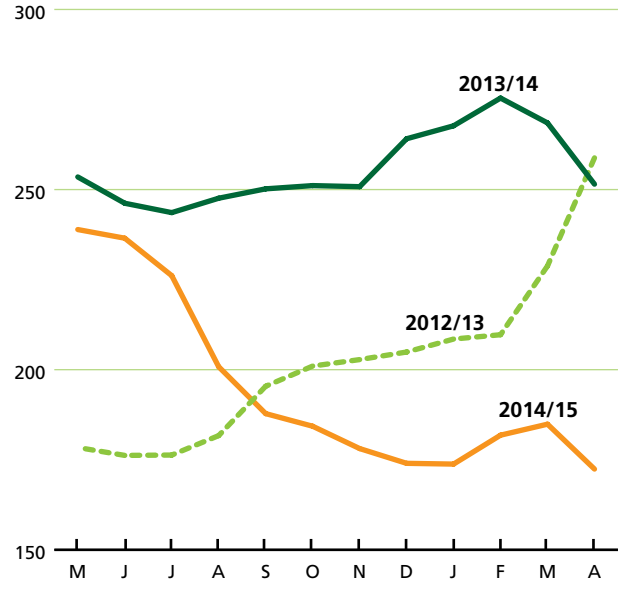
FAO INTERNATIONAL DAIRY PRICE INDEX (2002-2004 = 100)



WORLD DAIRY MARKET AT A GLANCE

	2013	2014 *estim.*	2015 *f'cast*	Change: 2015 over 2014
		million tonnes		%
WORLD BALANCE				
Total milk production	**765.1**	**788.5**	**804.5**	**2.0**
Total trade	**68.3**	**72.2**	**74.1**	**2.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	106.9	108.9	109.9	0.9
Developed (kg/yr)	218.1	221.9	222.5	0.3
Developing (kg/yr)	75.6	77.5	78.9	1.8
Trade share of prod. (%)	*8.9*	*9.2*	*9.2*	*0.6*

FAO DAIRY PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	243	224	178	-32.9

FISH AND FISHERY PRODUCTS

In 2014, overall fish production is estimated to have grown by only 1 percent to 164.3 million tonnes, boosted by a 5 percent expansion of aquaculture to 74.3 million tonnes, which compensated for a 2 percent contraction in wild fish output to 90.0 million tonnes. Supply in 2015 is likely to see a small rebound in wild catches from the 2014 El Niño-related shortfall, to 90.6 million tonnes, and a further 5 percent growth in aquaculture production to 78 million tonnes. As a result, fish production is forecast to reach 168.6 million tonnes in 2015, up 2.6 percent from the previous year.

Consumer demand for fish remains brisk, with more people worldwide appreciating the health benefits of regular fish consumption. Direct human consumption, which accounts for more than 85 percent of all uses, is now projected to grow by 2 percent. On the other hand, the expected recovery in world wild fish catches in 2015 is predicted to foster a 9 percent rebound in the usage of fish as feed, mostly destined for aquaculture operations.

Sustained import demand in the United States, together with renewed interest from the European Union market have underpinned international fish trade in 2014 and early 2015. Fish deliveries to emerging markets also were strong, despite some weakness in countries such as Brazil and the Russian Federation, which faced economic slowdowns and sharp currency devaluations. However, Japan's buying interest has been tepid with seafood consumption now stagnating. Fish international prices remained at relatively high levels in the course of 2014, although subject to fluctuations depending on individual species. As a result of the firm prices and sustained volume growth, the value of fish trade is estimated to have reached a record USD 143.9 billion in 2014. However, the value of trade is forecast to grow only modestly to USD 144.5 billion in 2015, on anticipation of a stalling volume of trade and steady world prices.

The FAO Code of Conduct for Responsible Fisheries will celebrate its twentieth anniversary in 2015. A groundbreaking and negotiated document, the Code lays forth principles and standards for national and international efforts to ensure sustainable production of aquatic living resources. As a living document, it serves as the basis for the development of various new instruments to address new challenges related to areas such as illegal, unreported and unregulated fishing (IUU) and small-scale fishieries.

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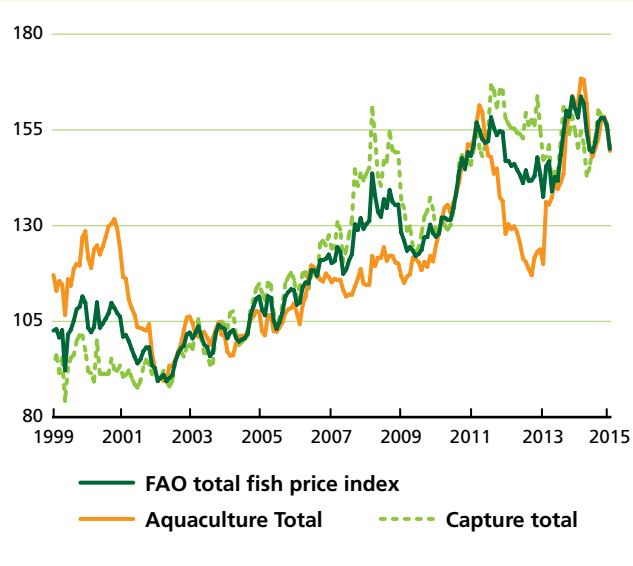
FAO FISH PRICE INDEX (2002-2004 = 100)



Source: Norwegian Seafood Council (NSC)

WORLD FISH MARKET AT A GLANCE

	2013	2014 *estim.*	2015 *f'cast*	Change: 2015 over 2014
	million tonnes			%
WORLD BALANCE				
Production	**162.8**	**164.3**	**168.6**	**2.6**
Capture fisheries	92.6	90.0	90.6	0.7
Aquaculture	70.2	74.3	78.0	5.0
Trade value (exports USD billion)	**136.5**	**143.9**	**144.5**	**0.4**
Trade volume (live weight)	**58.8**	**59.5**	**59.7**	**0.3**
Total utilization	**162.8**	**164.3**	**168.6**	**2.6**
Food	141.0	144.6	147.5	2.0
Feed	16.8	15.0	16.4	9.7
Other uses	5.0	4.8	4.7	-2.1
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	19.7	20.0	20.1	0.9
From capture fisheries (kg/year)	9.9	9.7	9.5	-2.2
From aquaculture (kg/year)	9.8	10.3	10.6	3.8

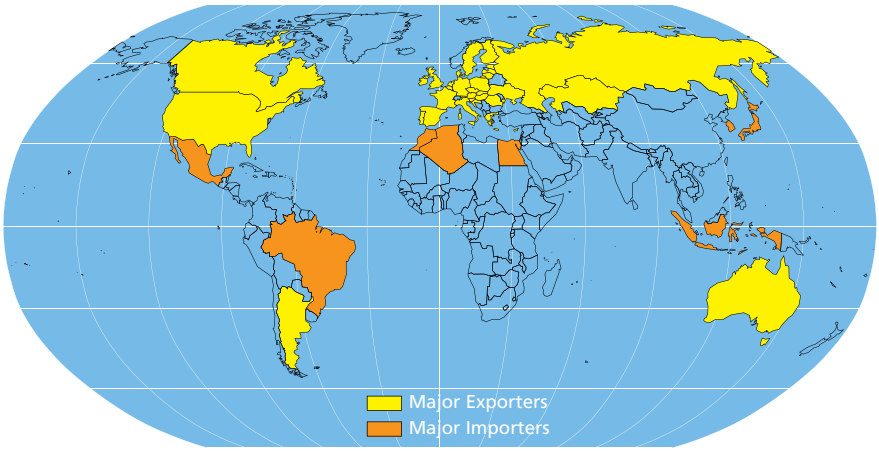
FAO FISH PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	148	157	150	-6.6

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

MARKET ASSESSMENTS

WHEAT

Major Wheat Exporters and Importers



PRICES

Wheat prices under downward pressure since the start of 2015

Large global supplies, in particular in major exporting countries, have kept international wheat prices under downward pressure since the beginning of 2015. In fact, with two consecutive bumper crops in 2013 and 2014 pushing world inventories to above average levels, wheat prices have been on a declining trend since the start of the 2014/15 marketing season, in July 2014, falling in March 2015 to their lowest level since 2010. While at times, developments in other markets, in particular maize and soybean markets provided some support, wheat prices remained under downward pressure even after the imposition of export restrictions by the Russian Federation (from February 2015 to June 2015), which could have lifted world prices, but did not. By April, the benchmark US wheat (No.2 Hard Red Winter) averaged USD 242 per tonne, down over USD 100 per tonne, or nearly 30 percent, from April 2014.

Wheat futures also remained under substantial pressure because of large supplies. While in recent weeks, concerns

Figure 1. Wheat export price (US No. 2 H.W. Gulf)

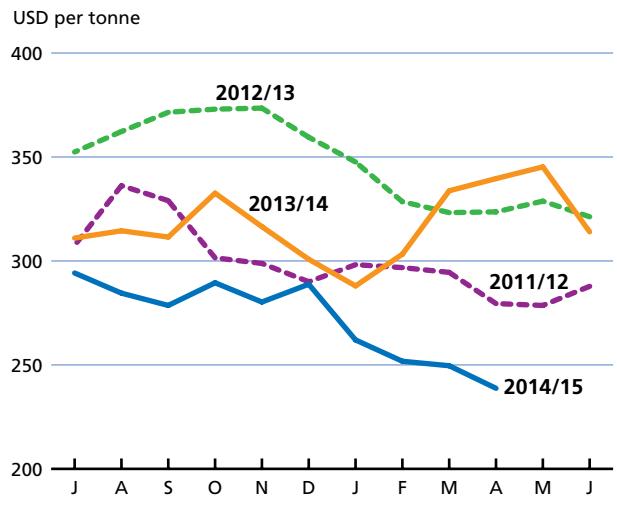
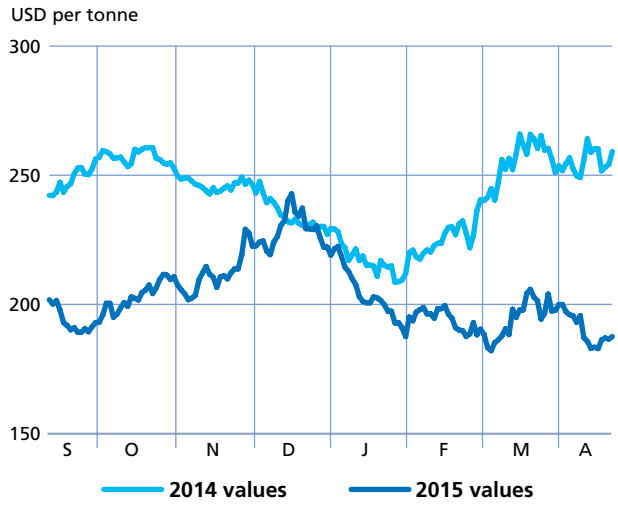


Figure 2. CBOT wheat futures for September



about dry conditions in the southern plains of the United States provided some support, the overall favourable supply prospects for another season kept the Chicago Board of Trade (CBOT) quotations at some 25 percent below the levels registered in the corresponding period in 2014. More detailed analysis of the futures markets can be found in the Market Indicators section of this report.

PRODUCTION

Wheat production could decline slightly in 2015

FAO's latest forecast for 2015 wheat production stands at 719 million tonnes, over 10 million tonnes (1.4 percent) below the record of 2014. The decline is largely attributable to a lower production forecast in *Europe*, following a contraction in the area planted, only partly compensated by small increases in *Asia* and *North America*.

In the **United States**, production is forecast to grow by 1.6 percent to 56 million tonnes in 2015. The anticipated gain reflects a 9 percent increase in the main winter wheat plantings, to be harvested from June, on account of a recovery to average yields and a lower abandonment rate more than compensating for reduced plantings. Plantings for the minor spring crop are expected to remain unchanged from 2014's above-average level and, assuming normal weather conditions, production is forecast to be close to last year's level. In **Canada**, with the bulk of the wheat crop planted in May, production is tentatively forecast to increase by 0.7 percent to 29.5 million tonnes. The positive outlook mainly reflects a projected enlargement in the area sown to durum wheat.

In *Europe*, production is set to fall by nearly 15 million tonnes. Current prospects for the **EU** point to a production of just over 148 million tonnes, nearly 4 percent less than the 2014 record, but still the second largest crop. Smaller plantings are the main reason for the decrease, but beneficial weather is expected to maintain above average yields, averting further declines. In the **Russian Federation**, the total area planted to wheat in 2015 is expected to remain unchanged compared to last year's average level, with a strong expansion in winter plantings forecast to offset a projected shortfall in spring sowings due, in part, to higher input costs. Assuming near-average yields, wheat production in 2015 is forecast at an above-average level of 54 million tonnes, although 10 percent below 2014. **Ukraine** is set to harvest a smaller wheat crop of 23.6 million tonnes, 2 percent down from 2014. The decline is on account of a likely decrease in yields from the record last year.

In *Asia*, with harvesting underway, current prospects for 2015 point to a production close to the high level of

Table 1. World wheat market at a glance

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
	million tonnes			%
WORLD BALANCE				
Production	**717.2**	**729.5**	**719.1**	**-1.4**
Trade[1]	**156.7**	**153.0**	**151.0**	**-1.3**
Total utilization	**695.2**	**711.7**	**716.1**	**0.6**
Food	480.8	484.6	488.8	0.9
Feed	128.1	139.0	139.4	0.3
Other uses	86.4	88.1	87.9	-0.2
Ending stocks	**189.4**	**200.0**	**198.9**	**-0.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	67.2	67.1	66.9	-0.3
LIFDC (kg/yr)	46.2	45.9	45.8	-0.2
World stock-to-use ratio (%)	*26.6*	*27.9*	*27.8*	
Major exporters stock-to-disappearance ratio[2] *(%)*	*13.6*	*15.5*	*16.5*	

FAO WHEAT PRICE INDEX[3] **(2002-2004=100)**	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	194	181	157	-16.9

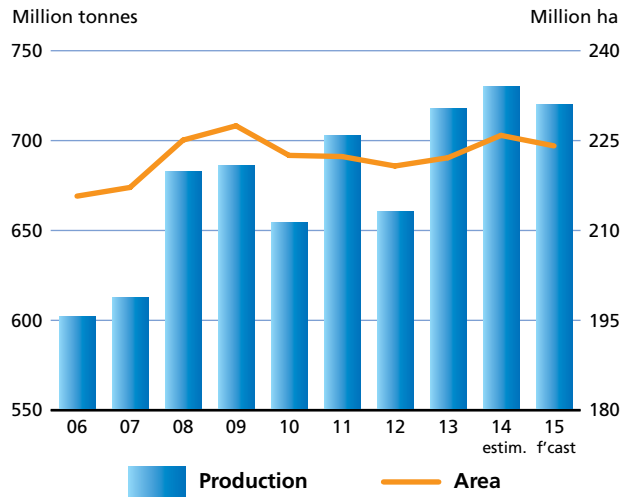
[1] Trade refers to exports based on a common July/June marketing season.
[2] Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.
[3] Derived from the International Grains Council (IGC) wheat index.

Table 2. Wheat production: leading producers*

	2013	2014 *estim.*	2015 *f"cast*	Change: 2015 over 2014
	million tonnes			%
European Union	143.6	156.1	148.5	-4.9
China (Mainland)	121.9	126.2	126.5	0.2
India	93.5	95.8	92.0	-4.0
United States	58.1	55.1	56.0	1.6
Russian Federation	52.1	59.7	54.0	-9.5
Canada	37.5	29.3	29.5	0.7
Pakistan	24.2	25.3	26.4	4.3
Australia	26.9	23.6	24.4	3.4
Ukraine	22.3	24.1	23.6	-2.1
Turkey	22.0	19.0	21.0	10.5
Iran Islamic Rep. of	14.0	13.0	13.5	3.8
Kazakhstan	14.0	13.0	12.5	-3.8
Argentina	9.2	13.9	12.0	-13.7
Egypt	8.8	8.8	8.5	-3.4
Uzbekistan	6.9	7.2	7.5	4.2
Other countries	62.2	59.4	63.2	6.4
World	**717.2**	**729.5**	**719.1**	**-1.4**

* Countries listed according to their position in global production (average 2013-2015)

Figure 3. Wheat production and area



the previous year. In **China,** considering similar plantings to 2014 and assuming favourable weather conditions for the remainder of the season, the 2015 wheat production is set to remain close to the 2014 record. In **India**, the production forecast has been revised downwards by 1.8 million tonnes to 92 million tonnes, reflecting unfavourable weather before harvest in the main wheat producing states. At this level, the 2015 wheat output would be 2 percent lower than that of 2014 but still the fourth highest on record. In **Pakistan**, the 2015 wheat production is officially forecast at 26.4 million tonnes, 4 percent up from the bumper level of the previous year, mainly reflecting an increase in the area planted. Buoyed by an adequate irrigated water supply, higher fertilizer use and good weather conditions, yields are also predicted to remain around the high level of the previous year. Planting of the spring wheat crop is progressing in **Kazakhstan**, with the preliminary 2015 production forecast for the aggregate harvest standing at 12.5 million tonnes, 4 percent below the average 2014 outcome, due to an expected 2 percent fall in plantings.

In the *Near East*, wheat production is forecast to rebound from the drought-affected level of 2014. In **Turkey**, an anticipated increase in yields, reflecting adequate soil moisture, and a small expansion in the area planted are foreseen to result in a 10 percent production increase in 2015. Although good climatic conditions also favoured crop development in **Iraq** and **Syria**, the on-going conflicts are likely to limit any significant production gains after the weather-depressed output of 2014.

In *North Africa*, the sub-region which accounts for the bulk of Africa's wheat, the production outlook remains positive, mainly due to favourable weather in most countries, except for **Algeria**, where an autumn drought resulted in a reduced forecast for 2015. Both **Morocco**, following last year's below average harvest, and **Tunisia** are expected to harvest larger crops in 2015.

In the Southern Hemisphere, early indications for **Australia** point to improved production, with the 2015 harvest expected to commence in August-September. The anticipated increase would rest on a forecast recovery in yields from the below-average 2014 level and on a slight expansion in the area planted, provisionally forecast at about 14 million hectares.

In *South America*, sowing began in May and will be finalized by September. Lower wheat prices in **Argentina** will likely cause a decline in the sown area for the 2015 crop, while plantings are tentatively forecast to rise in **Brazil,** owing to strong demand for high quality milling wheat. Overall, aggregate production for the region is expected to decline by 2.3 percent from the exceptionally high level of 2014. In *Central America and the Caribbean*, the 2015 wheat production prospects are positive, driven by an expected increase in the main producer **Mexico,** reflecting a significant rise of plantings.

TRADE

World trade to contract in 2015/16

FAO's first forecast for world trade in wheat (including wheat flour in wheat equivalent) in 2015/16 (July/June) stands at 151 million tonnes, down 1.3 million tonnes from the 2014/15 revised estimate. The largest declines are expected in imports by the developing countries whereas the developed countries are likely to maintain their purchases at the same level as in 2014/15. While world wheat trade in 2014/15 is currently put at almost 4 million tonnes below the record in 2013/14, the estimated drop in trade volume is less than anticipated, as lower international prices have helped stimulate import demand. In fact, the forecast for world wheat trade in 2014/15 has been raised by 1.6 million tonnes since April, mostly on upward adjustments to import forecasts of several countries in Africa and Asia.

Total imports in *Asia* in 2015/16 are forecast at 72.8 million tonnes, down just 700 000 tonnes from the 2014/15 estimate. A reduction of 1 million tonnes in wheat imports by **Turkey** in 2015/16 (to 4.5 million tonnes), mostly on expectation of larger output in 2015, would more than offset some increases in imports by the **Republic of Korea** and **China**. Imports by most other major wheat importers in Asia are seen to decline slightly, in view of the relatively large levels of carryover stocks as well as generally good production outlook for the largest producers. Imports by the **Philippines** are expected to

Figure 4. Wheat imports by region

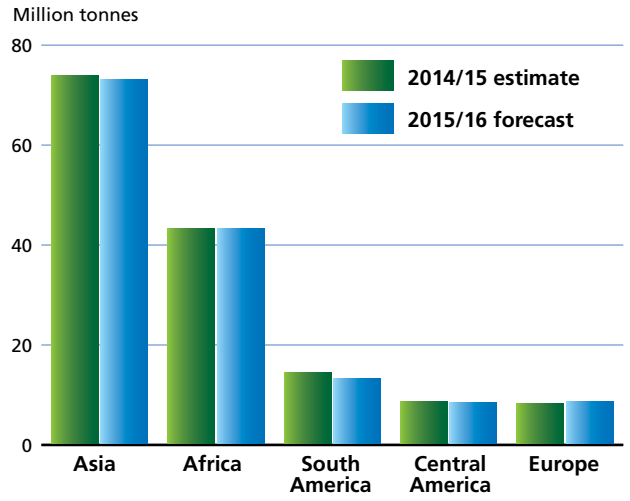
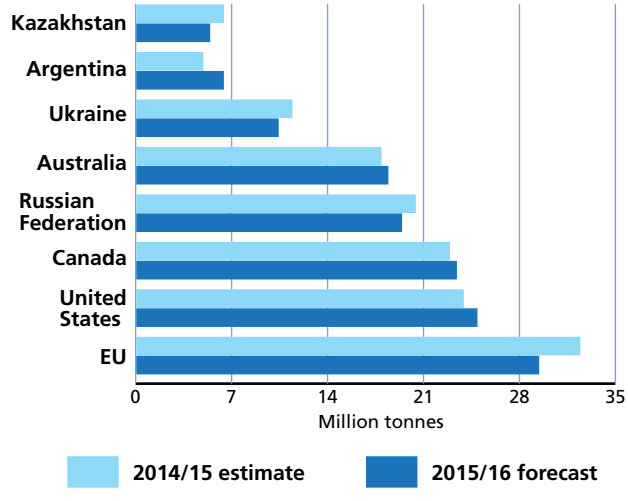


Figure 5. Wheat exports: major exporters



remain steady, at around 3.3 million tonnes. In November 2014, the government initiated anti-dumping duties of just over 16 percent on imports of wheat flour from Turkey for five years.

In *Africa*, total wheat imports in 2015/16 are forecast to remain unchanged at the 2014/15 level of around 43 million tonnes. In North Africa, wheat imports by **Egypt**, the world's largest wheat importer, are set to increase slightly, to 11 million tonnes in 2015/16, given the expectation of a small decline in production and rising demand. In January, the government approved the release of 139 000 tonnes of imported wheat, along with over 630 000 tonnes of domestic wheat from state reserves to help ease tight domestic supply of high protein grades. This move was followed by a decision in February to extend for six months the import of wheat with moisture levels of up to 13.5 percent. However, shipments to **Morocco**, the second largest North African importer, could decline slightly, to 3 million tonnes, given the prospect for higher production this year. In April, Morocco increased the custom duty on soft wheat imports sharply, to 75 percent from 17.5 percent last year (effective from 1 May through October 31). Wheat imports by other major buyers in Africa are expected to remain close to 2014/15 levels. In **Nigeria**, they are forecast to reach 4.7 million tonnes, similar to the previous two seasons. In **South Africa**, where production is put at nearly the same level as in 2014, imports are expected to decline slightly, to 1.6 million tonnes. In March, the country increased its import tariff on wheat, from ZAR 157 (USD 13) per tonne to ZAR 461 (USD 38) per tonne.

In *Europe*, aggregate wheat imports in 2015/16 are forecast to reach 8.5 million tonnes, up just marginally from 2013/14. As in the current season, the **EU** would be responsible for all of the projected increase. In spite of the sharp fall in its wheat production, currently anticipated, wheat imports by the EU are forecast to reach just 6 million tonnes in 2015/16, up only 300 000 tonnes from the current season. Large inventories will limit the need for higher imports. By contrast, in *Latin America and the Caribbean*, aggregate wheat imports in 2015/16 are put at nearly 21.3 million tonnes, down 1.4 million tonnes from 2014/15. All of the decline would be on account of **Brazil** and **Mexico,** which may curb imports by 1.2 million tonnes and 200 000 tonnes respectively from their 2014/15 levels, on expectation of larger crops this year.

As for exports, the current 2014/15 season, which is soon coming to a close, was marked by some unexpected developments concerning market shares for several exporters. The main driving factor has been currency movements, most specifically the continuing strengthening of the US dollar which eroded the export price competitiveness of United States' wheat against its main rivals, in particular the EU. Wheat shipments from the **United States** are currently forecast at 23.5 million tonnes in 2014/15, down almost 8 million tonnes from the previous season and 6.5 million tonnes less than the FAO's first forecast published in the May 2014 Food Outlook. By contrast, wheat shipments from the **EU** are currently put at an all-time high of 32 million tonnes which exceeds the previous season's level by 1.5 million tonnes and FAO's initial forecast by 7.5 million tonnes. **Argentina** has been another major exporter making much larger shipments in 2014/15 than in the previous season, on improved supply situation following a rebound in domestic production. Even **Ukraine** and the **Russian Federation**, the two countries

that faced very uncertain export prospects at the start of the season first due to continuing conflicts and later also because of export restrictions (higher export taxes in the Russian Federation from 1 February to 30 June 2015), are seen to end the current season with higher wheat sales than in 2013/14. With **Canada** also exporting slightly more wheat this season, only **Australia** and **Kazakhstan** are expected to curtail deliveries, due to smaller domestic production and stronger competition from other exporters. Looking ahead into the 2015/16 season, wheat sales from the **EU** are projected to decline by 3 million tonnes to 29 million tonnes, consistent with this year's production fall. Shipments from the CIS exporting countries are projected down as well, by about 3 million tonnes. These declines are likely to be compensated in part by larger sales from **Argentina**, **Australia**, **Canada** and the **United States**. Elsewhere, **India** is likely to remain a net exporter, of around 2 million tonnes, although exports could prove bigger, should world prices increase significantly above current levels. Exports by **Brazil** are also pegged at around 2 million tonnes, while **Turkey** could expand its shipments by 500 000 tonnes, to 3.5 million tonnes, given the prospect for a rebound in this year's domestic production.

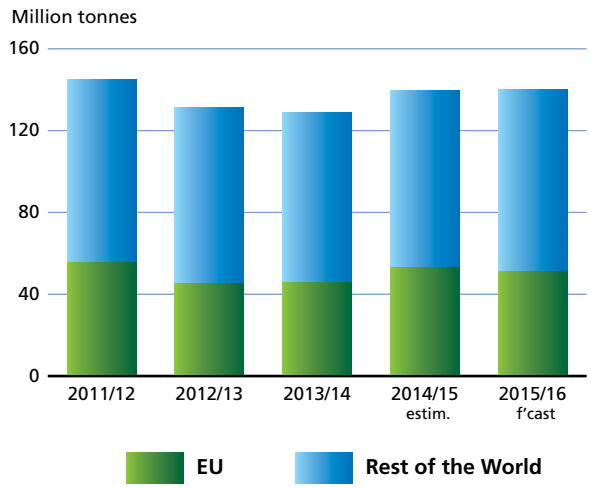
UTILIZATION

Wheat utilization to expand further in 2015/16

Early indications for world wheat utilization in the new season (2015/16) point to a continuing expansion, to 716.1 million tonnes, up 0.6 percent from the latest estimate for 2014/15. However, this increase would be much smaller than in the previous two seasons, mostly because of a larger availability of coarse grains in many feed markets and their more competitive prices. For the current marketing season (2014/15), total wheat utilization is estimated at 711.7 million tonnes, 2.4 percent higher than in the previous season. However, the **feed use** component is seen growing by as much as 8.5 percent from the previous season, while food use is set to rise at about the same rate as population, hence keeping the average annual per capita consumption steady at around 67 kg. In 2015/16, feed use of wheat is seen to increase only marginally, by 0.3 percent, to 139 million tonnes. The slowdown mostly reflects a sizeable decline in feed use of wheat in the EU, the world's largest feed wheat market, from 53 million tonnes in 2014/15 to a projected 51 million tonnes in 2015/16. Reduced feed use of wheat is also anticipated for Canada and the Russian Federation. However, in China, the amount of wheat used for animal feeding could grow for a third consecutive season, exceeding 19 million tonnes, up 2 million tonnes from 2014/15, due to the continued high domestic prices of coarse grains, maize in particular.

Global **food consumption** of wheat is set to reach 489 million tonnes in 2015/16, up 0.9 percent from the current season. As in previous years, almost 60 percent of this total is likely to be consumed by countries in Asia, 17 percent in Europe and 11 percent in Africa. In Asia, food consumption of wheat in China is projected at 88.5 million tonnes, for a per capita level of around 63 kg. While food consumption of wheat in absolute terms continues to grow in China, on a per capita basis, it declined by over 5 kg in the past decade because of a gradual change of diet towards more value added food products. In India, where around 77 million tonnes of wheat are expected to be used for direct human consumption in 2015/16, the per capita national average would remain at around 60 kg and stay relatively stable over time.

Figure 6. Wheat feed use

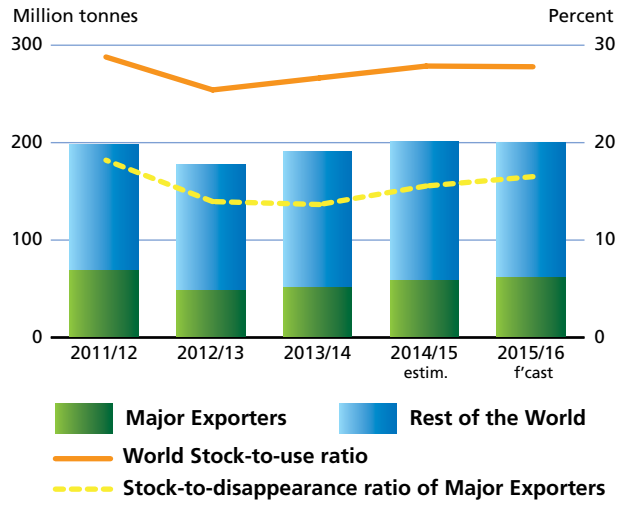


STOCKS

Large wheat stocks also in 2015/16

At the close of seasons in 2015, world wheat inventories are forecast to approach 200 million tonnes, their highest level since 2010 and at least 10 million tonnes (5.5 percent) above their opening levels. Record wheat production in 2013 and 2014 boosted the size of global reserves, resulting in a world stocks-to-utilization ratio of 27.9 percent, up from 26.6 percent in the previous season and significantly above the low of 20.0 percent registered in 2007/08. The largest year-on-year expansions of inventories are expected in the EU (+6.0 million tonnes), the Russian Federation (+3.0 million tonnes), the United

Figure 7. Wheat stocks and ratios

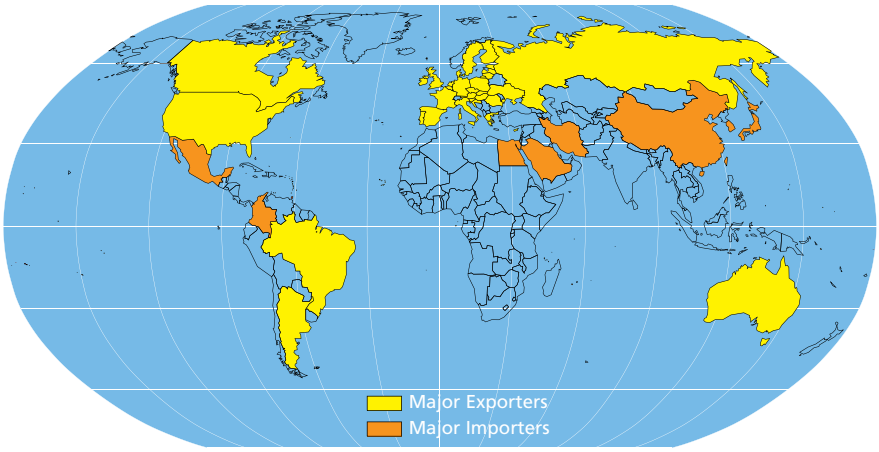


States (+2.6 million tonnes), India (+2.5 million tonnes) and Argentina (+1.0 million tonnes), more than offsetting declines in Canada (-3.4 million tonnes) and China (-2.2 million tonnes).

Based on the latest production forecast for 2015 and the projected utilization in 2015/16, FAO's first forecast for world wheat stocks by the close of crop seasons in 2016 stands at nearly 199 million tonnes, marginally below this year. In China, ending stocks are anticipated to fall to 44 million tonnes, down 4.9 million tonnes from 2015, the smallest in over a decade. Offsetting this decrease, however, inventories in the United States and the EU are expected to increase further in the new season, by 2.4 million tonnes and 3.0 million tonnes respectively. At the current forecast levels, the world **wheat stock-to-use ratio** in 2015/16 would reach 27.8 percent, nearly unchanged from the current season's estimate. More importantly, however, **the ratio of major wheat exporters' closing stocks to their total disappearance** (defined as domestic utilization plus exports) is also anticipated to remain at a comfortable level of 16.6 percent in 2015/16, up from 15.5 percent in 2014/15.

COARSE GRAINS

Major Coarse Grain Exporters and Importers



PRICES

Ample maize supplies keep international prices under pressure

Large inventories in the major exporting and importing countries, as well as favourable prospects for crops to be harvested this year, have kept international maize prices under downward pressure. Towards the end of 2014, maize values received support from news that China had approved imports of the GM variety MIR162 and of its co-products. However, concerns about weaker demand from the ethanol sector and a slow pace of imports by China have led world prices to dip further since the start of the year. Furthermore, the strong US currency contributed to the slide in export quotations. The benchmark US maize price (yellow, No. 2, f.o.b) averaged USD 172 per tonne in April 2015, down as much as USD 52 per tonne, or 23 percent, from the corresponding level last year. By the end of April, the **Chicago Board of Trade (CBOT) maize futures** for December 2015 delivery were quoted at around USD 151 per tonne, down USD 50 per tonne, or 25 percent, year-on-year. Maize futures remained

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

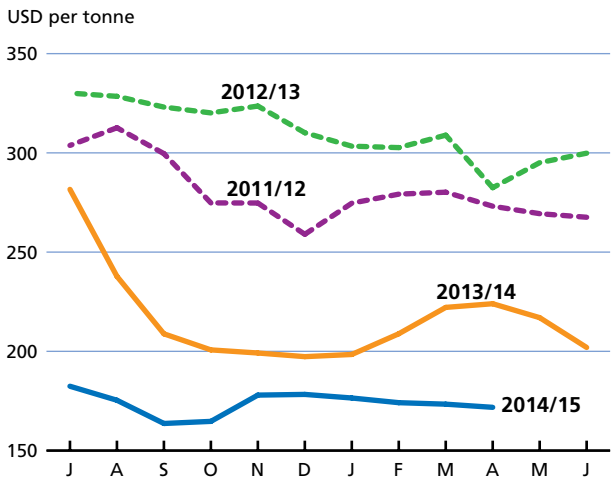
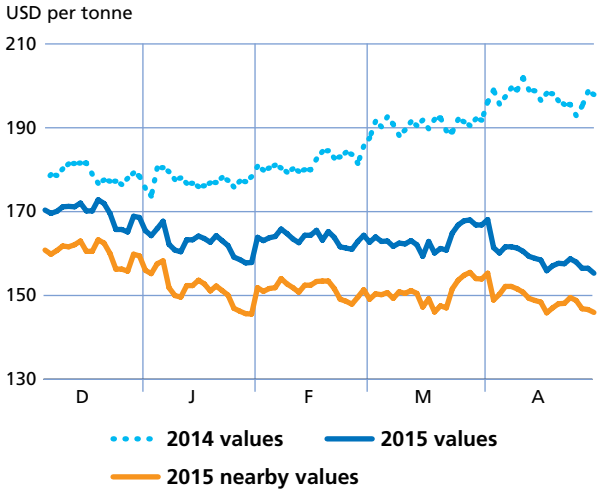


Figure 2. CBOT maize futures for December



under downward pressure in April mostly on a slack world demand and prospects for continuing high supplies.

By contrast, international prices of barley and sorghum rose sharply between September 2014 and March 2015. The Canadian feed barley and US sorghum quotations gained over 50 percent and 40 percent, respectively, underpinned by large sales to China, where import demand for both commodities surged unexpectedly. Tightening export supplies also contributed to the strengthening of international quotations, of sorghum in particular.

PRODUCTION

Early prospects indicate smaller coarse grains production in 2015

FAO's first forecast for world coarse grains production in 2015 stands at 1 290 million tonnes, 2.6 percent lower than the record of 2014. The overall decrease mainly reflects reduced output prospects in *North America* (maize) and *Europe* (maize and barley).

Global maize production in 2015 is forecast at 995 million tonnes, 3 percent (30 million tonnes) below the 2014 record. The contraction would result from lower anticipated outputs in the **United States** and *Europe*, but also in *South America* and *Africa*.

In the Northern Hemisphere, planting of the 2015 maize crops is underway, with harvesting expected to start from September. Maize production in the **United States**, the world's largest producer, is forecast to decline by 3 percent from the 2014 record, to 350 million tonnes. The contraction would ensue from a 5 percent price-induced reduction in plantings, partly offset by an expected recovery in yields.

In **China**, continued government support and a switch away from cotton cultivation could foster a small expansion in the area planted to maize. For instance, the northeastern provinces of China, traditionally specialized in soybeans, are reportedly shifting towards the cultivation of maize and rice, which benefit from government procurement programmes. Assuming average yield levels, maize production in the country is forecast to grow by about 1 percent to 217 million tonnes in 2015.

In the **EU**, early indications point to a 6 percent decline in production from the 2014 record to 70 million tonnes. The decrease rests on expectations of a contraction in plantings (mainly in the **United Kingdom**) and of a return to near-average yields from the 2014 exceptionally high level. In the **Russian Federation**, official projections point to a 3 percent expansion in plantings, which is likely to outweigh a decline of yields from the above-average level of last year, resulting in a an expected 11 million tonne increase in maize production in 2015. In **Ukraine**, production is anticipated to decrease from last year's high level, owing partly to higher production costs that are expected to reduce plantings.

In the Southern Hemisphere, harvesting of the main 2015 maize crops is underway and expected to be finalized by July. In *South America*, **Brazil's** production is forecast to decrease from the high level of 2014, largely on account of a drop in the area planted, in response to less attractive prices relative to soybeans. Similarly, in **Argentina,** a fall in plantings is anticipated to result in a smaller production. Despite an expected combined decline of nearly 6 million tonnes in **Brazil** and **Argentina**, production in the subregion is still forecast to remain above average levels. In *Central America and the Caribbean*,

Figure 3. Coarse grain production and area

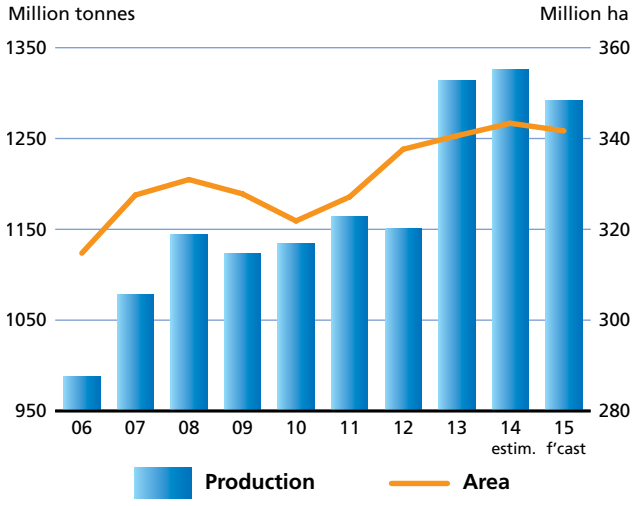


Figure 4. World maize production

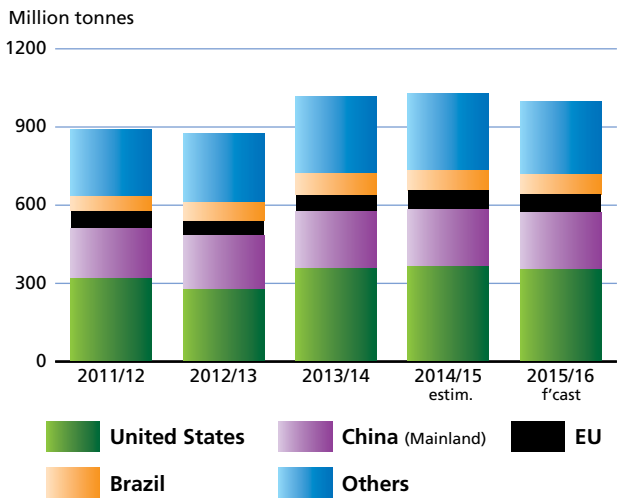


Table 1. World coarse grain market at a glance

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
		million tonnes		%
WORLD BALANCE				
Production	**1 312.3**	**1 324.4**	**1 290.0**	**-2.6**
Trade[1]	**158.7**	**157.0**	**156.0**	**-0.6**
Total utilization	**1 247.4**	**1 284.5**	**1 297.5**	**1.0**
Food	199.7	202.7	206.1	1.7
Feed	698.7	724.9	737.3	1.7
Other uses	349.0	356.9	354.2	-0.8
Ending stocks	**238.9**	**269.5**	**259.6**	**-3.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	27.9	28.1	28.2	0.4
LIFDC (kg/yr)	39.6	39.7	40.1	1.0
World stock-to-use ratio (%)	*18.6*	*20.8*	*19.6*	
Major exporters stock-to-disappearance ratio[2] (%)	*11.5*	*14.6*	*13.7*	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	246	183	165	-18.3

[1] Trade refers to exports based on a common July/June marketing season.

[2] Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

Table 2. Coarse grain production: leading producers*

	2013	2014 *estim.*	2015 *f"cast*	Change: 2015 over 2014
		million tonnes		%
United States	367.4	377.4	365.6	-3.1
China (Mainland)	227.9	224.7	226.1	0.6
European Union	158.9	169.0	161.5	-4.4
Brazil	83.5	81.7	78.7	-3.7
India	43.2	38.2	40.7	6.5
Argentina	40.9	39.9	37.6	-5.8
Russian Federation	36.6	41.7	39.7	-4.8
Ukraine	40.5	39.5	35.0	-11.4
Mexico	30.7	31.8	30.4	-4.4
Canada	28.8	22.0	23.8	8.2
Nigeria	18.4	19.5	19.4	-0.5
Indonesia	18.5	19.1	19.2	0.5
Ethiopia	18.5	18.0	17.2	-4.4
Turkey	14.5	12.9	12.9	0.0
South Africa	13.0	15.6	10.5	-32.7
Other countries	171.0	173.4	171.7	-1.0
World	**1 312.3**	**1 324.4**	**1 290.0**	**-2.6**

* Countries listed according to their position in global production (average 2013-2015)

prospects point to an above-average output in **Mexico**, the subregion's main producer, although not matching the 2014 record.

In *Southern Africa*, drought conditions earlier in the year have marred the production outlook, especially in **South Africa**, the largest maize producer in *Africa*, which may incur a 33 percent output contraction. Adverse weather conditions across most of the subregion have resulted in poor crop prospects, with virtually all countries expected to register a contraction in production from the 2014 bumper levels. As a result, the subregion aggregate output in 2015 is provisionally forecast at 21 million tonnes, 25 percent below the previous year's high level.

The global forecast for 2015 barley production stands at 141 million tonnes, about 2 percent less than in 2014. The outlook reflects lower forecasts for *Europe* and the *CIS* region that would more than outweigh a foreseen recovery in *South America*, and increases in *Asia* and *North America*.

World sorghum production in 2015 is forecast at around 62 million tonnes, 1.4 million tonnes (2 percent) below the previous year. The anticipated overall decrease is mainly on account of lower expected harvests in the **Sudan** and the **United States,** which more than offset a projected rise in **India**.

TRADE

World trade in coarse grains could decline slightly in 2015/16

FAO's first forecast for world trade in coarse grains in 2015/16 (July/June) stands at 156 million tonnes, which would point to a 0.6 percent (1 million tonnes) decline from the estimated level for 2014/15. The projected decrease reflects reduced trade in barley, which could offset expected rises in maize, oats, rye and sorghum, while trade in millet is likely to remain unchanged.

Global trade in *maize* is forecast at 117 million tonnes, slightly above the 2014/15 level. A decline in maize imports in Asia (particularly China) and North America (Canada) is likely to outweigh increased purchases by other regions. Total maize imports in *Europe* are forecast to exceed 9 million tonnes in 2015/16. The increase is consistent with the **EU**'s prospects for lower maize production. In *Asia*, aggregate maize imports are set to decrease slightly, to 59 million tonnes in 2015/16. In **China** (Mainland), they may fall to a 5-year low of 3 million tonnes (500 000 less than in 2014/15) despite high domestic maize prices, as import restrictions and high inventories are anticipated to curtail demand.

In *Africa*, total maize imports could reach 18 million tonnes, 500 000 tonnes higher than last season, with most of the anticipated increase resting on

Figure 5. Coarse grain imports by region

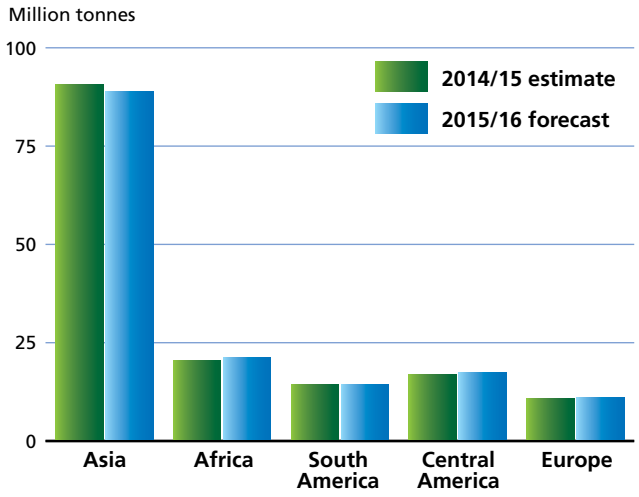


Figure 6. Coarse grain exports: major exporters

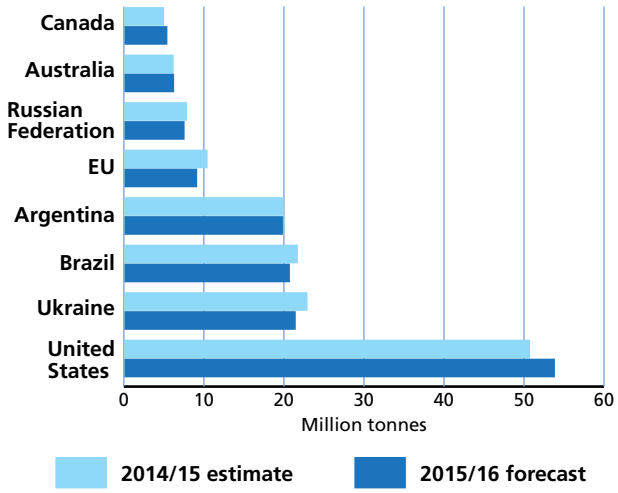
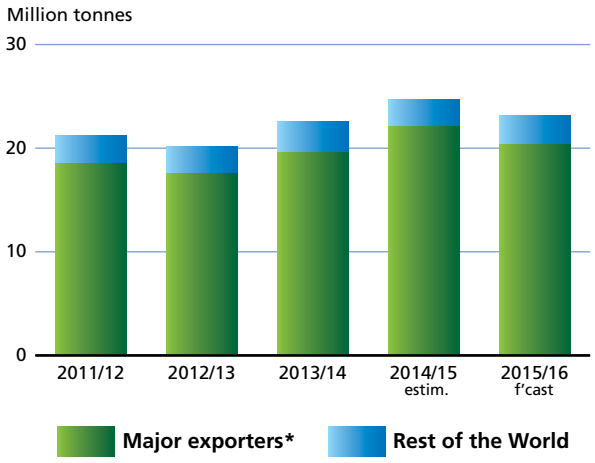


Figure 7. Barley exports: major exporters



*Major exporters are: Argentina, Australia, the EU, Russian Fed. and Ukraine.

Figure 8. Barley imports: major importers

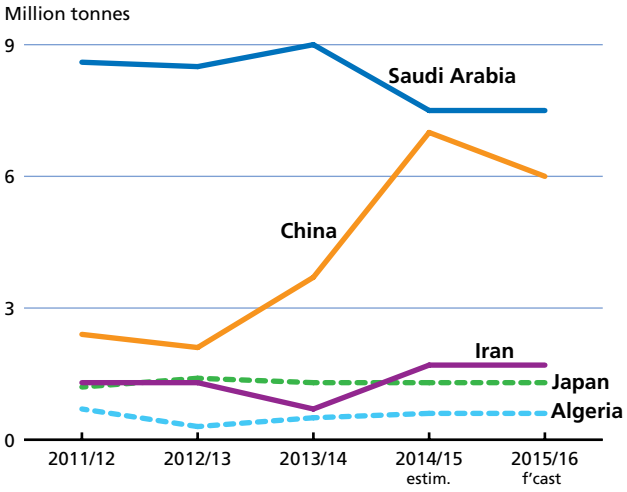
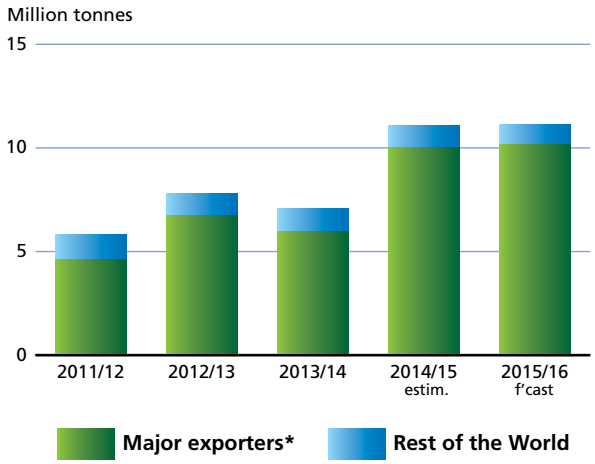


Figure 9. Sorghum exports: major exporters



*Major exporters are: Argentina, Australia and the USA.

Figure 10. Sorghum imports: major importers

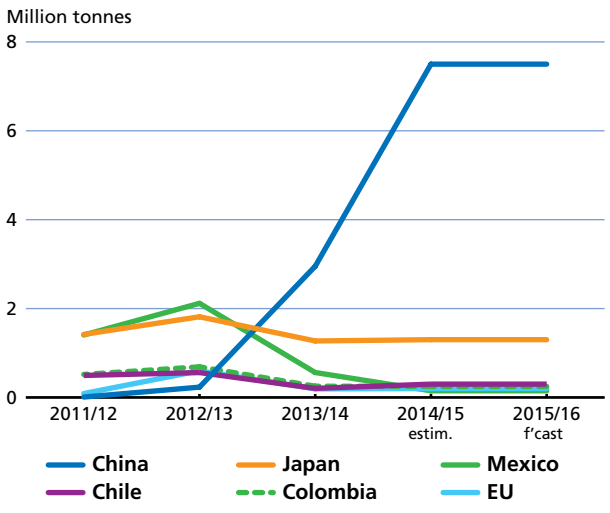


Table 3. Maize use for ethanol (excluding non-fuel) in the United States

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14* estim.	2014/15* (f'cast)
				Thousand tonnes				
Maize production	331 177	307 142	332 550	316 166	313 956	273 188	351 270	361 101
Ethanol use	77 453	93 396	116 616	127 538	127 005	117 886	130 409	132 085
Yearly change (%)	44	21	25	9	-0.4	-7	11	1
As % of production	23	30	35	40	41	43	37	37

Source: WASDE-USDA. * 9 April 2015

larger purchases by **Zimbabwe** and **South Africa**, which face production declines in 2015. In *Latin America and the Caribbean*, maize imports by **Mexico** may climb to 11 million tonnes, 500 000 tonnes more than in 2014/15, to compensate for an anticipated small production decline in 2015 from last year's record harvest. Elsewhere, imports by **Canada** are expected to fall to 1 million tonnes on expectations of a larger 2015 crop.

World trade in barley is forecast at 23 million tonnes in 2015/16, around 2 million tonnes, or almost 6 percent, less than the record of 2014/15. Much of the contraction in world barley imports is expected to be concentrated in *Asia*, where **China** is set to import 6 million tonnes in 2015/16, 1 million tonnes less than the exceptionally high level of the current season, but still well above the 5-year average. In recent years, China has turned increasingly to barley and sorghum as a source of livestock feed. **Saudi Arabia,** which accounts for 33 percent of world barley imports, is projected to purchase a similar volume to that of 2014/15. On the other hand, in *Africa,* barley imports could rise slightly, to 1.9 million tonnes, on higher deliveries to **Tunisia**.

Global trade in sorghum is projected to approach 11 million tonnes in 2015/16, virtually unchanged from an unusually high level in the current season. Total imports in *Asia* are anticipated to remain steady around this season's level. **China** (Mainland) is forecast to purchase 7.5 million tonnes of sorghum in 2015/16, confirming its position as the world major importer of sorghum, held for the past three years. Similar to barley, sorghum is a low cost feed substitute for maize and is not subject to import quotas as maize is. Purchases of sorghum by **Japan** are expected to remain stable at 1.3 million tonnes. **Mexico**, traditionally the largest sorghum importer, has switched to maize for livestock feeding over the past two years. In 2015/16, it is forecast to import 150 000 tonnes of sorghum, similar to the previous year, but well below the high levels it used to purchase prior to 2013/14.

Based on the prospect of a slight decrease in world demand for coarse grains in 2015/16, most exporting countries, are anticipated to export less than in the current season except for **Australia** and the **United States**. Notably, given the positive outlook for maize production in the **United States**, shipments of coarse grains from the country could rise by 3 million tonnes to 53 million tonnes. The global contraction in coarse grains exports would mainly reflect reduced sales by the **EU,** currently forecast to dip by 1.3 million tonnes to 8.4 million tonnes, **Ukraine**, which may ship around 21 million tonnes, almost 2 million tonnes less than in 2014/15, and **Brazil**, which is likely to register a 1 million tonne decline in sales to 20 million tonnes. Exports by the **Russian Federation** are also predicted to drop slightly mainly on account of a smaller crop in 2015.

UTILIZATION

Utilization in 2015/16 to increase at a slower pace than in the two previous seasons

Based on current expectations, total utilization of coarse grains in 2015/16 may reach 1 298 million tonnes, 1 percent higher than in 2014/15. At this forecast level, utilization would exceed its 10-year trend value for the third consecutive season.

Global **feed utilization** of coarse grains in 2015/16 is forecast to rise by around 2 percent, or 12 million tonnes, to 737 million tonnes. Much of the expected increase would be driven by the United States, which may feed a record 145 million tonnes (mostly maize) in 2015/16, up by 6 million tonnes, or 5 percent, from the current season, and the EU, with an increase of 3 million tonnes, or 3 percent, to 124 million tonnes. China is also anticipated to use more coarse grains for feed in 2015/16, but the increase would be modest, about 1 percent, far lower than the 7 percent growth registered in 2014/15. The utilization of coarse grains by the livestock sector is also foreseen to increase in Brazil and the Russian Federation.

World **food consumption** of coarse grains is projected to increase by almost 2 percent (around 3 million tonnes) in 2015/16, to 206 million tonnes, or about 16 percent of total utilization. Most of the expected increase would originate in Africa (up 3 percent to 86 million tonnes) and

Figure 11. Coarse grain utilization

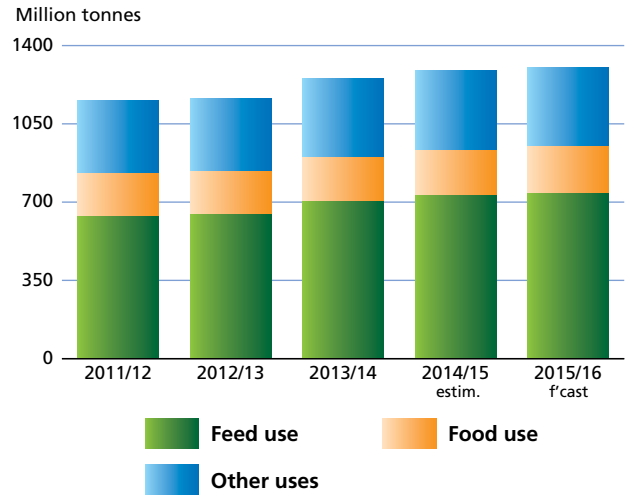
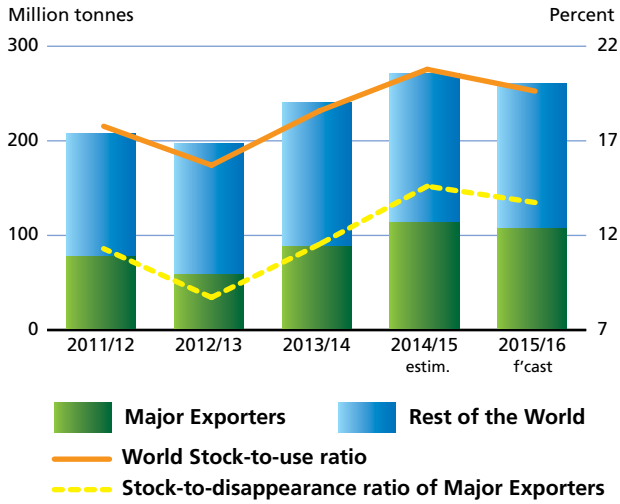


Figure 12. Coarse grain stocks and ratios



to a lesser extent Asia (up 1 percent to 65 million tonnes) and Latin America and the Caribbean (up 1 percent to 21 million tonnes). At the global level, average annual per capita consumption of coarse grains as food is expected to remain stable at 28.2 kg. Small rises in per capita food consumption of coarse grains in 2015/16 are projected for Latin America and the Caribbean, to 96.9 kg, and for Africa, to 75.0 kg, while in Asia it could stabilize at around 14.9 kg.

Total **industrial use** of coarse grains is projected to slightly exceed 300 million tonnes in 2015/16, up 1 percent from the estimated level in 2014/15, with the increase driven by higher starch, sweetener and alcohol demand. According to the International Grains Council, around 263 million tonnes of maize are likely to be used for conversion into fuel ethanol, starch and sweeteners in 2014/15, up almost 3 percent from the previous year. In the United States, the world's largest user of maize for production of fuel ethanol, current expectations point to a stagnant, if not declining, use of maize as feedstock for ethanol production in 2015/16. The shrinking profit margin on the back of low oil prices is among the main reasons.

STOCKS

Inventories to decline slightly after two consecutive seasons of accumulation

Based on the latest forecasts for production in 2015 and utilization in 2015/16, global inventories of coarse grains are likely to decline by 4 percent (10 million tonnes) to 260 million tonnes by the close of the crop seasons in 2016. This follows two consecutive seasons of build-up in stocks. Among the major coarse grains, global maize stocks could decline to 217 million tonnes, down 2 percent, or 5 million tonnes, from their historically high opening levels.

South Africa and Ukraine are expected to account for much of the projected decrease in reserves, given the smaller production expected in 2015. By contrast, carry-over stocks of coarse grains in China may approach 100 million tonnes, even bigger than their recently revised estimates for this year. The increase in coarse grains inventories in China would mainly concern maize, following two years of bumper crops and the government's attractive procurement programme. The latter sustained domestic support prices for maize well above international prices, a development that has made barley and sorghum more attractive as a feed ingredient for the country's livestock sector.

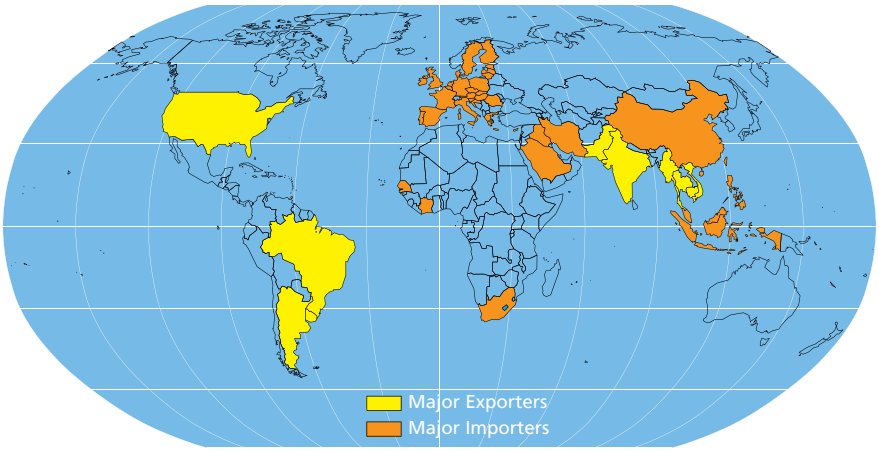
Given the small decline in world inventories, the **world stock-to-use ratio**[2] is estimated to fall from 20.8 percent in 2014/15 to 19.6 percent in 2015/16, still a relatively high level and two percentage points above the levels in the recent period of high international prices (between 2007 and 2012). Similarly, the **major exporters' stock-to-disappearance ratio**[3] (i.e. domestic consumption plus exports) is forecast at 13.8 percent, down from 14.5 percent in 2014/15, but still adequate in terms of meeting demand prospects in world markets in the new season.

[2] The stock-to-use ratio in 2015/16 is defined as the sum of ending stocks of all countries by the end of seasons in 2016 divided by their expected total utilization in 2016/17

[3] The stock-to-disappearance ratio in 2015/16 is defined as the sum of ending stocks held by major exporters divided by their domestic utilization and exports in 2015/16.

RICE

Major Rice Exporters and Importers



PRICES

International rice prices still falling

International rice prices have been falling steadily since September 2014, causing the value of the FAO All Rice Price Index (2002-2004=100) to drop to 218 points in April 2015, its lowest level since August 2010. In the first four months of 2015, the downward pressure on prices lessened, with the index subsiding only four points between January and April. Notwithstanding tight Japonica supplies, prices in that segment fell by 3 percent over the period, influenced by weakening quotations in the United States. International rice prices in April were steady around their January level for the Lower Quality Indica (with no less than 20 percent brokens) but softened by 3 percent for the Higher Quality Indica. By contrast, after incurring sharp losses in the last quarter of 2014, fragrant rice prices in April 2015 were 2 percent up from January, on prospects of a re-opening of the Iranian market. Comparing the average of the All Rice Price index in January-April 2015 with its corresponding period value in 2014 shows it falling by 6 percent.

Figure 1. FAO rice price sub-indices

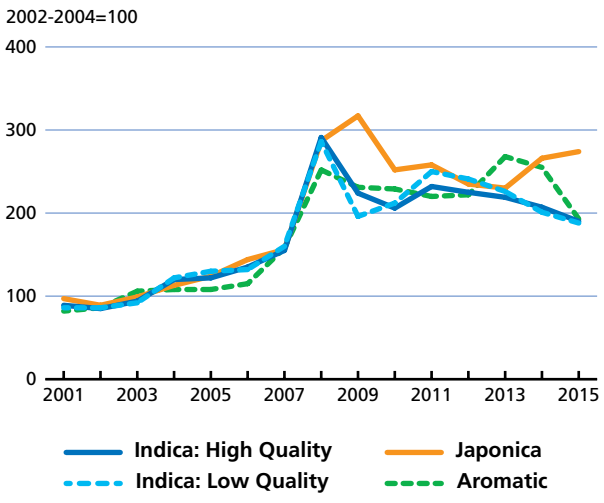
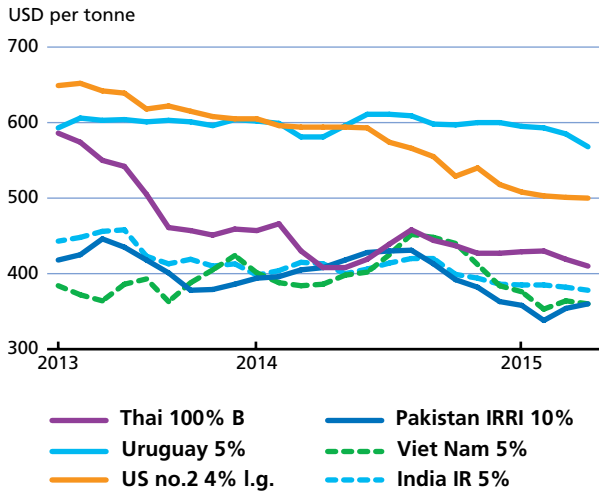


Figure 2. Export prices for higher-quality rice in selected countries



Will 2015 be a strong EL Niño year?

The 2014 paddy season opened under the threat of a recurring El Niño weather anomaly, which could have wreaked havoc to crops worldwide. In retrospect, a number of climatic disruptions did impact crops in 2014, for instance a late arrival of the monsoon and a precipitation deficit in India, which were mainly responsible for the poor global outcome of the 2014 paddy season. However, most of the setbacks incurred in 2014 were not, or only limitedly, related with the prevalence of an El Niño, especially as this did not develop as a "strong" event. Since late last year, various Climatic Prediction Centres have again portended the arising the weather anomaly in 2015 and, in March, the National Oceanic and Atmospheric Administration (NOAA) officially declared the onset of an El Niño episode. In April, the prevalence of the event was confirmed, with the NOAA setting the chances of an El Niño manifestation throughout the 2015 Northern Hemisphere summer at 70 percent, and of its lasting till autumn at 60 percent. At this stage, however, the Centre noted the "considerable uncertainty as to how strong this event may become".

Much of the prevailing weakness of Indica prices reflects the intensification of competition among exporters, which, despite poor 2014 seasons, keep holding large supplies in stocks. The introduction of more stringent controls on China's border also appears to have reduced the volumes entering the country unofficially, somewhat suppressing one of the factors that had sustained the market in recent years. As for the benchmark Thai white 100%B rice, this was quoted at USD 410 per tonne in April 2015, down 4.4 percent from its January level, partly a reflection of the 1.5 million tonnes offloaded from public stocks through auctions by Thailand since December. The weakening of currencies such as the naira in Nigeria, the CFC franc in Western Africa, or the real in Brazil also contributed to the easing of world prices in recent months, by hampering the ability of major importing countries to buy.

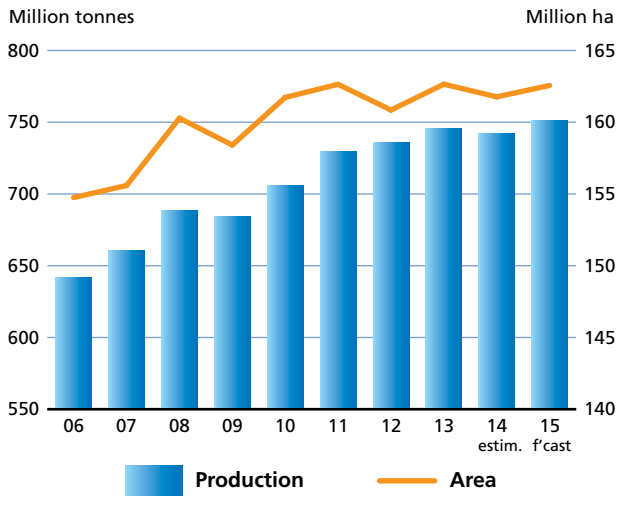
PRODUCTION[4]

Low market prices and less supportive policies to dampen 2015 world rice production growth

The 2015 season is already well advanced along and south of the equator, where the first crops are reaching maturity. However, it is just starting in Northern Hemisphere countries, which account for the bulk of world production. There, farmers are presently sowing their first 2015 crops, or preparing to sow them when the monsoon rains arrive in May/June. Taking into account the limited available information on crop progress or planting intentions, FAO has set its first forecast for global rice production in 2015 at some 500 million tonnes (milled basis), only 1.2 percent above the poor 2014 outcome. The growth is expected to result from a 0.5 percent recovery in the rice area to 162.6 million hectares and a 0.7 percent gain in yields to 4.61 tonnes per hectare. These forecasts assume the prevalence of normal weather conditions, unlike the 2014 season which, although little affected by the dreaded El Niño, was marred by severe climatic setbacks, in particular late and insufficient rains and/or floods. The adverse climate was very much behind an estimated 0.5 percent contraction of world output in 2014 which, if confirmed, would be the first since 2009, another season marked by erratic weather. As for the new 2015 season, the rather modest 1.2 percent output recovery currently projected takes also account of the general tendency of falling international prices witnessed in recent months, which may encourage farmers to curb plantings. The low price context is already prompting several governments, in particular in exporting countries, to lean towards less supportive production policies, for instance by imposing limitations on rice cultivation or keeping official producer prices unchanged. The policy shift also reflects a growing concern about the negative environmental impacts of rice cultivation and the budgetary implications of holding bulging public stocks. At the same time, it is noteworthy that the pursuance of rice self-sufficiency, i.e. producing enough to cover domestic consumption, remains a mainstay of policies in many rice importing countries.

Much of the expected growth in world production in 2015 is likely to originate in ***Asia***, where

Figure 3. Global rice paddy production and area



[4] All figures quoted correspond to rice expressed on a milled weight basis.

Table 1. World rice market at a glance

	2013/14	2014/15 *estim.*	2015/16 *f'cast*	Change: 2015/16 over 2014/15
	million tonnes, milled equivalent			%
WORLD BALANCE				
Production	**496.6**	**494.4**	**500.1**	**1.2**
Trade [1]	**42.4**	**41.4**	**42.4**	**2.4**
Total utilization	**491.2**	**499.9**	**508.3**	**1.7**
Food	409.1	414.9	420.3	1.3
Ending stocks	**181.1**	**176.2**	**168.2**	**-4.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	57.3	57.4	57.5	0.2
LIFDC (kg/yr)	64.2	64.3	64.3	0.0
World stock-to-use ratio (%)	*36.2*	*34.7*	*32.4*	
Major exporters stock-to-disappearance ratio[2] (%)	*26.8*	*23.2*	*19.2*	

FAO RICE PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	233	235	220	-6.3

[1] Calendar year exports (second year shown).
[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

Table 2. Rice Production: leading producers *

	2013	2014 *estim.*	2015 *f.cast*	Change: 2015 over 2014
	million tonnes, milled equivalent			%
China (Mainland)	139.5	141.4	141.8	0.3
India	106.7	103.0	105.5	2.4
Indonesia	44.9	44.6	46.0	3.1
Bangladesh	34.4	34.8	34.5	-0.8
Viet Nam	29.4	30.0	29.9	-0.4
Thailand	24.4	22.7	23.2	2.1
Myanmar	17.8	18.2	18.4	1.0
Philippines	12.3	12.4	12.9	4.0
Brazil	7.9	8.1	8.3	2.3
Japan	7.8	7.6	7.6	-0.5
United States	6.1	7.1	7.0	-1.0
Pakistan	6.8	6.7	6.5	-3.7
Cambodia	6.0	5.9	6.0	0.7
Korea Rep. of	4.2	4.2	4.1	-3.5
Egypt	4.2	4.1	4.1	-1.7
World	496.6	494.4	500.1	1.2

* Countries listed according to their position in global production (average 2013-2015).

452.8 million tonnes are forecast to be harvested, 1.2 percent above the 2014 reduced output and a new record. Many of the countries in the region that suffered from poor weather over the 2014 season could see production rebound in 2015. This could be particularly the case of **India**, where a delayed monsoon was much behind a 3.6 million tonne, or 3.4 percent, contraction of output to 103.0 million tonnes in 2014. Although very tentative, since the season will only start with the arrival of the monsoon in June, production in India is forecast to rise to 105.5 million tonnes in 2015. The level would imply only a partial recovery, but sweeping changes in national procurement policies, already enacted or under discussion, are shrouding the sector with uncertainty. In **Indonesia,** the 2015 season is more advanced and progressing well, although belated seasonal rains delayed plantings. The country, which endured flood-related losses last year, is expected to witness a 3.1 percent output growth, to a new record of 46.0 million tonnes, sustained by attractive market prices and government assistance, especially through infrastructure improvements and higher government procurement prices. In **Sri Lanka**, abundant precipitation since late last year is mostly behind an expected 21 percent recovery from the 2014 drought-affected output. Barring any major natural setback, government support and high local prices are also anticipated to boost production in the **Philippines**, where the 2015 season is yet to start. Prospects also point to some increase in **China**, albeit relatively modest. Although support to producers of cereals remains a priority for the country, the Government is paying growing attention to concerns about resource constraints, environmental impacts and bulging public grain inventories, partly explaining the decision to keep official rice procurement prices unchanged in 2015 after seven years of steady rises. Within the region, **Cambodia**, the **Democratic People's Republic of Korea**, **Nepal** and **Myanmar** are also expected to gather larger crops. In the case of **Thailand**, the expected increase would mean a recovery from the 2014 drought-reduced performance. However, given the much lower prices prevailing since the termination of the pledging programme, output in 2015 is anticipated to remain well below the levels attained between 2010 and 2013. By contrast, the current outlook points to possible contractions in **Japan,** due to depressed prices, and in **Bangladesh** because of low returns. Efforts to divert area away from paddy may also result in falling production in the **Republic of Korea,** as well as **Pakistan** and **Viet Nam**.

Although very preliminary, prospects for ***Africa*** point to a rather modest 0.8 percent production increase to 18 .5 million tonnes in 2015, which would mark the

sixth season of uninterrupted growth. In the Eastern and Southern parts of the region, where the 2015 crops are at a more advanced stage of development, growing conditions have been overall positive, despite some reported flood problems. In particular, **Madagascar** and **Tanzania**, two of the leading producers in the region, are expected to harvest larger crops, while both **Malawi** and **Mozambique** may endure contractions, following excessive precipitation. Although the 2015 crop has yet to be sown in **Egypt**, FAO anticipates that rising costs and marketing difficulties will depress plantings and production in the country. By contrast, in Western Africa, more normal weather could facilitate a recovery in **Benin**, **Chad**, **Gambia** and **Togo.** In **Burkina Faso**, **Cote D'Ivoire**, **Ghana** and **Senegal,** support to the sector under self-sufficiency drives could also prop up production. As for **Nigeria**, which benefited in 2014 from a very favourable growing environment, a return to more normal conditions could instead result in a 2 percent decline in output, especially if, as predicted by the Nigerian Meteorological Agency, the 2015 rainy season is characterized by a late onset and an early retrieval under the influence of an El Niño recurrence.

In ***Latin America and the Caribbean***, the first 2015 crops have already reached harvest stage in the southern part of the continent. Overall, the region is forecast to gather 18.9 million tonnes, 2.3 percent above the previous season. Excess precipitation, along with shrinking margins, is behind an expected contraction in **Argentina** and **Uruguay**. Similarly, shortages of basic inputs and payment delays to producers may result in output falling in **Venezuela**. The outlook points to improved harvests in the rest of the region, in particular for **Brazil**, **Guyana** and **Paraguay**, but also **Colombia**, **Ecuador** and **Peru**, which faced marked shortfalls in 2014 due to water shortages. Although very tentatively, most countries in Central America and the Caribbean are expected to gather good crops in 2015, with the largest absolute increases foreseen in the **Dominican Republic**, where growing conditions have been favourable so far, as well as **Nicaragua** and **Panama**, which experienced some declines in 2014 due to deficient rains.

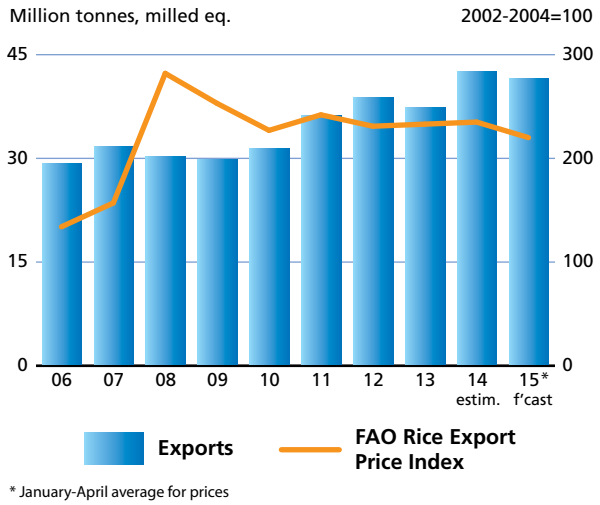
In ***North America***, the USDA, in March, foreshadowed a small contraction of area in the **United States**, reflecting a prolonged drought in California and weak price prospects, which could depress production by 1 percent. According to the planting intention survey, short and medium grain rice is likely to be most affected by the cut in land coverage. In **Oceania**, output in **Australia**, which already harvested its 2015 crop, is officially estimated to have shrunk by 18 percent, as insufficient water availability forced producers to curtail the area under rice. The 2015 fall in Australia's output succeeds to the 28 percent dip already registered in 2014, a season also characterized by scant precipitation. FAO's outlook for **Europe** is more optimistic. In the **EU**, where the season is about to start, a more normal unfolding of the season along with firm domestic prices of Japonica rice is expected to support a 2 percent recovery, especially in Italy, but also Greece and Portugal. Attractive prices are likewise expected to boost production in the **Russian Federation**.

TRADE

Subdued import demand in the Far East behind an anticipated 2 percent contraction of international rice trade in 2015

After an outstanding 14.1 percent growth registered in 2014, FAO forecasts international trade in rice to decline by 2.3 percent, or 1.0 million tonnes, to 41.4 million tonnes in 2015, still the second highest level on record. A softening of demand, especially in leading importing countries, lies behind the expected reduced volume of world rice exchange. Shipments to the Far East, in particular, are foreseen to be slashed by 11 percent to 11.1 million tonnes. Bumper 2014 crops and easing domestic prices are behind expectations of sharply reduced purchases by **Bangladesh** and the **Philippines**, while a recovery of production in 2015 is anticipated to curb those by **Indonesia**. On the other hand, high domestic prices relative to those prevailing internationally are likely to support a further rise in official imports by **mainland China**. However, the forecast is subject to much uncertainty given the recent implementation of measures intended to contain rice inflows: the government, while

Figure 4. World rice trade and FAO rice export price index



keeping the preferential import quota unchanged at 5.32 million tonnes in 2015, equally divided between the public and private sector, has tied its allocation to private traders to their purchasing rice through public auctions at prices exceeding official procurement levels. In parallel, officials have continued to clampdown unrecorded rice inflows. Deliveries to countries in Near East Asia are anticipated to make further inroads to 8.1 million tonnes, sustained by larger purchases by the **Islamic Republic of Iran**, **Iraq**, **Jordan** and **Saudi Arabia.** Imports by African countries are currently foreseen to remain steady around 14.6 million tonnes. Larger inflows to northern, central and southern Africa are indeed expected to be offset by reduced shipments to western Africa, where a depreciation of currencies will make imports less attractive. At the country level, the major cuts would concern **Burkina Faso**, **Guinea**, **Madagascar**, **Nigeria**, **Senegal** and **Tanzania**, while increased purchases are expected to be made by **Cote d'Ivoire**, **Liberia** and **South Africa**. The outlook for deliveries to Latin America and Caribbean countries is more bullish, with an anticipated 5 percent growth. It would be mainly sustained by increasing demand in South America, in particular, by **Colombia** and **Venezuela,** although purchases are seen falling in **Bolivia**, reflecting an improved supply situation, and in **Brazil,** following a pronounced depreciation of the real. Among Central America and Caribbean countries, **Haiti** and **Panama** are anticipated to step up imports. For the other continents, the **United States** officially forecasts its purchases to dip by 7 percent from the high 2014 level. Intakes by the **Russian Federation** may also fall following a good 2014 production outcome. By contrast, tighter domestic supplies may prompt the **EU** and **Australia** to buy more.

As for exports, several international suppliers are expected to face a tightening of supplies, which may lead them to reduce their deliveries to foreign markets in 2015, foremost **India**, but also **Argentina**, **Australia**, **Brazil** and **Uruguay**. In the case of **India**, exports are currently forecast to fall to 9.3 million tonnes, 18 percent below the record 11.3 million tonnes shipped in 2014 that had confirmed the country as the leading rice exporter. The contraction would be consistent with the prospects of softer import demands in traditional markets, especially for white rice in Bangladesh and Sri Lanka, as well as for parboiled rice in Africa, amid growing competition from Thailand. Although **Thailand** is also predicted to incur a sizeable decline in production in 2014, the country still holds large reserves, especially in public warehouses, which the government has targeted for liquidation through market auctions within two years, much of which will have to be destined to foreign markets. The country is also in the process to sign an agreement with China for a sale of 2 million tonnes for delivery in 2015 and 2016. These should help boost Thailand's exports from close to 11 million tonnes in 2014 to 11.2 million tonnes in 2015, a volume that would enable the country to recover its status of leading rice exporter, which it lost to India in 2012. Exports by the **United States** are officially forecast to increase, despite a strong dollar, on larger sales to Latin America and the Caribbean. **Pakistan** may also step up its deliveries in the course of the year, while those from **Viet Nam** are forecast to stagnate, influenced by a weakening demand in traditional Far Eastern markets. As for the other rice exporting countries, further increases of sales are expected in 2015 for **Cambodia** and **Myanmar,** which continue to benefit from the EBA preferential access to the EU market, but also for **Egypt**, the **EU** and the **Russian**

Figure 5. Rice imports by region

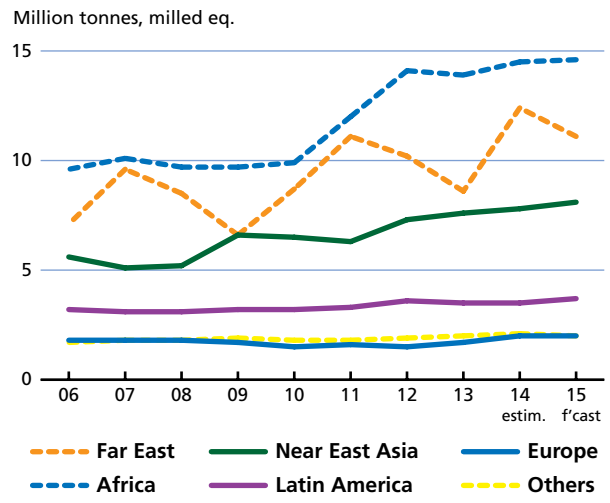
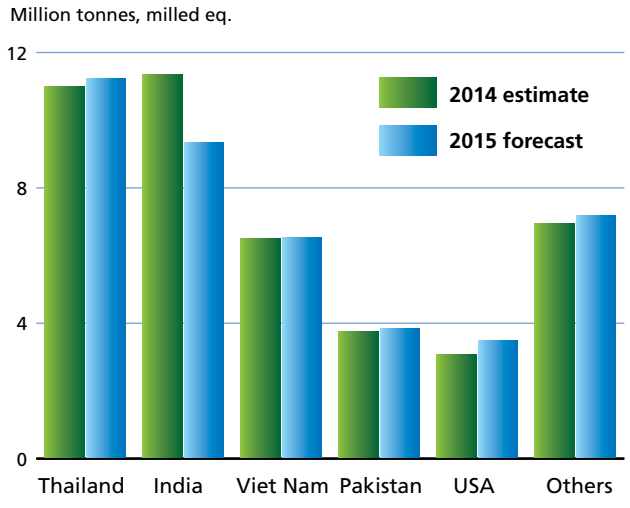


Figure 6. Rice exports by the major exporters



Federation, which will continue to benefit from reduced competition from Australia and the United States in the Japonica market segment.

Although subject to much uncertainty, largely drawing on current supply and demand prospects, rice trade in calendar 2016 is forecast to rebound to close to the 2014 record. Deliveries from **India**, **Thailand,** the **United States** and **Viet Nam**, in particular, may increase, while the outlook points to some decline for **Pakistan**. As for imports, the increase would stem from a recovery of demand in Asia, especially by **China**, **Indonesia**, **the Islamic Republic of Iran**, **Iraq** and **the Philippines**, but also Africa, spearheaded by increased imports by **Cote d'Ivoire**, **Nigeria** and **South Africa**. Purchases by the **EU** are projected to remain on the rise.

UTILIZATION

Rice utilization to grow by 1.7 percent in 2015/16

Overall, FAO projects world rice utilization to increase by 1.7 percent in 2015/16 to 508.3 million tonnes, much on account of growth in food consumption, which represents the principal end-use of the product, with an 83 percent share of the total. At a forecasted 420.3 million tonnes, food intake of rice in 2015/16 would be 1.3 percent above the previous year's estimate, slightly outpacing the 1.1 percent population growth. As a result, direct human rice consumption is seen rising only marginally on a per capita basis, from 57.4 kg in 2014/15 to 57.5 kg in 2015/16. Indeed, despite the general tendency for international prices to weaken, domestic consumer prices remain high or are even rising from their year earlier levels in a number of countries, in particular, India, Indonesia and Nepal in Asia; Liberia, Mauritania and Uganda in Africa; Brazil, Colombia, Ecuador, Mexico, Nicaragua and Uruguay in Latin America and the Caribbean; and Italy and the Russian Federation in Europe. The utilization of rice as animal feed, which remains a relatively secondary destination for the crop, accounting for an estimated 3 percent of total utilization, is predicted to grow by about 6 percent to 15.6 million tonnes in 2015/16, sustained by increases in China and Thailand. Other uses, which comprise, seeds, non-food industrial uses and post-harvest losses, are now assessed to reach 72.5 million tonnes in 2015/16, 3 percent above the previous season, accounting for over 14 percent of the total.

GLOBAL RICE INVENTORIES

Global rice stocks to fall in 2016 for the second consecutive year after nine years of uninterrupted accumulation

Based on the latest estimates, global rice consumption in 2015/16 is predicted to surpass world 2015 production, which would require the gap to be filled from existing reserves. As a result, world rice stocks carried over at the close of the marketing seasons ending in 2016 are expected to decline by 4.6 percent, or 8.1 million tonnes, to 168.2 million tonnes. If confirmed, this would be the second consecutive season of global stock declines, succeeding to nine years of uninterrupted buildups. The anticipated fall of world reserves is also in line with current efforts by several governments to reduce the size of public rice inventories. This stance particularly concerns **Thailand**, where the authorities announced in February 2015 the intention to liquidate the estimated 17 million tonnes held in government granaries within a two year period. **India** also amended its Buffer Stocks Norms, announcing at the same time that Central Pool supplies in excess of those mandated would be put on sale through open market operations. **China** also issued new guidelines, calling on provincial governments to maintain local grain stocks, in an attempt to relieve pressure from central reserves.

As a group, developing countries could see their inventories fall by 4.8 percent to 163 million tonnes in 2016, while those held by developed nations may rise by almost 3 percent to 5.2 million tonnes. From a trade status

Table 3. India: buffer stock norms (million mt) [1]

	Existing since April 2005			As of January 2015		
	Buffer norms	Strategic reserves	Total	Buffer norms	Strategic reserves	Total
1st January	11.8	2.0	13.8	5.61	2.0	7.61
1st April	12.2	2.0	14.2	11.58	2.0	13.58
1st July	9.8	2.0	11.8	11.54	2.0	13.54
1st October	5.2	2.0	7.2	8.25	2.0	10.25

[1] Refers to rice component only.
Source: Ministry of Consumer Affairs, Food and Public Distribution.

perspective, much of the predicted contraction in world stock carried over in 2016 would concern the major rice exporting countries, in particular **India**, **Thailand** and, to a much lesser extent, **Pakistan** and **Viet Nam**, while stocks are seen rising in the **United States**. Under current forecasts, these five major exporters will hold 34.7 million tonnes in reserve in 2016, 6.5 million tonnes less than in the previous year. Among key importers, **Bangladesh** and **Indonesia** are predicted to curtail their inventories. Overall, African countries are also assessed to close the season holding less. Based on current expectations, the world stock-to-use ratio, a key indicator of food security, is predicted to fall from 34.7 percent in 2014/15 to 32.4 percent in 2015/16. As for the five major exporters' stock-to-disappearance ratio, which gives a better indication of the international market tightness, it is currently foreseen to drop from 23.2 percent to 19.2 percent over the same period, its lowest level since 2008/09.

Figure 7. Stocks held by the five major rice exporters and stock-to-disappearance ratio

Figure 8. Rice production, utilization and stocks

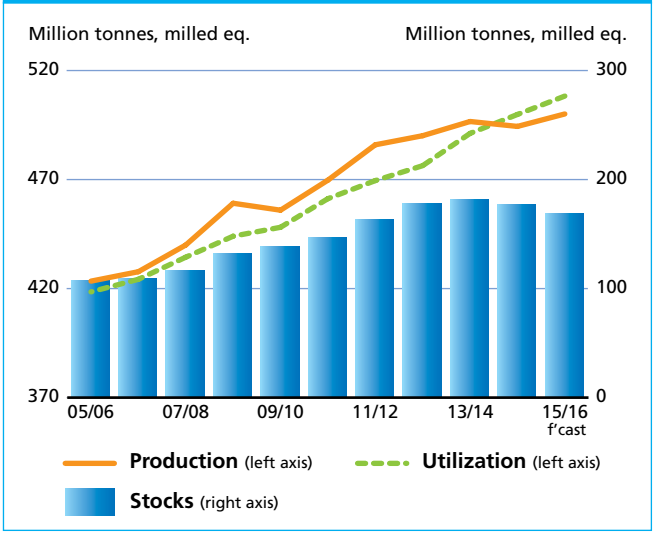


Table 4. Monthly retail prices of rice in selected markets

	Historical monthly price trend	Latest available: Month	USD/Kg	Latest quotation available compared to: [1] 3 months earlier	1 year earlier	2 years earlier
ASIA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Bangladesh: Dhaka (coarse)		Apr-15	0.41	-4%	-5%	4%
Cambodia: Phnom Penh (mix)*		Mar-15	0.40	0%	-11%	-11%
China: 50 City Avg. (japonica second quality)		Mar-15	1.00	2%	3%	7%
India: Delhi		Apr-15	0.48	3%	11%	10%
Indonesia: Ntl. Avg. (medium quality)		Apr-15	0.77	4%	13%	21%
Japan: Ku-area of Tokyo (non-glutinous)		Feb-15	3.90	0%	-5%	-10%
Republic of Korea: Ntl. Avg.		Apr-15	2.06	-3%	-4%	-6%
Lao PDR: Vientiane (glutinous first quality)		Dec-14	0.99	3%	3%	0%
Mongolia: Ulaanbaatar		Feb-15	1.19	0%	1%	37%
Myanmar: Yangon (Emata, Manawthukha FQ)*		Apr-15	0.35	6%	3%	2%
Nepal: Kathmandu (coarse)		Jan-15	0.45	0%	10%	25%
Pakistan: Karachi (irri)		Apr-15	0.50	-9%	-10%	0%
Philippines: Ntl. Avg. (well-milled)		Apr-15	0.94	-2%	0%	18%
Sri Lanka: Colombo (white)		Apr-15	0.53	-7%	2%	22%
Thailand: Bangkok (5% broken)*		Apr-15	0.36	-6%	3%	-24%
Viet Nam: Dong Thap (25% broken)*		Apr-15	0.32	0%	-4%	-4%
WESTERN AFRICA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Benin: Cotonou (imported)		Mar-15	0.88	0%	0%	0%
Burkina Faso: Ouagadougou (imported)*		Apr-15	0.58	-13%	-10%	-8%
Cape Verde: Santiago (imported)		Jan-15	0.97	1%	4%	-5%
Chad: N'Djamena (imported)		Feb-15	0.83	-5%	-4%	-4%
Liberia: Monrovia (imported)		Jan-15	0.64	-11%	16%	17%
Mali: Bamako*		Apr-15	0.54	2%	2%	3%
Mauritania: Nouakchott (imported)		Feb-15	1.43	5%	52%	74%
Niger: Niamey (imported)*		Apr-15	0.63	0%	0%	-12%
Senegal: Dakar (imported)		Jan-15	0.60	-16%	-22%	-25%
Togo: Lomé (imported)		Mar-15	0.63	-4%	-30%	-28%
EASTERN AFRICA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Djibouti: Djibouti (Belem)*		Jan-15	0.56	-2%	-4%	0%
Rwanda: Kigali*		Apr-15	0.88	-11%	-8%	-1%
Somalia: Mogadishu (imported)		Mar-15	0.55	-8%	-8%	0%
Uganda: Kampala*		Apr-15	0.99	41%	8%	4%

Table 4. Monthly retail prices of rice in selected markets (Cont'd)

	Historical monthly price trend	Latest available: Month	USD/Kg	Latest quotation available compared to: /1 3 months earlier	1 year earlier	2 years earlier
SOUTHERN AFRICA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Angola: Luanda		Jan-15	3.17	1%	2%	5%
Madagascar: Ntl. Avg. (local)		Dec-14	0.50	4%	-9%	1%
Mozambique: Maputo		Apr-15	0.72	0%	0%	0%
CENTRAL AMERICA AND THE CARIBBEAN	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Costa Rica: Ntl. Avg. (first quality)		Mar-15	1.44	0%	6%	0%
Dominican Rep: Santo Domingo (first quality)		Apr-15	1.06	4%	2%	5%
El Salvador: San Salvador		Mar-15	1.09	0%	0%	9%
Guatemala: Ntl. Avg. (second quality)		Mar-15	1.23	0%	1%	2%
Haiti: Port-au-Prince (imported)		Apr-15	0.95	0%	0%	0%
Mexico: Mexico City (sinaloa)*		Apr-15	0.84	0%	18%	21%
Nicaragua: Ntl. Avg. (second quality)*		Jan-15	0.92	-1%	8%	18%
Panama: Panama City (first quality)		Apr-15	1.04	20%	-20%	-13%
SOUTH AMERICA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Bolivia: La Paz (grano de oro)*		Apr-15	0.94	-18%	-15%	-2%
Brazil: São Paulo		Mar-15	0.87	2%	12%	10%
Colombia: Ntl. Avg (first quality)		Mar-15	1.37	42%	44%	33%
Ecuador: Quito (long grain)*		Apr-15	1.14	11%	9%	9%
Peru: Lima (corriente) *		Apr-15	0.65	-2%	0%	34%
Uruguay: Ntl. Avg. (grade 1)*		Apr-15	0.95	3%	19%	39%
NORTH AMERICA	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
United States: City Avg. (long grain, uncooked)		Mar-15	1.48	-4%	-9%	-6%
EUROPE	2007 2008 2009 2010 2011 2012 2013 2014 2015			-100 0 100	-100 0 100	-100 0 100
Italy: Milan (arborio volano)*		Apr-15	1.76	6%	7%	118%
Russian Federation: Ntl. Avg.		Jan-15	0.88	20%	33%	40%

/1 *Quotations in the month specified in the third column were compared to their levels in the preceding three, twelve and twenty-four months. Price comparisons were made in nominal local currency units.*

** Wholesale prices.*

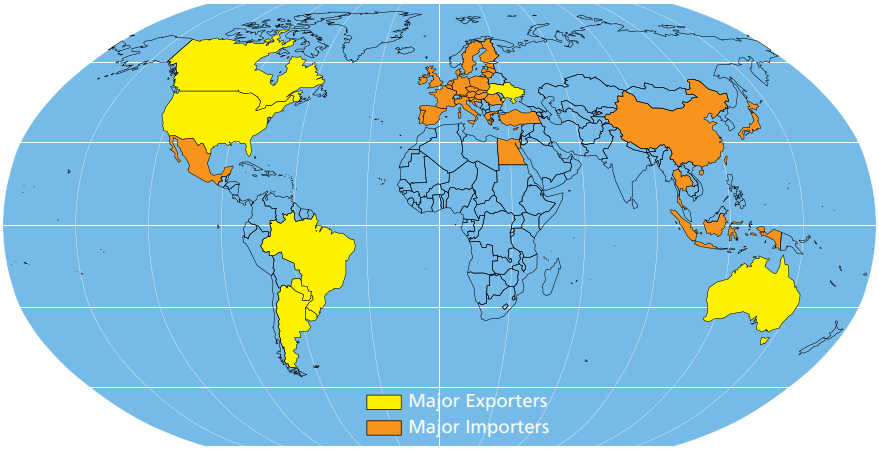
Sources: FAO/GIEWS GIEWS Food Price Data and Analysis Tool; Korea Agricultural Marketing Information Service (KAMIS); Japan Ministry of Agriculture, Forestry and Fisheries; U.S. Bureau of Labor Statistics (BLS); Associazione Industrie Risiere Italiane (AIRI).

Please note that prices shown are comparable over time, but not across countries, as they may refer to different stages of the marketing chain (e.g. retail versus wholesale prices), different rice types (e.g. aromatic versus non-aromatic) or different qualities of rice (e.g fully broken versus 5% brokens).

Currency conversions are as of 27 April 2015.

OILCROPS, OILS AND MEALS[4]

Major Oilseed Exporters and Importers



PRICES[5]

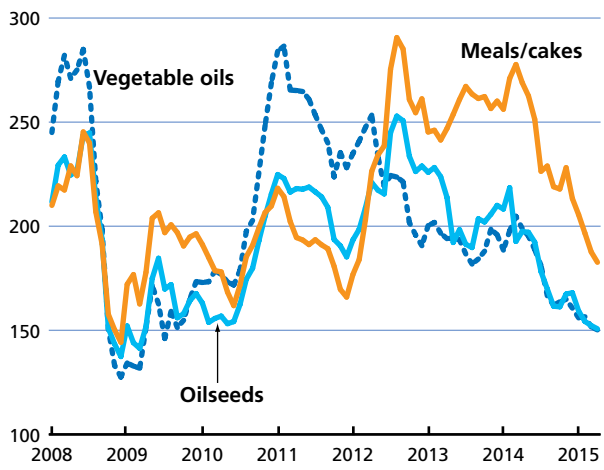
Prices in the oilseed complex at multi-year lows

During the 2013/14 (October/September) season, international prices for oilseeds and oilseed products embarked on a downward trend, driven by large export availabilities, a temporary slowdown in import demand and a general build-up in inventories. Forecasts for 2014/15 suggest a further easing of the global supply and demand balance. In particular, the coincidence of bumper soybean crops in the United States and South American countries point towards a sizeable supply surplus for oils/fats and even more so for meals/cakes with a consequential boost in inventories – a setting suggesting further downward pressure on prices.

Indeed, international oilseed and product quotations weakened considerably during the first half of 2014/15, as reflected by FAO's price indices, which, in April 2015, showed a year-on-year decline of 24 percent for both oilseeds and oils, and of 32 percent for meals. Seen from a historic perspective, the indices for oilseeds and meals plunged to 5-year lows, while the oils index tumbled to a 6-year low.

Developments in other commodity markets also played a role: abundant global availabilities of feedgrains started impinging on global demand for oilmeals, thus adding downward price pressure on the latter. On the oils/fats

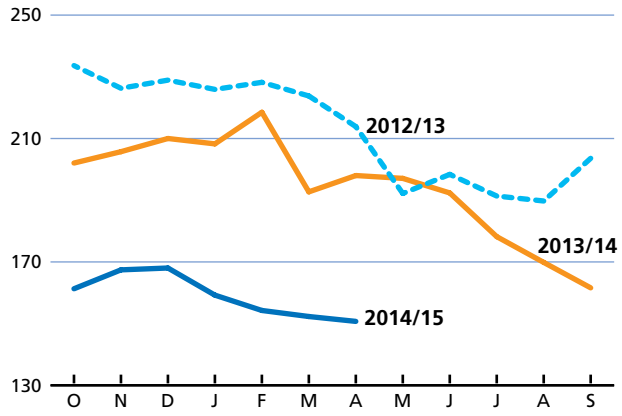
Figure 1. FAO monthly international price indices for oilseeds, vegetable oils and meals/cakes (2002-2004=100)



[4] 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 which 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. Please note that data on trade in and stocks of oils (meals) refer to the sum of trade in and stocks of oils or meals plus the oil (meal) equivalent of oilseed trade and stocks. Trade in oilseed trade (including situations where oilseeds are produced in one country but crushed in another) is fully reflected in national oil/meal consumption statistics. Furthermore, production data for oils and meals are derived from domestic production of the relevant oilseeds in a given year, i.e. they do not reflect the outcome of actual oilseed crushing in a given country and period.

[5] For details on prices and corresponding indices, see appendix Table 24.

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



Note: With regard to the sudden drops in the price index for oilseeds in May 2013 and March 2014, please note the clarification provided in appendix table 24

Figure 3. FAO monthly price index for vegetable oils (2002-2004=100)

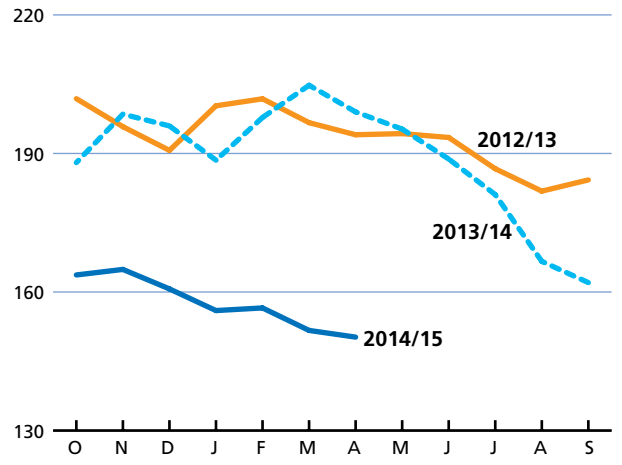


Figure 4. FAO monthly price index for oilmeals/cakes (2002-2004=100)

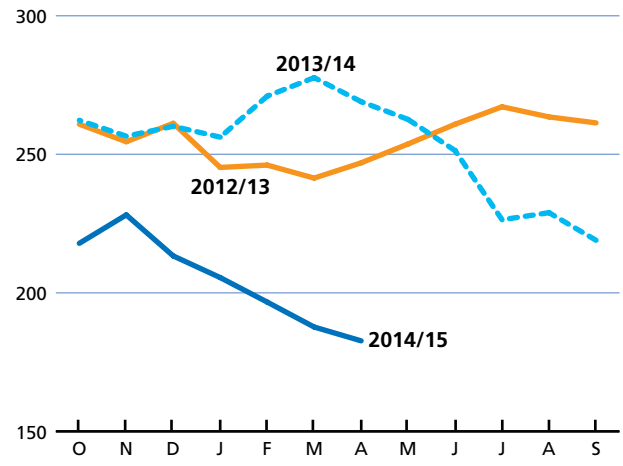
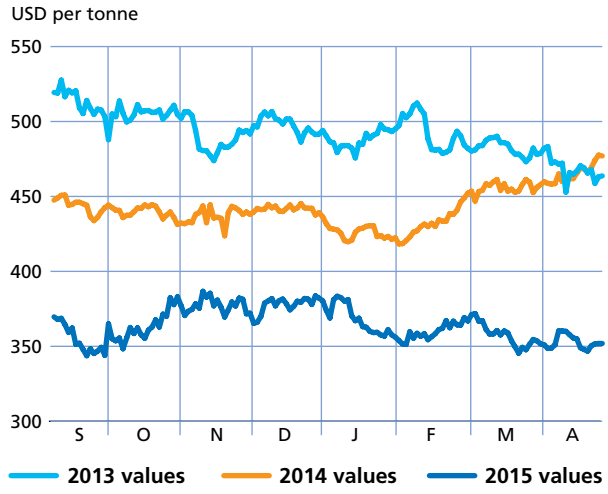


Figure 5. CBOT soybean futures for September



side, the sudden slump in international mineral oil prices compromised the competitiveness of vegetable oil-based biofuels, thus cutting into global demand for vegetable oils (especially palm oil) and accentuating the slide in world vegetable oil prices.

Latest reports about South America's on-going soybean harvest confirm the bright outlook for production in 2014/15. This, together with first indications that soybean plantings for the 2015/16 season in the United States could match the 2014/15 record-high, suggest that international prices for oilseeds and oilseed products could remain depressed in the next few months. The persistent weakness in Chicago Board of Trade futures prices for soybeans, which currently stand at more than USD 100 per tonne below their corresponding values of the past two years, point to the same direction.

OILSEEDS

Expansion in global oilseed production to continue in 2014/15

Possibly topping 542 million tonnes, global oilseed production is forecast to expand strongly for the third consecutive season. The projected year-on-year rise of 5.7 percent almost matches the rates recorded in 2012/13 and 2013/14. Higher area and improved yields both contribute to the expansion. Growth will again be led by soybeans, the production of which is forecast to surge by 11 percent or 31 million tonnes. In the Northern Hemisphere, where 2014/15 crops were harvested last year, aggregate output bounced up by about 14 percent, under the lead of the **United States**. The United States' soy area climbed to unprecedented levels (at the expense of grains), as did average yields, which, thanks to near-ideal

growing conditions, reached an all-time high of 3.2 tonnes per hectare. Larger plantings also lifted **Canada**'s output. Similarly, **Ukraine** and the **Russian Federation**, where soy production expanded strongly in recent years, reported further gains based on additional expansion in area. In **China**, production improved thanks to better yields. By contrast, **India**'s output dropped on both lower plantings and reduced productivity. In South America, the 2014/15 soybean harvest is currently in full swing. Thanks to further growth in area and generally favourable growing conditions in key producing regions, South America's total output could climb to an all-time high, despite recent downward corrections due to periods of adverse weather. The largest production gains are reported by **Brazil**, followed by **Argentina**. **Paraguay**'s output could fall compared with last season, based on lower plantings and productivity losses, while, in **Uruguay**, area gains should compensate for lower yields.

Global rapeseed, sunflowerseed and groundnut production in 2014/15 are expected to fall short of last season's record levels. Rapeseed output is forecast slightly below last season, with drops in **Canada**, **India** and **Australia** only partly offset by a bumper **EU** crop. While good weather has benefited production in both Canada and the EU, in Canada, yields trailed behind last season's top level. India's crop suffered from poor weather that hindered yields and reduced the area harvested. Global sunflowerseed and groundnut productions are projected to drop by 4 percent and 2 percent respectively from last year, still reaching their second highest levels on record. For sunflowerseed, production drops in **Ukraine** and the **Russian Federation** are expected to be partly offset by gains in **Argentina**. Favourable weather conditions should also lift Argentina's groundnut output, which should help compensate production falls in **India** and the **United States**.

With regard to cottonseed, a rebound in global production should be possible as larger crops in the **United States** and **Pakistan** are expected to more than offset reduced harvests in **Australia**, **Brazil** and **China**. A small recovery is also expected in copra production, although global output is set to trail behind recent records. Global palmkernel output should keep rising, mainly reflecting continued expansion in mature oil palm area in Southeast Asia.

Table 1. World production of major oilcrops

	2012/13	2013/14 *estim.*	2014/15 *f'cast*	Change 2014/15 over 2013/14
		million tonnes		%
Soybeans	267.2	283.7	314.5	10.9
Rapeseed	64.3	71.3	70.9	-0.6
Cottonseed	45.8	45.0	45.6	1.4
Groundnuts (unshelled)	37.9	38.9	37.9	-2.4
Sunflower seed	36.2	42.3	40.7	-3.9
Palm kernels	13.9	14.6	15.3	4.5
Copra	5.9	5.6	5.7	0.7
Total	**471.2**	**501.4**	**530.6**	**5.8**

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[6]

Global oils/fats supplies to rise further

Current crop forecasts for 2014/15 translate into an increase in global oils/fats production of only 3 percent, about half the rate recorded in 2013/14. Last season's rise was made possible by record outturns of high oil-yielding crops, whereas this season, the lower oil-yielding soybeans will play a dominant role. Rapeseed, sunflowerseed, groundnut, olive and fish oil outputs are all projected to fall, while global soy oil output should surge by 12 percent. Palm oil production is expected to expand, although less than in recent years, due to unfavourable weather in **Indonesia** and **Malaysia** that affected oil palms last year and during the first months of this year. While in Malaysia production is forecast to increase by no more than 110 000 tonnes (or 0.6 percent), Indonesia's output could still rise by 2 million tonnes (or 6.5 percent) thanks to further growth in mature oil palm area. This compares with an average growth rate (for the last five years) of 2.3 percent in Malaysia and 8 percent in Indonesia.

Global oils/fats supplies (comprising 2014/15 production and 2013/14 ending stocks) are forecast to grow by an about-average rate of 4 percent. Thanks to record crops, robust gains in domestic availabilities are expected in several major producers, notably **Indonesia**, **United States**, **EU**, **Brazil** and **Argentina**. In the three latter countries, large carry-in stocks will contribute to the gains. By contrast, only marginal supply increases are forecast for **Malaysia** and **China**, while year-on-year falls in oils/fats supplies – mostly due to modest crop outturns – are forecast for **Canada**, **India**, the **Russian Federation**, **Ukraine** and **Australia**. In Canada and India, the presence of large carry-in stocks is expected to attenuate the drop in supplies.

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

Table 2. World oilcrops and product market at a glance[1]

	2012/13	2013/14 *estim.*	2014/15 *f'cast*	Change: 2014/15 over 2013/14
		million tonnes		%
TOTAL OILCROPS				
Production	482.9	513.0	542.3	5.7
OILS AND FATS [2]				
Production	189.9	202.7	209.6	3.4
Supply [3]	222.2	234.7	244.3	4.1
Utilization [4]	189.7	199.0	203.9	2.5
Trade [5]	101.9	107.3	109.0	1.6
Global stock-to-use ratio (%)	*16.9*	*17.5*	*18.9*	
Major exporters stock-to-disappearance ratio (%) [6]	*9.6*	*9.8*	*12.0*	
MEALS AND CAKES [7]				
Production	120.0	128.9	139.2	8.0
Supply [3]	137.6	146.9	160.6	9.3
Utilization [4]	118.5	125.2	131.2	4.8
Trade [5]	73.6	81.3	84.2	3.6
Global stock-to-use ratio (%)	*15.2*	*17.1*	*21.8*	
Major exporters stock-to-disappearance ratio (%) [8]	*7.6*	*9.3*	*14.8*	
FAO PRICE INDICES (Oct/Sept) (2002-2004=100)	**2012/13**	**2013/14**	**2014/15 *Oct-Apr***	**Change: Oct-Apr 2014/15 over Oct-Apr 2013/14 %**
Oilseeds	213	194	159	-22.4
Oilmeals/cakes	255	253	205	-22.7
Vegetable oils	193	189	158	-19.6

[1] Refer to footnote 4 on page 34 for overall definitions and methodology.
[2] Includes oils and fats of vegetable, animal and marine origin.
[3] Production plus opening stocks.
[4] Residual of the balance.
[5] Trade data refer to exports based on a common October/September marketing season.
[6] Major exporters include Argentina, Brazil, Canada, Indonesia, Malaysia, Ukraine and the United States.
[7] 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.
[8] Major exporters include Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, Ukraine and the United States.

Subdued demand from biodiesel producers to dampen growth in global oils/fats utilization

In 2014/15, global consumption of oils/fats is projected to rise by no more than 5 million tonnes, which implies a below-average growth rate of 2.5 percent. With regard to individual oils, the strongest contribution to overall growth comes from soyoil, whose consumption should leap by about 3.5 million tonnes or over 7 percent. By contrast, palm oil utilization is estimated to expand by no more than 0.9 million tonnes, or 1.5 percent, by far the lowest rate recorded in the last 15 years.

In most developing countries, utilization for food and traditional industrial uses should continue to expand, sustained by rising populations and income growth, but also by more attractive prices. One important exception, however, is **China**, where a dimmer economic outlook is expected to temper demand growth for vegetable oils.

The key reason for the anticipated slowdown in global consumption concerns fuel use. In 2014/15, demand from the biofuel sector – one of the main drivers of consumption growth in the last few years – could suffer its first setback. In the **EU** and the **United States,** the world's leading producers and consumers of biodiesel, the freeze in domestic biodiesel consumption mandates and increasing uncertainty about future biofuel policies have curbed the industry's enthusiasm for biodiesel. In addition, policies to encourage the use of alternative feedstock, for example waste vegetable oil, are under implementation in several countries. In those countries where biofuel demand is less policy-driven and, hence, more price elastic, the recent plunge in world mineral oil prices depressed biodiesel production – and thus demand for the main feedstock, i.e. vegetable oils and animal fats. This is because rising discounts for mineral oil quickly eroded the competitiveness of biodiesel. Countries strongly affected by this development include **Indonesia**, **Malaysia** and **Argentina**. In an effort to safeguard demand for domestically produced oils/fats, some governments decided to strengthen their policies in favour of biodiesel. New support measures and ambitious biodiesel consumption targets have been announced in **Indonesia**, **Malaysia**, **Argentina**, **Brazil** and **India**, with similar initiatives under consideration in the **Philippines** and the **Republic of Korea**. However, it should be noted that, in recent years, the implementation of such policies has often been hampered by regulatory problems, logistical difficulties and/or inadequate domestic feedstock supplies.

Higher inventory levels and stock-to-use ratios expected in 2014/15

Based on the above supply and demand forecasts, global 2014/15 closing stocks (which comprise oils/fats inventories plus the oil contained in stored oilseeds) should increase strongly for the second consecutive season. As total production is projected to surpass total consumption by about 5.7 million tonnes, global oils/fats inventories could top 38 million tonnes, with soyoil accounting for most of the rise. At country level, a marked build-up in stocks is envisaged in the **United States**, while more modest gains are expected in **Brazil**, **Argentina**, **Indonesia**, **EU** and **China**. By contrast, **Canada** and **India** may witness a sizeable contraction in stocks. China is estimated to

Figure 6. Global production and utilization of oils/fats

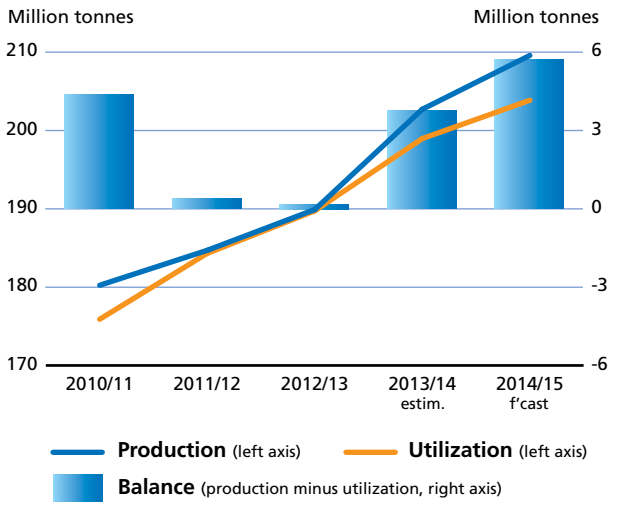
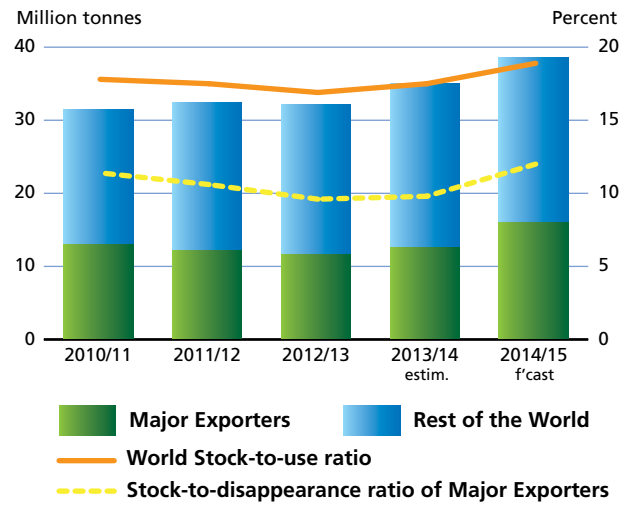


Figure 7. World stocks and ratios of oils/fats (including the oil contained in seeds stored)



continue holding the largest oils/fats stockpile, mainly in the form of whole soybeans.

Based on current projections, the global stock-to-use ratio and the stock-to-disappearance ratio for the major exporters[7] are poised to rise to 19 percent and 12 percent, respectively – marking a second consecutive rise for both indicators.

Growth in oils/fats trade to slow down considerably

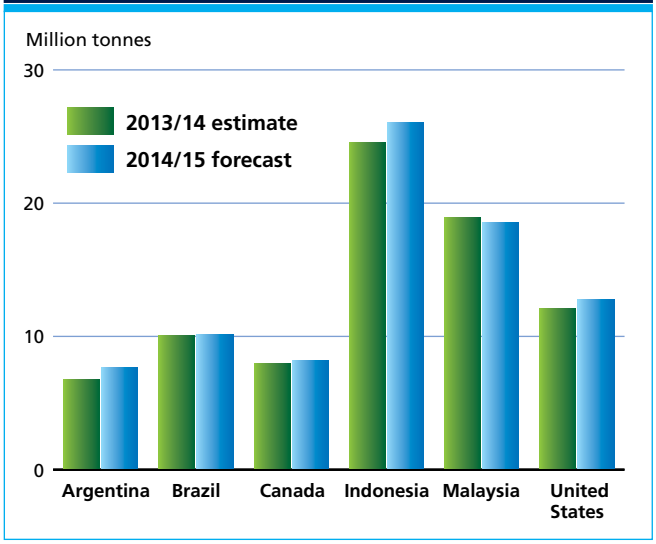
Although international prices for oils/fats softened considerably over the last three seasons and currently stand at 6-year lows, world trade in oils/fats – including the oil contained in traded oilseeds – is projected to expand by only 2 percent in 2014/15, well below the pace observed in recent years. The slowdown mainly reflects ample domestic supplies in key importing countries. For several of them, the current strength of the US dollar (the main currency for such trade) has also made purchases more expensive, tempering import demand.

Reflecting developments in seed production, global soyoil transactions should climb to a new record, while the volumes of trade in sunflower and rapeseed oil may contract somewhat. Trade in palm oil, the most widely traded vegetable oil, could recover from last season's exceptional fall.

Exports by **Indonesia**, the world's top supplier of vegetable oil, are expected to post another strong increase. This forecast assumes that the planned uptake in internal demand – for the local oleo-chemical and biodiesel industry – will require more time than originally envisaged. By contrast, a contraction in palm oil shipments is expected in **Malaysia** for the second consecutive year. Similar to last year, the country's overseas sales could be constrained by both weak production growth and rising domestic consumption. The boost in global soyoil exports should be driven by the **United States** and **Argentina**. **Brazil**'s shipments are set to remain close to last season's level mainly reflecting the introduction of higher consumption mandates for biodiesel. **Canada** expects to sell record volumes of rapeseed (which in part stem from last season's bumper crop), now that bottlenecks in domestic shipments have been overcome. **Ukraine**, the **Russian Federation** and **Australia** are anticipated to export less.

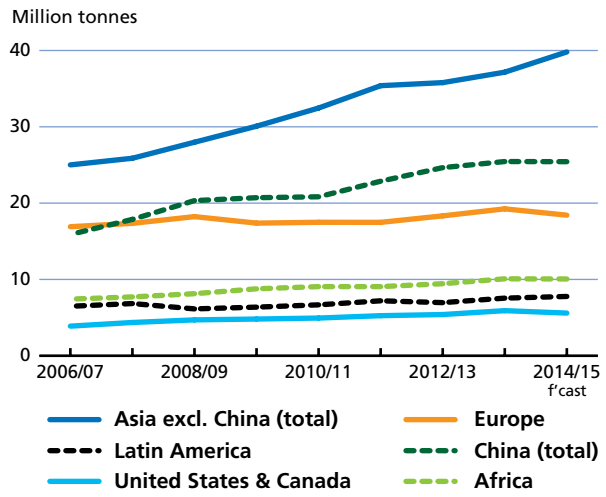
Regarding imports, the expansion in **China**'s oil/fat purchases could come to a halt in 2014/15, in line with the anticipated slowdown of domestic consumption and

Figure 8. Oil/fat exports by major exporters (including the oil contained in seed exports)



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

Figure 9. Oil/fat imports by region or major country (including the oil contained in seed imports)



because the country maintains record-high inventories. Other countries in Asia could expand their imports further, with **India** likely to maintain its position as the world's top importer. Lower domestic supplies and steadily rising demand are projected to drive up India's imports (mainly palm oil) by at least 1 million tonnes, or 10 percent. Based on this forecast, some 58 percent of India's consumption would be met by imports, which compares with 47 percent four years ago. By contrast, large domestic supplies should allow the **EU** and the **United States** to scale down their purchases.

MEALS AND CAKES[8]

Global meal supplies to expand sharply in 2014/15

Based on the current crop forecasts, global production of meals/cakes in 2014/15 would expand strongly for the third consecutive year. As in the past two seasons, growth will be driven entirely by soy, with incremental world soymeal output estimated at close to 11 million tonnes (expressed in protein equivalent), while outputs of all the other meals are expected to shrink, except for a small rise in palmkernel meal and stable cottonseed meal.

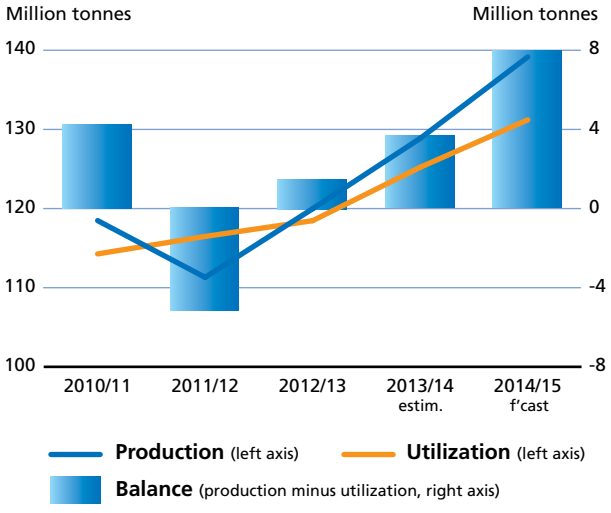
Global supplies, which comprise 2014/15 production and 2013/14 carry-out stocks, could increase by 9 percent to 160 million tonnes. In **China**, the world's top consumer, meal supplies are unlikely to recover from last season's low level, while, in **India**, they could drop to a multi-year low. In the **United States**, **Brazil** and **Argentina**, the three leading soymeal producers, supplies are expected to rise sharply, buoyed by record domestic harvests. In the case of Argentina, large opening stocks contribute to the surge. Overall, the increases in the three countries could add up to almost 14 million tonnes. Also in the **EU**, **Ukraine** and the **Russian Federation**, meal supplies should climb, thanks to both good crops and large opening stocks.

Global meal consumption to continue expanding in 2014/15

World meal/cake consumption is projected to reach a record 131 million tonnes (expressed in protein equivalent), up 5 percent from last season, underpinned by falling prices of meals/cakes and economic growth in several countries. The expansion is expected to fall short of the 6 percent registered last year, as large oilmeal supplies will coincide with ample availabilities of grain-based feeds in 2014/15, which should trim demand for meals/cakes.

Soymeal will occupy a dominant position in overall consumption growth, considering that only slightly higher or stagnating demand is expected for all other meals. As in previous years, developing nations will contribute strongly to overall consumption growth. Countries in Asia continue to play a central role, with demand growth expected to accelerate in **India** and several other countries in the region, albeit with **China** as one important exception. In the world's top meal consumer, feed demand could expand at a slower pace than in recent years reflecting a slowdown in meat production growth, especially in the avian influenza-hit poultry sector. In **Brazil**, slower economic growth might

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



[8] This section refers to meals from all origins. In addition to products derived from the oil crops discussed under the section on oilseeds, this also includes fish meal and meals of animal origin.

affect meat consumption, possibly trimming demand for oilseed meals. In the **EU**, the world's second largest meal consumer, oilmeal use is likely to be negatively affected by the high availability of attractively priced feed wheat. By contrast, in the **United States**, meal consumption may increase faster than last season, as, compared to recent years, the livestock sector has been less affected by disease problems and adverse weather conditions.

Strong build-up of meal inventories anticipated in 2014/15

Based on current 2014/15 forecasts, global meal production will exceed consumption by almost 8 million tonnes (expressed in protein equivalent). Such a large production surplus will foster a surge of inventories, chiefly of soymeal. Total meal stocks are set to reach 28.6 million tonnes (including the meal contained in stored oilseeds), one-third above last season's level. The extraordinary stock build-up should be concentrated in the **United States**, **Argentina** and **Brazil**. In the United States, where the 2013/14 season closed with exceptionally low carry-out stocks due to a brisk export pace, the current season's bumper crop and less buoyant export sales should bring about a massive replenishment in inventories, possibly lifting the United States' reserves to an 8-year high. It is estimated that up to 7.5 million tonnes of soybeans – i.e. nearly half of this season's incremental production – could be earmarked for stock rebuilding by the country. In Argentina and Brazil, inventories could climb to all-time highs, given record soy harvests and, in the case of Brazil, a sharp slowdown in exports growth. In Argentina, the anticipated stock build-up should occur mostly on-farm as farmers are expected to hold their crops as a means of hedging against domestic price inflation. Among other countries, a moderate increase in inventories is expected in the **EU**, while stocks may be trimmed in **China**, **India** and **Canada**.

The current forecasts lead to a sharp rise in the 2014/15 stock-to-use ratios. Estimated at, respectively, 22 percent and 15 percent, the global stock-to-use ratio and the stock-to-disappearance ratio for major exporters[9] would hit multi-year highs, indicating there is considerable scope for world meal prices to slide further.

Global meal trade to slow down in 2014/15

After expanding briskly in 2013/14, world trade in meals/cakes, which includes the meal contained in traded oilseeds, is projected to grow by only 3–4 percent in the current season. Commodity-wise, record volumes of trade in soybean meal are anticipated to offset smaller flows of most other meals, in particular of rapeseed.

Regarding imports, countries in Asia will continue to dominate demand, with China alone accounting for one-third of global purchases. **China**'s imports (mostly in the form of whole soybeans) should keep expanding, but at a lower pace than last season, in line with the projected slowdown of domestic demand. Purchases by other Asian countries, in particular **Turkey**, **Vietnam**, **Thailand**, **Indonesia** and **Pakistan** are anticipated to expand further. In the **EU**, the world's second largest buyer, imports should remain about unchanged as incremental demand can be met by higher domestic supplies of both oilmeals and feedgrains. Imports by

[9] Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, Ukraine and the United States.

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

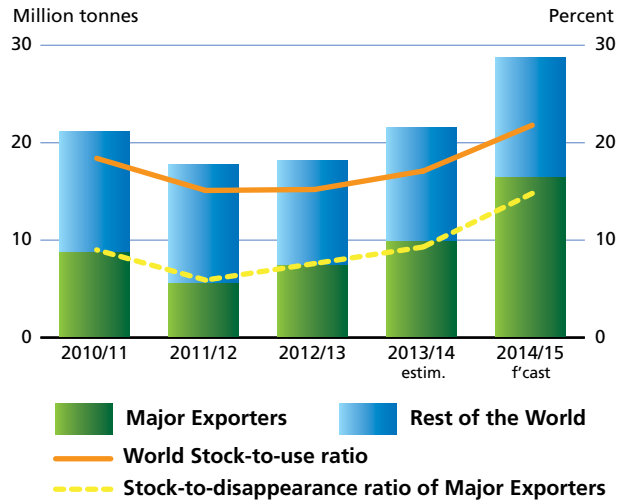


Figure 12. Meal/cake imports by region or major country (in protein equivalent and including the meal contained in seed imports)

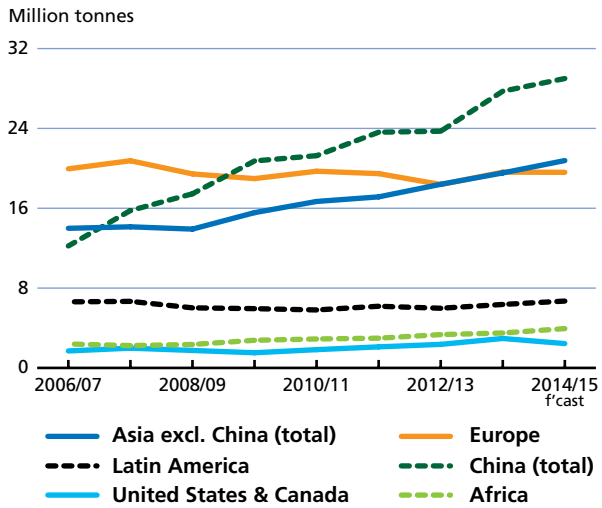
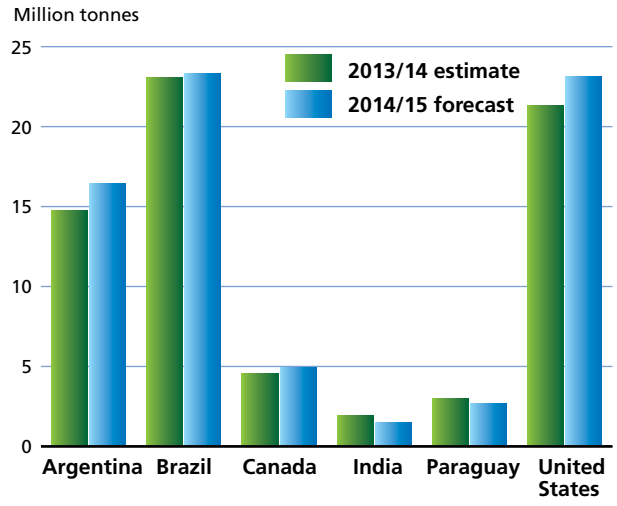


Figure 13. Meal/cake exports by major exporters (in protein equivalent and including the meal contained in seed exports)



the **United States** (a net exporter of meals), which surged last season due to temporary shortages in domestic supplies, are likely to be scaled back to average levels in 2014/15.

With respect to exports, a pronounced rise in shipments is expected in the **United States** and **Argentina**. In the United States, export sales are forecast to outstrip last season's all-time high by 4 million tonnes (expressed in product weight), while Argentina could boost its deliveries by 3.7 million tonnes. In **Brazil**, where exports increased conspicuously in the last three seasons, only modest gains are expected in 2014/15, although the country should retain its position as the world's top supplier. Higher shipments are also forecast for **Canada**. In **India**, where domestic meal supplies have been trending downward since 2011/12, export availabilities could drop further in 2014/15, possibly dragging shipments to a multi-year low. Also **Paraguay**'s exports could fall as a result of this year's reduced soybean crop.

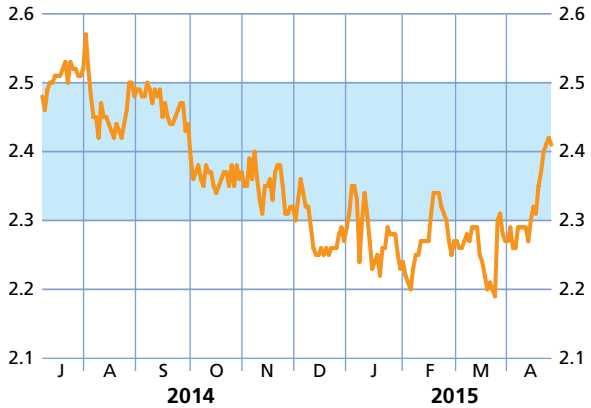
2015/16 PRODUCTION OUTLOOK

With the 2014/15 season still on-going, it is early to draw world supply and demand projections for 2015/16. Currently available information primarily concerns planting intentions in selected Northern Hemisphere countries, where preparations for the next campaign are about to start. Overall, the general fall in oilseed prices would limit the scope for increases in oilcrop plantings, although much will depend on the price relationship with other products such as maize. As usual, our initial crop forecasts rest on the assumption of normal weather conditions.

Global 2015/16 soybean production could trail behind the current season's record, owing to possible reductions in the **United States**, **Brazil** and **Argentina**. Plantings in the United States are presently estimated slightly above last year's record. However, under average weather conditions (i.e. as opposed to last season's unusually favourable growing conditions), soy production in the country could shrink by around 4 percent year-on-year. In South America, where preparations for the 2015/16 crops remain several months away, planting decisions as well as crop yields could be negatively affected by reportedly rising production costs, which, if confirmed, could bring production growth in the region to a halt. Conversely, the aggregate soy output of **China**, **India** and **Canada** – assuming roughly stable plantings and on-trend yield levels – could progress by some 3–4 percent. With regard to other major oilseeds, tentative forecasts for sunflower, rape and cottonseed also point to possible contractions, or limited gains, in production in 2015/16. Global rapeseed and cottonseed output could fall by around 4 percent, due to lower plantings and/or a return to average yield levels. Possible production cuts concern primarily the **EU** (rapeseed) and **China** (cottonseed). The potential fall in sunflowerseed production would be primarily on account of a return to average yield levels (**EU**) and plantings (**Ukraine**). For groundnut, a possible recovery in sowings in the **United States** could lead to a small rise in global output.

Based on the above highly tentative forecasts, global oilseed production could falter in 2015/16 after three consecutive seasons of increases. The largest downward potential is seen for soybeans. Thanks to the current season's record-high carry-out stocks – in particular of soybeans and soymeal – the possible decrease in oilseed production in 2015/16 should not result in tight global oilseed and product balances. Rather, it would help correct a burdensome excess supply situation in world markets.

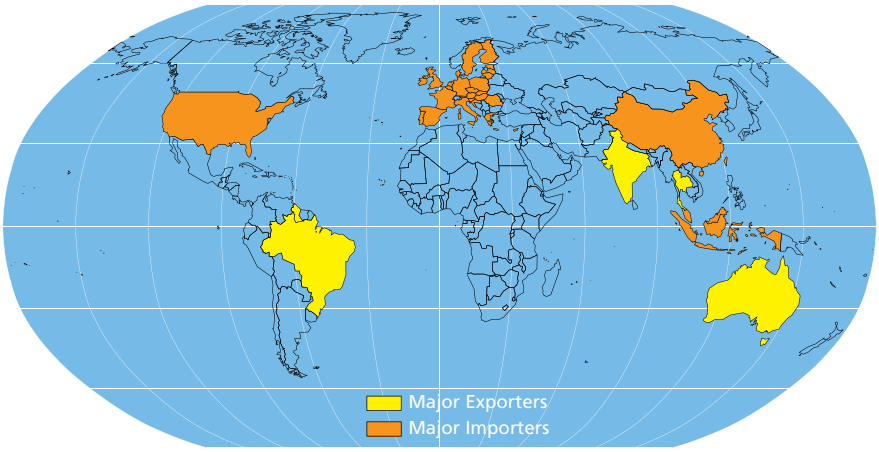
Figure 14. Soybean/maize price ratio (CBOT September 2015 futures contract)



From a historical perspective, in the USA, whenever the ratio enters the 2.3–2.5 range, the general bias favours soybean over maize, potentially resulting in a shift of planted area from maize to soybeans.

SUGAR

Major Sugar Exporters and Importers



PRICES

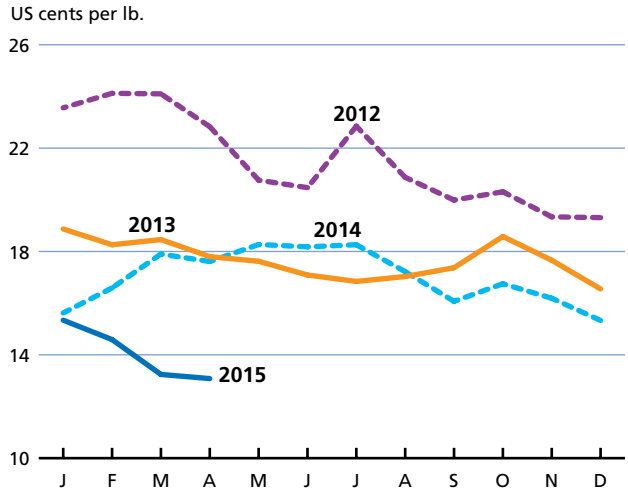
Large availabilities in both exporting and importing countries weigh on International sugar prices

International sugar prices, as measured by the ISA daily prices for raw sugar, have been declining since the beginning of 2015, confirming the steady fall that has characterized the market since 2011. The slide is attributed to large expansions in production capacity over the past four years, which have resulted in rising global sugar inventories to near record levels. After starting the current year at USD 15.34 cents per pound, sugar quotations fell in February and again in March, when they hit their lowest level since February 2009 at USD 13 cents per pound. Consequently, from January to April 2015, prices averaged 26 percent less than in the same period in 2014. Reports of increasing production in India, the European Union and the United States, coupled with lower anticipated import demand by China, are expected to keep international prices in 2015 under downward pressure.

Downgradings of production prospects in March in Brazil, the world's largest producer and exporter, and in Thailand, the world's second largest exporter, were not sufficient to reverse the tendency for international prices to fall.

Early indications of a small production deficit in the new 2015/16 season have not yet helped prices to recover. Also, the continued weakening of the Brazilian real against the US dollar, which dropped by more than 30 percent since August 2014, favours increasing Brazilian sugar exports, since sugar is traded in US dollars. In fact, while sugar prices declined by 8 percent in USD between August 2014 and January 2015, they increased by about 7 percent in Brazilian real. In addition, the US dollar appreciation, renders imports of many countries more expensive in local currency. For example, in the Russian Federation, prices in USD declined by 12 percent between

Figure 1. International sugar prices*



* As measured by the International Sugar Agreement (ISA)

August 2014 and January 2015, but spiked by about 60 percent when measured in rouble. Support for prices is not coming from the policy front either. Some countries have tightened regulations to curb imports, by limiting the number of import licences (Indonesia), and restricting out-of-quota imports (China), while others (India) granted export subsidies to boost sales abroad. These measures only exacerbate the downward pressure on international sugar values.

PRODUCTION[10]

World sugar production to expand modestly in 2014/15

World sugar production is estimated by FAO to reach 181 million tonnes in 2014/15 (October/September), a modest 0.2 percent increase over the 2013/14 season, still the second largest harvest in history. Favourable weather conditions, along with expanding planted areas, are expected to lead to higher output in most countries, with the exception of **Brazil**, **China** and **Thailand**. The small expansion in world sugar output means that production and utilization are likely to be more closely balanced than in the previous four seasons, when production largely outweighed consumption, which led to large accumulated inventories in both importing and exporting countries. As opposed to the previous couple of years, all of the increase in world production in 2014/15 is expected to take place in the developed countries, with an overall expansion of 2.4 million tonnes, while output is predicted to decline by 1.9 million tonnes in the developing countries as a whole. Based on the latest FAO estimates, global sugar production in 2014/15 is set to surpass consumption by about 1.3 million tonnes, a surplus much smaller than the 9.0 million tonnes and 4.7 million tonnes registered in 2012/13 and 2013/14, respectively.

In *South America*, revised estimates show that production is expected to decline in 2014/15, amid generally unfavourable weather conditions, notably in **Brazil**. In fact, sugar output in the country is forecast to fall as a result of extreme drought conditions in early 2014, which had a negative effect on sugarcane yields. Brazil's production is now estimated at 37.5 million tonnes, 1.5 million tonnes below the volume reached in 2013/14. About 53 percent of the sugarcane harvest is expected to be used for the production of ethanol, slightly less than last season, when sugar mills converted about 54.5 percent of the crop into ethanol. Brazil's sugar output is influenced by changes in the ethanol/sugar price ratio, which eventually determines how much of the two products will be produced from sugarcane. The higher the price ratio, the larger the amount of cane converted into ethanol instead of sugar and vice versa. The Government of Brazil recently increased the mandated ethanol blending ratio in gasoline to 27.5 percent, up from 25 percent last year. The extent to which sugarcane is allocated to ethanol production alters the sugar production forecast for the country. In the rest of South America, sugar production is expected to increase in **Colombia**, the second largest producer in the region, and in **Argentina,** on the expectation that more favourable

[10] Sugar production figures refer to centrifugal sugar derived from sugar cane or beet, expressed in raw equivalents. Data relate to the October/September season.

Figure 2. Sugar production in major producing countries

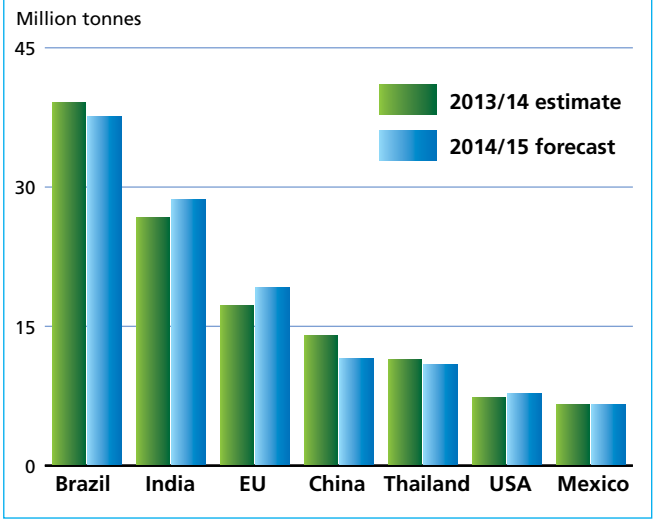


Figure 3. World sugar production by region

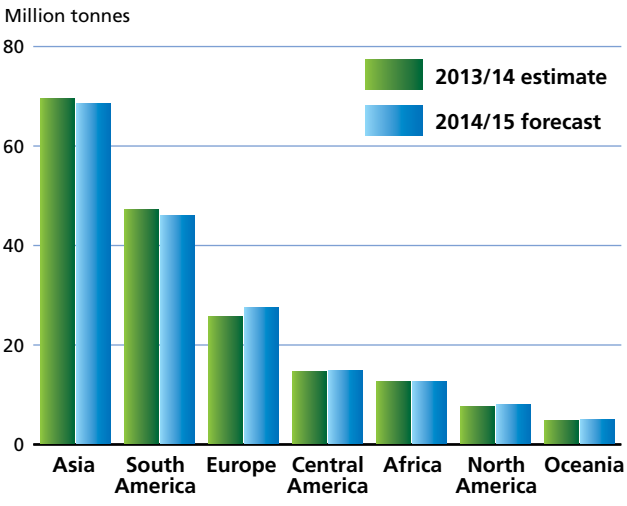
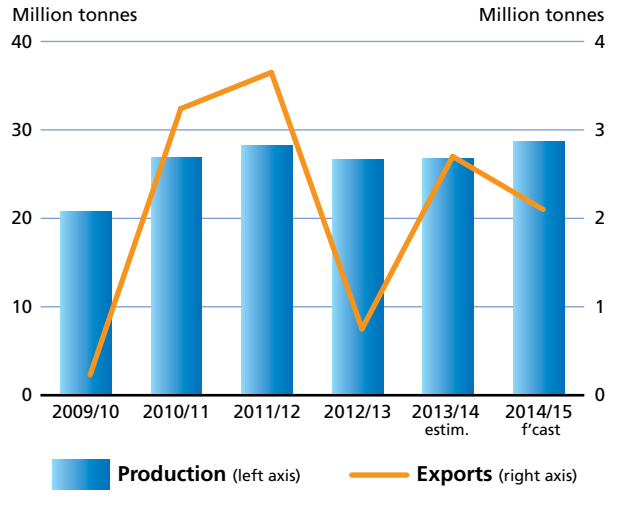


Table 1. World sugar market at a glance

	2012/13	2013/14 *estim.*	2014/15 *f'cast*	Change: 2014/15 over 2013/14
	million tonnes			%
WORLD BALANCE				
Production	**182.3**	**180.6**	**181.0**	**0.24**
Trade *	**54.7**	**55.4**	**55.3**	**-0.19**
Total utilization	**176.1**	**176.9**	**179.8**	**1.59**
Ending stocks	**74.7**	**78.4**	**79.4**	**1.28**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	24.7	25.0	25.3	1.11
LIFDC (kg/yr)	16.5	16.5	16.8	1.87
World stock-to-use ratio (%)	*42.4*	*44.3*	*44.2*	**-0.31**
ISA DAILY PRICE AVERAGE (US cents/lb)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014 %**
	18.53	16.70	14.39	-13.84

* Trade figures refer to exports

Figure 4. Sugar production and exports in India



growing conditions prevail in the main producing region of Tucuman than in 2013/14.

In *Central America and the Caribbean*, 2014/15 estimates indicate that sugar production in **Mexico** will remain at about the same level as last year, or even decline slightly, as large outputs in 2012/13 and 2013/14 reduced the incentive to expand sugarcane areas for the new season. In **Guatemala**, higher than expected sugarcane yields boosted sugar output in 2013/14, but no further increase is anticipated for 2014/15. In **Cuba**, sugar production is expected to continue its recovery, sustained

Table 2. World sugar production

	2012/13	2013/14	2014/15	Change: 2014/15 over 2013/14
	million tonnes			
Asia	69.3	68.3	69.4	1.30
South America	47.0	45.8	12.4	5.51
Europe	25.5	27.4	14.6	1.86
Central America	14.5	14.6	48.0	-0.06
Africa	12.4	12.5	8.3	-2.30
North America	7.3	7.7	24.7	-7.10
Oceania	4.6	4.8	4.6	-1.80
World	**180.6**	**181.0**	**182.0**	**-0.21**
Developing countries	140.3	138.4	141.4	1.24
Developed countries	40.3	42.7	40.7	-4.97

by investments to raise sugar productive capacities at both farm and factory levels. In *Africa*, 2014/15 sugar production is set to rise, prompted by continued area expansions and improved processing capacities. **Kenya**, **Swaziland**, **Sudan** and **Morocco** are anticipated to harvest larger crops, while output is expected to fall in **South Africa** following drought conditions. Sugar output in the country has recently been expanding but at a moderate rate because of labour disputes and land reform challenges. In **Zambia,** sugar production has been expanding by an average of 9 percent per year over the past ten years, driven by investment in irrigation and the price incentives introduced under the 2009 EU Economic Partnership Agreement (EPA). Zambia's sugar production is estimated to increase further in 2014/15.

In *Asia*, output forecasts have been revised since the November issue of *Food Outlook* and now point to a contraction in the region of 1.4 percent compared with the 2013/14 marketing season, due to anticipated declines in **China** and **Thailand**. By contrast, production is set to increase in **India**, **Indonesia** and the **Philippines**. In **India**, favourable monsoon rainfalls last August boosted yields, resulting in a 1.9 million tonne increase of sugar production to 28.5 million tonnes in 2014/15. Also, remunerative sugarcane prices have led farmers to substitute sugarcane for rice or wheat. It is expected that India's recent partial deregulation of the sugar industry, which abolished the required 10 percent levy on sugar mills and deregulated sales in the open market for the next two years, will give sugar mills some financial flexibility to repay cane arrears.

As already mentioned in the November issue of *Food Outlook*, below average precipitation at the beginning of the season reduced sugarcane yields in **Thailand**, the world's second largest sugar exporter. Output is now estimated to fall 4.4 percent to 10.8 million tonnes, despite a 4.2 percent

expansion in planted area. Similarly, sugar production in **China** is expected to decline in 2014/15, due to a reduction in planted area in response to falling domestic prices and rising input costs. Sugar returns have reportedly fallen in comparison with competing crops such as cassava and fruits. In recent years, financial assistance and subsidized inputs that sugar mills provided to farmers helped boost plantings. However, with limited available areas for expansion due to competition with other crops, increases in output will need to originate from high-yielding varieties as well as better crop husbandry and productivity gains at farm and processing stages. Production is foreseen to contract in **Pakistan**, following an estimated 6 percent decline in planted area. In 2013/14, sugar production expanded in response to the relatively high sugar returns witnessed over the past three seasons. Remunerative prices also encouraged the use of fertilizers and other inputs, which boosted sugar crop yields. Sugar output is set to expand in **Indonesia**, amid favourable weather, area increases and a high extraction rate. The area expansion occurred mainly in Central Java, Lampung and South Sulawesi. Expansion in the sugar market is largely attributed to sustained demand for sugar by the food and beverage industries, a reflection of per capita income growth. Similarly, sugar production in **Turkey**, the world's fifth largest sugar beet producer, is foreseen to rise by 0.1 million tonnes from its 2013/14 level. The increase comes on the back of an estimated 8 percent growth in sugar beet area to satisfy the increase in beet sugar production quota for the new season.

In *Europe*, the latest estimates for the European Union point to a significant rise in sugar production largely on account of better yields, notably in **France**, **Germany** and the **Netherlands**. With the elimination of production quotas as of September 2017, the European Union is projected to become more self-sufficient in sugar in the medium-term. The impact of the abolition of domestic sugar quotas on the Economic Partnership Agreements (EPAs) and "Everything But Arms" (EBA) countries is still uncertain and further analysis is warranted. It is likely, however, that producers supplying the European Union under the EBA initiative, or holding preferential access to the European Union market through bilateral or multilateral tariff rate quotas (TRQs), will ship more to the European Union market as long as the European Union internal price is higher than their own export price, plus transportation and marketing costs. Also, a great deal of uncertainty remains regarding the extent to which sugar will be displaced by isoglucose in the sweetener market following European Union market liberalization.

Production in 2014/15 is expected to grow modestly in the **Russian Federation**, on the back of high beet sugar content, even though drought conditions impacted negatively on beet yields. Domestic prices have been remunerative in recent years, which prompted increases in plantings. However, the expansion is constrained by competition from grains and oilseeds. Growth in sugar production is also likely to be limited by more expensive imported inputs, such as seeds and fertilizers, given the depreciation of the Russian currency, notably, with respect to the US dollar. Sugar production is also expected to expand in **Ukraine**, where cultivated area is reportedly significantly higher than last year. However, rising costs of imported inputs, the result of a significant depreciation of the Ukrainian currency, are likely to weigh negatively on beet yields. In **Australia**, sugar output is anticipated to increase following gains in area harvested and higher sugar yields. In 2013/14, floods and the spread of canopy disease had negative impacts on plantings. In the *rest of the world*, production in the **United States** is forecast to rise from its 2013/14 level, on the back of higher sugarcane yields in Florida as favourable weather conditions helped support plant development. In 2013/14, ample supplies put pressure on domestic sugar prices, forcing the US Department of Agriculture (USDA) to purchase sugar and re-sell it, at a loss, to bioenergy producers, as part of the Feedstock Flexible Program (FFP). The USDA has recently confirmed that for the new season, it is not planning to make use of the FFP.

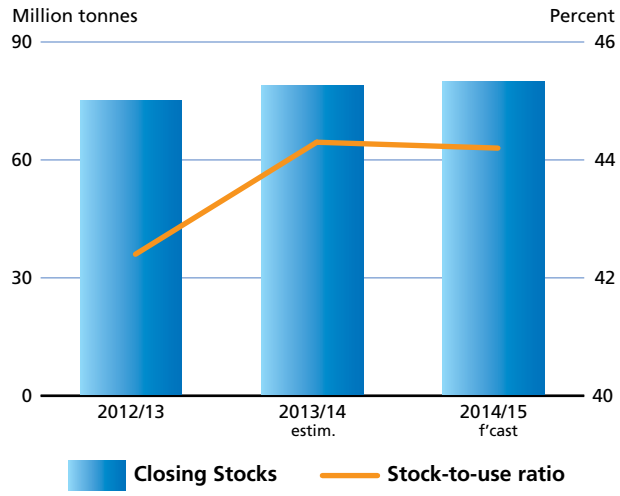
UTILIZATION

Per caput sugar consumption to rise only slightly in 2014/15

Global sugar consumption is anticipated to reach 179.8 million tonnes in 2014/15, 2.8 million tonnes, or 1.6 percent, more than in 2013/14, in line with the 10-year trend. Large supply availabilities and lower international and domestic prices are foreseen to support increases in per capita sugar intake in 2014/15. Domestic prices in local currencies are up sharply, particularly in **China**, **Brazil**, **Mexico** and **the Russian Federation**, while they are down in the **European Union**, the **United States**, **India** and **Japan**. Under current prospects, world per capita sugar consumption is to rise slightly, from 25.0 kg in 2013/14 to 25.3 kg in 2014/15. In developing countries, aggregate sugar utilization is estimated to expand by 2.9 million tonnes, to 130 million tonnes, equivalent to 72 percent of the world total. In the generally more mature markets of the developed countries, consumption is estimated to remain relatively unchanged.

Sugar consumption in the long-run is mostly driven by per capita income and population growth. According to the January update of the World Economic Outlook

Figure 5. Sugar stocks and ratios



of the International Monetary Fund (IMF), the global economy is expected to grow by 3.5 percent in 2015, up from 3.3 percent in 2014, but with uneven growth in the developing and emerging economies. Strong economic performance is usually associated with a dynamic sugar demand, as manufacturing and food preparation sectors, which account for the bulk of aggregate sugar consumption, are highly influenced by the economic environment. One additional element of risk underpinning the outlook on the consumption side relates to currency movements. The appreciation of the US dollar – which makes imports in domestic currency more expensive – could limit further growth in sugar intake. This would be particularly the case for **Brazil**, **Indonesia**, **China**, the **Russian Federation** and the **Islamic Republic Iran**.

TRADE

Trade to remain relatively unchanged in 2014/15

The forecast for world sugar trade in 2014/15 (October/September) stands at 55.3 million tonnes, relatively the same as last season. The main feature of the sugar international market in the 2014/15 season is the greater availability of supplies in most traditional importers, including the **European Union**, **Indonesia** and the **United States**. Although not expected to export more than in 2013/14, given its lower sugar production, **Brazil** is set to ship 24.7 million tonnes or 45 percent of world trade, in 2014/15. The bulk of the Brazilian shipments is in raw form and mainly shipped to the markets of China, Indonesia, Algeria and Egypt. However, the final volume it sells abroad will depend on the quantity of sugarcane production processed into ethanol, especially considering that the mandated blend ratio will increase from 25 percent to 27.5 percent in 2013/14. Also, any further depreciation of the Brazilian real against the US dollar could stimulate Brazil's exports beyond the current estimates.

Despite lower production, the world's second largest exporter, **Thailand**, is expected to consolidate its position and raise deliveries from 6.4 million tonnes in 2013/14 to 7.5 million tonnes in 2014/15, by drawing supplies from sugar inventories. About 60 percent of the country's export are forecast to be shipped in raw form to neighbouring countries, including Indonesia, Malaysia and the Republic of Korea. In the near term, Thai exports to ASEAN countries should benefit from the reduction of import tariffs under the existing ASEAN Economic Community Free Trade Agreement. As a result of the expected increases in sugar output, shipments from **India** are estimated to remain relatively strong, driven by large inventories and the newly introduced export subsidy programme. The objective of the subsidy is to provide sugar millers with additional cash flow, as part of a series of measures to address the issue of arrears due to sugarcane growers. Under the subsidy programme, a total of 1.4 million tonnes of raw sugar can be exported under the programme and benefit from an export subsidy of USD 64.25 per metric tonne. Exports are composed of raw sugar and geared to markets in Asia and Africa.

Deliveries from **Australia**, the world's third largest raw sugar exporter, are set to continue to perform well, rising to 3 million tonnes, up 3.4 percent from 2013/14, supported by greater exportable surplus. In April 2014, Australia and the Republic of Korea signed a free trade agreement, under which Australian raw sugar exporters will be granted duty free access to the Korean market. The existing Republic of Korea 35 percent import tariff on refined sugar will be eliminated within an agreed period of 18 years. Also, China and Indonesia are becoming important destinations for Australian sugar. **South Africa** is expected to export about 800 000 tonnes of sugar, in light of sufficient domestic inventories, with the bulk of shipments directed to the Southern Africa Customs Union (SACU) market, and to the United States to fill its 2015 TRQ allocation.

Exports by **Guatemala**, the second largest exporter in Latin America and the Caribbean, are foreseen to expand, given ample stock availabilities and competitive pricing. Sugar has become a key source of foreign exchange earnings for the country, with large investments targeting refined sugar export markets, especially in the United States, the Republic of Korea and Canada, the main destinations of Guatemala's sugar exports. Guatemala, now the world's fifth largest sugar exporter, is focusing on

increasing its exports of refined sugar. Expected production gains in 2014/15 are also anticipated to enable **Cuba** to increase exports, with about 0.4 million tonnes directed to China, as part of an export agreement between the two countries. On the other hand, sales by **Mexico** are anticipated to decline for the new season, with inventory and production levels falling from 2013/14. Most importantly, shipments to the United States are set to contract as part of the agreement reached between the United States Department of Commerce and Mexico which suspends the anti-dumping and countervailing duty investigations launched against imports from Mexico. Under this agreement, Mexican sugar exports entering the United States will be subject to quantity limits[11] as well as a minimum reference price for both white and raw sugar.

Imports by *Asian* countries are estimated to fall in 2014/15, as a result of lower purchases by **India** and **China**. In the latter, domestic sugar prices have been rising, underpinned by a reduction in sugar output, as well as by the agreement between the China Sugar Association and domestic refineries to limit out-of-quota raw sugar imports to 1.9 million tonnes between January 2015 and September 2015. Nevertheless, **China** is expected to remain the world's largest sugar importer in 2014/15. Similarly, external purchases by **India** are anticipated to fall, on the back of large domestic supplies. In contrast, those by **Indonesia** are set to remain strong, driven by robust domestic utilization, particularly from the beverage and food processing sectors. The country is to consolidate its position as the world's second largest sugar importer.

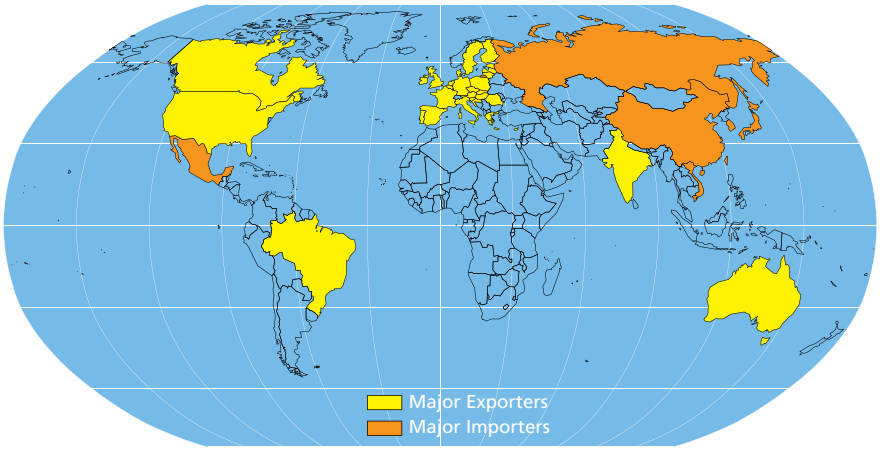
In *Europe*, shipments to the **European Union** are forecast to decline because of the estimated bumper crop. With new free trade agreements being fully implemented with Peru, Colombia and six Central American countries, namely Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama, imports by the EU actually may end up higher than the 3 million tonnes currently estimated. An additional 20 000 tonnes of sugar from Ukraine is also available to enter the European Union market, on the basis of a newly negotiated free trade agreement. On the other hand, a continued decline in EU's domestic sugar prices could result in falling preferential imports and lower overall imports to the Union than currently estimated. As a result of expanding domestic production, imports by the **Russian Federation**, once the world's largest sugar market for trade, are anticipated to fall in 2014/15. Also, any further depreciation of the Russian currency against the United States dollar (beyond current levels) could further dampen purchases. Likewise, shipments to **Kenya** are estimated to fall, unlike those to **Malaysia** and **Morocco,** which are expected to increase.

In the *rest of the world*, purchases by the **United States,** about half of which are managed through a TRQ system of 1.4 million tonnes, are anticipated to be cut, given an increase in domestic production combined and falling shipments from Mexico, as discussed previously. Despite anticipated gains in sugar output in 2014/15, *African countries* are foreseen to import larger quantities, in general, to meet robust growth in domestic sugar intake.

[11] This limit is equal to 100 percent of the remaining demanded quantity after the US producers and countries with fixed quotas have exhausted their supplies to the US market.

MEAT AND MEAT PRODUCTS

Major Meat Exporters and Importers



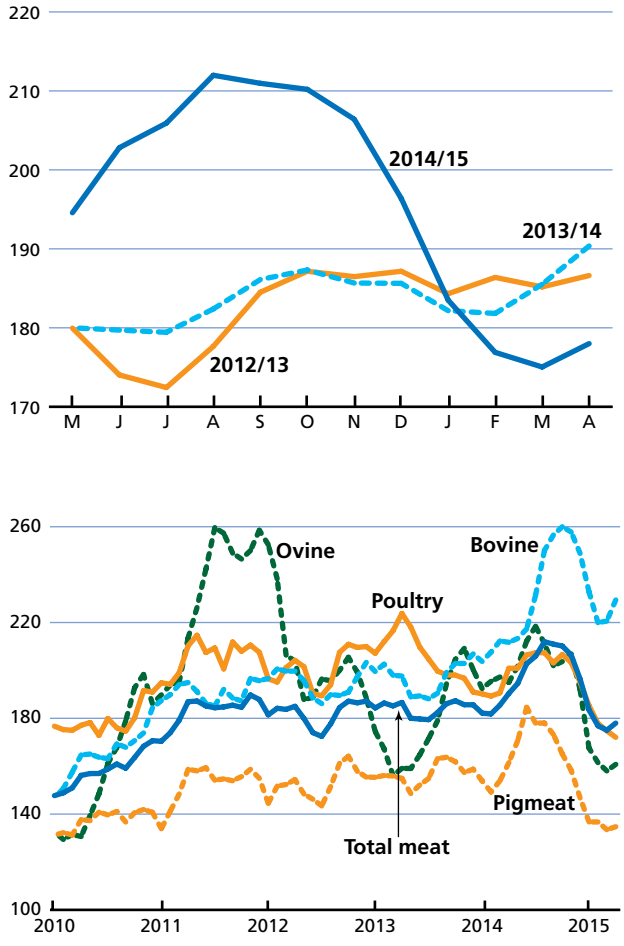
The **FAO Meat Price Index** was generally lower during the first four months of 2015, declining from 183 points in January to 178 points in April. The price fall affected all categories of meat.

Limited production growth; muted trade

World meat production is anticipated to record a modest expansion in 2015 to 318.7 million tonnes, 1.3 percent, or 4 million tonnes, above 2014, with the largest increases expected in China, the EU, United States and Brazil. The pigmeat sector is forecast to drive the global increase, followed by poultry meat. Only modest gains in bovine and ovine meat production are currently foreseen.

Global meat trade is forecast to expand at a moderate rate of 1.7 percent in 2015, to 31.2 million tonnes, a significant slowdown from the 3.1 percent registered last year. There are diverging projected trade trends for the various types of meat, with growth forecast for bovine meat, pigmeat and poultry, and decline forecast for ovine meat. Poultry remains the main traded meat product, followed by bovine, pig and ovine meat, respectively.

Figure 1. Prices fall on reduced demand (2002-2004=100)



BOVINE MEAT

Unchanged production

Bovine meat production in 2015 is forecast to remain largely unchanged at 68 million tonnes – continuing a trend of limited growth evident for several years.

Table 1. World meat market at a glance

	2013	2014 estim.	2015 f'cast	Change: 2015 over 2014
	million tonnes			%
WORLD BALANCE				
Production	**311.1**	**314.7**	**318.7**	**1.3**
Bovine meat	67.8	67.8	67.9	0.2
Poultry meat	108.6	110.2	111.8	1.4
Pigmeat	115.0	117.2	119.4	1.9
Ovine meat	13.9	13.9	14.0	0.8
Trade	**29.7**	**30.6**	**31.2**	**1.7**
Bovine meat	8.9	9.6	9.8	1.9
Poultry meat	12.5	12.7	13.1	2.6
Pigmeat	7.1	7.0	7.1	1.6
Ovine meat	1.0	1.0	0.9	-8.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	43.4	43.3	43.4	0.1

FAO MEAT PRICE INDEX (2002-2004=100)	**2013**	**2014**	**2015** *Jan-Apr*	**Change: Jan-Apr 2015 over Jan-Apr 2014** %
	184	198	178	-3.6

In *South America*, cattle availabilities and slaughter have been rising, particularly in **Brazil**. The country, which is the second largest producer after the United States, is anticipated to account for most of the regional growth, as its production is projected to rise by 1.6 percent to 10 million tonnes. The Brazilian cattle herd is in an expansion phase, supported by improvements in productivity and genetics. Additionally, favourable prices on the export market have stimulated the use of feed to maintain cattle weight during the dry season. In **Argentina**, government export restrictions have obliged the industry to focus increasingly on internal demand, which absorbs over 90 percent of output. Preference for younger, lighter animals for the domestic market means that production is growing at a relatively slow rate. In neighbouring **Paraguay** and **Uruguay**, strong production growth is anticipated, spurred by international demand and sustained cattle prices, and supported by an expanding herd and productivity increases.

In *Asia*, **India**, the sixth largest bovine meat producer, continues to see its industry grow, supported by a government programme to utilize male buffalo calves from the country's expanding dairy herd. Output is forecast to drop in the **Republic of Korea**, where low profitability has led to herd reduction. In **China**, production is anticipated to record a second year of decline, due to a reduction in the size of the national herd. Limitations on space and fodder supplies, combined with poor profitability, have led to a number of smaller-scale producers leaving the industry.

Most parts of *Africa* received adequate rainfall during the first part of the year, which led to satisfactory pasture conditions and laid the basis for an anticipated moderate increase in bovine meat production. However, some areas of southern Africa suffered from flooding at the start of the year, followed more recently by dry conditions, which may affect both pastures and feed availability. As a consequence, the sector growth may be constrained in the subregion. Furthermore, outbreaks of foot-and-mouth disease in east-central Africa including **Kenya**, **Uganda** and **Rwanda** may depress yields. **Egypt**, where bovine meat production is mainly based on dairy cattle (including buffaloes), the continued presence of FMD and a high calf slaughter rate are anticipated to depress output.

In *North America*, the **United States**, the world's largest producer, is anticipated to incur a further, although smaller, decline in bovine meat production in 2015, as a result of calves being retained for herd expansion. This should be only partly offset by higher average slaughter weights, fostered by cheaper feed costs. Output could decline by 2.3 percent, to 10.9 million tonnes, its lowest level since 1994. The long-term decline in the cattle herd in neighbouring **Canada**, evident since 1992, is expected to continue.

In *Oceania*, the after-effects of drought are anticipated to impinge on production. In **Australia**, slaughter rates increased markedly in 2013 and the first part of 2014, prompted by reduced availability of pasture and fodder. Diminished herd size and rebuilding should combine to curb output in 2015, with a decline of 7.1 percent to 2.3 million tonnes anticipated. In **New Zealand**, production is foreseen to be higher – at around 590 000 tonnes – as a result of drought during the first part of the year and substantially lower milk payouts to farmers. The beef industry in New Zealand is highly dependent on the dairy sector, which provides 80 percent of the total supply in the form of culled cows and male calves for fattening. In the **Russian Federation**, improved productivity and slaughtering facilities may be sufficient to counterbalance long-term herd reduction, resulting in a small increase in output overall. In the **EU**, the world's third largest beef producer at 7.8 million tonnes, the prolonged reduction in the cattle herd has reversed as a result of dairy sector expansion. Bovine meat production is anticipated to rise by 1.7 percent in 2015, mainly owing to a rise in the number of male dairy calves for fattening and the culling of dairy cows in some countries, stemming from lower milk prices.

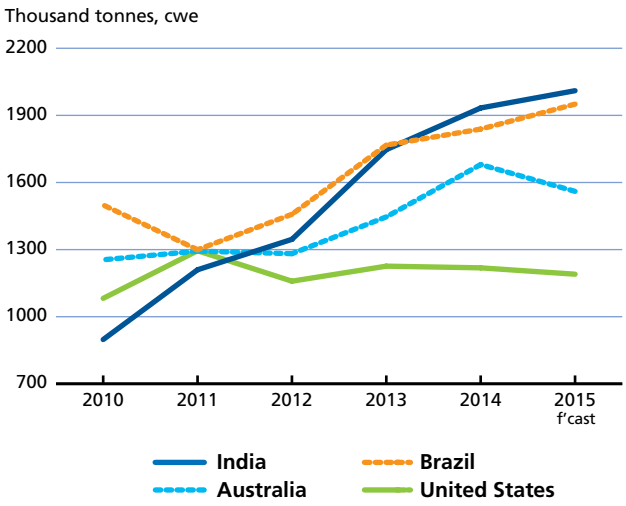
Limited trade growth

World trade in bovine meat in 2015 is anticipated to expand at a reduced rate of 1.9 percent, to 9.8 million tonnes. Supply limitations are forecast to be the principal factor behind the slowdown, although, the pace of growth in import demand may slacken as well.

China is expected to record a significant increase in imports, although not to the same degree as in the previous three years, when they tripled. Total imports could reach 1.3 million tonnes in 2015, 12.7 percent more than in 2014, placing China above the United States as the main world market for bovine meat. Changing consumption patterns, associated with increased income and growth in meals outside the home, have underpinned the substantial hike in imports China has experienced since 2011. Additionally, following outbreaks of avian influenza, some Chinese consumers have switched from poultry to other meats. Elsewhere in *Asia*, imports by **Vietnam**, the **Islamic Republic of Iran**, the **Republic of Korea** and **Malaysia** could increase, as domestic production is forecast to be either stable or decrease, while purchases by **Japan** may fall. Imports by the **United States** and **Canada** may also decline somewhat. In the **Russian Federation**, the devaluation of the rouble, combined with increased domestic production, are expected to result in a fall in purchases. Deliveries to the **EU**, **Chile** and **Mexico** are anticipated to be little changed.

Much of the 2015 expected expansion in trade is projected to be met by India and Brazil. **India**, in particular, is anticipated to see a strong rise in sales of buffalo meat (carabeef), which grew by 11 percent in 2014 and has almost quadrupled since 2009. India's exports in 2015 are projected at 2 million tonnes, confirming its position as the leading supplier of bovine meat, having overtaken Brazil already last year. India's main markets are in Asia – particularly **Vietnam** – and in North Africa. The popularity of carabeef rests on its price competitiveness, although quotations are moving nearer to those for beef from competitors such as Australia and Brazil. **Brazil's** stagnant domestic demand and increased competitiveness stemming from the depreciation of the real, the local currency, should promote exports, now projected to rise by 6.1 percent to 1.9 million tonnes. Favourable market conditions for bovine meat are expected to stimulate exports from **Paraguay**, the **EU**, **Argentina** and **Nicaragua**. Increased exports are also forecast for **New Zealand**, arising from drought-related herd reduction and a reduced rate of retention within the dairy herd caused by lower milk payouts. On the other hand, reduced production is anticipated to curb exports by the **United States** and **Australia.** In the case of **Uruguay,** the government-imposed restrictions on trade, to guarantee supplies to the domestic market, are anticipated to constrain exports.

Figure 2. Bovine meat exports



PIGMEAT

Production to grow in all regions

World production of pigmeat is anticipated to grow by 1.9 percent to 119.4 million tonnes in 2015, aided by lower feed costs. ***Asia*** is the leading pigmeat-producing region, accounting for almost 60 percent of the world total. Strong consumer demand and government support policies are anticipated to boost **China**'s output by 1.2 percent, to 57.8 million tonnes, equivalent to almost half of the world total. Elsewhere in Asia, **Vietnam**, the **Philippines** and **Indonesia** are foreseen to register growth rates similar to China**.** Production in **Japan** and the **Republic of Korea** is set to recover following last year's outbreaks of porcine endemic diarrhoea (PED), which reduced piglet numbers. Recovery from the effects of PED is also projected to result in a rise in pigmeat production in the **United States**. Elsewhere in the *Americas*, **Brazil** and **Canada** are set to increase output, stimulated by reduced feed costs. Steady growth is also anticipated for **Mexico**, underpinned by improved genetics and productivity, which translates into more piglets per litter and higher animal weights. Production in the **EU** is expected to continue the expansion seen last year. As a reflection of this, the year-end breeding sow herd increased for the first time in several years. In the **Russian Federation**, government policies favouring large-scale farms have resulted in production doubling over the past decade. The trend towards increased output may be amplified in 2015, following prohibitions of pork imports from the EU and Canada, which together supplied two-thirds of Russian imports before the ban was introduced.

Excess export supplies depress world prices

Trade in pigmeat is expected to recover by 1.6 percent to 7.1 million tonnes in 2015, following a decrease in the previous two years. The **United States**, the **EU** and **Canada** account for four-fifths of the world pig meat exports. Adding **Brazil** and **China** to the group brings the total to more than 90 percent. Expanding production in the main exporting countries is anticipated to be the main driver behind export growth. Abundance of supplies on the world market was reflected in the movement of the FAO Pigmeat Price Index which, after reaching an historic peak in June 2014, had fallen by 37 percent by April, reaching a level last seen in January 2011. An additional factor in the weakness in pigmeat prices was the country-specific import ban introduced by the **Russian Federation**, which particularly affected sales from the **EU**. Initially, EU pigmeat exports were redirected to *Asia*, in particular **Japan**, the **Republic of Korea**, **China** and the **Philippines.** However, towards the end of 2014 and into 2015, demand from these markets slackened and sales declined. A fall in exports increased supply to the EU domestic market causing internal prices to drop substantially. As a consequence, in February 2015, the European Commission opened a private storage aid scheme to assist price recovery. Lower international prices for pigmeat are anticipated to serve as the principal motor of trade growth. **China**, **Mexico**, the **Republic of Korea**, **Vietnam**, **Australia**, **Angola**, **Singapore** and **Colombia** and are all forecast to increase imports. Meanwhile, expansion in production in the **United States**, **Japan** and the **Russian Federation** is anticipated to lead to lower purchases this year.

Figure 3. EU pigmeat exports

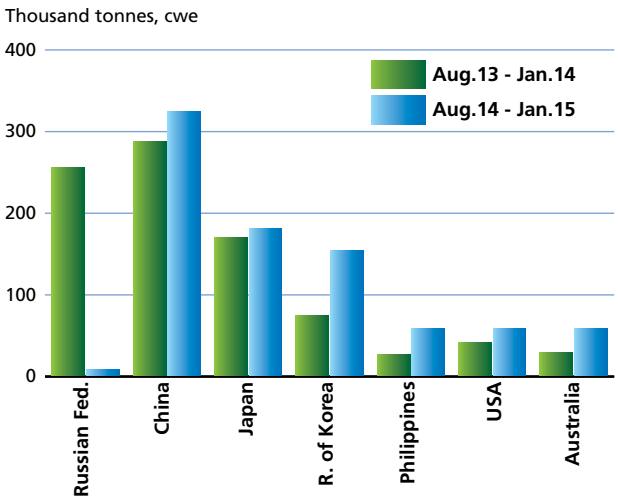
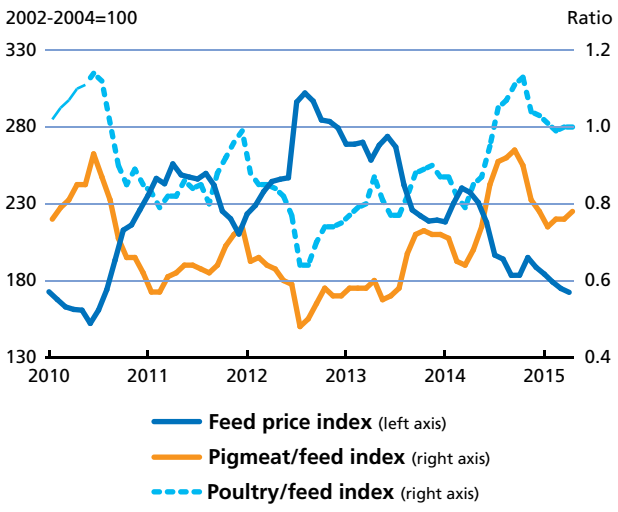


Figure 4. Pork and poultry producers benefit from reduced feed costs



POULTRY

Stagnation in China production weighs on world growth

Limited growth is foreseen for poultry production in 2015. Output is expected to rise by 1.4 percent to 111.8 million tonnes, much slower than the 3 percent per year trend observed over the past decade. While falling feed prices have supported growth in many countries, industry challenges in **China** continue to weigh on the world total. In China, concerns over avian influenza have caused demand for poultry to stagnate. As a consequence, poultry production in China is projected to be unchanged in 2015, at 18.5 million tonnes. Excluding China, the tendency in all the other largest producing countries is expected to be positive. Production in the **United States**, the principal producer, could grow by 0.8 percent, to 20.7 million tonnes. Elsewhere, the other major producers likely to witness gains include the **EU**, **Brazil**, the **Russian Federation**, **Mexico**, **India,** the **Islamic Republic of Iran** and **Turkey**.

Slow trade growth

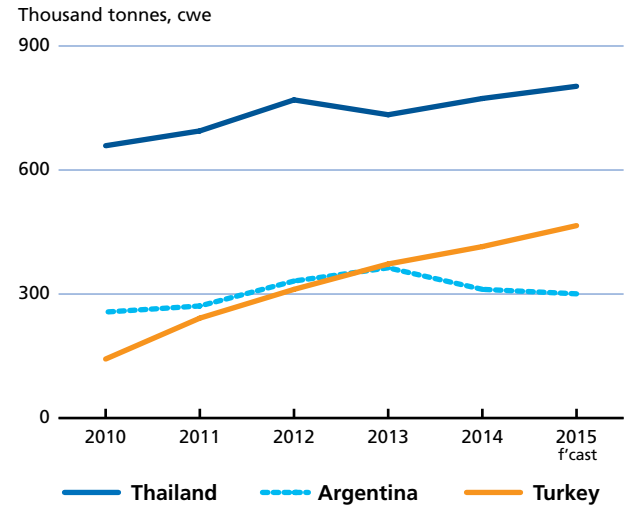
Poultry, the most traded meat category, accounts for over 40 percent of total meat trade. Although poultry trade volume has increased by 55 percent over the past decade, growth has slowed since 2012, a trend expected to continue in 2015, with trade increasing by 2.6 percent to 13.1 million tonnes. In part, the slowdown in growth is a reflection of augmented production in importing countries, which has reduced their need for external meat supplies. Additionally, outbreaks of highly pathogenic avian influenza (HPAI) in some areas of the United States from

January onwards caused numerous countries to suspend imports from this country, pending its containment and eradication.

The two major poultry meat importers, **China** and **Japan**, are projected to maintain their purchases at similar levels to the previous year. Stable to positive growth in imports by other major markets, including **Mexico**, **Saudi Arabia**, the **EU** and **Vietnam**, is expected to contrast with a second year of falling purchases by the **Russian Federation**. In the Federation, imports are provisionally estimated to decline by 12 percent, stemming from abundant domestic production and the August 2014 ban on imports from specific countries. In the case of poultry, this group of countries had supplied approximately three quarters of the Federation's overseas purchases in 2013, which means identifying alternative sources of supply has presented a challenge. In *Africa*, imports as a whole are forecast to rise by 6.7 percent. Among the main importing countries, **Angola** and **Benin** are anticipated to purchase more, as income growth strengthens demand, while imports by **South Africa**, the major trade destination in the region, are forecast to rise by 1 percent.

The three leading exporters, **Brazil**, the **United States** and the **EU,** which together account for almost three quarters of global poultry exports, have seen little expansion in sales in recent years. This situation may change in 2015, when sales by **Brazil** may receive a fillip from the US HPAI-related export restrictions and from the opening up of opportunities in the Russian Federation. Exports by the **United States** for the year as a whole are anticipated to suffer from HPAI-related import restrictions, even falling somewhat, although the severity of the decrease will depend on how soon the disease is contained and eradicated. As a result of this, second-tier exporters, such as **Thailand** and **Turkey**, along with Brazil, are projected to drive the expansion of world poultry exports in 2015. Conversely, **Argentina**, which has also seen substantial growth in recent years, suffered a decline in sales to its principal market, **Venezuela**, in 2014. A further fall in overall sales is anticipated for this year, despite Argentina having widened the focus of its trade to include **China**, **Chile**, **South Africa** and the **Russian Federation**, among others.

Figure 6. Poultry exports



OVINE MEAT

Limited production growth

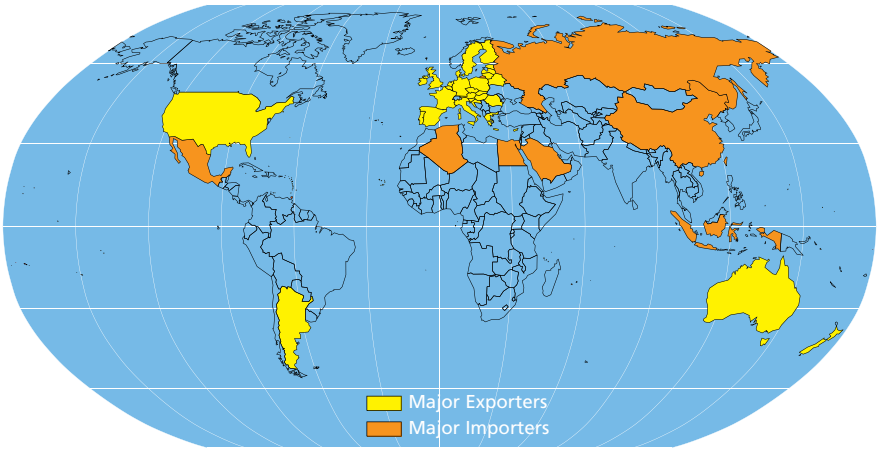
After stagnating in 2014, production of ovine meat is forecast to show limited growth in 2015, rising by 0.8 percent to 14 million tonnes. Developing countries account for three quarters of the total, with the largest producers being **China**, **India**, **Sudan**, **Pakistan** and **Nigeria**. Generally satisfactory pasture conditions have set the basis for flock rebuilding in many of the major producing areas of Asia and Africa. In Oceania, drought-imposed herd reduction and subsequent rebuilding are anticipated to constrain output in **Australia** and **New Zealand.** In the **EU**, the second largest producer, outbreaks of bluetongue disease reduced both herd size and off-take in several member countries in 2014 and the effects are anticipated to carry over into 2015.

Trade to fall

With **Australia** and **New Zealand** accounting for almost 85 percent of world ovine meat exports, trade in ovine meat is set to fall as a result of restocking in both countries. Overall, trade may drop by 8.5 percent to 940 000 tonnes. In dealing with reduced availabilities, Oceania exporters may maintain supplies to the highest value markets, such as the **EU** and the **United States**, while seeking, to the extent possible, to meet the requirements of growing markets, albeit lower priced ones, including **China**, the **United Arab Emirates**, **Qatar** and **Malaysia**. Among the small-scale exporters, **India** is expected to see sales grow this year, mainly to the Middle East, especially the **United Arab Emirates** and **Saudi Arabia**. Exports by the **EU** and **Uruguay** are forecast to be little changed from last year.

MILK AND MILK PRODUCTS

Major Dairy Exporters and Importers



PRICES

Signs of stabilization

International dairy product prices began the year at low levels and, despite some positive movement in February and March, fell back in April. A favourable opening to the April/March dairy year in the EU, combined with the abolition of the milk quota system, raised expectations of abundant world export supplies. At the same time, uncertainty over the level of China's imports in 2015 and continued trade prohibitions imposed by the Russian Federation have tempered demand.

The **FAO Dairy Price Index** stood at 172 in April, slightly below its level at the start of the year. Quotations for all dairy products covered in the Index were muted and substantially below a year ago. Compared with April 2014, prices for the main dairy commodities were down 43 percent for skimmed milk powder (SMP) to USD 2 414 per tonne; down 39 percent for whole milk powder (WMP) to USD 2 780 per tonne; down 28 percent for cheddar cheese to USD 3 525 per tonne; and down 23 percent for butter to USD 3 408 per tonne.

Figure 1. Dairy Price Index: Prices stabilize

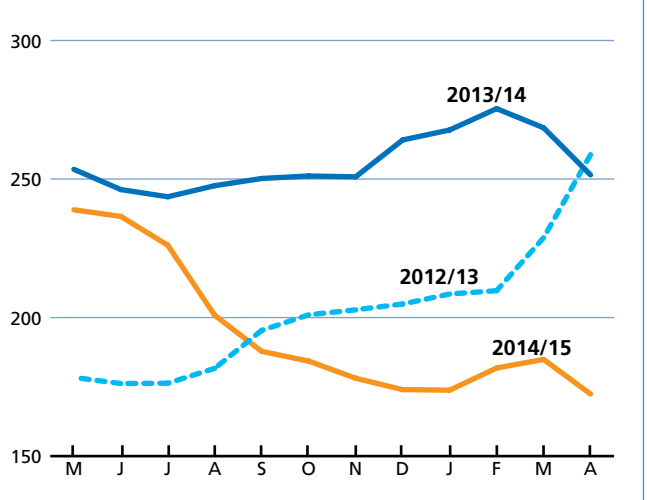


Figure 2. Dairy products: prices level out

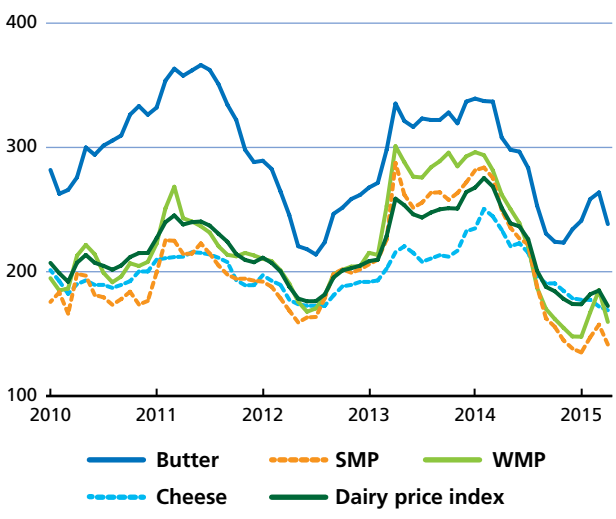


Table 1. World dairy market at a glance

	2013	2014 estim.	2015 f'cast	Change: 2015 over 2014
		million tonnes		%
WORLD BALANCE				
Total milk production	**765.1**	**788.5**	**804.5**	**2.0**
Total trade	**68.3**	**72.2**	**74.1**	**2.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	106.9	108.9	109.9	0.9
Developed (kg/yr)	218.1	221.9	222.5	0.3
Developing (kg/yr)	75.6	77.5	78.9	1.8
Trade share of prod. (%)	*8.9*	*9.2*	*9.2*	*0.6*

FAO DAIRY PRICE INDEX (2002-2004=100)	2013	2014	2015 Jan-Apr	Change: Jan-Apr 2015 over Jan-Apr 2014 %
	243	224	178	-32.9

PRODUCTION

Most growth to come from Asia

World milk production in 2015 is forecast to grow by 2.0 percent to 805 million tonnes. While *Asia* is expected to account for most of the increase, production should rise in all regions. Output in **India**, the world's largest milk producing country, is expected to expand by 4.3 percent, or 6.1 million tonnes, to 147.8 million tonnes. Expansion in herd size and improved productivity are important engines underpinning production growth in the country. Increased output is also anticipated in **China**, **Pakistan** and **Turkey**, spurred by steady growth in consumer demand. Several other main producing countries in the region are anticipated to record production levels slightly above last year, including: the **Islamic Republic of Iran**, **Japan** and **Saudi Arabia**. Meanwhile, in the **Republic of Korea**, production is expected to remain subdued as a result of limited profitability. In *Africa*, a moderate increase in milk production is foreseen for 2015, assisted by generally favourable weather conditions. However, some areas of southern Africa suffered from flooding at the start of the year, followed more recently by dry conditions, which may affect pasture condition and feed availability. Expansion is foreseen for **Algeria, South Africa** and **Tanzania,** while unusually dry weather in **Kenya** may negatively affect pastures as well as fodder and feed supplies. Furthermore, outbreaks of foot-and-mouth disease in east-central Africa including **Kenya**, **Uganda** and **Rwanda** continue to negatively affect yields.

Rising incomes and strong regional and international demand have promoted growth in dairy production in several countries in *Latin America and the Caribbean*. Countries of the southern cone experienced dry conditions at the start of the year, followed by flooding in February/March, raising concerns about the condition of pastures for the rest of the year. For the present, subregional milk production is projected to rise 1.4 percent to 72 million tonnes. Gains are forecast for **Brazil**, **Chile**, **Colombia**, **Ecuador**, **Paraguay** and **Uruguay.** In **Argentina,** in addition to the adverse weather seen so far this year, the sector is constrained by falling domestic demand and government-imposed limitations on exports, and production is expected to register a decline of almost 5 percent, to 11.1 million tonnes. In *Central America*, milk production in **Mexico**, the largest producer in the subregion, should recover after two years of constrained output caused by prolonged dry weather. Production in **Costa Rica** is expected to show a moderate increase.

In *North America*, output in the **United States** is forecast to register a second year of strong growth and rise by 2.9 percent to 96.3 million tonnes. Production in **Canada** is set to remain at 8.5 million tonnes, within the limits set by its milk quota system.

In *Europe*, **EU** milk production is projected to grow by 1.2 percent to 162.4 million tonnes, stimulated by reduced feed costs, a favourable start to the current season and the abolition of the Union's milk quota system. With the ending of the quota system, several EU member-states, particularly Ireland, the Netherlands and Germany, are expected to maximize their production, while others with less favourable production conditions may register a decline. This diverging trend within the EU has meant that 2014's exceptional rise in dairy cow numbers has not been repeated and the herd size is stable. Milk production in the

Figure 3. EU intervention prices, price and export refund for butter and skim milk powder

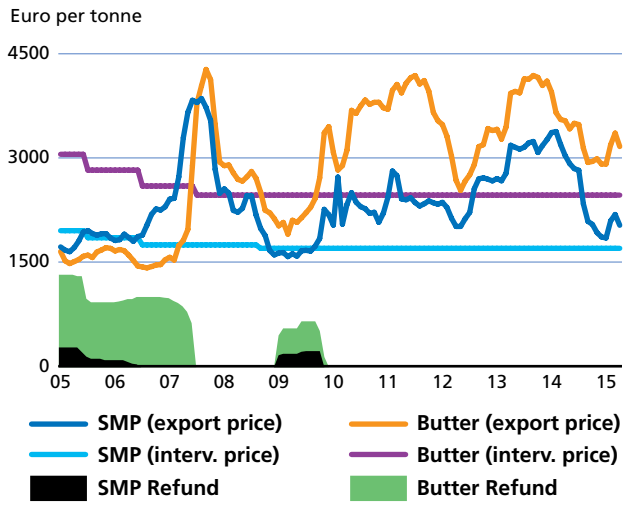


Figure 4. Feed prices continue to decline

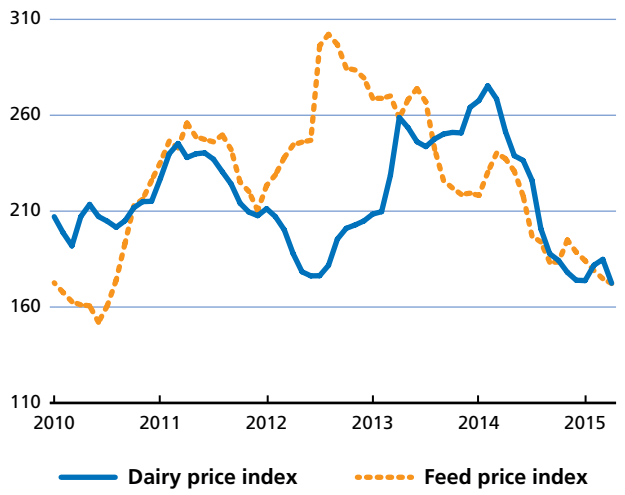


Table 2. Trade in dairy products 2012-2014: Principal exporting countries

	Average 2011-13	*2014 prelim.*	*2015 f'cast*	*Change 2015 over 2014*
	thousand tonnes (product weight)			*%*
WHOLE MILK POWDER				
World	**2389**	**2591**	**2672**	**3.1**
New Zealand	1221	1424	1480	3.9
European Union*	383	389	397	2.1
Argentina	195	144	132	-8.0
Australia	107	81	89	10.0
SKIM MILK POWDER				
World	**1811**	**2130**	**2239**	**5.1**
European Union*	481	646	743	15.0
United States	478	554	550	-0.6
New Zealand	381	383	400	4.4
Australia	142	164	175	6.9
BUTTER				
World	**878**	**976**	**995**	**1.9**
New Zealand	446	510	530	3.9
European Union*	127	149	149	-0.2
Belarus	70	69	70	1.9
United States	69	74	67	-9.0
Australia	48	43	47	9.7
CHEESE				
World	**2388**	**2398**	**2457**	**2.5**
European Union*	742	721	757	5.0
United States	269	371	360	-2.8
New Zealand	278	278	285	2.5
Belarus	132	166	185	11.8
Australia	165	151	160	6.2
Egypt	134	115	119	3.3

* Excluding trade between the EU Member States. From 2013: EU-28

Russian Federation is anticipated to move sharply lower in 2015, as poor profitability has caused a contraction in the dairy herd, in particular in the small-farm sector. In neighbouring **Belarus**, production is on an upward trend, assisted by increased sales to the Russian Federation.

In *Oceania*, a strong start to **New Zealand's** milk production in the second-half of the current 2015 dairy marketing year (June-May) was curtailed by dry to drought conditions in many areas from January to March. Additionally, falling world prices have led to a substantial revision in payments to producers, which may be down by as much as 40 percent compared to last year. This situation has acted as a strong disincentive for farmers to seek to maximize production via feeding supplements. New Zealand's current year production is anticipated to close at a level similar to the previous one, at some 20.7 million tonnes. In **Australia**, generally favourable weather conditions and falling feed costs are anticipated to result in a 2 percent rise in output for the current July-June dairy year.

TRADE

Market adjusts to changes seen in 2014

Trade in dairy products is projected to rise by 2.7 percent in 2015, a slower rate than last year, to reach 74 million tonnes of milk equivalent. The two principal exporters, **New Zealand** and the **European Union**, which together account for slightly more than 50 percent of world exports, are both anticipated to record an increase in sales. In the case of New Zealand, as the 2015/2016 dairy year has yet to begin, much will depend on pasture conditions following the dry-to-drought weather prevailing during the first part of 2015. For the EU, the current April-March dairy year marks the first time in 31 years that milk production will not be constrained by the milk quota system, which could facilitate higher exports. Elsewhere, the **United States** is anticipated to maintain sales at a level similar to last year. Conversely, exports from **Argentina** are projected to decline for the second year, as a result of reduced milk production and government-imposed limitations on overseas sales.

Asia is expected to remain the main centre for rising international demand in 2015, although growth may be slower than in recent years. Increased purchases are forecast for **China, Saudi Arabia**, **Malaysia**, the **United Arab Emirates**, **Vietnam**, the **Philippines**, **Thailand** and **Oman**. Elsewhere in *Asia*, **Singapore, Japan** and the **Republic of Korea** remain important markets, but the level of their imports is not expected to change markedly and, in some cases, could decrease slightly. Low prevailing international prices should stimulate imports by *Africa*.

The principal countries that could see growth in purchases are **Algeria**, **Egypt** and **Nigeria**. In *Latin America and the Caribbean*, increased domestic production could result in reduced imports by **Brazil**, while **Mexico** and **Venezuela** are projected to maintain dairy imports at a level similar to last year. For *Europe*, imports by the **Russian Federation** are anticipated to fall for the second year in a row, reflecting the substantial devaluation of the rouble, along with the continuation of the ban introduced in August 2014 on imports of dairy products from Australia, Canada, the EU, Norway and the United States, which has affected cheese in particular. Imports by the **EU** are forecast to be little changed compared with 2014, as are those of the **United States**.

Whole milk powder (WMP) – Prices remain weak

Following a steep decline throughout 2014, prices rose somewhat in February and March 2015, before falling back in April. Increased purchases by **China** and concerns over supplies from drought-affected **New Zealand** were the main causes of the price hike, although, subsequently, anticipation of continued abundant export supplies overall caused prices to drop in April. China's imports of WMP for 2015 are foreseen to be 4 percent higher, consolidating its position as the main international market, representing a third of total world sales. Elsewhere in *Asia*, lower prices may stimulate demand in several major markets, including **Saudi Arabia**, **Sri Lanka** and **Indonesia**. In *North Africa* and *Latin America and the Caribbean*, **Algeria** and **Venezuela** are anticipated to boost imports, building on substantial purchases made last year. Most of the principal exporters, including **New Zealand**, the **EU** and **Australia**, are projected to increase the level of sales in 2015, while supply limitations are anticipated to cause exports by **Argentina**, **Uruguay** and **Brazil** to fall. Overall, world exports of WMP are projected to rise by 3.1 percent in 2015 to 2.7 million tonnes.

Skim milk powder (SMP) – Prices lacklustre

As with WMP, SMP prices fell back in April 2015, after a short-lived rally in February and March. However, in the case of SMP, the decline was not as sharp, due to the more stable price of its co-product, butter.

Trade in SMP is predicted to grow by 5.1 percent in 2015. SMP is central to the milk processing industry in many countries and, as such, market demand is more dispersed than that of WMP. The principal markets are (in order of volume) **China, Mexico, Algeria, Malaysia, Indonesia,** the **Philippines, Saudi Arabia, Vietnam** and the **Russian Federation,** followed by **Egypt, Thailand** and **Singapore**. While **China** is anticipated to remain the main market, with 15 percent of total imports, a rise in purchases is also expected for some other major importers, including (in order of volume) **Algeria**, **Malaysia** and the **Philippines.** Conversely, imports by the **Russian Federation** and **Japan** could fall.

Almost 85 percent of world SMP exports are supplied by the **United States**, the **EU**, **New Zealand** and **Australia.** With the exception of the United States, all are anticipated to either maintain or expand sales during 2015. Following a surge in 2013, exports by **India** almost halved in 2014. The decline is projected to continue this year, as domestic prices have remained above those prevailing in the world market.

Butter – Prices also down

Since dairy prices began to fall in March 2014, butter prices have been less affected than the other products – a reflection of differing markets and utilization.

Trade in butter is forecast to increase by 1.9 percent to 995 000 tonnes in 2015. Demand for butter comes mainly from *Southeast Asia*, the *Middle East* and the **Russian Federation**, although, as with many other milk products, **China** has substantially increased purchases in recent years. Furthermore, as a result of trade agreements and duty-free access for *inward processing* (where products are imported duty free for additional processing and export), the **EU** is both an important butter importer (ranking sixth) and exporter (ranking second). Many of the principal markets, including **China**, **Saudi Arabia** and **Singapore,** are predicted to maintain or increase imports in 2015, while the devaluation of the rouble in the **Russian Federation** is expected to reduce purchases by the country this year.

The two principal exporters of butter, **New Zealand** and the **EU,** are both anticipated to see sales increase in 2015. In New Zealand, reduced returns from WMP may foster a shift towards production of butter/SMP, as processors seek to maximize returns from the new season's milk production. In the case of the **EU**, a devaluation of member states' currencies against the United States dollar has improved export competitiveness. In the **United States,** increased production of cheese and yogurt may cause exports of butter to fall for the second year in a row.

Cheese – Marginal price decline

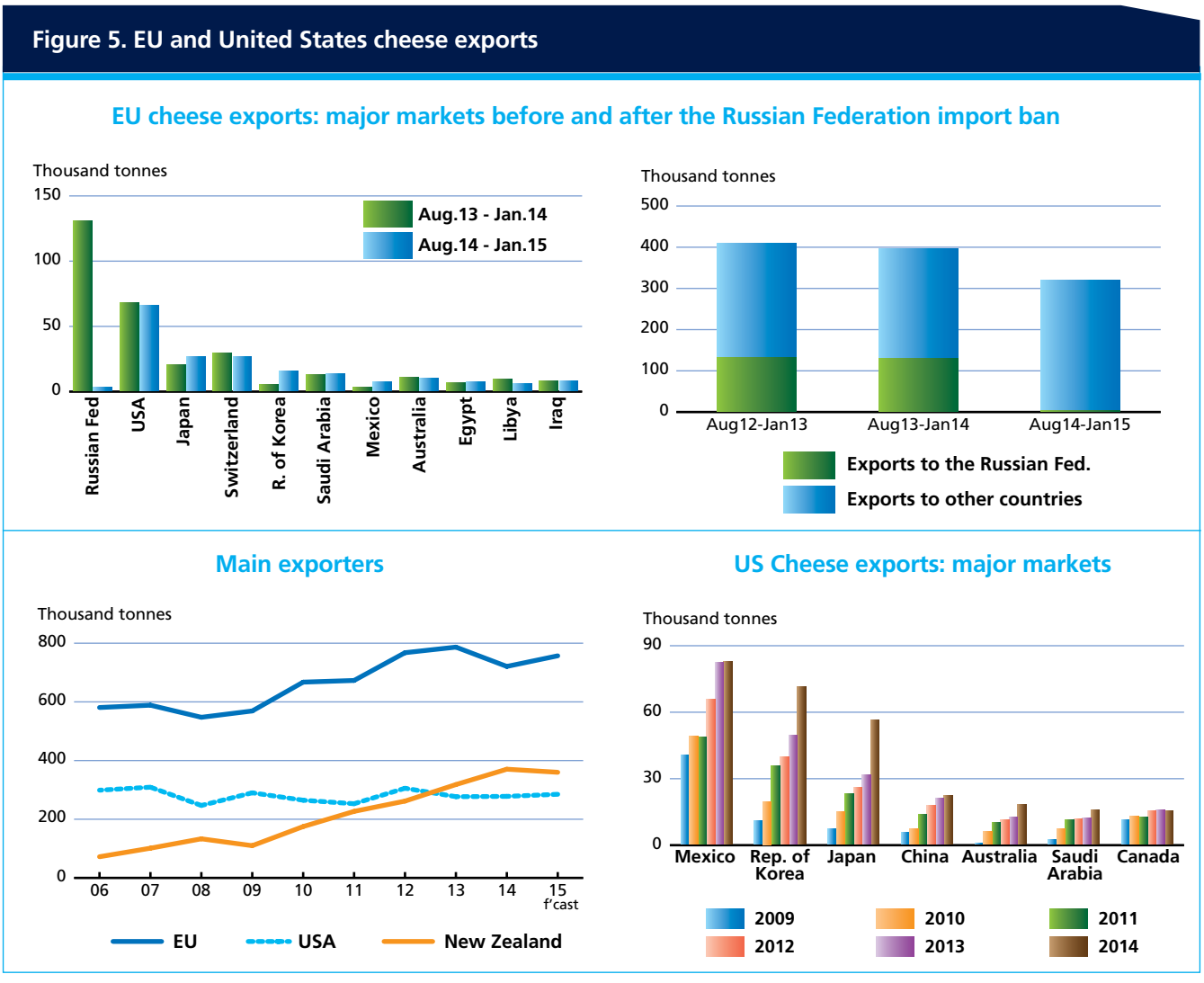
Cheese prices have declined along with other dairy products, with April prices a third lower than their February 2014 peak. The **Russian Federation**'s country-specific import ban and the devaluation of the rouble continue to weigh on the market. In 2014, imports by the Federation fell by 34 percent. Unlike the other commodities, cheese is a highly differentiated product and is used mainly for direct consumption rather than as an ingredient in the food

industry. Thus, the sudden loss of the Russian market caused difficulties for some suppliers, in particular the EU – which had previously supplied 55 percent of the country's imports, representing a third of total EU cheese exports. Some EU member states were particularly affected by the ban, including the **Netherlands**, **Germany**, **Finland**, **Lithuania** and **Poland.** Subsequently, EU cheese trade reoriented towards *Asia* and, as a consequence, only declined by 8 percent for 2014 as a whole. In the EU, cheese exports represent less than 10 percent of internal production which means that, in addition to seeking alternative export markets, it has the potential to absorb the surplus within its domestic market. In this regard, the European Commission has announced that additional funds will be allocated for measures to promote consumption in 2015.

In terms of the overall cheese market, trade is forecast to rise by 2.5 percent in 2015, as the market adjusts to the substantial changes of 2014. Imports by the **Russian Federation** are forecast to remain low – falling by as much as 15 percent over the substantially diminished levels of 2014. Elsewhere, reduced prices and growing demand are expected to lead to augmented purchases by most of the principal importing countries. A particularly strong rise is anticipated for **China**, where imports have more than doubled over the past five years. Sales to the second largest market, **Japan**, may also show moderate growth, along with those to **Saudi Arabia**, **Mexico** and the **Republic of Korea.** In the **United States**, a fall in exports could lead to reduced import demand by the country. Purchases by **Australia** and the **European Union** are forecast to remain stable.

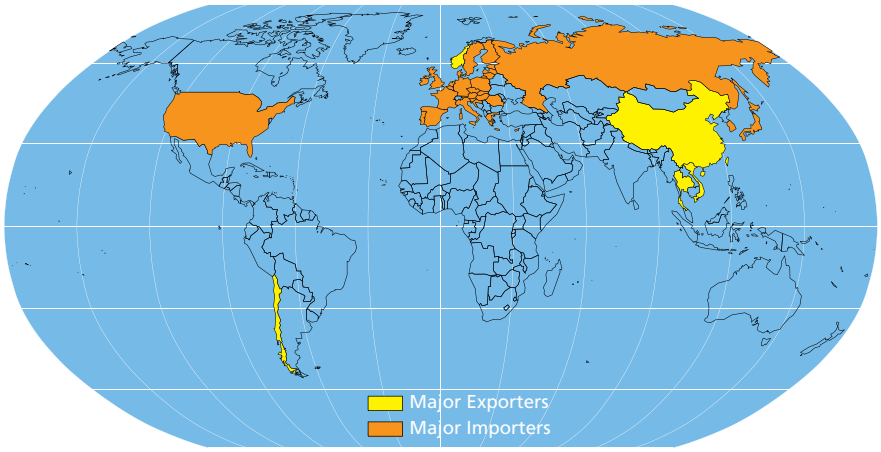
Cheese sales by the **EU** are projected to recover some of the ground lost in 2014 and to grow by 5 percent. Other countries expected to increase exports include **New Zealand**, **Australia** and **Belarus.** Following meteoric growth since 2009, the **United States** superseded New Zealand as the second major cheese exporter in 2013 and 2014. While the US is expected to maintain this position in 2015, a slowdown of sales in recent months suggests that the steady rise in cheese exports may stall in 2015. Overall, the United States has benefitted from Australia's and New Zealand's focus on milk powder and has seen substantial demand growth in its main markets in recent years, including Mexico, the Republic of Korea and Japan, as well as a significant expansion in sales to Australia, Saudi Arabia, China and Egypt.

Figure 5. EU and United States cheese exports



FISH AND FISHERY PRODUCTS

Major Exporters and Importers of Fish and Fishery Products

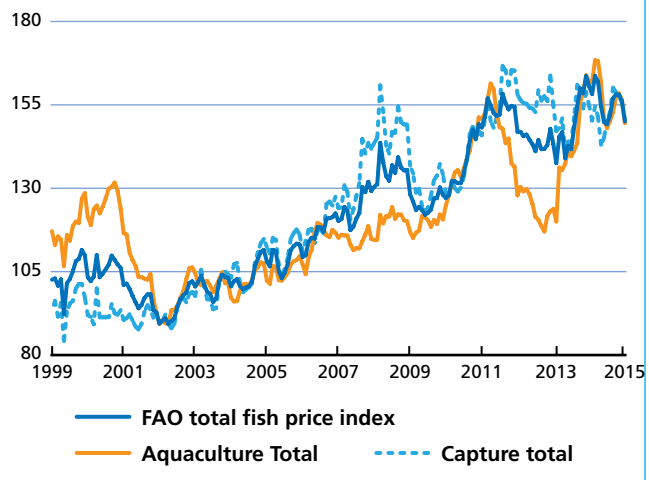


GLOBAL FISH **ECONOMY**

The global seafood industry in 2014 was characterized by sustained high prices for many important species, and a continuation of major trends in production and consumption growth. The shift towards relatively greater consumption of farmed species compared with wild fish hit a milestone in 2014, when the farmed sector's contribution to fish food supply overtook that of wild fish for the first time.

In 2014, overall fish production is estimated to have grown by only 1 percent to 164.3 million tonnes, boosted by a 5 percent expansion of aquaculture to 74.3 million tonnes, which compensated for a 2 percent contraction in wild fish output to 90.0 million tonnes. The contraction in capture fisheries production mainly reflected reduced anchoveta catches, a result of the El Niño climatic phenomenon. Supply in 2015 is likely to see a small rebound in wild catches from the 2014 El Niño-related shortfall, to 90.6 million tonnes, and a further 5 percent growth in aquaculture production to 78.0 million tonnes. As a result, fish production is forecast to reach 168.6 million tonnes in 2015, up 2.6 percent from the previous year.

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



Source: Norwegian Seafood Council (NSC)

Booming demand in Eastern Asia, together with a strong increase in fishmeal prices and impressive shrimp exports from Asia and from Latin America and the Caribbean are estimated to have boosted the value of world fish exports by 5.4 percent to USD 143.9 billion. Despite a surge of export revenues by developed countries in the last quarter of 2014, developing countries continue as frontrunners in the expansion of fish trade, earning USD 78.7 billion through exports in 2014, 6.3 percent more than in the previous year. India, Indonesia and Ecuador benefited from high prices of shrimps; Chile, of salmon; and Peru of fishmeal and fish oil. Norway, one of the world's most important producers, enjoyed record export revenues in 2014, as did China, already the most important producer and exporter of seafood. Among the world's major importers, deliveries to the United States were boosted by an improving economic situation and the strengthening of the US dollar. Meanwhile, imports to the

Table 1. World fish market at a glance

	2013	2014 *estim.*	2015 *f'cast*	Change: 2015 over 2014
	million tonnes			%
WORLD BALANCE				
Production	**162.8**	**164.3**	**168.6**	**2.6**
Capture fisheries	92.6	90.0	90.6	0.7
Aquaculture	70.2	74.3	78.0	5.0
Trade value (exports USD billion)	**136.5**	**143.9**	**144.5**	**0.4**
Trade volume (live weight)	**58.8**	**59.5**	**59.7**	**0.3**
Total utilization	**162.8**	**164.3**	**168.6**	**2.6**
Food	141.0	144.6	147.5	2.0
Feed	16.8	15.0	16.4	9.7
Other uses	5.0	4.8	4.7	-2.1
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	19.7	20.0	20.1	0.9
From capture fisheries (kg/year)	9.9	9.7	9.5	-2.2
From aquaculture (kg/year)	9.8	10.3	10.6	3.8

FAO FISH PRICE INDEX (2002-2004=100)	2013	2014	2015 *Jan-Apr*	Change: Jan-Apr 2015 over Jan-Apr 2014 %
	148	157	150	-6.6

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

European Union continued its steady rise, while Japan's importance as a seafood importer declined further in 2014.

According to the FAO Fish Price Index, prices were up by 5 percent in 2014, sustained by strong increases of farmed fish prices, which gain 12 percent, while prices of captured fishes were barely changed. Across different species, shrimp traded at high prices throughout 2014, as producers capitalized on low Thai harvests and buoyant world demand. Whitefish prices, particularly for cod, also rose significantly in 2014, as did prices for cephalopods, fishmeal and fish oil. By contrast, tuna prices declined significantly due to excess supply, with frozen skipjack prices hitting a 6-year low. Fresh salmon prices also fell back somewhat from previous highs, partly reflecting the import ban and a deteriorating economic situation in the Russian Federation, which intensified exporter competition for alternative markets. World mackerel prices fell on increased catches.

The overall outlook for seafood trade in 2015 is generally positive, although prices are forecast to soften for some species. More specifically, increasing production will exert downward pressure on shrimp prices, while salmon price prospects have been revised downwards due to expectations of sustained production growth in Norway and an overreliance on the US market to absorb volumes. Meanwhile, anchoveta catches are predicted to increase in 2015, which is good news for the growing number of aquaculture producers who use anchoveta as feedstuffs in their operations. Finally, as of early 2015, there are indications that demand for tuna is picking up and there is hope it will be sustained in the longer term.

Consumer demand for fish remains strong, with more people worldwide appreciating the health benefits of regular fish consumption. Direct human consumption, which accounts for more than 85 percent of all fish uses, is now projected to grow by 2 percent to 147.5 million tonnes. This would result in only a slight increase in per capita fish intake, from 20.0 kg in 2014 to 20.1 kg in 2015, a consequence of firm fish product prices and slowing income growth in several important markets. On the other hand, the expected recovery in world wild fish catches in 2015 is predicted to foster a 9 percent rebound in the usage of fish as feed, which is mostly destined for aquaculture operations.

The FAO Code of Conduct for Responsible Fisheries will celebrate its twentieth anniversary in 2015. A groundbreaking and negotiated document, the Code lays forth principles and standards for national and international efforts to ensure sustainable production of aquatic living resources. As a living document, it serves as the basis for the development of various new instruments to address new challenges related to areas such as illegal, unreported and unregulated fishing (IUU) and small-scale fisheries.

SHRIMP

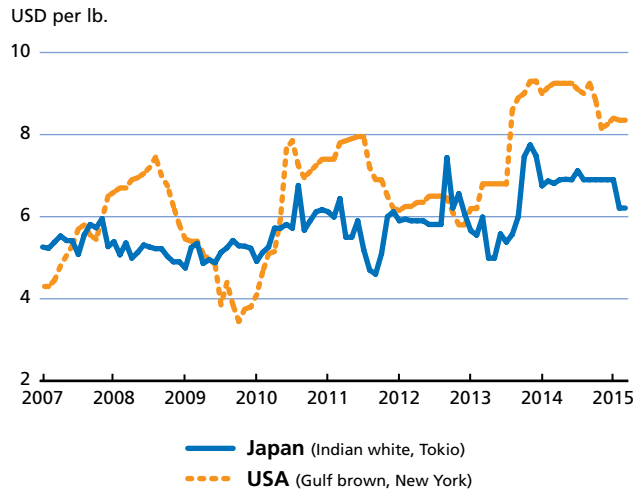
The **United States** continues to be the target market for many shrimp producing countries, although import

Table 2. USA shrimp imports, by origin

	2009	2010	2011	2012	2013	2014
	Jan-Dec (thousand tonnes)					
India	20.0	30.3	48.2	66.1	94.2	108.8
Indonesia	69.3	61.1	70.3	74.1	81.2	103.4
Ecuador	61.6	65.0	73.8	81.5	74.7	92.5
Viet Nam	42.3	48.5	45.4	41.2	60.0	73.8
Thailand	192.8	203.4	185.8	136.1	84.2	64.6
China	44.2	48.2	43.0	35.7	32.5	32.5
Mexico	41.1	23.5	30.9	26.3	18.5	20.2
Malaysia	18.4	24.3	29.3	23.5	10.5	17.9
Peru	8.5	7.0	8.3	8.4	9.0	11.8
Honduras	8.7	10.3	10.4	9.1	8.5	8.0
Guyana	8.9	7.8	6.5	9.0	8.7	6.7
Others	36.7	32.0	25.1	24.2	27.3	29.0
Total	**552.6**	**561.5**	**577.1**	**535.0**	**509.3**	**569.1**

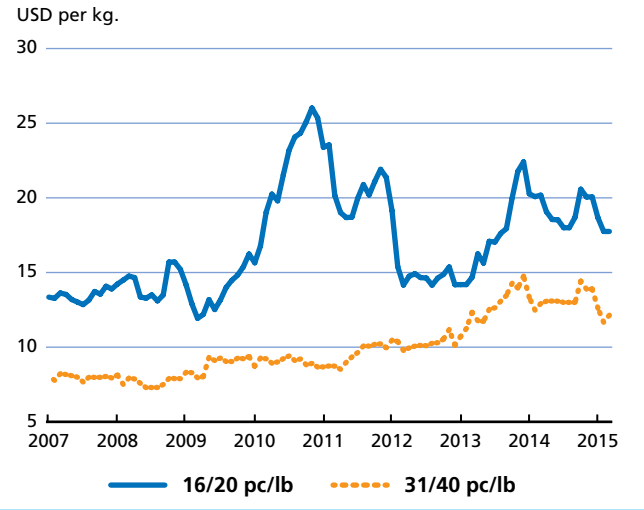
Source: NMFS

Figure 2. Shrimp prices (16-20 count) in main wholesale markets



Source: INFOFISH

Figure 3. Prices of white shrimp on the Japanese market



Source: INFOFISH

demand has been weak since January 2015 due to the large unsold stocks imported in 2014. Primary demand in 2015 is also poor in the **European Union** and in **Japan**, which is exerting downward pressure on shrimp prices. Local inventories, particularly in the **United States**, may decrease if shrimp prices to the end consumer come down over the rest of the year, but many traders in the market are unable to reduce selling prices as they bought products at higher prices last year. In the United States, demand for Indian shrimp may suffer as a result of the higher tariff rates imposed following the latest review by the US Department of Commerce, while those from Viet Nam may rise due to reduced tariffs. Meanwhile, the weakening Euro is likely to reduce European Union imports, while Japanese

Table 3. EU-28 shrimp imports, by origin

	2009	2010	2011	2012	2013	2014
	Jan-Dec (thousand tonnes)					
IMPORTS						
Ecuador	74.7	80.7	97.3	92.2	82.9	93.1
India	65.3	60.0	59.5	60.6	66.4	83.2
Argentina	47.1	55.5	62.1	55.0	59.9	66.2
Greenland	74.3	72.6	68.3	61.2	60.1	55.1
Viet Nam	38.1	43.2	45.5	35.7	37.9	49.7
Denmark	46.3	49.5	44.8	43.4	47.1	44.0
Bangladesh	39.0	41.2	43.4	42.1	42.3	40.7
Canada	31.4	30.5	27.8	30.1	31.4	35.8
Netherlands	36.9	41.1	44.1	40.8	35.1	35.5
China	40.2	41.0	38.8	36.2	37.4	28.8
Spain	22.1	26.1	24.8	28.4	23.3	25.0
Belgium	24.3	23.4	27.7	21.6	22.9	22.7
Germany	18.9	21.7	22.1	19.8	19.1	18.8
Thailand	52.8	68.2	63.1	53.7	31.9	18.2
Indonesia	26.2	23.1	18.9	10.8	12.1	15.6
Morocco	14.0	14.5	15.1	13.1	13.3	15.4
Nicaragua	8.9	8.5	9.7	11.5	11.3	15.2
Others	163.1	147.9	137.1	126.6	123.7	128.0
Grand Total	**823.5**	**848.6**	**850.0**	**782.6**	**758.0**	**790.9**
Total Intra Imports	**187.7**	**202.9**	**202.1**	**188.7**	**185.4**	**183.6**
Total Extra Imports	**635.8**	**645.7**	**647.9**	**593.9**	**572.6**	**607.3**
EXPORTS						
Grand Total	**362.2**	**373.9**	**370.2**	**335.3**	**326.8**	**316.3**
Total Intra Exports	**261.4**	**275.0**	**284.4**	**258.0**	**253.1**	**245.8**
Total Extra Exports	**100.8**	**98.9**	**85.8**	**77.3**	**73.7**	**70.5**

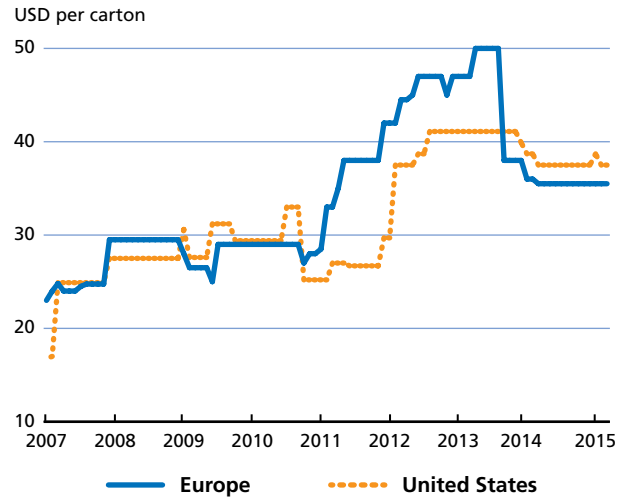
Source: EUROSTAT

importers are also likely to be selective due to the weak yen. This would leave only the US market to absorb much of the excess supplies. On the exporter side, the weakening of demand may result in more conservative stocking of ponds by farmers in developing countries, although world aquaculture experts expect increased farmed shrimp production overall for 2015, following a 6 percent increase in 2014. **Viet Nam** and **Indonesia** will continue to focus more on aquaculture of *vannamei* species. In **India** and **Thailand**, meanwhile, the first harvests of the season could be delayed due to a late stockings of ponds.

TUNA

Catches of ***yellowfin*** and ***skipjack*** in the Pacific have increased since July 2014, but import demand from Southeast Asian canners has not followed suit. In the Atlantic Ocean, the ICCAT FAD closure ended on 28 February 2015 and catches have since improved, with

Figure 4. CFR prices canned tuna (USA and Europe)



Source: INFOFISH 48x6.5 oz Europe, 48x6 oz USA, chunk, origin Thailand

yellowfin making up the majority of landings. Prices of both skipjack and yellowfin have declined due to limited demand from the canneries, although in early 2015, prices of frozen skipjack for delivery to Thailand stabilized at around USD 1 000 per tonne. ***Canned tuna*** prices are unlikely to weaken further in the short-term, especially as demand in major markets appears to be strengthening once again. For instance, in January 2015, imports of canned tuna by **Australia, Japan** and the **United States** were respectively up by 9 percent, 22 percent and 5 percent compared with the same month in 2014. Summer demand for ***fresh tuna*** in the United States is also expected to firm. Meanwhile, in the price-sensitive **European Union** markets, the recent steep increase in the Southeast Asian fresh tuna export price is likely to negatively impact consumer demand for fresh product. European Union demand for tuna from the Maldives has increased following the ban on all imports of fishery products from competing Sri Lanka due to the non-compliance of IUU regulations.

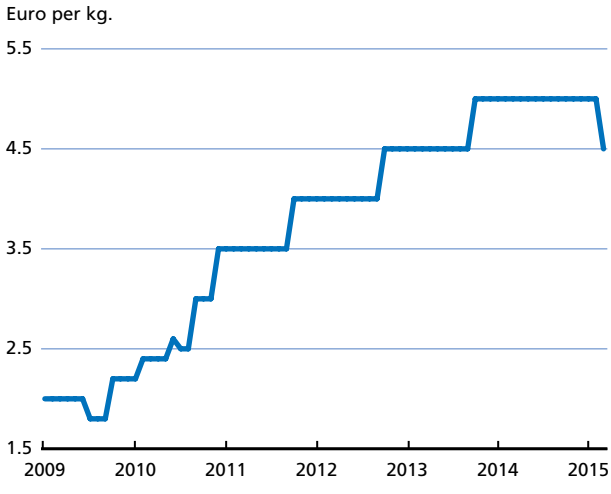
GROUNDFISH

Global ***cod*** landings have been rising for the past decade, and in 2014 total catches came to 1.8 million tonnes. Recently, strong demand has seen price increases accompany this trend. For **Norway**, 2014 was the best ever year for whitefish exports, mainly because of higher prices, which boosted the country's whitefish exports to 442 000 tonnes, worth USD 1.9 billion. However, the cod season was off to a slow start in early 2015 and modest reductions in global cod landings for the year are expected. Cod prices are forecast to rise during the first half of 2015 before stabilizing. The ***Alaska pollock*** season opened in January 2015 with a larger quota than in 2014. The total Bering Sea quota for 2015 is 1.31 million tonnes, 3 percent higher than in 2014, with around 40 percent of this allocated to the A season, which is set to end in early June. The depreciation of the Euro against the US dollar has had a major effect on Alaska pollock prices, making them far more expensive for European buyers in domestic currency. In the ***hake*** market, **China** is emerging as the largest supplier to the **Russian Federation** following the Russian import ban against specific countries, while exports from **Canada** and the **United States** to the same market have dropped dramatically. **Argentinean** hake is being diverted from the European Union to the United States**,** where demand is very strong. Foreign exchange fluctuations will affect trade in 2015, particularly with respect to the strengthening Krone and the weak Ruble that is making Russian groundfish easier to sell.

CEPHALOPODS

Total ***octopus*** production in 2014 rose to about 370 000 tonnes, the highest level since 2009. The main producer was **China**, with over 120 000 tonnes. Imports by **Japan** were down, but those directed to **Italy** and **Spain** increased. Octopus supplies might be a little tighter in 2015, particularly in Japan, and prices are expected to rise somewhat. Global ***squid*** production appears to be declining slightly, and **Argentinean** squid exports dropped slightly to 493 244 tonnes (-2.7 percent) in 2014. Tighter supplies also meant **Japan** imported 11.2 percent less squid in 2014. **European Union** imports also declined somewhat, with the **United States** the only major squid

Figure 5. Oyster prices, origin: Ireland/France



Source: GLOBEFISH European Price Report

market where imports were more or less level with the previous year. Squid landings are expected to be bit lower during 2015, and this will exert upward pressure on prices. Meanwhile, supplies of ***cuttlefish*** have been somewhat tight. All major markets imported less in 2014 than in 2013. Cuttlefish imports by **Japan** declined by almost 10 percent to 11 900 tonnes. Likewise, they dropped by 14.7 percent to 17 400 tonnes in **Italy** and by 28 percent to 25 400 tonnes in **Spain**. Cuttlefish supplies are expected to decline slightly in 2015, and prices are expected to rise.

SALMON

After the difficult market conditions caused by the Russian import ban in August 2014, the farmed salmon industry in **Norway** is now looking to capitalize on the relatively high prices, given expectations of a global production slowdown in 2015. Norway is once again leading the way in terms of production growth. By contrast, aquaculture production in **Chile** is expected to contract for the next two years at least as producers continue to fight against high disease and mortality rates in their operations. Consolidation of Chile's salmon farming industry is proceeding and profit margins are beginning to converge with those of Norwegian farmers. Despite the recent downward revision of forward prices, the outlook for prices remains positive for the rest of 2015, given continued strong import demand and slowing supply growth. The deterioration of the economic situation and devalued currencies may constrain the ability to import of the **Russian Federation** and **Brazil** in 2015**,** presenting a temporary challenge to suppliers, but the **United States**, the **European Union** and several Asian countries, such as **Japan**, **China**, **the Republic of Korea** and **Thailand** appear to be in a position to absorb excess volumes. In the longer term, however, the main challenges for the industry will likely concern the rising costs associated with feed and the biological management of their operations. Meanwhile, in the wild salmon market, catches of wild Pacific salmon species are expected to increase overall, especially in the **Russian Federation** and the **United States** (Alaska).

Table 4. World production farmed salmon

	2011	2012	2013*	2014*	2015*	2016*
	(thousand tonnes)					
	Jan-Dec					
ATLANTIC SALMON						
Norway	1065	1232	1200	1250	1250	1310
Chile	264	400	490	620	600	630
UK	158	163	165	165	170	170
Canada	102	108	120	125	135	140
Faeroe Is.	60	77	80	85	88	88
Australia	35	44	44	44	44	44
Ireland	12	12	15	16	17	18
USA	19	19	20	22	22	22
Others	10	12	12	12	12	12
Total	**1726**	**2067**	**2146**	**2187**	**2338**	**2434**
PACIFIC SALMON						
Chile	161	164	140	130	170	175
New Zealand	14	12	12	13	13	13
Japan	0	10	8	8	8	8
Total	**175**	**186**	**160**	**136**	**191**	**196**
Grand Total	**1901**	**2252**	**2306**	**2323**	**2529**	**2630**

Source: FAO (until 2012)
*Estimate

SMALL PELAGICS

During January and February 2015, Scottish and Irish vessels landed about 88 000 tonnes and 39 200 tonnes of ***mackerel*** respectively, and it is now expected that no more mackerel will be caught until September. The winter mackerel season in the North Atlantic ended with ample supplies, which have forced mackerel prices down, a tendency accentuated by the weakening of the Norwegian Krone versus the US dollar. In 2015, mackerel prices may decline further. In the Pacific, operators are bracing for a difficult 2015 ***herring roe*** season, although herring prices overall are expected to keep rising, continuing the upward trend caused by tight supplies in the last part of 2014 . In the market for canned ***sardines***, European demand is still relatively stable. The global market for ***capelin***, meanwhile, is reported to be difficult. In Peru, researchers have reported a significant recovery of the Pacific ***anchoveta*** stock in the southern region. A recent oceanographic survey estimated the biomass to be 607 000 tonnes, 98 percent of which were juveniles, pointing to a major resource recovery. However, total small pelagic landings in 2015 (excluding anchovies) may decrease by as much as 100 000 tonnes according to industry analysts.

FISHMEAL AND FISH OIL

In anticipation of a potential El Niño effect on anchoveta catches in early 2014, **Peru** opened the first fishing season one month earlier. Even then, only 1.8 million tonnes of 2.53 million tonne quota were landed. The second fishing quota in 2014 was cancelled due to reduced biomass, which will likely impact Peruvian fishmeal processors' earnings negatively in 2015. However, there is evidence that the anchovy biomass will recover before the first season in 2015. Global productions of fishmeal

Table 5. Production fishmeal: Selected countries

	2009	2010	2011	2012	2013	2014
	(thousand tonnes)					
	Jan-Dec					
Peru/Chile	2 039	1 274	2 160	1 161	855	910
Denmark/Norway	274	345	256	140	190	281
Iceland	198	146	134	169	176	165
Total	**2 511**	**1 855**	**2 607**	**1 801**	**1 477**	**1 672**

Source: IFFO
*These figures refer only to IFFO member countries

Table 6. Production fish oil: Selected countries

	2009	2010	2011	2012	2013	2014
	(thousand tonnes)					
	Jan-Dec					
Peru/Chile	410	279	450	295	181	255
Denmark/Norway	79	116	92	50	57	88
Iceland	44	69	67	67	69	51
Total	**532**	**471**	**612**	**479**	**441**	**484**

Source: IFFO
*These figures refer only to IFFO member countries

and fish oil in 2014 are estimated at 1 672 000 tonnes and 484 000 tonnes respectively. Fish oil exporters fared particularly well in 2014, supported by strong import demand. Prices for fishmeal and fish oil rose strongly after the first anchoveta fishing season closed in 2014 and have stabilised at high levels at the beginning of 2015. According to reports, anchoveta catches will improve in 2015, while positive stock assessments for Atlantic menhaden have boosted expectations about the quota.

BIVALVES

The top ten importing countries imported 276 900 tonnes of mussels in 2014, roughly the same amount as the year before. The **European Union** imported 198 100 tonnes of ***mussels*** and 50 400 tonnes of ***scallops*** in 2014. Both figures are the lowest in the last 6 years. In 2015, the supply of scallops in the United States is forecast to increase significantly while Japanese landings in the Sea of Okhotsk are expected to fall to around 284 000 tonnes. World imports of ***s*** in 2014 were stable around 52 000-54 000 tonnes while those of ***clams, cockles*** and ***ark shells*** grew by 4.7 percent to 254 800 tonnes. Imports of scallops reached 157 200 tonnes, with **China** as the leading importer and exporter. In general, there will be an increased presence of bivalve products complying with quality or environmental standards in the international market and recognized as such through labelling. Such improved standards may help to lift international prices and improve the economic situation of producers in this period of high competition and risk associated with climate change. As published recently in scientific journals, ocean acidification remains a severe potential threat for marine bivalves.

TILAPIA

In 2014, more than 400 000 tonnes of tilapia were imported by over 70 countries worldwide. **China** was by far the leading supplier in all product categories, although exports of tilapia from other sources are growing, with **Viet Nam** in particular set to ramp up production in 2015. China's export volumes of tilapia in 2014 remained stable with 402 000 tonnes exported, while the value was up 4.6 percent as prices strengthened globally. According to the National Aquaculture Association of Honduras (ANDAH), exports by **Honduras** rose by 5 percent in 2014, led by stronger sales to the United States and Canada. In 2015, world tilapia production is expected to increase, as demand for tilapia remains strong and prices are likely to stay firm.

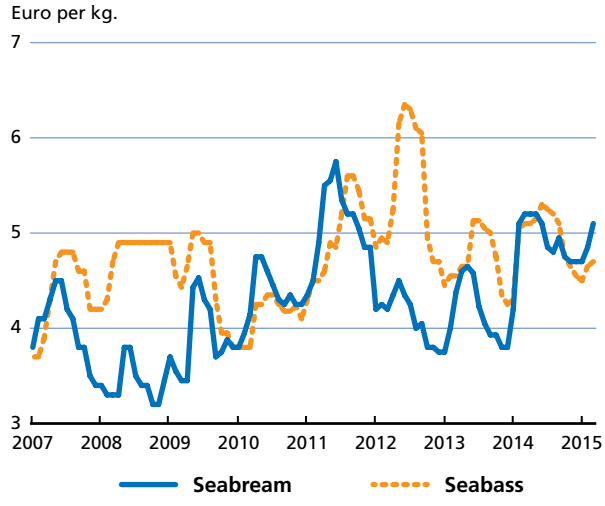
PANGASIUS

Viet Nam, the world's major *pangasius* producer, recorded a marginal increase in the export value of pangasius in 2014, sustained by growing sales to ASEAN countries, Latin America and the Caribbean, and the Middle East. These increases more than compensated for strong declines in the value of sales to traditional markets, including a drop of 10.7 percent to the **European Union**, markets, and of 11.5 percent to the **United States**. Viet Nam is facing competition with neighbouring countries in Southeast Asia such as **Indonesia** and **the Philippines**, which are increasing production of the species for both local consumption and export markets. As for 2015, official sources in Viet Nam predict production of *pangasius* to remain stable in the near future, due to a combination of the increased competition within the region and rising production costs.

GILTHEAD SEABREAM AND EUROPEAN SEABASS

Market conditions appear positive in 2015, with good demand and tightening supply of **seabass** and **seabream,** after a period of steadily increasing supply driven by the expanding industry in **Turkey**. Cheaper Turkish fish are

Figure 6. Prices of seabass and seabream in Italy, origin Greece



Source: GLOBEFISH European Price Report: Seabass fresh whole 300-450 gr/pc – Seabream fresh whole 300-450 gr/pc

increasingly present in many important markets, particularly the Russian Federation. Turkish producers will now seek to take advantage of the higher prices and increase their margins through marketing efforts, value addition and technical improvements at the farm level. The bass and bream aquaculture sector in **Greece**, amidst ongoing debt restructuring activities, must now follow a similar direction, although its current focus on traditional European markets may prove somewhat of an obstacle. In the medium term, falling harvest volumes in Greece and Turkey suggests international prices are likely to strengthen further, which will also benefit other producers, such as **Spain**.

LOBSTER

Lobster is one of the most expensive traded fishery products, with an average unit value is USD 20 per kg. It is of special importance for the livelihoods of particular regions, such as the Caribbean. In 2014, lobster imports by the **United States** came to 53 000 tonnes worth over USD 1 billion, both record figures. After the United States, the second major market for lobster is the **European Union**, which sources the product mainly from the United States and **Canada**. The positive economic situation in the **United States** is expected to strengthen demand for both domestic produce and imports this year, and prices are likely to rise. Imports by the **European Union** are also expected to grow, following tariff reductions on lobster from Canada, although the weakness of the Euro will impact the market. The management efforts in the Caribbean lobster fisheries will result in positive effects on stock levels and thus also on world trade in coming years.

SPECIAL FEATURES

HAS PRICE VOLATILITY CHANGED?

Contributed by Friederike Greb and Adam Prakash, Economists, FAO

WHY CHANGING VOLATILITY MATTERS

Prices of agricultural commodities are naturally volatile owing to their dependence on unpredictable factors like the weather. Periods of low volatility pose little threat, which cannot be said of periods of high volatility. Excessive agricultural price volatility can have severe impacts on governments, in terms of financing imports, export earning risks and also terms-of-trade. Large impacts are also felt by farmers and consumers, especially in developing countries, where about 2 billion people live off small farms[1] and spend large shares of their income on food items. Excessive price fluctuations do not allow stabilizing farm income or consumption, especially when coping mechanisms (e.g. storage, savings, access to credit and insurance) are not available. Thus, they can pose a serious threat to food security. What is more, vulnerable households are left with little scope to mitigate unusually high prices other than by lessening the intake of nutritious food, dropping out of school, lowering access to healthcare or distress sales of land and livestock. These responses can result in poverty traps and, accordingly, have long-term consequences. Producers are affected, too. As sellers of commodities, high volatility brings with it considerable downside price risk, which affects planting decisions and undermines agricultural investment where it is needed most. In addition, increasing volatility makes it difficult for farmers to extract price signals in production response.

Not only does high volatility pose a threat to the vulnerable, but changes in volatility can have consequences. This is because adjustments, often costly, are induced in households, in traders' trading strategies and also in policy-making. The period of elevated food price volatility starting in 2006/07 prompted a range of policy responses. These included export restrictions, reduction in import levies, removal of value added tax on food as well as targeted cash transfers and food subsidies. Most of them were ad hoc and very costly fiscally[2], and hence short lived.[3] However, some countries' policies reflected longer-term concerns about price volatility. For example, Nigeria earmarked USD 280 million for development of 33 silo complexes to store grains.[4] Senegal signed a five-year contract with India to secure the purchase of 600 000 metric tonnes of rice annually.[5] Saudi Arabia launched an initiative that provided incentives for the private sector to undertake long term investments in agricultural sectors abroad.[6]

For those making decisions based on the level of price volatility – farmers, actors along the value chain, traders, consumers and governments – it is indispensable to have a good estimate of it. Consequently, several questions are posited: where are we now in terms of agricultural price volatility? Prices appear to be less volatile over the past two years relative to the 2006/07 to 2011/12 period; therefore, are we back to a more normal level of volatility?

Should policies be thus re-orientated? Finding that we are in a different volatility regime now from what it was three years ago does not imply that we will not enter a different regime tomorrow – we must wait for sufficient price observations to determine whether a regime change has taken place. As long as the drivers of price volatility are not fully understood, it is impossible to anticipate the moment at which volatility could change. Nonetheless, investigating the degree to which volatility has changed precedes any analysis of the causes of higher price volatility and is, therefore, essential for policy orientation. In the absence of perfect prediction, flexibility in policy-making is needed. Needless to say, measures to improve market functioning and strengthen resilience to shocks[7] will always be vital regardless of the regime.

MEASURING VOLATILITY: ISSUES AND CHALLENGES

Before distinguishing between different price volatility regimes, it is important to clarify what we mean by volatility and to highlight some conceptual difficulties. It is indisputable that price volatility measures price fluctuations. However, a trader in Chicago will probably give a different assessment of wheat price volatility than a smallholder farmer in Pakistan or a baker in Niger. Whereas they might

[1] http://www.ifad.org/operations/food/farmer.htm

[2] Also some measures were costly in terms of welfare impacts.

[3] Per Pinstrup-Andersen. 2015. How do governments respond to food price volatility? UNU-WIDER Policy Brief.

[4] http://www.nigeriasilostransactions.com/background

[5] Shane Bryan. 2013. A cacophony of policy responses: Evidence from fourteen countries during the 2007/08 food price crisis, UNU-WIDER Working Paper.

[6] http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/Publications/IDB _AnnualSymposium/20thSymposium/8-AbdullaAlobaid.pdf

[7] Adam Prakash. 2010. Price Volatility in Agricultural Markets, FAO Policy Brief.

all be looking at the same estimator to assess volatility, they will very likely focus on prices in different locations or different stages in the value chain. Transmission of price changes is typically neither complete across space and time nor along the value chain. Indeed, movements of the reference wheat prices in Chicago do not necessarily resemble movements of wheat prices in the local market in Pakistan where our farmer sells her/his harvest; and the export price does not automatically move parallel to the flour price, which is relevant for the Niger baker. In addition, the capacity to adjust to price signals typically varies across participants in the wheat market. In contrast to a trader exploiting daily price changes, a farmer cannot easily respond to even weekly or monthly price changes, as adjusting production will take an entire crop season.

Independent from these issues, volatility is usually defined as the "standard deviation of logarithmic returns", in other words the dispersion of relative changes in prices.[8] It is worth noting, however, that other notions of volatility exist, e.g. price volatility as more than 15 percent deviation from the expected price.[9] It is key to keep in mind that the standard deviation is a parameter of a probability distribution. Consequently, not only do we need to define volatility, we also need to agree upon how to infer this parameter, which we do not directly observe, from the price data. There exist various estimators producing potentially different estimates of volatility[10] – which one is the most informative depends on the context.

When comparing volatility metrics, it is vital to pay close attention to their definitions and measurement methods. For example, the International Grains Council bases its Grain and Oilseeds Index' volatility on non-logarithmic returns, and for the first week of March 2015 its measure ranged from 9.58 percent to 11.56 percent, compared to 4.15 percent to 5.02 percent when the calculations are based on logarithmic returns.[11] In addition, agricultural prices are naturally unstable owing, for example, to the weather. However, whereas sometimes variability can be anticipated which allows market participants to be prepared, it is the unpredictable constituent of price variations, which is problematic. Different methods to remove the predictable component can produce different volatility estimates.

There are two fundamentally different strategies to estimate volatility: ***forward-looking*** and ***backward-looking***. Exploiting traders' expectations about volatility as embodied in option prices offers a forward-looking way to determine volatility. Option prices depend on the volatility of the underlying commodity – inversion of the pricing formula reveals traders' assumption about it. This is known as "implied volatility". On the contrary, a backward-looking approach is based on past price observations. Adopting this perspective, a natural first take on volatility is to consider a series of price changes and compute its sample standard deviation. However, when enough price observations are available to obtain a reliable estimate, the variance of the series might change, which is critical to modelling volatility. In case data are available at a higher frequency than the volatility of interest – for example, if the focus is on monthly volatility and we have daily returns at hand – it is thus common to estimate monthly volatility as the sample standard deviation of daily return data for that particular month and adjust it with a scaling factor. This is called realized volatility.[12] Time series models present a promising alternative to assess volatility. In addition to providing an estimate of overall variability, these allow an estimation of time-varying predictable volatility.

Depending on the perspective we take, the price definition varies; price frequency varies; and so does the estimation approach. To illustrate the effect of different frequencies in a simplistic setting, compare the prospect of a farmer who bases decisions on annual price averages with that of a trader dealing with daily prices. The latter has roughly 250 price observations per year and has sufficient grounds to judge whether there has been a regime change in volatility over the past year. For the farmer, in contrast, one more year means only one more observation. Assuming a price of USD 200 and 30 percent annualized volatility, this means that there is an 80 percent chance of the following year's price falling between USD 136 and USD 294.[13] If volatility increased by 10 percent, the lower and upper price bounds would be USD 131 and USD 305, respectively, again with 80 percent probability. How would the farmer be able to even suspect there has been a 10

[8] Logarithms stabilize the variance of the series and their properties facilitate computation.

[9] Tsion Taye Assefa et al. 2014. Agro-food chain actors' perceptions of price volatility and their management strategies, ULYSSES Policy Briefing.

[10] In principle, any function that takes price observations as an input and produces a positive number as an output can be considered an estimator for volatility. There are infinitely many such estimators, which, naturally, do not all yield equally good results. As an example, a function mapping any arbitrary sample of prices to 0.5 is a poor volatility estimator.

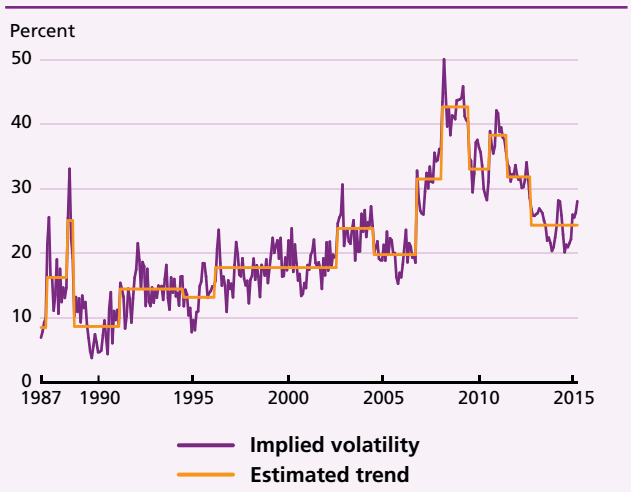
[11] http://www.igc.int/en/grainsupdate/igcgoi.aspx.

[12] Some authors use the term "realized volatility" (or "historical volatility") for what we refer to as backward-looking, see for example Monika Tothova, 2011, Main Challenges of Price Volatility in Agricultural Commodity Markets In Isabelle Piot-Lepetit and Robert M'Barek (eds), Methods to Analyse Agricultural Commodity Price Volatility, Springer, New York, Dordrecht, Heidelberg, London, 2011.

[13] We assume logged prices to follow a random walk. This implies that $P_{year2} = P_{year1} \cdot e^{\varepsilon}$ for a normally distributed ε. The lower (upper) bound of 136 (294) is the 10 (90) percent quantile of the lognormal distribution (with zero mean and standard deviation 0.3 on the log scale) multiplied by $P_{year1} = 200$.

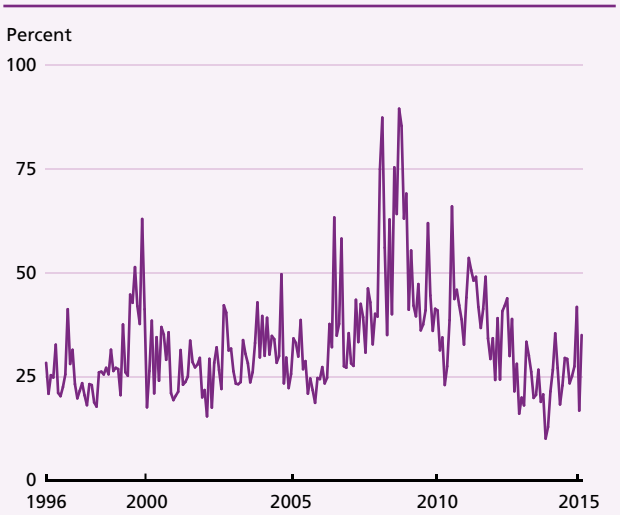
Changes in volatility are visually apparent

Figure 1.1: Implied wheat price volatility*



* based on Black-Scholes formula for at-the-money options with six months maturity

Figure 1.2: Realized wheat price volatility (Chicago No. 2 SRW Wheat)



percent increase in volatility in the past year based on one observation? In addition, as the number of observations diminishes and volatility decreases with averaging, changes in volatility will become harder to detect.

MEASURING CHANGES TO VOLATILITY – A PROOF OF CONCEPT

Here, using wheat as an example, we shift focus to estimating changes in volatility regimes and shedding light on conceptual issues surrounding measurement. The data employed represent an international benchmark price (Chicago No.2 Soft Red Winter Wheat) and an index (Wheat Sub Index of the International Grains Council's Grains and Oilseeds Index) combining ten quotations from major wheat producing areas including Argentina, Australia, the Black Sea, Canada, Europe and the United States as well as options prices to calculate implied volatility.[14]

In Figure 1.1, implied volatility exposes a regime of high price volatility beginning in 2006/07 and lasting until 2012. Afterwards the series appears to resume the positive trend beginning in the early 1990s. Estimating the mean of the series as a step function[15] reinforces these observations. Likewise, realized volatility plotted in Figure 1.2 indicates that there is a phase of higher volatility starting in 2006/07 and ending in 2011/12.

To check the robustness of evolving volatility in the international wheat market, we apply a novel "change-point-detection" approach to the wheat price and index.[16] Figures 2 and 3 display results for the two series. Figures 2.1 and 3.1 show weekly prices and index values, respectively, with the estimated regimes of higher volatility shaded. While the exact start and end date varies slightly between the two datasets, both show a period of new volatility dynamics beginning in 2006/07 and lasting for approximately five years. Figures 2.2 and 3.2 present the corresponding estimated volatility based on weekly data. Volatility increases by a factor of 1.6 (1.7) for the wheat price (index) for the said time period. Figures 2.3 and 3.3 visualize "switches" in volatility estimated from daily data. Exploiting the additional information contained in these more frequent series naturally reveals more precision in detecting changing volatility than can be inferred from their weekly averages. The comparison between Figures 2.2 and 2.3 exemplifies how the frequency of data influences both the measurement and perception of volatility; changes in volatility that are apparent in daily data might not be noticed when examining weekly data. Whereas we estimate three different levels of volatility based on weekly data in Figure 2.2, we find six levels for daily data in Figure 2.3. Contrasting Figures 3.2 and 3.3 reinforces this observation.

[14] Time periods vary according to data availability.

[15] We employ the estimator proposed by Klaus Frick, Axel Munk and Hannes Sieling, 2014, Multiscale change point inference, Journal of the Royal Statistical Society B.

[16] We use the estimator introduced by Piotr Fryzlewicz and Suhasini Subba Rao, 2014, Multiple-change-point detection for auto-regressive conditional heteroscedastic processes, Journal of the Royal Statistical Society B. Volatility estimates are derived from a baseline GARCH(1,1) model and are to be understood as preliminary.

Estimation results indicate a phase of higher wheat price volatility from March 2006 to July 2012 for Chicago No. 2 SRW wheat

Figure 2.1: Chicago No.2 SRW Wheat price

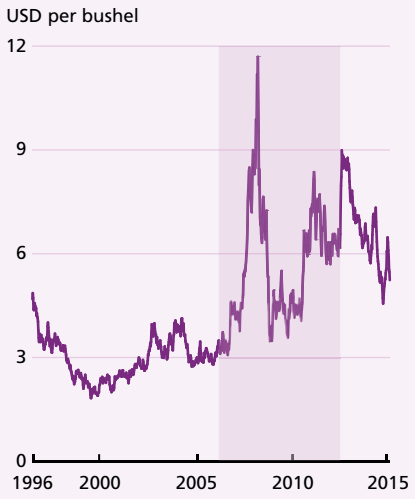


Figure 2.2: Volatility estimates based on weekly data

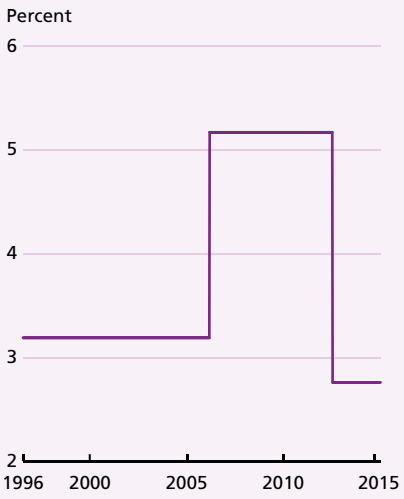
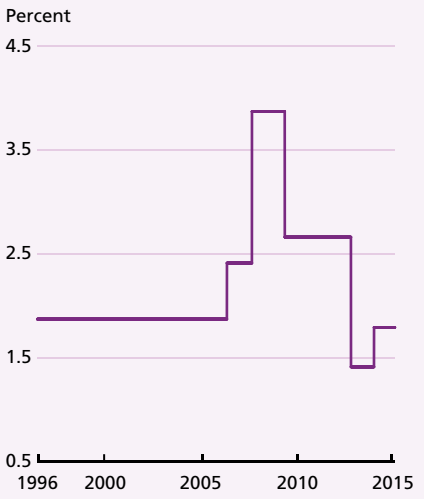


Figure 2.3: : Volatility estimates based on daily data



Estimation results indicate a phase of higher wheat price volatility from April 2007 to September 2011 for wheat sub index of IGC's Grains and oilseeds index

Figure 3.1: Wheat sub index of IGC's Grains and Oilseeds Index

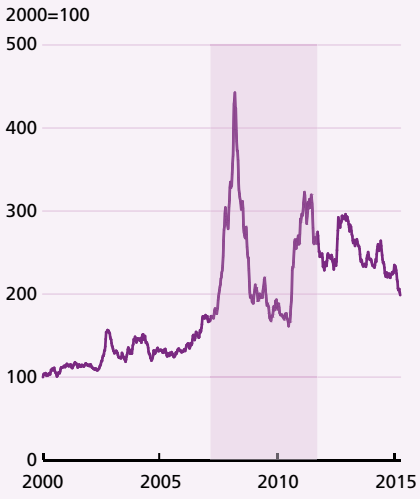


Figure 3.2: Volatility estimates based on weekly data

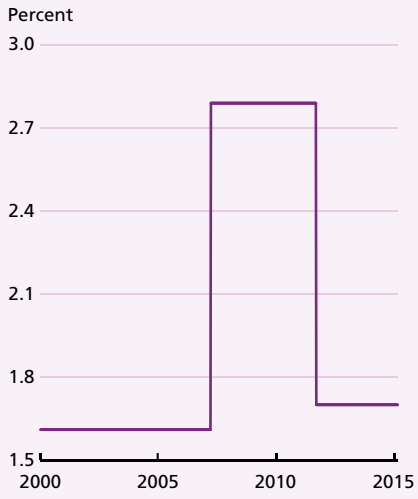
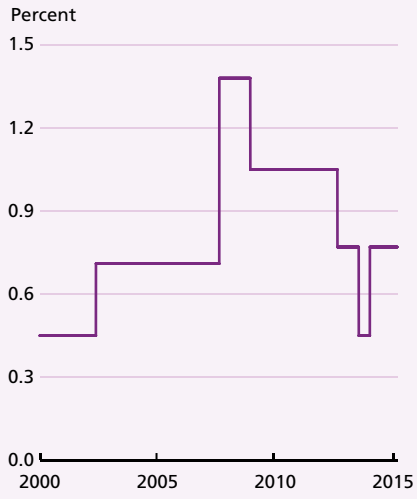


Figure 3.3: Volatility estimates based on daily data



On the basis of these preliminary findings, it is difficult to judiciously claim a reversal to the more "normal" pre-2006 regime. However, all evidence hitherto is pointing in this direction – be it based on forward- or backward-looking analysis or on daily, weekly or monthly data on the price, or on the index. Notwithstanding this evidence, it could be disingenuous to draw conclusions about future trends in volatility for the following reason. Change-points between regimes or steps of the function are estimated in retrospect and do not have any forbearance on tomorrow's volatility. It might resemble today's or, if there is a switch in regimes, be different.

The initial findings justify further enquiry, possibly taking into account different perspectives of volatility and extending the analysis to better understand the drivers triggering changes in volatility regimes. This will yield a more informed answer on whether today we are back to pre-2006 levels of volatility. That said, these first results sketch out the background against which policy-makers and other stakeholders in the wheat market take decisions. The results warrant a precautionary yet flexible approach to decision making, keeping in mind that volatility might switch regimes again.

MARKET POLICY DEVELOPMENTS

GRAINS: MAJOR POLICY DEVELOPMENTS: OCTOBER 2014 TO MID-APRIL 2015*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Argentina	Wheat	Oct 14	Export quota	Authorized the export of 400 000 tonnes of wheat and 100 000 tonnes of wheat flour from the 2013/14 harvest.
	Maize	Oct 14	Export quota	Authorized the export of 500 000 tonnes of maize from the 2013/14 harvest.
	Maize	Nov 14	Export quota	Authorized the export of 8 million tonnes of the future maize crop, to be gathered from March. The quota to go into effect as of 15 March 2015.
	Wheat	Dec 14	Export quota	Approved an additional 1 million tonnes of 2014/15 wheat and wheat flour for export, effective 1 January 2015.
	Wheat	Feb 15	Export quota	Approved 1 million tonnes of 2014/15 wheat for export. This adds to a previous authorization to export 1.5 million tonnes of wheat and wheat flour, started in December 2014. The total quota will now amount to 3.5 million tonnes.
	Grains	Mar 15	Export promotion	Announced the creation of a new fund which will compensate by up to 50 percent the 'retention' taxes on exportation rights paid by small and medium agricultural producers
	Maize	Apr 15	Export quota	Ministry of Economy and Public Finances announced the authorization of an additional 3.5m t of maize exports from the 2014/15 crop.
Canada	Grains	Nov 14	Export promotion	Announced that minimum grain shipment targets for the railway network would be extended through 28 March 2015. The targets were set after a railcar shortage in 2014 caused shipments of Canadian grain to the US to decrease significantly.
China	Wheat	Oct 14	Procurement price	Announced that the 2015 state purchase price for wheat would be maintained at the 2014 level of CNY 2 360 (USD 385) per tonne.
	Maize	Nov 14	Procurement price	Announced the start of the 2014/15 intervention programme for maize. The State purchase price was kept unchanged from 2014 at CNY2,220-2,260 (USD 362-368) per tonne. Intervention programme will last until the end of April 2015.
	Grains	Dec 14	Import quota	Announced that grain import quotas in 2015 would be kept unchanged from the previous year, 9.636 million tonnes for wheat and 7.2 million tonnes for maize.
	Wheat	Jan 15	Stock release	Approved the release of 139 000 tonnes of imported wheat, along with 630 600 tonnes of domestic wheat from state reserves to help ease tight domestic supply of high protein grades.
	Grains	Mar 15	Government procurement	Announced that USD 24.7bn will spent on stockpiling of grains, edible oils and other commodities in 2015; government targeting zero growth in use of chemical fertilizers by 2020; government sold a total of 1.38m t of domestic wheat and 29,712t US SRW supplies.
Egypt	Wheat	Feb 15	Import policy	Extended for six months a decision to allow imports of wheat with up to 13.5 percent moisture.
European Union	Grains	Oct 14	Import tariff	Increased import tariffs for maize, sorghum and rye from EUR 5.32 to EUR 10.44 (USD 13.15) per tonne.
	Grains	Nov 14	Import tariff	Suspended import duties on maize and several other cereals. The import duty had been reinstated on 16 July and subsequently revised on several occasions.
	Grains	Dec 14	Import tariff	Decreased import tariffs for maize, sorghum and rye from EUR 10.44 to EUR 4.49 (USD 5.52) per tonne.
	Wheat	Mar 14	Import quota	Awarded licenses to import 45 000 tonnes of Ukrainian wheat under an annual duty free quota. This brings the awarded volume to 309 437 tonnes; out ofa total volume of 950 000 tonnes available in 2015.
France	Biodiesel	Jan 15	Blend ratio	Raised the authorized concentration of biodiesel in gasoline from 7 percent to 8 percent.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
India	Wheat	Oct 14	Procurement price	Raised domestic procurement price for wheat by 3.6 percent to Rupees 1 045 per 100 kg (USD 236 per tonne).
	Wheat	Feb 15	Government procurement	Fixed the wheat procurement target at 30 million tonnes during the 2015/16 marketing year (April/ March) as against 28 million tonnes purchased by the Food Corporation of India (FCI) in 2014.
Japan	Wheat	Feb 15	Stock release	Announced plans to sell imported wheat to domestic millers at an average price of Yen 60 070 (USD 506) per tonne from April to September, up 3 percent from the preceding six-month period.
	Wheat	Apr 15	Government procurement	Announced that from 1 April, the price of milling wheat sold to domestic millers would be increased by 3 percent on average, to Yen 60 070 (USD 501) per tonne.
Kazakhstan	Wheat	Dec 14	Production/price support	Raised the support price of domestic third class wheat in Kazakhstan by about 50 percent, to KZT 42 000 (USD 232) per tonne.
	Wheat	Feb 15	Stock release	Released 738 000 tonnes of wheat from stocks to stabilize bread and wheat flour prices. The programme will continue until September 2015.
	Grains	Mar 15	Production support	Allocated Tenge 20 billion (USD 108 million) to support agrarian industry with anti-crisis measures. According to the Ministry of Agriculture, the principle of financial recovery is applied to agricultural producers who cannot repay loans taken from second tier banks and other financial institutions. To support such producers, the holding "KazAgro" sets an interest rate of not more than 3 percent per annum in tenge. Seven percent of the allocated funds will be reimbursed by the State in the form of subsidies.
Kenya	Grains	Feb 15	Production support	Distributed farm input worth 31 million Kenyan Schillings (USD 330 000) to farmers. Under the Mingora Government, more than 4 000 farmers will receive fertilizer and maize and rice seeds in the second phase of the Farm Inputs Access Programme.
	Maize	Feb 15	Production support	Announced that the Tana River county government will buy bags of maize from farmers at 3 000 Kenyan Schillings each (USD 32) under the Bura irrigation scheme.
Morocco	Wheat	Apr 15	Import tariff	Increased the custom duty on soft wheat imports to 75 percent from 17.5 percent last year. Initiated on 1 May, the new duty will run until 31October.
Pakistan	Wheat	Nov 14	Import tariff	Imposed a 20 percent import duty on wheat from all countries for the current crop season.
	Wheat	Feb 15	Export quota/ Import ban	Approved the export of 1.2 million tonnes of wheat to help clear large inventories. An export subsidy between USD 45 and USD 55 per tonne would be granted to suppliers. An immediate ban on import of wheat byproducts was applied.
	Wheat	Mar 15	Import tariff	Lifted the ban on the import of wheat, but imposed a uniform 25 percent regulatory duty on the import of wheat and wheat products.
Philippines	Wheat	Nov 14	Import tariff	Imposed anti-dumping duties of up to 16.19 percent on imports of wheat flour from Turkey for five years.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Russian Federation	Wheat	Dec 14	Government procurement	Raised the state purchase intervention prices for 2014 wheat crop by approximately 50 percent. New prices for wheat are around RUB 10 000 for 3d category wheat, around 9200 for 4th category wheat and RUB 9 000 for 5th category Sales of wheat to the State Intervention Fund ceased in mid-November, when the market price of wheat in the Russian Federation increased sharply and surpassed the intervention prices by 70–90 percent. The first intervention purchases of wheat at new prices were scheduled for 23 and 24 December 2014.
	Grains	Dec 14	Import restrictions	Imposed limitations on the transport of grain to ports and land border crossings. Raised grain loading tariff by 13 percent, effective 24 January 2015.
	Wheat	Dec 14	Export tariff	Announced a combined tax on wheat exports from 1 February to 30 June 2015. The tax adds EUR 7.50 per tonne to a 15 percent tax on the customs price, subject to a minimum tax level of EUR 35 (USD 40.4) per tonne. Limitations in transport and delays in the certification of export grains had applied before this announcement. Intervention tenders in December and January procured over 40 000 tonnes of wheat.
	Grains	Apr 15	Government procurement	Set the minimum purchasing prices for the public intervention fund on grains for the new harvest. In particular, the purchasing prices for 3-grade soft milling wheat will reduce to 9700 RUR/t in the European part of Russia and 9500 RUR/t in the Asian part, against the current level of 10100 RUR/t and 10000 RUR/t, respectively. At the same time, the minimum purchasing prices for other crops will increase: A-group milling rye - 6400 RUR/t, against the current level of 5100 RUR/t, feed barley - 6500 RUR/t, against the current level of 5150 RUR/t, 3-grade corn - 6900 RUR/t, against the current level of 5600 RUR/t. The decree comes into force on July 1, 2015, and is valid until July 1, 2016.
South Africa	Wheat	Mar 15	Import tariff	Increased its import tariff on wheat from ZAR 157 (USD 13) per tonne to ZAR 461 (USD 38) per tonne.
Tanzania	Maize	Feb 15	Production support	Borrowed about 15 billion Tanzanian Schillings (USD 8 million) to settle extended debts that the National Food Reserve Agency (NFRA) owes farmers. The Government will settle the debt NFRA owes maize farmers by March.
Vietnam	Maize	Mar 15	Production support	Approved three types of GMO maize commercial crops of for distribution to local farmers
Ukraine	Grains	Jan 15	Trade	Cancelled VAT refunds for grain exporters
	Wheat	Jan 15	Export quota	Reached agreement between government and traders to limit wheat exports from 1 January to 30 June 2015 to 4.6 million tonnes, of which 1.2 million tonnes is milling wheat, with provisions to revise these quantities.
	Grains	Feb 15	Import tariff	Introduced a temporary (12 month) additional import charge on goods imported into the customs territory of Ukraine, including 10 percent increases on imports of food products, live animals, trees and plants, cereals, seeds, fats and oils, alcohol and tobacco.
United States	Biofuel	Jan 15	Trade measure	Authorized a simplified, third-party-operated, renewable tracking programme for Argentinian biodiesel, in lieu of the current record keeping requirement. This responds to a plan submitted on 29 August 2012. The approval may be revoked at any time.
Zambia	Wheat	Mar 15	Export quota	Stated that, after a large crop boosted availabilities, 1m t of maize had been approved for sale, including 800,000t for export at prices some 20% above domestic values

* 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: JANUARY TO MID APRIL 2015*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Angola	Rice	Jan-15	Import quota, licenses	Introduced an import quota of 457 000 tonnes of rice for calendar 2015, as part of broader efforts to boost national production of various items and reduce dependence on oil revenue. The measure is to replace a previous import licensing system.
Bangladesh	Rice	Mar-15	Government procurement, purchasing prices	Announced that it would purchase 1.0 million tonnes of rice and 100 000 tonnes of paddy from the 2014-2015 Boro harvest. The procurement drive is to run between May and September 2015 and will offer Taka 22 per kg (USD 276 per tonne) of paddy and Taka 32 per kg (USD 402 per tonne) of rice.
Bolivia	Rice	Mar-15	Government procurement, purchasing prices	Announced that the state enterprise EMAPA would procure supplies from the 2015 harvest at USD 60 per 200-kg fanega (USD 300 per tonne), up 9 percent from the previous year.
Brazil	Rice	Jan-15	Stock release	Released 115 000 tonnes of paddy from Government reserves through six auctions held in January 2015, which offered a combined 135 000 tonnes of paddy.
Cambodia	Rice	Mar-15	Export promotion	Announced that the Phnom Penh Autonomous Port would forgo charges for rice stored in its facilities for up to 18 days.
China (Mainland)	Rice	Jan-15	Stock holding policy	Issued new guidelines entrusting provincial governors with the responsibility of grain security, including that of raising local grain production, maintaining reserves and ensuring grain circulation.
	Rice	Feb-15	Support prices	Announced that government paddy procurement prices for the 2015 season would be kept unchanged year-to-year at Yuan 135 per 50 kg bag (USD 440 per tonne) in the case of early Indica rice; at Yuan 138 per 50 kg bag (USD 450 per tonne) for late/intermediate Indica rice; and at Yuan 155 per 50 kg bag of Japonica rice (USD 506 per tonne).
	Rice	Mar-15	Government procurement	Announced that it would allocate Yuan 154.6 billion (USD 25.2 billion), 33 percent more than in 2014, to purchase grains, oils and other local produce in 2015.
Colombia	Rice	Mar-15	Import quota	Approved imports of 80 000 tonnes of milled rice, or an equivalent paddy amount, from Ecuador. Volumes are to arrive no later than 31 July 2015 or between 1 November and 31 December 2015.
Costa Rica	Rice	Jan-15	Safeguard measures	Decided to impose safeguard measures on selected classes of milled rice imports (SAC codes 1006309091 and 1006309099), raising tariffs for these classes from 35 percent to 62.06 percent, with the rate to be progressively reduced back to its original level of 35 percent in equal instalments over a four-year period.
	Rice	Feb-15	Consumer prices	Adjusted ceiling and floors for all qualities of rice consumed in the country and of all origins, effective 8 June 2015. In the case of 80-20 rice, these were set at a minimum of Colones 631 and a maximum of Colones 634 per kg bags (USD 1.15–1.16 per kg) at the retail level, down 4 percent from previously set bands.
	Rice	Feb-15	Support prices	Set a new reference price of Colones 22 139.00 per 73.6 kg bag (USD 550 per tonne) of paddy to replace the fixed producer price of Colones 22 604.41 (USD 562 per tonne) prevailing since 2011. The initiative is part of government efforts to bring the country's agricultural subsidies within limits committed to the WTO, but under a gradual approach that would permit the industry to make necessary adjustments to improve its competitiveness over the medium term.
	Rice	Feb-15	Safeguard measures	Adjusted the rate of the additional import duty to be levied on selected classes of milled rice imports, as a safeguard measure, from 27.06 percent to 24.88 percent. The move will bring total duties accrued by such imports to 59.88 percent, applicable from 19 February 2015 until 18 February 2019 and subject to progressive reductions in equal annual instalments.
	Rice	Apr-15	Safeguard measures, import quotas	Allocated annual import quotas to Uruguay and Argentina in a bid to compensate the two South American origins for the imposition of safeguard measures against imports of selected classes of milled rice. According to the decision, 6 960 tonnes of milled rice from Uruguay will be permitted to enter Costa Rica annually during the four-year duration of the safeguard application, subject to an import tariff of 35 percent, with an additional 3 062 tonnes of paddy and 1 100 tonnes of parboiled rice exempted from duties. Similarly, 3 786 tonnes of milled rice from Argentina will be levied an import duty of 35 percent, while 2 235 tonnes of Argentinian parboiled rice will be allowed into Costa Rica per year free of duties.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Dominican Republic	Rice	Apr-15	Support prices	Paddy support prices set at Pesos 2 150–2 250 per 120-kg fanega (USD 397–415 per tonne) by the National Rice Commission.
Ecuador	Rice	Feb-15	Import levies, safeguard measures	Decided to exclude paddy for sowing from the temporary import duties applied on goods originated in Peru and Colombia since January 2015, with immediate effect.
	Rice	Mar-15	Consumer prices	Announced that it would release supplies from government granaries in order to relieve pressure on local quotations. Supplies are to be sold to consumers at a USD 1.74 per 2 kg packages (USD 0.87 per kg) or USD 37.5 per quintal (USD 827 per tonne) for a period of 15 days.
	Rice	Mar-15	Import levies, safeguard measures	Revoked a December 2014 measure imposing a temporary duty of 7 percent for goods originated in Peru and of 21 percent for imports from Colombia since January 2015, effective 11 March 2015.
	Rice	Mar-15	Import levies, safeguard measures	Imposed import surcharges on a wide range of products for 15 months, starting 11 March 2015, in an effort to counteract the impact of the decline in international oil prices and strengthening of the US dollar on its economy. While exceptions were established, including for the lesser developed members of the Latin American Integration Association (ALADI), in the case of milled rice, the levy was set at 45 percent, to be applied on top of the duties of 0–67.5 percent normally accrued by milled rice.
India	Rice and Wheat	Jan-15	Stock holding policy	Revised quantities mandated to be held in the Central Pool under the Buffer Stock Norms at the start of each quarter of the year. According to the decision, mandated stock levels of foodgrains (wheat and rice) as of 1 January were reduced by 3.6 million tonnes to 21.41 million tonnes and by 200 000 tonnes to 21.04 million tonnes for 1 April. Stock norms for 1 July and 1 October were instead raised by 9.2 million and 9.6 million tonnes, respectively, to 41.12 and 30.77 million tonnes. The revised quantities are inclusive of a 5.0 million tonne strategic reserve (2.0 million tonnes rice and 3.0 million tonnes wheat) applicable for all quarters of the year. Moreover, it announced that supplies would be released on the domestic market through open sales or exports, should inventories held at the Central Pool exceed these revised levels.
	Rice	Feb-15	Budgetary allocations, food subsidies	As part of its 2015-16 budgetary allocations, raised allotments to food subsidies by 1.4 percent to Rupees 1.24 trillion (USD 19.9 billion).
	General	Feb-15	Budgetary allocations, production support	Announced that in its efforts to address critical factors related to soil and water, it would support organic farming through the "Paramparagat Krishi Vikas Yojana" scheme, as a complement to ongoing efforts to extend soil health cards to farmers. The 2015–16 budget would see an additional Rupees 53 billion (USD 847 million) reserved to the "Pradhanmantri Gram Sinchai Yojana" scheme, with a target of extending irrigation to all farmers and enhance water use efficiency, and for micro-irrigation and watershed development. Further efforts will concentrate on boosting agricultural credit and initiating the process to create a national agriculture market, greater outlays to fertilizer subsidies, as well as enhancing the effectiveness of the Mahatma Gandhi National Rural Employment Guarantee Act. Meanwhile, selected programmes, such as the Rashtriya Krishi Vikas Yojana and the National Food Security Mission, will fall under a new cost-sharing mechanism between the central government and states.
	Rice	Feb-15	Government procurement	Instructed state governments to eliminate all procurement of rice under statutory levy, as of 1 October 2015.
	Rice	Feb-15	Tax policy	Reinstated the duty drawback on rice exports, effective 13 February 2015. The measure, which is intended to compensate for duties levied on inputs of products destined to outside markets, is to be extended on a brand rate basis, requiring the submission of an application by individual exporters to determine the rate of drawback based upon actual quantities of inputs used and respective duties paid.
Indonesia	Rice	Mar-15	Government procurement, purchasing prices	Raised government purchasing prices by 12 percent to Rupiah 3 700–3 750 per kg (USD 296–300 per tonne) of wet paddy, while dry paddy and rice were raised by 11 percent each, to Rupiah 4 600–4 650 (USD 368–372 per tonne) and 7 300 per kg (USD 584 per tonne), respectively.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Nigeria	Rice	Jan-15	Production support	Allocated Naira 26 billion (USD 129 million) to support agricultural producers with subsidized inputs through the 2015 Dry Season Farming Program.
Pakistan	Rice	Feb-15	Finance and credit facilities	Extended coverage of the Export Refinance Scheme to brown rice exports (in bulk/loose packing) to all destinations, withdrawing the Letter of Credit requirement for such shipments.
Philippines	Rice	Feb-15	Import quota	Approved imports of 500 000 tonnes of rice, to be contracted on a government-to-government basis. Volumes are to be delivered by 30 April 2015 and will serve to refurbish public inventories ahead of the lean season.
Republic of Korea	Rice	Jan-15	Export restrictions and prohibitions	Announced that long-standing restrictions requiring that traders receive prior authorization on rice exports would be eliminated as of March 2015, as part of its efforts to promote shipments abroad and stabilize the domestic market.
Senegal	Rice	Feb-15	Production support	Announced that FCFA 8 billion (USD 13 million) would be allocated to enhance access to credit and marketing of produce, with state entities henceforth drawing supplies exclusively from local production. The initiative, part of the government's self-sufficiency programme, also envisages infrastructural improvements and provision of machinery and tax concessions, and makes the issuance of import licenses conditional on the purchase of local produce.
	Rice	Mar-15	Import quota, licenses	On the occasion of a memorandum of understanding's signature, whereby sector representatives committed to enhance marketing of domestic produce, announced that rice imports in 2016 would be limited to 500 000 tonnes, with authorities to devise a regulatory mechanism that considers local production, as well as individual trader's market share.
Sri Lanka	Rice	Jan-15	Budgetary allocations, production support, support prices, credit	Allocated Rupees 2.5 billion (USD 18 million) to provide a 50 percent waiver on farmer loans of up to Rupees 100 000 (USD 734), as part of the 2015 Interim Budget. Additional support measures will include a higher guaranteed purchasing price for paddy of Rupees 50 per kg (USD 367 per tonne), the continuation of the subsidized fertilizer programme, as well as efforts to lower prices of agricultural machinery.
	Rice	Jan-15	Import tariff, tax policy	Raised duties levied on paddy, husked, semi/wholly milled and/or broken rice to Rupees 20 per kg (USD 147 per tonne), valid for a period of four months starting from 22 January 2015.
	Rice	Feb-15	Government procurement	Approved the purchase of 200 000 tonnes of paddy from the 2015 Maha harvest. The procurement drive is to be undertaken by registered farmer organizations and District Secretaries and will offer Rupees 50 per kg (USD 367 per tonne) for Samba paddy purchased and Rupees 45 per kg (USD 330 per tonne) for Nadu paddy.
	Rice	Mar-15	Finance and credit facilities	Announced that a credit line would be opened, at subsidized rates, to support small- and medium-scale rice mills.
Thailand	Rice	Jan-15 to Mar-15	Stock release	Held two public auctions, selling a combined 1.3 million tonnes of rice from Government reserves for the domestic market and export, out of a total volume offered of 2.0 million tonnes.
	Rice	Feb-15	Production adjustment program	Announced that, in an effort to reduce an estimated 4.4 million tonnes of excess domestic supply, it aimed to put 290 000 ha of paddies to cultivation of other crops in two years, including 112 000 ha just to sugar. An additional 64 000 ha of offseason paddies would also be cut.
	Rice	Feb-15	Stock release	Announced plans to dispose of an estimated 17 million tonnes of rice held in government granaries in two years. Officials expect up to 10 million tonnes to be disposed of over the course of 2015, with the remaining rice to be released in 2016.
	Rice	Mar-15	Production adjustment program	Approved a five-year (2015–2019) agricultural restructuring plan. Under its rice component, the programme would aim to improve productivity levels, lower production costs, boost quality of supplies and assist farm cooperatives. Efforts will also concentrate on converting paddies to sugar cultivation and reducing offseason acreage.
	Rice	Mar-15	Stock release	Decided to postpone the release of supplies from government stockpiles until after the completion of offseason harvests, so as to avoid pressure on local prices.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Vietnam	Rice	Jan-15 to Mar-2015	Minimum export prices	Lowered minimum export prices for 25 percent broken rice twice, last setting them at USD 350 per tonne.
	Rice	Jan-15	Export requirements	In an effort to promote greater vertical integration, issued directives that make it requisite for exporters to progressively engage in contract farming, invest in large-scale farms or develop alternative production areas of their own in order to secure rice export permits, effective 1 March 2015. The size of production areas to be developed/invested on will be based upon exporters' trade record in 2011–2013 and will be raised progressively through 2020.
	Rice	Feb-15	Government procurement	Approved a procurement drive for 1 million tonnes of winter-spring rice from farmers, to be purchased by member companies of the Vietnam Food Association between March and April 2015. Government credit assistance will be available for entities participating in the drive for a period of four months.
	Rice	Feb-15	Import quota	Renewed import duty exemptions on 70 000 tonnes of rice originating in the Lao PDR, effective until 31 December 2015.

* Because of their number, rice policy developments are reported since January 2015 only. 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: OCTOBER 2014 TO MID-APRIL 2015 *

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Argentina	Soybeans	Dec-14 to Feb-15	Market regulation	Limited access of farmers holding soybean stocks to public production loans, and introduced formal reporting requirements for the sale of silo-bags (used for on-farm storage), in a bid to encourage farmers to release soybeans into the market.
	Oilseeds, grains	Mar-15	Agricultural policy	Established a fund to support small and medium-sized grain/oilseed producers, with the specific objective of reducing the export tax burden they faced.
Brazil	Soybeans	Nov-14	Environmental policy	Endorsed the extension – until May 2016 – of the industry's voluntary moratorium on trading and financing soybeans grown on illegally cleared land in the Amazon region.
	Biodiesel	Nov-14	Renewable energy policy	Exempted sellers of vegetal-origin feedstock to biodiesel manufacturers from paying selected taxes, with a view to stimulate domestic biodiesel production.
Cameroon	Oil palm	Jan-15	Sector development	Granted public funding to increase the production and free distribution of certified planting material to farmers, in an effort to stimulate domestic palm oil production.
Canada	Rapeseed oil	Oct-14	Bilateral trade agreement	Completed negotiation of the Comprehensive Economic and Trade Agreement (CETA) with the EU, which includes elimination of EU tariffs on Canadian imports of rapeseed oil as well as provisions to reduce biotech-related trade hurdles.
	Rapeseed, rapeseed oil	Oct-14	Bilateral trade	Obtained removal of tariffs on rapeseed exports to the Republic of Korea, as well as a gradual phasing-out of tariffs on crude and refined rapeseed oil.
	Grains, oilseeds	Dec-14	Market regulation	Extended measures regulating national grain transportation until March 2015, in order to address logistical bottlenecks affecting the movement of grains/oilseeds to ports.
	Camelina sativa meal	Jan-15	Market regulation	Approved the feeding of camelina sativa meal to broiler chickens.
	Rapeseed, soybeans	Jan-15	Sector development	Funded R&D activities meant to enhance the competitiveness and sustainability of the country's rapeseed and soybean industries.
	Biodiesel	Mar-15	Renewable energy policy	Supported research on raw glycerol (a by-product of vegetable oil-based diesel production) with a view to enhance value addition in the biodiesel sector.
China	Soybeans	Nov to Dec-14	GMO policy	Authorized importation of two new genetically modified soybean varieties, but suspended the approval process for another GM soy strain.
	Biodiesel	Feb-15	Renewable energy policy	Published new policy guidelines for the development of the country's biodiesel industry, with the overall objective of promoting domestic biodiesel consumption while protecting local resources.
European Union	Rapeseed oil	Oct-14	Bilateral trade agreement	Completed negotiation of the Comprehensive Economic and Trade Agreement (CETA) with Canada, which includes the elimination of EU tariffs on Canadian imports of rapeseed oil and provisions to reduce biotech-related trade hurdles.
	Edible oils	Oct-14	Food labelling	Opened infringement proceedings against the United Kingdom over its voluntary nutritional labelling scheme.
	Palm oil	Feb-15	Trade policy	Requested establishment of a WTO dispute settlement panel to review the Russian Federation's import duties on the selected products, including palm oil.
	GM crops	Mar-15	GMO policy	Adopted a new regulation allowing individual member states to restrict or ban GMO cultivation on their own territory.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
France	Biodiesel	Jan-15	Renewable energy policy	Raised maximum level of biodiesel permitted in transportation fuel from 7 to 8 percent.
	Olive oil	Mar-15	Sector support	Offered financial assistance and other support measures to olive oil producers affected by pest outbreaks and bad weather.
	Olive tree	Apr-15	Phyto-sanitary measure	Announced restrictions on import from Italy of plant material susceptible to infection with xylella fastidiosa, a bacterium hitting olive trees in Italy's Apulia region.
India	Selected oilseeds	Oct - Dec-14	Producer support	Raised minimum support prices for rapeseed, mustardseed, safflowerseed and copra.
	Sunflower seed	Nov-14	Sector development	Launched programme to stimulate cultivation of sunflowerseed and other oilcrops in Punjab State, with a view to raise local edible oil production and reduce imports.
	Vegetable oils	Dec-14	Import policy	Raised import tariff for both crude and refined edible oils, with a view to protect local refiners as well as farmers from price drops caused by rising imports.
	Vegetable oils	Feb-15	Export policy	Lowered the minimum export price for packaged and branded edible oil.
	Biodiesel	Mar-15	Renewable energy policy	Allowed manufacturers to sell biodiesel directly to end users (especially bulk consumers such as rail companies), in an attempt to foster domestic biodiesel production and usage.
	Coconut oil	Apr-15	Food safety	Banned nine brands of coconut oil in Kerala State, following detection of severe adulteration.
Indonesia	Palm oil	Oct-14	Export tax	Temporarily suspended a variable tax on crude palm oil shipments, with a view to stimulate exports, bring down domestic inventories, and contain declines in prices.
	Oil palm	Oct-14	Agricultural policy	Introduced new legislation regulating plantation ownership, with a view to maximize land usage while ensuring adequate participation of smallholders in the plantation sector.
	Oil palm	Oct-14	Environmental policy	Launched the Sustainable Palm Oil Initiative (SPOI), a national platform meant to help small low-income growers increase their productivity while adopting environmentally sound practices.
	Palm oil, palmkernel oil	Jan-15	Trade policy	Introduced mandatory letters of credit for commodity exports, in an effort to help public entities gather accurate records of foreign exchange flows.
	Biodiesel	Feb-15	Renewable energy policy	Revised the method used to set domestic retail prices for biodiesel (using crude palm oil prices as a reference rather than the price of conventional diesel).
	Biodiesel	Mar-15	Renewable energy policy	Announced a rise in mandatory blending of palm oil-based biodiesel into transport diesel fuel from 10 percent to 15 percent.
Italy	Olive oil	Oct-14	Market regulation	Passed legislation regulating quality and transparency in the virgin olive oil chain, in line with a new EU directive.
Kenya	Coconut	Feb-15	Sector development	Established a new body within the country's Agriculture, Fisheries and Food Authority to oversee the development of the coconut industry in coastal regions.
Republic of Korea	Rapeseed, rapeseed oil	Oct-14	Bilateral trade	Exempted Canadian rapeseed imports from paying import duties, and agreed to gradually phase out tariffs on crude and refined rapeseed oil.
	Soybeans, soycake, cottonseedcake, vegetable/animal fat	Feb-15	Import policy	Announced tariff policy changes meant to stabilize domestic consumer prices, including the introduction of voluntary tariff-rate quotas for soybeans, animal/vegetable fat for animal feed, soycake and cottonseedcake for feed. .

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Malaysia	Palm oil	Oct-14 to Mar-15	Export tax	Suspended variable tax on crude palm oil exports, with a view to stimulate exports, bring down domestic inventories, and contain declines in prices.
	Palm oil	Apr-15	Export tax	Reactivated the sliding export tax regime for crude palm oil, with a view to help secure adequate supplies for the domestic palm oil refining industry.
Pakistan	Soybeans	Nov-14	Sector development	Launched a programme to promote domestic soybean cultivation, with a view to help meet meal demand by the domestic poultry and aquaculture sectors.
	Vegetable oils	Jan-15	Import policy	Added all major edible oils (crude and refined) to the list of products that must meet Pakistan's quality standards at the import stage.
Philippines	Coconut	Nov-14	Sector support	Provided state funding to rehabilitate damaged coconut trees in areas affected by typhoon Bopha in late 2012.
	Coconut	Dec-14	Sector development	Approved supplementary funding for the Coconut Authority's activities in support of coconut farming.
Thailand	Palm oil	Jan-15	Market regulation	Approved an increase in palm oil retail prices, with a view to stimulate the sale of edible oils by local manufacturers.
United States	Oilseeds	Oct-14	Agricultural policy	Informed that (as part of the 2014 Farm Bill) a programme providing relief to farmers affected by severe weather would be implemented from 2015, so as to offer better risk coverage to farmers.
	Soybeans	Oct-14	Market regulation	Temporarily allowed, in Iowa State, circulation of overweight truckloads of certain products (including soybeans), in an effort to reduce pressure on the state's over-burdened river freight system.
	Biodiesel	Nov-14	Renewable energy policy	Granted federal support for the production of "advanced biofuels" (fuels produced from renewable biomass other than maize kernel starch); eligible feedstock includes vegetable oils and animal fats.
	Biodiesel	Dec-14	Renewable energy policy	Retroactively reinstated, for calendar year 2014, the biodiesel tax incentive that expired in January 2014.
	Biodiesel	Jan-15	Renewable energy policy	Allowed Argentine biodiesel producers to apply an alternative method for proving that feedstock used to produce biodiesel was not grown on deforested land, thus permitting biodiesel of Argentine origin to benefit from US biofuel support measures.
	Biodiesel	Feb-15	Biodiesel policy	Granted, in Iowa State, a tax break on sales of fuel blends containing at least 11 .percent of soy-based biodiesel, with a view to spur local biodiesel usage.
Zambia	Edible oils	Mar-15	Import policy	Suspended the issuance of licenses for edible oil imports while carrying out investigations about possible adverse effects of such imports on the domestic market.

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

SUGAR: MAJOR POLICY DEVELOPMENTS: DECEMBER 2014 TO MID APRIL 2015*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Mexico-USA	Sugar	Dec-14	Import duties	Reached an agreement to avoid potentially high duties on Mexican sugar exports to the United States. The agreement is intended an end to anti-subsidy and anti-dumping complaints lodged in March. If adopted in full, Mexico will deliver sugar only to satisfy the demand in excess of US domestic production and the import quota guaranteed by trade agreements. Additionally, the deal would set a price floor to prevent imports from Mexico from undercutting US supplies. The agreement would also smooth out supply over the year and limit the volume of refined sugar that may enter the US market.
Jamaica	Sugar	Feb-15	Production support	Allocated 2.4 billion Jamaican$, or USD20 million, to support the effort to revitalize the sugar industry during the 2015/16 season.
COMESA/Kenya	Sugar	Feb-15	Import quotas	Granted a one-year extension of sugar import limits from the regional trade area, the Common Market for Eastern and Southern Africa (COMESA), to help revamp its sugar industry. The safeguards allow Kenya to limit the entry of COMESA sugar to 350,000 tonnes a year.
Brasil	Sugar			
Brazil	Ethanol	Mar-15	Market regulation	Approved a provisional measure to increase the maximum ethanol blend to gasoline from 25 to 27.50 percent.
India	Sugar	April-29		The Government of India increased the tax on imported sugar from 25 to 40 percent in a bid to support falling domestic prices. The government also withdrew the duty free import authorization scheme for sugar exporters.

* A collection of major sugar policy developments starting in January 2013 is also available at: http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=Sugar

MEAT: MAJOR POLICY DEVELOPMENTS: NOVEMBER 2014 TO MID APRIL 2015*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Angola	Poultry	Jan-15	Import quota	Announced import quotas on 14 food items, including meat. The quotas replace the previous system of import licensing.
China	Bovine meat	Feb-15	Import ban lifted	Lifted a long-standing import ban on beef from Ireland: details of the import protocol still need to be agreed.
	Poultry	Jan-15	Import ban	Banned imports of poultry and poultry-related products from the United States, following detection of highly pathogenic avian influenza (HPAI) there.
	Poultry	Jan-15	Market regulation	Published poultry trading and management regulations limiting live bird trading in urban areas, in order to stem the transmission of avian influenza.
European Union	Bovine meat	Mar-15	Import ban lifted	Lifted the import ban on beef from Paraguay, introduced in September 2011 following an outbreak of foot-and-mouth disease there.
	Pigmeat	Mar-15	State market Regulation	Adopted Aid-for-Private-Storage measures for pigmeat.
India	Bovine meat	Dec-14	State Market Regulation	Launched "Rashtriya Gokul Mission" under the National Programme for Bovine Breeding and Dairy Development (NPBBD) to conserve and develop indigenous bovine breeds and to raise productivity.
Iraq	Bovine meat	Mar-15	Import ban lifted	Lifted ban on beef imports from Brazil, which had been introduced in 2014 following a case of bovine spongiform encephalopathy (BSE) there.
	Poultry	Feb-15	Import tax	Announced a substantial increase in import duties on poultry meat and eggs from Turkey.
Japan	All	Feb-15	Regulatory measure	Changed standards on Listeria monocytogenes, facilitating greater importation of meat and other animal products.
Jordan	Poultry	Jan-15	Import ban	Imposed a weight limit of less than 2.5 kg/pack for imported chicken leg quarters.
Kazakhstan	All	Feb-15	Tariff rate quota	Approved the annualtariff quotas for fresh or chilled meat (HS 0201), frozen meat (HS 0202), pork (HS 0203) and poultry meat (HS 0207).
Mexico	Poultry	Jan-15	Import ban	Banned all poultry and poultry products originating in the state of California, including egg products, hatching eggs and baby chicks – due to the presence of highly pathogenic avian influenza (HPAI). Additional testing requirements for poultry from contiguous and nearby US states were also announced.
Pakistan	All	Feb-15	Import ban lifted	Reached an agreement with the USDA regarding health certification of cattle shipped from the United States.
Philippines	Poultry	Feb-15	Import ban	Banned imports of poultry products from Israel and the US state of Oregon, following concerns over the presence of avian influenza.
Russian Federation	Pigmeat	Dec-14	Import ban	Temporarily suspended imports of non-heat-treated pork products from Belarus, due to African swine fever concerns.
South Africa	Bovine meat	Mar-15	Import ban lifted	Lifted ban on beef imports from Brazil, introduced in 2014 following a case of bovine spongiform encephalopathy (BSE) in Brazil.
Switzerland	Poultry	Nov-14	Import ban	Banned imports of poultry from specified areas of the Netherlands and the UK, following outbreaks of avian influenza.
Turkey	All	Mar-15	Market Regulation	Published a decision permitting the importation of feeder cattle by members of associations/ cooperatives, provided it is approved by the Meat and Milk Board (ESK).
Ukraine	Poultry	Nov-14	Import ban	Banned poultry imports from UK, Netherlands and Germany, following reported outbreaks of H5N8 avian influenza.

* A collection of major meat policy developments starting in January 2011 is available at: http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/en/?groupANDcommodity=Meat

DAIRY: MAJOR POLICY DEVELOPMENTS: OCTOBER 2014 TO MID APRIL 2015*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Australia/China	Dairy products	Nov-14	Free trade agreement	Signed declaration of intent – China and Australia – for a free trade agreement which would give Australia tariff-free access for its exports of infant milk formula within four years.
Canada/EU	Dairy products	Oct-14	Free trade agreement	Signed a comprehensive Economic Trade Agreement granting the EU expansion of the cheese quota and elimination of in-quota tariffs, with preferential quota access expanded from 13 500 tonnes to almost 32 000 tonnes, and eliminating completely the over-quota tariff on milk protein substances (35.04.00.12) . Under the agreement, signed in September 2014, access for EU cheese will increase over a six-year period, by 2 667 tonnes in year one to 16 000 tonnes by year six.
China	Dairy products	Oct-14	Import ban lifted	Lifted ban on imports of New Zealand milk powder which had been introduced in August 2014, after reports of bacterial contamination in milk powder in New Zealand.
Dominican Republic	Dairy products	Apr-15	State Market Intervention	Raised government allocation in support of dairy farmers, via the National Milk Producers Association, by Pesos 5 million (USD 112 000), to Pesos 15 million (USD 335 000).
European Union	Dairy products	Dec-14	State market regulation	Approved a Euro 10.7 million support package for the dairy sector of Finland, which had been affected by the Russian Federation's ban on imports from specific countries in August 2014.
	Dairy products	Nov-14	State market regulation	Approved a Euro 28 million support package for the dairy sectors in Estonia, Latvia and Lithuania, subsequent to the Russian Federation's ban on imports from specific countries in August 2014.
	Dairy products	Feb-15	Import ban lifted	Lifted ban on imports of infant milk formula and milk products from China.
	Dairy products	Apr-15	Production	Abolished milk production quotas, introduced in 1984.
India	Dairy products	Dec-14	State market regulation	Launched "Rashtriya Gokul Mission" under the National Programme for Bovine Breeding and Dairy Development to conserve and develop indigenous bovine breeds, enhance their productivity and increase milk production.
Japan	Cheese	Feb-15	Market regulations	Changed standards on the presence of listeria monocytogenes in food, which will facilitate the importation of certain types of cheeses.
Russian Federation	Cheese	Nov-14	Import restrictions lifted	Certified a further three Brazilian dairy plants for cheese export to Russia, bringing the total number of eligible plants to five.

* 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.

Production

- **Cereals**: Data refer to the calendar year in which the whole harvest or bulk of harvest takes place.
- **Sugar**: Figures refer to centrifugal sugar derived from sugar cane or beet, expressed in raw equivalents. Data relate to the October/September season.

Utilization

- **Cereals**: Data are on individual country's marketing year basis.
- **Sugar**: Figures refer to centrifugal sugar derived from sugar cane or beet, expressed in raw equivalents. Data relate to the October/September season.

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** and **sugar**: 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 55 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		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . .)								
ASIA	**1 096.3**	**1 112.9**	**1 123.2**	**160.4**	**183.3**	**181.2**	**59.0**	**53.1**	**54.6**
Bangladesh	37.5	38.5	38.4	2.6	4.2	4.2	-	-	-
China	475.0	493.6	495.5	21.2	29.2	28.1	1.1	1.1	1.3
India	239.2	237.1	238.2	0.1	0.2	0.3	20.9	13.8	15.2
Indonesia	61.8	63.8	65.2	10.8	11.8	11.8	0.2	0.2	0.2
Iran, Islamic Republic of	19.8	19.1	19.8	11.3	15.0	14.7	0.2	0.5	0.5
Iraq	4.1	4.4	4.1	5.0	5.1	5.2	-	-	-
Japan	8.7	8.7	8.7	24.7	25.3	25.2	0.4	0.3	0.3
Kazakhstan	18.7	16.5	16.0	-	-	-	8.7	6.5	5.5
Korea, Republic of	4.4	4.5	4.4	13.9	14.3	14.7	0.1	0.1	0.1
Myanmar	19.7	20.3	20.3	0.3	0.3	0.3	0.9	1.2	1.2
Pakistan	35.4	37.3	38.3	0.4	0.8	0.8	3.8	4.3	4.4
Philippines	19.0	20.2	20.7	4.6	5.3	5.4	-	-	-
Saudi Arabia	1.2	0.9	0.8	15.1	16.0	16.0	-	-	-
Thailand	30.0	27.7	28.2	2.8	2.4	2.5	8.7	11.5	11.9
Turkey	35.0	32.4	34.5	5.4	8.1	7.0	3.2	3.3	3.7
Viet Nam	33.9	35.2	35.0	4.4	4.7	4.9	7.0	6.5	6.6
AFRICA	**159.0**	**170.6**	**165.0**	**74.4**	**77.8**	**78.9**	**8.7**	**8.3**	**7.0**
Algeria	4.7	3.3	4.0	10.6	11.6	11.6	-	-	-
Egypt	20.1	19.6	19.4	17.2	18.3	18.4	0.4	0.5	0.5
Ethiopia	20.3	22.0	21.2	0.9	0.7	0.8	1.4	1.7	1.3
Morocco	7.9	7.0	8.7	6.1	5.9	5.7	0.1	0.1	0.1
Nigeria	20.2	22.5	22.4	7.3	7.8	8.1	0.7	0.7	0.7
South Africa	14.5	17.3	12.3	3.1	2.9	3.4	2.3	2.2	1.1
Sudan	3.6	7.9	6.6	2.6	2.8	2.6	-	0.2	0.3
CENTRAL AMERICA	**38.8**	**42.1**	**41.4**	**26.2**	**27.3**	**27.4**	**1.6**	**2.1**	**1.8**
Mexico	32.1	35.7	34.6	15.8	16.2	16.5	1.4	1.9	1.7
SOUTH AMERICA	**159.7**	**177.5**	**172.4**	**27.6**	**29.8**	**28.4**	**57.8**	**54.2**	**54.7**
Argentina	46.7	54.9	50.6	-	0.1	0.1	29.5	24.2	25.7
Brazil	85.7	96.0	94.7	9.1	9.2	8.1	21.6	23.8	22.8
Chile	3.6	3.3	3.6	2.4	2.5	2.4	0.1	0.1	0.1
Colombia	3.2	2.4	2.9	6.0	7.2	7.2	0.1	0.1	0.1
Peru	4.1	4.0	4.2	4.1	4.4	4.4	-	-	-
Venezuela	3.1	3.2	3.2	4.2	4.7	4.9	-	0.1	0.1
NORTH AMERICA	**444.7**	**490.9**	**481.9**	**9.6**	**10.9**	**10.4**	**94.5**	**103.7**	**108.8**
Canada	55.5	51.3	53.3	1.4	2.3	1.7	24.0	26.8	27.7
United States of America	389.3	439.6	428.6	8.2	8.7	8.6	70.6	77.0	81.1
EUROPE	**453.0**	**518.4**	**488.5**	**22.6**	**20.5**	**21.3**	**81.6**	**106.6**	**98.5**
European Union	290.5	326.8	311.7	18.3	16.3	17.0	30.3	42.0	37.6
Russian Federation	82.8	102.1	94.4	0.8	0.7	0.7	22.8	27.3	26.0
Serbia	8.0	9.6	8.7	0.1	0.1	0.1	2.2	3.1	3.1
Ukraine	54.8	63.7	58.7	0.1	0.2	0.2	25.5	33.2	30.7
OCEANIA	**40.6**	**35.9**	**36.9**	**1.6**	**1.7**	**1.7**	**28.1**	**23.4**	**23.9**
Australia	39.7	35.0	36.0	0.2	0.2	0.2	28.1	23.4	23.9
WORLD	**2 392.2**	**2 548.3**	**2 509.2**	**322.4**	**351.4**	**349.4**	**331.3**	**351.4**	**349.4**
Developing countries	1 396.8	1 445.2	1 449.1	250.8	279.7	277.3	114.9	107.8	110.4
Developed countries	995.3	1 103.1	1 060.1	71.5	71.7	72.1	216.5	243.6	238.9
LIFDCs	434.3	445.1	446.0	51.6	55.8	56.1	26.7	19.5	20.6
LDCs	159.4	170.5	168.0	26.7	29.5	29.1	7.1	7.3	7.1

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**1 171.9**	**1 241.8**	**1 258.3**	**387.7**	**407.3**	**395.7**	**161.5**	**162.3**	**162.6**
Bangladesh	40.4	41.7	42.3	9.9	10.4	10.1	194.3	197.0	199.5
China	478.7	518.3	526.7	229.0	251.6	247.2	149.5	149.4	149.3
India	216.1	224.1	225.9	49.8	46.9	43.0	153.0	153.2	153.6
Indonesia	72.1	76.2	77.0	13.2	12.8	12.2	209.3	212.2	212.6
Iran, Islamic Republic of	28.9	32.3	33.1	5.5	8.7	9.5	205.2	205.5	205.4
Iraq	8.8	9.4	9.5	2.1	2.6	2.4	198.1	199.0	199.1
Japan	33.2	33.6	33.7	4.9	4.9	5.0	130.1	130.2	130.2
Kazakhstan	10.3	10.7	10.4	5.0	2.2	2.3	165.5	166.4	166.5
Korea, Republic of	18.3	18.8	18.6	4.2	4.0	4.3	119.6	117.1	116.8
Myanmar	20.2	19.6	19.7	3.8	2.1	1.8	221.0	218.3	219.3
Pakistan	31.7	33.1	33.7	4.2	4.0	4.3	147.4	147.6	147.7
Philippines	23.8	25.2	26.0	2.8	3.1	3.2	160.5	163.9	166.1
Saudi Arabia	15.7	16.7	17.0	5.2	6.1	5.9	144.6	147.0	147.0
Thailand	21.0	21.4	22.2	16.9	15.1	11.8	155.9	158.1	158.6
Turkey	36.4	37.7	38.1	4.7	5.2	4.8	240.8	242.0	241.7
Viet Nam	30.4	32.7	33.2	5.9	7.4	7.3	207.0	211.0	210.8
AFRICA	**222.9**	**237.1**	**239.3**	**39.5**	**41.7**	**37.9**	**149.9**	**151.7**	**150.9**
Algeria	14.4	15.7	15.7	5.5	5.8	5.8	224.4	224.2	224.2
Egypt	36.6	37.7	38.1	6.9	6.4	5.7	289.9	289.7	288.7
Ethiopia	19.3	20.9	20.9	2.0	2.1	1.9	168.4	171.2	171.0
Morocco	13.3	13.8	13.9	4.7	5.1	5.5	258.2	258.0	258.1
Nigeria	26.7	29.1	29.7	1.1	1.2	1.0	118.4	122.6	120.0
South Africa	15.8	16.3	16.1	2.2	3.2	1.9	171.8	171.9	171.8
Sudan	6.8	8.7	8.7	0.8	1.9	1.7	172.3	182.7	181.7
CENTRAL AMERICA	**63.4**	**67.2**	**67.5**	**6.0**	**7.2**	**6.9**	**157.8**	**158.6**	**158.9**
Mexico	46.6	50.0	50.0	2.8	3.6	3.2	185.6	187.0	186.6
SOUTH AMERICA	**128.6**	**143.5**	**146.0**	**20.7**	**32.0**	**30.0**	**121.4**	**121.9**	**122.0**
Argentina	17.4	24.0	24.1	4.3	8.4	6.3	136.4	138.9	139.2
Brazil	72.3	78.0	80.1	8.7	14.0	13.9	116.4	116.6	116.6
Chile	6.0	6.2	6.2	0.8	0.9	0.9	150.4	150.9	151.1
Colombia	9.3	10.2	10.2	0.6	0.7	0.7	101.3	100.6	101.0
Peru	8.0	8.4	8.4	1.4	1.6	1.4	148.9	150.3	151.2
Venezuela	7.3	7.9	7.9	0.6	0.7	0.9	135.7	136.5	136.3
NORTH AMERICA	**357.8**	**377.9**	**383.1**	**58.9**	**78.2**	**78.8**	**109.6**	**110.2**	**110.3**
Canada	29.3	30.4	29.5	10.6	9.2	7.0	96.1	96.2	97.1
United States of America	328.5	347.5	353.6	48.3	69.1	71.9	111.0	111.8	111.7
EUROPE	**397.5**	**413.6**	**412.6**	**53.3**	**70.9**	**69.4**	**135.3**	**136.1**	**135.8**
European Union	278.0	287.3	288.8	30.7	47.1	49.1	135.3	136.1	136.0
Russian Federation	65.5	71.8	71.1	9.7	9.7	7.6	126.9	127.9	128.2
Serbia	6.1	6.6	5.6	0.9	0.8	0.8	151.6	152.5	127.2
Ukraine	28.9	30.7	29.8	9.0	8.6	6.9	157.2	158.1	159.5
OCEANIA	**15.1**	**15.0**	**15.1**	**8.8**	**8.3**	**7.9**	**90.9**	**90.8**	**91.6**
Australia	12.8	12.6	12.7	8.3	7.8	7.3	98.1	98.0	99.4
WORLD	**2 357.3**	**2 496.0**	**2 521.9**	**574.9**	**645.6**	**626.6**	**151.6**	**152.6**	**152.7**
Developing countries	1 504.0	1 604.5	1 626.3	435.7	471.4	454.3	156.8	157.7	157.8
Developed countries	853.3	891.6	895.6	139.2	174.2	172.3	130.7	131.4	131.3
LIFDCs	456.5	479.1	484.5	89.6	88.0	82.1	148.6	150.1	150.3
LDCs	179.6	189.1	191.3	35.7	36.6	33.8	154.3	156.4	157.1

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**314.7**	**320.2**	**321.1**	**69.5**	**73.6**	**72.8**	**20.0**	**14.9**	**14.6**
Bangladesh	1.2	1.3	1.5	2.1	3.4	3.3	-	-	-
China	120.1	126.2	126.5	6.0	3.3	3.6	0.4	0.4	0.5
of which Taiwan Prov.	-	-	-	1.3	1.6	1.6	-	-	-
India	91.8	95.9	92.0	-	0.1	0.2	5.2	2.0	2.0
Indonesia	-	-	-	7.0	7.6	7.5	0.1	0.1	0.1
Iran, Islamic Republic of	13.8	13.0	13.5	4.6	6.3	6.0	0.2	0.5	0.5
Iraq	2.8	3.0	2.8	3.4	3.3	3.4	-	-	-
Japan	0.8	0.8	0.9	6.1	6.0	6.0	0.3	0.3	0.3
Kazakhstan	15.5	13.0	12.5	-	-	-	8.1	6.0	5.0
Korea, Republic of	-	-	-	4.8	4.2	4.5	0.1	0.1	0.1
Pakistan	24.3	25.3	26.4	0.3	0.7	0.7	0.6	0.5	0.8
Philippines	-	-	-	3.0	3.3	3.3	-	-	-
Saudi Arabia	0.8	0.5	0.4	2.8	3.5	3.5	-	-	-
Thailand	-	-	-	2.2	1.9	2.1	0.2	0.2	0.2
Turkey	21.3	19.0	21.0	3.8	5.5	4.5	3.1	3.0	3.5
AFRICA	**25.8**	**24.9**	**26.7**	**41.4**	**43.0**	**43.0**	**1.2**	**1.0**	**0.9**
Algeria	3.2	2.0	2.5	6.8	7.2	7.2	-	-	-
Egypt	8.7	8.8	8.5	10.2	10.7	11.0	-	-	-
Ethiopia	3.5	4.0	4.0	0.8	0.7	0.8	-	-	-
Morocco	5.6	5.1	6.5	3.9	3.3	3.0	0.1	0.1	0.1
Nigeria	0.1	0.1	0.1	4.2	4.7	4.7	0.5	0.5	0.5
South Africa	1.9	1.8	1.8	1.6	1.7	1.6	0.3	0.2	0.1
Tunisia	1.5	1.5	1.7	1.7	1.6	1.6	0.1	0.1	0.1
CENTRAL AMERICA	**3.4**	**3.7**	**4.1**	**8.5**	**8.5**	**8.3**	**0.9**	**1.5**	**1.3**
Cuba	-	-	-	0.8	0.8	0.8	-	-	-
Mexico	3.4	3.7	4.1	4.6	4.5	4.3	0.9	1.4	1.2
SOUTH AMERICA	**20.3**	**24.7**	**24.1**	**14.1**	**14.2**	**13.0**	**10.1**	**8.2**	**9.8**
Argentina	10.6	13.9	12.0	-	-	-	6.8	4.5	6.0
Brazil	5.3	6.2	7.7	7.1	7.0	5.8	1.2	2.0	2.0
Chile	1.4	1.4	1.5	0.9	0.7	0.7	-	-	-
Colombia	-	-	-	1.5	1.8	1.8	-	0.1	0.1
Peru	0.2	0.2	0.2	1.8	1.7	1.7	-	-	-
Venezuela	-	-	-	1.8	1.8	2.0	-	-	-
NORTH AMERICA	**87.9**	**84.4**	**85.5**	**3.4**	**4.8**	**4.5**	**48.4**	**46.0**	**47.5**
Canada	30.0	29.3	29.5	0.2	0.3	0.2	19.4	22.5	23.0
United States of America	57.9	55.1	56.0	3.2	4.5	4.3	29.0	23.5	24.5
EUROPE	**214.1**	**247.7**	**233.0**	**7.6**	**8.1**	**8.5**	**47.5**	**64.0**	**59.0**
European Union	137.9	156.1	148.5	5.4	5.7	6.0	22.7	32.0	29.0
Russian Federation	48.7	59.7	54.0	0.1	0.3	0.3	16.8	20.0	19.0
Ukraine	20.1	24.1	23.6	-	-	-	7.2	11.0	10.0
OCEANIA	**26.9**	**23.9**	**24.7**	**0.9**	**0.9**	**0.9**	**20.9**	**17.5**	**18.0**
Australia	26.6	23.6	24.4	-	-	-	20.9	17.5	18.0
WORLD	**693.1**	**729.5**	**719.1**	**145.3**	**153.0**	**151.0**	**149.1**	**153.0**	**151.0**
Developing countries	334.1	345.6	348.1	118.0	124.1	122.0	22.8	18.2	20.4
Developed countries	358.9	383.8	371.0	27.3	29.0	29.0	126.3	134.8	130.6
LIFDCs	112.8	118.9	115.5	30.6	33.5	33.2	6.6	3.3	3.3
LDCs	12.3	13.7	13.7	15.7	17.9	17.4	0.1	0.1	0.1

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**360.0**	**374.9**	**380.3**	**111.8**	**115.2**	**111.6**	**64.3**	**64.5**	**64.7**
Bangladesh	3.5	3.8	4.0	2.8	3.4	3.5	20.6	20.7	21.1
China	125.8	131.1	134.5	49.9	49.8	44.9	62.9	62.8	62.8
of which Taiwan Prov.	1.3	1.4	1.5	0.4	0.5	0.5	45.1	45.8	45.7
India	84.9	89.7	89.2	23.2	26.5	26.0	59.8	60.0	60.0
Indonesia	6.5	7.3	7.4	2.5	2.9	2.9	18.9	19.4	19.6
Iran, Islamic Republic of	16.3	17.9	18.2	3.1	6.3	7.1	167.5	167.6	167.3
Iraq	5.9	6.2	6.3	1.9	2.4	2.3	143.1	143.1	143.3
Japan	6.5	6.7	6.7	1.0	0.9	0.9	43.1	43.3	43.4
Kazakhstan	7.6	7.8	7.5	4.8	1.8	1.8	150.0	150.5	150.6
Korea, Republic of	4.8	4.1	4.3	0.9	0.6	0.8	47.8	47.9	47.9
Pakistan	24.0	24.9	25.6	2.1	2.2	2.5	124.6	124.7	125.2
Philippines	3.0	3.2	3.3	0.4	0.4	0.4	23.0	23.0	24.1
Saudi Arabia	3.8	3.7	3.8	2.3	2.6	2.8	98.7	98.7	98.7
Thailand	2.0	1.9	1.9	0.5	0.2	0.2	15.0	16.2	16.2
Turkey	21.6	21.8	22.0	2.6	2.7	2.8	211.5	211.6	211.2
AFRICA	**64.4**	**67.2**	**68.1**	**17.9**	**18.4**	**18.1**	**51.4**	**50.9**	**50.0**
Algeria	9.2	9.9	9.9	4.4	4.5	4.4	202.7	202.9	202.9
Egypt	18.8	19.6	20.0	5.1	4.6	4.1	198.3	198.5	198.3
Ethiopia	4.3	4.7	4.8	0.4	0.5	0.5	40.2	40.3	40.4
Morocco	8.6	9.0	9.1	3.4	4.0	4.3	202.9	203.0	203.0
Nigeria	3.8	4.0	4.0	0.2	0.2	0.2	19.7	20.6	19.5
South Africa	3.2	3.2	3.3	0.6	0.6	0.6	58.4	58.8	58.4
Tunisia	3.0	3.0	3.1	0.7	0.7	0.8	211.2	211.4	211.3
CENTRAL AMERICA	**10.7**	**10.6**	**10.9**	**1.7**	**2.2**	**2.3**	**43.8**	**44.2**	**44.3**
Cuba	0.8	0.8	0.8	-	-	-	55.4	54.6	54.7
Mexico	7.0	6.9	7.1	0.5	0.8	0.9	47.9	48.5	48.7
SOUTH AMERICA	**26.0**	**27.0**	**27.4**	**4.0**	**7.3**	**6.5**	**60.2**	**60.4**	**60.4**
Argentina	5.5	5.9	5.9	1.0	2.9	2.1	119.7	120.8	121.0
Brazil	11.0	11.3	11.5	1.0	1.5	1.5	52.5	52.5	52.5
Chile	2.3	2.4	2.4	0.2	0.2	0.2	119.8	120.6	120.7
Colombia	1.4	1.5	1.5	0.3	0.5	0.5	27.6	27.7	27.9
Peru	1.9	2.0	2.0	0.4	0.6	0.5	60.2	60.6	60.8
Venezuela	1.8	1.9	1.9	0.2	0.2	0.3	58.3	59.0	59.2
NORTH AMERICA	**43.8**	**42.5**	**42.4**	**25.5**	**24.8**	**25.4**	**81.1**	**81.4**	**81.4**
Canada	9.2	9.9	9.0	6.9	6.2	4.4	80.4	80.2	80.8
United States of America	34.6	32.6	33.4	18.6	18.6	21.0	81.2	81.5	81.5
EUROPE	**178.5**	**181.8**	**179.3**	**21.2**	**26.7**	**29.8**	**109.7**	**109.8**	**109.3**
European Union	121.0	123.6	122.3	9.5	15.0	18.0	111.1	111.2	111.0
Russian Federation	36.0	36.9	35.8	6.2	6.4	5.8	100.4	100.7	100.8
Ukraine	13.0	13.1	13.2	3.7	2.8	3.2	122.8	123.1	123.4
OCEANIA	**7.5**	**7.7**	**7.8**	**5.6**	**5.3**	**5.1**	**67.0**	**66.7**	**67.1**
Australia	6.4	6.5	6.6	5.2	4.9	4.7	78.1	78.3	79.4
WORLD	**690.9**	**711.7**	**716.1**	**187.7**	**199.9**	**198.9**	**67.1**	**67.1**	**66.9**
Developing countries	425.3	443.3	450.1	123.9	134.4	129.4	60.0	60.0	59.9
Developed countries	265.5	268.4	266.0	63.9	65.6	69.5	96.3	96.5	96.3
LIFDCs	134.9	142.2	142.8	37.9	42.5	42.0	45.8	45.9	45.8
LDCs	28.2	29.6	30.4	8.2	9.7	9.4	28.7	28.7	28.8

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**336.1**	**345.2**	**349.3**	**72.5**	**90.2**	**88.4**	**7.5**	**4.9**	**6.0**
China	214.7	224.8	226.1	12.3	22.8	21.3	0.2	0.2	0.3
of which Taiwan Prov.	0.1	0.1	0.1	4.5	4.6	4.6	-	-	-
India	41.7	38.2	40.7	-	-	-	4.9	2.5	3.5
Indonesia	18.5	19.1	19.2	2.6	3.3	3.3	0.1	0.1	0.1
Iran, Islamic Republic of	4.5	4.5	4.7	5.2	7.1	7.1	-	-	-
Japan	0.2	0.2	0.2	17.9	18.6	18.5	-	-	-
Korea, D.P.R.	2.3	2.7	2.7	0.3	0.1	0.1	-	-	-
Korea, Republic of	0.2	0.2	0.2	8.7	9.6	9.7	-	-	-
Malaysia	0.1	0.1	0.1	3.2	3.9	3.9	-	-	-
Pakistan	4.9	5.3	5.4	-	-	-	-	-	-
Philippines	7.2	7.8	7.8	0.3	0.5	0.5	-	-	-
Saudi Arabia	0.4	0.4	0.4	10.9	11.0	11.0	-	-	-
Thailand	5.1	5.0	5.1	0.2	0.2	0.2	0.5	0.1	0.2
Turkey	13.1	12.9	12.9	1.3	2.3	2.2	0.1	0.3	0.2
Viet Nam	4.9	5.2	5.1	1.8	2.1	2.1	-	-	-
AFRICA	**115.6**	**127.3**	**119.8**	**18.8**	**20.2**	**20.8**	**6.9**	**6.8**	**5.5**
Algeria	1.6	1.3	1.5	3.7	4.3	4.3	-	-	-
Egypt	7.4	6.6	6.8	6.9	7.6	7.4	-	-	-
Ethiopia	16.8	18.0	17.2	0.1	-	-	1.4	1.7	1.3
Kenya	3.8	3.2	3.6	0.6	1.0	0.9	-	-	-
Morocco	2.3	1.9	2.2	2.3	2.6	2.7	-	-	-
Nigeria	17.4	19.5	19.4	0.2	0.2	0.2	0.3	0.3	0.3
South Africa	12.6	15.6	10.5	0.3	0.1	0.7	2.1	2.0	1.0
Sudan	3.3	7.4	6.1	0.4	0.3	0.2	-	0.2	0.3
Tanzania, United Rep. of	6.1	6.2	6.2	-	-	-	0.2	0.2	0.2
CENTRAL AMERICA	**33.5**	**36.5**	**35.4**	**15.7**	**16.7**	**17.0**	**0.6**	**0.6**	**0.5**
Mexico	28.5	31.8	30.4	10.6	11.1	11.6	0.5	0.5	0.5
SOUTH AMERICA	**122.9**	**136.4**	**131.4**	**12.0**	**14.1**	**14.0**	**44.5**	**42.8**	**41.5**
Argentina	35.0	39.9	37.6	-	0.1	0.1	22.1	19.2	19.1
Brazil	72.2	81.7	78.7	1.2	1.6	1.8	19.5	21.0	20.0
Chile	2.1	1.9	2.1	1.5	1.7	1.6	0.1	0.1	0.1
Colombia	1.8	1.1	1.6	4.4	5.2	5.2	0.1	0.1	0.1
Peru	1.9	1.8	1.9	2.2	2.5	2.5	-	-	-
Venezuela	2.5	2.5	2.5	2.1	2.6	2.6	-	0.1	0.1
NORTH AMERICA	**350.7**	**399.4**	**389.4**	**5.1**	**5.1**	**4.7**	**42.9**	**54.3**	**57.8**
Canada	25.5	22.0	23.8	0.8	1.6	1.1	4.6	4.3	4.7
United States of America	325.3	377.4	365.6	4.3	3.5	3.6	38.3	50.0	53.1
EUROPE	**236.3**	**268.2**	**253.0**	**13.2**	**10.4**	**10.8**	**33.7**	**42.2**	**39.1**
European Union	150.8	169.0	161.5	11.7	9.1	9.4	7.5	9.7	8.4
Russian Federation	33.4	41.7	39.7	0.4	0.1	0.1	5.8	7.1	6.8
Serbia	5.8	7.2	6.5	-	-	-	1.6	2.3	2.3
Ukraine	34.6	39.5	35.0	0.1	0.1	0.1	18.3	22.2	20.7
OCEANIA	**13.1**	**11.4**	**11.7**	**0.3**	**0.3**	**0.3**	**6.7**	**5.5**	**5.5**
Australia	12.6	10.8	11.1	-	-	-	6.7	5.5	5.5
WORLD	**1 208.2**	**1 324.4**	**1 290.0**	**137.6**	**157.0**	**156.0**	**142.8**	**157.0**	**156.0**
Developing countries	589.4	623.5	619.1	98.6	119.8	118.6	56.9	52.6	52.1
Developed countries	618.8	700.9	670.9	38.9	37.2	37.4	86.0	104.5	104.0
LIFDCs	147.6	153.4	154.1	5.1	5.3	5.3	9.2	6.7	7.5
LDCs	73.4	81.6	78.7	2.5	2.4	2.3	5.1	5.1	4.9

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**391.2**	**427.9**	**431.3**	**110.6**	**123.2**	**123.1**	**15.1**	**14.9**	**14.9**
China	218.4	244.4	246.3	86.0	99.3	100.1	10.8	10.8	10.8
of which Taiwan Prov.	4.6	4.7	4.6	0.3	0.2	0.2	6.7	7.1	7.0
India	36.7	36.5	37.4	3.2	1.5	1.5	20.4	19.6	19.8
Indonesia	20.9	22.4	22.5	4.3	4.3	4.1	28.7	28.7	28.7
Iran, Islamic Republic of	9.5	11.3	11.7	1.9	2.0	2.0	1.3	1.3	1.3
Japan	18.4	18.7	18.7	1.3	1.3	1.3	29.2	29.3	29.3
Korea, D.P.R.	2.6	2.8	2.7	0.1	-	0.1	77.3	84.0	84.0
Korea, Republic of	8.9	10.1	9.8	1.6	1.6	1.6	4.4	4.5	4.5
Malaysia	3.3	3.9	3.9	0.1	0.1	0.1	1.6	1.6	1.5
Pakistan	4.8	5.2	5.1	1.6	1.3	1.3	9.4	9.4	9.0
Philippines	7.5	8.2	8.3	0.4	0.5	0.5	16.4	16.8	16.9
Saudi Arabia	10.6	11.6	11.8	2.8	3.3	2.9	3.4	3.3	3.2
Thailand	4.9	4.6	5.0	0.3	0.6	0.6	2.8	2.8	2.7
Turkey	14.1	15.1	15.4	2.0	2.4	2.0	20.1	20.3	20.4
Viet Nam	6.6	7.4	7.2	0.7	0.8	0.8	5.6	5.8	3.9
AFRICA	**127.7**	**137.2**	**138.2**	**17.9**	**20.1**	**16.8**	**73.3**	**75.0**	**75.0**
Algeria	5.1	5.7	5.7	1.1	1.3	1.4	18.7	18.3	18.3
Egypt	14.0	14.3	14.3	1.3	1.5	1.4	50.1	49.7	48.9
Ethiopia	14.9	16.1	16.0	1.5	1.6	1.4	126.8	129.7	129.4
Kenya	4.3	4.3	4.5	0.6	0.4	0.4	83.6	82.9	82.7
Morocco	4.6	4.8	4.8	1.2	1.1	1.2	53.9	53.9	53.9
Nigeria	17.4	19.3	19.6	0.4	0.7	0.5	69.9	72.3	71.6
South Africa	11.5	12.0	11.8	1.5	2.6	1.3	93.9	94.1	93.5
Sudan	4.0	6.3	6.2	0.2	1.1	0.9	95.7	120.8	118.5
Tanzania, United Rep. of	5.8	6.2	6.2	0.8	0.8	0.5	91.8	92.8	94.4
CENTRAL AMERICA	**48.8**	**52.6**	**52.6**	**3.9**	**4.6**	**4.1**	**96.5**	**96.8**	**96.9**
Mexico	38.8	42.3	42.1	2.2	2.9	2.4	131.5	132.3	131.6
SOUTH AMERICA	**87.7**	**101.5**	**103.5**	**14.5**	**23.2**	**22.0**	**27.2**	**27.5**	**27.4**
Argentina	11.4	17.6	17.7	3.3	5.4	4.2	7.4	7.4	7.3
Brazil	53.0	58.7	60.6	6.4	12.0	11.9	24.9	25.3	25.4
Chile	3.5	3.6	3.6	0.6	0.7	0.7	18.7	18.4	18.4
Colombia	6.3	7.2	7.2	0.2	0.2	0.2	43.0	44.1	43.9
Peru	3.9	4.2	4.2	0.6	0.7	0.6	24.8	24.4	24.1
Venezuela	4.5	5.0	5.0	0.4	0.5	0.5	51.4	50.7	50.0
NORTH AMERICA	**309.9**	**331.0**	**336.2**	**32.3**	**52.0**	**51.8**	**17.8**	**17.6**	**17.4**
Canada	19.8	20.1	20.1	3.7	2.9	2.5	4.7	4.7	4.7
United States of America	290.1	310.9	316.1	28.6	49.1	49.3	19.2	19.0	18.8
EUROPE	**215.1**	**227.6**	**229.1**	**31.5**	**43.5**	**39.1**	**20.7**	**21.1**	**21.2**
European Union	154.1	160.7	163.5	20.7	31.7	30.7	19.0	19.4	19.4
Russian Federation	28.8	34.2	34.5	3.5	3.3	1.8	21.8	22.1	22.2
Serbia	4.4	4.9	4.2	0.4	0.5	0.5	20.2	21.4	21.5
Ukraine	15.7	17.4	16.4	5.3	5.8	3.7	31.2	31.2	32.3
OCEANIA	**6.9**	**6.5**	**6.6**	**3.1**	**2.9**	**2.7**	**8.2**	**8.1**	**8.2**
Australia	6.1	5.7	5.8	3.0	2.8	2.6	9.8	9.6	9.7
WORLD	**1 187.4**	**1 284.5**	**1 297.5**	**213.8**	**269.5**	**259.6**	**27.7**	**28.1**	**28.2**
Developing countries	618.3	680.5	687.3	143.2	165.8	161.9	29.0	29.4	29.6
Developed countries	569.1	604.0	610.3	70.6	103.6	97.7	22.2	22.4	22.4
LIFDCs	143.4	151.8	153.8	15.5	13.9	12.3	39.2	39.7	40.1
LDCs	70.4	76.5	77.1	12.1	12.7	11.2	57.1	58.8	59.5

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**287.9**	**300.7**	**301.9**	**52.7**	**59.5**	**59.1**	**6.4**	**3.8**	**4.9**
China	205.7	215.7	217.0	8.3	8.0	7.5	0.1	0.1	0.2
of which Taiwan Prov.	-	-	-	4.3	4.4	4.4	-	-	-
India	22.8	22.0	22.5	-	-	-	4.4	2.0	3.0
Indonesia	18.5	19.1	19.2	2.5	3.2	3.2	0.1	0.1	0.1
Iran, Islamic Republic of	1.3	1.3	1.4	4.0	5.4	5.4	-	-	-
Japan	-	-	-	14.9	15.6	15.5	-	-	-
Korea, D.P.R.	2.2	2.6	2.6	0.3	0.1	0.1	-	-	-
Korea, Republic of	0.1	0.1	0.1	8.6	9.5	9.6	-	-	-
Malaysia	0.1	0.1	0.1	3.2	3.9	3.9	-	-	-
Pakistan	4.4	4.7	4.8	-	-	-	-	-	-
Philippines	7.2	7.8	7.8	0.3	0.5	0.5	-	-	-
Thailand	4.9	4.8	4.9	0.2	0.2	0.2	0.5	0.1	0.2
Turkey	4.9	6.0	5.0	1.1	1.5	1.8	0.1	0.2	0.1
Viet Nam	4.9	5.2	5.1	1.7	2.0	2.0	-	-	-
AFRICA	**69.0**	**75.0**	**68.9**	**16.0**	**17.6**	**18.1**	**4.7**	**4.4**	**3.4**
Algeria	-	-	-	3.2	3.7	3.7	-	-	-
Egypt	6.5	5.8	6.0	6.8	7.5	7.3	-	-	-
Ethiopia	6.3	6.6	6.5	-	-	-	0.3	0.3	0.3
Kenya	3.5	2.9	3.3	0.5	0.9	0.8	-	-	-
Morocco	0.2	0.2	0.2	1.9	2.2	2.2	-	-	-
Nigeria	9.4	11.0	11.0	0.2	0.2	0.2	0.2	0.2	0.2
South Africa	12.1	14.9	10.0	0.2	-	0.5	2.0	2.0	1.0
Tanzania, United Rep. of	4.9	5.0	5.0	-	-	-	0.2	0.2	0.2
CENTRAL AMERICA	**25.4**	**28.2**	**27.1**	**14.0**	**16.0**	**16.4**	**0.6**	**0.6**	**0.5**
Mexico	20.8	23.9	22.5	9.0	10.5	11.0	0.5	0.5	0.5
SOUTH AMERICA	**108.2**	**123.9**	**118.3**	**10.1**	**12.2**	**12.2**	**38.8**	**39.5**	**37.3**
Argentina	25.7	33.0	30.0	-	-	-	16.6	16.0	15.0
Brazil	69.4	78.8	75.9	0.9	1.0	1.2	19.5	21.0	20.0
Chile	1.5	1.2	1.4	1.0	1.3	1.2	-	-	-
Colombia	1.7	1.1	1.6	3.7	4.6	4.6	0.1	0.1	0.1
Peru	1.6	1.5	1.7	2.0	2.4	2.4	-	-	-
Venezuela	2.0	2.0	2.0	2.1	2.6	2.6	-	0.1	0.1
NORTH AMERICA	**325.3**	**372.6**	**362.2**	**2.6**	**2.4**	**2.0**	**36.6**	**42.9**	**46.0**
Canada	12.9	11.5	12.2	0.7	1.5	1.0	1.2	0.9	1.0
United States of America	312.4	361.1	350.0	1.9	0.9	1.0	35.3	42.0	45.0
EUROPE	**107.3**	**124.6**	**116.0**	**11.4**	**8.7**	**9.2**	**23.0**	**25.3**	**24.8**
European Union	63.3	74.3	69.9	10.8	8.0	8.5	2.5	2.5	2.5
Russian Federation	8.9	11.3	11.4	-	-	-	2.8	2.5	2.5
Serbia	5.4	6.8	6.1	-	-	-	1.6	2.3	2.3
Ukraine	24.7	28.5	25.0	0.1	0.1	0.1	15.8	17.5	17.0
OCEANIA	**0.6**	**0.5**	**0.6**	**-**	**-**	**-**	**0.1**	**0.1**	**0.1**
WORLD	**923.7**	**1 025.3**	**994.9**	**106.9**	**116.5**	**117.0**	**110.1**	**116.5**	**117.0**
Developing countries	476.6	511.0	504.4	76.2	87.8	88.0	48.4	46.2	45.1
Developed countries	447.1	514.3	490.6	30.7	28.7	29.0	61.8	70.3	71.9
LIFDCs	85.8	88.1	88.6	4.0	4.6	4.7	6.5	3.9	4.9
LDCs	41.2	43.7	42.6	1.8	1.9	1.9	3.0	2.9	3.0

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**324.9**	**351.2**	**354.5**	**98.2**	**112.0**	**112.8**	**9.4**	**9.4**	**9.4**
China	204.9	220.4	223.0	83.7	96.6	97.9	7.5	7.5	7.4
of which Taiwan Prov.	4.4	4.5	4.4	0.3	0.2	0.2	5.2	5.6	5.5
India	18.4	19.3	19.5	1.0	1.0	1.0	7.1	7.1	7.1
Indonesia	20.8	22.3	22.4	4.3	4.3	4.1	28.2	28.3	28.3
Iran, Islamic Republic of	5.3	6.4	6.7	0.9	1.0	1.0	1.0	1.0	0.9
Japan	15.0	15.3	15.5	0.7	0.8	0.8	26.7	26.8	26.8
Korea, D.P.R.	2.5	2.7	2.6	0.1	-	0.1	75.2	81.9	82.0
Korea, Republic of	8.7	9.9	9.6	1.5	1.6	1.5	2.0	2.0	2.0
Malaysia	3.3	3.9	3.9	0.1	0.1	0.1	1.6	1.6	1.5
Pakistan	4.2	4.6	4.5	1.6	1.3	1.3	7.4	7.3	6.9
Philippines	7.4	8.2	8.3	0.4	0.5	0.5	16.4	16.8	16.9
Thailand	4.7	4.5	4.9	0.3	0.6	0.6	1.3	1.3	1.3
Turkey	5.8	6.9	6.9	0.6	1.2	1.0	16.1	16.5	16.6
Viet Nam	6.5	7.3	7.1	0.7	0.8	0.8	5.6	5.7	3.9
AFRICA	**79.6**	**85.0**	**85.9**	**12.2**	**14.3**	**11.6**	**40.3**	**41.0**	**41.1**
Algeria	3.0	3.6	3.6	0.5	0.8	0.9	3.5	3.5	3.5
Egypt	13.1	13.4	13.4	1.2	1.4	1.3	46.5	46.2	45.4
Ethiopia	5.5	6.0	6.0	0.5	0.4	0.5	42.8	43.1	43.4
Kenya	3.9	4.0	4.1	0.4	0.3	0.2	78.4	77.3	77.4
Morocco	2.0	2.3	2.4	0.7	0.8	0.8	10.8	10.4	10.4
Nigeria	9.5	10.9	11.3	0.3	0.5	0.3	32.1	34.2	34.1
South Africa	10.8	11.2	11.1	1.3	2.4	1.1	89.6	90.0	89.4
Tanzania, United Rep. of	4.6	5.0	5.0	0.6	0.6	0.4	70.7	72.1	73.8
CENTRAL AMERICA	**39.1**	**43.4**	**43.5**	**3.4**	**4.2**	**3.7**	**95.5**	**95.2**	**95.3**
Mexico	29.5	33.6	33.6	1.7	2.5	2.0	131.0	130.9	130.2
SOUTH AMERICA	**76.9**	**90.0**	**92.0**	**11.9**	**20.2**	**19.0**	**25.7**	**26.0**	**25.9**
Argentina	7.8	14.0	14.0	1.9	4.0	3.0	7.2	7.2	7.1
Brazil	49.9	55.2	57.1	6.0	11.5	11.5	23.8	24.3	24.3
Chile	2.2	2.3	2.3	0.4	0.5	0.5	16.6	16.3	16.3
Colombia	5.4	6.1	6.1	0.2	0.2	0.2	41.5	42.6	42.4
Peru	3.5	3.8	3.8	0.6	0.7	0.6	18.5	18.0	18.0
Venezuela	4.1	4.5	4.5	0.4	0.4	0.4	50.9	50.2	49.5
NORTH AMERICA	**290.0**	**313.6**	**318.4**	**27.3**	**47.9**	**48.1**	**14.7**	**14.5**	**14.4**
Canada	12.1	12.7	13.0	1.5	1.5	1.1	3.2	3.2	3.2
United States of America	278.0	300.9	305.4	25.8	46.4	47.0	15.9	15.7	15.6
EUROPE	**94.1**	**100.7**	**102.5**	**14.3**	**23.7**	**21.6**	**8.2**	**8.4**	**8.4**
European Union	70.2	73.8	76.4	10.0	18.0	17.5	9.6	9.8	9.8
Russian Federation	6.2	8.7	9.0	0.6	0.6	0.5	1.1	1.3	1.3
Serbia	4.0	4.5	3.8	0.4	0.5	0.5	18.7	19.8	19.9
Ukraine	8.6	10.0	9.6	2.4	3.8	2.2	11.5	11.8	12.0
OCEANIA	**0.6**	**0.5**	**0.5**	**0.1**	**0.1**	**0.1**	**2.4**	**2.3**	**2.4**
WORLD	**905.2**	**984.4**	**997.4**	**167.3**	**222.3**	**217.0**	**17.7**	**17.9**	**17.9**
Developing countries	491.4	539.5	546.0	123.4	146.9	144.7	18.5	18.8	18.8
Developed countries	413.8	444.9	451.4	44.0	75.4	72.3	14.1	14.2	14.2
LIFDCs	82.5	88.0	89.2	8.8	8.5	7.5	19.1	19.5	19.7
LDCs	38.8	41.4	41.9	8.3	8.5	7.6	27.9	28.2	28.8

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**20.3**	**19.4**	**20.4**	**16.3**	**20.6**	**19.2**	**0.9**	**0.8**	**0.8**
China	1.7	1.6	1.7	2.8	7.1	6.1	-	-	-
India	1.7	1.8	1.7	-	-	-	0.3	0.4	0.4
Iran, Islamic Republic of	3.2	3.2	3.2	1.1	1.7	1.7	-	-	-
Iraq	0.8	0.9	0.8	-	0.1	0.1	-	-	-
Japan	0.2	0.2	0.2	1.3	1.3	1.3	-	-	-
Kazakhstan	2.2	2.5	2.5	-	-	-	0.5	0.4	0.4
Saudi Arabia	-	-	-	8.7	7.5	7.5	-	-	-
Syria	0.8	0.6	0.7	0.4	0.5	0.5	-	-	-
Turkey	7.5	6.3	7.2	0.1	0.8	0.4	-	0.1	0.1
AFRICA	**6.6**	**6.3**	**6.7**	**1.8**	**1.8**	**1.9**	**-**	**-**	**-**
Algeria	1.5	1.2	1.4	0.5	0.6	0.6	-	-	-
Ethiopia	1.8	1.9	1.9	-	-	-	-	-	-
Libya	0.1	0.1	0.1	0.4	0.4	0.4	-	-	-
Morocco	2.1	1.7	2.0	0.4	0.4	0.4	-	-	-
Tunisia	0.6	0.8	0.7	0.4	0.3	0.4	-	-	-
CENTRAL AMERICA	**0.8**	**0.8**	**0.8**	**0.1**	**0.1**	**0.1**	**-**	**-**	**-**
Mexico	0.8	0.8	0.8	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	**5.6**	**3.9**	**5.0**	**0.8**	**1.0**	**0.9**	**3.5**	**1.8**	**2.9**
Argentina	4.6	2.9	4.0	-	-	-	3.4	1.7	2.8
NORTH AMERICA	**13.0**	**11.0**	**12.0**	**0.5**	**0.5**	**0.4**	**1.6**	**1.6**	**1.7**
Canada	8.7	7.1	7.9	-	-	-	1.4	1.4	1.5
United States of America	4.3	3.8	4.1	0.4	0.5	0.4	0.2	0.2	0.2
EUROPE	**82.2**	**93.7**	**88.3**	**0.7**	**0.4**	**0.4**	**9.7**	**15.9**	**13.3**
Belarus	1.9	2.1	1.9	-	-	-	-	0.1	0.1
European Union	55.4	60.6	58.0	0.2	0.1	0.1	4.6	6.8	5.5
Russian Federation	15.4	20.4	19.0	0.4	0.1	0.1	2.8	4.5	4.2
Ukraine	7.9	9.0	8.0	-	-	-	2.2	4.5	3.5
OCEANIA	**8.8**	**8.3**	**7.8**	**-**	**-**	**-**	**5.5**	**4.5**	**4.3**
Australia	8.5	8.0	7.5	-	-	-	5.5	4.5	4.3
WORLD	**137.2**	**143.3**	**141.0**	**20.2**	**24.5**	**23.0**	**21.2**	**24.5**	**23.0**
Developing countries	29.1	25.8	28.4	17.2	21.7	20.3	3.9	2.2	3.3
Developed countries	108.1	117.5	112.6	3.0	2.8	2.7	17.3	22.3	19.7
LIFDCs	4.7	5.0	4.9	0.1	-	-	0.3	0.4	0.4
LDCs	2.3	2.4	2.4	-	-	-	-	-	-

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**34.8**	**39.8**	**39.9**	**8.5**	**8.9**	**7.9**	**0.6**	**0.6**	**0.6**
China	4.4	8.5	8.3	1.4	1.7	1.1	0.1	0.2	0.2
India	1.4	1.5	1.5	-	0.1	-	1.0	1.0	0.9
Iran, Islamic Republic of	4.1	4.9	4.9	1.1	1.0	1.0	0.4	0.3	0.3
Iraq	0.8	1.0	0.9	0.1	-	-	3.9	3.7	3.6
Japan	1.5	1.5	1.4	0.4	0.3	0.3	2.4	2.4	2.4
Kazakhstan	1.7	2.0	2.0	0.2	0.3	0.5	1.2	1.2	1.2
Saudi Arabia	8.0	7.7	7.9	2.7	3.2	2.8	1.0	1.0	0.9
Syria	1.3	1.2	1.2	0.6	0.5	0.5	12.8	12.7	12.7
Turkey	7.5	7.5	7.8	1.3	1.1	0.9	1.1	1.1	1.1
AFRICA	**8.4**	**8.7**	**8.6**	**1.8**	**1.5**	**1.5**	**3.4**	**3.5**	**3.4**
Algeria	1.9	2.0	2.0	0.6	0.5	0.5	15.2	14.8	14.8
Ethiopia	1.8	1.9	1.9	0.1	0.1	0.1	15.8	16.5	16.4
Libya	0.5	0.5	0.5	-	-	-	13.5	13.3	13.2
Morocco	2.5	2.5	2.3	0.6	0.3	0.4	43.0	43.3	43.3
Tunisia	1.0	1.0	1.1	0.3	0.4	0.4	8.3	8.1	8.0
CENTRAL AMERICA	**0.8**	**0.9**	**0.9**	**0.1**	**0.2**	**0.2**	**-**	**-**	**-**
Mexico	0.8	0.9	0.9	0.1	0.2	0.2	-	-	-
SOUTH AMERICA	**2.9**	**3.0**	**3.0**	**0.7**	**0.7**	**0.7**	**0.5**	**0.5**	**0.5**
Argentina	1.2	1.2	1.2	0.6	0.7	0.7	-	-	-
NORTH AMERICA	**10.9**	**10.3**	**10.4**	**3.0**	**2.4**	**2.0**	**0.5**	**0.5**	**0.5**
Canada	6.4	6.1	5.9	1.4	0.7	0.5	0.3	0.3	0.3
United States of America	4.5	4.2	4.5	1.6	1.7	1.5	0.6	0.5	0.5
EUROPE	**73.7**	**76.5**	**76.6**	**10.9**	**13.7**	**12.6**	**1.0**	**1.1**	**1.1**
Belarus	1.8	1.7	1.7	0.2	0.5	0.6	-	-	-
European Union	51.5	51.9	52.6	7.2	10.0	10.0	0.7	0.8	0.8
Russian Federation	13.1	15.7	15.7	0.8	1.3	0.5	1.1	1.2	1.2
Ukraine	5.5	5.6	5.0	2.5	1.6	1.2	3.3	3.3	3.4
OCEANIA	**3.6**	**3.6**	**3.6**	**1.9**	**2.0**	**2.0**	**0.2**	**0.2**	**0.2**
Australia	3.3	3.2	3.2	1.9	2.0	2.0	0.3	0.3	0.3
WORLD	**135.2**	**142.8**	**142.9**	**26.9**	**29.4**	**26.9**	**1.1**	**1.1**	**1.1**
Developing countries	41.5	46.6	46.6	9.9	10.1	9.0	1.1	1.1	1.1
Developed countries	93.7	96.2	96.3	16.9	19.3	18.0	1.0	1.0	1.0
LIFDCs	4.6	4.8	4.7	0.5	0.4	0.4	1.2	1.2	1.2
LDCs	2.3	2.5	2.5	0.2	0.2	0.2	1.8	1.9	1.9

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(million tonnes)								
ASIA	**9.0**	**7.6**	**8.9**	**2.9**	**9.1**	**9.1**	**0.1**	**0.1**	**0.1**
China	2.5	2.6	2.5	1.2	7.6	7.6	-	0.1	0.1
India	5.6	4.1	5.5	-	-	-	-	-	-
Japan	-	-	-	1.5	1.3	1.3	-	-	-
AFRICA	**23.8**	**28.0**	**26.4**	**0.9**	**0.7**	**0.6**	**0.9**	**0.8**	**0.7**
Burkina Faso	1.8	1.7	1.8	-	-	-	0.2	0.1	0.1
Ethiopia	4.0	4.2	3.8	-	-	-	0.4	0.4	0.2
Nigeria	6.7	6.9	7.0	-	-	-	0.1	0.1	0.1
Sudan	2.9	6.3	5.0	0.4	0.2	0.1	-	0.2	0.3
CENTRAL AMERICA	**7.3**	**7.4**	**7.4**	**1.4**	**0.2**	**0.2**	**-**	**-**	**-**
Mexico	6.9	7.0	7.0	1.4	0.2	0.2	-	-	-
SOUTH AMERICA	**7.3**	**6.9**	**6.2**	**0.9**	**0.6**	**0.6**	**2.1**	**1.5**	**1.3**
Argentina	4.1	3.5	3.0	-	-	-	2.1	1.5	1.3
Brazil	2.0	2.2	1.9	-	-	-	-	-	-
Venezuela	0.4	0.4	0.4	-	-	-	-	-	-
NORTH AMERICA	**7.2**	**11.0**	**10.0**	**0.1**	**-**	**-**	**2.7**	**7.7**	**7.8**
United States of America	7.2	11.0	10.0	0.1	-	-	2.7	7.7	7.8
EUROPE	**0.9**	**1.0**	**0.9**	**0.4**	**0.3**	**0.3**	**0.1**	**0.1**	**0.1**
European Union	0.6	0.7	0.6	0.3	0.2	0.2	-	-	-
OCEANIA	**2.1**	**1.1**	**1.8**	**0.1**	**0.1**	**0.1**	**1.0**	**0.8**	**1.1**
Australia	2.1	1.1	1.8	-	-	-	1.0	0.8	1.1
WORLD	**57.6**	**63.1**	**61.7**	**6.8**	**11.0**	**11.0**	**6.8**	**11.0**	**11.0**
Developing countries	47.3	49.8	48.9	4.6	9.2	9.1	3.0	2.4	2.1
Developed countries	10.4	13.3	12.8	2.2	1.8	1.9	3.8	8.6	9.0
LIFDCs	29.0	31.7	31.5	0.8	0.6	0.5	0.9	0.8	0.7
LDCs	15.1	18.9	17.3	0.6	0.4	0.3	0.8	0.7	0.6

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(million tonnes)								
ASIA	18.8	17.5	18.1	0.6	1.0	1.1	0.2	0.2	0.2
AFRICA	16.2	18.0	17.8	0.1	0.1	0.1	1.3	1.5	1.4
CENTRAL AMERICA	0.1	0.1	0.1	0.2	0.4	0.4	-	-	-
SOUTH AMERICA	1.7	1.7	1.8	0.2	0.3	0.3	0.1	0.1	0.1
NORTH AMERICA	5.2	4.9	5.2	2.0	2.2	2.2	2.1	2.2	2.3
EUROPE	46.0	49.0	47.8	0.6	1.0	0.8	0.8	0.9	0.9
OCEANIA	1.6	1.5	1.5	0.1	0.1	0.1	0.1	0.1	0.1
WORLD	**89.7**	**92.8**	**92.4**	**3.7**	**5.0**	**5.0**	**4.7**	**5.0**	**5.0**

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**12.5**	**17.2**	**17.9**	**1.1**	**1.1**	**1.1**	**1.4**	**1.1**	**1.4**
China	4.2	10.6	10.0	0.5	0.6	0.6	0.4	0.5	0.5
India	5.5	4.1	5.5	0.1	-	-	4.1	3.0	3.9
Japan	1.6	1.4	1.3	0.3	0.2	0.2	-	-	-
AFRICA	**24.4**	**27.3**	**27.0**	**2.2**	**2.2**	**1.7**	**18.2**	**18.9**	**18.6**
Burkina Faso	1.6	1.8	1.8	0.1	-	-	82.9	85.6	83.8
Ethiopia	3.7	3.9	3.8	0.4	0.4	0.2	31.3	31.7	31.5
Nigeria	6.7	6.9	6.9	0.1	0.1	0.1	32.1	32.0	31.5
Sudan	3.5	5.3	5.0	0.2	0.9	0.7	85.0	101.4	94.2
CENTRAL AMERICA	**8.6**	**7.8**	**7.7**	**0.4**	**0.3**	**0.3**	**0.8**	**0.8**	**0.8**
Mexico	8.1	7.3	7.2	0.4	0.2	0.2	-	-	-
SOUTH AMERICA	**6.2**	**6.5**	**6.4**	**1.8**	**2.2**	**2.1**	**0.1**	**0.1**	**0.1**
Argentina	1.9	1.9	1.9	0.7	0.7	0.5	-	-	-
Brazil	1.9	2.2	2.0	0.4	0.4	0.3	-	-	-
Venezuela	0.4	0.4	0.4	0.1	0.1	0.1	-	-	-
NORTH AMERICA	**4.3**	**2.5**	**2.7**	**0.6**	**0.5**	**0.3**	**-**	**-**	**-**
United States of America	4.3	2.5	2.7	0.6	0.5	0.3	-	-	-
EUROPE	**1.1**	**1.1**	**1.1**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
European Union	0.9	0.9	0.8	0.1	0.2	0.2	0.4	0.4	0.4
OCEANIA	**1.3**	**1.0**	**1.0**	**0.9**	**0.6**	**0.4**	**0.2**	**0.2**	**0.2**
Australia	1.2	0.9	0.9	0.9	0.5	0.4	-	-	-
WORLD	**58.3**	**63.4**	**63.8**	**7.2**	**7.1**	**6.3**	**3.7**	**3.7**	**3.8**
Developing countries	49.8	57.1	57.4	5.1	5.5	5.0	4.5	4.5	4.7
Developed countries	8.5	6.3	6.4	2.0	1.6	1.3	0.3	0.3	0.3
LIFDCs	29.5	30.9	31.9	2.3	2.4	1.8	9.8	9.6	10.0
LDCs	15.4	17.9	17.6	1.8	2.0	1.6	14.4	15.3	15.0

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

	Total Utilization			Stocks ending in			Per caput food use		
	11/12-13/14 average	2014/15 estim.	2015/16 f'cast	2012-2014 average	2015 estim.	2016 f'cast	11/12-13/14 average	2014/15 estim.	2015/16 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	19.0	19.7	19.0	2.9	1.2	1.2	3.6	3.7	3.5
AFRICA	15.3	16.2	16.7	1.7	2.0	1.9	11.4	11.6	11.9
CENTRAL AMERICA	0.3	0.6	0.5	-	-	-	0.3	0.8	0.8
SOUTH AMERICA	1.8	1.9	2.1	0.1	0.1	0.1	0.8	0.8	0.9
NORTH AMERICA	4.7	4.7	4.7	1.4	1.3	1.4	2.6	2.6	2.5
EUROPE	46.2	49.3	48.9	6.0	5.8	4.5	11.2	11.3	11.5
OCEANIA	1.4	1.5	1.5	0.2	0.2	0.2	5.4	5.4	5.5
WORLD	**88.8**	**93.8**	**93.4**	**12.4**	**10.6**	**9.4**	**5.3**	**5.4**	**5.4**

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

	Production			Imports			Exports		
	2011-2013 average	2014 estim.	2015 f'cast	2011-2013 average	2014 estim.	2015 f'cast	2011-2013 average	2014 estim.	2015 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)								
ASIA	**445.5**	**447.5**	**452.8**	**17.4**	**20.7**	**19.5**	**29.3**	**34.7**	**33.3**
Bangladesh	34.0	34.8	34.5	0.6	1.1	0.7	-	-	-
China	140.2	142.6	142.9	2.2	3.0	3.2	0.5	0.4	0.5
of which Taiwan Prov.	1.2	1.2	1.1	0.1	0.1	0.1	-	-	-
India	105.7	103.0	105.5	0.1	0.1	0.1	8.6	11.3	9.3
Indonesia	43.3	44.6	46.0	1.8	1.2	0.9	-	-	-
Iran, Islamic Republic of	1.6	1.6	1.7	1.5	1.4	1.6	-	-	-
Iraq	0.2	0.3	0.3	1.4	1.4	1.5	-	-	-
Japan	7.7	7.6	7.6	0.7	0.7	0.7	0.1	0.1	-
Korea, D.P.R.	1.8	1.7	1.8	0.1	0.1	0.1	-	-	-
Korea, Republic of	4.2	4.2	4.1	0.5	0.4	0.5	-	-	-
Malaysia	1.7	1.7	1.7	1.0	1.1	1.2	-	-	-
Myanmar	17.9	18.2	18.4	-	-	-	0.7	0.7	0.8
Pakistan	6.2	6.7	6.5	0.1	0.1	0.1	3.0	3.7	3.8
Philippines	11.8	12.4	12.9	1.1	1.9	1.5	-	-	-
Saudi Arabia	-	-	-	1.2	1.4	1.5	-	-	-
Sri Lanka	2.8	2.3	2.8	-	0.6	0.2	-	-	-
Thailand	24.9	22.7	23.2	0.5	0.4	0.3	8.0	11.0	11.2
Viet Nam	28.9	30.0	29.9	0.6	0.6	0.6	7.2	6.5	6.5
AFRICA	**17.6**	**18.3**	**18.5**	**13.3**	**14.5**	**14.6**	**0.5**	**0.6**	**0.6**
Cote d'Ívoire	0.4	0.5	0.5	1.2	1.2	1.2	-	-	-
Egypt	4.1	4.1	4.1	0.1	-	0.1	0.3	0.4	0.5
Madagascar	2.8	2.7	2.7	0.3	0.3	0.3	-	-	-
Nigeria	2.7	2.9	2.9	2.6	3.0	2.9	-	-	-
Senegal	0.3	0.3	0.3	1.1	1.3	1.2	-	-	-
South Africa	-	-	-	1.1	0.9	1.1	-	-	-
Tanzania, United Rep. of	1.4	1.7	1.7	0.1	0.2	0.1	-	0.1	0.1
CENTRAL AMERICA	**1.9**	**1.9**	**2.0**	**2.1**	**2.1**	**2.1**	**0.1**	**-**	**-**
Cuba	0.4	0.4	0.4	0.4	0.4	0.4	-	-	-
Mexico	0.1	0.2	0.2	0.6	0.7	0.6	-	-	-
SOUTH AMERICA	**16.5**	**16.5**	**16.9**	**1.4**	**1.4**	**1.5**	**3.4**	**3.1**	**3.2**
Argentina	1.1	1.1	1.0	-	-	-	0.6	0.5	0.5
Brazil	8.3	8.1	8.3	0.7	0.6	0.6	1.1	0.8	0.8
Peru	2.0	2.0	2.0	0.2	0.2	0.2	-	-	-
Uruguay	1.0	0.9	0.9	-	-	-	0.9	0.9	0.8
NORTH AMERICA	**6.1**	**7.1**	**7.0**	**1.0**	**1.1**	**1.1**	**3.3**	**3.0**	**3.5**
Canada	-	-	-	0.4	0.4	0.4	-	-	-
United States of America	6.1	7.1	7.0	0.6	0.8	0.7	3.3	3.0	3.5
EUROPE	**2.6**	**2.5**	**2.6**	**1.6**	**2.0**	**2.0**	**0.4**	**0.4**	**0.5**
European Union	1.8	1.7	1.7	1.2	1.4	1.5	0.2	0.2	0.3
Russian Federation	0.7	0.7	0.7	0.2	0.3	0.3	0.2	0.2	0.2
OCEANIA	**0.6**	**0.6**	**0.5**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**
Australia	0.6	0.6	0.5	0.1	0.2	0.2	0.4	0.4	0.4
WORLD	**490.9**	**494.4**	**500.1**	**37.3**	**42.4**	**41.4**	**37.3**	**42.4**	**41.4**
Developing countries	473.3	476.0	481.9	32.3	37.0	35.9	33.1	38.4	37.0
Developed countries	17.6	18.3	18.2	5.0	5.4	5.5	4.3	4.0	4.4
LIFDCs	173.9	172.8	176.4	14.8	18.3	17.0	8.8	11.5	9.5
LDCs	73.7	75.2	75.6	8.0	9.8	9.2	2.0	1.9	2.0

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

	Total Utilization			Stocks ending in			Per caput food use		
	10/11-12/13 average	2013/14 estim.	2014/15 f'cast	2011-2013 average	2014 estim.	2015 f'cast	10/11-12/13 average	2013/14 estim.	2014/15 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**412.2**	**430.8**	**438.9**	**153.1**	**173.5**	**169.0**	**81.7**	**82.6**	**82.9**
Bangladesh	33.9	35.5	35.4	6.9	6.6	6.7	166.6	171.5	171.7
China	132.2	137.5	142.8	84.8	100.0	102.5	75.9	75.8	75.7
of which Taiwan Prov.	1.2	1.3	1.3	0.2	0.2	0.2	46.2	49.6	49.6
India	92.9	96.3	97.9	22.9	23.0	18.9	72.3	73.2	73.6
Indonesia	43.5	45.7	46.6	6.0	6.4	5.6	159.7	162.5	164.0
Iran, Islamic Republic of	3.1	3.1	3.2	0.4	0.4	0.4	35.9	36.6	36.7
Iraq	1.5	1.7	1.8	0.1	0.1	0.1	46.8	50.1	50.2
Japan	8.1	8.3	8.3	2.6	2.8	2.8	57.9	57.7	57.6
Korea, D.P.R.	1.7	1.9	1.9	0.1	0.1	0.1	62.9	68.2	68.3
Korea, Republic of	4.6	4.6	4.6	1.6	1.7	1.8	69.4	65.2	64.8
Malaysia	2.7	2.7	2.7	0.3	0.2	0.2	83.4	82.9	83.1
Myanmar	19.1	18.3	17.9	4.7	2.2	1.9	211.2	205.9	206.1
Pakistan	2.8	2.9	3.0	0.5	0.6	0.6	13.2	13.4	13.5
Philippines	12.8	14.4	13.8	2.4	2.0	2.2	120.0	123.8	124.1
Saudi Arabia	1.2	1.4	1.4	0.1	0.2	0.2	40.8	44.1	44.9
Sri Lanka	2.8	2.9	2.9	0.3	0.3	0.4	117.6	118.0	119.1
Thailand	13.3	14.5	14.9	12.8	17.3	14.3	137.1	138.6	139.1
Viet Nam	21.1	22.6	23.2	3.3	5.2	6.1	186.8	191.8	193.0
AFRICA	**29.4**	**32.0**	**32.6**	**3.6**	**3.7**	**3.2**	**24.6**	**25.5**	**25.9**
Cote d'Ívoire	1.6	1.6	1.7	0.1	0.1	-	74.7	76.4	76.5
Egypt	3.7	3.9	3.9	0.5	0.5	0.4	41.7	41.5	41.5
Madagascar	3.2	3.0	3.0	0.3	0.1	0.1	123.0	117.6	117.6
Nigeria	5.3	5.7	5.9	0.5	0.4	0.3	28.0	28.9	29.7
Senegal	1.3	1.5	1.5	0.3	0.5	0.4	95.8	96.9	97.1
South Africa	1.0	1.2	1.0	-	0.2	-	17.4	20.8	19.0
Tanzania, United Rep. of	1.4	1.5	1.6	0.3	0.2	0.3	23.7	25.7	25.8
CENTRAL AMERICA	**3.8**	**3.9**	**4.0**	**0.4**	**0.4**	**0.5**	**17.6**	**17.5**	**17.6**
Cuba	0.8	0.8	0.8	-	-	0.1	63.5	64.8	65.0
Mexico	0.8	0.8	0.8	-	-	-	6.3	6.2	6.2
SOUTH AMERICA	**14.6**	**15.4**	**15.0**	**2.5**	**1.6**	**1.5**	**34.0**	**34.5**	**34.0**
Argentina	0.4	0.5	0.5	-	0.1	0.1	8.8	9.8	10.8
Brazil	8.1	8.5	8.0	1.6	0.7	0.6	39.0	39.8	38.8
Peru	2.1	2.2	2.2	0.3	0.4	0.3	63.3	64.9	65.2
Uruguay	0.1	0.1	0.1	0.1	-	-	8.6	8.5	8.5
NORTH AMERICA	**4.4**	**4.4**	**4.4**	**1.4**	**1.1**	**1.4**	**11.0**	**11.2**	**11.3**
Canada	0.4	0.4	0.4	-	-	-	10.9	11.2	11.3
United States of America	4.0	4.0	4.0	1.3	1.0	1.4	11.0	11.2	11.3
EUROPE	**3.9**	**4.1**	**4.2**	**0.6**	**0.7**	**0.6**	**4.8**	**5.0**	**5.2**
European Union	2.9	3.0	3.0	0.5	0.5	0.4	5.2	5.3	5.5
Russian Federation	0.7	0.7	0.8	-	0.1	0.1	4.6	5.0	5.1
OCEANIA	**0.7**	**0.7**	**0.7**	**0.1**	**0.2**	**0.1**	**15.9**	**15.6**	**15.9**
Australia	0.3	0.3	0.3	-	0.1	0.1	10.4	10.0	10.2
WORLD	**469.0**	**491.2**	**499.9**	**161.6**	**181.1**	**176.2**	**56.5**	**57.2**	**57.4**
Developing countries	450.5	471.9	480.7	156.9	176.2	171.2	67.5	68.1	68.3
Developed countries	18.5	19.3	19.2	4.7	4.9	5.0	12.1	12.4	12.4
LIFDCs	173.8	183.3	185.1	35.8	35.8	31.6	63.2	64.2	64.5
LDCs	79.7	82.8	82.9	16.4	14.6	14.2	68.2	68.9	68.9

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

	Wheat[1]			Coarse Grains[2]			Rice (milled basis)		
	2013/14	2014/15 *estim.*	2015/16 *f'cast*	2013/14	2014/15 *estim.*	2015/16 *f'cast*	2013/14	2014/15 *estim.*	2015/16 *f'cast*
	UNITED STATES (June/May)			**UNITED STATES**			**UNITED STATES** (Aug./July)		
Opening stocks	19.5	16.1	18.6	23.5	34.3	49.1	1.2	1.0	1.4
Production	58.1	55.1	56.0	367.4	377.4	365.6	6.1	7.1	7.0
Imports	4.6	3.9	4.3	3.3	3.3	3.6	0.7	0.7	0.8
Total Supply	**82.2**	**75.1**	**78.9**	**394.2**	**415.0**	**418.2**	**8.0**	**8.8**	**9.1**
Domestic use	34.2	32.6	33.4	305.4	310.9	316.1	4.0	4.1	4.1
Exports	32.0	24.0	24.5	54.5	55.0	52.8	3.0	3.4	3.5
Closing stocks	16.1	18.6	21.0	34.3	49.1	49.3	1.0	1.4	1.6
	CANADA (August/July)			**CANADA**			**THAILAND** (Nov./Oct.)[3]		
Opening stocks	5.1	9.7	6.2	3.1	4.6	2.9	18.0	17.3	14.3
Production	37.5	29.3	29.5	28.8	22.0	23.8	24.4	22.7	23.2
Imports	0.1	0.1	0.1	0.6	1.8	1.2	0.4	0.3	0.3
Total Supply	**42.6**	**39.0**	**35.8**	**32.6**	**28.4**	**27.9**	**42.8**	**40.3**	**37.7**
Domestic use	9.5	9.9	9.0	21.2	20.1	20.1	14.5	14.9	15.2
Exports	23.5	22.9	22.4	6.7	5.4	5.2	11.0	11.2	11.5
Closing stocks	9.7	6.2	4.4	4.6	2.9	2.5	17.3	14.3	11.0
	ARGENTINA (Dec./Nov.)			**ARGENTINA**			**INDIA** (Oct./Sept.)[3]		
Opening stocks	0.3	1.9	2.9	1.8	4.0	5.4	23.9	23.0	18.9
Production	9.2	13.9	12.0	40.9	39.9	37.6	106.7	103.0	105.5
Imports	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Supply	**9.5**	**15.8**	**15.0**	**42.8**	**43.9**	**43.0**	**130.6**	**126.1**	**124.5**
Domestic use	5.7	5.9	5.9	15.4	17.6	17.7	96.3	97.9	99.3
Exports	1.9	7.0	7.0	23.4	20.9	21.1	11.3	9.3	9.7
Closing stocks	1.9	2.9	2.1	4.0	5.4	4.2	23.0	18.9	15.5
	AUSTRALIA (Oct./Sept.)			**AUSTRALIA**			**PAKISTAN** (Nov./Oct.)[3]		
Opening stocks	4.2	5.3	4.9	2.7	3.5	2.8	0.4	0.6	0.6
Production	26.9	23.6	24.4	14.0	10.8	11.1	6.8	6.7	6.5
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Supply	**31.1**	**28.9**	**29.3**	**16.7**	**14.3**	**13.9**	**7.2**	**7.4**	**7.1**
Domestic use	6.3	6.5	6.6	6.5	5.7	5.8	2.9	3.0	3.0
Exports	19.5	17.5	18.0	6.8	5.8	5.5	3.7	3.8	3.6
Closing stocks	5.3	4.9	4.7	3.5	2.8	2.6	0.6	0.6	0.5
	EU (July/June)			**EU**			**VIET NAM** (Nov./Oct.)[3]		
Opening stocks	8.7	9.0	15.0	16.6	24.1	31.7	4.3	5.2	6.1
Production	143.6	156.1	148.5	158.9	169.0	161.5	29.4	30.0	29.9
Imports	3.7	5.7	6.0	15.8	9.1	9.4	0.6	0.6	0.6
Total Supply	**156.0**	**170.8**	**169.5**	**191.3**	**202.1**	**202.6**	**34.2**	**35.8**	**36.5**
Domestic use	116.2	123.6	122.3	158.2	160.7	163.5	22.6	23.2	23.9
Exports	30.8	32.2	29.2	9.1	9.7	8.4	6.5	6.5	6.6
Closing stocks	9.0	15.0	18.0	24.1	31.7	30.7	5.2	6.1	6.1
	TOTAL OF ABOVE			**TOTAL OF ABOVE**			**TOTAL OF ABOVE**		
Opening stocks	37.8	41.9	47.7	47.8	70.4	91.9	47.7	47.1	41.2
Production	275.3	278.0	270.4	610.1	619.2	599.6	173.3	169.5	172.0
Imports	8.4	9.7	10.4	19.8	14.2	14.2	1.8	1.8	1.8
Total Supply	**321.5**	**329.6**	**328.4**	**677.7**	**703.7**	**705.6**	**222.8**	**218.4**	**215.0**
Domestic use	171.9	178.4	177.2	506.8	515.1	523.2	140.3	143.0	145.5
Exports	107.7	103.6	101.1	100.6	96.8	93.1	35.4	34.2	34.9
Closing stocks	41.9	47.7	50.2	70.4	91.9	89.3	47.1	41.2	34.7

[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.
[3] Rice trade data refer to the calendar year of the second year shown.

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

	Production[1]			Imports			Exports		
	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*
ASIA	**133.4**	**136.0**	**134.5**	**82.8**	**99.6**	**105.7**	**2.5**	**2.7**	**2.5**
China	60.1	59.9	59.8	62.7	77.8	82.0	1.2	1.1	1.0
of which Taiwan Prov.	0.1	0.1	0.1	2.3	2.3	2.4	-	-	-
India	37.9	38.3	35.8	0.2	0.3	0.4	0.8	0.8	0.8
Indonesia	9.8	11.1	11.9	2.0	2.5	2.6	0.1	0.1	0.1
Iran, Islamic Republic of	0.7	0.7	0.7	0.5	0.4	0.5	-	-	-
Japan	0.3	0.3	0.3	5.6	5.6	5.8	-	-	-
Korea, Republic of	0.2	0.2	0.2	1.6	1.5	1.4	-	-	-
Malaysia	4.9	5.0	5.1	0.7	0.7	0.7	-	0.1	0.1
Pakistan	5.2	5.4	5.7	1.2	1.4	1.5	-	-	-
Thailand	0.7	0.8	0.9	2.0	2.0	2.1	-	-	-
Turkey	2.6	3.3	3.1	2.2	2.6	3.3	0.1	0.1	0.1
AFRICA	**17.0**	**17.1**	**17.7**	**3.2**	**3.5**	**3.7**	**0.9**	**0.7**	**0.7**
Nigeria	4.8	4.9	5.0	-	-	-	0.2	0.1	0.1
CENTRAL AMERICA	**1.5**	**1.6**	**1.8**	**6.1**	**6.3**	**6.5**	**0.2**	**0.2**	**0.2**
Mexico	1.0	1.1	1.3	5.5	5.6	5.8	-	-	-
SOUTH AMERICA	**142.5**	**164.2**	**175.2**	**1.3**	**1.6**	**1.7**	**52.6**	**64.3**	**63.6**
Argentina	51.0	57.0	61.6	0.1	0.1	-	8.8	8.4	9.0
Brazil	78.1	89.8	97.7	0.2	0.5	0.5	36.2	47.0	46.9
Paraguay	7.2	9.3	8.4	-	-	-	4.7	5.0	4.0
NORTH AMERICA	**115.6**	**124.4**	**141.0**	**2.2**	**4.1**	**2.6**	**50.9**	**60.2**	**64.8**
Canada	19.7	24.8	23.1	0.6	0.6	0.7	11.8	13.5	14.6
United States of America	95.9	99.6	117.9	1.6	3.5	1.9	39.1	46.7	50.2
EUROPE	**54.1**	**64.1**	**67.5**	**19.2**	**22.1**	**20.6**	**4.4**	**6.0**	**6.5**
European Union	29.1	31.9	35.3	17.7	19.4	18.4	0.9	1.4	1.4
Russian Federation	10.6	13.5	13.6	1.0	2.3	1.8	0.3	0.5	0.5
Ukraine	12.4	16.1	16.3	-	-	-	2.9	3.5	4.0
OCEANIA	**5.4**	**5.6**	**4.7**	**0.1**	**-**	**0.1**	**3.2**	**3.4**	**2.7**
Australia	5.0	5.2	4.3	-	-	-	3.1	3.3	2.6
WORLD	**469.4**	**513.0**	**542.3**	**114.8**	**137.3**	**140.9**	**114.7**	**137.4**	**140.8**
Developing countries	289.0	313.1	323.1	86.9	104.5	111.0	56.0	67.5	66.6
Developed countries	180.4	200.0	219.2	27.9	32.8	29.8	58.7	69.8	74.2
LIFDCs	126.0	126.5	124.4	63.5	79.0	83.8	3.2	3.3	3.0
LDCs	10.9	10.9	10.9	0.5	0.6	0.7	0.5	0.4	0.4

[1] 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.

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

	Imports			Exports			Utilization		
	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*
ASIA	**41.1**	**43.2**	**44.7**	**45.7**	**48.2**	**49.1**	**92.7**	**103.3**	**106.3**
Bangladesh	1.5	1.7	1.8	-	-	-	1.8	2.0	2.1
China	11.3	11.2	10.4	0.6	0.6	0.6	34.1	37.2	37.4
of which Taiwan Prov.	0.4	0.4	0.4	-	-	-	0.8	0.8	0.8
India	10.0	11.8	12.9	0.5	0.5	0.3	19.6	21.3	22.5
Indonesia	0.1	0.1	0.1	21.4	24.4	25.9	8.5	11.0	11.4
Iran	1.7	1.4	1.6	0.2	0.1	0.2	1.9	2.0	2.0
Japan	1.2	1.3	1.3	-	-	-	3.1	3.2	3.2
Korea, Republic of	1.0	1.1	1.1	-	-	-	1.4	1.4	1.5
Malaysia	2.4	1.0	1.5	19.3	18.8	18.4	3.9	4.2	4.7
Pakistan	2.4	2.7	2.8	0.2	0.1	0.1	4.0	4.5	4.6
Philippines	0.6	0.7	0.6	1.0	0.9	0.9	1.4	1.6	1.6
Singapore	0.9	0.8	0.8	0.2	0.2	0.2	0.7	0.7	0.6
Turkey	1.5	1.8	1.9	0.5	0.8	0.8	2.5	2.9	3.0
AFRICA	**8.5**	**9.4**	**9.3**	**1.6**	**1.5**	**1.6**	**14.3**	**15.4**	**15.7**
Algeria	0.6	0.5	0.6	-	0.1	-	0.7	0.7	0.7
Egypt	1.8	2.1	1.8	0.4	0.4	0.3	1.9	2.2	2.2
Nigeria	1.0	1.1	1.2	0.1	0.1	0.1	2.8	3.0	3.0
South Africa	0.9	0.9	0.8	0.1	0.1	0.1	1.2	1.4	1.4
CENTRAL AMERICA	**2.5**	**2.5**	**2.6**	**0.8**	**1.0**	**1.0**	**4.8**	**5.0**	**5.1**
Mexico	1.3	1.4	1.4	0.1	-	-	3.2	3.3	3.4
SOUTH AMERICA	**2.8**	**3.2**	**3.3**	**8.7**	**8.5**	**9.3**	**15.2**	**16.9**	**18.1**
Argentina	0.1	-	-	5.4	5.0	5.7	3.3	4.1	4.1
Brazil	0.6	0.7	0.7	1.9	1.5	1.6	7.7	8.1	9.2
NORTH AMERICA	**4.6**	**4.9**	**4.9**	**6.9**	**6.4**	**6.5**	**18.8**	**19.6**	**19.6**
Canada	0.6	0.5	0.6	3.2	3.2	3.2	1.2	1.3	1.4
United States of America	4.1	4.4	4.4	3.6	3.2	3.3	17.6	18.3	18.3
EUROPE	**13.2**	**14.0**	**13.7**	**7.7**	**10.5**	**9.8**	**36.4**	**37.5**	**37.7**
European Union	10.8	11.5	11.1	2.9	3.0	3.1	30.1	31.2	31.2
Russian Federation	1.1	1.1	1.2	1.3	2.5	2.2	4.0	4.2	4.3
Ukraine	0.3	0.3	0.3	3.2	4.4	4.0	1.0	0.9	0.9
OCEANIA	**0.6**	**0.7**	**0.7**	**1.8**	**1.8**	**1.9**	**1.1**	**1.3**	**1.3**
Australia	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.9	1.0
WORLD	**73.3**	**78.0**	**79.3**	**73.3**	**77.9**	**79.3**	**183.3**	**199.0**	**203.9**
Developing countries	52.4	55.6	57.3	57.4	59.7	61.7	121.7	135.0	139.5
Developed countries	21.0	22.4	21.9	15.9	18.2	17.6	61.6	64.0	64.3
LIFDCs	31.9	35.2	35.9	4.1	4.2	4.0	73.0	79.8	81.6
LDCs	5.2	6.0	6.2	0.4	0.4	0.5	8.3	9.1	9.3

[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		
	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*	10/11-12/13 average	2013/14 *estim.*	2014/15 *f'cast*
ASIA	**31.4**	**34.8**	**35.9**	**15.5**	**16.0**	**14.7**	**131.2**	**144.4**	**151.7**
China	3.2	2.9	2.7	1.4	2.4	2.0	71.4	79.6	83.1
of which Taiwan Prov.	0.5	0.5	0.6	-	-	-	2.4	2.4	2.4
India	0.2	0.2	0.3	5.7	4.3	3.1	12.0	12.4	13.1
Indonesia	3.5	4.3	4.4	3.4	4.1	4.3	5.3	6.4	6.8
Japan	2.6	2.6	2.4	-	-	-	6.7	6.5	6.5
Korea, Republic of	3.5	4.0	4.0	0.1	0.2	0.2	4.7	5.0	5.1
Malaysia	1.2	1.4	1.5	2.5	2.6	2.6	1.9	2.1	2.2
Pakistan	0.7	0.8	1.1	0.2	0.2	0.3	3.3	3.7	3.9
Philippines	2.0	2.4	2.5	0.5	0.5	0.5	2.4	2.8	2.9
Saudi Arabia	0.7	0.8	0.9	-	-	-	0.7	0.9	0.9
Thailand	3.2	3.2	3.5	0.1	0.2	0.1	5.4	5.6	5.7
Turkey	1.7	2.3	2.5	0.2	0.2	0.1	3.9	5.0	5.7
Viet Nam	3.5	3.7	4.0	0.1	0.2	0.2	4.3	4.8	5.3
AFRICA	**4.7**	**5.5**	**6.2**	**0.9**	**1.0**	**1.0**	**11.1**	**12.3**	**12.9**
Egypt	1.0	1.1	1.3	-	-	-	2.5	2.7	2.9
South Africa	1.2	1.1	1.2	0.1	0.1	0.1	1.9	2.2	2.2
CENTRAL AMERICA	**3.4**	**3.4**	**3.7**	**0.2**	**0.2**	**0.2**	**8.2**	**8.4**	**8.6**
Mexico	1.8	1.7	2.0	0.1	0.1	0.1	6.1	6.2	6.3
SOUTH AMERICA	**4.9**	**5.3**	**5.5**	**45.1**	**45.9**	**49.9**	**23.6**	**26.2**	**28.0**
Argentina	-	-	-	27.0	26.2	29.5	2.5	3.8	5.0
Bolivia	-	-	-	1.4	1.8	1.8	0.1	0.1	0.2
Brazil	0.2	-	-	14.0	14.0	14.6	14.6	15.4	15.7
Chile	1.0	1.2	1.3	0.3	0.3	0.3	1.4	1.6	1.7
Paraguay	-	-	-	1.1	2.5	2.6	0.4	0.4	0.4
Peru	0.9	0.9	0.9	1.2	1.0	1.0	1.0	1.1	1.1
Venezuela	1.3	1.4	1.5	-	-	-	1.4	1.5	1.6
NORTH AMERICA	**4.2**	**5.0**	**4.9**	**13.6**	**15.4**	**16.4**	**34.9**	**35.0**	**36.1**
Canada	1.2	1.1	1.1	4.1	4.6	4.5	2.3	2.3	2.0
United States of America	3.1	3.9	3.8	9.6	10.9	11.9	32.7	32.7	34.1
EUROPE	**31.2**	**30.0**	**30.9**	**6.6**	**8.0**	**7.7**	**61.5**	**64.7**	**67.1**
European Union	28.5	27.3	28.1	1.4	1.1	1.2	54.0	56.0	57.5
Russian Federation	0.6	0.6	0.7	1.6	2.6	2.5	4.2	5.0	5.6
Ukraine	-	-	-	3.1	3.9	3.5	0.9	1.3	1.6
OCEANIA	**2.4**	**2.9**	**3.2**	**0.2**	**0.2**	**0.2**	**3.1**	**3.7**	**4.0**
Australia	0.8	0.9	1.2	0.1	0.1	0.1	1.3	1.7	1.9
WORLD	**82.2**	**86.8**	**90.2**	**82.2**	**86.8**	**90.2**	**273.6**	**294.7**	**308.5**
Developing countries	40.0	44.7	47.2	61.5	63.0	65.7	163.6	180.6	190.6
Developed countries	42.2	42.1	43.0	20.7	23.8	24.5	110.0	114.1	118.0
LIFDCs	8.8	9.6	10.1	9.0	8.7	7.3	96.0	105.7	111.0
LDCs	0.6	0.7	0.8	0.4	0.5	0.5	3.8	4.0	4.1

[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: **SUGAR** STATISTICS (*million tonnes, raw value*)

	Production		Imports		Exports		Utilization	
	2013/14 *estim.*	2014/15 *f'cast*	2013/14 *estim.*	2014/15 *f'cast*	2013/14 *estim.*	2014/15 *f'cast*	2013/14 *estim.*	2014/15 *f'cast*
ASIA	**69.3**	**68.3**	**32.2**	**32.0**	**13.5**	**13.6**	**83.9**	**85.7**
China	13.9	11.4	5.3	4.9	0.3	0.1	17.6	18.1
India	26.6	28.5	1.3	1.2	2.7	2.1	26.3	26.6
Indonesia	2.7	2.8	3.5	4.1	-	-	5.9	6.1
Japan	0.7	0.7	1.5	1.5	-	-	2.2	2.2
Korea, Republic of	-	-	1.6	1.7	0.3	0.3	1.4	1.4
Malaysia	-	-	1.6	1.9	0.1	0.1	1.8	1.8
Pakistan	5.4	5.3	0.1	0.1	0.6	0.7	4.8	4.9
Philippines	2.4	2.5	-	-	0.4	0.3	2.1	2.2
Thailand	11.3	10.8	-	-	6.4	7.5	2.7	3.4
Turkey	2.5	2.5	-	-	0.1	0.1	2.5	2.5
Viet Nam	1.7	1.7	0.1	0.1	0.1	0.2	1.6	1.7
AFRICA	**12.4**	**12.5**	**10.3**	**10.7**	**3.2**	**3.3**	**19.8**	**20.3**
Algeria	-	-	2.0	1.9	0.5	0.5	1.3	1.3
Egypt	2.1	2.1	1.3	1.5	0.1	0.1	3.4	3.6
Ethiopia	0.4	0.4	0.2	0.2	-	-	0.5	0.6
Kenya	0.6	0.7	0.2	0.2	-	-	0.9	0.9
Mauritius	0.4	0.4	-	-	0.4	0.3	0.1	0.1
Morocco	0.4	0.5	0.8	1.0	-	-	1.3	1.4
Mozambique	0.5	0.5	-	-	0.3	0.3	0.2	0.2
South Africa	2.4	2.3	0.3	0.3	0.5	0.8	2.3	2.4
Sudan	0.9	1.0	0.8	0.8	-	-	1.7	1.7
Swaziland	0.7	0.7	-	-	0.6	0.6	0.1	0.1
Tanzania, United Rep. of	0.4	0.4	0.2	0.2	-	-	0.5	0.6
Zambia								
CENTRAL AMERICA	**14.5**	**14.6**	**0.6**	**0.6**	**7.1**	**6.5**	**8.8**	**8.7**
Cuba	1.7	1.8	-	-	0.9	1.1	0.6	0.7
Dominican Republic	0.6	0.6	-	-	0.2	0.2	0.5	0.5
Guatemala	2.9	2.9	0.1	0.1	1.9	2.1	0.9	0.9
Mexico	6.5	6.4	0.1	0.2	2.6	1.8	4.7	4.8
SOUTH AMERICA	**47.0**	**45.8**	**2.2**	**2.3**	**26.4**	**26.4**	**21.5**	**22.0**
Argentina	2.1	2.2	-	-	0.4	0.4	1.8	1.8
Brazil	39.0	37.5	-	-	24.7	24.7	12.9	13.1
Colombia	2.4	2.5	0.4	0.4	0.8	0.8	1.9	2.2
Peru	1.1	1.1	0.3	0.4	-	-	1.4	1.4
Venezuela	0.6	0.6	0.6	0.7	-	-	1.2	1.3
NORTH AMERICA	**7.3**	**7.7**	**4.3**	**4.5**	**0.3**	**0.3**	**12.2**	**12.2**
United States of America	7.2	7.6	2.9	2.8	0.2	0.2	10.7	10.7
EUROPE	**25.5**	**27.4**	**5.5**	**4.8**	**1.9**	**2.0**	**29.3**	**29.2**
European Union	17.1	19.1	3.4	3.0	1.3	1.4	19.3	19.4
Russian Federation	4.8	4.8	1.1	0.9	-	-	6.0	6.1
Ukraine	1.9	2.3	-	-	0.1	0.1	2.0	2.1
OCEANIA	**4.6**	**4.8**	**0.3**	**0.3**	**3.1**	**3.2**	**1.5**	**1.6**
Australia	4.4	4.6	-	-	2.9	3.0	1.1	1.2
Fiji	0.2	0.2	-	-	0.1	0.1	-	-
WORLD	**180.6**	**181.0**	**55.4**	**55.3**	**55.4**	**55.3**	**176.9**	**179.8**
Developing countries	140.3	138.4	41.2	41.6	49.7	49.1	127.0	129.9
Developed countries	40.3	42.7	14.2	13.7	5.7	6.2	49.9	49.8
LIFDCs	36.1	38.2	15.0	13.8	4.5	3.8	45.6	46.1
LDCs	4.3	4.4	10.3	9.0	1.0	0.9	11.0	11.3

APPENDIX TABLE 14: TOTAL **MEAT** STATISTICS[1]
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*
ASIA	**134 108**	**135 727**	**15 833**	**16 261**	**4 500**	**4 731**	**145 441**	**147 257**
China	87 741	88 390	4 663	4 828	730	753	91 674	92 465
India	6 316	6 530	1	1	1 966	2 048	4 350	4 483
Indonesia	3 340	3 401	103	98	5	5	3 438	3 494
Iran, Islamic Republic of	2 595	2 694	142	157	75	93	2 662	2 758
Japan	3 262	3 287	3 214	3 175	15	14	6 460	6 448
Korea, Republic of	2 232	2 277	1 002	1 058	29	31	3 204	3 304
Malaysia	1 646	1 675	289	294	50	50	1 885	1 919
Pakistan	3 092	3 171	19	24	64	72	3 047	3 122
Philippines	3 135	3 155	440	451	18	19	3 556	3 587
Saudi Arabia	821	829	1 036	1 068	62	66	1 795	1 832
Singapore	118	119	331	355	28	30	421	444
Thailand	2 712	2 795	40	41	851	879	1 901	1 956
Turkey	3 106	3 145	3	4	450	502	2 659	2 647
Viet Nam	4 328	4 413	1 783	1 886	22	26	6 089	6 273
AFRICA	**17 087**	**17 286**	**2 866**	**2 991**	**239**	**269**	**19 714**	**20 007**
Algeria	742	747	102	102	1	1	843	849
Angola	267	274	693	766	-	-	960	1 039
Egypt	2 097	2 089	333	329	16	10	2 414	2 408
Nigeria	1 464	1 494	4	4	1	1	1 468	1 497
South Africa	2 821	2 848	459	459	148	184	3 131	3 122
CENTRAL AMERICA	**8 872**	**9 030**	**2 820**	**2 872**	**505**	**539**	**11 187**	**11 364**
Cuba	304	303	244	230	-	-	549	533
Mexico	6 184	6 301	1 848	1 907	274	285	7 758	7 923
SOUTH AMERICA	**42 050**	**42 765**	**1 197**	**1 139**	**8 128**	**8 497**	**35 118**	**35 407**
Argentina	5 274	5 359	14	15	562	565	4 726	4 809
Brazil	26 348	26 806	85	93	6 546	6 852	19 887	20 048
Chile	1 457	1 458	362	356	289	286	1 530	1 528
Colombia	2 396	2 421	134	143	14	12	2 517	2 552
Uruguay	650	683	40	38	348	371	342	349
Venezuela	2 073	2 146	468	397	-	-	2 540	2 542
NORTH AMERICA	**46 854**	**47 481**	**2 775**	**2 678**	**9 252**	**9 242**	**40 377**	**40 917**
Canada	4 491	4 581	769	766	1 717	1 723	3 542	3 624
United States of America	42 362	42 899	1 995	1 900	7 535	7 519	36 822	37 280
EUROPE	**59 470**	**60 324**	**3 767**	**3 661**	**4 797**	**4 872**	**58 440**	**59 113**
Belarus	1 147	1 159	86	110	312	325	921	944
European Union	45 515	46 079	1 291	1 325	4 037	4 106	42 769	43 297
Russian Federation	8 615	8 886	1 880	1 719	143	129	10 352	10 475
Ukraine	2 559	2 564	109	111	206	212	2 463	2 463
OCEANIA	**6 242**	**6 089**	**443**	**455**	**3 225**	**3 026**	**3 460**	**3 518**
Australia	4 500	4 325	222	234	2 253	2 057	2 470	2 502
New Zealand	1 235	1 255	70	70	969	966	336	359
WORLD	**314 683**	**318 701**	**29 700**	**30 056**	**30 645**	**31 176**	**313 737**	**317 582**
Developing countries	192 914	195 470	18 658	19 243	13 197	13 826	198 375	200 888
Developed countries	121 769	123 231	11 042	10 814	17 448	17 350	115 362	116 694
LIFDCs	22 204	22 637	1 845	1 922	2 138	2 241	21 911	22 318
LDCs	10 011	10 179	1 683	1 816	11	12	11 683	11 983

[1] Including "other meat".

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

	Production		Imports		Exports		Utilization	
	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*
ASIA	**17 611**	**17 683**	**4 609**	**4 852**	**2 183**	**2 269**	**20 045**	**20 305**
China	6 546	6 459	1 189	1 340	43	42	7 713	7 767
India	2 621	2 678	-	1	1 933	2 010	688	668
Indonesia	591	601	93	86	-	1	683	686
Iran, Islamic Republic of	253	254	127	140	4	3	377	391
Japan	495	482	737	731	2	2	1 221	1 221
Korea, Republic of	330	325	346	365	5	5	671	701
Malaysia	31	31	194	202	13	12	211	221
Pakistan	1 680	1 735	5	4	29	33	1 656	1 707
Philippines	290	286	142	145	4	3	427	428
AFRICA	**6 161**	**6 229**	**764**	**763**	**76**	**100**	**6 850**	**6 892**
Algeria	135	132	94	95	-	-	229	228
Angola	107	108	143	150	-	-	250	258
Egypt	870	860	300	300	2	1	1 168	1 159
South Africa	860	862	30	29	45	70	846	820
CENTRAL AMERICA	**2 468**	**2 509**	**381**	**378**	**310**	**338**	**2 538**	**2 549**
Mexico	1 770	1 782	223	220	133	138	1 860	1 864
SOUTH AMERICA	**15 776**	**16 017**	**462**	**422**	**2 740**	**2 927**	**13 488**	**13 517**
Argentina	2 809	2 848	-	1	215	230	2 594	2 618
Brazil	9 820	9 973	71	80	1 839	1 950	8 052	8 103
Chile	209	211	224	220	5	5	428	426
Colombia	840	835	4	4	11	9	833	831
Uruguay	525	550	3	2	308	330	220	221
Venezuela	510	512	144	100	-	-	644	617
NORTH AMERICA	**12 280**	**12 028**	**1 507**	**1 428**	**1 562**	**1 531**	**12 288**	**11 921**
Canada	1 160	1 163	280	275	343	341	1 110	1 098
United States of America	11 120	10 864	1 224	1 150	1 218	1 190	11 175	10 820
EUROPE	**10 453**	**10 590**	**1 263**	**1 209**	**516**	**502**	**11 201**	**11 297**
European Union	7 661	7 788	327	323	315	335	7 674	7 776
Russian Federation	1 654	1 687	830	780	46	19	2 438	2 448
Ukraine	459	443	3	4	18	16	445	430
OCEANIA	**3 013**	**2 861**	**60**	**59**	**2 209**	**2 108**	**934**	**814**
Australia	2 423	2 251	12	12	1 680	1 560	825	706
New Zealand	570	590	17	14	526	545	61	59
WORLD	**67 762**	**67 916**	**9 046**	**9 111**	**9 596**	**9 774**	**67 344**	**67 296**
Developing countries	38 834	39 234	5 297	5 507	5 261	5 559	38 878	39 216
Developed countries	28 927	28 682	3 749	3 604	4 335	4 215	28 467	28 079
LIFDCs	8 102	8 243	297	295	2 071	2 167	6 328	6 371
LDCs	3 485	3 533	218	229	3	3	3 700	3 758

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

	Production		Imports		Exports		Utilization	
	2014 *estim.*	**2015** *f'cast*	**2014** *estim.*	**2015** *f'cast*	**2014** *estim.*	**2015** *f'cast*	**2014** *estim.*	**2015** *f'cast*
ASIA	**8 102**	**8 191**	**643**	**577**	**45**	**53**	**8 700**	**8 716**
Bangladesh	210	213	-	-	-	-	210	213
China	4 128	4 178	327	273	2	1	4 453	4 450
India	741	732	-	-	23	27	718	706
Iran, Islamic Republic of	280	291	2	7	-	-	282	298
Pakistan	464	467	-	-	13	15	451	452
Saudi Arabia	132	134	60	55	3	3	189	186
Turkey	360	366	1	1	-	-	361	367
AFRICA	**3 064**	**3 101**	**33**	**31**	**36**	**37**	**3 061**	**3 095**
Algeria	308	315	5	3	-	-	313	318
Nigeria	481	487	-	-	-	-	481	487
South Africa	181	182	10	10	2	1	189	191
Sudan	482	483	-	-	6	6	477	478
CENTRAL AMERICA	**125**	**124**	**21**	**22**	**-**	**-**	**145**	**146**
Mexico	96	95	11	13	-	-	107	108
SOUTH AMERICA	**322**	**324**	**10**	**8**	**26**	**25**	**305**	**307**
Brazil	117	116	10	8	-	-	127	124
NORTH AMERICA	**91**	**92**	**118**	**104**	**4**	**5**	**205**	**191**
United States of America	74	75	98	85	4	5	167	155
EUROPE	**1 217**	**1 224**	**176**	**174**	**36**	**38**	**1 357**	**1 360**
European Union	898	901	156	157	28	30	1 026	1 028
Russian Federation	191	191	10	8	-	-	201	200
OCEANIA	**987**	**964**	**28**	**23**	**880**	**781**	**135**	**205**
Australia	575	558	1	1	482	408	94	152
New Zealand	411	405	4	3	398	374	17	34
WORLD	**13 907**	**14 019**	**1 028**	**941**	**1 028**	**940**	**13 908**	**14 020**
Developing countries	10 796	10 913	696	628	105	114	11 387	11 427
Developed countries	3 111	3 107	332	313	922	826	2 521	2 593
LIFDCs	3 698	3 728	25	22	31	35	3 692	3 715
LDCs	1 896	1 919	6	6	6	6	1 896	1 919

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

	Production		Imports		Exports		Utilization	
	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*
ASIA	**68 019**	**68 867**	**3 753**	**3 852**	**299**	**315**	**71 424**	**72 611**
China	57 091	57 768	1 346	1 413	200	213	58 212	59 168
India	355	357	1	1	-	-	355	357
Indonesia	744	748	3	3	-	-	747	750
Japan	1 273	1 295	1 351	1 300	2	2	2 588	2 592
Korea, D.P.R.	113	114	3	3	-	-	116	117
Korea, Republic of	1 200	1 240	486	520	3	3	1 695	1 766
Malaysia	230	230	16	15	6	5	240	239
Philippines	1 701	1 724	122	121	3	3	1 821	1 842
Thailand	980	985	4	3	34	35	950	953
Viet Nam	3 284	3 352	183	213	22	25	3 446	3 540
AFRICA	**1 326**	**1 356**	**317**	**331**	**33**	**32**	**1 610**	**1 655**
Madagascar	59	60	-	-	-	-	59	60
Nigeria	255	257	1	1	-	-	256	258
South Africa	221	225	25	22	24	25	222	221
Uganda	118	120	1	1	-	-	118	120
CENTRAL AMERICA	**1 806**	**1 854**	**894**	**919**	**146**	**150**	**2 554**	**2 624**
Cuba	194	191	15	17	-	-	209	208
Mexico	1 285	1 335	711	735	127	131	1 870	1 939
SOUTH AMERICA	**5 485**	**5 692**	**190**	**193**	**807**	**821**	**4 868**	**5 065**
Argentina	450	485	11	8	1	1	460	492
Brazil	3 344	3 494	2	2	646	661	2 700	2 836
Chile	553	554	44	41	157	155	440	440
Colombia	245	249	71	82	-	-	316	331
Venezuela	250	260	8	6	-	-	258	266
NORTH AMERICA	**12 377**	**13 051**	**792**	**784**	**3 303**	**3 337**	**9 885**	**10 493**
Canada	2 008	2 051	239	240	1 176	1 181	1 074	1 115
United States of America	10 368	11 000	548	540	2 127	2 155	8 807	9 374
EUROPE	**27 663**	**28 077**	**739**	**714**	**2 388**	**2 437**	**26 014**	**26 354**
Belarus	443	451	41	61	79	86	405	426
European Union	22 681	22 964	15	15	2 222	2 259	20 475	20 720
Russian Federation	3 013	3 157	535	480	32	33	3 517	3 604
Serbia	242	240	29	31	26	27	245	244
Ukraine	809	790	40	51	12	16	838	825
OCEANIA	**497**	**501**	**262**	**278**	**35**	**33**	**719**	**745**
Australia	365	365	192	202	34	32	518	535
Papua New Guinea	73	72	8	9	-	-	81	81
WORLD	**117 173**	**119 398**	**6 947**	**7 072**	**7 011**	**7 124**	**117 075**	**119 548**
Developing countries	75 046	76 147	3 742	3 938	1 259	1 289	77 515	79 005
Developed countries	42 127	43 251	3 205	3 134	5 752	5 835	39 561	40 543
LIFDCs	3 307	3 355	286	287	7	8	3 586	3 634
LDCs	1 570	1 593	238	259	1	1	1 807	1 851

APPENDIX TABLE 18: **POULTRY MEAT** STATISTICS
(*thousand tonnes, carcass weight equivalent*)

	Production		Imports		Exports		Utilization	
	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*	2014 *estim.*	2015 *f'cast*
ASIA	**38 431**	**39 030**	**6 776**	**6 929**	**1 948**	**2 070**	**43 248**	**43 902**
China	18 500	18 500	1 795	1 796	471	483	19 823	19 814
India	2 451	2 614	-	-	9	9	2 442	2 605
Indonesia	1 889	1 935	2	3	-	-	1 891	1 937
Iran, Islamic Republic of	2 045	2 132	10	7	68	88	1 987	2 052
Japan	1 481	1 497	1 089	1 110	11	10	2 540	2 594
Korea, Republic of	690	700	154	158	21	23	812	842
Kuwait	41	43	125	123	-	-	166	165
Malaysia	1 383	1 412	49	51	31	32	1 401	1 430
Saudi Arabia	580	586	810	840	30	32	1 360	1 394
Singapore	99	100	143	146	9	10	233	236
Thailand	1 540	1 620	10	8	773	803	796	835
Turkey	1 806	1 820	-	-	415	465	1 392	1 355
Yemen	151	149	130	132	-	-	281	281
AFRICA	**5 101**	**5 158**	**1 719**	**1 833**	**86**	**94**	**6 733**	**6 897**
Angola	34	35	387	435	-	-	420	470
South Africa	1 536	1 557	394	398	71	82	1 858	1 873
CENTRAL AMERICA	**4 354**	**4 422**	**1 505**	**1 534**	**47**	**49**	**5 813**	**5 907**
Cuba	31	33	210	194	-	-	241	227
Mexico	2 930	2 987	889	925	13	15	3 806	3 897
SOUTH AMERICA	**20 223**	**20 525**	**533**	**514**	**4 488**	**4 658**	**16 268**	**16 380**
Argentina	1 830	1 840	2	6	311	300	1 521	1 546
Brazil	13 035	13 191	3	3	4 037	4 216	9 001	8 978
Chile	670	668	94	95	117	116	647	647
Venezuela	1 300	1 360	316	290	-	-	1 616	1 650
NORTH AMERICA	**21 857**	**22 060**	**347**	**349**	**4 346**	**4 331**	**17 861**	**18 058**
Canada	1 283	1 326	226	229	178	180	1 313	1 365
United States of America	20 574	20 734	117	116	4 168	4 150	16 543	16 689
EUROPE	**18 943**	**19 240**	**1 422**	**1 397**	**1 772**	**1 811**	**18 593**	**18 828**
European Union	13 232	13 383	692	730	1 390	1 400	12 534	12 713
Russian Federation	3 666	3 760	458	403	64	77	4 060	4 088
Ukraine	1 242	1 283	64	56	176	181	1 131	1 158
OCEANIA	**1 318**	**1 332**	**89**	**91**	**60**	**62**	**1 347**	**1 361**
Australia	1 116	1 129	17	18	44	44	1 088	1 102
New Zealand	176	176	1	1	16	18	160	159
WORLD	**110 227**	**111 767**	**12 392**	**12 647**	**12 747**	**13 075**	**109 863**	**111 335**
Developing countries	64 268	65 222	8 832	9 081	6 478	6 770	66 630	67 549
Developed countries	45 959	46 546	3 560	3 566	6 269	6 305	43 233	43 786
LIFDCs	5 525	5 730	1 208	1 288	27	28	6 707	6 991
LDCs	2 417	2 488	1 195	1 297	2	2	3 610	3 783

APPENDIX TABLE 19: **MILK AND MILK PRODUCTS** STATISTICS
(*thousand tonnes, milk equivalent*)

	Production			Imports			Exports		
	2011-2013 average	2014 *estim.*	2015 *f'cast*	2011-2013 average	2014 *estim.*	2015 *f'cast*	2011-2013 average	2014 *estim.*	2015 *f'cast*
ASIA	**285 917**	**302 700**	**313 370**	**35 236**	**40 985**	**42 877**	**6 419**	**6 645**	**6 570**
China	41 707	42 513	44 216	9 991	13 183	13 933	241	249	233
India[1]	131 978	141 702	147 795	227	93	88	585	670	528
Indonesia	1 377	1 400	1 450	2 499	2 530	2 577	106	105	98
Iran, Islamic Republic of	7 624	7 700	7 800	499	470	501	373	551	571
Japan	7 537	7 315	7 350	1 712	1 815	1 811	6	6	6
Korea, Republic of	2 035	2 073	2 065	911	886	878	14	24	25
Malaysia	84	86	86	1 662	2 086	2 250	413	640	641
Pakistan	37 830	40 000	41 000	434	422	438	78	89	89
Philippines	18	22	23	1 716	1 580	1 707	210	76	77
Saudi Arabia	2 298	2 380	2 400	2 455	3 143	3 316	1 551	1 199	1 169
Singapore	-	-	-	1 722	1 865	1 878	615	609	606
Thailand	1 033	1 125	1 300	1 379	1 477	1 586	238	186	186
Turkey	16 895	19 500	20 500	160	229	256	409	649	726
AFRICA	**45 089**	**46 198**	**46 612**	**9 235**	**9 842**	**10 176**	**1 132**	**1 283**	**1 289**
Algeria	2 923	3 200	3 300	2 506	3 115	3 298	3	3	3
Egypt	5 842	5 950	6 000	1 650	1 378	1 424	656	566	581
Kenya	4 943	4 950	4 940	38	48	52	24	16	18
South Africa	3 341	3 450	3 500	223	209	198	153	403	394
Sudan	7 514	7 580	7 600	276	262	266	-	-	-
Tunisia	1 139	1 190	1 200	101	100	103	45	38	38
CENTRAL AMERICA	**16 485**	**17 099**	**17 367**	**4 880**	**4 821**	**4 917**	**634**	**704**	**704**
Costa Rica	1 016	1 100	1 125	49	58	59	165	174	175
Mexico	11 014	11 296	11 454	2 946	2 861	2 927	155	182	178
SOUTH AMERICA	**67 231**	**70 586**	**71 549**	**3 579**	**3 280**	**3 302**	**4 565**	**4 405**	**4 239**
Argentina	11 414	11 680	11 119	97	43	46	2 598	2 144	2 021
Brazil	33 036	35 450	36 680	1 037	698	654	90	407	366
Colombia	6 408	6 500	6 550	152	202	182	21	18	28
Uruguay	2 118	2 100	2 120	20	30	30	1 286	1 180	1 145
Venezuela	2 552	2 700	2 750	1 536	1 447	1 557	-	-	-
NORTH AMERICA	**98 838**	**101 892**	**104 738**	**1 982**	**2 393**	**2 349**	**9 582**	**11 130**	**11 251**
Canada	8 453	8 360	8 485	544	721	712	419	573	587
United States of America	90 384	93 531	96 252	1 422	1 657	1 622	9 161	10 556	10 662
EUROPE	**212 709**	**219 540**	**220 100**	**6 813**	**6 440**	**6 082**	**22 314**	**25 413**	**26 558**
Belarus	6 636	6 600	6 716	44	237	231	3 555	4 356	4 394
European Union	152 667	160 400	162 400	1 378	1 576	1 552	15 948	17 727	18 679
Russian Federation	31 304	30 800	29 284	4 424	3 736	3 398	96	263	281
Ukraine	11 317	11 510	11 470	181	144	142	919	777	803
OCEANIA	**27 899**	**30 517**	**30 780**	**847**	**931**	**923**	**20 730**	**22 603**	**23 507**
Australia[2]	9 368	9 830	10 030	575	635	634	3 633	3 462	3 652
New Zealand[3]	18 461	20 617	20 680	71	89	79	17 093	19 138	19 852
WORLD	**754 167**	**788 533**	**804 517**	**62 572**	**68 692**	**70 626**	**65 376**	**72 182**	**74 118**
Developing countries	382 891	403 832	415 640	50 533	56 141	57 990	12 532	12 609	12 320
Developed countries	371 276	384 701	388 877	12 052	12 426	12 023	52 856	59 476	61 216
LIFDCs	179 828	191 306	197 813	7 446	7 399	7 668	1 347	1 381	1 224
LDCs	31 819	32 638	32 809	3 497	3 853	3 939	189	167	178

[1] Dairy years starting April of the year stated (production only).
[2] Dairy years ending June of the year stated (production only).
[3] Dairy years ending May of the year stated (production only).

Note: Trade figures refer to the milk equivalent trade in the following products: butter (6.60), cheese (4.40), 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 20: **FISH AND FISHERY PRODUCTS** STATISTICS[1]

	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2012	2013	2012	2013	2012	2013	2014 estim.	2012	2013	2014 estim.
	Million tonnes (live weight equivalent)				*USD billion*			*USD billion*		
ASIA	**50.2**	**50.9**	**59.0**	**62.5**	**51.2**	**53.8**	**56.2**	**44.2**	**42.7**	**43.8**
China[2]	17.2	17.4	41.5	43.9	20.8	22.2	23.6	12.2	12.9	13.5
of which: Hong Kong SAR	0.2	0.2	-	-	0.7	1.1	1.0	3.7	3.8	3.6
Taiwan Prov.	0.9	0.9	0.3	0.3	2.0	1.8	1.8	1.0	1.0	1.2
India	4.9	4.6	4.2	4.5	3.4	4.6	6.0	0.1	0.1	0.1
Indonesia	5.8	6.1	3.1	3.8	3.6	3.8	4.1	0.4	0.4	0.3
Japan	3.7	3.7	0.6	0.6	1.8	2.0	1.9	18.4	15.6	14.8
Korea, Rep. of	1.7	1.6	0.5	0.4	2.0	1.8	1.7	3.7	3.6	4.3
Philippines	2.3	2.3	0.8	0.8	0.8	1.2	1.1	0.2	0.2	0.2
Thailand	1.7	1.8	1.3	1.1	8.1	7.0	6.6	3.1	3.2	2.7
Viet Nam	2.7	2.8	3.1	3.2	6.3	6.8	6.9	0.8	0.9	1.0
AFRICA	**8.2**	**8.0**	**1.5**	**1.6**	**5.4**	**5.5**	**5.7**	**5.4**	**6.1**	**6.1**
Ghana	0.4	0.3	-	-	-	-	-	0.2	0.3	0.3
Morocco	1.2	1.3	-	-	1.6	1.8	1.8	0.1	0.2	0.2
Namibia	0.5	0.5	-	-	0.8	0.8	0.8	-	-	0.1
Nigeria	0.7	0.7	0.3	0.3	0.3	0.2	0.2	1.5	1.7	1.3
Senegal	0.5	0.5	-	-	0.3	0.3	0.4	-	-	-
South Africa	0.7	0.4	-	-	0.6	0.5	0.7	0.5	0.5	0.4
CENTRAL AMERICA	**2.2**	**2.2**	**0.3**	**0.4**	**2.2**	**2.4**	**2.6**	**1.7**	**2.0**	**2.2**
Mexico	1.6	1.6	0.1	0.2	1.1	1.1	1.1	0.6	0.8	0.9
Panama	0.2	0.2	-	-	0.1	0.2	0.2	0.1	0.1	0.1
SOUTH AMERICA	**10.1**	**10.3**	**2.1**	**2.1**	**12.7**	**13.6**	**15.5**	**2.8**	**3.5**	**3.6**
Argentina	0.7	0.9	-	-	1.3	1.5	1.6	0.2	0.2	0.2
Brazil	0.8	0.8	0.5	0.5	0.2	0.2	0.2	1.2	1.5	1.6
Chile	2.6	1.8	1.1	1.0	4.3	5.0	5.9	0.4	0.4	0.4
Ecuador	0.5	0.5	0.3	0.3	2.8	3.6	4.4	0.2	0.1	0.1
Peru	4.8	5.9	0.1	0.1	3.3	2.7	3.0	0.1	0.2	0.2
NORTH AMERICA	**6.2**	**6.4**	**0.6**	**0.6**	**10.4**	**10.7**	**11.1**	**20.3**	**22.0**	**25.0**
Canada	0.8	0.9	0.2	0.2	4.2	4.3	4.5	2.7	2.9	3.0
United States of America	5.1	5.2	0.4	0.4	5.8	6.0	6.1	17.6	19.0	21.9
EUROPE	**13.1**	**13.5**	**2.9**	**2.8**	**44.3**	**47.5**	**49.8**	**53.6**	**58.3**	**61.0**
European Union[2]	4.7	5.0	1.3	1.2	28.7	30.2	32.1	47.2	50.9	54.0
of which Extra -EU					5.7	5.8	6.0	24.9	26.5	28.2
Iceland	1.4	1.4	-	-	2.2	2.3	2.1	0.1	0.1	0.1
Norway	2.2	2.1	1.3	1.2	8.9	10.3	10.8	1.4	1.3	1.4
Russian Federation	4.3	4.3	0.1	0.2	3.2	3.6	3.6	2.8	3.4	3.1
OCEANIA	**1.3**	**1.2**	**0.2**	**0.2**	**3.1**	**2.9**	**3.1**	**2.0**	**2.0**	**2.3**
Australia	0.2	0.2	0.1	0.1	1.0	1.0	1.1	1.6	1.6	1.7
New Zealand	0.4	0.4	0.1	0.1	1.2	1.2	1.2	0.1	0.2	0.2
WORLD[3]	**91.3**	**92.6**	**66.5**	**70.2**	**129.3**	**136.5**	**143.9**	**130.0**	**136.6**	**144.0**
Excl. Intra-EU					106.5	112.0	118.4	107.8	112.2	118.2
Developing countries	67.2	68.1	62.2	66.0	70.5	74.0	78.7	35.5	38.4	40.8
Developed countries	24.0	24.4	4.3	4.2	58.8	62.5	65.3	94.5	98.2	103.2
LIFDCs	14.8	14.5	7.4	7.9	7.4	9.0	10.0	3.6	4.3	4.0
LDCs	9.8	10.1	3.0	3.2	2.6	2.6	2.6	0.9	1.1	1.2

[1] Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fish meal and fish oil.
[2] Including intra-trade. Cyprus is included in the European Union as well as in Asia. Starting with 2013 data, EU includes Croatia.
[3] For capture fisheries production, the aggregate includes also 32 358 tonnes in 2012 and 83 275 in 2013 of not identified countries, data not included in any other aggregates.

APPENDIX TABLE 21: 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)								
2004/05	154	138	123	97	90	129	122	99
2005/06	175	138	138	104	101	133	128	109
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	
2013/14	318	265	335	216	219	243	241	281
2014 – April	340	281	361	224	229	250	256	226
2014 – May	345	271	372	217	224	233	256	223
2014 – June	314	235	365	202	204	219	251	220
2014 – July	294	218	287	182	192	213	247	203
2014 – August	284	219	270	175	181	206	228	183
2014 – September	279	204	248	164	166	194	227	174
2014 – October	289	223	242	165	171	204	247	189
2014 – November	280	236	252	178	179	214	259	197
2014 – December	289	261	251	178	197	223	257	217
2015 – January	262	233	254	176	184	215	252	231
2015 – February	252	221	241	174	181	205	240	230
2015 – March	250	219	228	173	169	199	241	226
2015 – April	239	209	225	172	167	197	241	223

APPENDIX TABLE 22: TOTAL **WHEAT AND MAIZE** FUTURES PRICES

	May		July		September		December	
	May 2015	May 2014	Jul. 2015	Jul. 2014	Sept.2015	Sept.2014	Dec. 2015	Dec. 2014
	(USD/tonne)							
Wheat								
Mar 25	191	260	192	262	196	264	201	268
Apr 1	194	252	195	254	198	256	203	261
Apr 8	193	250	192	253	196	257	201	262
Apr 15	180	258	180	261	183	264	188	269
Apr 22	183	247	183	250	187	253	192	258
Apr 29	175	260	178	263	188	266	194	271
Maize								
Mar 25	156	192	189	193	162	192	165	191
Apr 1	150	200	153	202	157	200	160	199
Apr 8	149	200	152	202	156	201	163	202
Apr 15	148	198	151	201	154	199	158	198
Apr 22	147	195	149	198	153	196	157	195
Apr 29	143	197	145	205	148	203	152	202

Source: Chicago Board of Trade (CBOT)

APPENDIX TABLE 23: 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)*				
2009	587	329	545	937	253	224	196	317	231
2010	518	386	510	881	227	206	212	252	229
2011	565	464	577	1060	242	232	250	258	220
2012	588	540	567	1137	231	225	241	235	222
2013	534	483	628	1372	233	219	226	230	268
2014	435	322	571	1324	235	207	201	266	255
Monthly									
2014 – April	408	307	594	1350	237	205	198	268	264
2014 – May	408	298	594	1350	235	207	199	262	264
2014 – June	419	313	593	1350	236	209	202	263	265
2014 – July	439	325	574	1350	239	212	206	265	265
2014 – August	458	343	566	1430	242	215	213	263	271
2014 – September	444	336	555	1450	239	207	208	265	272
2014 – October	437	345	529	1435	235	203	204	260	268
2014 – November	427	338	540	1181	233	199	200	289	211
2014 – December	427	332	518	885	224	195	191	283	187
2015 – January	429	330	508	876	222	194	189	279	189
2015 – February	430	331	503	978	220	189	186	276	196
2015 – March	419	330	501	985	219	189	187	272	194
2015 – April	410	333	500	980	218	188	189	271	193

[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 24: SELECTED INTERNATIONAL PRICES FOR **OILCROP PRODUCTS**

Period	International prices[1]					FAO indices		
	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
Monthly								
2013 - October	544	989	866	555	318	202	188	262
2013 - November	556	992	921	541	316	206	199	257
2013 - December	568	979	907	548	336	210	196	260
2014 - January	566	935	871	539	337	208	189	256
2014 - February	594	991	911	571	361	219	198	271
2014 - March	501	1001	959	582	396	193	205	278
2014 - April	516	1005	911	563	375	198	199	269
2014 - May	522	973	896	552	340	197	195	263
2014 - June	514	933	859	531	304	192	189	251
2014 - July	480	886	839	477	272	178	181	226
2014 - August	457	855	755	485	265	170	167	229
2014 - September	433	850	714	463	265	162	162	219
2014 - October	430	835	724	463	258	161	164	218
2014 - November	447	827	728	485	265	167	165	228
2014 - December	446	816	694	449	278	168	161	213
2015 - January	421	789	681	431	279	159	156	206
2015 - February	407	775	693	412	273	154	157	197
2015 - March	402	748	673	392	262	152	152	188
2015 - April	396	753	657	380	263	151	150	183

[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.

Notes:

- The sudden drop in the FAO price index for oilseeds in March 2014 is due to a structural break in the underlying price series for soybeans (US no.2 yellow, c.i.f. Rotterdam), the component with the highest weight. A look at alternative reference prices for soybeans reveals that, during March and April 2014, international soybean values have actually appreciated further rather than falling. For a detailed explanation of the anomalous trend in the soybean reference price, please refer to issue no. 58 of the Oilcrops Monthly Price and Policy Update (MPPU), which can be downloaded through the following link. http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Oilcrops/Documents/MPPU_April_14.pdf
- The FAO indices are based on the international prices of five selected seeds, ten selected oils and five selected cakes and meals.

Sources: FAO and Oil World.

APPENDIX TABLE 25: SELECTED INTERNATIONAL PRICES FOR **SUGAR** AND **SUGAR** PRICE INDEX

	I.S.A. average of daily prices	ISO (Euronext, Liffe) white sugar price index	FAO sugar price index
	Raw Sugar	White Sugar	
Annual (Jan/Dec)	..... *(US cents/lb)*		*...(2002/04 = 100) ...*
2005	9.9	13.2	140.3
2006	14.8	19.0	209.6
2007	10.1	14.0	143.0
2008	12.8	16.1	181.6
2009	18.1	22.2	257.3
2010	21.3	27.2	302.0
2011	26.0	31.1	368.9
2012	21.5	26.3	305.7
2013	17.8	22.4	251.2
2014	17.0	20.2	241.2
Monthly			
January, 2014	15.6	19.3	221.7
February, 2014	16.6	20.6	235.4
March, 2014	17.9	21.4	254.0
April, 2014	17.6	21.2	249.9
May, 2014	18.3	21.7	259.3
June, 2014	18.2	21.6	258.0
July, 2014	18.3	20.8	259.1
August, 2014	17.2	19.9	244.3
September, 2014	16.1	19.1	228.1
October, 2014	16.7	19.4	237.6
November, 2014	16.2	19.1	229.7
December, 2014	15.3	18.1	217.5
January, 2015	15.3	18.0	217.7
February, 2015	14.6	17.4	207.1
March, 2015	13.2	16.6	187.9
April, 2015	13.1	16.7	185.5

1 International Sugar Agreement (ISA) prices: simple average of the closing quotes for the first three future positions of the New York Intercontinental Exchange (NYCE) Trade Sugar Contract no. 11.
2 ISA white sugar prices: white sugar price is a simple average of the closing quotes for the first two future positions of the White Sugar Contract in UK Euronext.liffe.

Sources: International Sugar Organization (ISO). FAO for the sugar index.

APPENDIX TABLE 26: 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	219
2008	3 701	3 251	3 891	4 633	223
2009	2 736	2 332	2 556	2 957	149
2010	4 270	3 081	3 514	4 010	207
2011	4 876	3 556	4 018	4 310	229
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
Monthly					
2014 - April	4 405	4 260	4 565	4 875	251
2014 - May	4 263	4 018	4 360	4 600	239
2014 - June	4 242	3 869	4 165	4 650	236
2014 - July	4 052	3 791	3 835	4 492	226
2014 - August	3 621	3 212	3 259	4 100	201
2014 - September	3 301	2 775	2 963	3 975	188
2014 - October	3 204	2 657	2 822	3 975	184
2014 - November	3 195	2 469	2 696	3 850	178
2014 - December	3 348	2 359	2 576	3 725	174
2015 - January	3 446	2 304	2 573	3 700	174
2015 - February	3 695	2 512	2 913	3 700	182
2015 - March	3 773	2 687	3 226	3 588	185
2015 - April	3 408	2 414	2 780	3 525	172

[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 27: 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
Monthly									
2014 – April	4 305	6 190	4 435	4 517	2 999	2 980	2 265	1 230	1 929
2014 - May	4 252	6 240	4 566	4 674	3 194	3 413	2 294	1 185	1 973
2014 - June	4 399	6 326	4 598	4 916	3 345	4 072	2 410	1 199	2 045
2014 - July	5 141	6 424	4 617	5 059	3 432	3 701	2 293	1 221	2 038
2014 – August	5 810	6 912	4 718	4 893	3 559	3 702	2 227	1 270	1 992
2014 - September	6 168	7 049	4 629	4 679	3 442	4 000	2 047	1 233	1 962
2014 - October	6 014	7 378	4 773	4 718	3 260	4 225	1 824	1 242	2 006
2014 - November	5 900	7 528	4 627	4 792	3 281	3 699	1 784	1 228	1 969
2014 - December	5 352	7 655	4 544	4 447	3 327	2 939	1 670	1 195	1 873
2015 - January	5 062	7 161	4 186	3 882	3 147	2 727	1 535	1 173	1 743
2015 - February	4 572	6 903	4 087	3 741	3 008	2 632	1 638	1 127	1 672
2015 – March	4 661	7 020	3 928	3 661	3 040	2 484	1 576	1 120	1 631
2015 - April	5 014	7 160	4 005	3 724	3 050	2 435	1 623	1 110	1 598

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 carcase grade E

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

APPENDIX TABLE 28: 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
Monthly					
2014 – April	190	212	195	161	201
2014 - May	195	213	202	171	201
2014 - June	203	217	212	185	206
2014 - July	206	231	218	178	207
2014 – August	212	250	211	178	207
2014 - September	211	257	202	173	203
2014 - October	210	260	204	165	207
2014 - November	206	258	207	158	203
2014 - December	196	249	192	147	195
2015 - January	183	233	168	137	185
2015 - February	177	220	162	137	178
2015 – March	175	221	158	134	175
2015 - April	178	229	161	135	172

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 29: **FISH** PRICE INDICES

Period	Total	Aquaculture	Capture	White fish	Salmon	Shrimp	Pelagic e/tuna	Tuna	Other fish
Annual (Jan/Dec)				*(2002-2004=100)*					
2006	117	114	119	128	144	100	124	118	120
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
Monthly									
2014 - January	161	162	155	134	179	154	220	181	177
2014 - February	158	162	150	132	173	154	217	181	175
2014 - March	164	168	155	138	176	159	200	181	190
2014 - April	162	168	151	141	176	152	200	169	187
2014 - May	155	162	143	139	165	137	174	170	185
2014 - June	150	150	145	143	153	133	170	174	156
2014 - July	149	148	150	145	156	133	213	172	173
2014 - August	152	150	153	145	146	139	256	170	198
2014 - September	157	153	160	142	143	151	214	187	195
2014 - October	158	157	159	146	143	157	236	174	201
2014 - November	158	158	158	153	149	158	196	171	186
2014 - December	156	156	156	150	155	149	222	164	196
2015 - January	150	149	151	143	143	139	244	159	198

Source= Norwegian Seafood Council.

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 30: SELECTED INTERNATIONAL COMMODITY PRICES

	Currency and unit	Effective date	Latest quotation	One month ago	One year ago	Average 2010-2014
Sugar (ISA daily price)	US cents per lb	28-04-14	17.58	18.30	17.59	20.93
Coffee (ICO daily price)	US cents per lb	27-04-15	126.05	128.39	170.58	157.75
Cocoa (ICCO daily price)	US cents per lb	27-04-15	134.27	127.07	138.37	127.08
Tea (FAO Tea Composite Price)	USD per kg	31-03-15	2.64	2.43	2.69	2.79
Cotton (COTLOOK A index)	US cents per lb	31-03-15	69.35	69.84	96.95	104.18
Jute "BTD" (Fob Bangladesh Port)	USD per tonne	22-04-15	720.00	750.00	575.00	650.71

MARKET INDICATORS

FUTURES MARKETS

Contributed by Ann Berg, Senior Commodity Analyst

Futures prices for wheat, maize and soybeans rose modestly after October 2014 but, overall, demonstrated a significant decline from the 2012/2013 and 2013/2014 crop year levels. Wheat prices exhibited a short-term surge in December 2014, as Black Sea regional tensions flared, but fell afterwards as the region's shipments continued unabated and drought conditions in the US southern plains resolved with the arrival of soaking rains. Expectations for record wheat exports particularly from the EU in 2014/2015 and competition from feed grains caused further price pressure. For soybeans, following back-to-back bumper crops in the US and South America as well as a seasonal slowdown in US exports to China, 2014/2015 prices traded 25 to 30 percent lower than the previous two years. Maize prices were similarly weighed by record supplies, as well as low energy prices. A rising US dollar against the currencies of both major and emerging markets and heightened currency volatility also restrained price increases for all three commodities.

VOLUMES AND VOLATILITY

Trade volumes generally followed seasonal crop patterns for wheat, maize and soybeans. Post-harvest hedging followed a record US maize crop, resulting in increased trade volume in the fourth quarter of 2014, with volumes reverting to more normal levels as of January 2015. In soybeans, following a record volume surge during October 2014 as large options positions were squared with futures, volumes similarly followed normal monthly patterns. Wheat volumes exhibited comparable monthly patterns.

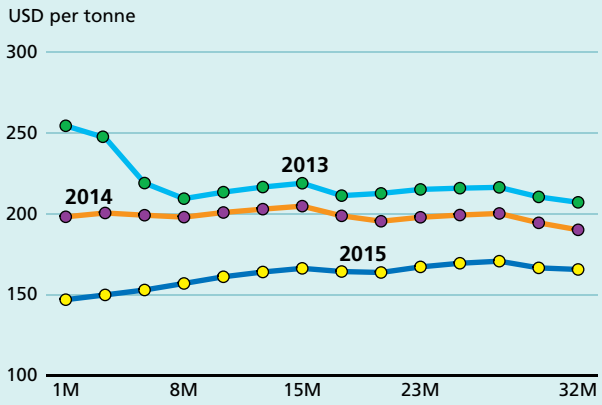
Implied volatility – calculated by the level of option premiums on underlying futures contracts – was lower for maize and soybeans than the previous two years, hovering between 15 and 25. However, implied volatility for wheat persisted in a higher range (between 25 and 30), as its price fluctuations are usually more sensitive to policy measures and political tensions than maize or soybeans.

FORWARD CURVES

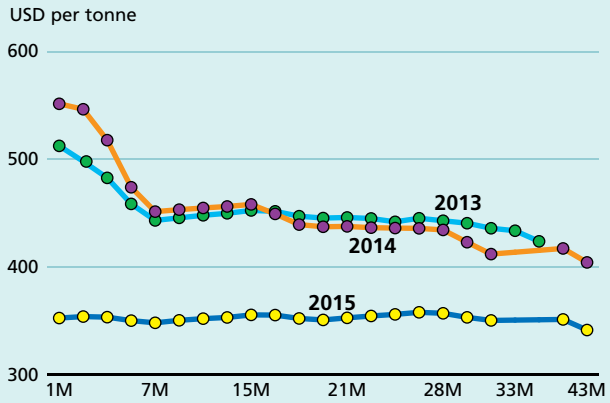
For wheat and maize, forward curves have displayed mostly upward sloping (contango) price configurations since November 2014, indicating ample supply situations for both commodities. However, forward curves in soybeans narrowed in configuration. This revealed a modest

Forward curves snapshots as of April 2012, 2013, 2014

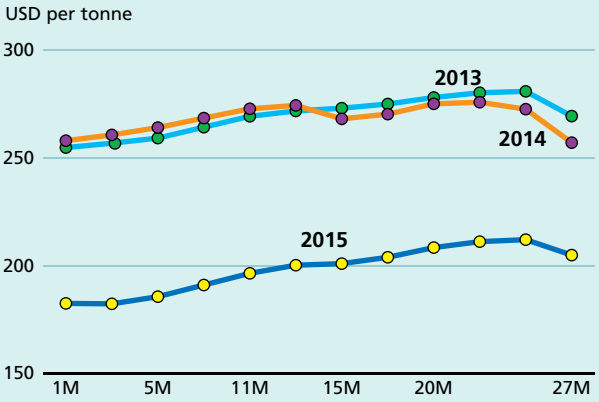
Maize



Soybeans



Wheat



downward slope (backwardation) between old and new crop months of July and November 2015, as soybean exports and domestic consumption were projected at record levels. This mild price inversion provided a stark difference from previous crop years, particularly 2013/2014, when backwardation levels were as high as USD 100 per tonne between the old and new crops, indicating an extreme end-of-year supply shortage.

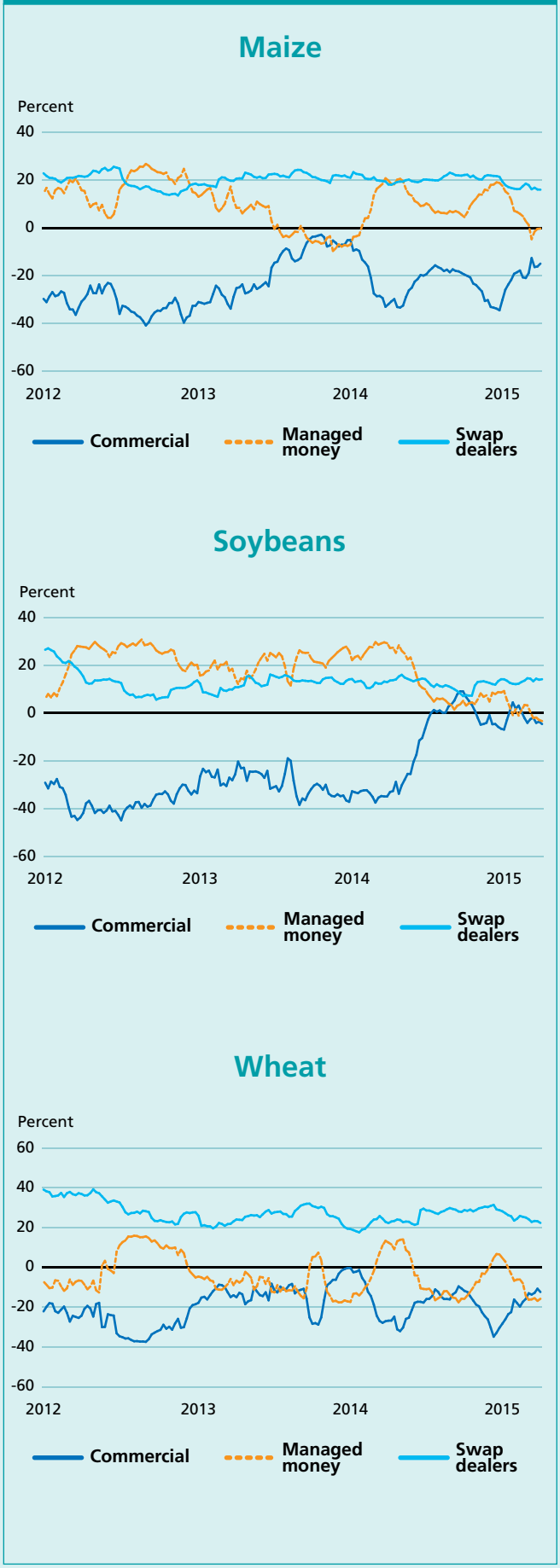
INVESTMENT FLOWS

Managed money established short positions simultaneously in wheat, maize and soybeans during March 2015 for the first time since the CFTC began publishing the disaggregated Commitment of Traders Report in 2006. An ample supply situation coupled with US dollar strength – historically correlated with low commodity prices – were the main drivers of this strategy. Notional levels in index fund investment have declined since October 2014 by about 10 percent, driven by lower prices for grains and oilseeds as well as several key commodities in the energy and industrial metals sectors.

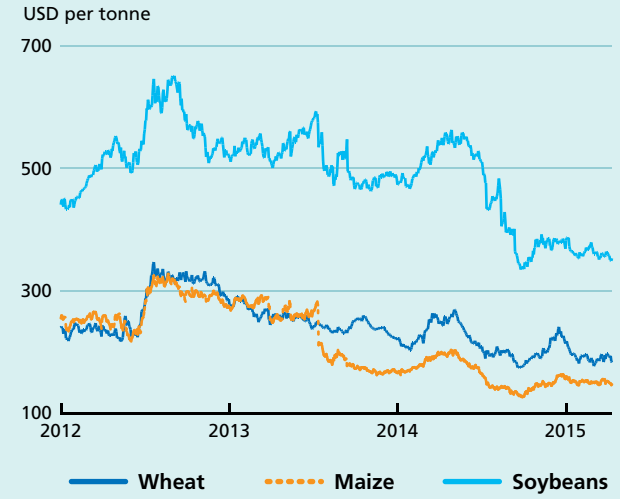
The level of notional amounts – approximately USD250 billion in both long and short index investments – has dropped fairly steadily since April 2011 when investment amounts reached USD 460 billion, according to the CFTC monthly reports on commodity futures index investments. Declining levels in wheat and maize were registered by the modest decrease in the swaps dealers categories, while unchanged levels were seen in the soybean market.

Although banks continue to wind down commodities trading activities, the sector reported profits in commodities trading in 2014, reversing three years of decline mostly attributable to volatile energy prices.

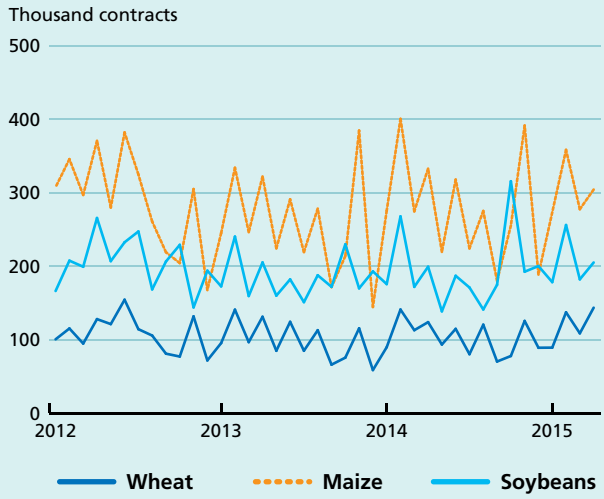
CME net-length as % of open interests (January 2011 - April 2014)



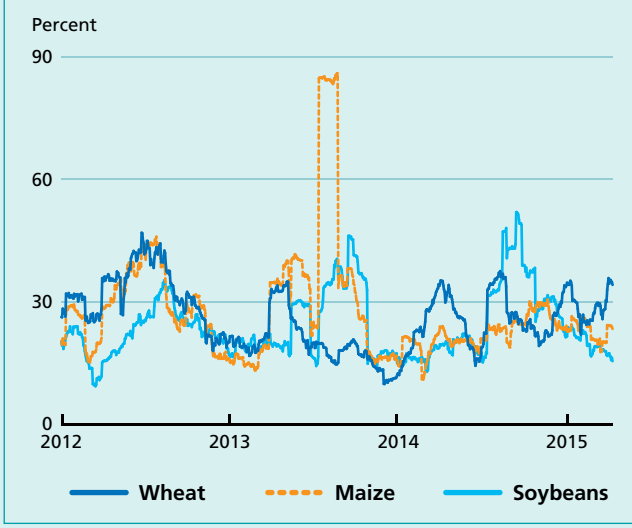
CME futures prices



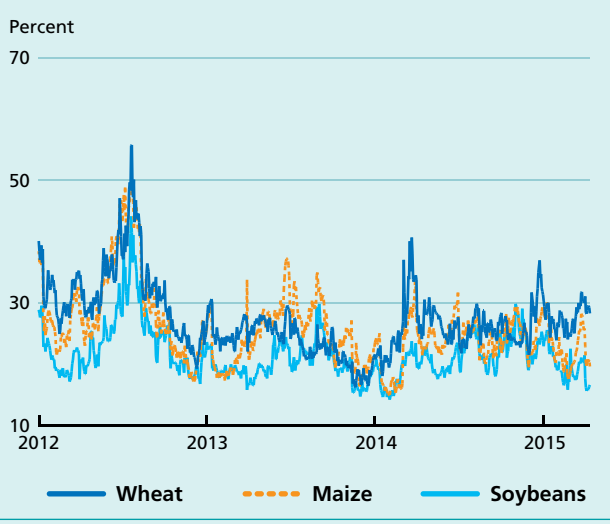
CME futures volumes



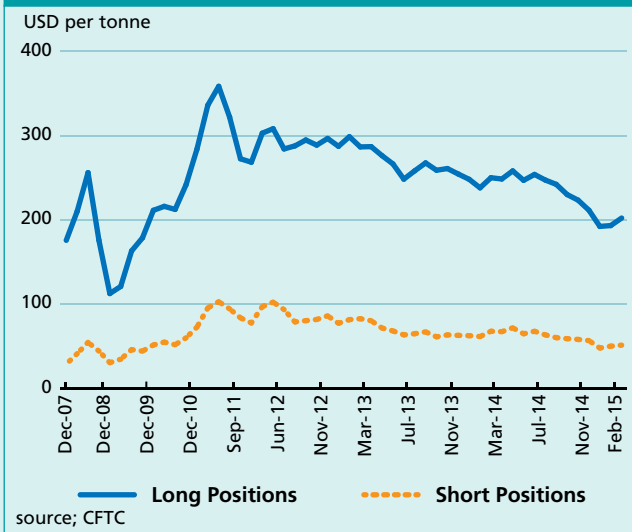
Historical volatility (30 days)



Implied volatility



Notional Amounts of Commodity Futures Index Investment*



source; CFTC

* USD amounts invested in commodity index funds or other commodity based investment vehicles as measured by the outstanding value of their underlying futures contracts.

OCEAN FREIGHT RATES

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

OCEAN FREIGHT MARKET (OCTOBER 2014 - MID-APRIL 2015)

Dry bulk ocean freight rates remained under pressure over the past six months. After substantial gains in October, attributed to a surge in demand for commodities, including grains and soyabeans, the freight market fell sharply on weaker chartering activity and an oversupply of tonnage, notably on routes across the Atlantic and to Far East Asia. The arrival of newly-built vessels, although down from the peak of 2012, outpaced the volume of demolition. A slowdown in China's mineral demand added to the market weakness. However, in March 2015, ocean freight rates in the grains-carrying sectors rebounded on the back of improved demand for commodities, particularly on routes from South America. Overall, since the beginning of October 2014, the average of the Baltic Indices of the three grains-carrying sectors plummeted by 34 percent and was down by 28 percent year-on-year. The Baltic Dry Index, which includes the Capesize sector in addition to grains, fell by 44 percent, weaker by 40 percent year-on-year.

After the October rally, Panamax rates were in decline until the end of February 2015, pressured by an oversupply of tonnage and spill-over weakness from the Capesize sector. Trading volumes remained low, notably on transatlantic routes, losing competition to the Supramax sector. Business from South America was mostly covered by the ballasters from the Indian Ocean and South East Asia. In March, however, the Atlantic market found some support in chartering activity from South America to Far East Asia and to Europe/Mediterranean, although overall trading volumes remained low. Rates in the Pacific stayed under pressure due to surplus tonnage and reduced mineral demand, prompting owners to send vessels in ballast to a more lucrative Atlantic market. Overall, from early October to mid-April, the Baltic Panamax Index (BPI) fell by 27 percent.

October saw firmer Atlantic Supramax rates attributed to increased chartering activity in the key loading areas, particularly on transatlantic routes from the US Gulf. However, in the November to February period, rates came under significant pressure from poor demand and an oversupply of tonnage. In March, similar to the Panamax market, Atlantic Supramax rates increased in most areas due to improved charting activity, especially on routes from South America and the US Gulf. Rates in the Pacific were supported by mineral business from Indonesia and

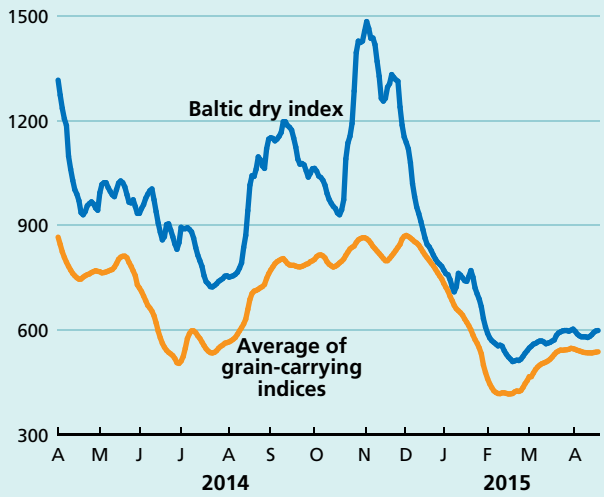
Selected routes (monthly averages) USD/tonne

	Brazil/EU ARAH	US Gulf/EU ARAH	US Gulf/Japan	US Gulf/S. Korea
Vessel size	**Handysize**	**Panamax**	**Panamax**	**Panamax**
Origin	Brazil	US (Gulf)	US (Gulf)	US (Gulf)
Destination	EU (ARAH)	EU (ARAH)	Japan	South Korea
April 2014	31	17	45	46
May 2014	30	16	44	45
June 2014	29	15	41	42
July 2014	28	14	40	41
August 2014	28	14	40	41
September 2014	29	17	44	45
October 2014	28	17	43	44
November 2014	26	14	40	41
December 2014	27	15	40	41
January 2015	25	12	34	35
February 2015	20	9	26	27
March 2015	21	10	29	30
April 2015	23	11	30	31

Philippines, mostly to China. Over the October to mid-April period, the Baltic Supramax Index (BSI) fell by 42 percent. Handysize rates remained generally weak due to insufficient demand, with the Baltic Handysize Index (BHSI) dropping by 32 percent over the past six months.

After sharp gains in October, attributed to strong mineral demand, the Capesize market collapsed in November 2014 to historically low levels, pressured by an increasing oversupply of tonnage amid a fall in raw materials trade, including a decline in China's demand. Overall, the sector lost 73 percent since the beginning of October.

Ocean freight indices
(April 2014 - mid-April 2015)



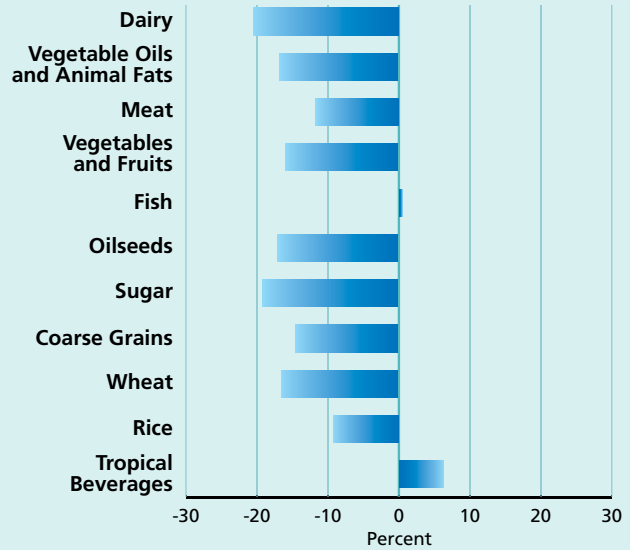
FOOD IMPORT BILLS

Contributed by Adam Prakash, Economist, FAO

Global food import bills set to fall sharply in 2015 but currency movements curb benefits

The value of global foodstuff imports in 2015 is tentatively forecast to drop to a 5-year low of USD 1.13 trillion, 12 percent or USD 153 billion less than the revised 2014 estimate and 14 percent below the record high in 2013. The expected fall comes at a time of very low international prices compared to previous years and a sizeable decline in freight costs.

Forecast changes in global food import bills by type
(April 2015 over April 2014)



Of the commodity import bills foreseen to undergo the largest absolute declines are cereal-based foodstuffs, as well as vegetables and fruits, which could fall by a combined USD 59 billion, or 14 percent and 16 percent, respectively. The decline in these bills is a reflection of weakened demand and ample supplies in major import destinations, especially in the case of cereals. Products in the livestock category, including meat and dairy, could decline together by as much as USD 37 billion, despite a slight increase in imported volumes. Similarly, world import bills of commodities within the oilseed complex – vegetable oils and oilseeds – are forecast down by USD 31 billion from 2014, in spite of rising import volumes, as international vegetable oil quotations have never been so low since 2005. Sugar too will register a drop in bills, which are anticipated to decrease by USD 10 billion from the previous year as a result of considerably lower quotations and smaller volumes. The only import bill that looks set to significantly increase in 2015 is that of the tropical beverage group, especially coffee and cocoa. Exporters of these US dollar-denominated commodities have keenly met soaring demand, facilitated by the weakness of their own currencies vis-a-vis the dollar. The global value of imported fish is likely to be similar to 2014 levels, given sustained international demand.

The tendency for considerably lower import bills in 2015 extends to many of the most economically vulnerable nations, such as those in the groups of Least Developed Countries (LDCs) and Low-Income Food-Deficit Countries

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

	World		Developed		Developing		LDC		LIFDC		Sub-Saharan Africa	
	2014	2015 f'cast	2014	2015 f'cast	2014	2015 f'cast	2014	2015 f'cast	2014	2015 f'cast	2014	2015 f'cast
TOTAL FOOD	**1 282**	**1 129**	**776**	**690**	**506**	**439**	**38**	**32**	**76**	**65**	**46**	**41**
Vegetables and Fruits	224	189	165	139	59	50	3	3	9	8	3	3
Cereals	164	141	71	62	93	79	11	9	20	17	14	12
Fish	144	145	106	109	38	35	1	1	4	3	5	4
Meat	174	154	115	101	59	53	3	3	4	3	5	4
Dairy	98	78	59	46	39	32	3	2	5	4	3	2
Vegetable Oils and Animal Fats	96	80	44	36	52	44	6	5	17	14	5	4
Oilseeds	88	73	29	23	59	50	1	1	1	1	1	1
Sugar	52	42	27	21	26	21	5	3	7	5	4	3
Tropical beverages	102	109	79	84	23	25	1	1	4	4	2	2

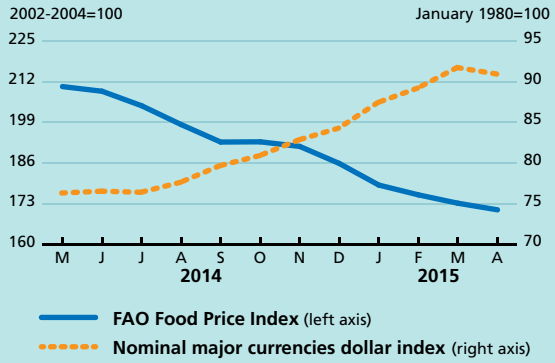
(LIFDCs) and those geographically situated in sub-Saharan Africa. Lower bills will not necessarily come at the expense of volumes as imported food quantities for many of them look set to rise above the previous year's levels in contrast to the global trend. When viewed from a local currency perspective, however, a different picture arises (see box below). Shortfalls in the production of staples in many economically disadvantaged countries necessitate procurement on the global marketplace to meet domestic demand. But this brings with it a severe burden on foreign exchange reserves, especially when international purchases are required to be paid in US dollars. Although a strong US dollar is generally beneficial to net merchandise exporters who can pay for food imports, it can prove onerous to many of the most vulnerable countries which are net importers, notably of foodstuffs.

Beneath the benign picture of low food prices are numerous uncertainties. Since August 2014, the US dollar has risen uninterruptedly against many currencies, reaching a 12-year high in March of this year. All things being equal, a strong dollar tends to lower international demand and with it commodity prices as most are US dollar-denominated. Gains to importing countries will be influenced by the degree to which their currencies have withstood depreciation.

The figures to the right show that this has not been the case for major-importing Low-Income Food-Deficit Countries (LIFDCs): unit costs of key imported foods - cereals and vegetable oils - when converted to local currency have declined less than in US dollars. Where US dollar unit costs have risen, the increase has been stronger in local currency.

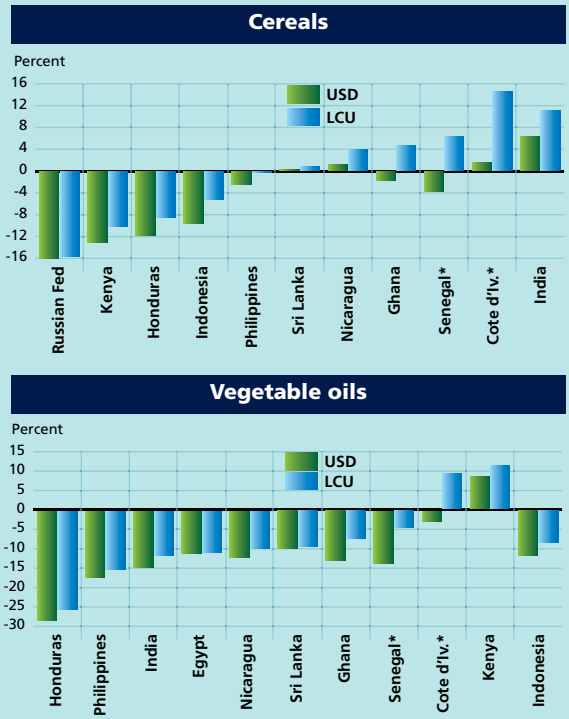
Strengthening US dollar and falling food prices

Trends of the US Dollar and FAO Food Price Indices: (May 2014 - April 2015)



Unit costs of major imported foodstuffs have risen in local currencies in many low-income food-deficit countries despite falling US dollar values.

Changes in unit values for selected LIFDCs (%):



Sources: GTIS/FAO. Based on reflected trade statistics, USD versus local currencies (LCUs), Nov-Jan 2015 over Apr-Jun 2014
* Pegged to the Euro

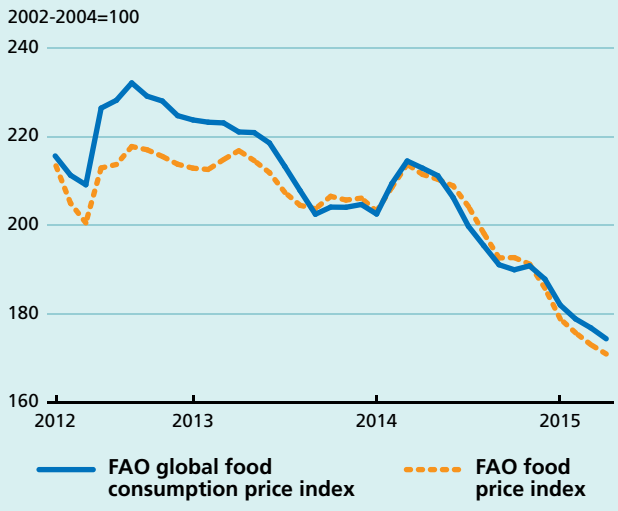
FAO PRICE INDICES[1]

The FAO Global Food Consumption Price Index continues to slide[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).

The index has fallen uninterruptedly over the past 12 months, losing considerable ground since the last Food Outlook report. From October 2014 to April 2015, the index has lost just under 7 percent of its value. The overall decline, however, is less pronounced when compared with the trade-weighted FAO Food Price Index (FPI) . This is because international prices of foodstuffs that carry a much higher weight in trade than in typical consumption have fallen at a much greater pace (notably livestock products and especially meat). As a result of these price developments, the tendency for both indices to track one another, which emerged in 2013, has become less marked.

The FAO global food consumption and food price indices
(April 2012 - April 2015)



FAO Food Price Index keeps falling[3]

The **FAO Food Price Index** averaged 171 points in April 2015, down 2.1 points (1.2 percent) from March and 40.5 points (19.2 percent) below its level in April 2014. Dairy prices fell most, but sugar, cereals and vegetable oils prices also declined. By contrast, meat values rose in April, their first increase since August 2014. The April average puts the FAO Food Price Index at its lowest level since June 2010.

The **FAO Cereal Price Index** averaged 167.6 points in April, down 2.2 points (1.3 percent) from March and nearly 42 points (20 percent) below the corresponding month last year. Wheat prices continued their decline in April, influenced by large supplies and slow trade activity, as many buyers await in expectation of even lower prices in the coming months. Maize quotations changed little compared to March, with stronger import demand being offset by prospects for more than ample supplies. Rice prices moved marginally lower, on subdued demand.

The **FAO Vegetable Oil Price Index** averaged 150.2 points in April, down 1.5 points (or 1 percent) from March. The slide was driven by palm oil, the key commodity in the index. International palm oil quotations continued to ease as higher than expected output in Indonesia and Malaysia coincided with weak global import demand. Global soy oil prices, on the other hand, increased slightly, reflecting concerns about slower than usual farmer selling and renewed strikes in South America. Prices for sunflowerseed oil strengthened amid falling world production and export supplies.

The **FAO Dairy Price Index** averaged 172.4 points in April, down 12.5 points (6.7 percent) from March. Milk powders and butter were the main commodities affected. The price weakness affecting the sector reflects a favourable opening to the April-March dairy year in the EU, combined with the abolition of the milk quota system, which raised expectations of abundant export supplies. Dairy prices were also influenced by uncertainty over the level of China's purchases during 2015 and continued import prohibitions imposed by the Russian Federation.

The **FAO Meat Price Index**[4] averaged 178 points in April, up 3 points (1.7 percent) from its revised March value.

[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*.

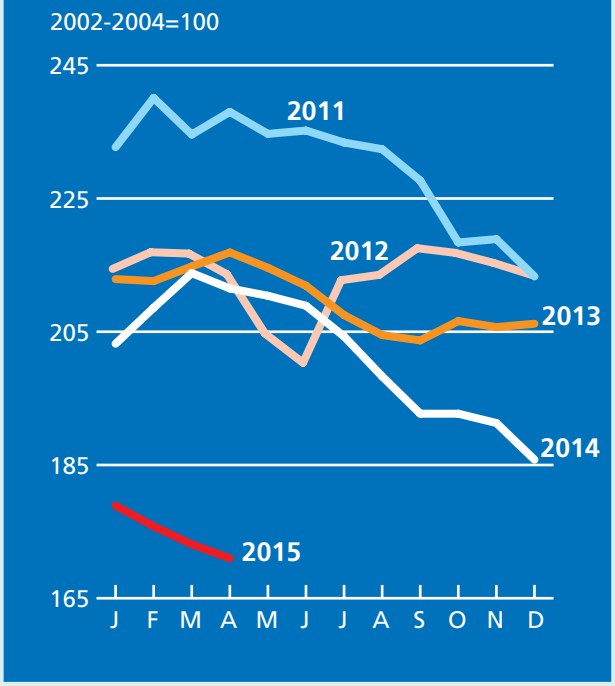
[3] The FAO food price indices are updated on a monthly basis and are available on: http://www.fao.org/worldfoodsituation

[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 revisions in the final value of the FAO Meat Price Index which could in turn influence the value of the **FAO Food Price Index**.

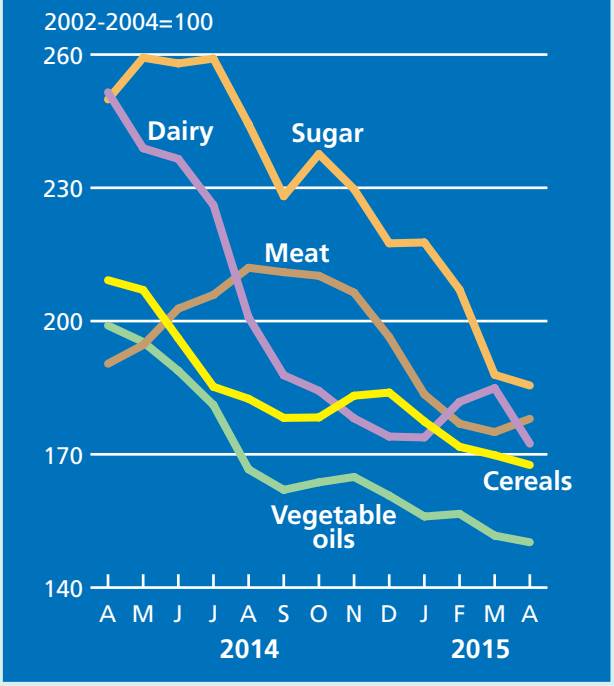
The main causes of the rise were higher prices for bovine and ovine meat from Oceania, where herd rebuilding restricted exports. Pigmeat prices also showed some upward movement, while those of poultry were lower. For meat overall, moderately higher import demand in China, Japan, the United States and Vietnam is the main factor underpinning the market.

The **FAO Sugar Price Index** averaged 185.5 points in April, down 2.4 points (1.3 percent) from March and reaching its lowest level since February 2009. The decrease was mainly fueled by reports of higher than expected sugarcane harvesting in Brazil, the world's largest producer and exporter of sugar. Also, India's recent announcement it would raise sugar import tariffs from 25 percent to 40 percent, in a bid to support falling domestic prices, weighed on international sugar quotations. Persistent weakness in the Brazilian currency (Real) against the US dollar also kept the FAO Sugar Price Index under pressure.

FAO Food Price Index



FAO Food Commodity Price Indices



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
2014	April	211.5	190.4	251.5	209.2	199.0	249.9
	May	210.4	194.6	238.9	207.0	195.3	259.3
	June	208.9	202.8	236.5	196.1	188.8	258.0
	July	204.3	205.9	226.1	185.2	181.1	259.1
	August	198.3	212.0	200.8	182.5	166.6	244.3
	September	192.7	211.0	187.8	178.2	162.0	228.1
	October	192.7	210.2	184.3	178.3	163.7	237.6
	November	191.3	206.4	178.1	183.2	164.9	229.7
	December	185.8	196.4	174.0	183.9	160.7	217.5
2015	January	178.9	183.5	173.8	177.4	156.0	217.7
	February	175.8	176.9	181.8	171.7	156.6	207.1
	March	173.1	175.0	184.9	169.8	151.7	187.9
	April	171.0	178.0	172.4	167.6	150.2	185.5

1 **Food Price Index:** Consists of the average of 5 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.

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 10 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 10 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.

MONITORING Agriculture Drought with REMOTE SENSING DATA

FAO Agriculture Stress Index System (ASIS)

Drought affects more people than any other type of natural disaster, and is also the most damaging to livelihoods, especially in developing countries. They are also becoming increasingly frequent and severe, the result being widespread crop and livestock damage and the degradation of livelihoods, famines and economic losses usually felt well beyond drought affected areas.

Timely detection of developing droughts and accurately assessing the extent of the resultant stresses (both spatially and temporally) to crops and pasture goes a long way in putting in place mitigating factors and informed proactive responses. A new system designed to detect agricultural areas with a high likelihood of water stress has been developed by FAO EST and NRC divisions to support the vegetation monitoring activities of the FAO-Global Information and Early Warning System (GIEWS).

ASIS uses the Vegetation Health Index (VHI), which is derived from the Normalized Differenced Vegetation Index (NDVI). VHI has successfully been applied in many different environmental conditions around the globe, including in Asia, Africa, Europe, North America and South America. VHI can detect drought conditions at any time of the year. For agriculture, however, the most interesting period is the one most sensitive for crop growth (temporal integration), so the analysis is performed only between the start and end of the crop season. ASIS assesses the severity (intensity, duration and spatial extent) of the agricultural drought and indicates the final results at administrative level allowing for the possibility to compare it with the agricultural statistics of the country.

The development of ASIS is included in the EU/FAO Programme on "Improved global governance for hunger reduction", which seeks to improve how the global community combats hunger and malnutrition. The EU is both a resource and technical partner of the programme, which is closely aligned with current priorities for food security and nutrition, such as raising awareness of the importance of resilience and linking nutrition more closely to food security and agriculture. The programme is fully embedded in the new FAO strategic framework, and in this way the development of ASIS significantly and substantially contributes to three of the five FAO Strategic Objectives (SOs): SO1 – to help eliminate hunger, food insecurity and malnutrition; SO3 – to reduce rural poverty; and SO5 – to increase the resilience of livelihoods to disasters.

http://www.fao.org/giews/earthobservation/

Food Outlook is published by the Trade and Market Division of FAO under Global Information and Early Warning System (GIEWS). It is a biannual publication focusing on developments affecting global food and feed markets. Each report provides comprehensive assessments and short term forecasts for production, utilization, trade, stocks and prices on a commodity by commodity basis and includes feature articles on topical issues. Food Outlook maintains a close synergy with another major GIEWS publication, Crop Prospects and Food Situation, especially with regard to the coverage of cereals. Food outlook is available in English. The summary section is also available in Arabic, Chinese, French, Spanish and Russian.

Food Outlook and other GIEWS reports are available on the internet as part of the FAO world wide web (http://www.fao.org/) at the following URL address: http://www.fao.org/giews/. Other relevant studies on markets and global food situation can be found at http://www.fao.org/worldfoodsituation.

This report is based on information available up to late April 2015. The next Food Outlook report will be published in November 2015.

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