

# Food Outlook

BIANNUAL REPORT ON GLOBAL FOOD MARKETS



June 2013



*The FAO Food Outlook Team is pleased to present this new edition of Food Outlook which incorporates many improvements, including extended coverage and a revised layout. The new edition takes account of feedback received through a recent readership survey while also taking into consideration advances in digital publishing, which is envisaged to become the main means of disseminating Food Outlook reports in the near future.*

*First published in November 1974, in the wake of the major world food crisis, Food Outlook is a product of FAO's Global Information and Early Warning System on Food and Agriculture (GIEWS). Food Outlook was initially a quarterly report, before becoming monthly and then biannually since 2006. Given the fast changing global food markets, the main focus of Food Outlook reports has always been on providing timely information and forecasts with accurate early warnings and in-depth assessments.*

*Food Outlook is produced in English but the Market Summaries of the report are also available in Arabic, Chinese, French, Russian and Spanish.*

*Suggestions and comments about the new edition are welcome as your feedback will help improve future reports.*

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# HIGHLIGHTS

**F**ood commodity markets are set to be more balanced in 2013/14, in particular cereals. The global food import bill is forecast to reach USD 1.09 trillion in 2013, 13 percent below the record of 2011 but close to the 2012 estimate, as higher bills for fish and livestock products are anticipated to offset lower expenditures on most other commodities, especially sugar.

## WHEAT

Record world wheat production in 2013 will boost supplies and help increase inventories. With world trade contracting in 2013/14 on lower import demand by several countries, due to their higher domestic production, global wheat markets are likely to experience more stable conditions under generally lower prices.

## COARSE GRAINS

World production of coarse grains is set to rebound strongly in 2013. While the overall utilization is also projected to increase, total supply would exceed demand, helping in replenishing the heavily depleted stocks and resulting in a more comfortable world supply and demand balance than witnessed in recent years.

## RICE

International rice prices were generally stable in the first five months of 2013. The market attention is now focusing on future decisions regarding releases from public stocks in Thailand and on India's availabilities for export. The pace of China's imports is also becoming critical.

## OILSEEDS

Expectations of a marked rebound in global oilseed output for 2012/13, combined with a slowing consumption growth, have led to a softening in world prices. Positive early production forecasts for 2013/14 suggest a more balanced world supply and demand situation and thus a general easing of prices.

## SUGAR

World sugar production is estimated to reach a new record in 2012/13 – one that will be more than sufficient to cover projected global consumption. On the other hand, world sugar trade is anticipated to contract reflecting expectations of falling import demand from the traditional importing countries.

## MEAT

World meat production is anticipated to grow by only 1.4 percent in 2013, to 308.2 million tonnes. Meat prices remain at historically high levels which, as of May, have not shown signs of decreasing in spite of reduced feed costs.

## DAIRY

International prices of dairy products have risen in the face of limited export supplies. Milk production continues to increase steadily in 2013 in many countries, especially in Asia, but growth in the main exporting countries is anticipated to be limited.

## FISHERIES

Tight supply and higher feed costs for several key traded species such as salmon and shrimp are pushing international seafood prices higher. Overall supply is still growing thanks to aquaculture, with strong local and regional demand sustaining production growth in the developing countries.

## SPECIAL FEATURES

### Quinoa

The special feature on Quinoa examines the fundamentals of this ancient Andean commodity with the potential for becoming a new important food crop. The growing global demand and booming exports from Bolivia and Peru have benefitted the smallholder producers, but also pose new challenges as market dynamics change.

### Commodity Hedge Funds in Retreat?

The special feature "Commodity hedge funds in retreat?", examines the declining performance of this sector following multiple years of profitability. It reviews the factors that helped propel the growth of commodity hedge funds against those surrounding today's trading environment.

## ACKNOWLEDGEMENTS

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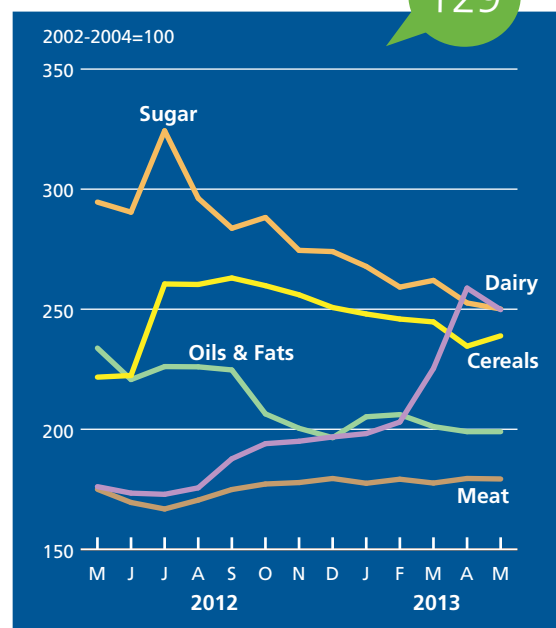
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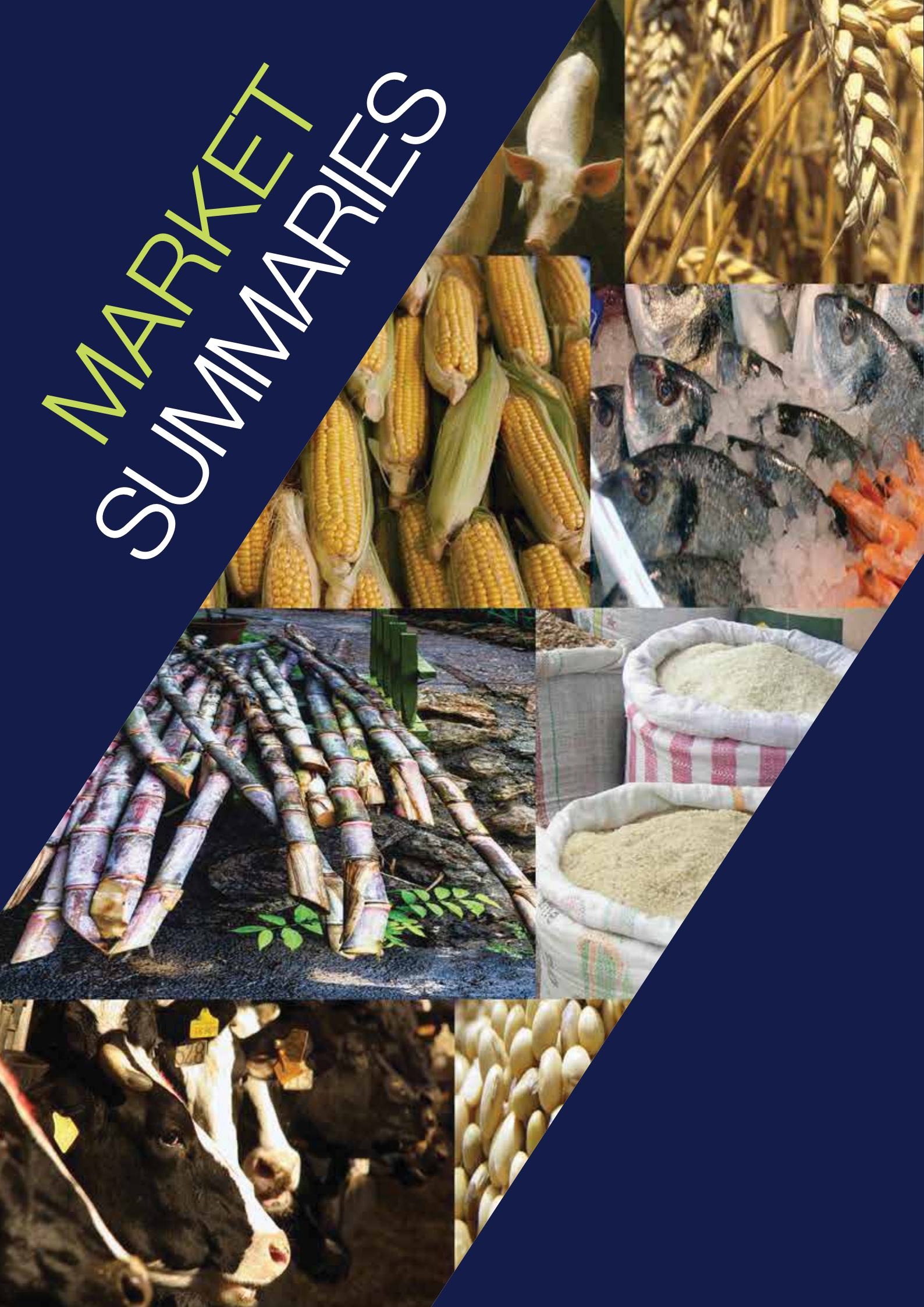
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# MARKET SUMMARIES



Latest indications point to a more comfortable world cereal supply-and-demand balance in the new 2013/14 marketing season. After a relatively tight situation in 2012/13, characterized by reduced grain supplies and high prices, good production prospects and a likely replenishment in world stocks could pave the way for calmer markets and some easing of prices in the new season.

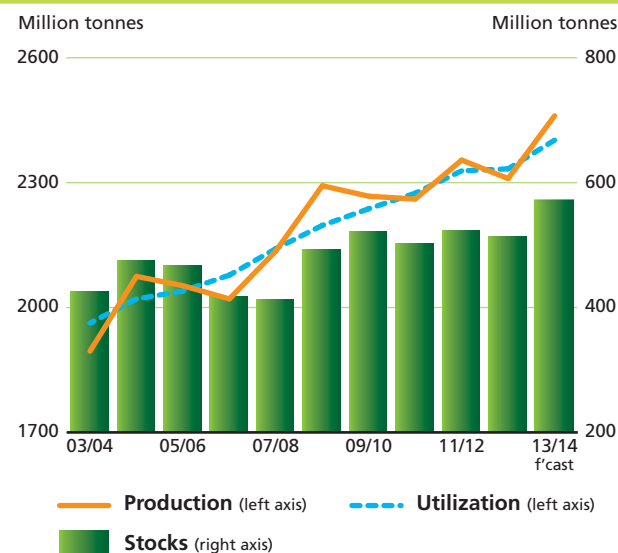
World cereal production in 2013, including rice on a milled basis, is forecast to reach a record 2 460 million tonnes. This is up 6.5 percent from the previous year's reduced level, mainly due to higher wheat output and a sharp expected rebound of maize production in the United States. Rice production is also set to increase in 2013, although concerns over diminishing prices may dampen growth.

Global cereal utilization is forecast to reach 2 402 million tonnes in 2013/14, 3 percent above 2012/13. Much of the growth would stem from higher use of maize for feed and industrial purposes in the United States. Total feed use of coarse grains is forecast to be greater in developing than developed countries for the second consecutive season. The increase in utilization of wheat and rice would be broadly in line with the population growth, a factor that would keep average per capita consumption of cereals stable at around 153 kg per year.

Based on current supply and demand prospects, by the end of seasons in 2014, world cereal inventories could register an 11 percent recovery to 569 million tonnes, the highest level in twelve years. The build-up of stocks is forecast to affect all the major cereals, with coarse grains increasing the most. The projected recovery in world inventories would lead to higher 2014 stock-to-use ratios, especially for maize.

World trade in cereals is forecast to reach 306 million tonnes in 2013/14, similar to 2012/13. A reduction in wheat trade is expected to offset a rebound in maize while rice trade in 2014 is forecast to change little.

## CEREAL PRODUCTION, UTILIZATION AND STOCKS



## WORLD CEREAL MARKET AT A GLANCE <sup>1</sup>

	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	Change: 2013/14 over 2012/13
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
<b>Production</b>	2 354.2	2 309.8	2 460.5	6.5
<b>Trade<sup>2</sup></b>	317.2	306.1	306.2	0.0
<b>Total utilization</b>	2 328.3	2 333.2	2 402.0	2.9
Food	1 066.4	1 082.7	1 097.9	1.4
Feed	794.1	795.5	833.0	4.7
Other uses	467.7	455.0	471.1	3.5
<b>Ending stocks</b>	521.5	510.9	568.8	11.3
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	152.1	152.5	153.3	0.5
LIFDC <sup>3</sup> (kg/yr)	157.5	159.0	160.9	1.2
World stock-to-use ratio (%)	22.4	21.3	23.3	
Major exporters stock-to-disappearance ratio (%)	18.0	16.3	18.9	
<b>FAO CEREAL PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
	247	241	242	8.0

<sup>1</sup> Rice in milled equivalent.

<sup>2</sup> 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.

<sup>3</sup> Low-income Food-Deficit countries.

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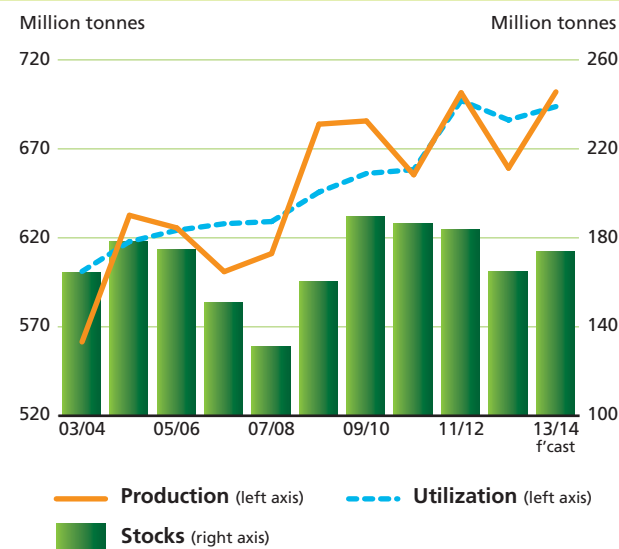
# WHEAT

FAO's latest wheat production forecast for 2013 has been raised by 7 million tonnes since May, to a new record level of 702 million tonnes. At this level, world production of wheat would be 6.5 percent higher than the reduced harvest in 2012. The bulk of the recovery is forecast to be concentrated in some of the major producing countries that harvested poor crops in 2012, in particular in Europe and the Black Sea region. The anticipated higher production is a welcome development, especially as the 2012/13 run-down took global inventories to their lowest level since 2009. FAO's first forecast for global stocks at the end of the seasons in 2014 points to a strong rebound from the reduced opening levels which, given the current expectations regarding global utilization in 2013/14, would result in a higher world stock-to-use ratio. The largest increases in world inventories are forecast for China, which is heading towards another record crop, and for the EU and the Russian Federation. Although total wheat utilization is forecast to resume its growth after a decline in 2012/13, the increase would only concern wheat consumption as food, since feed utilization, which rose sharply in 2011/12 as a result of very tight supplies and high prices of coarse grains, is likely to remain close to the 2012/13 level. FAO's first forecast for world wheat trade in 2013/14 points to a reduction of 2.5 percent from 2012/13. This contraction mainly reflects reduced imports by countries expecting improved supplies in 2013/14, which include some traditional exporting countries, such as the Russian Federation and Ukraine. Based on this preliminary supply and demand assessment for 2013/14 and barring any major unexpected developments, especially with regard to production, global markets are likely to face more stable conditions, with prices retreating from the highs seen during the 2012/13 marketing season.

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## WHEAT PRODUCTION, UTILIZATION AND STOCKS



## WORLD WHEAT MARKET AT A GLANCE

	2011/12	2012/13 estim.	2013/14 f'cast	Change: 2013/14 over 2012/13
	million tonnes			%
<b>WORLD BALANCE</b>				
<b>Production</b>	701.5	659.1	702.0	6.5
<b>Trade<sup>1</sup></b>	146.8	139.5	136.0	-2.5
<b>Total utilization</b>	697.2	686.2	693.8	1.1
Food	471.2	474.6	480.3	1.2
Feed	146.5	132.9	133.7	0.6
Other uses	79.4	78.7	79.7	1.3
<b>Ending stocks</b>	183.1	164.2	173.1	5.4
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	67.2	66.9	67.1	0.3
LIFDC (kg/yr)	47.8	47.7	48.4	1.5
World stock-to-use ratio (%)	26.7	23.7	24.5	
Major exporters stock-to-disappearance ratio <sup>2</sup> (%)	18.4	14.2	15.5	
<b>FAO WHEAT PRICE INDEX<sup>3</sup> (2002-2004=100)</b>				
	2011	2012	2013 Jan-May	Change: Jan-May 2013 over Jan-May 2012 %
			212	10.3

<sup>1</sup> Trade refers to exports based on a common July/June marketing season.

<sup>2</sup> Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.

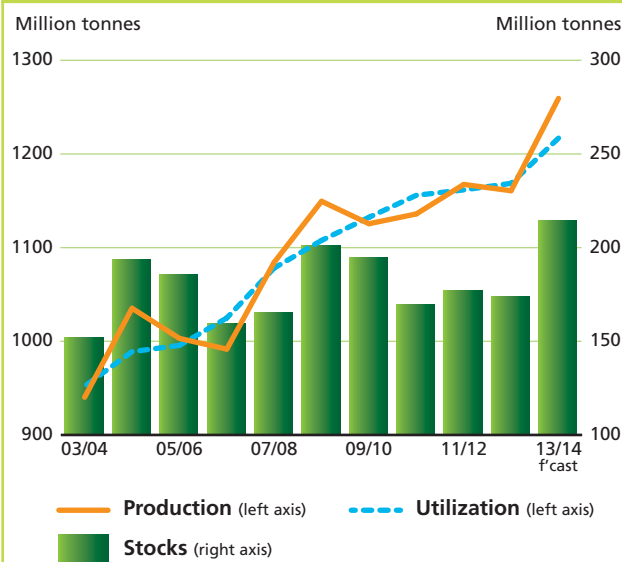
<sup>3</sup> Derived from the International Grains Council (IGC) wheat index.



# COARSE GRAINS

At 1 259 million tonnes, world production of coarse grains is forecast to reach a record in 2013 on the back of a strong rebound in maize production in the United States from its 2012 drought-reduced level. A number of other major producers are also expected to harvest bigger crops this year, most notably China, where maize production could hit a record for the fourth consecutive season. The projected recovery in world production of coarse grains in general, and of maize in particular, would lead to a rebuilding in global inventories to their highest level since 2000. The recovery is expected to be pronounced and, hence, result in a rise of the world stock-to-use ratio from the historic low of 14.2 percent in 2012/13 to 17.1 percent in 2013/14. Again, the bulk of this anticipated improvement in global supply and demand balance in 2013/14 assumes current positive production prospects for maize in the United States materialize. The recovery in the United States is also seen as the main driver behind renewed growth in the industrial use of coarse grains in 2013/14 after a decline in the 2012/13 season. In addition, feed utilization is projected to exhibit a strong increase in 2013/14, in both developed and developing countries, supported by more ample supplies and the likelihood of lower prices. Against the background of rising export availabilities and increased world demand, world trade in 2013/14 is forecast to expand by 3 percent, with maize exports reaching 103 million tonnes, a new record.

## COARSE GRAIN PRODUCTION, UTILIZATION AND STOCKS



## WORLD COARSE GRAIN MARKET AT A GLANCE

	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	Change: 2013/14 over 2012/13
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	1 167.5	1 160.7	1 259.3	8.5
<b>Trade<sup>1</sup></b>	131.8	129.0	133.0	3.1
<b>Total utilization</b>	1 161.7	1 168.6	1 216.9	4.1
Food	199.8	205.2	208.2	1.5
Feed	634.7	649.2	685.6	5.6
Other uses	327.1	314.2	323.0	2.8
<b>Ending stocks</b>	176.7	173.0	213.7	23.5
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	28.6	28.9	29.1	0.7
LIFDC (kg/yr)	39.5	40.4	40.7	0.7
<i>World stock-to-use ratio (%)</i>	15.1	14.2	17.1	
<i>Major exporters stock-to-disappearance ratio<sup>2</sup> (%)</i>	10.3	8.0	12.5	
<b>FAO COARSE GRAIN PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
			283	8.4

<sup>1</sup> Trade refers to exports based on a common July/June marketing season.

<sup>2</sup> Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

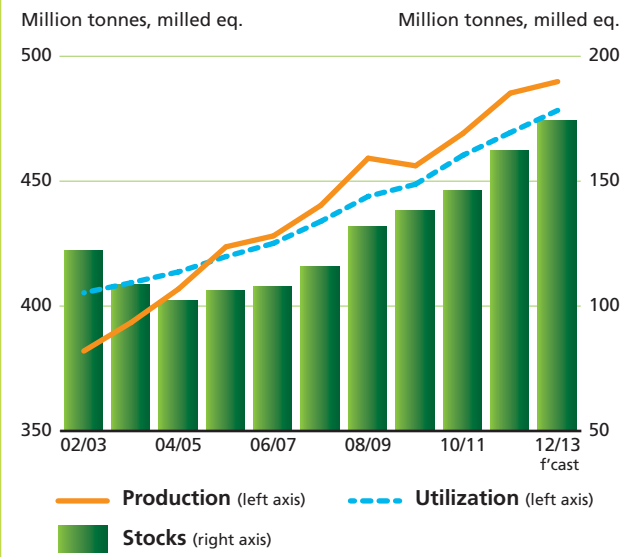
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# RICE

International rice prices have been stable since January, but still averaged higher in the first five months than in the corresponding period in 2012. However, prices have followed different directions, depending on the type of rice and its origin. World rice production is forecast to expand by 1.9 percent in 2013, reaching close to 500 million tonnes (in milled rice equivalent), on expectations of improved weather conditions in Asia. Low returns are encouraging farmers to cut plantings, especially in Latin America and the Caribbean, North America and the EU, a tendency likely to dampen production growth. Weakening import demand is behind expectations of a 2.8 percent contraction in international rice trade in 2013. Among exporters, India is anticipated to cut shipments most, but will nonetheless remain the leading rice exporter again this year. Much of India's export shortfall is anticipated to be filled by Viet Nam, but also by Egypt, Pakistan, Myanmar and the United States. Thailand is anticipated to keep sales abroad at about the same level as last year, thus falling well short of the 2011 record performance. On the import side, reduced purchases by Indonesia, Nigeria, the Philippines and Thailand are behind the expected decline in trade. China's imports, on the other hand, are anticipated to remain close to the highs witnessed last year, reflecting a wide differential between domestic and international prices.

## RICE PRODUCTION, UTILIZATION AND STOCKS



## WORLD RICE MARKET AT A GLANCE

	2010/11	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	Change: 2012/13 over 2011/12
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	469.1	485.3	489.9	0.9
<b>Trade<sup>1</sup></b>	36.2	38.6	37.6	-2.6
<b>Total utilization</b>	460.4	469.5	478.4	1.9
Food	387.9	395.4	402.9	1.9
<b>Ending stocks</b>	145.7	161.7	173.7	7.4
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	56.1	56.4	56.8	0.7
LIFDC (kg/yr)	69.3	70.2	70.9	1.0
<i>World stock-to-use ratio (%)</i>	31.0	33.8	35.3	
<i>Major exporters stock-to-disappearance ratio<sup>2</sup> (%)</i>	21.1	25.2	26.8	
<b>FAO RICE PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
	251	240	241	2.3

<sup>1</sup> Calendar year exports (second year shown).

<sup>2</sup> Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

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# OILSEEDS

Even if crops suffered from unfavourable weather in several countries, a marked rebound in global oilseed output is forecast for 2012/13. While current crop estimates should allow a conspicuous year-on-year rise in meal output, oil production growth is likely to remain below trend. Global supplies are expected to grow at a slower pace than production, due to low stock levels at the beginning of the season.

Subdued global economic growth is likely to slow demand for oils and meals in 2012/13. Oils/fats consumption could also be affected by weaker demand from the biodiesel sector, whereas persistently high meal prices are expected to result in an unusual contraction in global meal/cake utilization. End-of-season stocks of oilseeds and derived products are anticipated to increase, both in absolute terms and relative to consumption. Nonetheless, stock-to-use ratios are likely to remain low compared to previous years, in particular for meals.

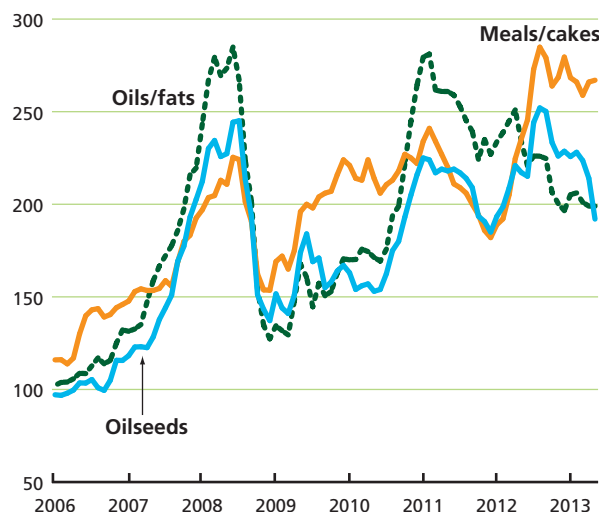
International trade in oilseeds and sub-products is forecast to decline, especially in meals/cakes, mirroring weak growth in domestic consumption in some of the world's major importing countries. As for meals, near-record prices have lowered appetite for imported material.

In general, international prices for oilseeds, oils and meals have softened since the start of this season, amid improved production prospects and weak consumption growth. The decrease has been less marked for meals, whose values remained close to all-time highs reflecting the market's concerns about persistent supply tightness during the first half of the season. During the second half, prices in the oilseed complex could ease further as South America's record harvests enter the market and provided the positive forecasts for next season's Northern Hemisphere crops are confirmed. Combined with continued weak consumption growth, the production gains anticipated for next season should permit global stocks levels and stock-to-use ratios to rise further in 2013/14, especially in the meals/cakes subsector, thus suggesting a further general relaxation of prices.

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



## WORLD OILSEED AND PRODUCT MARKET AT A GLANCE

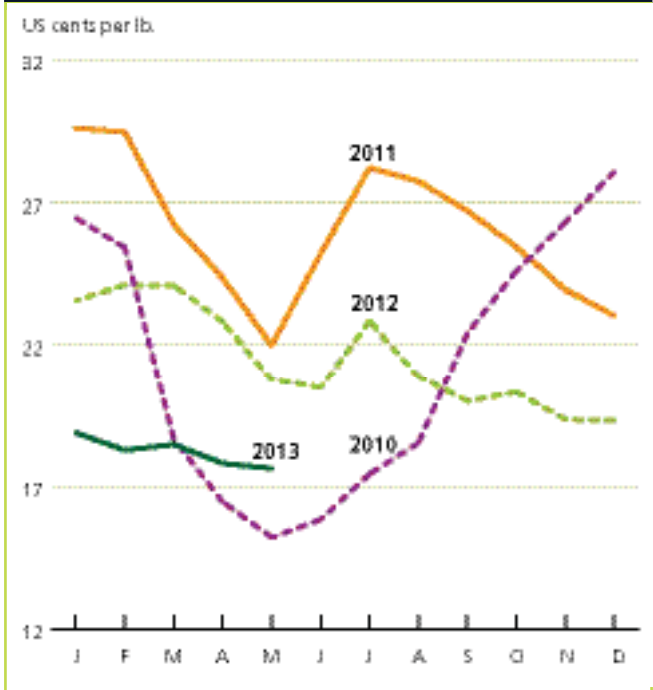
	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
<b>TOTAL OILSEEDS</b>				
Production	468.9	453.6	477.5	5.3
<b>OILS AND FATS</b>				
Production	180.4	183.3	188.7	2.9
Supply	208.0	214.5	220.3	2.7
Utilization	176.0	184.7	188.4	2.0
Trade	92.5	97.9	101.0	3.1
Stock-to-utilization ratio (%)	17.7	17.1	17.4	
Major exporters stock-to-disappearance ratio	11.2	10.1	10.0	
<b>MEALS AND CAKES</b>				
Production	118.6	110.3	118.0	7.0
Supply	137.5	131.6	134.8	2.5
Utilization	114.1	117.1	115.9	-1.1
Trade	69.6	72.6	72.9	0.4
Stock-to-utilization ratio (%)	18.7	14.4	15.5	
Major exporters stock-to-disappearance ratio	9.3	5.6	7.5	
<b>FAO PRICE INDICES (Jan/Dec) (2002-2004=100)</b>				
	2011	2012	2013 Jan-May	Change: Jan-May 2013 over Jan-May 2012 %
Oilseeds	211	224	217	4.3
Meals/cakes	212	245	265	2.7
Oils/fats	252	225	202	-16.0

NOTE: Refer to table 9 for explanations regarding definitions and coverage.

# SUGAR

World sugar production in 2012/13 is set to increase by 4.8 million tonnes, or 2.8 percent, to 180 million tonnes. For the second consecutive season, production is anticipated to surpass consumption, with the surplus expected to hover around 6.5 million tonnes, contributing to a rebuilding of sugar stocks to relatively comfortable levels. The growth in world output is mainly attributed to an upturn in Brazil, the world's largest producer, where sugar production is set to recover from the sharp fall of the previous season. The expansions in Brazil, but also in the United States, Australia and China, are anticipated to offset declines in India, the EU and Thailand. World sugar consumption is forecast to grow by about 2 percent in 2012/13, amid falling domestic sugar prices. World sugar trade is anticipated to contract in 2012/13, reflecting expectations of lukewarm import demand from the traditional importing countries, which are holding large supplies.

## INTERNATIONAL SUGAR PRICES\*



\* As measured by the International Sugar Agreement (ISA)

## WORLD SUGAR MARKET AT A GLANCE

	2010/11	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	Change: 2012/13 over 2011/12
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
Production	165.6	175.2	180.0	2.75
Trade	54.8	52.5	51.1	-2.62
Total utilization	159.8	169.8	173.5	2.18
Ending stocks	62.9	65.6	69.4	5.80
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	23.13	24.30	24.55	1.03
LIFDC (kg/yr)	15.19	16.64	16.87	1.35
World stock-to-use ratio (%)	39.36	38.62	39.99	
<b>ISA DAILY PRICE AVERAGE (US cents/lb)</b>				
	2011	2012	2013 <i>Jan-Apr</i>	Change: Jan-Apr 2013 over Jan-Apr 2012 <i>%</i>
	26.0	21.5	18.35	-22.41

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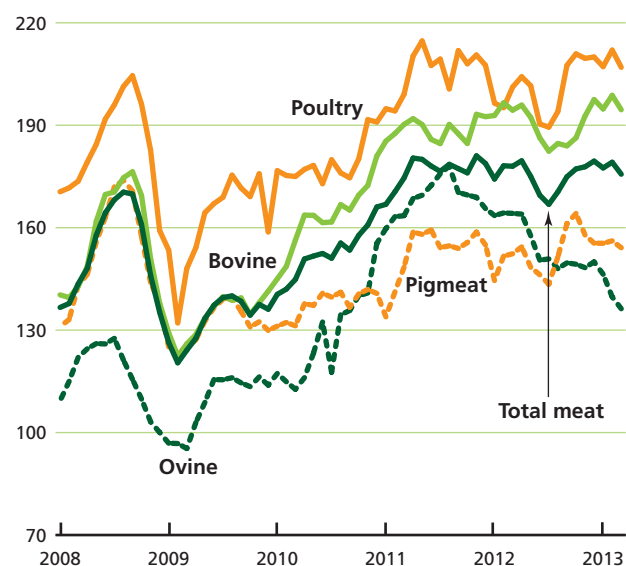
# MEAT AND MEAT PRODUCTS

World meat production is anticipated to grow modestly in 2013, when it is forecast to reach 308.2 million tonnes, an increase of 4.3 million tonnes or 1.4 percent compared to 2012. In many countries, producers continue to struggle against elevated feed prices; however, although remaining high by historical standards, they began to fall during the second half of 2012 and continued to diminish during 2013. This has offered greater scope for profitable meat production, particularly in the pig and poultry sectors, which are the most dependent on concentrated feed. Meat production is anticipated to grow most vigorously in the developing countries, which are the main centres of demand expansion.

Meat prices have remained at historically high levels since the early part of 2011. The FAO Meat Price Index averaged 179 in May 2013, having moved within the narrow band of 177–179 since October 2012. Export reference prices for the different types of meat have followed varying directions so far this year, rising marginally for poultry and pork, remaining largely stable for beef and falling for ovine meat.

Meat trade is expected to grow more slowly in 2013 than in recent years, as a result of adequate national supplies in a number of importing countries and a reduction in production among some of the major exporters. Global meat exports are anticipated to reach 30.2 million tonnes in 2013, an increase of 1.1 percent over 2012.

## FAO INTERNATIONAL MEAT PRICE INDICES (2002-2004 = 100)



## WORLD MEAT MARKET AT A GLANCE

	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>297.6</b>	<b>303.9</b>	<b>308.2</b>	<b>1.4</b>
Bovine meat	67.3	67.6	68.1	0.9
Poultry meat	102.1	104.6	106.4	1.8
Pigmeat	109.0	112.5	114.2	1.5
Ovine meat	13.5	13.6	13.8	1.2
<b>Trade</b>	<b>29.2</b>	<b>29.9</b>	<b>30.2</b>	<b>1.1</b>
Bovine meat	8.1	8.2	8.6	4.6
Poultry meat	12.8	13.1	13.3	1.5
Pigmeat	7.3	7.5	7.2	-4.1
Ovine meat	0.7	0.8	0.9	5.8
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	42.5	43.0	43.1	0.4
Developed (kg/yr)	78.7	79.1	79.3	0.3
Developing (kg/yr)	32.5	33.1	33.3	0.7
<b>FAO MEAT PRICE INDEX (2002-2004=100)</b>	<b>2011</b>	<b>2012</b>	<b>2013 Jan-May</b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	177	175	179	0.9

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# MILK AND MILK PRODUCTS

International dairy products prices registered strong growth during the first four months of 2013, particularly in March and April. Although prices fell back in May, they remained at elevated levels, substantially above a year earlier. The main cause of the leap in prices was a steep fall-off in New Zealand's milk production. The FAO Dairy Price Index reached 259 points in April, close to its historic peak in late 2007, before dropping to 250 points in May. The absence of substantial growth in milk output in the principal exporting countries implies that supplies to the international market will be finely balanced until at least the latter part of 2013, indicating that the current elevated prices are likely to remain for some months.

World milk production in 2013 is forecast to grow by 2.2 percent to 784 million tonnes – a similar rate to recent years. Asia and Latin America and the Caribbean are expected to account for most of the increase, with only limited growth elsewhere.

World trade in dairy products is expected to expand in 2013; however, supply limitations are anticipated to stem growth. Consequently, trade is forecast to increase by 1.9 percent, compared with an average of 7 percent in recent years, to reach 54.7 million tonnes of milk equivalent. Asia will remain the main market for dairy products, accounting for some 54 percent of world imports, followed by Africa, with 16 percent.

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



The index is derived from a trade-weighted average of a selection of representative internationally traded dairy products.

## WORLD DAIRY MARKET AT A GLANCE <sup>1</sup>

	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
Total milk production	745.5	767.4	784.4	2.2
Total trade	49.7	53.7	54.7	1.9
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	105.7	107.6	108.7	1.1
Developed (kg/yr)	235.3	237.9	238.0	0.1
Developing (kg/yr)	72.1	74.1	75.9	2.4
Trade share of prod. (%)	6.7	7.0	7.0	-0.3
<b>FAO DAIRY PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
	221	189	227	17.0

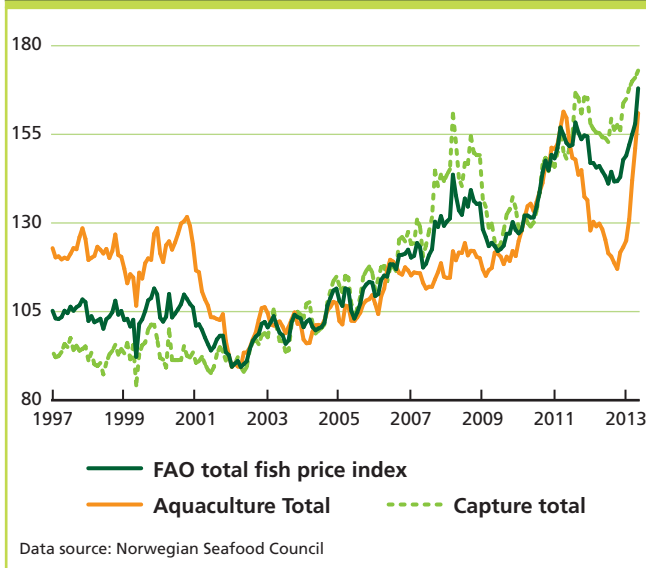
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# FISH AND FISHERY PRODUCTS

Buoyant demand in developing countries has driven world aquaculture production to new heights, yet, at the same time, consumption has slackened in many traditional developed country markets. Capture fisheries have registered a small rebound after the 2012 downturn related to the El Niño. As a result, global production is expected to reach another record level in 2013, topping 160 million tonnes for the first time. Fish for direct human consumption will also increase significantly during 2013 as a smaller share of captures is destined for fish meal production. On a per capita basis, overall fish consumption is approaching 20 kg, with aquaculture contributing close to half.

World trade continues to grow, thanks to strong demand from emerging markets, with both volumes and values progressing in 2013. Prices on a number of farmed species, including salmon, shrimp and selected bivalves, have risen sharply, due to supply problems and higher feed costs. Some capture fisheries species, including tuna, have also registered sharp increases. As a result, the Fish Price Index has risen to the record levels witnessed during the summer of 2011. In the coming months, supply constraints for several important species are likely to keep world fish prices on the rise.

## FAO FISH PRICE INDEX (2002-2004 = 100)



## WORLD FISH MARKET AT A GLANCE

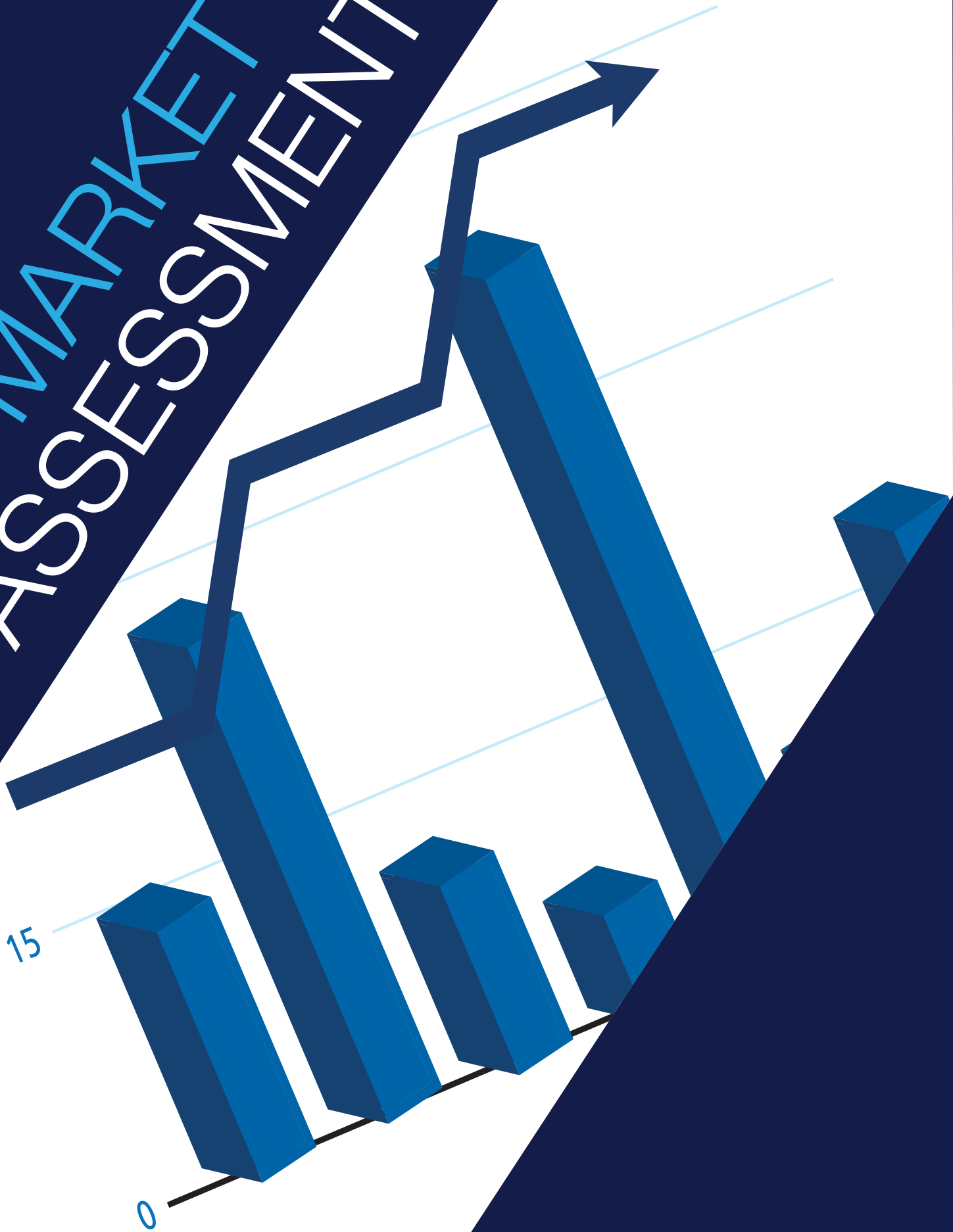
	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>156.2</b>	<b>156.7</b>	<b>161.2</b>	<b>2.9</b>
Capture fisheries	93.5	90.2	91.0	0.9
Aquaculture	62.7	66.5	70.2	5.6
<b>Trade value (exports USD billion)</b>	<b>127.6</b>	<b>128.2</b>	<b>130.8</b>	<b>2.0</b>
<b>Trade volume (live weight)</b>	<b>57.2</b>	<b>57.4</b>	<b>57.8</b>	<b>0.7</b>
<b>Total utilization</b>	<b>156.2</b>	<b>156.7</b>	<b>161.2</b>	<b>2.9</b>
Food	131.8	135.7	140.5	3.5
Feed	18.3	15.5	15.7	1.0
Other uses	6.0	5.5	5.1	-7.3
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
Food fish (kg/yr)	18.9	19.2	19.7	2.4
From capture fisheries (kg/year)	9.9	9.8	9.9	0.5
From aquaculture (kg/year)	9.0	9.4	9.8	4.4
<b>FAO FISH PRICE INDEX <sup>1</sup> (2002-2004=100)</b>	<b>2011</b>	<b>2012</b>	<b>2013 <i>Jan-May</i></b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	154	145	156	7.7

<sup>1</sup> Data source: Norwegian Seafood Council

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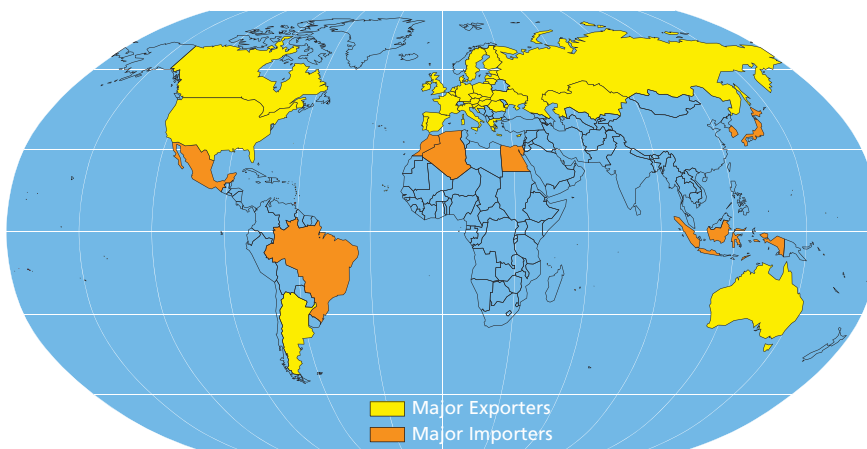
# MARKET ASSESSMENTS





# WHEAT

Major Wheat Exporters and Importers



## PRICES

### Good crop prospects for 2013 put downward pressure on prices

Compared with the first half of the current marketing season, international wheat prices were generally weaker during its second half, which began in January 2013. A poor harvest in Argentina and concerns over winter wheat conditions in the United States plus a strong increase in the use of wheat for feed (as a result of the tightness in maize) provided some support. However, favourable prospects for 2013 harvests, especially in the Black Sea, slower trade

activity and large supplies of old crop (2012 production) in non-traditional exporting countries, such as in India, continued to put pressure on prices. The benchmark United States wheat, **No.2 Hard Red Winter, f.o.b. Gulf**, averaged USD 329 per tonne in May, some 5 percent below its level at the start of the year but still almost 18 percent higher than in May 2012.

Wheat futures also weakened during the second half of the season. Although less than ideal weather conditions in Australia, parts of Europe and the United States were supportive, the US quotations were depressed by the continued slow pace of exports, weakness in maize prices

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

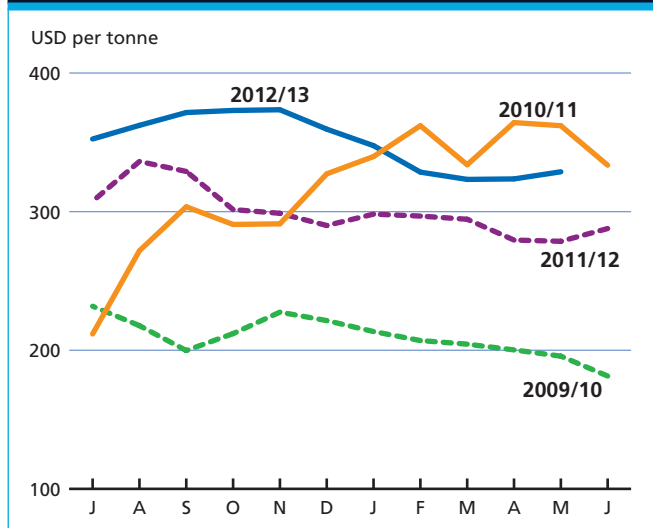
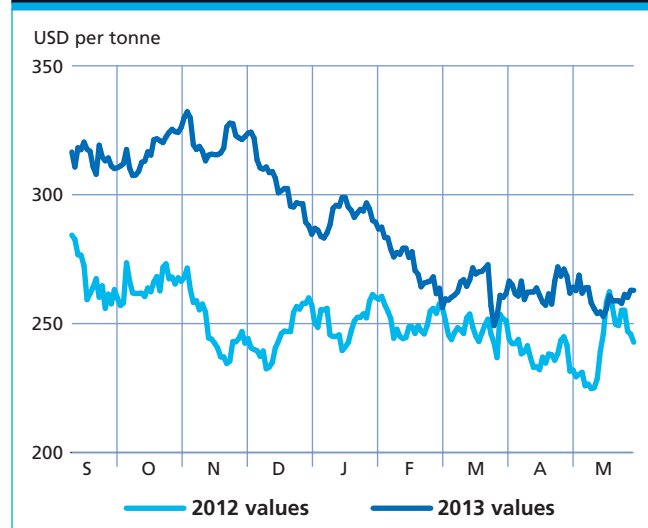


Figure 2. CBOT wheat futures for September



and the forecasts for a large increase in world wheat production in 2013. In May 2013, **wheat futures in Chicago for September delivery** averaged USD 260 per tonne, down 11 percent from the beginning of 2013, but ten percent higher than the corresponding period last year.

## PRODUCTION

### Global wheat output could reach record high in 2013

Based on indications as of late May, FAO's forecast for global **wheat** production in 2013 has been raised to a new record level of 702 million tonnes, 6.5 percent up from last year's reduced harvest. Increased plantings for the 2013 crop, in response to strong prices, are largely behind the expected growth, although a recovery of yields in some areas affected by drought last year is also contributing to the positive outlook. The upward adjustment in the past month largely reflects increased forecasts for the EU and China, but also for several smaller wheat producing nations.

In **North America**, latest indications for wheat production in the **United States** confirm the possibility of a sharp decline in output this year. Although winter wheat plantings for 2013 were estimated marginally up from last year, the rate of abandonment is expected to be above normal, reflecting the impact of drought. As a result, the harvested area of winter wheat is forecast to drop by about 4 percent compared with 2012, with yields also expected to be below average in areas where drought persists. Regarding spring wheat, farmers' intentions pointed to increased plantings, but the slow pace of fieldwork as of late May raises some doubt over the final planted area. Based on latest indications, the country's total wheat production in 2013 is forecast at 56 million tonnes, some 9 percent down from 2012. In **Canada**, the main spring wheat crop planting was underway as of April and, based on an official survey, the area is expected to increase sharply by some 12 percent, largely at the expense of canola, the major oilseed crop.

In **Europe**, the 2013 spring growing period got off to a slow start in northern and central areas where temperatures have been below the long-term average, with consequent delays in winter crop development and spring planting. Although it is still too early to judge the impact of the adverse weather, it likely precludes anything better than average yields in the affected areas. In the **EU**, the aggregate wheat area is estimated some 2 percent higher than last year and, assuming yields are average, output is forecast to increase by about 6 percent, to 139 million tonnes. In the **Russian Federation**, winter wheat plantings

**Table 1. World wheat market at a glance**

	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	Change: 2013/14 over 2012/13
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>701.5</b>	<b>659.1</b>	<b>702.0</b>	<b>6.5</b>
<b>Trade<sup>1</sup></b>	<b>146.8</b>	<b>139.5</b>	<b>136.0</b>	<b>-2.5</b>
<b>Total utilization</b>	<b>697.2</b>	<b>686.2</b>	<b>693.8</b>	<b>1.1</b>
Food	471.2	474.6	480.3	1.2
Feed	146.5	132.9	133.7	0.6
Other uses	79.4	78.7	79.7	1.3
<b>Ending stocks</b>	<b>183.1</b>	<b>164.2</b>	<b>173.1</b>	<b>5.4</b>
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	67.2	66.9	67.1	0.3
LIFDC (kg/yr)	47.8	47.7	48.4	1.5
<i>World stock-to-use ratio (%)</i>	<i>26.7</i>	<i>23.7</i>	<i>24.5</i>	
<i>Major exporters stock-to-disappearance ratio<sup>2</sup> (%)</i>	<i>18.4</i>	<i>14.2</i>	<i>15.5</i>	
<b>FAO WHEAT PRICE INDEX<sup>3</sup> (2002-2004=100)</b>	<b>2011</b>	<b>2012</b>	<b>2013 Jan-May</b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	222	210	212	10.3

<sup>1</sup> Trade refers to exports based on a common July/June marketing season.

<sup>2</sup> Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Fed., Ukraine and the United States.

<sup>3</sup> Derived from the International Grains Council (IGC) wheat index.

**Table 2. Wheat production: leading producers\***

	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>		<i>%</i>
European Union	131.3	139.0	5.9
China (Mainland)	120.6	121.8	1.0
India	94.9	93.6	-1.4
United States	61.8	56.0	-9.4
Russian Federation	37.7	55.0	45.9
Canada	27.2	29.4	8.1
Australia	22.1	24.0	8.6
Pakistan	24.0	26.3	9.6
Turkey	20.1	21.0	4.5
Ukraine	15.8	20.2	27.8
Kazakhstan	9.8	14.1	43.9
Iran Islamic Rep. of	13.8	14.5	5.1
Argentina	9.0	11.0	22.2
Egypt	8.8	9.4	6.8
Uzbekistan	6.7	6.7	0.0
Other countries	55.5	60.0	8.1
<b>World</b>	<b>659.1</b>	<b>702.0</b>	<b>6.5</b>

\* Countries listed according to their position in global production (average 2011-2013)

were down from the previous year due to dry weather but winter survival rates are estimated above normal after generally favourable winter conditions. The spring wheat area is expected to increase in response to high price prospects but the prolonged winter weather in many parts could impact on the final area sown. In the main producing southern regions, above-normal temperatures and reduced precipitation in recent weeks have raised concern over yield prospects for winter crops and could impact spring sowing in these areas. At this stage, assuming conditions return to normal for the remainder of the season, aggregate wheat output is forecast to recover sharply from last year's drought-reduced level to about 55 million tonnes. In **Ukraine**, the winter wheat conditions are also reported to be generally good, and spring planting is progressing well. Wheat output in 2013 is forecast to recover from the previous year's reduced level to 20 million tonnes.

In **Asia**, where harvesting of the 2013 wheat crops in the Far East subregion is already underway or due to start soon, prospects are mostly good in the main producing countries following generally favourable weather. In **China**, the latest official forecast points to a wheat crop of 121.8 million tonnes, surpassing by 1 percent last year's record. Apart from satisfactory weather, the good outcome is attributable to subsidized inputs, including high-quality seeds, fertilizers and fuel. In **India**, the official forecast for 2013 wheat production has been raised to 93.6 million tonnes, a good harvest, although down by 1.4 percent from last year's high. In **Pakistan**, a record 2013 harvest is expected – officially forecast at 26.3 million tonnes, it will be some 10 percent above the 2012 reduced harvest.

In the **Asian CIS** subregion, **Kazakhstan** is the major wheat producer and the bulk of its crop is spring sown from April to May. Plantings are forecast at about 13 million hectares, slightly down from 2012, but a return to normal yields after last year's reduced levels is expected to lift production back up, to some 14 million tonnes.

In **North Africa**, weather conditions remain favourable for harvesting the 2013 winter wheat. In **Egypt**, the 2013 wheat crop is officially forecast at a record 9.4 million tonnes. In **Algeria** and **Tunisia**, outputs are forecast to be similar to last year's satisfactory levels while, in **Morocco**, wheat production is set to recover sharply to 6.5 million tonnes, after a reduction in the previous year due to adverse weather.

In the Southern Hemisphere, winter wheat sowing is underway in **Australia**. Early indications point to about a 4 percent increase in plantings in response to attractive prices. Assuming average yields, this could lift output to 24 million tonnes. However, as of mid-May, soil moisture was still lacking in many parts of the eastern grain belt. Without

good rains in the coming weeks, this would impact the final area sown. In **Argentina**, early indications for the 2013 wheat crop, to be planted from June, suggest an increase of area from last year's sharply reduced level to about 3.5 million hectares. Assuming normal weather conditions and a recovery in yields from last year, production is tentatively forecast to increase to 11 million tonnes. In **Brazil**, where planting of the 2013 crop was underway as of May, output is officially forecast to increase by about 25 percent from last year's poor level to 5.5 million tonnes, remaining still below average. Planted area is expected to increase only marginally, while yields are seen to recover by almost 18 percent from the low levels of 2012.

## TRADE

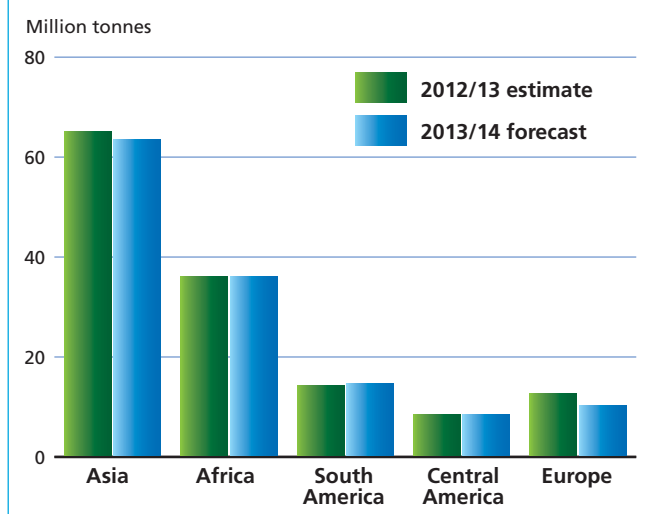
### Wheat trade to decline in 2013/14 for the second consecutive season

FAO's first forecast for world wheat trade in 2013/14 (July/June) is put at 136 million tonnes, 3.5 million tonnes less than the latest estimate for 2012/13 and almost 11 million tonnes, or 7 percent, below the all-time high of 146.8 million tonnes registered in 2011/12. The anticipated decline in world trade is mainly attributable to projected lower import demand by several countries in Asia and Europe, mostly due to higher domestic production.

In **Asia**, aggregate imports in 2013/14 are forecast at 63.2 million tonnes, down 1.6 million tonnes from 2012/13. Smaller purchases are foreseen for the **Islamic Republic of Iran**, which had doubled imports in 2012/13 to replenish stocks. As a result, the country is estimated to import only 1.5 million tonnes in 2012/13, down from 4.7 million tonnes in 2012/13. Feed wheat imports by the **Republic of Korea** are expected to decline by at least 400 000 tonnes as larger maize supplies in the new season may encourage a switch to maize instead. By contrast, larger purchases are forecast for **Saudi Arabia**, given the falling trend in domestic production associated with the gradual phasing out of subsidies to domestic producers. In **China**, in spite of the projected record wheat crop this year, imports of high quality wheat could increase by around 500 000 tonnes should prices remain favourable. China surprised the market in April when it purchased almost 1 million tonnes of soft red winter wheat from the United States. This came after a sharp price decline in international markets, which put the US prices below the domestic prices of China's *Juangsue* red wheat.

In **Europe**, total imports in 2013/14 are projected to reach 10 million tonnes, down more than 2 million tonnes from the estimated imports in 2012/13. Most of this decline is expected in the **Russian Federation** where this year's

**Figure 3. Wheat imports by region**

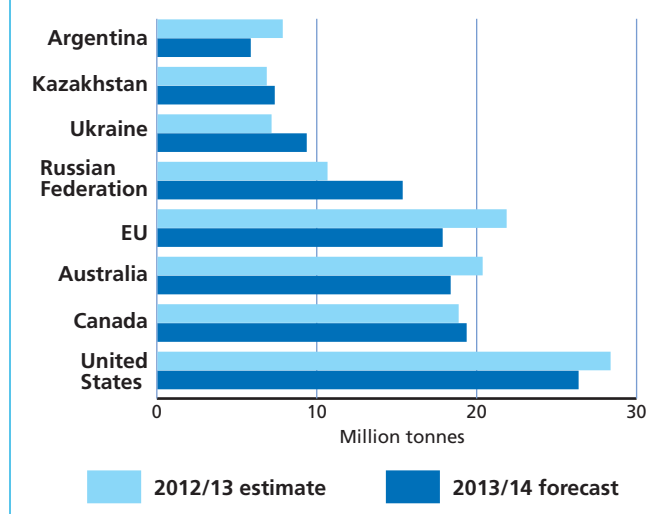


anticipated recovery in production could result in a decline of 2 million tonnes in imports. While still a net exporter in the 2012/13 marketing season, in April the country suspended its 5 percent import duty on wheat until July 2013 to check rising domestic prices. Wheat imports by **Ukraine**, another net-exporting country, are also forecast to decline sharply, by at least 800 000 tonnes, given the current prospects for a strong rebound in domestic production. By contrast, wheat imports by the **EU** are expected to increase by 500 000 in the new season despite the projected increase in production. Larger imports may be required by the **UK**, where crops have been negatively affected by prolonged cold and wet weather conditions.

In **Africa**, aggregate wheat imports in 2013/14 could increase slightly from the current season's reduced level. In North Africa, wheat purchases by **Morocco** are set to decrease by 900 000 tonnes because of the anticipated recovery in domestic production. Lower imports are also forecast for **Algeria**. However, in **Egypt**, the world's largest wheat importer, they may increase to 9 million tonnes on growing demand. Most countries in the sub-Saharan region are forecast to import as much as in the current season. Only **Kenya** may buy significantly more wheat in 2013/14, due to rising demand.

In **Latin America and the Caribbean**, total imports in 2013/14 are forecast to change little with most countries keeping their imports at about 2012/13 levels. Wheat imports by **Brazil**, the world's second largest wheat importer after Egypt, are forecast at 7.5 million tonnes, unchanged from the estimated purchases in the current season, during which, in April, Brazil doubled the non-Mercosur import quota (to 2 million tonnes) and waived the 10 percent tariff until July 2013. This was intended

**Figure 4. Major wheat exporters**



to facilitate imports from non-traditional suppliers so as to offset reduced exports from Argentina, which had harvested a poor crop in 2012/13.

Regarding exports, the expected recovery in wheat production could boost shipments from the **Russian Federation** and **Ukraine** in the new season. Slightly higher exports are also forecast for **Canada**, but sales from a number of other major exporters are expected to decline, in particular from **Argentina**, **Australia** and the **United States** due to reduced crops, and from the **EU**, largely on assumption of rising competition with Black Sea-origin wheat and shrinking demand in world wheat markets in 2013/14. Among the non-traditional exporters, shipments from **India** could remain at the same level as in 2012/13 (7 million tonnes), given the large surplus generated by consecutive years of bumper crops.

## UTILIZATION

### Modest growth in world wheat utilization projected for 2013/14

Following a small decline in 2012/13, total wheat utilization in 2013/14 is forecast to increase to 694 million tonnes, 1 percent higher than 2012/13 but still about 1 percent below the 10-year trend.

Strong demand for feed lifted world wheat utilization to a record high of 697 million tonnes in 2011/12. The sudden increase in the feed use of wheat in 2011/12 was driven by very tight supply and high prices of maize and barley. While supplies of coarse grains have been short again in 2012/13, and their prices also very high, feed wheat use is not expected to increase as much as it did in 2011/12 largely because of the overall difficult macro-economic conditions.

These very same conditions are expected to weigh on feed demand in 2013/14.

Total **feed use** in 2013/14 is projected at nearly 134 million tonnes, well below the peak of 147 million tonnes registered in 2011/12 and up slightly from 2012/13. Contrary to the situation in 2012/13, the EU, the largest user of wheat for animal feed, is anticipated to account for much of the world increase in wheat feed use in 2013/14. By contrast, feed use of wheat in the United States is forecast to decline sharply from the peak registered this season, provided the expected strong recovery in domestic maize supply in 2013/14 is confirmed.

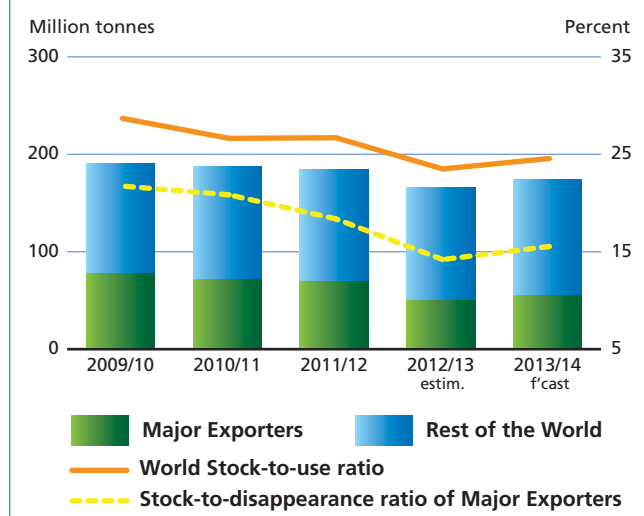
World utilization of wheat in 2013/14 for **direct human consumption** is expected to reach 480 million tonnes, up 1.2 percent from 2012/13. At this level, world wheat consumption, on a per capita basis, would be steady at around 67.00 kg per annum. Per capita wheat consumption is expected to remain at around 60 kg in the developing countries and at 96 kg in the developed countries.

## STOCKS

### Higher production pushing up world inventories in 2013/14

Based on the latest production forecasts for 2013 and the projected utilization in 2013/14, FAO's first forecast for world wheat stocks by the close of crop seasons in 2014 stands at around 173 million tonnes, representing a 5 percent, or 8.4 million tonnes, rebound from their opening levels. The bulk of this increase is projected for **China** (+3.9 million tonnes), the **EU** (+3.5 million tonnes) and the **Russian Federation** (+ 3.2 million tonnes), more than offsetting possible declines in a few countries, most notably, **Egypt** (- 600 000 tonnes), Ukraine (-800 000

Figure 5. Wheat stocks and ratios



tonnes) and the **United States** (-1.6 million tonnes). In **India**, inventories are again likely to be above normal levels given the consecutive years of bumper crops.

At the current forecast levels, the **world wheat stocks-to-use ratio** in 2013/14 would reach 24.6 percent, up from 23.5 percent in 2012/13 and well above the historical low of 19.9 percent registered in 2007/08. Furthermore, the ratio of **major wheat exporters' closing stocks to their total disappearance** (defined as domestic utilization plus exports) is set to increase from 14.2 percent in 2012/13 to 15.5 percent in 2013/14. This ratio would be 2.6 percentage points higher than in 2007/08 when international prices surged on growing supply concerns. Given the importance of wheat as a food staple, the increase in these ratios is a positive development for global food security.

# COARSE GRAINS

Major Coarse Grain Exporters and Importers



## PRICES

### Expectation of improved supplies in 2013/14 weighs on prices

Tight supplies, mainly due to drought-reduced 2012 maize crops in the United States, continued to underpin prices of major coarse grains throughout the 2012/13 season. International prices moved higher in the early months of 2013, influenced also by currency movements and faster pace in exports. However, prices weakened slightly in recent months with newly harvested crops from South America reaching world markets and the

expectation of a very strong recovery in production in the United States.

The benchmark **US maize prices (yellow, No. 2, f.o.b.)** averaged USD 295 per tonne in May, down 11 percent from the start of the season in July 2012 but still 10 percent above May last year. Export prices of **sorghum** (Argentina and the United States origins) closely followed maize although, in recent weeks, Australian sorghum prices rose sharply on supply concerns. **Barley** prices, especially Black Sea quotations, were underpinned by strong international demand earlier in the year, while unfavourable conditions for spring plantings in Europe

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

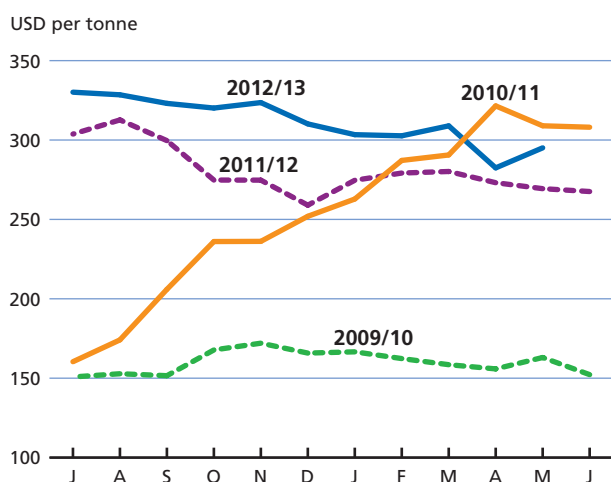
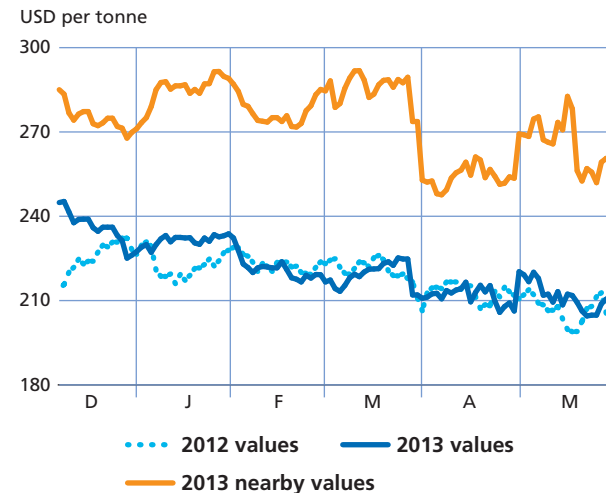


Figure 2. CBOT maize futures for December



were also supportive. Barley values (feed barley) weakened as crop conditions improved and trade activity slowed down.

Good prospects for a strong recovery in coarse grains production in general, and maize in particular, have put downward pressure on prices in the futures markets. In May, the **Chicago maize futures** for December delivery averaged USD 223 per tonne, 8 percent below their nearby (July) values. This situation is very much a reflection of tight supplies of the old crop while markets anticipate prices to drop below current levels by the end of year with the arrival of a bumper new crop in the United States.

## PRODUCTION

### Global output of coarse grains could recover strongly in 2013

FAO's latest forecast for world production of **coarse grains** in 2013 stands at 1 259 million tonnes, 8.5 percent up from last year and a new record level, well above the previous high of 1 167 million tonnes in 2011. The bulk of the increase is anticipated in the United States, the world's largest producer, where a sharp expansion in maize plantings is forecast, but it also reflects record crop prospects in China and good harvests already underway in South America.

Global output of **maize** in 2013 is forecast at about 963 million tonnes, 10 percent up from 2012. In the **United States**, the world's largest maize producer, the early pace of maize planting was much slower than normal due to adverse weather. However, weather improved in mid-May and farmers made up quickly for the lost time. If weather conditions remain clement, survey data indicates that

producers intend to plant the largest area since 1936. If these intentions are realized and yields return to normal after last year's drought-reduced levels, the country's maize output could increase to about 340 million tonnes. In **China**, the world's second largest maize producer, 2013 production is expected to increase 2.8 percent above last year's level to a new record of 214 million tonnes. In the **EU**, maize plantings are forecast to increase slightly this year and, assuming yields recover, output could increase by some 16 percent or 9 million tonnes to about 65 million tonnes.

In the Southern Hemisphere, the main 2013 maize harvests are underway or already complete in some countries. In **South America**, in **Brazil**, harvesting of the 2013 first maize season is progressing, while planting of the second season crop was completed in March. Official forecasts point to an aggregate production in 2013 of 77.8 million tonnes, a new record level, 9 percent above last year's peak. This mainly reflects an expected 9 percent increase overall in the area harvested, driven by higher market prices. In **Argentina**, where harvesting of the 2013 maize crop is almost complete, production is officially forecast to increase by 21 percent from 2012, reaching 25.7 million tonnes. Higher yields in the key growing areas have more than offset a reduction in the area planted caused by excessive rains at sowing time. In **Southern Africa**, where the main maize harvest is already underway, aggregate output is forecast to decrease for the third year in succession, albeit slightly, to about 23 million tonnes, which would still remain above the short-term average. In **South Africa**, the subregion's main producer and exporter, prospects have deteriorated since earlier in the season mainly because of dry conditions in western

Figure 3. World maize production

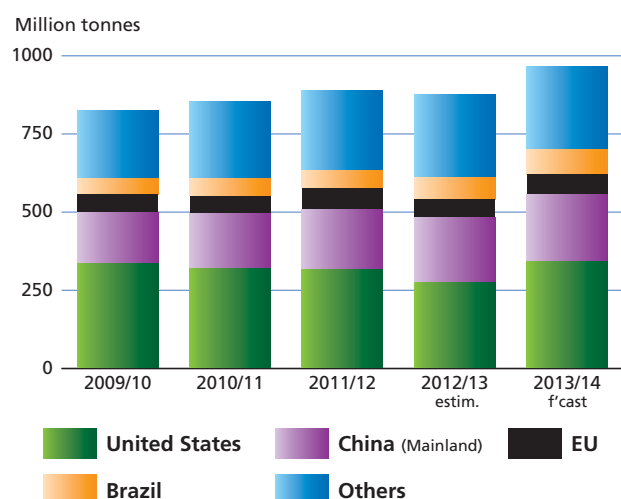


Figure 4. Soybean/maize ratio



From a historical perspective in the USA, whenever this ratio exceeds 2.4, the general bias favours soybean over maize, resulting in a shift of planting area from maize to soybeans.

**Table 1. World coarse grain market at a glance**

	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	Change: 2013/14 over 2012/13
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
<b>Production</b>	1 167.5	1 160.7	1 259.3	8.5
<b>Trade<sup>1</sup></b>	131.8	129.0	133.0	3.1
<b>Total utilization</b>	1 161.7	1 168.6	1 216.9	4.1
Food	199.8	205.2	208.2	1.5
Feed	634.7	649.2	685.6	5.6
Other uses	327.1	314.2	323.0	2.8
<b>Ending stocks</b>	176.7	173.0	213.7	23.5
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	28.6	28.9	29.1	0.7
LIFDC (kg/yr)	39.5	40.4	40.7	0.7
World stock-to-use ratio (%)	15.1	14.2	17.1	
Major exporters stock-to-disappearance ratio <sup>2</sup> (%)	10.3	8.0	12.5	
<b>FAO COARSE GRAIN PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
	277	283	283	8.4

<sup>1</sup> Trade refers to exports based on a common July/June marketing season.

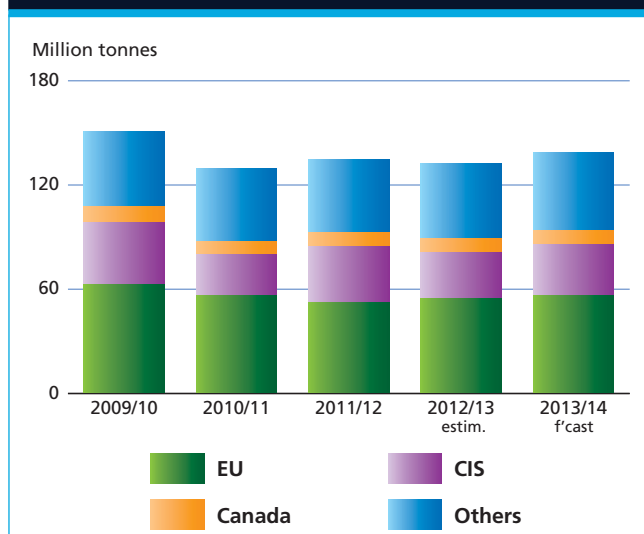
<sup>2</sup> Major exporters include Argentina, Australia, Brazil, Canada, EU, Russian Fed., Ukraine and the United States.

**Table 2. Coarse grain production: leading producers\***

	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>		%
United States	286.3	357.1	24.7
China (Mainland)	217.0	222.8	2.7
European Union	142.3	152.9	7.4
Brazil	74.1	80.8	9.0
India	42.2	38.8	-8.1
Russian Federation	30.8	34.0	10.4
Argentina	31.1	34.3	10.3
Ukraine	29.9	31.8	6.4
Mexico	30.0	30.3	1.0
Canada	24.4	26.0	6.6
Nigeria	22.6	22.6	0.0
Indonesia	19.0	19.0	0.0
Ethiopia	17.4	17.4	0.0
Turkey	12.4	12.8	3.2
South Africa	13.3	12.6	-5.3
Other countries	167.9	166.1	-1.1
<b>World</b>	<b>1 160.7</b>	<b>1259.3</b>	<b>8.5</b>

\* Countries listed according to their position in global production (average 2011-2013)

**Figure 5. World barley production**



areas of the country's maize triangle, predominantly a white maize producing region. Growing conditions remain more favourable in the yellow maize growing eastern areas. Based on latest indications, the country's aggregate maize output is expected at 12.1 million tonnes, about 5 percent below the 2012 harvest, which was recently revised upwards.

World output of **barley** in 2013 is forecast at about 138 million tonnes, 4.9 percent up from 2012. Larger harvests are expected in all the major barley producing countries throughout the world, but the most significant increases would be in North Africa and the CIS countries in Europe, where outputs are forecast to recover from last year's drought-reduced levels.

## TRADE

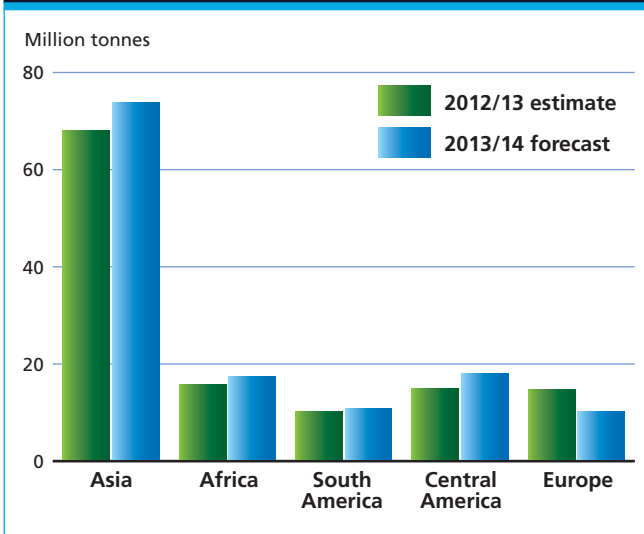
### World trade in coarse grains to increase in 2013/14

FAO's first forecast for world trade in coarse grains in 2013/14 (July/June) points to a 3 percent (4 million tonnes) expansion from the 2012/13 estimated level to an all-time high of 133 million tonnes.

The anticipated increase would be largely on account of a larger volume of **maize** trade, which is forecast to reach a record 103 million tonnes, up 3.5 percent (3.5 million tonnes) from 2012/13. The bulk of the increase is expected in **Asia**, where total maize imports could rise by 11 percent and reach 55.6 million tonnes. Imports by **China** alone are forecast to climb by 3 million tonnes in 2013/14 in spite of anticipated record production this year. China's imports have been on the rise since 2010/11 and, while recent episodes of animal diseases slowed the pace of China's



Figure 6. Coarse grain imports by region

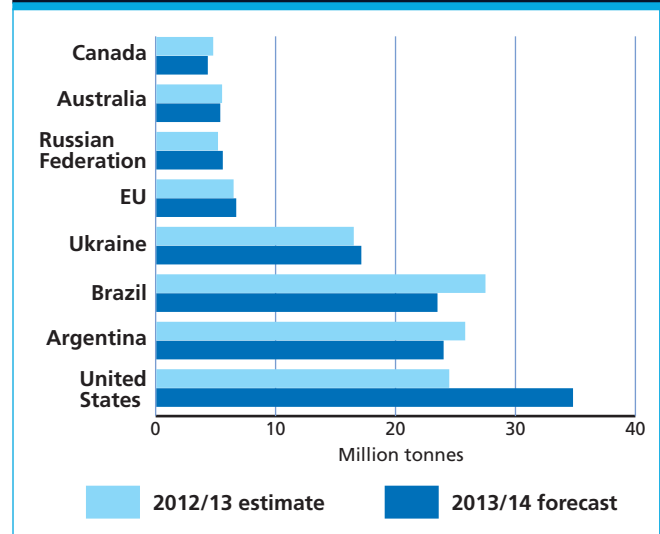


feed grains purchases from world markets, the overall trend still points to further increases. Larger maize imports are also forecast for the **Republic of Korea** as the country is expected to take advantage of lower maize prices and reduce its purchase of feed wheat instead. Maize imports in **Africa** are forecast to increase significantly as well, from 13.2 million tonnes in 2012/13 to 15 million tonnes in 2013/14. Most of this increase is expected in **Egypt** where this year's maize production could fall short of 2012/13 levels. Also in **Latin America and the Caribbean**, maize imports are forecast higher, especially in **Mexico** where, despite an increase in production, they could rise to 9 million tonnes in order to meet the growing demand from the feed sector. By contrast, imports into **Europe** are expected to fall sharply in 2013/14, mostly in the **EU**, given this year's anticipated recovery in the production of wheat, a major feed grain in the Union. Elsewhere, imports by the **United States** are likely to return to a normal level of less than 1 million tonnes, down from an exceptionally high level of 3 million tonnes in 2012/13.

World barley trade is likely to remain steady at 19 million tonnes. Countries in Asia are expected to account for 81 percent of the world import volume with **Saudi Arabia** alone accounting for half of the volume flowing into the region. In **Africa**, current indications point to a small reduction in barley imports to just above 1 million tonnes with most of the decrease in **Algeria**, facilitated by higher domestic production. Likewise, in **Europe**, imports by the **Russian Federation** and **Ukraine** are seen to decline slightly, given the anticipated recovery in domestic supplies in 2013/14.

Global trade in sorghum is forecast to reach 7.5 million tonnes in 2013/14, up 500 000 tonnes from

Figure 7. Major coarse grain exporters



2012/13. Purchases by **Mexico**, the world largest sorghum importer, are forecast to increase by 1 million tonnes, bringing total purchases to 3 million tonnes to meet rising domestic demand. Mexico's increase will be partially offset by lower EU imports, now forecast to be halved to 300 000 tonnes in 2013/14. Global trade in other coarse grains (millet, rye and oats) is anticipated to total 3.5 million tonnes in 2013/14, unchanged from 2012/13 level.

Regarding coarse grains exports, a recovery in supplies of maize in the **United States** is expected to boost its shipments to over 34 million tonnes, which would be at least 10 million tonnes higher than the current season's reduced level. Of this total, maize exports are put at 30 million tonnes. Coarse grains exports by **Argentina** are forecast to decline to 23.5 million tonnes on lower shipments of barley. Maize exports from **Brazil** may reach 23 million tonnes. In 2012/13, Brazil became the world's largest maize exporter, with total shipments of 27 million tonnes, surpassing even the United States. However, the forecast decline in Brazil's exports to 23 million tonnes would place the country as the second largest maize exporter in 2013/14, after the United States. Among the other major coarse grains exporters, total shipments from the **EU** are forecast to rise slightly, to 6.2 million tonnes, of which barley would account for 72 percent. While exports from **Canada** and **Australia** are likely to decline somewhat, maize exports from the **Russian Federation** and **Ukraine** are anticipated to increase. However, exports of barley from the two countries could remain close to 2012/13 levels.

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

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 <i>estim.</i>	2013/14* <i>(f'cast)</i>
	<i>Thousand tonnes</i>							
Maize production	267 503	311 177	307 142	332 549	316 165	313 949	273 832	359 173
Ethanol use	53 837	77 453	93 396	116 616	127 538	127 284	116 845	123 195
Yearly change (%)	32	44	21	25	9	-0.2	-8	5
As production (%)	20	23	30	35	40	41	43	34

## UTILIZATION

### Falling prices could boost feed and industrial utilization of coarse grains

Based on early indications, total utilization of coarse grains in 2013/14 could be heading for the first significant year-on-year expansion in more than five years. FAO's first forecast for global utilization of coarse grains points to a 4 percent increase from the 2012/13 stagnated level, to an all-time high of 1 217 million tonnes. In contrast to the situation in the current season (2012/13), when total utilization in the developed countries is estimated to have contracted by over 2 percent against an expansion of 3.6 percent in the developing countries, the forecast growth in 2013/14 is likely to be shared equally between the developed and developing countries, with their use increasing by around 4 percent in each group. The expansions are mostly driven by expectations of much higher feed use, largely reflecting the anticipated rebound in maize supplies in the new season.

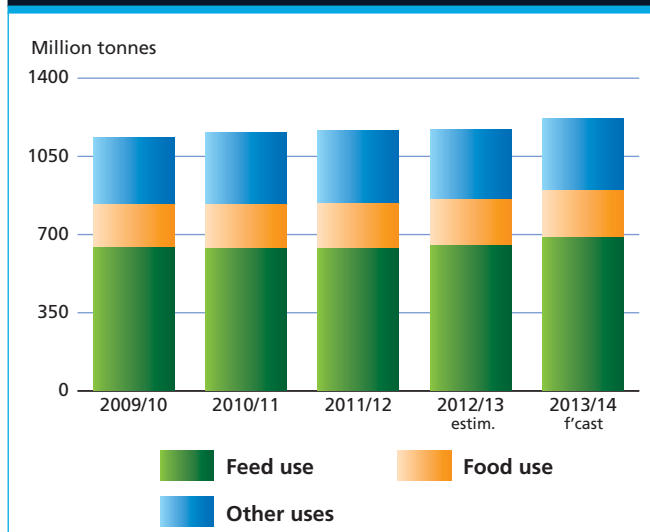
Total **feed utilization** of coarse grains is forecast to reach 686 million tonnes in 2013/14, some 5.6 percent higher than in 2012/13. In the developing countries, as a

group, the aggregate feed use is projected at 349 million tonnes, 6 percent higher than the latest estimate for the current marketing season and exceeding the projected feed use in the developed countries for the second consecutive season. However, most of this increase is expected to be concentrated in few countries, primarily in the emerging markets such as Brazil and China. In the developed countries, where total feed use in 2013/14 is projected to rise by 5 percent (about 17 million tonnes) to 337 million tonnes, the bulk of the growth is expected in the United States, where a recovery in maize production and falling prices could boost its domestic feed utilization by as much as 16 percent (18 million tonnes) to 130 million tonnes.

World **food consumption** of coarse grains is forecast to increase by 1.5 percent in 2013/14, to 208 million tonnes. Although globally, direct human consumption of coarse grains may seem far less significant than that of rice or wheat, coarse grains do account for an important share of human food consumption in Central America and the Caribbean as well as many countries in Africa. At the global level, the anticipated rate of increase in food consumption of coarse grains would closely trail growth in world population, thus leading to a stable average per capita consumption of around 29 kg. In Africa, per capita consumption is projected at 78 kg while, in Central America, it is put at 99 kg.

Total **industrial use** of coarse grains is forecast to reach at least 292 million tonnes in 2013/14, up 3 percent from the estimated level in 2012/13. Globally, nearly one-half of total industrial utilization of coarse grains is concentrated in the United States (at over 150 million tonnes), of which at least 117 million tonnes will be used for production of ethanol in 2012/13 (October/September) according to the official estimates. This would be down 8.2 percent from 2011/12 as high prices weigh on ethanol production. However, based on the expectation of a record US maize crop this year, early projections point to a significant (5.4 percent) rebound in the US use of maize for production of ethanol in the new marketing season (2013/14), increasing to 123 million tonnes, which is still below the 127 million tonnes record hit in 2010/11.

**Figure 8. Coarse grain utilization**



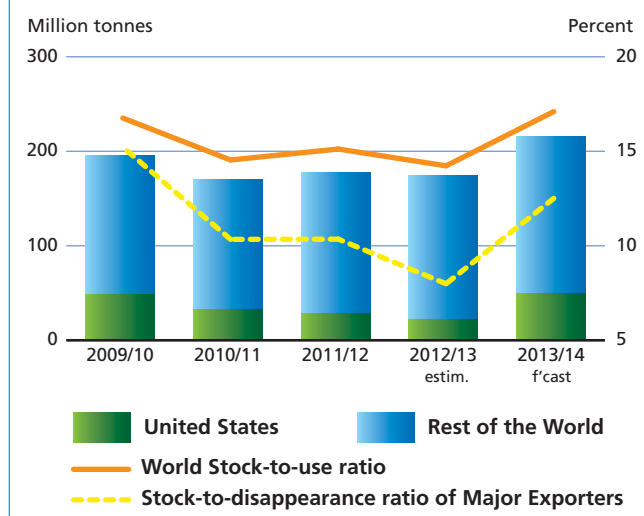
## STOCKS

### Inventories to rebound from a 2-year low to highest in 14 years

Assuming current production forecasts for 2013 materialize and based on FAO's early projections for total utilization in 2013/14, global inventories of coarse grains are likely to reach 214 million tonnes by the close of seasons in 2014. This is as much as 24 percent (41 million tonnes) above their 2-year low opening levels of only 173 million tonnes and the highest level since 2000. This will lift the **global stock-to-use ratio** from the historically low level of 14.2 percent in 2012/13 to at least 17 percent in 2013/14, signalling a notable improvement in the global supply and demand balance in the new season after an exceptionally tight situation in 2012/13. This improvement is also evidenced by the sharp increase in the **major exporters' stock-to-disappearance ratio** (i.e. domestic consumption plus exports), which is forecast to rebound from the historical low level of 8 percent in 2012/13 to 12.5 percent in 2013/14 – the highest level since 2009/10.

The bulk of the recovery in world stocks of coarse grains is expected in the **United States**, where maize stocks, having fallen to a critically low level of 19 million tonnes in 2012/13, are forecast to more than double and reach at least 45 million tonnes, their highest since 2005/06.

Figure 9. Coarse grain stocks and ratios



Significantly larger inventories are anticipated in **China**, where based on current expectation of another record maize crop this year, inventories could reach 67 million tonnes, 5 million tonnes higher than their opening levels. **Brazil** is also expected to end the new season with much larger maize stocks, given this year's bumper harvest and reduced export prospects compared to 2012/13. Larger carryovers, driven by the projected strong recovery in maize production this year, are also forecast for the **EU**.

# RICE

Major Rice Exporters and Importers



## PRICES

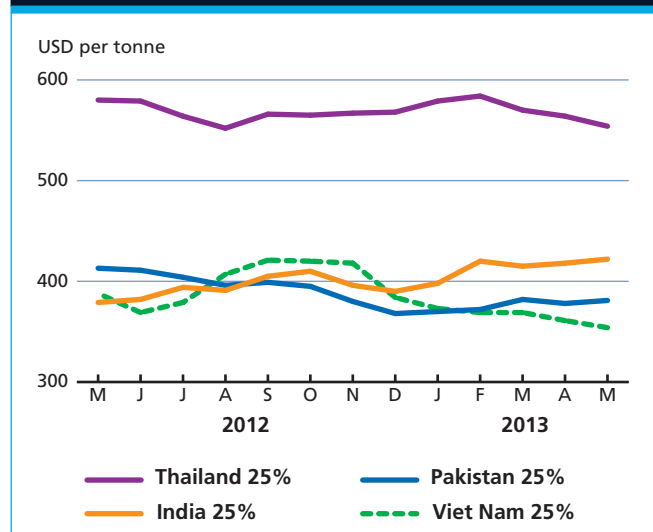
### International rice prices stable around high levels

International rice prices were generally stable in the past five months, as indicated by the FAO All Rice Price Index (2002-04=100), which averaged 240 points in May 2013, unchanged from a revised January value. However, on average, prices still were about 2 percent higher than in the corresponding period in 2012. Across the various rice types, the lower quality Indica Rice index was quoted at 238 in May, same as in January, while the higher quality Indica

dropped 4 points, or 1.8 percent, over the five-month period. Japonica rice prices were more volatile, dipping in the first quarter, amid growing competition among suppliers, before recovering in May to its January value. By contrast, aromatic rice varieties gained 6 percent between January and May 2013, reflecting thin supplies amid strong buying interest.

Seen from an origin perspective, prices have followed diverging trends since the beginning of the year. Large supplies exerted downward pressure on quotations in **Thailand** and **Viet Nam**, although the reduction or removal of minimum export prices also contributed to the drop in Viet Nam. For instance, the benchmark Thai white rice 100% B eased by 6.1 percent to USD 574 per tonne between January and May, and by 6.4 percent from May 2012 to May 2013, in spite of continued large government purchases under the rice pledging programme. The hefty public stocks held in Thailand also weighed on market sentiment, prompting Viet Nam to lower its own prices ahead of a possible offloading of large volumes of Thai rice on world markets. On the contrary, prices of regular Indica rice moved up in India, reflecting lower availabilities and large government purchases, and in **Pakistan**, on strong import demand from China and African countries. Prices also strengthened in the **United States** and in the chief exporters in South America, including **Argentina** and **Uruguay**, reflecting thin supply availabilities. In the **United States**, the high quality Indica US N.2 4% rice was quoted at USD 652 per tonne in May 2013, 5.8 percent higher than in January and almost 20 percent higher than in May last year.

Figure 1. Export prices for lower quality rice



In the next few months, the market attention is likely to focus on Thailand, regarding the possible release of large volumes of pledged rice from public stocks, but also on India, where the planned widening of the subsidized rice distribution programme may have an impact on export availabilities and prices. The pace of rice imports by China will also be critical, as the country emerged as one of the leading rice importers in the last year.

## PRODUCTION

### Preliminary forecasts for 2013 point to stronger production growth

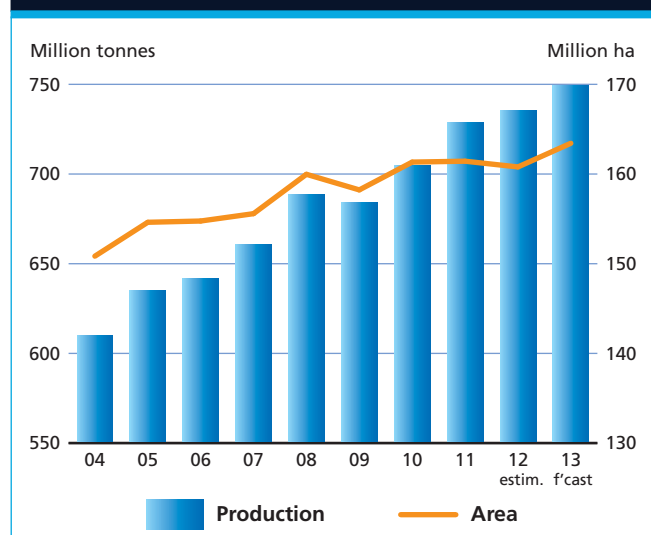
Since the May 2013 release of global rice supply and demand balances, the only critical revision to the 2012 world rice production estimate concerned **India**, where output was officially raised by 2.4 million tonnes. India's new production figure implies that the losses caused by the 2012 erratic monsoon rains were much less severe than originally believed. The revision lifts the 2012 global production aggregate to nearly 490 million tonnes, in milled rice terms, resulting in a 1.0 percent increase from 2011, equivalent to about 4.6 million tonnes, a relatively modest performance if compared to the 13 million tonne and 16 million tonne gains recorded by the sector in 2010 and 2011, respectively. The global pattern of the 2012 season follows closely the outcome of crops in Asia, where 444.5 million tonnes were harvested, some 4.4 million tonnes more than in 2011. The increase was supported by large gains in **China, Indonesia, the Philippines, Thailand** and **Viet Nam**, which more than compensated for shortfalls in **India, Nepal** and **Pakistan**, where crops were hit by unfavourable weather. In Africa,

some 17.5 million tonnes are estimated to have been harvested, 5.4 percent more than in 2011. Much of the gain originated in **Egypt**, where high prices induced farmers to exceed their official cultivation limits, but also in **Guinea, Madagascar, Mali** and **Senegal**. In most of the region, the sector continued to benefit from special development programmes, as well as renewed investor interest. By contrast, output fell in **Nigeria**, reflecting excessive precipitation and flooding, and in **Tanzania**, because of delayed and erratic rainfall. In Latin America and the Caribbean, 2012 production contracted by almost 7 percent to 18.3 million tonnes, following weather and price-induced reductions in **Argentina, Brazil, Ecuador** and **Uruguay**. In the other regions, output in 2012 rose by 30 percent in **Australia** and by 8 percent in the **United States**, but stagnated in the **EU** and the **Russian Federation**.

With the 2012 rice season now concluded, the market attention is shifting to the 2013 crops. While countries along and south of the equator are already harvesting their main crops, in the Northern Hemisphere, countries have just completed the sowing of their 2013 first (or single) crop, or are still waiting for the rains to come to start planting. The bulk of production will only be garnered in the second half of the year. Still tentatively, and assuming normal weather conditions prevail in the coming months, FAO forecasts world rice production in 2013 to reach 499.1 million tonnes, which is 1.9 percent, or 9 million tonnes, more than in 2012. The expected increase falls short of those realized in 2010 and 2011, largely because of the existing global supply overhang, which could depress world prices and, ultimately, farm prices. However, the effect on plantings of a possible drop in world quotations is likely to be uneven, as many governments, especially in Asia, guarantee relatively high support price levels to producers, shielding them against international price dips. Farmers are more exposed in the Americas and Europe, where the transmission of prices from international to domestic markets looks stronger.

Under more regular climatic conditions, production in Asia is forecast to grow by 1.9 percent, or 8.6 million tonnes, to 453.0 million tonnes in 2013. Monsoon rains, which determine much of the outcome of the season in the region, have been predicted to reach 98 percent of their long-run average in **India**. If confirmed, they could support a 2 percent upturn of production in the country to a record 106 million tonnes, with much of the increase likely to be concentrated in the seven eastern states that have been targeted for production expansion under India's "Extending the Green Revolution to Eastern States" programme. The raising of official paddy procurement prices and/or other

Figure 2. Global rice paddy production and area



support measures are expected to foster a continued expansion of outputs, especially in **Bangladesh, China, Indonesia, Malaysia** and the **Philippines**. However, at this preliminary stage, virtually all producing countries in the region look set to harvest larger crops, with the possible exceptions of **Japan**, which last year benefited from exceptionally favourable weather conditions, and **Viet Nam**, where official forecasts point to a slight decline of output. In 2013, 18.1 million tonnes of rice are expected to be harvested in Africa, 3.9 percent more than in 2012, with the largest absolute gains expected in **Egypt, Mali, Nigeria** and **Tanzania**. In **Egypt**, the recent decision to raise the permitted area for rice cultivation is foreseen to boost output by 4 percent. Large investments in the sector are also expected to underpin production in Western and Eastern Africa. However, prospects are negative for **Madagascar**, where the 2013 main crops are already at an advanced growing stage, reflecting mainly the possible negative effects of locust outbreaks on yields. Likewise, production in **Mozambique** has been hit by excessive precipitation and floods, which may result in a 15 percent shortfall from last season. In Latin America and the Caribbean, where the 2013 crops are already at the harvesting stage, production is forecast to rebound to 18.5 million tonnes, still remaining short of the 2011 record, as many producers cut rice planting in favour of more remunerative crops. In the other regions, prospects for 2013 are positive for **Australia**, with a 15 percent increase forecast by the Government, but remain downbeat in the **United States** and the **EU**, where adverse weather and unattractive price expectations may result in a contraction of the rice area.

## TRADE

### Weak import demand to result in a 2 percent contraction of rice trade in 2013

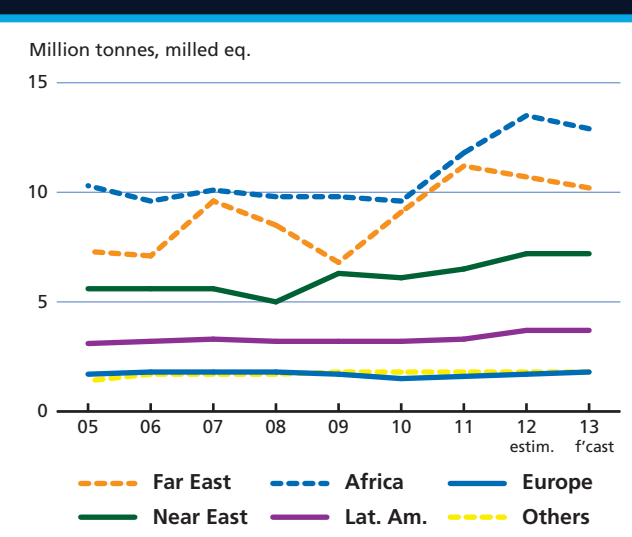
FAO has raised its previous forecasts of international rice trade in 2013 by about 200 000 tonnes to 37.6 million tonnes (milled basis). The revision mainly accounts for larger than previously forecast imports by **China**. On the supply side, it reflects more buoyant expectations for exports by **India, Myanmar** and **Viet Nam**, which more than offset downward adjustments for **Thailand** and the **United States**.

Compared to the 2012 record, the volume of rice trade in 2013 would be 2.6 percent lower, but still the second highest in history. The international trade in rice is now approaching 8 percent of world production, up from less than 7 percent in the previous decade. Much of the expected contraction of rice trade in 2013 would be

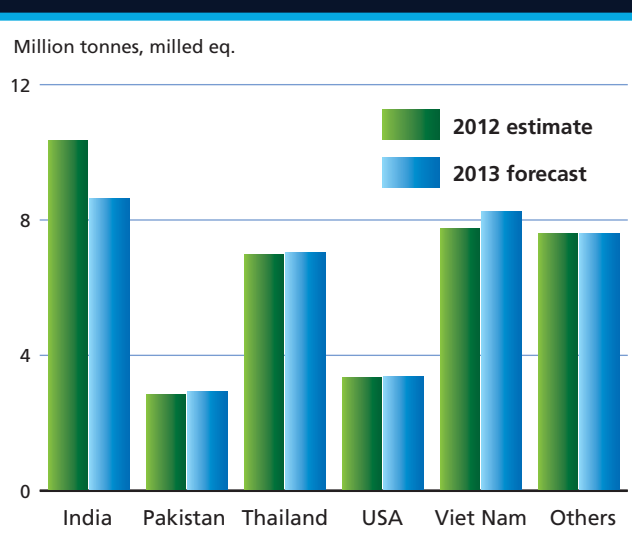
**Figure 3. World rice trade and FAO rice export price index**



**Figure 4. Rice imports by region**



**Figure 5. Rice exports by the major exporters**



associated with reduced purchases by **Indonesia, Nigeria, the Philippines and Thailand**, partly the result of good crops and, in the last three countries, of their efforts to thwart illegal rice inflows. Imports by the **Islamic Republic of Iran** and **Egypt** may also decline, following their fast paced purchases last year, which enabled them to refurbish stocks. On the other hand, official imports by **China** are predicted to remain at last year's level of 2.4 million tonnes, as domestic prices are still substantially above nearby exporter's quotations, making imports particularly attractive. China's import figure does not make provision for unofficial inflows, which have been reported to be rising.

As for exports, **India** is anticipated to ship 8.6 million tonnes this year, much less than the 10.3 million tonnes delivered in 2012, but still sufficient for it to retain its leading position among international suppliers. The anticipated decline reflects rising prices in India and anticipation of larger domestic requirements, once the National Food Security Act, which guarantees very cheap rice supplies to a widened set of the population, is implemented. Reduced availabilities could also hinder exports from **Argentina, Brazil and Uruguay**. A large part of these shortfalls is expected to be covered by **Viet Nam**, which may see exports rising by 6 percent to 8.2 million tonnes. Indeed, the country has taken an aggressive stance to buoy sales, first by reducing or suspending its minimum export prices, fearing a reversal of policies in **Thailand** will result in a large release of supplies from stocks in the country and, hence, falling international prices. **Egypt, Pakistan** and the **United States** are also forecast to step up exports. Among the other important sources, **Thailand**

is foreseen to export around 7 million tonnes, a similar level to last year, as the high prices guaranteed to Thai producers under the rice pledging programme continue to translate into export quotations far above those of competitors. However, shipments from Thailand could rebound sharply, should government procurement purchases under the pledging programme be discontinued or large supplies from public stocks be downloaded on the market.

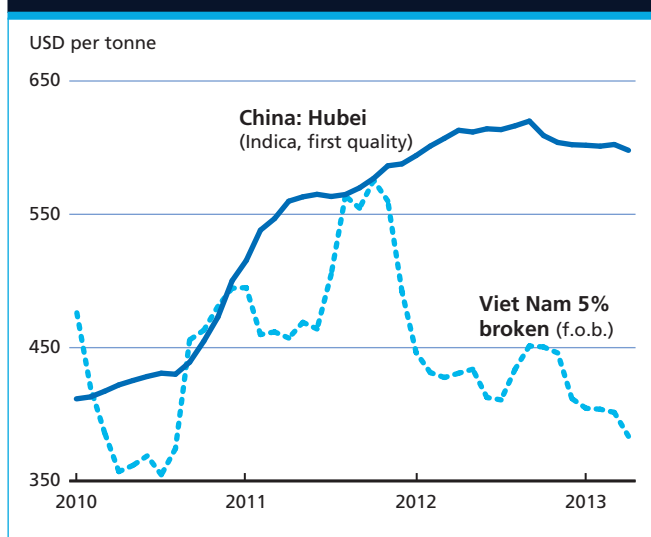
## UTILIZATION

### Demand for food consumption continues to underpin world rice utilization

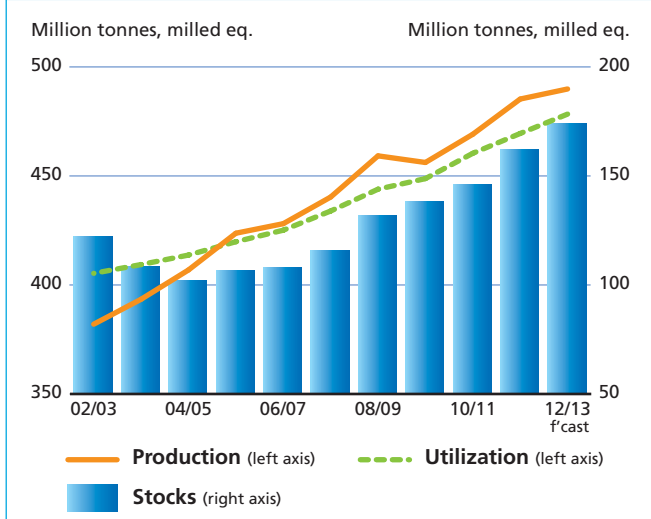
Global rice utilization in 2012/13 is estimated to hover around 478 million tonnes, almost 2 percent more than in the previous year, with most of the increase sustained by growing demand for food. Overall, this is gauged at close to 403 million tonnes, 7.5 million tonnes more than in 2011/12, which lifts the average world rice food intake per capita from 56.4 kg in 2011/12 to 56.8 kg in 2012/13. Rice remains a major staple for developing countries, where consumption is now estimated at 67.6 kg per person in 2012/13 compared to 12.3 kg per person in the developed countries. The increase in average rice food consumption is being facilitated in various countries by declining retail prices (Table 7) and, in others, by special subsidized distribution programmes targeting vulnerable population groups. However, retail prices remain high, exceeding USD 1.00 per kg in several markets, and have shown a tendency to rise in important countries such as **China, India, Indonesia** and **Myanmar**.

Based on expectations for a large increase in world supplies, under current prospects for a good 2013 production turnout, global rice utilization in 2013/14 is anticipated to expand strongly, by 2.7 percent or almost 13 million tonnes, to 491 million tonnes. Much of the increase would correspond to rice utilization as food, which will contribute to lifting per capita food consumption further. Demand of rice for food, however, could be affected by the very recent news regarding the detection of cadmium in rice produced in **China's** Hunan province. Cadmium is a carcinogenic metal that can cause severe damage to kidneys and bones. This event could have implications at the national level, and divert a wider share of the country's supplies towards feed and other utilizations, which include rice post-harvest losses. Based on current expectations, world rice per capita food consumption is anticipated to average 57.1 kg in 2013/14, up 0.4 percent from the previous year – rising in the developing countries, albeit by only 0.1 percent to 67.7 kg, and falling in the developed countries by 2.4 percent to 12.0 kg.

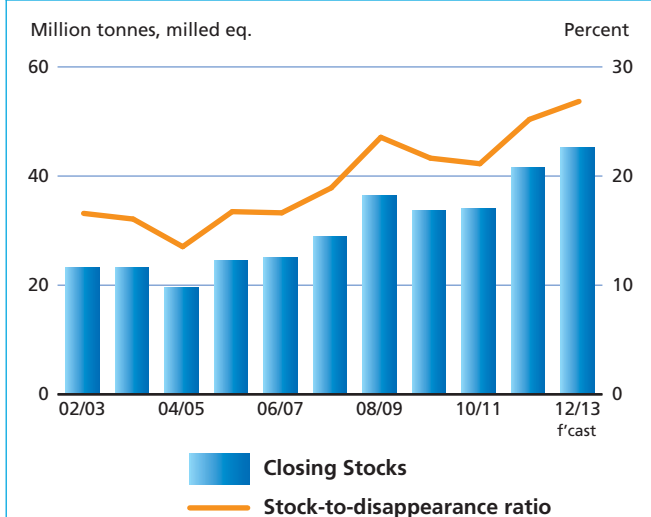
**Figure 6. Wholesale rice prices in China (Mainland) vs export prices in Vietnam**



**Figure 7. Rice production, utilization and stocks**



**Figure 8. Stocks held by the five major rice exporters and stock-to-disappearance ratio**



## STOCKS

### Exporting countries to account for the increase in world stocks

FAO's forecast of global rice carryover stocks at the close of crop seasons in 2013 have been raised by about 2 million tonnes since May, to 173.7 million tonnes, mainly reflecting upward revisions for India, following the release of new production figures for 2012, and for Thailand, on lowered export prospects. At that level, inventories would be 7 percent larger than their opening level, with much of the increase concentrated in **China** and **Thailand** where inventories are bulging. The Chinese and Thai Governments are actively purchasing rice from the market

**Table 1. World rice market at a glance**

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
<b>WORLD BALANCE</b>				
<b>Production</b>	469.1	485.3	489.9	0.9
<b>Trade <sup>1</sup></b>	36.2	38.6	37.6	-2.6
<b>Total utilization</b>	460.4	469.5	478.4	1.9
Food	387.9	395.4	402.9	1.9
<b>Ending stocks</b>	145.7	161.7	173.7	7.4
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	56.1	56.4	56.8	0.7
LIFDC (kg/yr)	69.3	70.2	70.9	1.0
World stock-to-use ratio (%)	31.0	33.8	35.3	
Major exporters stock-to-disappearance ratio <sup>2</sup> (%)	21.1	25.2	26.8	
<b>FAO RICE PRICE INDEX (2002-2004=100)</b>	2011	2012	2013 Jan-May	Change: Jan-May 2013 over Jan-May 2012 %
	251	240	241	2.3

<sup>1</sup> Calendar year exports (second year shown).

<sup>2</sup> Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

to support producer prices. Based on the current estimates, the increase in carryover stocks would lift the world rice **stock-to-use ratio** from 33.8 percent in 2012 to 35.3 percent in 2013. Seen from a trade status perspective, inventories held by exporting countries are set to end close to 10 percent higher at 145 million tonnes, while importing countries may cut their reserves by 3 percent to 28.1 million tonnes. Large supplies are expected to be carried forward to next season by the major exporters, especially **Thailand** and **India**, where public stocks are reaching very high levels. Overall, the five major rice exporters (India, Pakistan, Thailand, United States and Viet Nam) are anticipated to increase their end-of-season inventories from 14.2 million tonnes in 2012 to 44.9 million tonnes in 2013, resulting in their **stock-to-disappearance ratio** rising from 25.2 percent to 26.8 percent over the two years.

Based on the current forecasts for 2013 production and very early prospects for 2014 trade, global rice carryover stocks at the close of marketing years in 2014 are anticipated to reach 182.0 million tonnes, an increase of 5 percent from their opening levels. This would lift the world **stock-to-use ratio** further to 36.3 percent in 2014.



Table 2. Monthly retail prices of rice in selected markets

	Historical monthly price trend					Latest available: Month	USD/Kg	Latest quotation available compared to: <sup>1/</sup>			
	2007	2008	2009	2010	2011			2012	2013	3 months earlier	1 year earlier
<b>ASIA</b>											
Bangladesh: Dhaka (coarse)						Apr-13	0.40	5%	9%	-8%	
Cambodia: Phnom Penh (mix)*						Apr-13	0.45	6%	13%	13%	
China: 50 City Avg. (japonica second quality)						Apr-13	0.91	-1%	6%	6%	
India: Delhi						Apr-13	0.52	8%	14%	21%	
Indonesia: Ntl. Avg. (medium quality)						Apr-13	0.85	-1%	4%	18%	
Lao PDR: Vientiane (glutinous first quality)						Mar-13	0.95	-6%	4%	-6%	
Mongolia: Ulaanbaatar						Apr-13	1.21	0%	4%	2%	
Myanmar: Yangon (manawthukha FQ)*						Apr-13	0.42	14%	35%	6%	
Nepal: Kathmandu (coarse)						Jan-13	0.41	0%	3%	6%	
Pakistan: Karachi (irri)						Apr-13	0.52	0%	6%	24%	
Philippines: Ntl. Avg. (well-milled)						Apr-13	0.86	0%	0%	2%	
Sri Lanka: Colombo (white)						Apr-13	0.46	-5%	11%	0%	
Thailand: Bangkok (5% broken)*						Mar-13	0.52	-5%	1%	16%	
Viet Nam: Dong Thap (25% broken)						Apr-13	0.34	-4%	-5%	-17%	
<b>WESTERN AFRICA</b>											
Benin: Cotonou (imported)						Mar-13	1.05	0%	0%	10%	
Burkina Faso: Ouagadougou (imported)*						Apr-13	0.75	0%	4%	-1%	
Cape Verde: Santiago (imported)						Dec-12	1.23	2%	11%	10%	
Chad: N'Djamena (imported)						Mar-13	0.99	0%	-5%	6%	
Mali: Bamako*						Apr-13	0.63	-3%	-20%	0%	
Mauritania: Nouakchott (imported)						Feb-13	0.80	-1%	20%	-16%	
Niger: Niamey (imported)*						Apr-13	0.85	2%	8%	-9%	
Senegal: Dakar (imported)						Mar-13	0.93	5%	-6%	19%	
<b>CENTRAL AFRICA</b>											
Cameroon: Yaoundé						Dec-12	0.94	4%	4%	8%	
Dem. Rep. Congo: Kinshasa (imported)						Apr-13	1.64	33%	52%	43%	
<b>EASTERN AFRICA</b>											
Burundi: Bujumbura						Mar-13	1.16	-3%	-16%	34%	
Djibouti: Djibouti (Belem)*						Dec-12	0.59	-4%	-16%	-16%	
Rwanda: Kigali*						Apr-13	1.03	-19%	-14%	32%	
Somalia: Mogadishu (imported)						Mar-13	0.65	-14%	-37%	-48%	
Uganda: Kampala*						Apr-13	1.16	-4%	-21%	24%	
United Rep. of Tanzania: Dar es Salaam*						Apr-13	0.93	-30%	-37%	13%	

Table 2. Monthly retail prices of rice in selected markets (Cont'd)

	Historical monthly price trend	Latest quotation available compared to: <sup>1/</sup>				
		Month	USD/Kg	3 months earlier	1 year earlier	2 years earlier
<b>SOUTHERN AFRICA</b>						
Madagascar: Ntl. Avg. (local)		Apr-13	0.59	2%	6%	9%
Malawi: Lilongwe		Mar-13	1.00	4%	27%	-
Mozambique: Maputo		Apr-13	0.82	0%	9%	-10%
<b>CENTRAL AMERICA AND THE CARIBBEAN</b>						
Costa Rica: Ntl. Avg. (first quality)		Mar-13	1.55	-	1%	-7%
Dominican Rep: Santo Domingo (first quality)		Apr-13	1.11	0%	-6%	-2%
El Salvador: San Salvador		Mar-13	1.00	-7%	-7%	-7%
Guatemala: Ntl. Avg. (second quality)		Mar-13	1.17	0%	2%	6%
Haiti: Port-au-Prince (imported)		Apr-13	1.08	0%	6%	14%
Honduras: Tegucigalpa (second quality)*		Apr-13	0.88	1%	12%	6%
Mexico: Mexico City (sinaloa)*		Apr-13	0.88	-3%	6%	-2%
Nicaragua: Ntl. Avg. (second quality)		Apr-13	0.91	0%	4%	10%
Panama: Panama City (first quality)		Mar-13	1.20	-	8%	10%
<b>SOUTH AMERICA</b>						
Bolivia: La Paz (grano de oro)*		Apr-13	0.97	18%	12%	3%
Brazil: São Paulo		Apr-13	1.21	-5%	29%	31%
Colombia: Bogotá (first quality)*		Apr-13	1.21	-9%	-	5%
Ecuador: Quito (long grain)*		Apr-13	1.05	1%	8%	24%
Peru: Lima (corriente)		Apr-13	0.95	0%	-1%	1%
<b>NORTH AMERICA</b>						
United States: City Avg. (long grain, uncooked)		Apr-13	1.60	1%	4%	-1%
<b>EUROPE</b>						
Italy: Milan (arborio volano)*		Apr-13	0.97	-6%	-20%	-48%
Russian Federation: Ntl. Avg.		Apr-13	1.22	-2%	-11%	-18%

<sup>1/</sup> Quotations in the month specified in the fourth 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 Food Price Data and Analysis Tool; U.S. Bureau of Labor Statistics (BLS); Associazione Industrie Risiere Italiane (AIRI).

# OILSEEDS, OILS AND MEALS<sup>1</sup>

Major oilseeds exporters and importers



## PRICES<sup>2</sup>

As the 2011/12 season (October/September) drew to a close, international prices for both, oilseeds and meals/cakes started to ease, ending a spell of steady price rises. However, during the first seven months of the current 2012/13 season, oilseed quotations were, on average, above the level recorded during the corresponding period of the last three seasons, while those of meals remained close to all-time highs. In the meantime, oils/fats values continued to lose strength, following the downward path that commenced in 2011.

Oilseed prices eased, as forecasts of a full rebound and possibly a record performance in total oilseed production in 2012/13 allayed market concerns regarding global supply tightness. In particular, the prospect of record South American soy crops brought relief to the market, making up for the poor US soybean harvest. Additional factors contributing to the easing of soybean prices include relatively weak demand growth in China and the EU,

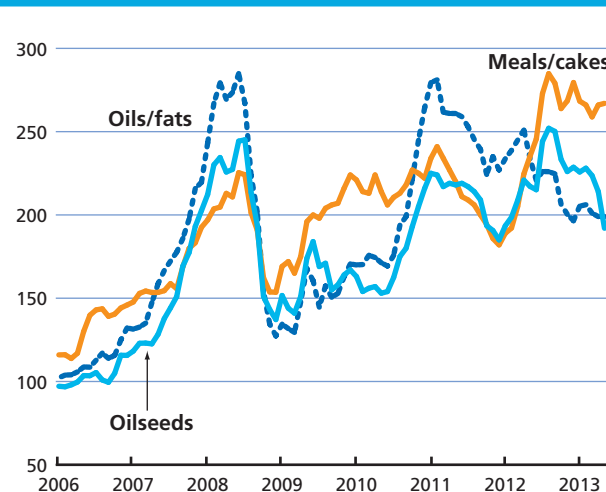
<sup>1</sup> Almost the entire volume of oilcrops harvested worldwide is crushed to obtain oils and fats for human nutrition or industrial purposes, and to obtain cakes and meals which are used as feed ingredients. Therefore, rather than referring to oilseeds, the analysis of the market situation is mainly undertaken in terms of oils/fats and cakes/meals. Production data for oils (cakes) derived from oilseeds refer to the oil (cake) equivalents of national production of the relevant oilseeds, i.e. they do not reflect the outcome of actual oilseed crush in individual countries. Furthermore, the data on trade in and stocks of oils (cakes) refer to the sum of trade in and stocks of oils and cakes plus the oil (cake) equivalent of oilseed trade and stocks.

<sup>2</sup> For details on prices and corresponding indices, see appendix table 24.

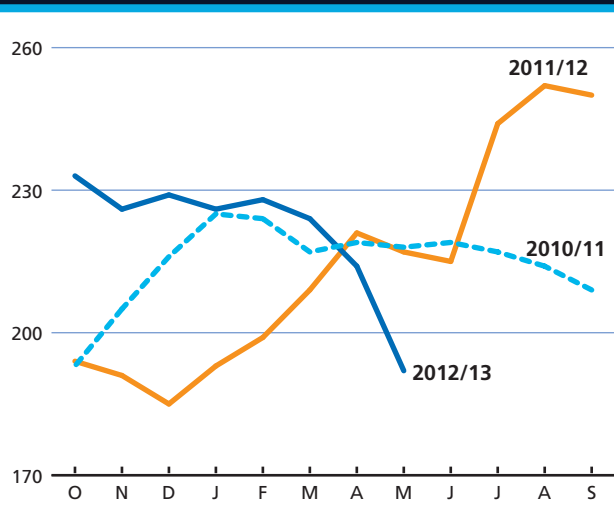
the softening of international grains prices and forecasts of a possible bumper 2013/14 soy crop in the United States. However, a number of factors prevented oilseed prices from falling more markedly, notably unexpected weather problems in parts of South America, the market's protracted, strong reliance on thinning old crop supplies from the United States and, more recently, the emergence of logistical bottlenecks in Brazil and sluggish sales of soybeans by Argentine farmers.

The world market for protein meals/cakes, which is dominated by soybean meal, largely followed the dynamics

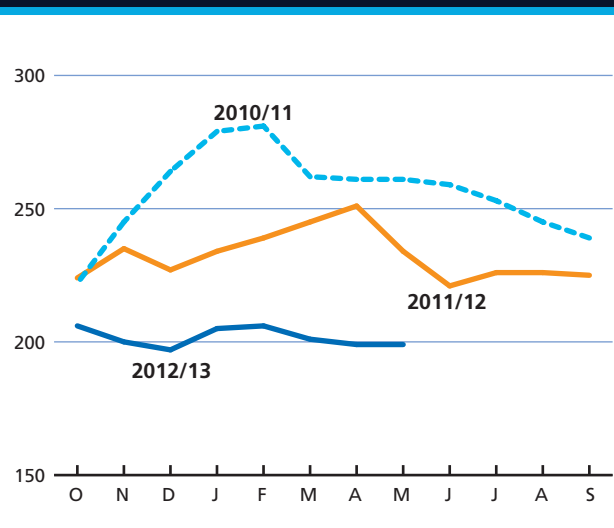
Figure 1. FAO monthly international price indices for oilseeds, oils/fats and meals/cakes (2002-2004=100)



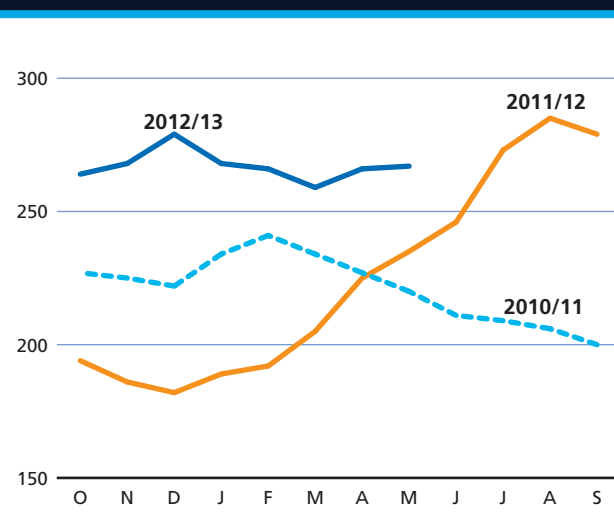
**Figure 2. FAO monthly price index for oilseeds (2002-2004=100)**



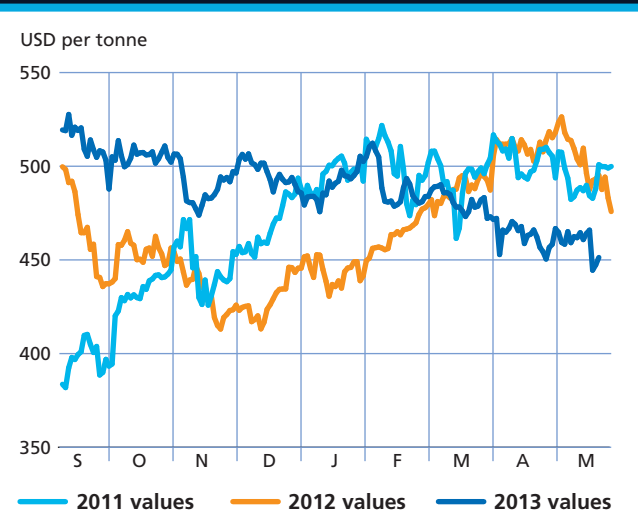
**Figure 3. FAO monthly price index for oils/fats (2002-2004=100)**



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



**Figure 5. CBOT soybean futures for September**



of the soybean market, with increasingly tight global fishmeal supplies also lending support to prices.

Regarding the slide in oils/fats prices during 2012/13, in addition to softening soybean values, developments in the palm oil market played a major role. A period of unusually high palm oil production combined with a temporary slowdown in import demand led to an exceptional surge in inventories in key producing countries, exerting downward pressure on prices. Furthermore, subdued economic growth worldwide has affected demand from the food and oleochemical industries, and, at the same time, demand from the biodiesel sector has reportedly weakened due to reduced profitability and growing uncertainty about the direction of future bio-energy policies.

Prices in the oilseed complex could ease further during the remainder of the season, with 2012/13 closing stocks and stock-to-use ratios for oils and meals anticipated to improve, plus there are encouraging, though still preliminary, crop forecasts for 2013/14. In addition, the gradual softening in CBOT soybean futures prices, which, since mid-March, have ranged below the corresponding values of the last two years, seems to point in the same direction.

## OILSEEDS

### Record 2012/13 production estimate

Global oilseed production is forecast to rebound strongly in 2012/13 – up 5 percent from last season’s depressed outcome and 2 percent higher than the historic record set in 2010/11. The rise is mainly due to the production forecast for soybeans, now expected to climb to a record 266 million tonnes – 11 percent more than in 2011/12. Soybean production gains are largely driven by expansion

Table 1. World production of major oilseeds

	2010/11	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	Change 2012/13 over 2011/12 %
	<i>million tonnes</i>			
Soybeans	265.4	239.8	266.0	10.9
Rapeseed	60.8	61.4	62.6	1.9
Cottonseed	44.1	46.5	44.4	-4.3
Groundnuts (unshelled)	37.3	37.3	38.7	3.8
Sunflower seed	33.0	39.0	35.6	-8.9
Palm kernels	12.6	13.3	13.8	4.1
Copra	4.9	5.4	5.3	-1.0
<b>Total</b>	<b>458.1</b>	<b>442.7</b>	<b>466.4</b>	<b>5.4</b>

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.

in area cultivated, given that, in several growing regions, unfavourable weather conditions have affected yields. As the season progressed, forecasts had to be successively lowered due to extreme weather conditions, first in the **United States** and then in some key production areas of South America, in particular in **Argentina**. In the United States, the crop suffered from an exceptional drought, driving down production for the second consecutive year. In Argentina, production prospects deteriorated as a result of excessive rainfall towards the beginning of the growing season. Despite spells of dry weather, **Brazil** and **Paraguay** reported record harvests thanks to further expansion in plantings and near-record yield levels. With the decline in US production, Brazil's output should – for the first time – almost match that of the United States. Meanwhile, in Asia, **China** has reported a further production drop, due to additional cuts in area planted, whereas **India** has harvested a bumper crop, thanks to a yield increase that followed average rainfalls.

Record outputs are also expected for rapeseed, groundnut and palmkernel. For rapeseed, production declines – caused by bad weather in **Canada** and planting reduction in **Europe** – should be more than offset by production gains in **India**, **China** and the **United States**. Higher global palmkernel production is largely based on further expansion of mature oil palm area in **Indonesia**, whereas the projected rise in groundnut mainly comes from record yields in the **United States** and from higher plantings combined with productivity increases in **China**.

By contrast, a noticeable production drop is forecast for cottonseed and sunflowerseed. The projected decrease in cottonseed output is mostly driven by lower plantings

and yields in **Brazil**, **India**, **Pakistan** and **Australia**, which are only partially offset by good harvests in **China** and the **United States**. With regard to sunflowerseed, less favourable weather in the **Russian Federation** and the **Ukraine** prevented a repeat of last season's bumper crop.

Table 2. World oilseed and product market at a glance

	2010/11	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	Change: 2012/13 over 2011/12 %
	<i>million tonnes</i>			%
<b>TOTAL OILSEEDS</b>				
Production	468.9	453.6	477.5	5.3
<b>OILS AND FATS<sup>1</sup></b>				
Production	180.4	183.3	188.7	2.9
Supply <sup>2</sup>	208.0	214.5	220.3	2.7
Utilization <sup>3</sup>	176.0	184.7	188.4	2.0
Trade <sup>4</sup>	92.5	97.9	101.0	3.1
<i>Stock-to-utilization ratio (%)</i>	17.7	17.1	17.4	
<i>Major exporters stock-to-disappearance ratio<sup>5</sup> (%)</i>	11.2	10.1	10.0	
<b>MEALS AND CAKES<sup>6</sup></b>				
Production	118.6	110.3	118.0	7.0
Supply <sup>2</sup>	137.5	131.6	134.8	2.5
Utilization <sup>3</sup>	114.1	117.1	115.9	-1.1
Trade <sup>4</sup>	69.6	72.6	72.9	0.4
<i>Stock-to-utilization ratio (%)</i>	18.7	14.4	15.5	
<i>Major exporters stock-to-disappearance ratio<sup>7</sup> (%)</i>	9.3	5.6	7.5	
<b>FAO PRICE INDICES (Oct/Sept) (2002-2004=100)</b>				
	2010/11	2011/12	2012/13 Oct-May	Change: Oct-May 2012/13 over Oct-May 2011/12 %
Oilseeds	215	214	221	10.1
Meals/cakes	221	224	267	33.0
Oils/fats	256	232	202	-14.6

<sup>1</sup> Includes oils and fats of vegetable, animal and marine origin.

<sup>2</sup> Production plus opening stocks.

<sup>3</sup> Residual of the balance.

<sup>4</sup> Trade data refer to exports based on a common October/September marketing season and relate to the sum of trade in oils (meals) plus the oil (meal) equivalent of oilcrops traded.

<sup>5</sup> Major exporters include Argentina, Brazil, Canada, Indonesia, Malaysia and the United States.

<sup>6</sup> 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.

<sup>7</sup> Major exporters include Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay and the United States.

## OILS AND FATS<sup>3</sup>

### Growth in global oils/fats supplies to remain below trend

Current crop forecasts for 2012/13 translate into a year-on-year increase of 3 percent in global oils/fats production. Although above last season's rate, the expected expansion remains well below trend growth. The fact that much of this year's oilseed production rise comes from soybeans, which is a low oil-yielding crop, together with the prospect of only a moderate increase in palm oil production, explains the relatively modest growth in global output. Palm oil gains continue to be concentrated in **Indonesia**, thanks to expansion in mature oil palm area. However, compared with the past two years and given the absence of significant yield improvements, Indonesian production growth is poised to slow. In **Malaysia**, where unfavourable weather curtailed output last year, production should rebound thanks to a recovery in yields and small rises in mature area.

Global oils/fats supplies, which comprise 2012/13 production and 2011/12 ending stocks, are forecast to increase by less than 3 percent. Commodity-wise, robust growth in soy and palm oil supplies is to be partially offset by a contraction in global rape, sunflower and olive oil. Much of the projected rise in soyoil availabilities (referring to oil obtained from domestic crops) is expected to occur in **Brazil, Argentina** and **China**. Palm oil supply growth remains concentrated in **Indonesia** and **Malaysia**, the reduction in global rape oil availabilities originates in **Canada**, and the fall in sunflower and olive oil supplies concerns primarily the **CIS** region and the **EU**.

### Oils/fats consumption growth to slow down in 2012/13

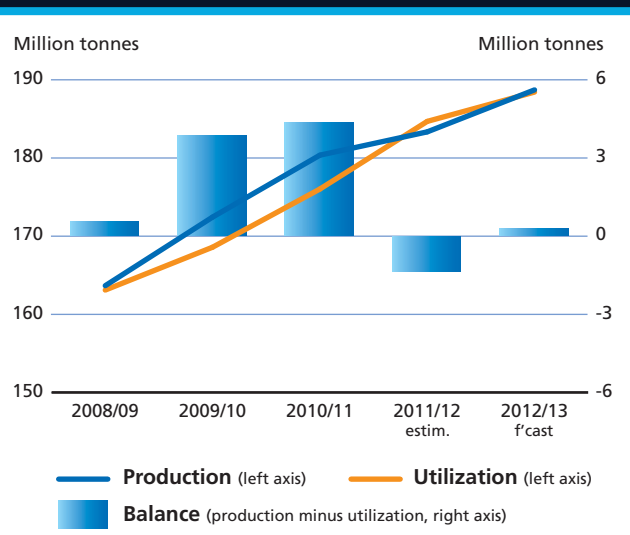
Estimated at 188 million tonnes, global consumption of oils/fats is predicted to expand by only 2 percent, compared with an average growth rate of over 4 percent for the last four years. The slowdown mainly reflects subdued global economic growth as well as weak demand from the biodiesel sector. The growth leader is palm oil, given its competitive price relative to soy and other oils. With palm oil demand expanding by a steady 5–6 percent per year, its share of total oils/fats consumption is set to approach 30 percent in 2012/13. By contrast, consumption growth should slow down in the case of soy and sunflower oil, while an absolute fall is forecast for rapeseed oil.

Consumption growth occurs almost exclusively in developing countries, in particular in Asia, where continued

economic growth keeps stimulating demand for food and oleochemical products. The expansion of oils and fats consumption is expected to concentrate in **China, India** and **Indonesia**, partly reflecting national policy measures in support of domestic crushing and refining industries. In South America and Africa, consumption growth could slow down relative to previous years. Meanwhile, among developed nations, oils/fats consumption is bound to stagnate due to poor economic growth.

Demand from the biodiesel industry will continue contributing to global consumption growth, though considerably less than before. Unlike past years, industrial demand is expected to grow primarily among developing nations, where biodiesel production capacities have expanded and national policies continue to encourage biofuel production for either domestic use or export. Countries where biodiesel production should keep expanding include **Argentina, Brazil, Colombia, Indonesia, Malaysia, Thailand** and the **Philippines**, with **Paraguay, Honduras, the Islamic Republic of Iran** and the **Republic of Cuba** standing ready to join the list of biodiesel producing countries. By contrast, among developed countries – which include the world's leading biodiesel producers and consumers – oils/fats demand for biofuel production is forecast to grow only modestly. Several developed economies, notably within the **EU**, are considering to cap mandatory blending requirements and to limit subsidies granted to crop-based or "first generation" biofuels, due to concerns over the environmental footprint of such fuels. The exception is the **United States**, where domestic consumption targets for the current year have been raised and the tax break granted

**Figure 6. Global production and utilization of oils/fats**



<sup>3</sup> 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.

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



to blenders extended. The practice of producing biodiesel from imported feedstock or directly importing biodiesel is expected to continue in several developed countries.

### 2012/13 end-of-season stocks anticipated to rise

Based on the above supply and demand forecasts, 2012/13 global closing stocks (which comprise oil/fat inventories plus the oil contained in stored oilseeds) are anticipated to rise to about 33 million tonnes, up almost 4 percent from last season. The increase concerns primarily palm oil and, to a lesser extent, soy and rapeseed oil, while a sizeable reduction in inventories is anticipated for sunflower and olive oil. With regard to individual countries, **China** remains by far the largest stockholder. By the end of the season, China's private and public stocks, comprising the oil contained in stored oilseeds, are expected to top 11 million tonnes. As for other major importers, **India's** inventories should grow, whereas **EU** stocks are expected to drop below the level of past years. Among exporters, **Malaysia** is set for a reduction in its record palm oil inventories, while **Indonesia** is likely to expand its reserves. Among the world's leading soy exporters, the **United States** should draw down inventories for the third consecutive year, dragging them to the lowest level in nine years. National stocks continue to be released to meet growing export demand. The same situation applies to **Canada** regarding rapeseed. By contrast, a replenishment of stocks should be possible in **Argentina** and especially **Brazil**.

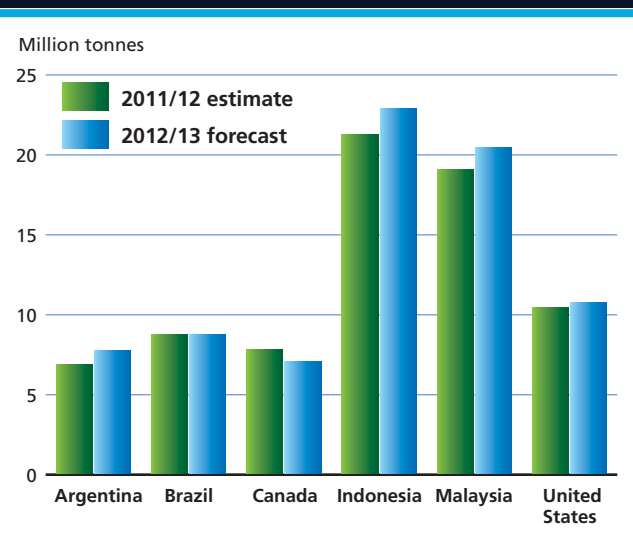
Considering the relatively modest growth in world oils/fats consumption currently anticipated, the global stock-to-use ratio should improve slightly compared with last season. This, in part, explains the recent easing of international oils/fats prices.

### Trade in oils/fats to expand further during 2012/13

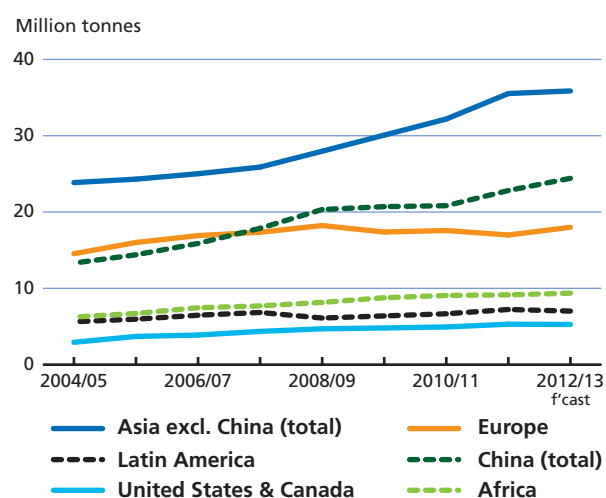
After growing by 5 percent on average during the last five years, global trade in oils/fats is forecast to expand in 2012/13 by 3 percent to 101 million tonnes (including the oil contained in traded oilseeds). The slowdown mirrors this season's sluggish consumption growth. Shipments of the two most traded oils, palm and soy, are estimated to rise by, respectively, 8 and 5 percent, while global trade in rape and sunflower oil should drop markedly – a pattern that reflects the prevailing price structure. Concerning exports, **Indonesia** and **Malaysia** are responsible for the expansion in palm oil shipments. Incremental soyoil sales should originate mainly in **Argentina**, where reduced domestic demand from the biodiesel industry (caused by lower **EU** biofuel imports) should raise export availabilities. The prospective drop in world sales of rapeseed oil mainly reflects **Canada's** poor crop outturn, while the decline of sunflower oil trade is related to poor harvests in various parts of Europe, which have curbed export availability in the region.

As for global oils/fats imports, the three leading buyers, China, India and the EU, are forecast to expand their purchases. In **China**, the increase in domestic supplies is not sufficient to meet growing consumer demand, which is expected to boost the country's imports to a record 23 million tonnes (including the oil equivalent contained in oilseed purchases). China could also take advantage of easing import prices to replenish domestic stocks. In **India**, the stagnation in domestic supplies is forecast to push imports above 11 million tonnes. In both countries, reliance on foreign purchases to satisfy domestic

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



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



demand is bound to rise further. Regarding other Asian importers, a slowdown in domestic consumption growth is anticipated to curb aggregate purchases. The **EU's** imports are expected to grow, even within the context of a stagnating domestic consumption, as they will be needed to compensate for the supply drawdown caused by poor rapeseed harvests. In Africa, where numerous countries are import-dependent, only a marginal increase in imports is expected, mirroring subdued consumption growth.

## MEALS AND CAKES<sup>4</sup>

### Global meal supplies to recover only partially in 2012/13

Current crop estimates translate into a conspicuous year-on-year rise in overall meals/cakes production. Estimated at 118 million tonnes (expressed in protein equivalents), global production should recover almost entirely from last year's decline, almost matching the 2010/11 record. Soymeal will be the main source of growth, although production of rapeseed, groundnut and palmkernel meal would also improve. By contrast, production of sunflower and cottonseed meal is likely to fall, following poor crop outturns. The rise in total output concerns primarily soybean meal producing countries in South America, notably **Brazil**, whereas sizeable year-on-year drops are expected for some other major players, in particular the **United States** and the **EU**.

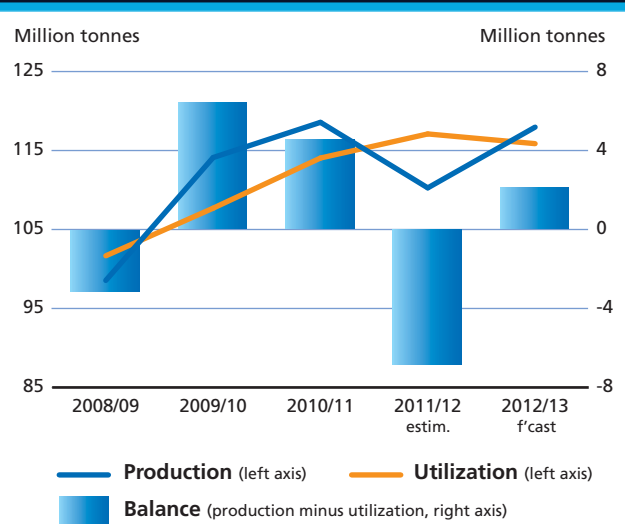
<sup>4</sup> This section refers to meals from all origins. In addition to products derived from the oil crops discussed under the section on oilseeds, this also includes fish meal and meals of animal origin.

Global supplies of meals/cakes, which comprise 2012/13 production plus 2011/12 ending stocks, are forecast to grow by less than 3 percent. Due to last season's sharp drawdown in stocks, 2012/13 availabilities will only recover partially from last season's significant drop. In the **United States**, the world's leading meal producer, domestic availability is set to shrink for the second consecutive season, pushing supplies to a multi-year low. While sizeable supply drops are also expected in the **EU** and **Canada**, global availability of meals/cakes will still increase, thanks to massive improvements in **Brazil**, **Argentina** and **Paraguay**.

### Global meal consumption to contract slightly in 2012/13

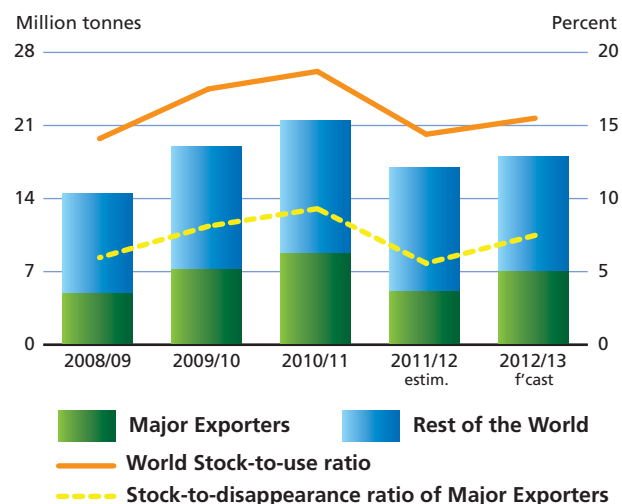
Persistently high meal/cake prices combined with weak economic growth world-wide should lead to an unusual contraction in global meal consumption, involving primarily soybean meal. Estimated at 116 million tonnes (expressed in protein equivalents), global utilization in 2012/13 will still be the second highest on record. Consumption falls are expected primarily in developed nations, whereas developing countries are likely to face a slowdown in growth. In Asia, the world's major consuming region, demand is estimated to increase by merely 1 percent, which compares with an average of 8 percent in the last three years. In **China**, utilization is forecast to grow by no more than 2 percent, due to reduced growth in meat production. In **India**, meal demand may fall by 2–3 percent. By contrast, across South America, the steep rise in domestic availabilities should stimulate meal consumption. As a whole, developing countries should account for over 60 percent of global utilization compared with 53 percent

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





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



only five years ago. In many developed countries, high feed costs eroded profitability in livestock production, eventually driving down meal demand. In the **EU** and the **United States**, meal consumption is projected to contract by, respectively, 4 and 9 percent, dragging meal utilization to multi-year lows.

**Partial recovery in meals/cakes inventories likely**

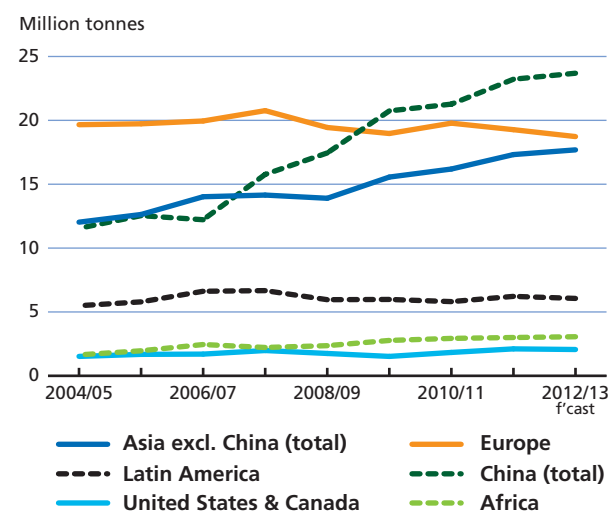
This season's recovery in global production combined with the slowdown in consumption should allow a rebuilding of global meal/cake stocks. Led by soybeans, end-of-season stocks are forecast to rise to 18 million tonnes (expressed in protein equivalent and comprising meal contained in stored oilseeds), up 6 percent from their opening level. Considering that global stocks dropped by 21 percent last year, the recovery expected for this year would only be a partial one. It is important to note that, among key stockholding countries, only **Argentina** and **Brazil** are expected to rebuild stocks. In the **United States**, as the country strives to satisfy demands of both domestic users and foreign buyers, inventory levels are set to shrink for the second consecutive season, falling to the lowest level in nine years. As to meal importing countries, **China** and the **EU** are expected to cut down their reserves for the second season in a row, reflecting efforts to compensate for stagnating or falling imports.

If realized, the anticipated reconstitution in global stocks would lead to an improvement in the global stock-to-use ratio. However, the ratio would still remain well below the level prevailing in past years, which explains the relative firmness of international meal prices during the past months.

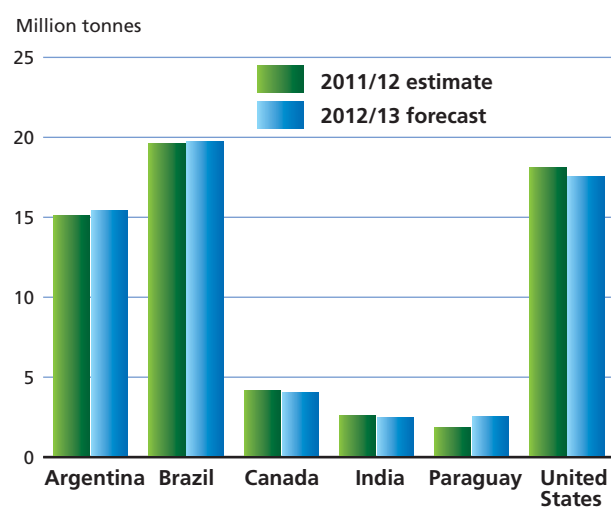
**Global meal trade unchanged from last season**

After years of steady expansion, the 2012/13 global trade in meals/cakes is anticipated to remain mostly unchanged. Higher soymeal shipments should be offset by lower transactions of rape, sunflower and fish meal. The stagnation in total trade is directly related to subdued meal consumption in the world's key importing countries. In **China**, imports (comprising the meal contained in imported seeds) should remain virtually unchanged, much in contrast to the steady expansion observed in previous years. The halt mainly reflects the unusual slowdown in domestic meal consumption. The **EU** is expected to cut its imports further, despite the anticipated drop in domestic supplies.

**Figure 12. Meals/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)**



For the developed country group, purchases could fall below 25 million tonnes (expressed in protein equivalents), a 3-year low, while developing country imports might reach 47 million tonnes, exceeding last year's record by a small margin. Clearly, the record high international meal prices prevailing since the middle of 2012 have dampened the global appetite for imported meals.

The bulk of the world's export supplies continues to come from the Americas. South America is expected to expand its shipments by only 2 percent, which, considering ample domestic availabilities, leaves sufficient room for the reconstitution of national stocks. In **Brazil**, limitations in domestic transport and port facilities are also behind the country's weak export performance. In the **United States**, falling domestic supplies will force overseas sales down for the third consecutive year.

## 2013/14 PRODUCTION OUTLOOK

With the 2012/13 season still on-going, it is too early to provide supply and demand projections for 2013/14. The only preliminary, though incomplete, information that can be offered is based on planting intentions in the Northern Hemisphere, where preparations for the next oilcrop campaign are underway.

Although relatively firm world prices for oilseeds should stimulate plantings of crops for harvest in 2013/14, the competition for land remains strong due to the fact that also prices of other crops, in particular maize, are historically high. Accordingly, with regard to soybeans, in the **United States**, only minimal expansion is expected in area planted. Output is nonetheless projected to climb to a new record, as yields are assumed to return to trend levels. While production could also grow in **India**, a further drop in output is expected in **China**, due to cuts in area

planted. In South America, a recovery in yields is expected to boost **Argentina's** output. In **Brazil**, persistently high transportation costs are likely to continue weighing on farmers' returns, possibly limiting expansion in area planted and, in turn, production gains. On the whole, a steep rise in global soybean production seems possible, provided normal weather conditions prevail. A similar picture is emerging for rapeseed production. A return to average yields should lift **Canada's** harvest to near-record levels, despite a likely reduction in planted area in favour of wheat. In the **EU**, production is anticipated to rise on account of higher plantings, provided weather conditions continue to be favourable. Conversely, **China's** production is forecast to drop as farmers increase plantings of wheat and other grains at the expense of rapeseed. By contrast, global sunflowerseed output should recover only partially from last season's drop. Production gains would be led by the **EU** and **Ukraine**, mostly based on a recovery in yields. World cottonseed production is forecast to remain unchanged from last season, with reduced crops in **China** and the **United States** offsetting larger harvests in **Brazil** and **India**. Aggregate groundnut output is projected to fall, mainly reflecting likely reductions in planted area and yields in the **United States**.

Together, the above tentative forecasts point to a conspicuous increase in total oilseed production in 2013/14, led by soybean production gains in the **United States** and **Argentina**. As the anticipated production may outstrip consumption, the current supply and demand tightness could come to an end. This would mean that during 2013/14, the **United States**, **Canada**, the **EU** and **China** will be in a position to reconstitute their inventories, further improving the stock-to-use ratios and, potentially, facilitating a general easing of international prices for oilseeds and oilseed products.

# SUGAR

Major Sugar Exporters and Importers



## PRICES

### International sugar prices easing

World sugar prices, as measured by the ISA daily prices (for raw sugar), have been on a declining trend since the release of the November 2012 issue of Food Outlook. Prices averaged US 19.31 cents per pound in December 2012 and fell to US 18.26 cents per pound in February 2013. They rose slightly to US 18.46 cents per pound in March, reflecting short-term supply tightness, but then retreated to US 17.80 cents per pound in April, when a

larger than expected harvest in Brazil, the world's largest sugar producer, was announced. Overall, from January to April 2013, sugar quotations were 22 percent lower than in the corresponding period in 2012, confirming the steady decline initiated in January 2011. The downward trend is attributed to an expansion of production in response to an historically low global stock-to-use ratio, which underpinned the market between 2008/09 and 2010/11. Prices in the second half of 2013 are likely to remain under downward pressure, given prospects of a second consecutive world production surplus which would bring

Figure 1. International sugar prices\*

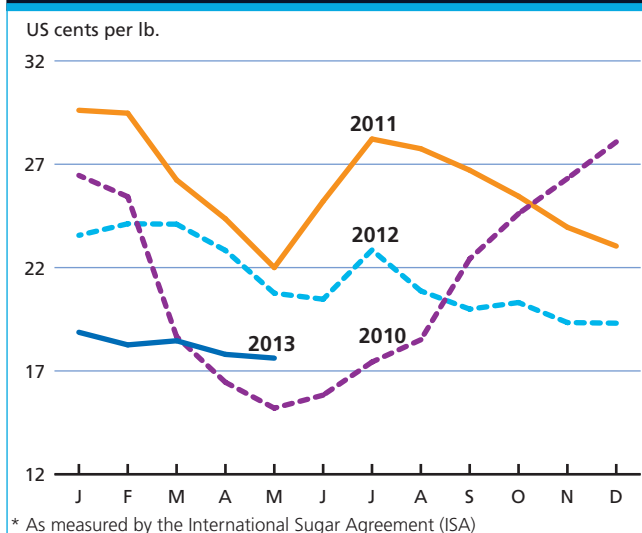
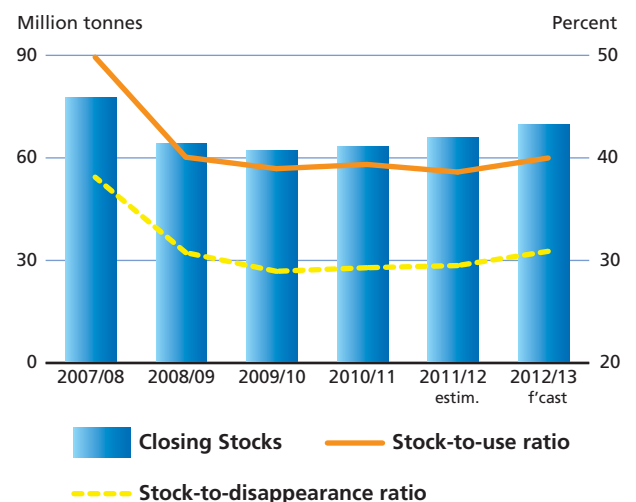
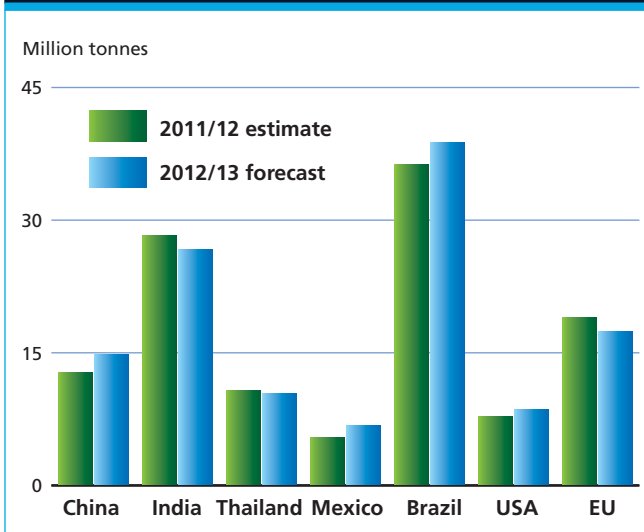


Figure 2. World closing stocks and stock-to-use ratio



**Figure 3. Sugar production by major producing countries**



the global stock-to-use ratio to a comfortable level of 40 percent.

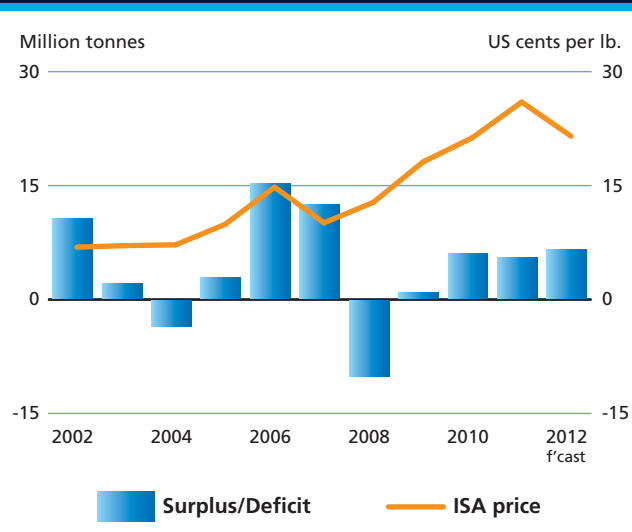
## PRODUCTION<sup>1</sup>

### World sugar production to reach a new record level in 2012/13

With most of the 2012/13 sugarcane and sugar beet crops already harvested in the main producing areas, FAO's current estimate for world sugar production in 2012/13, at 180 million tonnes, is becoming firmer. The figure points to a new record production which surpasses the November 2012 preliminary forecast by 2.7 million tonnes. Much of this upward revision is due to production in **Brazil, China, Mexico** and the **United States**, which is more than compensating for the reduced forecasts in, mainly, **EU, India** and **Thailand**. World production is predicted to increase 2.8 percent over the previous season, with most of the gain stemming from developing countries, in particular **Brazil, Mexico** and **China**, which are predicted to harvest 137 million tonnes overall, 4.3 percent more than in 2011/12. By contrast, output in the developed countries is anticipated to contract by 1.8 percent to 42.5 million tonnes, mostly on account of the **EU**. Under the current forecast, world production in 2012/13 will be more than sufficient to allow for an increase in total consumption and a rebuilding of world inventories. The surplus is currently predicted to reach 6.5 million tonnes, although it is likely to

<sup>1</sup> 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 4. World sugar surplus/deficit**



be subject to revisions as the new season progresses in the southern hemisphere.

The expected expansion in world sugar production in 2012/13 season is attributed to an overall increase in area planted to sugarcane in response to the relatively high sugar returns witnessed over the past three seasons. In addition, attractive prices encouraged the use of fertilizers and other inputs, which boosted sugar crop yields. In South America, production is anticipated to increase by 5.9 percent, amid generally favourable weather conditions and larger plantings. The expansion in the region would be mainly on account of **Brazil**, where the sector is set to rebound by 6.8 percent to 38.6 million tonnes. Sugar production also responds to changes in the ethanol/sugar price ratio, which eventually determines how much of the two products will be produced out of sugarcane. The higher the price ratio, the larger the amount of cane converted into ethanol at the expense of sugar. The Government of Brazil recently introduced two measures that have the potential to divert a greater share of sugarcane output into ethanol. First, it increased the mandatory amount of ethanol to be blended into gasoline back to 25 percent beginning in May 2013. The blending rate had been cut to 20 percent in October 2011, following a poor 2011/12 sugarcane harvest. Second, after keeping gasoline prices unchanged since 2006 to check inflation, it raised them by 7 percent, a move that improves the competitiveness of ethanol against gasoline at the pump. Sugar production is also expected to increase in **Colombia**, the second largest producer in the region, but it will remain about unchanged in **Argentina**, where less than favourable weather, mostly in the main producing region of Tucuman, prevented expansion in sugarcane production.

Table 1. World sugar market at a glance

	2010/11	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	Change: 2012/13 over 2011/12
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	165.6	175.2	180.0	2.75
<b>Trade</b>	54.8	52.5	51.1	-2.62
<b>Total utilization</b>	159.8	169.8	173.5	2.18
<b>Ending stocks</b>	62.9	65.6	69.4	5.80
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	23.13	24.30	24.55	1.03
LIFDC (kg/yr)	15.19	16.64	16.87	1.35
World stock-to-use ratio (%)	39.36	38.62	39.99	
<b>ISA DAILY PRICE AVERAGE (US cents/lb)</b>	<b>2011</b>	<b>2012</b>	<b>2013 Jan-May</b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	26.0	21.5	18.35	-22.41

Table 2. World sugar production

	2011/12	2012/13
	<i>million tonnes</i>	
Asia	67.6	68.7
Africa	10.4	10.8
Central America	12.6	14.1
South America	44.0	46.6
North America	7.8	8.5
Europe	28.7	26.6
Oceania	4.2	4.7
<b>World</b>	<b>175.2</b>	<b>180.0</b>
Developing countries	131.9	137.5
Developed countries	43.3	42.5

In Central America, revised forecasts for 2012/13 indicate that sugar production in **Mexico** will increase, prompted by favourable rains and the introduction of high-yielding plant varieties. In **Guatemala**, higher than expected sugarcane yields boosted sugar output in 2011/12, no further increase is anticipated for the new season. In **Cuba**, sugar production is expected to continue its moderate recovery, driven by investment in increasing sugar productive capacities at farm and factory levels. A series of policy measures, including higher official support to cane prices, also helped incentivise farmers. In Africa, 2012/13 sugar production is projected to rise on the back of largely favourable weather conditions. **South Africa**, **Swaziland** and **Sudan** are set to harvest larger crops, while output is expected to remain at last year's level in **Egypt**. In **Swaziland**, area planted under sugarcane has

increased 20 percent since 2000, driven by investment in irrigation and price incentives provided under the EU Economic Partnership Agreement (EPA) introduced in 2009. Sugarcane production is expected to benefit from improved climatic conditions in **South Africa**, the largest producer in the region, after the country was hit by the worst drought in 20 years in 2010/11 and 2011/12, affecting yields and reducing harvested areas.

In Asia, sugar output is expected to increase by 1.7 percent compared to the 2011/12 marketing season, sustained by expansions in **China** and **Pakistan**.

At the same time, production is set to fall in India and Thailand. In **India**, relatively attractive returns in 2010 and 2011 encouraged farmers to increase their sugarcane plantings and use of fertilizers. However, below average monsoon rains during the cane's critical growing stage hindered yields. As a result, sugar production in the country is anticipated to decline by 5 percent to 26.6 million tonnes. In April 2013, the government approved a partial deregulation of the sugar industry, abolishing the required 10 percent levy on sugar mills and deregulating sales in the open market. These measures are likely to moderate the amplitude of the production cycles which characterize the sugar subsector in India. Latest estimates indicate that 2012/13 sugar output in **Thailand**, the world's second largest sugar exporter, could fall below the all-time high recorded in the previous season, as less than favourable weather conditions led to weaker sugar extraction rates. Still, sugar output is to remain around the relatively high levels of the past two seasons, sustained by recent expansions in harvested areas and investments at factory level. Sugar production in **China** is expected to surge in 2012/13, notably in Guangxi, China's largest sugar producing province, and Yunnan, its second largest. Financial assistance, as well as the subsidized inputs that sugar mills provided to farmers, were major contributing factors in boosting plantings. In **Pakistan**, sugar output is expected to reach a record in 2012/13, following favourable monsoon rains, which lifted yields and harvested areas. Outputs in 2012/13 are also likely to increase in **Indonesia** and **Vietnam**, but may remain stagnant in **Turkey** and **Japan**.

In Europe, the latest estimates for the **EU** point to a decrease in sugar production, largely due to unfavourable weather conditions hampering beet yields, notably in France and Germany. Nonetheless, the EU's ending stocks are foreseen to return to historic levels, as about 900 000 tonnes of sugar are expected to be carried over from the 2011/12 season into 2012/13. The final decision regarding the elimination of sugar production quotas and minimum sugar beet prices, which would likely foster an expansion

in sugar production, is expected sometime in June 2013. The EU Commission, Parliament and Council are all proposing different years for their abolition. Production in 2011/12 is expected to fall in the **Russian Federation**, as a result of delays in planting due to cold weather. The decline would also reflect the decision by farmers not to expand area, given the scarcity of storage facilities – an issue they dealt with last year when they harvested a record-level crop. Sugar production is expected to remain relatively unchanged from last season in **Ukraine**, despite further contraction of beet plantings. Beet prices are less competitive than alternative crops such as maize, sunflower and wheat. In **Australia**, sugar production is set to rise by 12.5 percent, spurred by favourable growing conditions as well as favourable sugarcane prices, which stimulated sharp increases in sugarcane area. Gains in average sugarcane yields to about 85 tonnes per hectare also helped boost production, as compared to 2011/2012. In the rest of the world, production in the **United States** is forecast to surpass its 2011/12 level and reach a record high, sustained by increases in both beet and cane sugar outputs, amid conducive weather conditions.

## UTILIZATION

### World sugar consumption sustained by lower prices

Global sugar consumption is anticipated to reach 173.5 million tonnes in 2012/13, 3.7 million tonnes, or 2.2 percent more than in 2011/12, perfectly in line with the 10-year trend. Large supply availabilities and lower international and domestic prices are expected to support increases in per capita sugar intake in 2012/13. Falling domestic sugar prices were witnessed in all the major markets, including **Brazil**, **China** and **India**. Under current prospects, world per capita sugar consumption is anticipated to rise slightly, from 24.3 kg in 2011/12 to 24.6 kg in 2012/13. In developing countries, aggregate sugar utilization is estimated to expand by 2.6 percent, or 3.1 million tonnes, to 121.8 million tonnes, equivalent to 70 percent of global consumption. In the generally more mature markets of developed countries, consumption is to increase by 1.1 percent, to 51.7 million tonnes. However, a deterioration of the 2013 global economic prospects could undermine demand expansion, as manufacturing and food preparation sectors, which account for the bulk of aggregate sugar consumption, are highly influenced by the economic environment. Also, the depreciation of the currency of several major sugar importers against the US dollar – which makes imports in domestic currency more expensive – could lead to weaker intake of sugar in these

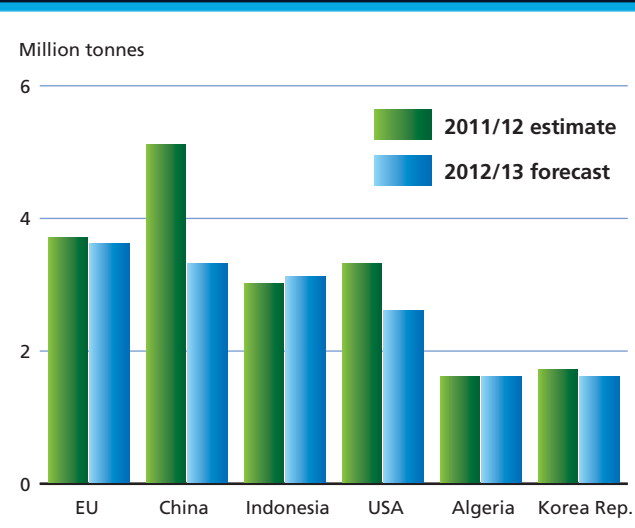
countries, which include **Egypt**, **Syrian Arab Republic** and **Japan**.

## TRADE

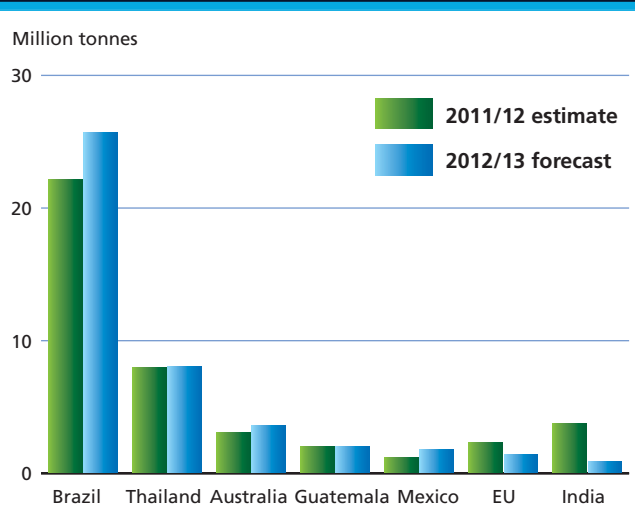
### Weaker import demand behind a contraction of world sugar trade in 2012/13

The forecast for world sugar trade in 2012/13 (October/September) stands at 51.1 million tonnes, 2.6 percent less than in the previous season. The main feature of sugar trade in the 2012/13 season is the rebounding of deliveries from Brazil, the world's largest exporter, which had fallen in 2011/12 amid tight domestic supplies. Brazil is expected to supply 50 percent of world trade in 2012/13. However, the final volume sold abroad by the country will vary

**Figure 5. Sugar imports by major importing countries**



**Figure 6. Sugar exports by major exporting countries**



much depend on the quantity of sugarcane production processed into ethanol, especially considering the recent increase in the mandated blend ratio and gasoline prices, as explained in the production section. Demand for ethanol will also be driven by the need of the United States to meet its advanced mandate requirements through imported ethanol-based sugarcane from Brazil.

Likewise, **Thailand**, the second largest exporter, is expected to expand sugar deliveries, but only slightly above last year's record, spurred by abundant supply availability. The bulk of the country's exports is forecast to be shipped in raw form (about 60 percent) to neighbouring countries, including Indonesia, Malaysia and the Republic of Korea. Exports to China are expected to contract given the increase in Chinese production. Thailand is also expected to fill its 2013 tariff rate quota (TRQ) with imports from the United States of 15 027 metric tonnes (raw value). Due to the expected reduction in sugar output, shipments from **India** are estimated at 800 000 tonnes, down from 3.7 million tonnes last season. India's competitiveness on the international market is being constrained by rising production costs and falling world prices, which may depress exports below last's year level, despite relatively comfortable supply availability. Supported by greater domestic production and exportable surplus, deliveries from Australia, the world's third largest supplier, are set to rise, to just below the country's historic high of 3.61 million tonnes. A bumper crop is also expected to raise deliveries by **South Africa**, with the bulk of shipments directed to the Southern Africa Customs Union (SACU) market, and to the United States to fill its 2013 TRQ allocation. Exports by **Guatemala** are foreseen to hover around the same level as last year, given ample supply 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 export. Sales by **Mexico** are anticipated to increase in 2012/13, due to greater production. The Government of Mexico recently established a trust fund to facilitate exports of sugar surplus to NAFTA and international markets, in an attempt to lift internal prices. However,

the final amount of shipped sugar still will depend on the extent to which high fructose corn syrup (HFCS) substitutes for domestic sugar use. Production gains are also anticipated to enable **Cuba** to step up exports, with the bulk of the sales directed to China.

Imports by Asian countries are forecast to decline somewhat in 2012/13 as a result of higher sugar production. Much of the reductions would result from lower purchases by **China**, reflecting expectations of an increasing domestic output and a slowdown in state purchases as stocks return to comfortable levels. After being the main driver of imports between 2009 and 2011, and with shipments growing by 41 percent per year, China is expected to rely less on international markets in 2012/13. On the other hand, shipments into **Japan** and **Malaysia** are predicted to change little, while imports into **Indonesia** may increase, as demand from the food and beverages industry remains steady. In Europe, shipments to the **EU** are forecast to fall due to ample domestic availabilities. However, estimates for imports may be revised upwards considering the conclusion of a free trade agreement between Colombia, Peru and the EU. The agreement took effect provisionally for the EU and Peru on 1 March 2013, and the agreement with Colombia will follow at a later date. A similar agreement between the EU and six countries in Central America – Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama – also could take effect next year, which would add pressure for EU's imports to increase further. These free trade agreements will allow additional duty-free TRQs, amounting to 264 000 tonnes of sugar and increasing at annual rate of 3 percent. As a result of falling domestic production, imports by the **Russian Federation**, once the world's largest sugar market, are expected to rise from 800 000 tonnes in 2011/12 to about 1 million tonnes in 2012/13, far below the 2.8 million tonnes imported in 2010/11. 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, may drop somewhat in light of expected higher output while, overall, **African countries** are expected to import 2.7 percent more, as increasing population and per capita income triggered strong increases in demand.

# MEAT AND MEAT PRODUCTS

Major Meat Exporters and Importers



## Moderate meat production growth; trade to slow

World meat production, is anticipated to grow modestly in 2013 to 308.2 million tonnes, an increase of 4.3 million tonnes or 1.4 percent compared with 2012. In many countries, producers continue to struggle against elevated feed prices; however, although remaining high by historical standards, they began to fall during the second half of 2012 and have continued to diminish during 2013. This has offered greater scope for profitable meat production, particularly in the pig and poultry sectors, which are the most dependent on concentrated feed. Meat production is anticipated to grow the most vigorously in the developing countries, which are the main centres of demand growth.

Meat prices have remained at historically high levels since the early part of 2011. The **FAO Meat Price Index** averaged 179 in May 2013, having moved within the narrow band of 177–179 since October 2012. Export reference prices for the different types of meat have followed varying directions so far this year, rising marginally for poultry and pork, remaining largely stable for beef, and falling for ovine meat.

Meat trade is expected to grow more slowly in 2013 than in recent years due to adequate national supplies in a number of importing countries and a reduction in production among some of the major exporters. Global meat exports are anticipated to rise to 30.2 million tonnes in 2013, an increase of 1.1 percent over 2012.

## BOVINE MEAT

### Herd rebuilding over the past two years promotes production growth in 2013

Bovine meat production is forecast to reach 68.1 million tonnes in 2013, representing a further increase over 2012, which had followed two years of stagnation in 2010 and 2011. The resurgence in output is being led by the developing countries, which collectively account for almost 60 percent of the world total, while

Figure 1. Gains in global meat trade in 2013

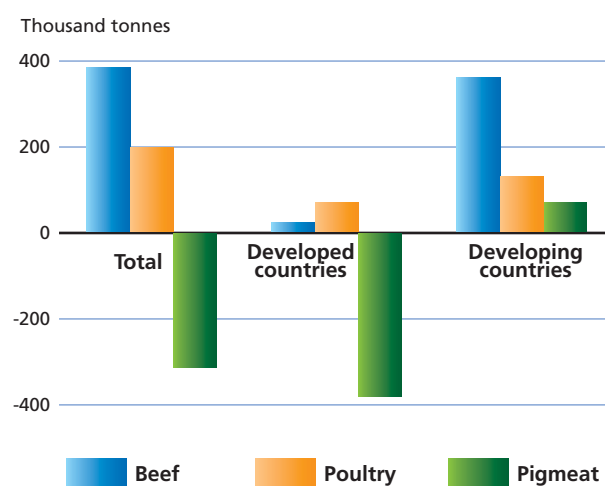




Table 1. World meat market at a glance

	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>297.6</b>	<b>303.9</b>	<b>308.2</b>	<b>1.4</b>
Bovine meat	67.3	67.6	68.1	0.9
Poultry meat	102.1	104.6	106.4	1.8
Pigmeat	109.0	112.5	114.2	1.5
Ovine meat	13.5	13.6	13.8	1.2
<b>Trade</b>	<b>29.2</b>	<b>29.9</b>	<b>30.2</b>	<b>1.1</b>
Bovine meat	8.1	8.2	8.6	4.6
Poultry meat	12.8	13.1	13.3	1.5
Pigmeat	7.3	7.5	7.2	-4.1
Ovine meat	0.7	0.8	0.9	5.8
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	42.5	43.0	43.1	0.4
Developed (kg/yr)	78.7	79.1	79.3	0.3
Developing (kg/yr)	32.5	33.1	33.3	0.7
<b>FAO MEAT PRICE INDEX (2002-2004=100)</b>	<b>2011</b>	<b>2012</b>	<b>2013 Jan-May</b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	177	175	179	0.9

climatic factors have restrained beef production in many developed countries.

In South America, cattle availabilities and slaughter have been rising, particularly in **Argentina, Brazil, Paraguay** and **Uruguay**, following two years of herd rebuilding. For **Argentina**, this process may be amplified in 2013, due to an augmentation of slaughter rates in the face of higher production costs. In addition, as a result of government-imposed restrictions on exports, external market demand is less of a factor in expanding meat production than in neighbouring Paraguay and Uruguay. In **Brazil**, the world's second largest beef producer after the US, production is expected to reach a record 9.5 million tonnes, as pasture conditions are good, the industry is improving its management practices, and international demand is strong.

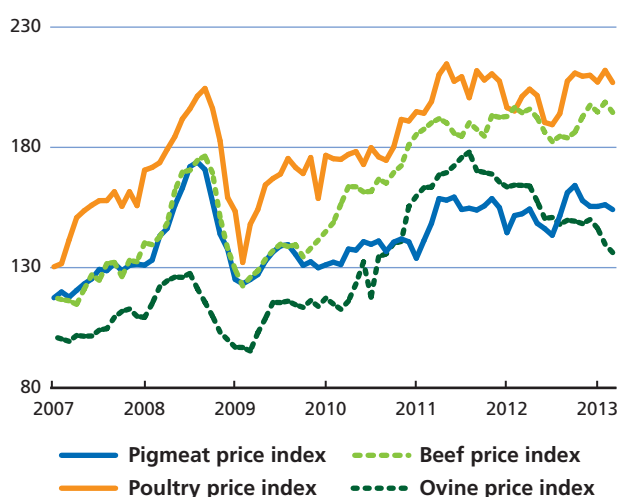
In Asia, **India**, the fifth largest bovine meat producer, is anticipated to show additional production growth, as is **Vietnam**, thanks to its investments in new processing operations. Beef output is forecast to continue to increase in the **Republic of Korea**, reflecting government slaughter subsidies and challenges to profitability in the light of low-priced domestic pork. In **China**, production is expected to remain around 6.5 million tonnes, which is similar to the previous three years, as the sector comes to terms with

labour shortages and high production costs that have led many small-scale producers to cease operations.

For Africa, bovine meat production in **Egypt** could show limited recovery in 2013, following extensive culling due to a foot-and-mouth disease (FMD) outbreak in 2012. Output in **South Africa** is also anticipated to increase. Elsewhere in the region, weather conditions have generally been favourable for pasture growth and feed grains – presenting the prospect of rising beef production for the continent overall.

In developed countries, production of bovine meat is anticipated to be constrained in a number of the principal producers, offsetting some of the growth in the developing countries. In the **United States**, the world's largest beef producer, output is expected to fall by 3 percent. This is due to a drop in cattle slaughtered – a situation that stems from a decline in the production of calves linked to drought-related herd reduction. US producers also have had to cope with elevated feed costs. The same factors are expected to cause a similar decline in production in neighbouring **Canada**. In the **EU**, the world's third largest beef producer, production is expected to contract to 7.6 million tonnes. However, it will be at 0.5 percent, a much slower rate than the 4 percent fall in 2012, which perhaps represents a slowing of the long-term decline in the Union's cattle herd amidst some indications that production may grow in 2014. In Oceania, dry conditions in recent months and the carry-over effect of higher feed costs in 2012 are anticipated to raise slaughter rates and boost production in both **Australia** and **New Zealand**. In the **Russian Federation**, reduced profitability is expected to lead to further herd reduction, with a resultant increase in beef production. In

Figure 2. Limited supplies and elevated feed costs sustain meat prices



**Japan**, bovine meat output is projected to remain stable at around the 0.5 million tonne mark.

### Trade in bovine meat to rise: Brazil and India vie for premier exporter position

Although for the past two years, prices have been at the highest levels of the past two decades, trade in bovine meat increased in 2012 and is expected to register further growth in 2013, with world exports expanding by 4 percent to 8.6 million tonnes. A shortage of domestic supplies in a number of countries has been an important contributor to the trade expansion.

Marked increases in imports are expected for the **United States**, the world's largest beef importer (and a major exporter) and, to a lesser degree for **Canada**, to compensate for domestic shortfalls. Demand from **China** is also anticipated to remain firm and imports may increase by over 20 percent compared to 2012 levels – especially as some consumers switch from poultry to other meat, following an outbreak of avian influenza. Elsewhere in Asia, imports by **Japan**, **Malaysia** and **Vietnam** are expected to increase moderately, while purchases by the **Republic of Korea** are anticipated to remain depressed, as a consequence of ample domestic supplies and price competition from other types of meat. Deliveries to the **Russian Federation**, the second largest importer, could also be below those of the previous year, as a result of a rise in domestic supplies. In the **EU**, 2013 imports are expected to be similar to 2012.

The development of buffalo meat exports by **India** is boosting the country's deliveries to Asian neighbours and to the Near East and North Africa. India's principal markets are Vietnam and Malaysia; however, the meat has found a ready outlet in many other countries. Overall, India's 2013 bovine meat exports may grow by as much as 15 percent to 1.6 million tonnes. At this level, sales would equal those of Brazil, and be above those of the other two principal beef exporting countries, Australia and the United States. In total, these four countries together supply 65 percent of bovine meat trade.

Higher production means that increased shipments are expected for both **Brazil** and **Australia**, by 6 percent and 4 percent, respectively. At the same time, limited domestic supplies will keep **United States'** trade at a level similar to 2012. Elsewhere, and in order of volume of trade, **New Zealand**, **Uruguay**, **Paraguay**, **Mexico** and **Argentina**, which together represent approximately a further 20 percent of trade, are all anticipated to increase sales, while shipments by the **EU**, **Canada**, **Belarus** and **Nicaragua** are forecast to remain stable or dip slightly lower.

## PIGMEAT

### Growth in Asia to sustain world pigmeat production

Production of pig meat is expected to grow by 1.5 percent to a record level of 114.2 million tonnes in 2013. However, the rate of growth will be slower than in the previous year, as a result of higher slaughter rates in 2012 in response to the elevated price of feed and, in some cases, abundant stocks, which depressed prices. Almost two-thirds of pig meat production originates in the developing countries, which is where most of the increase in output is forecast. Conversely, composite production by the developed countries is expected to show a small decline. Asia is the principal region, accounting for almost 60 percent of world pig meat production. Strong consumer demand and government support policies are anticipated to result in **China's** pork output reaching 53.8 million tonnes, or almost half of the world total. Recovery from FMD-depletion should boost production in the **Republic of Korea**. Elsewhere in Asia, listed by magnitude of production, output is forecast to be moderately higher in **Vietnam**, the **Philippines**, **Japan**, **Thailand** and **Indonesia** – in some instances, growth in the sector is being limited by competition from other types of meat.

In the Americas, **Brazil**, the world's fourth largest producing country, is expected to see pigmeat output increase, stimulated by improved pig prices. In **Mexico**, production continues to expand, underpinned by improved genetics and productivity, which are translating into more piglets per litter and higher animal weights.

In the **EU** – at 22.4 million tonnes, the second most important pork producer after China – compliance with animal welfare requirements relating to the housing of sows is expected to depress output for a second year, with an anticipated fall of 2 percent. In the **United States**, the third largest producing country, lower feed costs and increased slaughter, associated with an expansion of the breeding herd could lead to limited growth. In **Canada**, producers' struggles to remain profitable have resulted in a number ceasing operations –consequently a small decrease in output is anticipated. In the **Russian Federation**, where a sustained 4 percent growth is forecast, the industry is being assisted by reduced feed prices and is benefitting from government policies favouring large-scale farms

### Pig meat trade stalls in the face of reduced demand in Asia and lower export availabilities

Reduced output among some of the principal exporting countries and a decrease in demand by several major importing countries are expected to result in a decline in

pig meat trade during 2013. Shipments are anticipated to fall by 4 percent to 7.2 million tonnes. Pig meat imports by Asian countries, which as a group represent approximately half of world demand, are expected to fall for a second year: after being down by 4 percent in 2012, a 6 percent decrease is anticipated for 2013. Procurement by the **Republic of Korea** is forecast to register a substantial drop for the second year in a row, decreasing by around 150 000 tonnes, or 30 percent. This reflects a build-up of stocks and a fall in domestic prices stemming from a strong recovery of production following the 2011 FMD outbreak. **Japan**, the largest importer, is anticipated to cut purchases by 2.5 percent, reflecting expanding production and strong competition from poultry and imported beef. Imports by **China** are expected to be stable, following notable growth in recent years, as a consequence of a rise in production. Elsewhere, the **Russian Federation**, **Mexico**, the **United States** and **Canada** are anticipated to maintain purchases at a similar level to last year, while **Ukraine's** purchases may fall due to restrictions on imports established in favour of national producers.

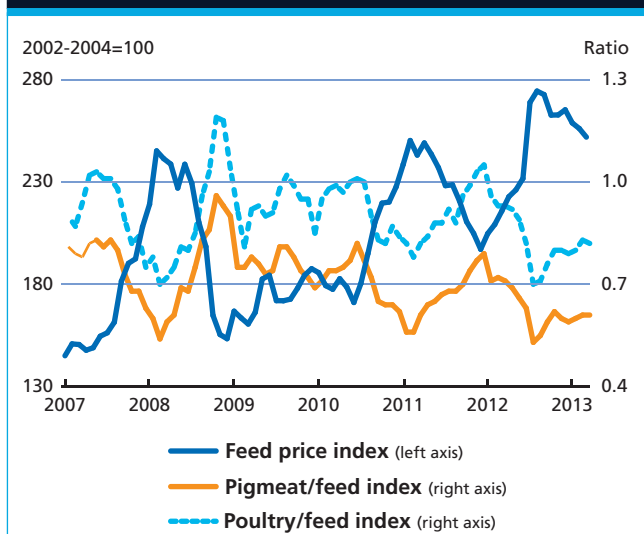
In terms of exports, reduced availability in the **United States**, the **EU** and **Canada** – which account for 75 percent of world trade – is expected to constrain sales, especially in the **EU**, where shipments are anticipated to fall by 10 percent. **Brazil**, the fourth largest exporter, is facing restrictions on pig meat trade in some markets, such as the **Ukraine**, and thus may also see a decline in sales. Moderate growth in shipments by smaller scale exporting countries will go some way to counterbalance reduced exports by the main trading countries. Sales by non-traditional exporters, such as **Chile** and **Mexico**, are expected to rise, especially in Mexico due in part to its newly recognized status as free of Classical Swine Fever. Shipments from **Belarus** are also set to increase, facilitated by a newly negotiated customs union with the Russian Federation.

## POULTRY MEAT

### Production growth continues despite disease outbreaks

Global poultry production is anticipated to increase 1.8 percent to 106 million tonnes in 2013. While growing, output remains constrained by the cost of feed, although this may fall further during the year. Unlike bovine and pig meat, production growth is foreseen in both developing and developed country groupings. Competitive pricing of poultry relative to other meats is an important element in its momentum. Estimating 2013 output for **China** – currently the second largest producer, but on trend to

**Figure 3. Pork and poultry producers struggle with high feed costs**



replace the United States as the main producing country in the next few years – remains difficult because of culling and limitations on the retail sale of live poultry following an outbreak of H7N9 influenza strain in March. Furthermore, consumer confidence in poultry meat has diminished and sales are reported to have suffered. Consequently, China's poultry output has been provisionally set as unchanged from 2012, in contrast with the 2.6 percent increase originally projected. An outbreak of the H7N3 strain in **Mexico** in April is also causing concern. In the **United States**, a 1.6 percent increase in output is anticipated as production has recovered from the 2012 slump, aided by improved prices and a reduction in feed costs. Elsewhere, production growth is anticipated for the **EU**, **Brazil** and the **Russian Federation**, which collectively account for 26 percent of world production. Continued rapid expansion is forecast for **India**, where output may rise by 8 percent. Among the top 20 producing countries, apart from the uncertainty surrounding China, only **Japan** is expected to register a fall in output, which could decline by 0.7 percent in response to oversupply and associated reduced prices stemming from a sharp increase in production in 2012 and a subsequent build-up of stocks.

### Trade slows

Poultry, the most traded category of meat, represents almost 45 percent of world commerce. Although the volume of sales doubled over the past decade, growth has stalled since 2010. This slowdown is expected to continue in 2013, when trade is forecast to increase by 1.5 percent to 13.3 million tonnes. Purchases by Asia, the main importing region, are anticipated to increase by 0.6 percent, due to growth in purchases by **Saudi**

**Arabia, Vietnam, Iraq, the United Arab Emirates and Kazakhstan**, among others. However, abundant domestic supplies in **Japan** and the **Republic of Korea**, and concerns over avian influenza that have led to decreased consumption in **China**, are expected to curb imports. Compared to other regions, imports for Africa as a whole are forecast to show strong growth in 2013, increasing by 6 percent. Among the main importing countries, **South Africa, Angola, Benin, Ghana** and **Egypt** are all anticipated to purchase more, as income growth strengthens demand. In **Egypt**, culling associated with avian influenza, combined with FMD-induced high beef prices, will provide an additional stimulus to imports. Deliveries to the **Russian Federation** in 2013 are expected to increase moderately, in part due to the recent customs agreement with Ukraine and Belarus. Imports by the Federation remain at less than half what they were in the mid-2000s, because of a considerable increase in domestic production. Rising poultry production within the **European Union** could lead to reduced purchases in 2013, while imports by **Mexico** and **Canada** are anticipated to change little, amid stable domestic demand.

Subdued import demand and reduced margins are expected to restrain overall world poultry exports; however, a rising trend in medium-sized exporting countries' trade is discernible. The most important trading countries, **Brazil, the United States and the EU**, which together account for almost three-quarters of global trade, have had little expansion in sales in recent years. Instead, most growth has come from second-tier exporters, including **Thailand, China, Argentina, Turkey, Chile, the Ukraine and Belarus**. This pattern is expected to be maintained for 2013, with the exception of China. Shipments from **Thailand** to the **EU** are forecast to rise vigorously, supported by competitive pricing and **EU's** lifting of an eight-year AI-induced ban on fresh and chilled products. Likewise, exports from **Turkey**, which have benefited from a rising regional demand, especially from Iraq, are forecast to grow by over 15 percent. Government investments are supporting record **Argentine** exports, particularly to regional markets, including Venezuela and Chile.

## OVINE MEAT

### Production rising steadily

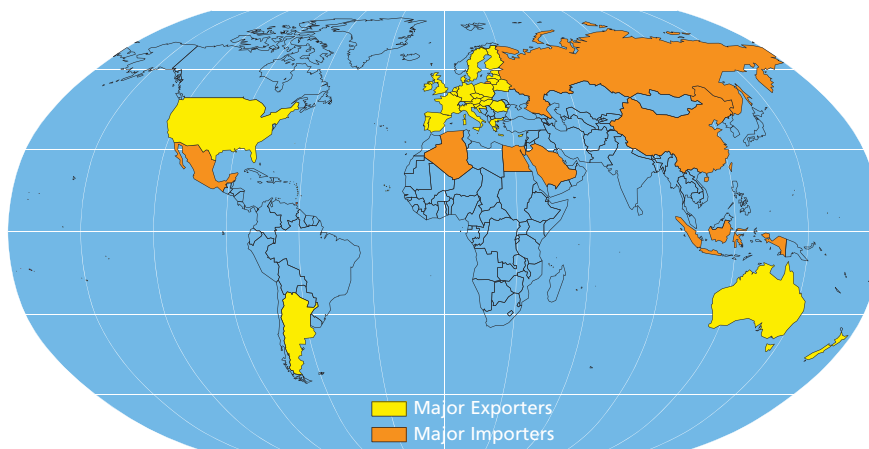
Production of ovine meat continues to show modest growth, following a period of stagnation, and is forecast to rise 1.2 percent, to 13.8 million tonnes, in 2013. Developing countries account for three-quarters of output, with the largest producers in this grouping being **China, India, Sudan** and **Nigeria**. Furthermore, ovine meat is an important element in the markets of many countries in North Africa and the Near East. Satisfactory pasture conditions have set the basis for flock rebuilding for many of the major producing areas of Asia and Africa. In developed countries, the main production growth is expected to come from **Australia** and **New Zealand**. Output in Australia is anticipated to register a particularly strong rise – increasing by 10 percent. In the **EU**, the long-term decline in output is expected to continue, as a result of high production costs and limited returns to producers.

### Demand rising in China and the Near East

Import demand for ovine meat is expected to register a second strong year, growing by over 6 percent to 850 000 tonnes in 2013. Most of the increase is anticipated to come from **China**, but will also encompass the **EU** and a number of countries in the Near East, including **Saudi Arabia, Jordan** and **Qatar**. Almost 90 percent of world trade is supplied by **Australia** and **New Zealand**. Of the two countries, Australia is anticipated to record the strongest growth in sales, although those of New Zealand are also expected to grow substantially. A shift in market demand to China and the Near East is also leading to a change in the type of meat shipped, with a movement towards whole carcasses, including offal, as opposed to a preference for only the higher value cuts which characterizes the markets of the EU and the United States.

# MILK AND MILK PRODUCTS

Major Dairy Exporters and Importers



## PRICES

### International prices surge in the face of limited availability

International prices of dairy products registered strong growth during the first part of the year, particularly in March and April. Although prices fell back in May, they still maintained elevated levels substantially above 2012. The main cause of the leap in prices was a steep fall-off in New Zealand's milk production, due to an abnormally prolonged dry period at the start of the year. This led farmers to

dry-off or cull milk cows early which, in turn, caused a reduction in milk production and in the processing of dairy products. Consequently, spot prices for New Zealand dairy products moved ahead sharply, particularly for milk powders, as buyers bid against each other for limited supplies. New Zealand's output for the 2012/2013 (June-May) production year is projected to finish only slightly below the previous season – which itself was a record. Thus, the scale of the jump in prices reflected the absence of commercial stocks able to cater for an unexpected reduction in availability, rather than a more profound shortage of world supplies.

The **FAO Dairy Price Index** reached 259 points in April, almost the same level as the historical peak in late 2007, before dropping to 250 in May. Even with the reduction, prices are still substantially above a year ago, particularly for milk powder compared to May 2012. Whole milk powder (WMP) has risen by USD 2 210 per tonne or 74 percent; skimmed milk powder (SMP) by USD 1 930 per tonne, or 69 percent; butter by USD 1 175 per tonne, or 38 percent; and cheddar cheese by USD 975 per tonne or 27 percent.

A further easing in dairy prices is anticipated during the coming months as milk production moves into full swing in the Northern Hemisphere. Nevertheless, as production in exporting countries in this region will barely increase, much of the tenor of the international market for the remainder of the year will depend on how Oceania shapes up in the new season. With publicly-financed inventories at minimal levels in the **EU** and the **United States**, and almost non-existent elsewhere, the international market

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



The index is derived from a trade-weighted average of a selection of representative internationally traded dairy products.

**Table 1. World dairy market at a glance**

	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
<b>Total milk production</b>	<b>745.5</b>	<b>767.4</b>	<b>784.4</b>	<b>2.2</b>
Total trade	49.7	53.7	54.7	1.9
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
World (kg/yr)	105.7	107.6	108.7	1.1
Developed (kg/yr)	235.3	237.9	238.0	0.1
Developing (kg/yr)	72.1	74.1	75.9	2.4
Trade share of prod. (%)	6.7	7.0	7.0	-0.3
<b>FAO DAIRY PRICE INDEX (2002-2004=100)</b>				
	2011	2012	2013 <i>Jan-May</i>	Change: Jan-May 2013 over Jan-May 2012 %
	221	189	227	17.0

remains exposed to sudden changes in milk production and availability of milk products, as seen so far this year, and which may become a common feature in the future.

## PRODUCTION

### World milk production to show steady growth in 2013

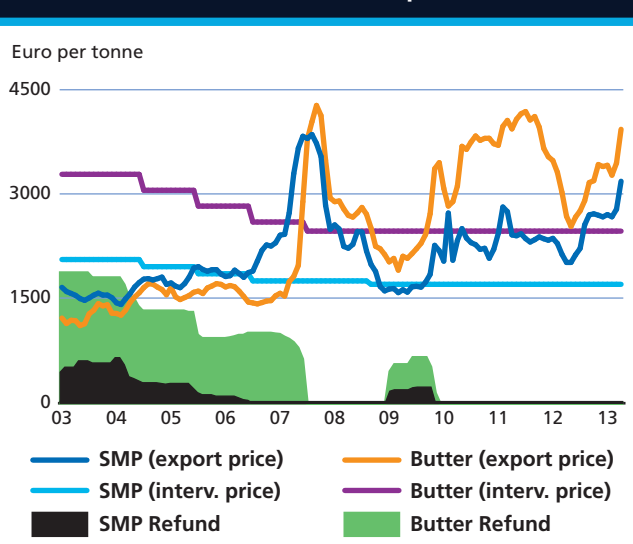
World milk production in 2013 is forecast to grow by 2.2 percent to 784 million tonnes – a similar rate to recent years. Asia is expected to account for most of the increase, with output in **India**, the world’s largest milk producing country, forecast to rise by 5.3 million tonnes to 139 million tonnes: per capita milk consumption is estimated to have grown by almost 30 percent in the past decade, while India’s population increased by 17.6 percent from 2001 to 2011. This dynamic domestic demand is providing the main impetus for growth, as India is largely absent from the international dairy markets. Unlike in many countries, expansion in herd size, in addition to a rise in productivity, is an important engine in the development of India’s milk production. Increased output is also anticipated in **China, Pakistan** and **Turkey**, spurred by steady growth in consumer demand. The **Republic of Korea** is slowly recovering from the 2011 foot-and-mouth disease outbreak which required the slaughter of 8 percent of its dairy herd and led to a corresponding drop in milk production.

In Africa, a moderate increase in milk output is anticipated for 2013, assisted by overall favourable weather conditions. Expansion in output is anticipated for **Algeria, Morocco** and **Uganda**, where government

policies in support of dairy development and an expansion of processing capacity have contributed to the increase. In Uganda, restocking in the conflict-affected northern parts of the country has also aided growth. For East Africa overall, a good start to the rainy season has assisted pasture growth in **Kenya**, Uganda and **Tanzania**. For Kenya, it is unclear whether the January introduction of a ban on the sale of raw milk, the common way of retailing milk, will reduce overall demand. In **South Africa**, where milk production has been running below 2012 levels as producers struggle to remain profitable, a fall in maize prices may provide some respite for the remainder of the year.

Rising incomes and firm regional and international demand have favoured dairy production growth in several countries in Latin America and the Caribbean. Additionally, most South American countries had very good pasture conditions during the 2012/2013 production year. Overall, South American milk production is foreseen to expand by 3 percent in 2013, a rate similar to 2012, to 72 million tonnes. Gains are forecast for **Brazil, Chile, Ecuador** and **Uruguay**. In addition to rising domestic demand, a number of these countries stand to benefit from the prevailing elevated prices for dairy products in both regional and international markets. The overall positive outlook has stimulated investment in new technology and improved animal genetics. In **Argentina**, although there has been substantial investment in new processing capacity, milk output has stagnated in the past two years, in the face of falling domestic demand and limitations on exports – with no growth foreseen in 2013. For Central America, milk output in **Mexico**, the largest producer in the subregion, is expected to be constrained by chronically dry to drought

**Figure 2. EU intervention prices, price and export refund for butter and skim milk powder**



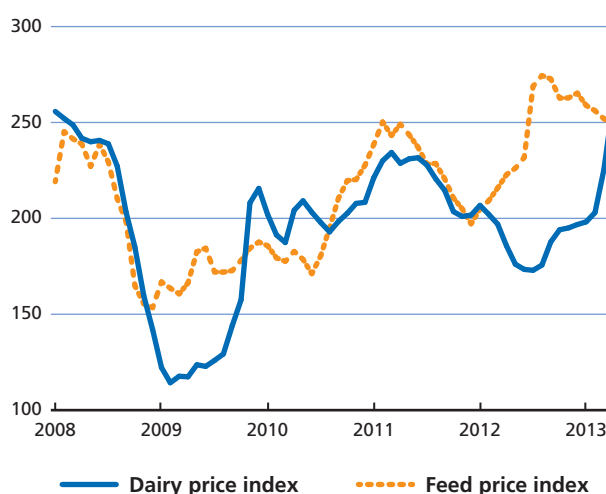
conditions in many parts of the country, leading to herd reduction and the withdrawal of a number of small-scale producers from the industry. Production in **Costa Rica** is expected to show a moderate increase.

In North America, milk production in the **United States** is forecast to increase by only 0.7 percent to 91.5 million tonnes. Sustained dry conditions, during the first part of the year, lingering from 2012, have affected pastures in central and western parts of the country. Furthermore, a prolonged unfavourable milk/feed price ratio has caused some farmers to cut back on output and may lead to a reduction in cow numbers. Production in **Canada** is set to remain stable at 8.5 million tonnes, within the limits set by the milk quota system.

In Europe, **EU** milk production is forecast to remain unchanged in 2013 at 156 million tonnes, as improved milk yields per cow continue to compensate for reduced cow numbers. Output within the EU suffered from exceptionally bad weather conditions in some areas in 2012. It was both unusually dry, especially in Romania, Hungary and Bulgaria, and excessively wet, in the case of Ireland, the United Kingdom and northern France – both had a negative impact on grass production for silage, as well as yields of feed grains grown on-farm. This raised the cost of milk production, as affected producers had to purchase high-priced grains and concentrate, which coincided with falling milk prices. EU production quotas were raised by 1 percent in April, in preparation for their abolition in 2015; however, the experience of recent years has shown that most countries have failed to fully utilise their quota, with the short-fall for the Union overall being around 5 percent. Milk production in the **Russian Federation** is anticipated to show a second year of modest increase in 2013, following declines in 2010 and 2011, supported by improved profitability and a concomitant slowing in dairy herd contraction. In neighbouring **Ukraine** and **Belarus**, milk production is on an upward trend, subsequent to a prolonged period of decline. In both countries, government incentives are provided to promote farm-level efficiency and the use of modern technology; however, as in the case of the neighbouring EU, producers have faced similar challenges in maintaining profitability in the face of increases in the cost of feed and reduced prices for milk.

In Oceania, sustained high prices for dairy products on the international market and associated levels of profitability have stimulated the dairy sector; however, both Australia and New Zealand experienced prolonged hot, dry weather at the start of 2013, which led to a sharp fall-off in milk production. In **New Zealand**, up until January, output was running 6 percent ahead of the 2011/12 season, itself a record, but subsequently plummeted. As a result, the

**Figure 3. FAO indices of dairy and feed prices (2002-2004=100)**



**Table 2. Major exporters of dairy products**

	2009-11 Average	2012 prelim.	2013 f'cast
<i>thousand tonnes</i>			
<b>WHOLE MILK POWDER</b>			
<b>World</b>	<b>2 155</b>	<b>2 437</b>	<b>2 464</b>
New Zealand	959	1 261	1 350
EU*	432	388	350
Argentina	159	201	180
Australia	121	109	99
<b>SKIM MILK POWDER</b>			
<b>World</b>	<b>1 502</b>	<b>1 827</b>	<b>1 853</b>
EU*	376	523	497
United States	356	445	432
New Zealand	371	390	400
Australia	146	168	190
<b>BUTTER</b>			
<b>World</b>	<b>848</b>	<b>898</b>	<b>923</b>
New Zealand	420	463	460
EU*	142	127	137
Belarus	69	82	90
United States	51	50	55
Australia	60	53	65
<b>CHEESE</b>			
<b>World</b>	<b>2 229</b>	<b>2 583</b>	<b>2 658</b>
European Union*	645	776	815
Saudi Arabia	231	341	350
New Zealand	269	306	317
United States	170	262	254
Egypt	160	111	100
Australia	163	163	170

\* Excluding trade between the EU Member States. From 2007: EU-27

current season is expected close slightly down, at 19.6 million tonnes. Abundant rain in April helped pastures re-establish themselves and set the basis for a reasonable start to the 2013/2014 season. In **Australia**, the 2012/13 milk year opened with less than favourable, cool and wet weather, only to experience widespread hot and dry conditions at the start of 2013. Consequently, for 2012/13, milk output is forecast to be moderately lower than the previous season, at 9.3 million tonnes. As a consequence of the unfavourable climatic conditions, herd rebuilding in both Australia and New Zealand was temporarily suspended in 2012/2013.

## TRADE

### Trade to grow in 2013, but limited export availability drives up international dairy prices

World trade in dairy products is expected to continue to expand in 2013 sustained by strong import demand, although supply limitations are anticipated to place a brake on growth. Consequently, trade is forecast to grow by 1.9 percent, compared with an average of 7 percent in recent years, to reach 54.7 million tonnes of milk equivalent. Demand remains firm and, in the context of limited supplies, has led to a substantial rise in prices during the first part of the year. Asia will continue to be the main market for dairy products, accounting for some 54 percent of world imports. In 2013, imports are expected to rise in **China**, the **United Arab Emirates**, the **Islamic Republic of Iran**, **Saudi Arabia**, **Indonesia**, the **Republic of Korea**, **Japan**, **Malaysia** and **Oman**. Elsewhere in Asia, the **Philippines**, **Vietnam** and **Thailand** should also remain important markets, but the level of their imports is not expected to rise. Elevated international prices are projected to reduce imports by **Africa** as a whole. The principal importers that may be affected include **Egypt**, **Algeria** and **Libya**. A number of significant milk powder importing countries in Latin America and the Caribbean, including **Mexico**, **Venezuela** and **Brazil**, may also see purchases constrained by high prices. Finally, imports by the **Russian Federation** are anticipated to increase, stimulated by strong demand for butter and cheese, while those of the **United States** are forecast to be unchanged.

International prices are expected to remain at elevated levels until at least the latter part of 2013, as limited growth in milk production and strong demand cast a shadow of uncertainty over the future availability of milk products. In this context, exporting countries will have to strike a delicate balance between maintaining core markets and pursuing long-term market development, and adjusting their product mix to ensure maximum returns.

For imports, some lower income countries and those that purchase milk products for social programmes may reduce the scale of their acquisitions in the light of elevated prices. In general, processing industries which rely on imports are likely to seek means of substituting less expensive ingredients, such as whey powder or vegetable fat, where possible. Furthermore, the elevated cost of imported products will provide a fillip to domestic milk production in many countries.

### Whole milk powder (WMP) – Prices surge on supply concerns

World exports of WMP are projected to register only a small increase 2013, rising by 1 percent to 2.5 million tonnes. This compares with average annual growth of 6 percent in the previous three years. High international prices will lead many countries to re-evaluate their import needs, including the potential for substitution. Sustained demand is forecast for Asia, the main market. However, some importers in North Africa and Latin America and the Caribbean may limit or reduce purchases in the face of elevated prices. **China** is expected to retain its position as the principal importer of WMP and may see further expansion in purchases, although processors may also seek to utilize lower value ingredients, such as whey powder, where possible, for recombination. Elsewhere in Asia, increased purchases are expected for the **United Arab Emirates**, **Saudi Arabia** and **Oman**. Conversely, in **Algeria** and **Venezuela**, which are second and third, respectively in terms of world imports, social programmes are an important driving force behind demand, and the countries may see imports reduced as a result of budgetary restrictions. In **Brazil**, rising domestic production could lead to imports being displaced. Demand for WMP is very geographically diverse, stemming from its wide use in both the processing industry and for direct retail sale. As for the exporters, **New Zealand**, **Belarus** and **Uruguay** will supply most of the increase in trade, as restricted milk supplies and a move into producing other milk products are expected to curb WMP export availability from the **EU**, **Australia** and **Argentina**. As a group, the above six countries supply 85 percent of the international WMP market.

### Skim milk powder (SMP) – Prices also up markedly

Trade in SMP is anticipated to record limited growth in 2013, rising by 1.5 percent to 1.9 million tonnes, and contrasting with an average annual increase of 11 percent for the previous three years. In the face of tight export availability, SMP prices have risen alongside



those of WMP. Supplies of SMP to the world market are expected to be constrained, as manufacturers juggle with finite milk supplies. SMP is central to the milk processing industry in many countries and, as such, market demand is widespread. The principal markets are (in order of volume) **Mexico, China, Indonesia, Algeria, the Philippines and Malaysia**, followed by the **Russian Federation, Vietnam, Saudi Arabia, Egypt and Thailand**. Overall demand is expected to remain firm in these markets; however, should the current high prices continue, this will inevitably affect the level of purchases. **China**, in particular, is anticipated to increase imports substantially, by 13 000 tonnes, although this would be less than the increment for 2012. Augmented purchases are also possible by (in order of volume) **Mexico, Indonesia, Algeria and Malaysia**. Conversely, imports by the **Russian Federation** may decline. Over 80 percent of world exports are supplied by (in order of volume) the **EU, the United States, New Zealand and Australia**. For 2013, much will depend on the coming season's milk production in **Oceania**, as SMP production in the EU and the United States is anticipated to decrease as emphasis is placed on the production of other milk products. A new development, first evidenced in 2012, is **India's** larger-scale participation as an exporter of SMP – supplying neighbouring **Bangladesh** and markets in the Near East and North Africa. Under current market conditions, and given the scale of India's domestic dairy industry, there would be potential to expand its SMP exports during 2013.

### Butter – Follows the milk powders higher

Trade in butter is forecast to grow by 2.7 percent in 2013, to 923 000 tonnes, based on increased sales by the **EU, Belarus, Australia** and the **United States**. Sales by **New Zealand** are foreseen to remain close to last year's, as more emphasis is being placed on using milk for WMP and cheese production. At the same time, the country remains the world's predominant supplier of butter, accounting for half of trade. Current high prices have created the opportunity for greater EU and United States participation in the international marketplace – as they have the possibility of drawing upon the substantial supplies available in their respective domestic markets. Demand for butter imports comes principally 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. Additionally, as a result

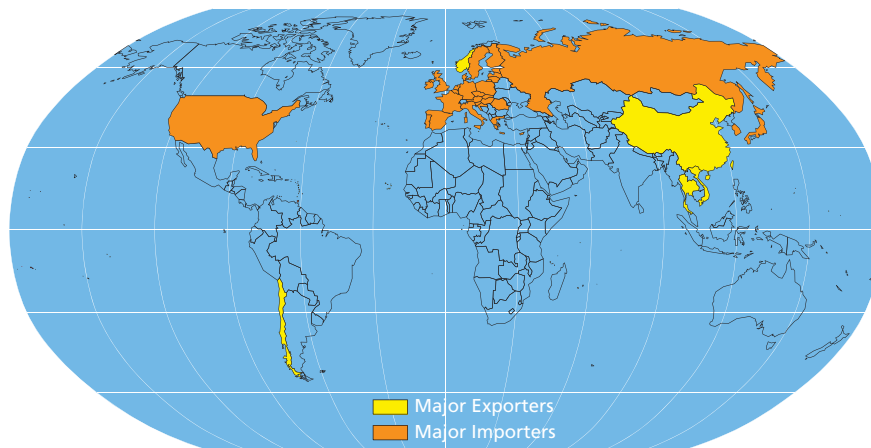
of trading agreements, the **EU** is both an important butter importer (ranking fourth) and exporter (ranking second). Purchases by most of the main importing countries – the **Russian Federation, Saudi Arabia, the Islamic Republic of Iran and China** – may increase in 2013, while those of the **EU** are anticipated to be unchanged.

### Cheese – Less volatile than other dairy commodities

Among the dairy commodities, cheddar cheese was least affected by the surge in international prices for milk products. Even in the case of a generic cheese, differences in taste, consumer preference and the use of branding mean that prices are not as volatile as for milk powder and butter fat, which are destined mainly for reconstitution and other processing and, thus, are not generally visible to the individual consumer. Trade in cheese is forecast to grow by 3 percent in 2013, to 2.7 million tonnes, sustained by robust import demand. However, the rate of increase is expected to be less than in recent years, as processors in the main exporting countries struggle to balance strong international demand for dairy products with limited supplies of milk. The international cheese market is the most difficult dairy market to classify. One apparent anomaly is that a number of major cheese producing and exporting countries are also important importers, including (in order of volume) the **United States, Saudi Arabia, Egypt, the EU, Australia and Switzerland**. Most often, purchases by this group of countries reflect import quotas under trade agreements and also the highly specific nature of some cheeses, including those with restrictions on the use of their names and areas of origin. Another group of the most significant importing countries, which includes the **Russian Federation, Japan, Mexico, the Republic of Korea and Iraq**, focuses more on industrial cheese, both for direct consumption and for use by the processing industry, although each market has its specific requirements and preferences. Overall, four importers, the **Russian Federation, Japan, the United States and Saudi Arabia**, account for almost 45 percent of purchases. The **EU** remains the major cheese exporter, supplying 30 percent of world trade, not including the substantial amount of cheese that is traded among the EU countries themselves. Other important exporters are **Saudi Arabia, New Zealand, the United States, Australia, Egypt, Belarus, Switzerland, the Ukraine, Argentina, Uruguay and Turkey**.

# FISH AND FISHERY PRODUCTS

Major Exporters and Importers of Fish and Fishery Products



## GLOBAL FISH ECONOMY IN 2013

### Overview

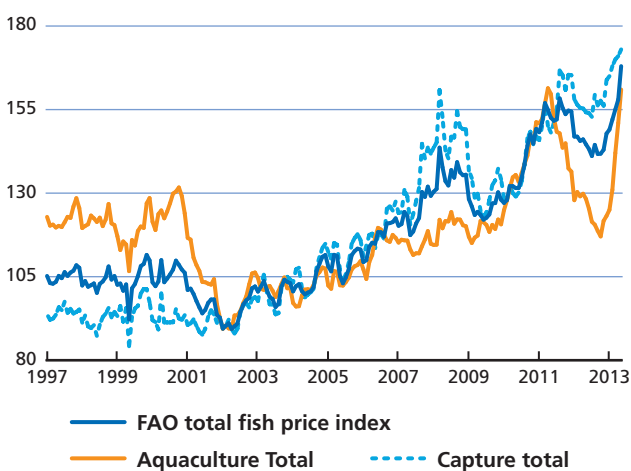
The lingering economic crisis in the major seafood importing markets of northern Europe and North America has contributed to generally sluggish growth in seafood imports, although with some exceptions where demand for specific products has remained strong, namely salmon and tuna. Fluctuating wild catch landings, mid-season quota adjustments and major incidences of disease in aquaculture facilities have contributed to supply uncertainty. As a result,

the direction of international prices and import volumes of fish and fishery products in 2013 remains unclear.

A combination of chronic disease in Southeast Asian **shrimp** farms and low wild shrimp catches continue to put upward pressure on shrimp prices. Despite record high prices, demand for **tuna** remains strong in the US and EU. **Canned tuna** prices are expected to remain stable in the face of low supply relative to demand. **Cephalopod** prices have stabilized, despite falling or weak demand in key markets of Europe and Japan. **Tilapia** demand in Europe and North America remains stable with good supplies from China, the main producer, while farmed tilapia production has expanded in some developing countries in Asia, Africa and Latin America and the Caribbean to meet growing domestic demand. Abundant supplies of **cod** and a parallel drop in cod prices in European markets have had negative effects on cod fishers and producers who find cod farming less profitable.

Weak demand for **seabass and seabream** in key markets and credit problems in southern Europe encouraged some producers to harvest early, resulting in smaller-sized fish reaching the markets. Strong **salmon** demand, despite rising salmon prices, implies a structural shift in consumer demand, which is positive for salmon producers. **Mackerel** demand increased in response to the lower prices last season, and price is expected to rise, although gradually, in 2013. The situation remains difficult in the mackerel fishery due to overcapacity of fishing fleets and the recent failure to regulate the South

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



Data source: Norwegian Seafood Council

Table 1. World fish market at a glance

	2011	2012 <i>estim.</i>	2013 <i>f'cast</i>	Change: 2013 over 2012
	<i>million tonnes</i>			<i>%</i>
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>156.2</b>	<b>156.7</b>	<b>161.2</b>	<b>2.9</b>
Capture fisheries	93.5	90.2	91.0	0.9
Aquaculture	62.7	66.5	70.2	5.6
<b>Trade value (exports USD billion)</b>	<b>127.6</b>	<b>128.2</b>	<b>130.8</b>	<b>2.0</b>
<b>Trade volume (live weight)</b>	<b>57.2</b>	<b>57.4</b>	<b>57.8</b>	<b>0.7</b>
<b>Total utilization</b>	<b>156.2</b>	<b>156.7</b>	<b>161.2</b>	<b>2.9</b>
Food	131.8	135.7	140.5	3.5
Feed	18.3	15.5	15.7	1.0
Other uses	6.0	5.5	5.1	-7.3
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
Food fish (kg/yr)	18.9	19.2	19.7	2.4
From capture fisheries (kg/year)	9.9	9.8	9.9	0.5
From aquaculture (kg/year)	9.0	9.4	9.8	4.4
<b>FAO FISH PRICE INDEX <sup>1</sup></b> (2002-2004=100)	<b>2011</b>	<b>2012</b>	<b>2013 Jan-May</b>	<b>Change: Jan-May 2013 over Jan-May 2012 %</b>
	154	145	156	7.7

<sup>1</sup> Data source: Norwegian Seafood Council

Pacific jack mackerel fishery, which is the world's largest fishery. Pressure on **fishmeal** prices remained strong in 2012 as a result of South American supply constraints in an El Niño year, coupled with strong demand in European and Asian markets. Despite the economic crisis, firm consumer demand for carnivorous fish (which feed on other fish species) and shrimp continue to support **fish oil** prices. **Scallop** catch levels in the United States for 2013 are expected to drop by 30–35 percent, which could lead to rising prices in the main import markets. **Oyster** prices are expected to remain strong in 2013, after more than doubling over the last three years.

## REVIEW BY FISH PRODUCT

### Shrimp

Shrimp prices continue to rise, given expectations of lower supplies due to delays in the start of the season in Southeast Asia. Disease stands as a major issue for the shrimp market in the coming year. Shrimp farmers in Thailand sustained heavy losses due to early mortality syndrome (EMS), a continuation of EMS problems experienced across Southeast Asian – from China to Malaysia – in 2012 EMS affected 80 percent of shrimp

Table 2. Shrimp imports USA

	2007	2008	2009	2010	2011	2012
	<i>(thousand tonnes)</i>					
Thailand	188.3	182.4	192.8	203.2	185.8	136.1
Ecuador	59.1	56.3	61.6	65.0	73.8	81.5
Indonesia	59.1	84.0	69.3	61.1	70.3	74.1
India	20.8	15.2	19.9	30.2	48.1	65.6
Viet Nam	39.3	47.9	44.1	48.4	45.5	41.2
China	48.4	47.8	42.2	48.1	43.0	35.7
Mexico	40.6	34.5	41.1	23.5	30.7	26.4
Malaysia	22.8	30.1	18.4	24.3	29.3	23.5
Honduras	7.3	5.7	8.7	10.2	10.4	9.1
Guyana	8.9	9.1	8.9	7.8	6.5	9.0
Peru	7.2	7.5	8.5	7.0	8.3	8.4
Nicaragua	4.2	2.4	4.8	4.4	3.4	4.7
Panama	4.5	3.6	3.6	3.3	3.3	3.2
Bangladesh	14.9	13.7	9.9	8.1	4.5	2.7
Others	31.6	23.9	18.4	16.1	13.9	13.5
<b>TOTAL</b>	<b>556.9</b>	<b>564.2</b>	<b>552.2</b>	<b>560.8</b>	<b>576.8</b>	<b>534.7</b>

Source: NMFS; GLOBEFISH

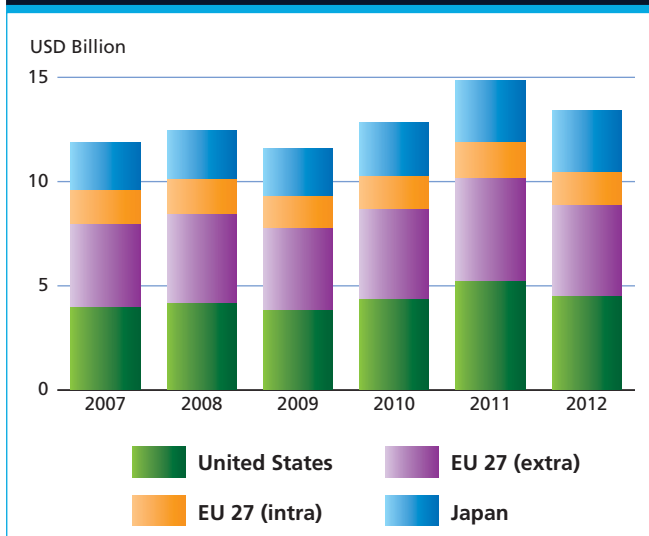
Table 3. Shrimp imports EU-27 (by country of origin)

	2007	2008	2009	2010	2011	2012
	<i>(thousand tonnes)</i>					
Ecuador	70.0	83.1	74.6	80.6	97.2	92.0
Greenland	81.1	80.3	74.3	72.6	68.3	61.2
India	57.0	61.3	65.2	59.8	59.4	60.7
Argentina	45.2	38.6	47.1	55.5	62.1	54.9
Thailand	32.9	39.9	52.8	68.2	63.1	53.4
Denmark	57.7	50.1	46.3	49.4	44.8	43.1
Bangladesh	29.8	32.5	39.0	41.2	43.2	41.9
Netherlands	39.3	36.7	37.0	41.1	44.2	40.5
China	42.4	39.2	40.0	40.6	38.6	35.8
Viet Nam	23.4	31.8	38.1	42.8	45.2	35.3
Canada	53.8	33.5	31.4	30.5	27.8	30.0
Spain	19.8	19.9	21.8	25.9	25.0	28.1
Belgium	20.4	24.5	24.2	23.4	27.7	20.6
Others	277.5	243.3	231.2	215.4	202.6	175.3
<b>Grand Total</b>	<b>850.1</b>	<b>814.8</b>	<b>822.9</b>	<b>847.1</b>	<b>849.1</b>	<b>772.6</b>
<b>Total intra imports</b>	<b>203.4</b>	<b>187.0</b>	<b>187.5</b>	<b>202.4</b>	<b>202.2</b>	<b>181.8</b>
<b>Total extra imports</b>	<b>646.8</b>	<b>627.8</b>	<b>635.3</b>	<b>644.7</b>	<b>646.9</b>	<b>590.9</b>

Source: GLOBEFISH

farms in the Mekong Delta with a major impact on Vietnamese producers. News that a research team at the University of Arizona has identified the pathogen causing the syndrome may pave the way for a recovery of the Southeast Asian shrimp industry. On the other hand,

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



the industry also has to overcome the problem of the presence of high levels of the antioxidant ethoxyquin used in fishmeal fed to shrimp. The new Japanese regulations introducing maximum levels of ethoxyquin, have resulted in quarantine of shrimp from Viet Nam and India and restricted their exports to Japan.

The supply of vannamei and black tiger shrimp from Indian farmers is also expected to be lower due to conservative production decisions and the lack of brood stock. White spot disease in Latin America is affecting production. Meanwhile, wild shrimp landings along its Pacific coast have been disappointing.

Price pressure from low global supply has been slightly offset by the weak yen impacting Japanese import demand, a major import market. Import demand from the United States and European markets has been sporadic, making for uncertain demand and supply conditions in 2013. Given the recent decision by the US International Trade Commission to investigate shrimp production in seven countries, namely China, Ecuador, India, Indonesia, Malaysia, Thailand and Viet Nam, the future for US demand is uncertain, as countervailing duties and higher import prices could be applied. The main EU markets, Spain and Italy, saw sharp drops in demand, at 15.4 percent and 12.4 percent respectively. With the EU's new Generalized System of Preferences to be implemented in January 2014, the tariff on Argentine shrimp imports will no longer receive specialized treatment in the EU market and will increase to 12 percent from the current rate of 4.5 percent. This price rise will likely put further strain on EU import demand and negatively impact Argentine shrimp producers.

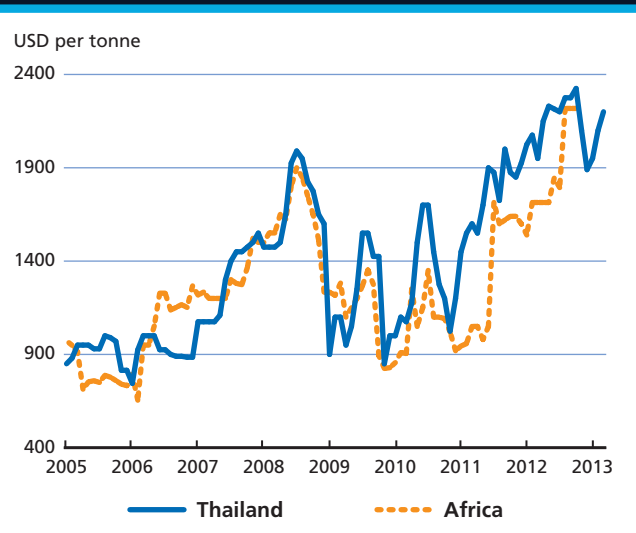
In Southeast Asia, the combination of chronic disease in farms and low wild catches will continue to put upward

pressure on prices. However, import volumes are expected to fall in all major markets, especially the United States and EU-27, causing uncertainty about the future of shrimp prices in 2013.

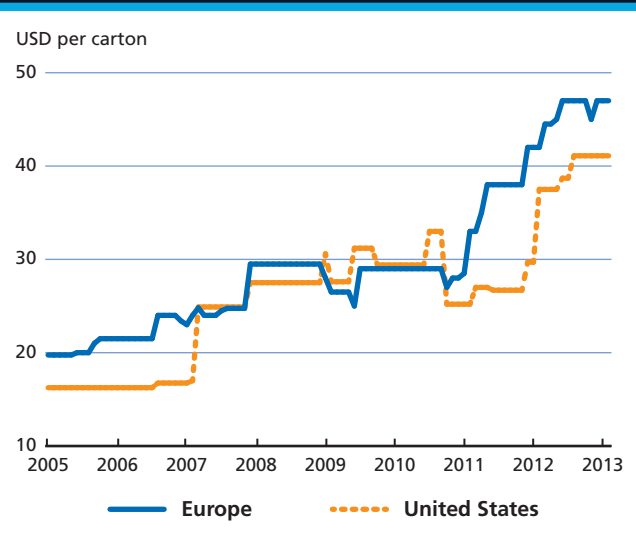
### Tuna

The sashimi tuna market in Japan remained firm in early 2013, mainly in anticipation of the spring festival in April/ May. The United States market for non-canned tuna also remains stable, despite the high price of USD 2 000 per tonne. In early 2013, the EU agreed to increase the annual import quota for pre-cooked tuna loins to 22 000 tonnes from 15 000 tonnes at zero duty for the next three years. European canners, mostly from Spain, quickly snapped up almost all the allotted duty-free quota in the first quarter of

**Figure 3. CFR prices frozen skipjack (Thailand and Africa)**



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



2013, mainly for supplies from Thailand, Viet Nam, China, Indonesia and the Philippines. Evidence shows that the record high tuna prices are not hindering import demand in the major markets. However, frozen yellow fin tuna steaks and loins treated with carbon monoxide (CO) and exported to the US market could face a tariff charge in the future, if US Customs reclassifies CO-treated tuna as a prepared or preserved product. If so, the tariff would escalate from the current zero tariff for raw fish or fillets up to 12.5 percent, with negative effects on imports.

Tuna supplies to Asian canners are down this year, leading to rising prices for canned tuna. The US remains the largest buyer of Thai canned tuna, despite the fact that US canned tuna imports had fallen over the years and remain flat, as does EU imports. Eco-labeled canned tuna, indicating pole-and-line fisheries and absence of fish aggregating devices (FAD-free fishing), are expected to become available in European and North American supermarkets later this year. This may lead to a rebound in demand for canned tuna in these eco-friendly markets, although overall volumes from pole-and-line fisheries are limited. EU importers are also looking for alternative suppliers of canned tuna with lower import duties. For example, ACP countries such as Mauritius, Cote d'Ivoire and Papua New Guinea can export to the EU at zero tariffs. Canned tuna prices are expected to remain strong in the face of low supply relative to demand.

### Groundfish

Abundant **supplies of cod** and falling prices in European markets have boded badly for fishermen and cod farmers who find that cod farming is becoming less profitable. While the increasing supply may be a sign of successful management of cod catch fisheries, it could also indicate the need for structural adjustments in the cod industry to reach a stable equilibrium in the market. From an optimistic point of view, it could also present an opportunity to market white fish as an alternate meat, given its relatively lower price, and to increase overall consumption of white fish. **Hake prices** are following cod in a downward trend, along with other substitute white fish. **Haddock prices**, currently lower than cod, are likely to catch up as haddock landings are not expected to increase in the near future.

### Seabass and seabream

Weak demand for **seabass** and **seabream** in key markets and credit problems encouraged some producers to harvest early, resulting in smaller sized fish reaching the markets. This has implications for future supplies and may put upward pressure on prices in 2013. This price pressure is in addition

Figure 5. CFR prices groundfish blocks (USA)

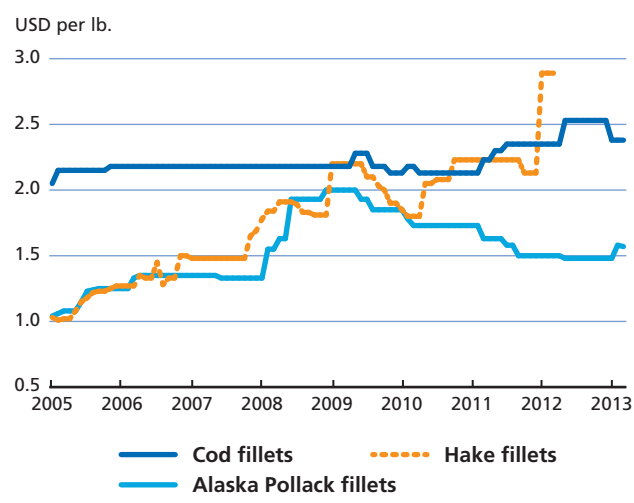
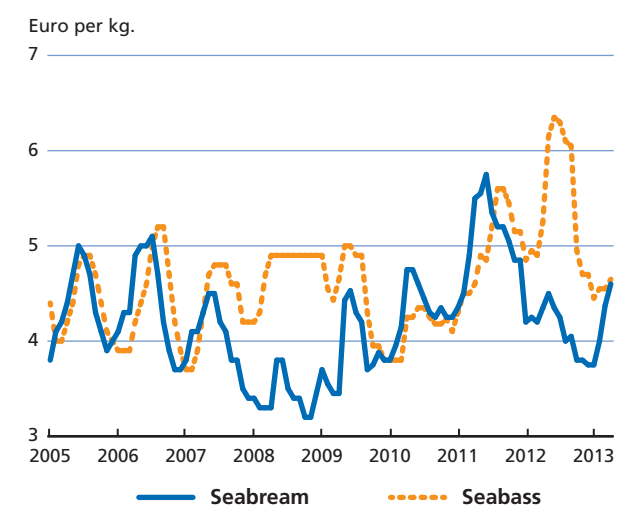


Figure 6. Prices of seabass and seabream in Italy, origin Greece



to normal price rises for seabass and seabream in spring and early summer due to the natural growth cycle of the species. Greece and Italy are integral players in the production and distribution chain of seabass and seabream, and the current economic climate in Southern Europe is squeezing credit available to producers, importers and distributors. Under these circumstances, Turkey has an opportunity to emerge as a major supplier. Although import demand is growing in Russia, the UK and the US, this has not been enough to offset falling demand in traditional markets of Southern Europe, and may lead farmers to cut future production.

### Cephalopods

The lingering effects of the global economic crisis are impacting sales of cephalopods in Europe, where imports

are down. **Squid prices** in Europe declined significantly towards the end of 2012 and remain stagnant in 2013. Squid prices in Japan remain stable, despite low inventories of squid in cold storage. **Octopus prices** have stabilized in the European and Japanese markets and this stability is expected to continue. **Cuttlefish prices** in Japan remain high.

### Pangasius

Global production of **pangasius** will most likely slow as a result of problems facing Viet Nam, the world's largest producer, where the current market price is below farm costs and falling ex-farm prices. Viet Nam has shifted its policy from increasing farming areas to focusing on more efficient and sustainable farm management. The introduction of improved traceability systems should have a positive long-term impact on Viet Nam's exports. Pangasius demand remains mixed, with slow import growth in the Americas, stable imports in Asian markets and declining imports in Europe. The latter is somewhat surprising, given the competitive pricing of pangasius. However it could indicate that the extreme focus on prices may have hurt the image of the product.

### Tilapia

China remains the world's largest producer of tilapia and the largest supplier to the European market. Tilapia production continues to interest some countries in Africa, Asia and Latin American for supplying emerging domestic demand. European demand for freshwater fillets is currently stable but expected to increase over time. US imports of tilapia, especially frozen fillets, increased in 2012 after a low season in 2011, but dipped again slightly during the first quarter of 2013. As the biggest market for Chinese tilapia, the US absorbed 60 percent of Chinese exports in 2012. Availability of certified tilapia as of August 2012 is projected to stimulate demand for tilapia fillets in European and North American markets where consumer demand for private certification of seafood products is on the rise. As expected, seasonal Asian demand for tilapia peaked in spring 2013 for Chinese Lunar New Year celebrations and Lent celebrations in the Philippines.

### Salmon

Despite a 13 percent increase in farmed **Atlantic and Pacific salmon** production between 2011 and 2012, salmon prices continue to recover from the very low levels reached in 2011. Strong demand in the face of rising salmon price implies a structural shift in consumer demand, which is good news for salmon producers. Production is expected to increase by only 2–3 percent in 2013, and

prices are expected to remain high. Some added supply is foreseen for the second half of the year, but it will be less than previously expected, due to production problems in Chile and Norway.

### Small pelagics

Recent changes in **mackerel** migratory patterns in the waters of Iceland and Greenland have contributed to ongoing disputes over quota allocations among Iceland, the Faroe Islands, Norway and the EU. Recent negotiations to regulate the South Pacific jack mackerel, the world's largest fishery, also failed. Major quota reductions anticipated in 2013 will lead to reduced supplies of mackerel and rising prices. Fishmeal producers, expressing concern about sustainability of the Peruvian **anchovy** fishery, are calling for reduced quotas in 2013. **Herring** exports from Norway, the main supplier of frozen herring and herring fillets, fell 50 percent between 2010 and 2012. Expectations of further reductions in herring supplies will put further pressure on the already high prices.

### Fishmeal and fish oil

Pressure on **fishmeal** prices remained strong in 2012 as a result of Latin American supply constraints in an El Niño year coupled with strong demand in European and especially Asian markets. Fishmeal prices reached high levels not seen since the first quarter of 2010 and carried

**Table 4. Production farmed salmon: World**

	2008	2009	2010	2011	2012*	2013*
	<i>(thousand tonnes)</i>					
<b>ATLANTIC SALMON</b>						
Norway	743	863	955	990	1075	1050
Chile	389	233	135	200	310	330
UK	129	133	145	155	160	155
Canada	104	100	115	115	120	115
Faeroe Is.	39	51	45	52	60	60
Australia	25	30	31	31	31	31
Ireland	10	12	15	15	15	15
USA	17	14	17	16	16	15
Others	1	5	2	2	3	3
<b>Total</b>	<b>1 457</b>	<b>1 441</b>	<b>1 460</b>	<b>1 576</b>	<b>1 790</b>	<b>1 774</b>
<b>PACIFIC SALMON</b>						
Japan	13	16	9	8	8	8
Chile	92	158	155	175	195	210
Canada	7	5	10	12	12	10
New Zealand	9	12	12	12	12	12
<b>Total</b>	<b>121</b>	<b>191</b>	<b>186</b>	<b>207</b>	<b>227</b>	<b>240</b>
<b>Grand total</b>	<b>1 578</b>	<b>1 632</b>	<b>1 646</b>	<b>1 783</b>	<b>2 017</b>	<b>2 014</b>

Source: GLOBEFISH AN 12201

\*Estimate

over into the first quarter of 2013. Strong global demand for animal feeds for terrestrial livestock helps support fishmeal prices. **Fish oil** prices have climbed steadily since February 2009 in response to strong growth in demand for both high-value aquaculture and human consumption. Despite the economic crisis, strong consumer demand for carnivorous fish and shrimp continue to support fish oil prices. Although human consumption of fish oil is small as compared with aquaculture utilization, future growth in direct human consumption of fish oils is expected to contribute to rising fish oil demand. Coupled with weak supplies in 2012, fish oil prices are expected to continue to rise in 2013.

**Table 5. Production fishmeal: Selected countries**

	2007	2008	2009	2010	2011	2012
	<i>(thousand tonnes)</i>					
Peru/Chile	2120	2063	2039	1274	2160	1302
Denmark/Norway	317	302	274	345	256	114
Iceland	135	251	198	146	134	185
<b>Total</b>	<b>2 572</b>	<b>2 616</b>	<b>2 511</b>	<b>1 855</b>	<b>2 607</b>	<b>1 691</b>

Source: IFFO

\*These figures refer only to IFFO member countries

**Table 6. Production fishoil: Selected countries**

	2007	2008	2009	2010	2011	2012
	<i>(thousand tonnes)</i>					
Peru/Chile	577	459	410	279	450	325
Denmark/Norway	74	93	79	116	92	39
Iceland	46	81	44	69	67	74
<b>Total</b>	<b>697</b>	<b>633</b>	<b>532</b>	<b>471</b>	<b>612</b>	<b>444</b>

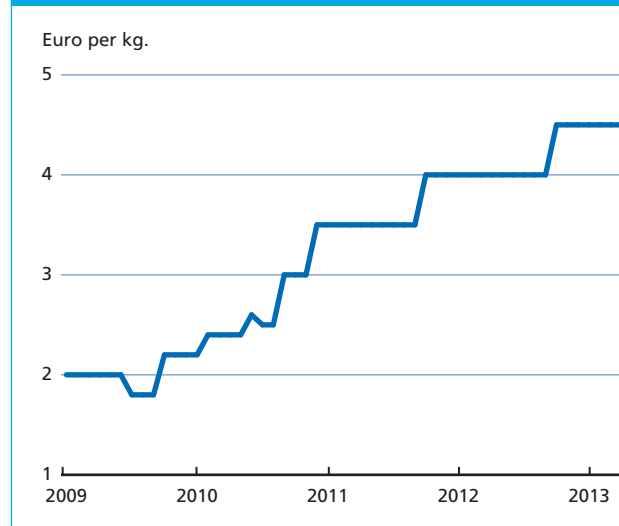
Source: IFFO

\*These figures refer only to IFFO member countries

## Bivalves

**Scallop** catch levels in the US for 2013 are expected to drop by 30–35 percent, which could see prices rising in the main import markets. In response to decreased US landings, US imports of scallops from Peru are expected to increase in 2013. China is emerging as the new leading market for high-end shellfish products, with Chinese demand for **oysters** and **mussels** growing as much as 20 percent per year. Oyster prices are expected to remain strong in 2013, after more than doubling over the last three years.

**Figure 7. Oyster prices (Ireland/France)**



# SPECIAL FEATURES

2013  
International year  
of Quinoa





## QUINOA

(Article by Ekaterina Krivonos, *Economist, Trade and Markets Division, FAO*)<sup>1</sup>

The year 2013 has been declared “International Year of Quinoa” by the United Nations General Assembly, a tribute to a little-known agricultural product with outstanding nutritional and agronomic properties grown almost exclusively in the Andes. Quinoa has been cultivated as a subsistence crop by indigenous Andean populations for thousands of years. Although similar in appearance to cereals, quinoa is an annual crop more closely related to beet or spinach. Its exceptional nutritional value, combined with its ability to grow in dry conditions and its resilience to climatic conditions, make it a potentially important crop from a food security perspective.

### The unique characteristics of quinoa

Quinoa is the only food crop that contains all the essential amino acids, trace elements and vitamins, and is also gluten-free. Although not a cereal, it is consumed in a similar way to rice and other staple grains. Quinoa also has a higher content of all important minerals than maize,

<sup>1</sup> The author would like to thank the staff of FAO offices in Bolivia, Ecuador and Peru who supplied valuable information and data obtained from Ministries of Agriculture and other national sources.

rice or wheat (except sodium), and contains large amounts of folate. It is also richer in protein and mono-saturated fat.

On the production side, quinoa has an extraordinary ability to adapt to different climatic conditions and agro-ecological zones. It can grow in relative humidity varying from 40 percent to 88 percent. It also is grown at altitudes from sea level up to 4000 meters, and at temperatures ranging from -4°C to +35°C (FAO, 2012). It is also highly water efficient and can produce acceptable yields with rainfall as low as 100–200 mm per year. Recognizing the significance of all of these properties in eradicating hunger and malnutrition, with Bolivia’s proposal, the United Nations General Assembly declared 2013 the International Year of the Quinoa.

Although still relatively unknown in many parts of the world, quinoa is becoming increasingly popular in international markets, especially among consumers in developed countries in North America and Europe. Together, the United States, Canada and the European Union imported 30 500 tonnes of quinoa in 2012, three times as much as they did in 2007.

### Production trends

Most quinoa production comes from the Andean region of South America. Bolivia and Peru, the leading suppliers, together account for over 90 percent of world production.

**Table 1. Nutrients in quinoa, corn, rice and wheat, per 100 g**

		Quinoa	Corn (White)	Rice (white)	Wheat (Hard Red Winter)
<b>Minerals</b>					
Calcium, Ca	mg	47	7	11	29
Iron, Fe	mg	4.57	2.71	1.60	3.19
Magnesium, Mg	mg	197	127	23	126
Phosphorus, P	mg	457	210	71	288
Potassium, K	mg	563	287	77	363
Sodium, Na	mg	5.00	35.00	7.00	2.00
Zinc, Zn	mg	3.10	2.21	1.20	2.65
<b>Vitamins</b>					
Thiamin	mg	0.36	0.39	0.18	0.39
Riboflavin	mg	0.32	0.20	0.06	0.11
Niacin	mg	1.52	3.63	2.15	4.38
Vitamin B-6	mg	0.49	0.62	0.11	0.37
Folate, DFE	µg	184.0	0.00	7.0	38.0
Vitamin A, IU	IU	14.0	0.0	0.0	9.0
Vitamin E (alpha-tocopherol)	mg	2.4	0.0	0.0	1.0
Fatty acids, monounsaturated		1.6	1.3	0.2	0.2
Protein	g	14.1	9.4	6.8	11.3
Fiber, total dietary	g	7.0	7.3	2.8	12.2

Source: National Nutrient Database for Standard Reference, USDA

Chile and Ecuador are also traditional producers, although on a smaller scale. In recent years, quinoa cultivation has expanded from South America to the United States and, to a lesser extent, to Europe (Denmark, England, Germany, Italy, France and Spain) and Africa (Kenya and Mali). In the traditional producing areas, quinoa has been cultivated mainly as a subsistence crop by the indigenous populations, especially by women, who play a particularly important role in its production and marketing.

**Bolivia** accounted for 45 percent of global quinoa production in 2011. Production in the country has grown steadily since the mid-1990s, with annual growth rates averaging 4.5 percent between 1995 and 2011. According to Bolivia's Ministry of Rural Development and Land, the country's quinoa output expanded from 38 257 tonnes in 2011 to 50 566 tonnes in 2012, although this very high estimate remains provisional, pending the collection of hard data on areas planted. If confirmed, Bolivia would have overtaken Peru as the major quinoa producer. Oruro and Potosí, Bolivia's main quinoa producing regions, each produce a 40 percent share of the national quinoa output, while La Paz produces the remaining 20 percent. Since 2011, Bolivia has exported approximately half of all the quinoa it produces.

**Peru's** quinoa production has expanded at more than 7 percent per year since the mid-1990s. It was the world's leading quinoa producer from 1997 to 2011, and accounted for 48 percent of global production in 2011. In 2012, preliminary official estimates put production at 44 207 tonnes, which made the country slide to second place behind Bolivia. Most quinoa in Peru is grown in the

southern highlands, particularly the Puno region, which accounts for 80 percent of national output (Peru Ministry of Agriculture, 2012) Although most Peruvian quinoa is consumed in the domestic market, its exports have grown steadily since 2007, accounting for 23.2 percent of production in 2012.

In **Chile**, most of the crop is grown in the Tarapacá region, under climatic conditions similar to the highlands of Bolivia and Peru. Recently, production expanded to central regions. The country's production remains small, declining from 1 448 tonnes in 2011 to an estimated 1 007 tonnes in 2012. In **Ecuador**, Chimborazo Province accounts for 70–80 percent of total output. The volume of Ecuador's quinoa production was estimated at a modest 712 tonnes in 2012.

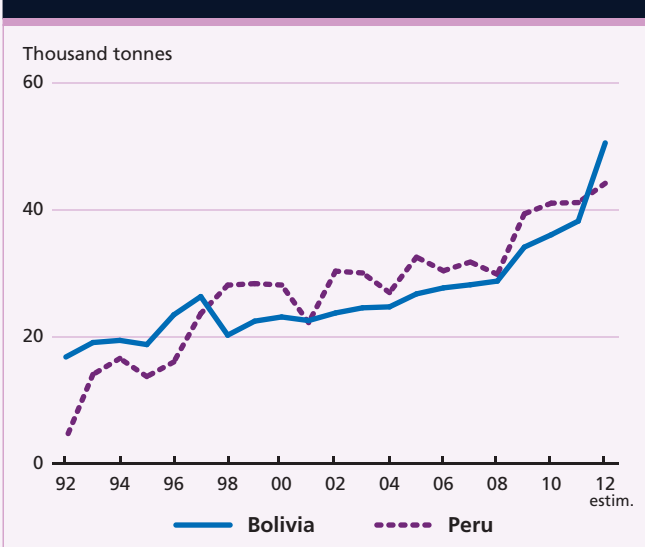
The **United States** and a few countries in **Europe, Asia** and **Africa** have taken up quinoa cultivation in recent years. In the United States, the crop has been grown on a small scale since the mid-1980s, principally in the Colorado Rockies, but now expanding to the western states of California, Oregon, Nevada and Washington, albeit in small volumes. In absence of official data, quinoa output in the country has been gauged at some 3 000 tonnes per year (FAO, 2011). Other emerging producers include Australia, Canada, China, Denmark, Italy, India, Kenya, Morocco and the Netherlands. These countries are already producing quinoa or carrying out research and agronomic trials to establish commercial production of the crop (FAO, 2012).

### Crop prospects in 2013 and beyond

In **Bolivia**, current estimates by the Ministry of Rural Development and Land show the area planted with quinoa in recent years has increased dramatically – from 64 789 ha in the 2010/11 season (the last year for which official figures by the National Statistics Institute of Bolivia are available) to 104 365 ha in 2012/13 – a 61 percent increase over two years. Given the expansion in sown area, the Bolivian government expects quinoa production to increase from 50 566 tonnes in 2012 to 58 040 tonnes in 2013. However, given a lack of firm area and production estimates from remote sensing or other crop monitoring methods, the numbers for 2012 and 2013 are still tentative. **Peru** reported planting 45 323 ha with quinoa in the 2012/13 season, 8.1 percent above the previous year. Assuming no changes in yields, the 2013 crop could reach 47 772 tonnes.

Given the nutritional value and strong export potential of quinoa, the governments of the main quinoa producing countries in the Andean region have made development of the sector national priorities, with several announcing strategic plans and investment programmes for quinoa. For

**Figure 1. Quinoa production in Peru and Bolivia, 1992-2012**



Sources: INE (Bolivia), Ministry of Rural Development and Land (Bolivia) and Ministry of Agriculture (Peru).

**Table 2. Area planted and production of quinoa in the Andean countries**

	Bolivia		Chile		Ecuador		Peru	
	Area (ha)	Prod. (t)	Area (ha)	Prod. (t)*	Area (ha)	Prod. (t)	Area (ha)	Prod. (t)
2009/10	63 010	36 106	1 998	1 202	1 100	897	36 176	41 079
2010/11	64 789	38 257	2 406	1 448	1 176	816	37 825	41 182
2011/12	96 544	50 566	1 779	1 070	1 277	712	41 941	44 207
2012/13**	104 365	58 040	n/a	n/a	n/a	n/a	45 323	47 772

\* The estimate for Chile is obtained by applying 2007 yield level to the annual area planted.

\*\* projections

Sources: FAOSTAT and official data from national sources, including INE (Bolivia), Ministry of Rural Development and Land (Bolivia), Ministry of Agriculture, Oficina de Estudios de Política Agrícola (ODEPA) (Chile), Ministry of Agriculture (Ecuador) and Ministry of Agriculture (Peru).

instance, Peru's Ministry of Agriculture launched a strategic plan for quinoa production for the period 2013-2021 and is projecting to put 64 000 ha under quinoa by 2016. It also expects yields to increase from 1.15 tonnes to 1.50 tonnes per hectare, so as to support an output of 96 000 tonnes annually by 2016.<sup>2</sup> In Oruro, **Bolivia's** major producing region, the regional government announced in April 2013 an investment of *USD*1.8 million to boost quinoa production. **Ecuador's** Ministry of Agriculture also put forward an ambitious plan to expand the area cultivated from the estimated 1 500 ha to 10 000 ha in five years, and to raise annual production from the 712 tonnes reported in 2012 to 6 818 tonnes by 2018.

### Evolution in global trade and prices

Until the year 2000, the volume of global trade in quinoa was modest, at less than 2 000 tonnes per year. Since then, world exports have expanded rapidly, especially from 2005 to 2012, when they grew eightfold,<sup>3</sup> from approximately 5 000 tonnes in 2005 to 40 256 tonnes in 2012. In 2012, 64 percent of the total was supplied by **Bolivia**, followed by **Peru** with 26 percent. Bolivia's exports grew steadily from 10 585 tonnes in 2007 to reach 25 899 tonnes in 2012. In the same period, the value of quinoa exports

grew sixfold: from *USD*13.1 million to *USD*78.9 million.

**Peru** registered even stronger export growth, in particular after 2009, mostly in response to dynamic demand from the United States. Peru's quinoa shipments increased from 1 347 tonnes, valued at *USD*1.8 million, in 2007, to 10 275 tonnes, valued at *USD*29.9 million, in 2012, with an average annual growth in export earnings of 76 percent.

**Table 3. Global quinoa exports by main exporter, tonnes\***

	2007	2008	2009	2010	2011	2012
Bolivia	10 585	10 429	14 522	15 519	20 366	25 899
Ecuador	331	118	46	38	100	460
Peru	1 347	2 096	2 652	4 763	8 020	10 275
Subtotal Andean countries	12 263	12 643	17 220	20 320	28 486	36 634
United States	-	-	-	-	-	3 356
Other	-	-	-	-	-	266
Total						40 256

\* No data are available for the countries other than Bolivia, Ecuador and Peru prior to 2012

Source: Global Trade Atlas (GTA) and Central Bank of Ecuador

**United States** stands as the third largest exporter of quinoa, shipping 8 percent of the world export estimate in 2012. However, of the 3 356 tonnes exported (mostly to Canada), only 728 tonnes were produced in the United States, with the remaining corresponding to re-exported quinoa. If these re-exports are not considered, Bolivia and Peru supplied approximately 96 percent of the global market in 2012, the remaining corresponding to Ecuador and the United States.

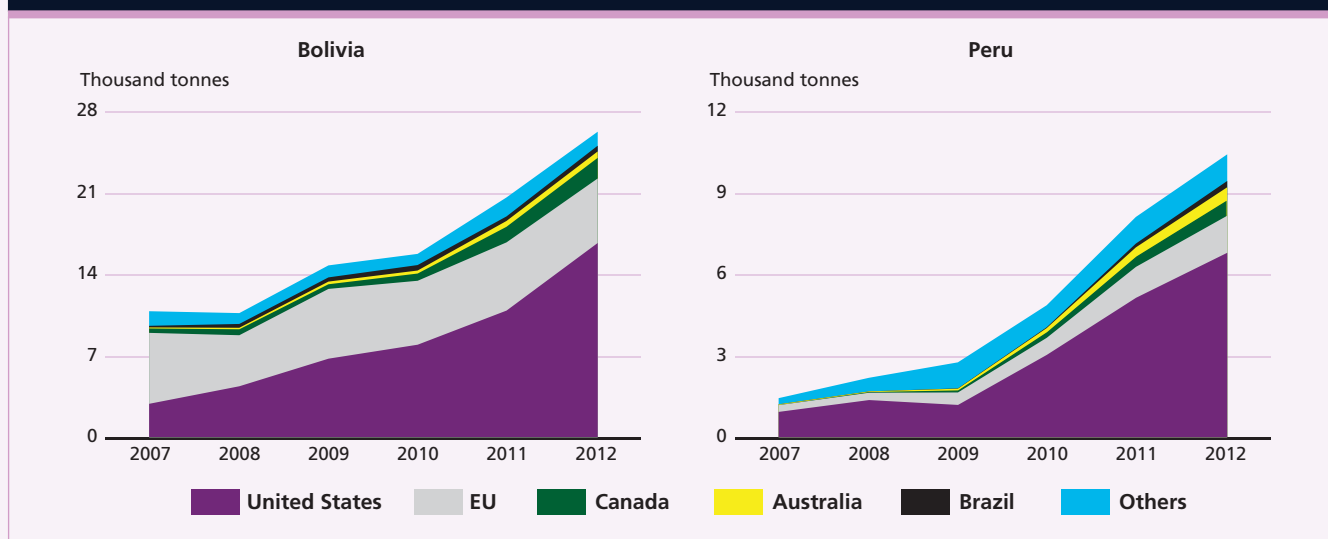
The United States is, by large, the world's major quinoa importer, accounting for about 64 percent of combined exports from Bolivia and Peru in 2012. The same year, the European Union, which ranks second, took 19 percent of overall shipments from Bolivia and Peru. Most quinoa

<sup>2</sup> Information provided to FAO by the Ministry of Agriculture of Peru, Department of Agricultural Competitiveness.

<sup>3</sup> Based on data from FAOSTAT and Global Trade Atlas (GTA).

There is some data discrepancy between what countries report as imports from the various origins and what the exporting countries report as exports to the various destinations. To estimate global exports we use export data from the main producing countries. The reason for choosing reported exports over imports is twofold. First, quinoa was introduced in the international trade nomenclature only in 2012, when it was assigned a separate six digit code in the Harmonized System. Prior to 2012, importing countries were not reporting imports of quinoa as a separate product, while exporting countries recorded their quinoa exports using their national customs classification. Second, some countries have not reported any quinoa imports in 2012, while they in fact may have imported some. For example, neither Ecuador, Mexico nor Uruguay reported quinoa imports, while customs data from Peru shows exports to these countries. As a result, global imports could be underestimated if only importers' statistics are used. Overall, exporter statistics appear to be more consistent and reliable.

**Figure 2. Evolution of Bolivia's and Peru's exports of quinoa by destination, 2007-2012**



\* Source: Bolivia and Peru Customs through Global Trade Atlas (GTA)

enters the European market through France and the Netherlands (Table 3).

The fact that the United States was the main market for Bolivian quinoa in 2012 is in stark contrast with 2007, when the majority of exports were destined to the EU (Figure 3).

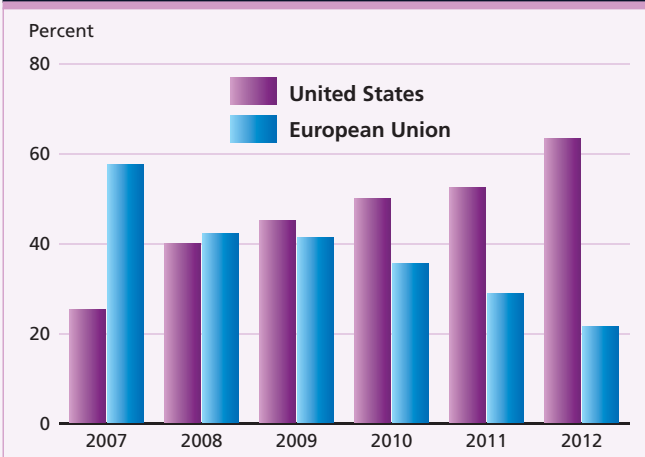
Export prices of quinoa, measured by the unit value of exports, increased substantially in 2008 and 2009, stabilizing in subsequent years. In 2012, the unit value of exports from Bolivia and Peru reached *USD3 047* per tonne and *USD2 910* per tonne, respectively, more than double their 2007 levels.

**Table 4. Quinoa exports from Bolivia and Peru by recipient country, tonnes**

	Exports from Peru			Exports from Bolivia		
	2010	2011	2012	2010	2011	2012
World	4 763	8 020	10 275	15 519	20 366	25 899
United States	2 944	5 039	6 662	7 720	10 655	16 342
EU-27	630	1 135	1 363	5 486	5 856	5 550
- Belgium	-	-	42	-	102	81
- France	74	23	93	2 077	2 552	2 608
- Germany	359	508	463	1 183	896	921
- Italy	77	381	251	125	58	37
- Netherlands	20	106	210	1 938	2 273	1 467
- Spain	23	35	30	30	33	102
- United Kingdom	2	22	202	258	487	371
Argentina	18	22	20	244	300	261
Australia	133	320	446	257	496	553
Brazil	25	142	229	473	389	485
Canada	226	400	592	620	1 339	1 755
Chile	31	99	85	81	132	142
Israel	224	184	380	201	283	429
Japan	136	116	101	81	80	106
New Zealand	85	145	120	-	-	-

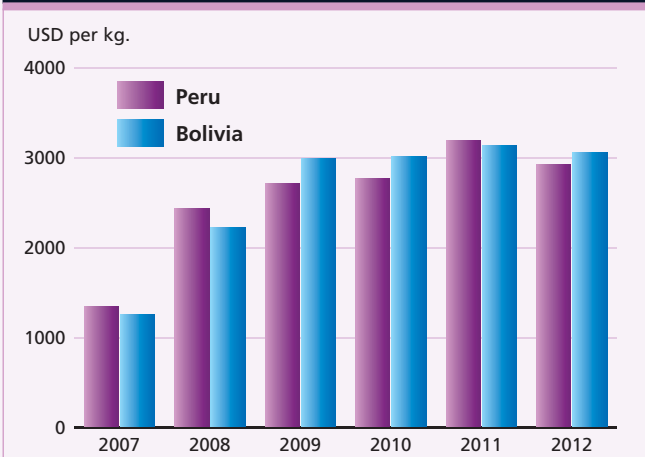
Source: Global Trade Atlas (GTA)

**Figure 3. Share of quinoa exports from Bolivia to US and EU-27**



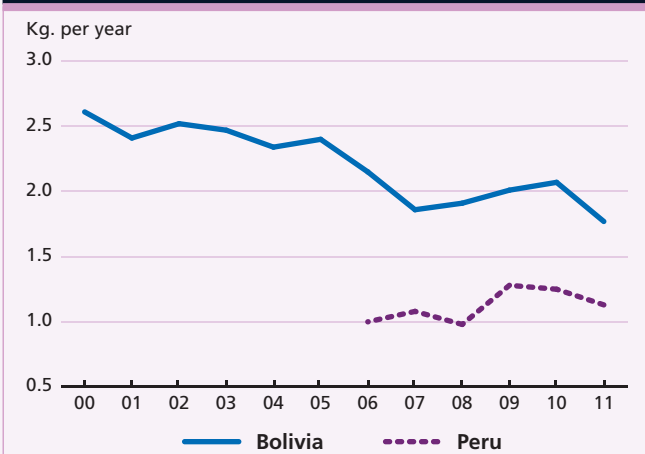
Source: Bolivia Customs through Global Trade Atlas (GTA)

**Figure 4. Unit values of quinoa exports from Bolivia and Peru**



Source: Bolivia and Peru Customs through Global Trade Atlas (GTA)

**Figure 5. Annual per capita consumption of quinoa in Bolivia and Peru**



Source: FAOSTAT, Global Trade Atlas (GTA), TradeMap, and WDI  
 Note: Peru's quinoa trade data is only available from 2006.

### Consumption in Bolivia and Peru

In the Andean countries, most quinoa was traditionally consumed domestically and, for the most part, within the locations where it was produced. However, with exports from both Bolivia and Peru growing vigorously, the share of production that is exported has increased dramatically in the past five years – in Peru from only 4.2 percent in 2007 to 23.2 percent in 2012 and, in Bolivia, from 37.5 percent to 51.2 percent in the same period.

Notwithstanding the dynamic production growth, the fast pace of exports has meant domestic availabilities have fallen in Bolivia and Peru since the mid-2000s. In **Bolivia**, total consumption, calculated as production net of exports, is estimated to have dropped from 22 000 tonnes in 2005 to 17 600 tonnes in 2007, translating into a falling per capita intake from 2.4 kg to 1.9 kg over the period. From 2007 to 2010, aggregate consumption appears to have rebounded, reaching 20 600 tonnes in 2010, equivalent to 2.1 kg per person, per year, but falling again in 2011 to 1.8 kg per person, per year. If the current production estimate for 2012 is confirmed, per capita consumption in Bolivia would have recovered to some 2.4 kg, although still less than the 2.6 kg consumed in 2005. In **Peru**, domestic availabilities could only be estimated from 2006. Based on the data available, consumption per capita has been relatively low, fluctuating around 1.0–1.2 kg between 2006 and 2011.

### Emerging issues

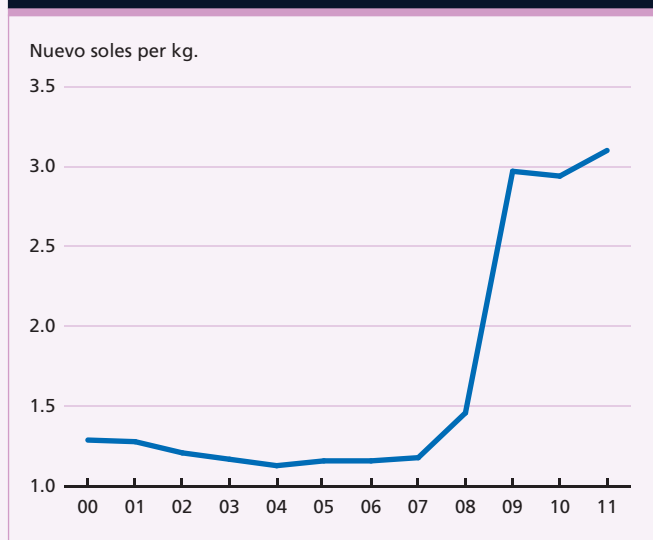
As quinoa production and trade systems are undergoing profound changes, reflecting a shift from a traditional crop, primarily produced for own consumption, to a globally traded commodity, several issues have emerged that require attention. First is the question of whether traditional quinoa producers will remain the main beneficiaries of the crop's growing popularity in the coming years. There are at least 130 000 small-scale quinoa growers in South America (FAO, 2012), The majority belong to poor households, with women directly involved in the crop production, processing and marketing. In **Bolivia**, some 55 000 farmers produce quinoa on an irregular basis, primarily for their own consumption, 13 000 farmers produce quinoa permanently for their own consumption and for the market, and 2 000 farmers produce quinoa mainly for the market (FAO, 2011). In **Peru**, quinoa is grown by approximately 60 000 small producers, who are mostly subsistence farmers. These farmers are deeply affected by the swift changes in global supply and demand for quinoa, and generally lack the instruments to respond to the challenges and opportunities arising from the growing

world demand. Thus, while quinoa is still produced mostly by smallholder farmers in the Andean countries, this might change rapidly in the future, as many commercial farms in the Andean countries and elsewhere are responding to the surge of demand and investing in the crop. Therefore, the question arises as to whether smallholder farmers will continue to dominate the quinoa market or will face increasing competition from larger commercial farms, with the risk of becoming marginalized.

A second concern has to do with the level of prices that quinoa producers may receive over the medium term. Since the mid-2000s, the strong growth in revenues generated by quinoa exports has benefitted the economies in the producing countries as a whole, as well as traditional quinoa growers, who have seen producer prices rise rapidly. For instance, in Peru, producer prices doubled in real terms from 2008 to 2009, reaching Nuevo Sol 3.10 (approximately USD1.1) per kg in 2011, while the export unit price was USD3.2 per kg – meaning that Peruvian producers captured approximately one-third of the export price. So far, strong world import demand and the relatively thin supplies available for trade have defined the quinoa market as a “seller” market. As a result, producers hold significant power in the transactions, able to reap better prices from the exporting agents. With production expanding, this state of play may change rapidly, which could eventually trim much of the benefits currently reaped by Andean quinoa producers.

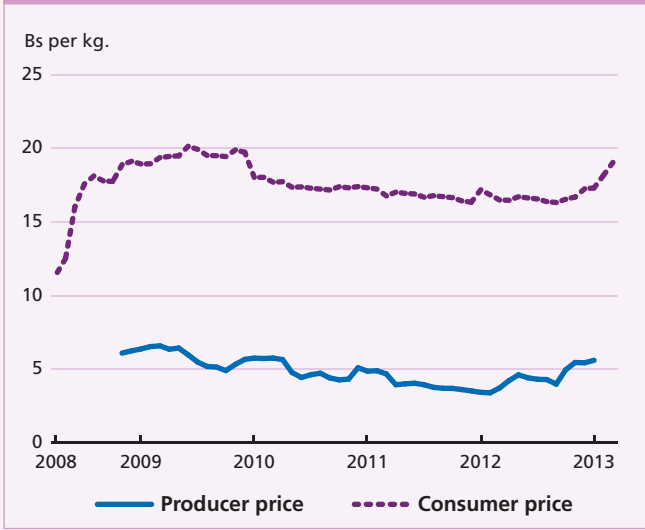
From the government policy perspective, it will be important in the coming years to guide and support the

**Figure 6. Annual quinoa producer prices at farm-gate in Peru, nuevo soles/kg, 2000-2011, in real terms (2005=100)**



Source: Ministry of Agriculture of Peru: [http://frenteweb.minag.gob.pe/sisca/?mod=consulta\\_cult](http://frenteweb.minag.gob.pe/sisca/?mod=consulta_cult)

**Figure 7. Consumer and producer price of quinoa in Bolivia, Bs/kg in real terms (2007=100)**



Note: Consumer prices are the prices in the town of Oruro. Producer prices are the prices in the Challapata market. Both locations are in Oruro Province. Source: INE, Bolivia and Fundación Valles / Servicio de Información y Análisis de Mercados

process of reorientation of the sector from a traditional, subsistence crop to an export-oriented cash product, so as to ensure that quinoa growers and their families benefit from the dynamic world demand. Additional measures are needed to help smallholder farmers realize the commercial potential of their product by encouraging joint marketing actions through producer organizations, providing technical assistance and market information, and ensuring fair competition within marketing channels.

A final concern relates to the possible negative impacts of surging local prices on the nutritional status of the indigenous Andean populations. Because producer prices have increased along with export prices, poor households have been enticed to replace quinoa with less expensive, but nutritionally inferior, food products, such as bread, pasta or rice. For instance, in Bolivia, the nominal quinoa retail prices in Oruro, one of the main producing regions, increased by 80 percent from April 2008 to April 2009 and remained at Bs 22 (USD3.1) per kg until September 2012. From then on, domestic prices increased further and reached Bs 24 in January 2013. By then, producers received Bs 8 per kg, which was one-third of the price paid by consumers. By March 2013, the quinoa retail price stood at Bs 27 per kg, more than double its level in April 2008. During the same period, the price of bread remained unchanged and the price of rice actually declined by over 10 percent.<sup>4</sup> The change in the relative food prices is very likely to have prompted most households to cut quinoa intake (either by selling more of

<sup>4</sup> Source: INE, Bolivia (<http://www.ine.gob.bo/ipc/ipcprecios.aspx>)

their production or buying less from the market) in favour of these other basic food products.

However, the implications of such consumption shift for the food and nutrition security of the indigenous Andean populations are not necessarily negative, as they depend on the relative importance of quinoa in their diets, the revenues generated by quinoa's sales and how the farmers spend any additional income.

For example, looking at the relative importance of quinoa in the Bolivian diet, Oruro is the only Bolivian province that considers quinoa in the calculation of the Consumer Price Index (CPI). As such, the crop is assigned a weight of only 0.6 percent in the food CPI, compared with 13.2 percent for bread and 6.4 percent for rice. However, rather than an actual low contribution of quinoa to the diet, this low weight probably reflects the fact that most of the quinoa consumed is produced by the household itself with little purchased from the market. On the other hand, at the national level, quinoa per capita consumption in Bolivia is estimated at about 2 kg per year, highlighting the relatively low importance of the crop for the average Bolivian and suggesting that, on the aggregate, the nutritional effects of substitution of other food for quinoa might have been limited.

This does not exclude the possibility that specific population groups in the Altiplano, where quinoa is an important part of the local diet, may have suffered from the dietary shift. Thus, although most quinoa smallholder farmers have likely benefited from the expansion in trade and rising producer prices, the longer term implications of switching towards nutritionally inferior foods remains a public policy concern and a topic under investigation by various national and international organizations.

## Outlook

Quinoa is still a relatively new product in the international markets, with vast potential for production and trade expansion. World demand is expected to keep growing vigorously in the coming years, driven primarily by developed countries, where expenditure on healthier and natural foods is on an upward trend. In other parts of the world, there is interesting potential for introducing quinoa as a new crop, given its resilience and low water requirements, and several governments have expressed interest in exploring this option.

In the future, quinoa could play a more important role in the global food system, given its adaptability to different agro-ecological regions and superior nutritional qualities. However, in the short term, the high price of this product, which has thus far catered to the niche market of health-conscious consumers in high-income countries, will

preclude the expansion of consumption in poor countries. Given the current export price of over *USD3 000* per tonne, quinoa cannot compete with other food crops such as rice, which is quoted approximately five times lower on international markets. In the short run, the growing consumption in developed countries will continue to be satisfied by exports from Bolivia and Peru. In the longer term, productivity increases are expected to take place not only in the Andean producing countries but also in the new producing areas, where investments are being made to cultivate the crop for commercial purposes. The current plans to expand quinoa production are expected to translate into much larger world supplies and declining prices at the producer, consumer and international levels, which may alter the current dynamics driving the crop. However, it remains to be seen whether quinoa will ever become a major and world-wide staple.

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## COMMODITY HEDGE FUNDS IN RETREAT?

(Article by Ann Berg, Senior Commodity Analyst)

(The views expressed herein do not necessarily reflect the official opinion of the Food and Agriculture Organization of the United Nations)

Once admired for turning profits year after year by riding the ups and downs of market waves, commodity hedge funds, it seems, have lost their momentum. For two years in a row, after enjoying double digit returns as high as 40 percent, commodity hedge funds have shown negative results. According to Newedge Index tracking fund, commodity hedge funds, including those focused in agriculture, registered slightly negative returns in 2011 and, in 2012, those returns fell to minus 3.7 percent. Poor performance led investors to withdraw 20 percent of their moneys from these funds last year.

Commodity hedge funds have existed since 1979, when the Commodity Futures Trading Commission (CFTC), the US regulator charged with overseeing all futures trading, required funds to register as either Commodity Trading Advisors or Commodity Pool Operators. These funds solicited customer moneys to trade in the US futures markets, using a variety of bullish or bearish strategies with the sole aim of maximizing returns for themselves and their customers. However, up until 2000, these funds were slow to take off.

The investment public generally viewed commodity futures trading as volatile and risky, and suspected that the trading pits in Chicago or New York City, then the dominant global futures trading centers, were biased in favor of the exchange members. After all, throughout the 1980s and 1990s, these exchanges maintained their original non-profit membership structure, and upheld a mission of "enhancing membership opportunity".

Market manipulation was also a recurrent theme. In 1976, a default on the potato contract at the New York Mercantile Exchange ended with CFTC charging both longs and shorts with manipulation. Three years later, perceived "corners" in the silver and wheat markets at the largest exchange, the Chicago Board of Trade (CBOT), prompted both the exchange and the CFTC to declare emergencies. In 1989, when a large exporter took ownership of virtually all of the soybeans in the Chicago and Toledo delivery houses, causing soybean futures to soar, the CFTC revoked the exporter's hedge status. The CBOT acted by declaring an emergency and ordered traders holding positions in July

soybeans to trade for "liquidation only."<sup>1</sup> The subsequent price collapse resulted in years of recriminations. Farmers staged tractor protests around the famed CBOT building and lodged several lawsuits against the trading establishment over a ten-year period.

From 2000 onwards, a cascade of events transformed commodities futures trading from an arcane business into a mainstream activity. Legislative events in the US were pivotal in this transformation: in 2000, the US Congress passed the Commodity Futures Modernization Act and the Graham, Leach, Bliley Act. The former exempted the over-the-counter [OTC] market and energy futures, such as crude oil, from CFTC oversight. The latter repealed the Depression-era Glass-Steagall Act, dissolving the barriers that had separated banking, insurance and brokering for 70 years. These two acts unleashed a flood of new players and money into the commodity futures arena and created pressure on the CBOT, then the primary agricultural exchange, to raise the speculative limits on its grain and oilseed contracts. Once restricted to 600 contracts (75 000 MT), these limits grew geometrically to as high as 22 000 contracts [2.8 million MT] by the middle of the decade.

When two renowned academics, Gary Gorton and Geert Rouwenhorst, wrote "Facts and Fantasies about Commodity Futures" in 2004, asserting that commodity futures were a distinct asset class and largely uncorrelated with equity markets, they turned commodity futures into an irresistible money magnet. *Commodity index funds* and similar vehicles such as commodity-based *exchange traded funds* (ETFs) attracted enormous investment interest. Commodity futures prices became a daily staple of financial news programmes, their prices streaming across the televised banners alongside equity prices. Unlike commodity hedge funds, the index funds and ETFs, defined as securities offerings, allowed for passive ownership of a basket of commodities by tracking the prices of the underlying futures contracts. Interest in commodities prices spread globally. The German-based Deutsche Bank launched a purely agricultural ETF in 2006, which today is the largest agricultural fund by market capitalization. No longer considered a form of gambling, commodity futures had achieved worthy status as a means for portfolio diversification.

Electronic trading rapidly deposed face-to-face pit trading throughout the 2000s, spurring an unprecedented increase in trade volumes. Instantaneous trade confirmations replaced the relay system of floor runners shuttling between pit broker and floor booth, which had

<sup>1</sup> Trade for liquidation means that traders cannot initiate new positions in a particular futures contract and must sell any existing long positions or conversely buy back any existing short positions.



sometimes delayed transaction reporting by an hour. Trading firms hired mathematicians to write algorithmic programmes that could trade without human intervention and arbitrage small price anomalies within milliseconds.

Major developments specifically drawing money into agricultural markets included US mandates for biofuel production that primarily involved distilling corn into ethanol, rising demand for animal protein spurred by emerging market growth, and disruptive climatic events. As the transformation of commodities futures from mundane hedging instruments to a *must-have* asset class neared completion, a global disaster loomed. The overhang of surplus grain stocks, which had been steadily decreasing for years, seemed to evaporate overnight. When FAO announced in 2007 that the stocks-to-use level in wheat would drop to the lowest in 30 years, agricultural futures exploded.

The 2007/2008 food crisis proved to be a money maker for the numerous hedge funds that rode the escalating prices of wheat, corn and soybeans to their highs. As prices fell, these funds exited most of their bullish bets by the end of 2008. In fact, in wheat, the commodity that had experienced the largest percentage gain, hedge funds had established a modest short position by October of the same year. However, the multiple food riots that erupted around the globe as a result of high prices drew unwelcome attention to the industry. A polarized debate commenced about the role of speculation and food prices, eliciting opinions from economists, financial journals, intergovernmental organizations, think tanks and, of course, the market participants. Most of those engaged in making money via speculation claimed that their trading activities were beneficial for markets – providing liquidity and aiding price discovery. Industry outsiders largely condemned speculation in foodstuffs as causing volatility, inflating prices and contributing to hunger. Essentially, without a scientific means for measuring the level of speculative “froth” in market-determined prices, the argument over speculation degenerated into a rigid reductionist stance of good versus bad.

The 2008 global financial crisis, followed by another round of high food prices in 2010/2011, prompted a reform movement on regulation of all derivatives transactions. When a corner in the London July 2010 cocoa contract by a single prominent hedge fund caused prices to soar and then collapse, it revealed that Europe had no regulatory system with regard to derivative transactions. US reform resulted in the passage of the Dodd Frank bill of 2010 while European reform was expressed in the principles of the Markets in Financial Instruments Directive II (MiFID II), along with several implementing regulations

such as European Market Infrastructure Regulation (EMIR). Following several complaints over the cocoa incident, NYSE-liffe, a self-regulatory organization (SRO), imposed speculative limits in its sugar, cocoa, coffee and feed wheat contracts. Reforms, particularly in the US, met with much resistance with regard to on-exchange futures transactions. The Dodd Frank Act’s mandate to the CFTC – imposing speculative position limits on 28 commodities – was rejected in court and remains contested. The Volcker Rule, which essentially banned proprietary trading by banks, has yet to be implemented, even though several banks have since closed their trading desks. Ironically, the Chicago Mercantile Exchange (CME) petition to the CFTC to *raise* speculative positions in agricultural contracts by as much as 80 percent met with the agency’s approval.<sup>2</sup>

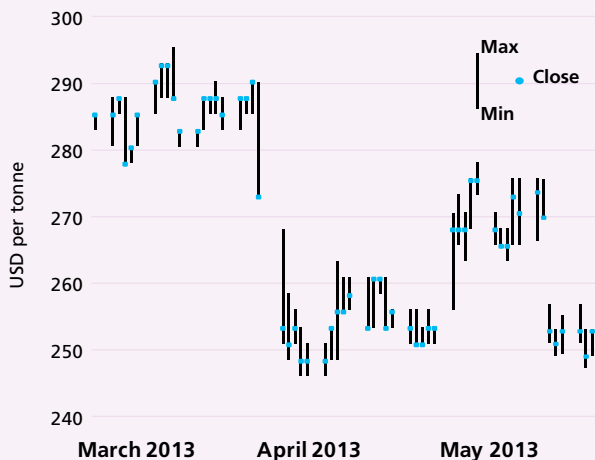
Notwithstanding the muted effects of reform on agricultural futures markets, by 2011, the performance of the commodity hedge funds declined and their positioning in agricultural futures no longer seemed to be predictive of market trends. Examining the maize market in 2012, hedge funds seemed uncharacteristically stubborn in holding on to their long holdings following a price decrease between August and December of about USD45/MT. Most recently, hedge funds enlarged their long position in maize in anticipation of a bullish USDA planting intentions report. The long bet turned disastrous when, in March, the USDA announced potential record maize production for 2013, causing a two-day sell-off of about USD40/MT. According to the following week’s CFTC Commitment of Traders Report, hedge funds liquidated about 80 000 contracts during this price rout. Even as prices rebounded, the long liquidation continued throughout April – as if funds were sounding a retreat from the sector. As of April, net long positions in all commodity futures had reportedly dropped to their lowest levels since 2006. Although these snapshots of market activity fail to capture the whole book of commodity hedge fund transactions, such as offsetting spreads or options trades, they do illustrate a change in hedge fund behavior and one that corresponds to declining performance.

Several analysts have suggested that the downturn in profitability parallels the approaching end of the “commodity supercycle”, citing a potential economic slowdown in China, which has been the most significant driver of all commodity demand since 2000. Agricultural contracts, such as grains and oilseeds, have appeared to be in a downturn since the second half of 2012. Soft commodities, such as coffee, sugar and cocoa which are less supply elastic owing to their extended growing

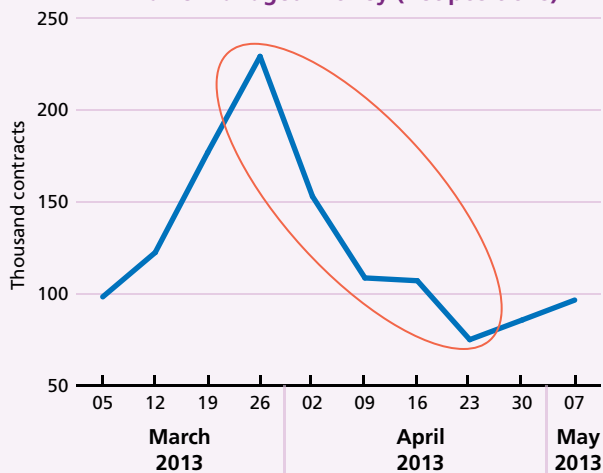
<sup>2</sup> The increase in speculative limits did not apply to spot month limits.

## Hedge funds beat retreat in face of market turmoil

Maize futures



Maize managed money (net positions)



cycles, have declined to multiyear lows. The industry itself however could unveil other explanations. Anecdotaly, the hefty fee and profit taken by the fund (commonly referred to as “2 and 20”<sup>3</sup>) have soured customers who, besides paying annual fees, now find themselves saddled with 100 percent of the losses. Indeed, this trend is visible in the commodity index fund investment data which shows a 20 percent drawdown since April 2011, mirroring the level of withdrawal from hedge funds. Also, sophisticated algorithmic programmes, which were once uncommon and highly profitable, have now saturated the system. These programmes, especially those specializing in arbitraging market anomalies, might have been instrumental in reducing the level of price volatility. High volatility – peaking at 80 during the food crisis five years ago but declining to levels around 12–20 for most of the past year and a half – was most likely a significant factor in commodity hedge fund success in years past. As with most mature businesses, commodity hedge funds are finding profitability harder to come by. Finally, the sobering truth about the nature of commodity futures may have re-emerged: they are not investments at all but risk-shifting instruments, always generating a loss for every gain.

<sup>3</sup> “2 and 20” refers to an annual management fee of 2 percent and the fund’s share of the accrued profits of 20 percent.



# MARKET POLICY DEVELOPMENTS



# GRAINS:

## MAJOR POLICY DEVELOPMENTS: MID-OCTOBER 2012 - MID MAY 2013\*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Argentina	Maize	Feb-13	Export quota	Authorized export of 3 million tonnes of maize in addition to 15 million tonnes already granted.
	Wheat	Mar-13	Export quota	Authorized 5 million tonnes of wheat export from the 2013/14 crop. In addition, approved export of 1 million tonnes of old crop wheat, bringing the total allowed to 3 million tonnes, half of what was originally agreed, due to low supplies.
	Maize	Apr-13	Export quota	Approved additional exports of 4.4 million tonnes of maize from 2012/13 crop.
	Wheat	May-13	Finance and credit facilities	Provide producers a refund of USD 30 per tonne of exported wheat.
Argentina/Brazil/United States of America	Maize	May-13	Trade alliance	Formed an alliance of maize producers, collectively called MAIZALL.
	Wheat	Mar-13	Procurement price	Increased procurement price of wheat by 4 percent to BDT 25 (USD 0.32) per kg, and set government procurement at 150 000 tonnes for the current year.
Brazil	Wheat	Feb-13	Import duty	Exempted 1 million tonnes of wheat from non-Mercosur origins from the 10 percent import duty between April and July 2013.
	Wheat	Apr-13	Import quota	Doubled non-Mercosur import quota for wheat and waived tariff. The quota will remain in place until 31 July 2013.
	Maize	Apr-13	Import tariff	Introduced 9.7 percent countervailing import tariff on imports of Argentine maize on grounds of unfair competition and dumping.
China (Mainland)	Maize	Nov-12	Government procurement from farmers	Increased government procurement price for maize in 2013 by 7 percent. Maize will be procured in northeastern maize producing region at CNY 2 100 per tonnes (USD 340).
	Wheat	Mar-13	Stock Release	Sold 1.29 million tonnes of wheat from state reserves to ease tight market conditions.
	Maize	May-13	Procurement price	Announced increase of procurement price for maize in 2013
	Maize	Dec-12	Productive assets	Approved the Plan Semillas de Alto Rendimiento for maize, which finances the access of small-scale farmers owning less than 10 ha of land, to modern, yield-increasing technologies, with the view to enhancing maize yields from 3.5 tonnes per ha to 6 tonnes per ha.
Egypt	Wheat	Nov-12	Import restrictions	Removed Ukraine from list of approved wheat suppliers during 2013, after the Ukrainian Government hinted banning exports of wheat.
	Wheat	Feb-13	Government procurement and procurement price	Increased procurement price for wheat in 2013/14 marketing year by 5 percent to EGP 2 666.5 per tonnes (USD 400 per tonnes). Government has allocated EGP 11 billion (USD 1.6 billion) to boost domestic wheat procurement to 4.5 million tonnes.
	Wheat	Mar-13	Government market intervention	Announced plans to build 150 silos ahead of the 2014 wheat harvest.
	Wheat	Apr-13	Government procurement	Allocated EGP 11 billion (USD 1.6 billion) for the purchase of 4.5 million tonnes of wheat from farmers to replenish stocks.
European Union	Barley and Wheat	Nov-12	Import tariff	Extended suspension of import duties on wheat of low and medium quality and feed barley from the end of December 2012 to the end of the 2012/13 marketing year (July/June).
	Wheat	Jan-13	Futures market development	Announced the first Europe-based durum futures market would be launched on 21 January 2013.
	Grains	May-13	Seed regulation	Announced by Borsa Italiana, the new AGREX futures will be traded on the Italian Derivatives Exchange Market, with March, May, September and December as delivery months.
	Wheat and barley	May-13	Import duty	Adoption by the European Commission of a package of measures to strengthen the enforcement of health and safety standards for the whole agrifood chain. It provides more simplified and flexible rules for the marketing of seeds and other plant reproductive material.
				Extension of zero import duties for feed wheat and barley quotas beyond the end of the current season (June 30).

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION	
India	Wheat	Nov-12	Releasing stocks	Approved release of 500 000 tonnes from government stocks through retail outlets, to ease high domestic prices.	
	Wheat	Dec-12	Export limit	Approved the 2013 wheat export limit at 2.5 million tonnes, 500 000 tonnes higher than in 2012.	
	Wheat	Dec-12	Minimum support price	Increased minimum support price for wheat in 2013 by 5 percent, to INR 1 350 per 100 kg (USD 248 per tonne).	
	Grains	Feb-13	Budgetary allocation, food subsidies	As part of its 2013-2014 budgetary allocations, set aside Rupees 100 billion (USD 1.8 billion) of extra outlays to fund the gradual roll-out of the National Food Security Act.	
	Wheat	Feb-13	Budgetary allocations, production support, crop diversification, agricultural credit, storage	Further Rupees 5.0 billion (USD 92 million) were allocated to encourage crop diversification in original Green Revolution states. Targeted agricultural credit disbursements also raised, the subsidized credit scheme renewed and expanded, with funds assigned to expand public and private storage capacity.	
	Wheat	Mar-13	Export measures	Allowed private traders to export 5 million tonnes of wheat from the 2012 harvest from government stocks between February and May 2013. Set the price at INR 14 800 per tonne (USD 315 per tonnes) plus taxes.	
	Grains	Mar-13	Food subsidies	A revised version of the National Food Security Act approved by the Indian Cabinet. The revised bill envisages granting legal entitlement of 5 kilograms of grains per person per month to the general population, with more vulnerable families receiving a monthly ration of 35 kilos of foodgrains per household. For the first three years of implementation of the scheme, the rations would be made available at subsidized prices of Rupees 3 (USD 0.05) per kilo of rice, Rupees 2 in the case of a kilo of wheat (USD 0.04) and Rupees 1 (USD 0.02) per kilo of millet. The scheme is expected to cover up to 75 percent of the rural population and 50 percent of urban dwellers, when enacted.	
	Wheat	May-13	Targeted food subsidies	Extended the allocation of subsidized grains during 2013-14 to families above the poverty line, under the Targeted Public Distribution System (TPDS) – 4.2 million tonnes of wheat will be distributed to the targeted families.	
	Indonesia	Wheat flour	Dec-12	Import Tariff	Raised import tariff for wheat flour to 20 percent for 200 days .
	Iran	Wheat	May-13	Export ban	Introduction of export ban on wheat in order to curb cross-border trading of wheat from western borders.
Japan	Maize and sorghum	Feb-13	Increase animal feed reserves	Increased animal feed grain reserves, including maize sorghum, by 44 percent year-on-year , to 1.15 million tonnes, for the fiscal year beginning 1 April 2013. This includes government reserves of 600 000 tonnes and 550 000 tonnes held by feed suppliers.	
	Wheat	Feb-13	Price control	Increased the domestic sale price by 10 percent, for imported wheat as of April 2013 to an average ¥ 54 900 per tonne (USD 600).	
Morocco	Wheat	Dec-12	Import Duty	Extended the zero duty on imports of soft wheat until the end of April 2013, due to poor grain harvest in the country and desire of the local authorities to increase their stocks of the product.	
Pakistan	Wheat	Mar-13	Government procurement	Purchase of 9 million tonnes of wheat from farmers by the Pakistan Agricultural Storage and Services Corporation (PASSCO) and provinces, in order to meet 2013 procurement target.	
Peru	Maize	Apr-13	Farmers Income Tax	Reduce maize farmers' income tax by 1.5 percent.	
Philippines	Maize	Feb-13	Finance and credit facilities	Provide insurance coverage for maize farmers, through the Provincial Government of Northern Samar and the Philippine Crop Insurance Corporation. Under the programme, 90 percent of the insurance premium will be covered by the provincial government and 10 percent by the farmer.	

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Russian Federation	Grains	Nov-12	Government market intervention	Expanded sales from grain intervention stocks to all regions, not just Siberia, the Urals and the Far East regions, as of 6 November 2012, and increased the weekly sales limit by 20 000 tonnes, to 130 000 tonnes.
	Wheat	Nov-12	Import duty	Remove 5 percent import tax – from early April until July 2013.
South Africa	Wheat	Mar-13	Government procurement	Announced plans to purchase wheat on the domestic market during August–October 2013 to replenish state reserves.
	Wheat	Apr-13	Price Support	Increase of the dollar-based reference price for locally produced wheat by 37 percent. from USD 215 per tonne to USD 294 per tonne.
Syria	Barley and Wheat	Jan-13	Import tariff	Announced removal of import tariffs on several basic commodities, including wheat and barley, to ease soaring domestic prices and food shortages.
	Wheat	Nov-12	Export ban	Announced export ban on wheat as of 15 November 2012, but retracted in late November 2012.
Ukraine	Wheat	Nov-12	Export quota	Increased wheat export quotas by 300 000 tonnes, to 5.8 million tonnes.
	Wheat	Mar-13	Export quota	Increased wheat export quotas by 500 000 tonnes, to 7 million tonnes in 2012/2013 (July/June).
Zambia	Maize	Mar-13	Export restriction	Lifted export restrictions on maize

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

## RICE: MAJOR POLICY DEVELOPMENTS: NOVEMBER 2012 - MID MAY 2013\*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Australia	Rice	Dec-12	Export and marketing arrangements	Single-desk arrangement for rice renewed by the Government of New South Wales until 30 June 2017, maintaining the New South Wales Rice Marketing Board's sole and exclusive right to export produce grown in the state.
Bangladesh	Rice	Nov-12	Government procurement, purchasing prices	Set a procurement target of 250 000 tonnes of parboiled rice and 50 000 tonnes of white rice from the Aman harvest. Volumes are to be purchased at Taka 26 per kg (USD 321 per tonne) and Taka 25 per kg (USD 309 per tonne), respectively, between 9 December 2012 and 28 February 2013.
	Rice	Dec-12	Import agreement	Agreed to renew the memorandum of understanding with Thailand until 2016, envisaging the supply of up to 1.0 million tonnes of Thai rice to Bangladesh, on a need basis.
	Rice	Feb-13	Export ban	Included non-aromatic rice in the list of items prohibited for export under the country's export policy for 2012–2015.
	Rice	Mar-13	Government procurement, purchasing prices	Announced that government will buy 900 000 tonnes of rice and 150 000 tonnes of paddy from the 2012–2013 Boro harvest, between May and September 2013. Volumes are to be purchased at Taka 29 per kg (USD 365 per tonne) of rice and Taka 18.5 per kg of paddy (USD 233 per tonne).
	Rice	Mar-13	Production support	Allocated Taka 430 million (USD 5.4 million) to support Aus crop cultivation during the 2013 season. The support package will provide an estimated 325 500 smallholders with free fertilizer and seed of high-yielding and Nerica rice varieties. The initiative is targeted to raise production from this small crop by 110 000 tonnes, thus helping alleviate concerns over depleting water tables from the extensive cultivation of the irrigated Boro crop.
	Rice	Mar-13	Food subsidies	Extended the subsidized sales programme for rice and maize for a second round. Locally produced rice will continue to be sold to vulnerable groups at a subsidized price of FCFA 200 per kg (USD 0.4 per kg).
Benin	Rice	Mar-13	Food subsidies	Announced plans to procure up to 60 000 tonnes from the 2013 harvest.
Bolivia	Rice	Dec-12	Government procurement	Announced that the state enterprise EMAPA would procure supplies from the 2013 harvest at USD 55 for 200 kg fanega (USD 275 per tonne), up 20 percent from 2012.
	Rice	Apr-13	Government procurement, purchasing prices	Announced that public stock releases would be stopped so as to avert downward pressure on local quotations during the approaching crop harvest period.
Brazil	Rice	Jan-13	Stock release	Exonerated products composing the basic food basket, including rice, from Social Integration Program (PIS), Contribution to Social Security Financing (COFINS) and Industrialized Products Tax (IPI) taxes. The move will make the exemption permanent in the case of rice, which had been intermittently exempted from the federal levies in recent years. The initiative is intended to assist the population in coping with inflationary pressure.
	Rice	Mar-13	Tax policy	Extended the exemption of value added taxes and other administrative charges levied on rice and 11 other imported food commodities until 30 of June 2013.
Burundi	Rice	Dec-12	Consumer prices, value added taxes	Imported food commodities until 30 of June 2013.
China (Mainland)	Rice	Feb-13	Support prices	Raised government paddy procurement prices for the 2013 season by 10 percent to Yuan 132 per 50 kg bag (USD 420 per tonne) of early indica rice; by 8 percent to Yuan 135 per 50 kg bag (USD 430 per tonne) of late/intermediate indica rice; and by 7 percent to Yuan 150 per 50 kg bag of japonica rice (USD 478 per tonne).
Colombia	Rice	Nov-12	Import quota	Approved imports of 250 000 tonnes of rice, in a bid to ease local supply tightness and keep prices under check. The volume includes 160 000 tonnes originating in the United States, as part of the 2012 and 2013 tariff rate quota set out under the US-Colombia Trade Promotion Agreement, as well as an additional 90 000 tonnes of rice from Andean Community countries for import between March and May 2013.
	Rice	Mar-13	Support prices, warehouse receipts program	Agreed to institute reference floor/ceiling prices for paddy. Producers are to receive a minimum of Pesos 108 000–122 000 per 125 kg (USD 475–537 per tonne) depending on the various production areas, and no more than Pesos 118 000–132 000 (USD 519–581 per tonne). The price band will be implemented within the framework of the storage incentive programme, which is to operate between 1 August and 30 November 2013, and will be accompanied by efforts to increase border protection and support the industry gain competitiveness.



COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Costa Rica	Rice	Nov-12	Safeguard measures	Rejected a local industry request to impose safeguard measures against selected classes of milled rice imports carried out outside of CAFTA and other Central American preferential trade commitments.
Côte d'Ivoire	Rice	Jan-13	Foreign agricultural investment	Signed a framework agreement with Louis Dreyfus, a multinational commodity trading company, that will seek to boost rice production by 300 000 tonnes. The plan envisages cultivating up to 200 000 ha in the northern areas of Poro, Tchologo and Bagoué.
Ecuador	Rice	Dec-12	Production support	Announced the introduction of a support programme for small-scale producers of maize and rice. The initiative will grant an estimated 3 000 small rice farmers (with holdings of 10 ha or less) a subsidy of USD 123 per hectare for the acquisition of high-yielding seed varieties, fertilizers and other agrochemicals, starting with the 2013 winter crop.
	Rice	Feb-13	Reference prices	Approved the institution of reference wholesale prices for a set of 46 products, including selected qualities of rice. These are to assist in monitoring local quotations and thwarting food price speculation.
	Rice	Apr-13	Production support, support prices	Following a meeting of the Rice Consultative Council, announced a 4 percent increase in paddy producer prices to USD 34.5 per 200 pounds (USD 380 per tonne) for the 2013 winter harvest. Additional support measures to the sector will include greater border protection, capacity building and higher subsidies on seeds, which will be raised from USD 113 to USD 200 per hectare.
	Rice	Dec-12	Export licenses	Awarded export licenses for 188 000 tonnes of rice through a tender held on 3 December 2013. Volumes were to be shipped by 31 January 2013.
Egypt	Rice	Feb-13	Export licenses	Awarded export licenses for 173 000 tonnes through a tender held on 14 February 2013. Volumes were to be delivered by 15 April 2013.
	Rice	Mar-13	Cultivation limits	Declared that sufficient irrigation water would be provided to cultivate 1.76 million feddans (739 000 ha) of rice during the 2013 season.
European Union	Rice	Feb-13	Protected geographical indication	Entered Thai "Khao Hom Mali Thung Kula Rong-Hai" rice into the register of protected designations of origin and protected geographical indications.
Guinea	Rice	Mar-13	Import agreement	Signed a Memorandum of Understanding with Viet Nam for the annual provision of 300 000 tonnes of rice until 2015.
Guyana/ Venezuela	Rice	May-13	Trade agreement	Agreed to renew the PetroCaribe rice trade agreement for an additional year. Under the accord, Guyana is to provide 140 000 tonnes of paddy and 70 000 tonnes of rice to Venezuela in 2013, payment for which will be deducted from Guyana's oil arrears to Venezuela.
Haiti	Rice	Dec-12	Import agreement, production support	Reached a government-to-government agreement with Viet Nam for the provision of rice on preferential terms. Additionally, Vietnam is to provide technical assistance to Haiti in its efforts to boost rice production and storage capacity.
India	Rice	Nov-12	Export restrictions	Decided to continue permitting the unrestricted export of non-basmati rice and wheat, in light of the more than adequate domestic supply situation.
	Rice	Nov-12	Food subsidies	Approved an additional allocation of 500 000 tonnes of rice and an equal amount of wheat for sale by state and union territory governments and national cooperatives, under the Open Market Sales Scheme.
	Rice	Nov-12	Production support	Extended the National Food Security Mission-Rice coverage to an additional 24 states.
	Rice	Nov-12	Trade promotion	Included rice, along with 21 other commodities, among the list of items permitted to be traded along the Indo-Myanmar border.
	Rice	Feb-13	Budgetary allocations, production support, crop diversification, agricultural credit, storage	Renewed the "Bringing the Green Revolution to Eastern India" (BGREI) scheme through a Rupees 10.0 billion (USD 183 million) allotment, as part of its 2013-2014 budgetary allocations. Allocated a further Rupees 5.0 billion (USD 92 million) to encourage crop diversification in original Green Revolution states. Targeted agricultural credit disbursements were also raised, and the subsidized credit scheme renewed and expanded, with funds assigned to enlarge public and private storage capacity.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Indonesia	Rice	Apr-13	Food subsidies	Announced that effective January 2014, rations under the public subsidized distribution scheme (Raskin) will be raised by 5 kg to 20 kg per household and will continue to be sold at Rupiah 1 600 (USD 0.2) per kg. However, the number of eligible families was revised down from 17.5 million in 2012 to 15.5 million in 2013.
	Rice	Apr-13	Import agreement	Signed a Memorandum of Understanding with Myanmar for the annual provision of up to 500 000 tonnes of rice, on a needs basis.
Iraq	Rice	Mar-13	Import requirements	Agreed to modify tender specifications for rice originating in the United States. Certification of non-GMO presence by private laboratories will now be permitted. Bulk shipments will also be allowed, provided certain criteria are met, and the US definition and test for chalky kernels accepted.
Kenya	Rice	Nov-12	Production support	Waived Shillings 442 million (USD 5.0 million) worth of debt accrued by paddy farmers in the Mwea irrigation scheme.
Liberia	Rice	Jan-13	Import tariff	Renewed import tariff exemptions on semi/wholly milled rice and broken rice, in an effort to keep local prices stable.
Myanmar	Rice	Nov-12	Government procurement	In collaboration with the Myanmar Rice Federation, launched a procurement round for 25 percent broken rice through a tendering process. Purchases are geared at refurbishing government stockpiles and supporting farmers during harvest time.
	Rice	Dec-12	Government procurement	Announced that the Myanmar Rice Federation would procure 100 000 tonnes of rice between December and January to replenish government stockpiles and support flood-affected farmers.
	Rice	Jan-13	Production support, credit	Announced that seasonal loan limits for summer paddy crops would be raised from Kyat 80 000 to 100 000 per acre (USD 284 per hectare), with the repayment period for loans for wet season crops further extended to March 2013. The measure is geared at sustaining farmers that have incurred losses due to floods.
	Rice	Apr-13	Government procurement, support prices	Announced plans to procure 100 000 tonnes of rice during the 2013–2014 fiscal year to refurbish public stocks and support local prices. Purchases are to be undertaken through tenders.
	Rice	Nov-12	Production support	Announced a programme to bolster off-season paddy production to supplement broader flood recovery efforts, which foresee the release of grain supplies from public reserves and distribution of subsidized inputs to affected producers. The initiative aims to raise dry-season output by 1.3 million tonnes, offering participating farmers improved seed free of costs, as well as a 50 percent subsidy on fertilizers.
Nigeria	Rice	May-13	Import restrictions	Announced that it would step-up border protection in order to curb rice smuggling. All rice brought into Nigeria via land borders will be considered contraband, with rice imports only permitted through seaports after applicable duties are paid.
Panama	Rice	Apr-13	Credit, marketing assistance	Announced that USD 6 million worth of credit and marketing assistance would be provided to the industry.
Peru	Rice	Apr-13	Production support, export promotion, promotion of local products	Agreed with industry representatives to promote exports to fellow Andean countries, greater domestic consumption of local rice, while continuing to encourage producers in northern coastal regions to replace rice with maize. The measures are geared at arresting further declines in local producer prices.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Philippines	Rice	Feb-13	Import quota	Signed an agreement with industry representatives in Luzon to combat rice smuggling. The accord envisages rice imports to be carried out primarily by the National Food Authority, with involvement of the private sector in the distribution of imported rice permitted through the agency's "Institutionalized Farmers as Distributors Program". Procedures to identify, seize, store and dispose of smuggled supplies were also covered under the agreement.
	Rice	Mar-13	Import quota	Announced plans to import 187 000 tonnes of rice by 30 June 2013, as part of its Minimum Access Volume (MAV) commitments under the WTO. Purchases are to be undertaken solely by the National Food Authority and will serve to reconstitute reserves ahead of lean months.
	Rice	Mar-13	Import quota	Announced that applications to import 163 000 tonnes of rice under Minimum Access Volume (MAV) country-specific quotas would be opened to the private sector, starting 10 April 2013. Imported volumes are to arrive no later than 31 December 2013.
	Rice	Apr-13	Import agreement	Signed a Memorandum of Understanding with Cambodia, enabling the National Food Authority to import rice through the Cambodian state-owned enterprise Green Trade.
Republic of Korea	Rice	Apr-13	Production support	Allocated Pesos 500 million (USD 12 million) to encourage greater hybrid rice cultivation in 2013 and 2014. The initiative aims to raise hybrid rice coverage to 284 000 ha in 2013 and to 390 000 ha the following year, up from an estimated 165 000 ha in 2012.
	Rice	Jan-13	Import quota	Announced its 2013 Minimum Market Access (MMA) purchase plan ahead of time, in order to anticipate deliveries and keep local quotations under check. Under its MMA commitments, the country is to buy 388 353 tonnes in 2013.
	Rice	Jan-13	Stock release	Announced that the government would release 211 000 tonnes of rice from reserves to local markets to ensure domestic prices remain stable ahead of the Lunar New Year.
Russia	Rice	Dec-12	Import restrictions, phytosanitary measures	Called for urgent consultations with Indian officials, after khapra beetle was found in a small consignment of rice from India.
	Rice	Feb-13	Import restrictions, phytosanitary measures	Announced that temporary import restrictions on Indian rice would be imposed due to detection of khapra beetle in a consignment of rice from India in December 2012. Restrictions became effective 19 February 2013.
Sri Lanka	Rice	Nov-12	Production support, procurement, support prices, insurance, credit	Announced that an estimated 100 000 drought-stricken farmers would be provided with credit relief and seeds free of charge, as part of 2013 budgetary allocations, and that a crop insurance scheme would be introduced alongside the existing fertilizer subsidy programme. In order to support official purchasing activities, the Paddy Marketing Board's storage capacity is to be bolstered and guaranteed prices for paddy raised by 14 percent to Rupees 32 per kg (USD 253 per tonne) in the case of Nadu paddy and by 17 percent to Rupees 35 per kg (USD 277 per tonne) for Samba paddy. Officials also announced the introduction of a guaranteed price for paddy grown using organic fertilizers of Rupees 40 per kg (USD 316 per tonne).
Syria	Rice	Jan-13	Import tariff	Announced plans to eliminate import duties on rice and 16 other staple products, in addition to permitting private entities to purchase fuel from abroad.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Thailand	Rice	Nov-12	Stock release	Approved the release of 600 000 tonnes of fragrant rice and 500 000 tonnes of white rice from government stocks for export through tenders.
	Rice	Nov-12	Trade promotion	Ministerial proposals to enhance rice trade cooperation with four other ASEAN nations (Cambodia, Lao PDR, Myanmar and Vietnam) approved by Thai Cabinet. The initiative is geared at preventing international rice prices from falling below profitable levels and envisages the establishment of rice trade zones along bordering areas.
	Rice	Dec-12	Stock release	Scaled back earlier announced plans to release 600 000 tonnes of fragrant rice from government stocks through tenders, on concerns over tenders' terms and conditions.
	Rice	Mar-13	Government procurement, support prices	Approved the extension of the Paddy Pledging Program for 2012-2013 off-season crops. Farmers will continue receiving between Baht 13 800-20 000 (USD 468-678) per tonne of paddy pledged, but will not be permitted to mortgage 18 types of low-quality, short-duration varieties. Mortgaged amounts will be additionally subject to a value ceiling of Baht 500 000 (USD 16 900) per farm household. Up to 7 million tonnes are officially anticipated to be mortgaged under the off-season run of the programme, between April and September 2013, for an estimated cost of Baht 105 billion (USD 3.6 billion).
	Rice	Mar-13	Stock release	Approved the release of 20 000 tonnes of Hom Mali rice and 10 000 tonnes of 5 percent broken rice for sale to the domestic market. A further 40 000 tonnes of paddy from the 2003-2004 crop are to be released to the feed sector, with 20 000 tonnes of fragrant rice exports to China (Mainland) additionally approved.
	Rice	Mar-13	Stock release	Announced a target of redeeming Baht 180 billion (USD 6.1 billion) worth of revenue from the sale of public stocks by the end of September 2013 in order to finance the paddy pledging programme.
	Rice	Apr-13	Stock release	Announced a plan to release 500 000 tonnes of white rice from government stocks through tender.
	Rice	Apr-13	Stock release	Delayed plans to release 500 000 tonnes of white rice from Government stocks through tender, given declines in domestic prices and a local currency appreciation.
	Rice	May-13	Stock release	Announced plans to expedite the release of rice from Government stocks to domestic and international markets.
	Rice	Nov-12	Cooperation agreement, import agreement	Signed a memorandum of understanding to enhance cooperation and expand trade in rice between the two nations. A separate agreement between private parties from the two countries secured the provision of 260 000 tonnes of Thai rice to China (Mainland).
Turkey	Rice	Apr-13	Import quota, import tariffs	Allocated a 100 000 tonne, free of duty, import quota to the Turkish Grain Board (TMO). The rice is to be brought by 1 September 2015.
Venezuela	Rice	Dec-12	Price controls	Raised ceilings on consumer prices by 28 percent to Bolivares 7.2 (USD 1.7) per kg of Type I rice, to Bolivares 6.69 (USD 1.6) per kg of Type II rice and to Bolivares 6.34 per kg of Type III rice (USD 1.5).
	Rice	May-13	Production support	Approved a one-time subsidy for the 2013 winter crop cycle. Producers are to receive Bolivares 1.1 per kg (USD 175 per tonne) of Type A or Type B paddy produced, between 1 January and 30 June 2013, on top of support prices of Bolivares 2.50-2.58 per kg (USD 397-410 per tonne).
	Rice	Dec-12	Import quota	Exempted 70 000 tonnes of rice originating from the Lao PDR from import duties, valid through 2013.
Vietnam	Rice	Dec-12	Minimum export prices	Introduced a Minimum Export Price (MEP) of USD 370 per tonne for 35 percent broken rice, effective 27 December 2012.
	Rice	Jan-13	Government procurement	Announced that member companies of the Vietnam Food Association would purchase 1 million tonnes of winter-spring paddy from farmers, starting 20 February 2013. Participating companies are to pay no less than Dong 5 000 per kg (USD 239 per tonne) of paddy bought and will receive credit at subsidized rates for the purpose.
	Rice	Feb-13	Minimum export prices	Set minimum export prices for 5 percent broken rice at USD 410 per tonne and at USD 365 per tonne in the case of 35 percent broken rice, effective 6 February 2013.
	Rice	Mar-13	Minimum export prices	Suspended minimum export prices for 5 percent broken rice and raised them for 35 percent broken by USD 5 to USD 370 per tonne.
	Rice	Apr-13	Minimum export prices	Lowered floor prices for 35 percent broken rice by USD 5 to USD 365 per tonne.

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

# OILSEEDS: MAJOR POLICY DEVELOPMENTS: APRIL 2012 - MARCH 2013\*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION	
Algeria	Soymeal	Oct-12	Import policy	Temporarily suspended import duties on soymeal (and other feedstuff) to contain costs for domestic livestock industry and thus check rises in local retail prices.	
	Biodiesel	Apr-12	Renewable energy policy	Postponed the increase in mandatory biodiesel blending (from B7 to B10) to 2013.	
	Arable land	May-12	Land taxation	Carried out revaluation of agricultural land with a view to raise real estate taxation.	
	Soybean	Aug-12	Import policy	Temporarily allowed soybean imports to address problems of excess capacity in domestic crushing.	
Argentina	Biodiesel	Aug-12	Trade policy	Filed a complaint at the WTO against the EU over Spain's biofuel import policy (later put on hold as Spain amended its import regulations, restoring access to the local biofuels market).	
	Soybean	Oct-12	Market control	Penalized leading grain firms during investigations into alleged export tax evasion.	
	Biofuel	Oct-12	Export policy	Adjusted level of export tax and of domestic retail price for soyoil-based diesel with a view to stimulate domestic biodiesel consumption, while at the same time guaranteeing adequate margins for export-oriented processors.	
	Vegetable oils	Jan-13	Import policy	Temporarily raised import tariffs above MERCOSUR's common external tariff.	
	Biofuel	May-12	Renewable energy policy	Granted federal tax exemptions plus financial assistance from state governments to biofuel companies.	
	Palm oil	Aug-12	Import policy/ market regulation	Started regular imports by state agency to guarantee domestic supplies and stabilize prices.	
Bangladesh	Soybean	May-12	Sector development assistance	Supported diversification of soybean marketing to tap into new export and domestic markets.	
	Rapeseed	Oct-12	Sector development assistance	Supported R&D projects to secure continued growth in the sector.	
	Brassica carinata oil	Nov-12	Renewable energy policy	Backed research on industrial applications of carinata oil, including as aviation biofuel.	
	Grains and oilseeds	Feb-13	Sector development assistance	Launched, together with concerned private sector bodies, voluntary standards to control major plant pests and diseases in grain and oilseed cultivation.	
	Rapeseed, soybean, sunflower seed	Feb-13	Sector development assistance	Raised coverage and areas included under the crop insurance programme of Manitoba province; added soybean and sunflower seed crops.	
	Biofuel	Feb-13	Renewable energy policy	Announced phasing out of biofuel production subsidies by 2017 – drawing attention to the biodiesel industry's inability to meet the national blending target – but committed to continue supporting the development of second generation biofuels.	
	Rapeseed and other agricultural commodities	Mar-13	Sector development assistance	Launched three support programmes focusing on the adaptation to emerging market opportunities, commercialization of new products and technologies, and improved food safety and traceability.	
	Canada				

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
China	Edible oils	Aug-12	Market control	Asked top edible oil producers to regularly report their raw material, wholesale and retail prices, thus closely monitoring price trends and inflation risks.
	Rapeseed soybean	2012 crop year	State reserves	Raised state procurement price for rapeseed and soybean to maintain incentives for domestic production.
	Soybean	Oct-12	GMO policies and regulations	Delayed import approval for second generation GM soy variety meant for direct human consumption.
	Vegetable oils	Dec-12	Import/export policy	Lowered administrative custom fees for exports and imports to stimulate trade growth.
	Rapeseed	Dec-12	Market regulation	Encouraged futures trading in rapeseed and rapeseed meal (in addition to rapeseed oil).
	Soybean, soyoil	Apr to Nov 2012	State reserves	Released state reserves with a view to ease supply tightness, thus checking the rise in domestic oil/meal prices.
	Vegetable oils	Jan-13	Quality standards	Introduced stricter quality controls on edible oil imports to guarantee product safety.
	Rapeseed	Feb-13	Import policy	Relaxed 3-year old ban on rapeseed imports from Australia.
	Grains	Feb-13	Production support	Renewed commitment to reach self-sufficiency in grains as a means to tackle rural poverty and food insecurity not extended to oilseeds.
	Rapeseed	Feb-13	Import restrictions	Considered removal of remaining import restrictions for rapeseed (introduced in 2009 on phytosanitary grounds).
	Soybean, rapeseed oil	Feb-13	State reserves	Released state reserves to ease domestic supply tightness and stabilize domestic prices.
	Coconut products	Dec-12	South-South cooperation	China agreed to help develop the coconut industry in Sri Lanka, to enhance exportation of coconut-based products to China.
	Colombia	Soybean, soy meal, soyoil	Apr-12	Bilateral trade
Cuba (Republic of)	Biodiesel	Feb-13	Renewable energy policy	Promoted the establishment of a national biodiesel industry based on locally produced jatropha oil.
Denmark	Oils and fats	Nov-12	Health policy	Repealed one-year old tax on fat consumption as it did not produce the changes sought.
Eurasian Economic Community (Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan)	Edible oils	Apr-12	Import policy	Extended import duty applied to tropical vegetable oils.
European Union	Butter, olive oil	Mar-12	Storage aid	Agreed to provide temporary support to private storage of butter and olive oil to address short-term marketing problems.
	GM crops	Oct-12	GMO policies and regulations	Declared illegitimate the national bans on GM cultivation introduced by single member States on top of the procedures and regulations established by the European Food Safety Authority.
	First-generation biofuels	Oct-12	Renewable energy policy	Proposed to limit contribution of first-generation biofuels to the EU transport fuel consumption target at 5 percent by 2020, in an effort to minimize adverse effects on climate and global food production.
	Oilseeds	Oct-12	Market regulation	Considered means to control excessive speculation in commodities futures trading, in particular in food-related commodities.
	Olive oil	Nov-12	Market regulation	Considered changes to the EU's olive oil marketing regime, focusing on increased quality controls and a possible increase in the trigger price for private storage aid.
Fiji	Biodiesel	Jan-13	Import policy	Introduced mandatory registration of biodiesel imports originating from Argentina and Indonesia in the context of anti-dumping/anti-subsidy investigations.
	Coconut	Feb-13	Sector development assistance	Supported coconut industry rehabilitation through encouragement of planting/replanting activities using improved seedlings.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
India	Oilseeds	Jun and Nov 2012	Farm support prices	Significantly raised minimum support prices for summer (kharif) as well as winter (rabi) oilcrops in an effort to stimulate domestic production and slow import growth.
	Refined palm oil	Aug-12	Import policy	Changed method for calculating the base import price for refined palm olein, now to be based on its actual value, thereby doubling the level of duties collected. Move aims to protect domestic refiners from low priced imports.
	Oilmeals	Aug-12	Import policy	Suspended duties on oilmeal imports on concerns over renewed food price inflation. Also considered a temporary ban on oilmeal exports.
	Oilseeds	Oct-12	Sector development assistance	Measures to raise national oilseed production and enhance oil palm cultivation included in 12th Five-Year-Plan (2012-2017).
	Olive oil	Oct-12	Production support	Supported efforts to launch domestic production and consumption of olive oil.
	Edible oils, oilseeds	Oct-12	Consumer protection	Extended, until end September 2013, nationwide distribution of imported edible oils at subsidized price and permission to impose limits for private stockholding.
	Edible oils	Oct-12 and Jan-13	Export policy	Liberalized exportation of edible oils in branded consumer packs, though setting a fixed minimum export price.
	Vegetable oil	Oct-12 to Mar-13	Import policy	Continuously adjusted reference prices used for calculating import levies, so as to pre-empt under-invoicing by traders.
	Crude vegetable oils	Jan-13	Import policy	Reinstated import duties on crude vegetable oils and changed method for calculating the base import price for crude palm oil and soyoil, now to be based on their actual value, thereby doubling the level of duties collected. Move aims to protect farmers and encourage domestic production.
	Copra	Feb-13	Marketing support	Marketing assistance provided to small coconut producers in Tamil Nadu state.
	Biofuel	Apr-12	Renewable energy policy	Mandated 2 percent share of locally produced (palm oil-based) biodiesel in total domestic fuel consumption.
	Palm Oil	Apr-12 to Mar-13	Export policy	Left in place sliding export tax regime used to prevent hikes in consumer prices (via regulation of domestic supplies) and to stimulate growth in downstream palm oil processing.
	Soybean	Aug to Dec 2012	Import policy	Temporarily suspended import tax on soybeans to bring down domestic prices for soy food products.
Indonesia	Oil palm	Aug-12	Industry support	Barred palm oil plantations from using state subsidized petrol.
	Soybean	Oct-12	Market regulation / state reserves	Considered to establish, for soybeans, state reserves together with fixed procurement and sale prices, aiming at both consumer protection and stimulation of domestic production.
	Oil palm	Oct-12	Environmental	Revoked logging permit of one oil palm company for infringing environmental regulations.
	Biodiesel	Jan-13	Renewable energy policy	Raised government-set price for palm oil-based biodiesel to further stimulate domestic production.
	Soybean	Feb-13	Market regulation / state reserves	Reiterated plan to set up public reserves of soybeans with a view to regulate domestic supplies and stabilize consumer prices; also considered requiring traders to match soybean imports with purchases from local sources, so as to stimulate domestic production.
	Coconut	Feb-13	Sector development assistance	Launched new public-private partnership to strengthen smallholder coconut farming, so as to enhance the sector's sustainability and improve livelihood of small coconut farmers.
Iran, Islamic Republic of	Staple foods	Feb-13	Consumer support	Engaged in discussions about a plan to provide subsidized staple foods (including rice, vegetable oil and meat) to the nation's most vulnerable groups.
	Biodiesel	Feb-13	Renewable energy policy	Promoted the establishment of a national biodiesel industry, based on locally produced jatropha oil and food processing wastes.
Korea, Republic of	Soybean, soy meal, soyoil	Apr-12	Bilateral trade	Signed trade agreement with the United States, allowing improved access for US soybean products to the Korean market.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Malaysia	Palm Oil	Aug-12	Market regulation / export policy	Raised duty free export quota for crude palm oil with a view to check build-up in domestic stocks and support farmgate prices.
	Palm Oil	Oct-12	Market regulation / export policy	Discontinued duty free export quotas for crude palm oil with a view to secure adequate supplies for refiners.
	Palm oil	Oct-12	Market regulation / export policy	Lowered export tax on crude palm oil to check build-up in domestic stocks, which push down farmgate prices, and introduced sliding tax regime where level of taxation follows the prevailing market price.
	Palm Oil	Oct-12	Production support	Launched new oil palm replanting scheme with the immediate objective of halting the rise in domestic palm oil stocks and the longer term goal of raising the average level of productivity.
	Palm Oil	Oct-12	Environmental policy	Enforced environmental laws regarding pollution control in palm oil mills.
	Palm Oil	Nov-12	Production policy	Launched new oil palm replanting scheme with the immediate objective of halting the rise in domestic palm oil stocks and the longer term goal of raising the average level of productivity.
	Palm oil	Nov-12 to Mar-13	Export policy	Periodically adjusted export taxes in line with the newly introduced sliding tax regime.
	Biofuel	Jan-13	Renewable energy policy	Moved to nationwide implementation of 5 percent mandatory fuel blending rate (palm oil-based biodiesel) and considered introducing 10 percent rate by end 2013.
	Biodiesel	Feb-13	Renewable energy policy	Announced plans to shift to 10 percent mandatory blending by mid-2014, with aim to pursue environmental objectives and increase domestic palm oil consumption, thus contributing to price stabilization.
	Palm oil	Feb-13	Environmental policy	Supported the launch of two national schemes for the certification of sustainably produced palm oil.
Mexico	Oils and fats	Oct-12	Market regulation	Lowered tariffs on crude and refined vegetable/animal oils and fats in an effort to control domestic food price inflation.
New Zealand	Biofuel	Oct-12	Renewable energy policy	Allowed government programme in support of biodiesel production, including investment aids and subsidized sales of domestically produced biodiesel, to expire without renewal.
Pakistan	Sunflower	Nov-12	Support price	Raised purchase price of sunflower seed with a view to stimulate domestic production growth.
Paraguay	Soybean	Nov-12	Export policy	Considered taxing exports of soybeans with a view to encourage shipment of value-added soyoil and soymeal.
Peru	Fish meal and oil	Dec-12	Resource management	Cut the catch quota cut for the key fishing months of December-January 2012/13 to allow repopulation, thus reducing export availabilities.
Philippines	Coconut	Feb-13	Sector development assistance	Launched new public-private partnership to strengthen smallholder coconut farming, aiming at the development of a sustainable certified coconut oil supply chain.
Serbia	Soybean, sunflower	Oct-12	Emergency relief	Introduced temporary export limitations for soybean and sunflower and provided financial assistance to farmers after drought decimated domestic crops.
Russian Federation	Soybean	Apr to Aug 2012	Export policy	Temporarily lowered export duty on soybeans to facilitate exportation following a bumper crop.
Saudi Arabia	Biodiesel	Feb-13	Renewable energy policy	Endorsed establishment of a national biodiesel industry using used cooking oil as feedstock.
Tanzania	Oil palm	Aug-12	Sector development assistance	Renewed commitment to support the development of the oil palm sector.
Thailand	Palm oil	Apr to May 2012	Consumer protection	Enforced retail price cap and hoarding prohibition for palm oil to protect consumers, and introduced a temporary tax on palm oil exports to prevent shortages in domestic supplies.
	Coconut	Nov-12	Sector development assistance	Issued 5-year action plan for the development of national coconut production.
	Biofuel	Nov-12	Biofuel regulation	Raised mandatory fuel blending rate (with palm oil-based biodiesel) to 5 percent.
	Palm oil	Dec-12	Producer support / consumer protection	Established a minimum price range for oil palm fruit purchases by palm oil factories so as to protect farmers, eventually securing domestic production and preventing surges in consumer prices.
	Palm oil	Jan-13	Market regulation	Accepted to take palm oil into public stock to stem a fall in farmgate price.



COUNTRY	PRODUCT	DATE	POLICY CATEGORY/INSTRUMENT	DESCRIPTION
Ukraine	Soybeans	Oct-12	Export policy	Sought access to Chinese soybean import market under government-to-government loan-for-crop deal.
	Sunflower	Feb-13	Market regulation	Adjusted downward the minimum prices of sunflower seed, oil and meal to reflect weakening domestic market prices.
	Soybean	Feb-13	Production support	Extended subsidization of crop insurance to maize, soybean and sugar beet.
United States	Soybean, soy meal, soyoil	Apr-12	Bilateral trade	Signed trade agreement with Colombia, securing improved access for soybean products to the Colombian market.
	Soybean, soy meal, soyoil	Apr-12	Bilateral trade	Signed trade agreement with the Republic of Korea, securing improved access for soybean products to the Korean market.
	Grains and oilseeds	Apr-12	Market regulation	Raised margin participants need to deposit, in order to guarantee speculative futures positions for all commodities.
	Biofuel	Apr-12 to Jan-13	Renewable energy policy	Provided financial assistance to producers of biofuel and to entities conducting research on advanced biofuels, especially those based on non-edible feedstocks.
	Agricultural commodities	Aug-12	Emergency relief	Provided assistance to farmers affected by exceptional drought.
	Biofuel	Oct-12	Biofuel regulation	Raised the required amount of bio-based diesel to be incorporated into the national fuel market in 2013.
	Grains and oilseeds	Oct-12	Market regulation	Considered means to control excessive speculation in commodities futures trading, in particular in food-related commodities.
	Biodiesel	Dec-12	Tax credit	Granted retroactive federal tax credit for biodiesel for all of 2012, and extended up to end 2013.
	Agricultural commodities	Jan-13	Agricultural policy	Provisionally extended 2008-2012 Farm Bill for nine months, i.e. through the 2013 crop-growing season, with the exception of some programmes such as the conservation scheme and emergency relief measures.
	Rapeseed	Feb-13	Production support	Adapted federal crop insurance programme to specific needs of farmers growing high-oleic rapeseed.
	Camelina oil	Feb-13	Renewable energy policy	Approved oil of camelina seed as biodiesel feedstock, meeting the 50 percent GHG reduction threshold required to qualify under US bioenergy policies.
	Refined soy, palm oil	Jan-13	Import policy	Considered charging "emergency import tariffs" on refined soy and palm oil to prevent rising imports from hurting domestic producers.
	Zimbabwe	Soybean	Nov-12	Sector development assistance

\* A collection of major oilseed 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>.



# MEAT:

## MAJOR RICE POLICY DEVELOPMENTS: NOVEMBER 2012 - MAY 2013\*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Belarus	Beef	Jan-13	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
	Poultry	Jan-13	Import ban	Imposed temporary restrictions on the import of poultry and poultry product from Bulgaria to prevent a spread of Newcastle disease.
	Pigmeat, poultry	Mar-13	Import ban lifted	Lifted the ban it had imposed in early January on the import of pork, poultry and ready meat products containing pork from Germany.
Bilateral/Multilateral	Poultry	Apr-13	Import ban lifted	Lifted the ban on the import of poultry meat from Czech Republic.
	Poultry	Feb-13	Animal health regulations	Russia-Belarus-Kazakhstan: Approved veterinary certificate for export of poultry from USA to the Customs Union.
Canada	Beef	Apr-13	State market intervention	Extended the national beef levy until 30 June 2015. The non-refundable national levy (expected to be worth more than CAD 600 000) has been authorized to continue providing industry stability through funding national marketing, promotion and research activities.
Chile	Beef	Feb-13	Import ban lifted	Ended its ban on US beef and beef products, imposed in 2003 after a US cow tested positive for bovine spongiform encephalopathy (BSE).
	Beef	Apr-13	Export ban	Suspended beef exports to the EU while it investigates supply chain weaknesses identified by a European veterinary mission.
China	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
Colombia	Meat	Apr-13	Export ban	Restricted meat exports to Venezuela to prevent domestic shortages and rising domestic prices.
Egypt	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
	Poultry	Dec-12	Import ban	Suspended the import of poultry from Australia following notification from the World Organization for Animal Health (OIE) about infectious diseases affecting poultry in the country.
Japan	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
	Beef	Feb-13	Import ban lifted	Lifted its ban on imports of beef from the US, France and the Netherlands.
Jordan	Beef	Jan-13	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
Kyrgyzstan	Poultry	Apr-13	Import ban	Banned imports of poultry and poultry products from China in connection with the spread of the new H7N9 virus in China.
Malaysia	Poultry	Apr-13	Import ban	Suspended temporarily the import of chicken products from China as a precaution against the H7N9 avian influenza.
Peru	Beef	Jan-13	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
Philippines	Poultry	Nov-12	Import ban	Suspended temporarily the importation of poultry and other poultry products from Australia because of the recent outbreak of Highly Pathogenic Avian Influenza (HPAI).
	Poultry	Nov-13	Import ban lifted	Lifted the ban on poultry products imported from the Chinese Province of Taiwan after global health authorities declared it free of the bird flu virus.
Qatar	Beef	Jan-13	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
Republic of Korea	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
	Poultry	Jan-13	Import ban	Restricted temporarily imports from the one specific poultry farm in Ukraine, and introduced enhanced laboratory control of products coming from a another company.
	Meat	Feb-13	Import ban	Banned imports of chilled pork, beef and poultry from Germany for, allegedly, excessively lax food safety controls, citing unclear origin of the meat, misrepresentation of the meat products, lack of monitoring of chemical ingredients and contamination.
	Beef, pigmeat, poultry	Feb-13	Import ban	Banned the imports of frozen pork and beef, as well as turkey meat and by-products from the US. The move was based on the presence of the banned growth promoter, ractopamine, in the products.
Russia	Poultry	Mar-13	Import ban lifted	Approved imports of poultry from two processing plants in Brazil, in a first concrete step towards lifting a ban on meat imports from three southern Brazilian states.
	Livestock	Mar-13	State market intervention	Approved, with Resolution Nr 338, the disbursement of subsidies from the 2013 federal budget to agricultural producers and animal breeders. The subsidies amount to RUB 6,77 billion (USD 221 million).
	Beef, pigmeat	Apr-13	Import ban	Banned virtually all beef and pork from Canada, after Canadian farmers were granted permission to use Paylean and Optaflexx as dietary growth promotants.
	Beef	Apr-13	Import ban	Banned almost all imports of Mexican beef because of concerns that Mexican producers had not complied with a commitment to refrain from using the animal feed additive, ractopamine, which promotes leanness in animals raised for their meat.
Saudi Arabia	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
South Africa	Beef	Dec-12	Import ban	Suspended imports of Brazilian beef due to the outbreak of bovine spongiform encephalopathy (BSE) in the country.
Thailand	Beef	Feb-13	Import ban lifted	Lifted the ban on imports of beef products from the EU which was imposed in 2001 after the outbreak of bovine spongiform encephalopathy (BSE). Thailand partially relaxed the measure in 2006, but kept a ban in place on beef and beef products coming from a number of EU member states.
	Livestock	Jan-13	State market intervention	Announced a record allocation of UAH 650 million (USD 80.4 million) from the state budget to be invested in support of the livestock sector in 2013.
	Pigmeat	Mar-13	Import ban	Banned imports of pork from Brazil, on claims that various companies from Brazil did not meet pork safety indicators required by Ukrainian law.
Ukraine	Poultry	May-13	Export ban	Suspended exports of chicken meat to the Russian Federation from two producing firms while investigating a Russian allegation of contamination.
	Pigmeat, pigs	May-13	Import ban	Banned imports of pigs, pork and products made of it from Belarus, due to the possible outbreak of African swine fever (ASF) in a district of Belarus.
United Arab Emirates	Poultry	Feb-13	Import ban	Banned poultry imports from Bulgaria to prevent the entry of epidemic diseases .
Vietnam	Poultry	Apr-13	Import ban	Suspended poultry imports from China after detection of the new avian influenza strain H7N9.

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

# DAIRY:

## MAJOR POLICY DEVELOPMENTS: NOVEMBER 2012 - MAY 2013\*

COUNTRY	PRODUCT	DATE	POLICY CATEGORY/ INSTRUMENT	DESCRIPTION
Brazil	Dairy products	Apr-13	Tariff rate quota	Established a tariff rate quota (TRQ) on lactose products for 4 476 tonnes, subject to an import duty of 2 percent. The out-of-quota import tariff remains 16 percent. The preferential tariff quota, introduced to help alleviate the high production costs facing Brazil's swine and dairy industry, is valid for a 12-month period.
Bulgaria	Dairy products	Jan-13	Marketing and Trade	Introduced a regulation to limit production of dairy products containing vegetable oil (palm oil) ingredients.
India	Dairy products	Nov-12	Export ban lifted	Lifted the ban on the export of milk and cream, concentrated and/or sweetened milk and cream, whole milk powder, dairy whitener and infant milk foods.
	Milk powder	Nov-12	TRQ revised	Revised tariff rate quota on skim milk powder to permit imports up to 10 000 MT at a 15 percent tariff rate.
Iraq	Milk, Dairy products	Apr-13	Export ban lifted	Lifted import ban on milk and dairy products from Egypt, which had been in place for several months on sanitary grounds.
Kenya	Raw milk	Jan-13	Ban	Kenya Dairy Board (KDB) imposed a ban on the sale of raw milk.
	Dairy products	Dec-12	Import quota	Announced it will allow a total of 44 200 metric tonnes of dairy product preparations (dairy blends) to be imported from any country under a mixed allocation (direct and public bid) scheme.
Mexico	Milk powder	Dec-12	Import quota	Announced opening of a duty free 80,000 tonne import quota for milk powder imported from Most Favoured Nations (MFN) as part of its World Trade Organization (WTO) commitments. The provisions became effective from 1 January 2013.
Bilateral/Multilateral	Milk, Dairy products	Dec-12	Free trade agreement	New Zealand-US: agreement signed between New Zealand and the US Food and Drug Administration (FDA) that recognizes their respective food safety systems
Bilateral/Multilateral	Milk, Dairy products	Mar-13	Import duties	Russia-Belarus-Kazakhstan: Customs Union increased the import duties on certain types of cheese by 5–10 percent
USA	Dairy products	Feb-13	Dairy TRQ	Foreign Agricultural Service (FAS) published an advance notice of proposed rulemaking, requesting public comments on possible changes to the Dairy TRQ Licensing Program.

\* 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>

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## NOTES

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### 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. For 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.

## COUNTRY CLASSIFICATION

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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 62 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 1 915 in 2010). The LDCs group currently includes 49 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

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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		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes.....)									
<b>ASIA</b>	<b>1 027.7</b>	<b>1 092.2</b>	<b>1 111.4</b>	<b>144.2</b>	<b>150.3</b>	<b>153.8</b>	<b>49.0</b>	<b>55.2</b>	<b>54.7</b>
Bangladesh	35.4	36.8	37.2	3.8	2.4	2.4	-	-	-
China	439.1	478.7	487.5	14.1	19.3	22.3	1.3	1.2	1.6
India	219.5	241.2	238.4	0.2	0.1	0.1	9.3	18.6	17.1
Indonesia	59.2	62.5	64.4	9.9	9.3	9.7	0.2	0.2	0.2
Iran, Islamic Republic of	19.9	20.3	21.0	7.9	11.8	8.8	0.6	0.2	0.2
Iraq	3.6	3.3	3.4	5.0	5.4	5.4	-	-	-
Japan	8.5	8.8	8.7	25.2	24.8	25.6	0.4	0.5	0.5
Kazakhstan	19.7	12.3	17.1	-	-	-	8.6	6.8	7.4
Korea, Republic of	4.7	4.2	4.4	13.2	14.0	13.9	0.1	0.1	0.1
Myanmar	21.9	21.7	22.2	0.2	0.2	0.2	0.7	0.9	0.9
Pakistan	34.1	33.5	36.7	0.3	0.3	0.3	3.8	3.2	3.4
Philippines	17.5	19.2	19.2	5.3	4.3	4.8	-	0.1	0.1
Saudi Arabia	1.6	1.2	1.1	12.8	13.3	14.2	-	-	-
Thailand	27.8	29.0	29.3	2.8	2.3	2.6	9.6	7.4	8.2
Turkey	33.5	33.0	34.3	4.1	3.8	3.6	3.8	3.9	3.4
Viet Nam	31.6	33.9	33.6	4.0	4.0	4.1	7.2	8.2	7.7
<b>AFRICA</b>	<b>158.6</b>	<b>166.4</b>	<b>168.3</b>	<b>68.1</b>	<b>64.2</b>	<b>66.1</b>	<b>8.0</b>	<b>8.3</b>	<b>7.7</b>
Algeria	5.0	5.0	5.5	8.6	9.1	8.6	-	-	-
Egypt	19.7	21.1	21.3	17.0	12.9	14.9	0.3	0.5	0.5
Ethiopia	18.8	21.0	21.0	1.4	1.0	0.9	0.8	1.0	0.9
Morocco	8.9	5.3	9.3	5.6	6.0	5.1	0.1	0.1	0.1
Nigeria	24.5	25.2	25.3	6.6	6.8	7.1	1.0	0.9	0.9
South Africa	14.6	15.1	14.3	2.8	2.9	3.0	2.6	2.0	2.2
Sudan	4.0	5.9	5.3	2.3	2.1	2.2	-	0.3	-
<b>CENTRAL AMERICA</b>	<b>38.1</b>	<b>39.9</b>	<b>40.8</b>	<b>26.2</b>	<b>24.9</b>	<b>28.0</b>	<b>1.4</b>	<b>1.0</b>	<b>1.0</b>
Mexico	31.5	33.4	34.2	15.9	14.7	17.2	1.2	0.9	0.8
<b>SOUTH AMERICA</b>	<b>137.9</b>	<b>155.9</b>	<b>168.5</b>	<b>24.8</b>	<b>25.6</b>	<b>26.5</b>	<b>43.8</b>	<b>70.0</b>	<b>61.2</b>
Argentina	40.5	41.1	46.3	-	-	-	27.0	33.4	29.6
Brazil	71.0	86.3	94.2	8.4	9.1	8.8	11.6	29.9	25.5
Chile	3.4	3.6	3.3	2.1	2.2	2.2	0.1	0.1	0.1
Colombia	3.5	3.7	3.6	5.3	5.4	6.0	0.1	0.1	0.1
Peru	3.9	4.0	3.9	3.6	3.8	4.0	-	-	-
Venezuela	3.3	4.1	4.1	3.5	3.3	3.7	-	0.1	0.1
<b>NORTH AMERICA</b>	<b>447.6</b>	<b>406.0</b>	<b>474.6</b>	<b>8.0</b>	<b>10.9</b>	<b>8.6</b>	<b>103.5</b>	<b>78.2</b>	<b>86.3</b>
Canada	47.9	51.6	55.4	2.0	1.2	1.3	20.3	22.8	22.9
United States of America	399.7	354.4	419.2	6.0	9.7	7.3	83.2	55.4	63.5
<b>EUROPE</b>	<b>444.5</b>	<b>414.5</b>	<b>459.4</b>	<b>17.1</b>	<b>28.7</b>	<b>21.8</b>	<b>63.5</b>	<b>67.8</b>	<b>72.0</b>
European Union	288.9	275.5	293.7	13.1	19.6	15.9	25.2	27.7	24.0
Russian Federation	82.9	69.2	89.8	0.8	3.3	1.0	17.6	15.2	20.3
Serbia	9.1	6.4	8.9	-	0.1	0.1	1.8	1.4	1.4
Ukraine	46.5	45.8	52.0	0.1	1.8	0.8	18.4	22.8	25.7
<b>OCEANIA</b>	<b>39.7</b>	<b>34.8</b>	<b>37.4</b>	<b>1.5</b>	<b>1.4</b>	<b>1.4</b>	<b>24.1</b>	<b>25.5</b>	<b>23.4</b>
Australia	38.8	34.0	36.5	0.2	0.1	0.1	24.1	25.5	23.4
<b>WORLD</b>	<b>2 294.0</b>	<b>2 309.8</b>	<b>2 460.5</b>	<b>289.8</b>	<b>306.1</b>	<b>306.2</b>	<b>293.2</b>	<b>306.1</b>	<b>306.2</b>
Developing countries	1 305.1	1 403.4	1 433.7	226.2	228.2	236.5	90.0	124.5	113.6
Developed countries	988.9	906.4	1 026.8	63.6	77.9	69.7	203.3	181.6	192.6
LIFDCs	502.5	543.4	541.6	81.6	73.3	78.0	16.6	27.6	25.2
LDCs	153.5	164.4	163.8	25.3	23.1	23.4	5.5	7.3	6.4



# APPENDIX TABLE 1(B): CEREAL STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(. . . . . million tonnes . . . . .)						(. . . . . Kg/year . . . . .)		
<b>ASIA</b>	<b>1 104.5</b>	<b>1 165.2</b>	<b>1 195.2</b>	<b>303.4</b>	<b>353.0</b>	<b>367.7</b>	<b>160.9</b>	<b>161.7</b>	<b>163.2</b>
Bangladesh	38.0	39.6	39.5	9.5	9.9	10.0	174.2	175.9	175.2
China	445.8	476.9	494.5	168.7	194.3	208.0	151.7	151.4	151.4
India	208.1	218.2	223.2	38.4	51.2	48.8	152.7	154.3	158.2
Indonesia	66.6	72.1	74.8	10.3	12.1	11.4	207.3	213.7	220.7
Iran, Islamic Republic of	26.7	28.2	29.3	5.9	11.0	11.3	198.9	200.3	200.3
Iraq	8.1	8.8	8.8	1.1	1.5	1.5	190.1	193.5	193.5
Japan	33.3	33.5	33.4	4.9	4.9	5.0	129.3	129.2	128.8
Kazakhstan	9.5	9.4	9.6	4.0	3.1	3.2	161.9	161.6	161.5
Korea, Republic of	17.6	18.2	17.8	4.1	4.1	4.6	123.7	120.9	120.8
Myanmar	21.4	21.5	21.6	6.3	5.6	5.6	243.2	243.7	244.0
Pakistan	30.9	32.2	33.4	3.1	1.3	1.4	148.7	146.5	146.9
Philippines	23.0	23.9	24.1	4.2	3.3	3.1	163.1	166.3	164.8
Saudi Arabia	14.0	15.0	15.2	4.6	4.5	4.5	146.4	153.6	153.0
Thailand	18.5	19.8	20.5	9.7	17.7	20.9	145.8	148.2	148.2
Turkey	33.5	34.0	34.7	4.5	4.2	4.0	225.2	225.1	224.5
Viet Nam	28.4	30.0	30.2	5.0	4.9	4.7	206.5	206.8	206.6
<b>AFRICA</b>	<b>215.1</b>	<b>226.3</b>	<b>230.3</b>	<b>37.4</b>	<b>35.9</b>	<b>32.9</b>	<b>150.9</b>	<b>153.0</b>	<b>152.5</b>
Algeria	13.2	13.9	14.1	4.0	4.7	4.8	233.1	233.7	232.9
Egypt	35.5	36.0	36.3	6.9	5.6	5.1	270.8	272.7	272.3
Ethiopia	19.1	20.8	21.1	1.8	2.0	1.9	185.3	188.5	187.2
Morocco	13.4	13.1	14.1	3.9	2.7	2.9	250.6	252.9	252.9
Nigeria	30.0	31.1	31.5	1.3	1.1	1.0	136.0	135.5	134.8
South Africa	14.9	15.4	15.8	3.2	3.1	2.4	171.6	177.4	177.5
Sudan	6.8	7.5	7.6	1.7	1.5	1.4	140.8	141.9	142.2
<b>CENTRAL AMERICA</b>	<b>63.1</b>	<b>63.7</b>	<b>67.1</b>	<b>4.5</b>	<b>4.3</b>	<b>5.0</b>	<b>163.7</b>	<b>161.8</b>	<b>162.4</b>
Mexico	46.5	47.1	49.9	2.7	2.6	3.2	198.0	197.9	198.9
<b>SOUTH AMERICA</b>	<b>120.1</b>	<b>123.5</b>	<b>128.0</b>	<b>23.1</b>	<b>18.6</b>	<b>24.6</b>	<b>123.0</b>	<b>120.6</b>	<b>121.0</b>
Argentina	13.7	15.4	15.9	4.5	2.8	3.7	133.0	132.9	132.8
Brazil	69.5	69.7	73.6	9.3	5.8	10.0	118.4	114.0	115.2
Chile	5.4	5.6	5.3	0.7	0.7	0.7	144.1	139.6	137.0
Colombia	8.8	9.1	9.4	2.1	2.0	2.2	106.7	106.8	106.4
Peru	7.5	7.7	7.7	1.3	1.6	1.7	145.7	145.8	145.2
Venezuela	7.0	7.4	7.6	0.7	0.7	0.8	133.3	134.0	133.9
<b>NORTH AMERICA</b>	<b>358.3</b>	<b>346.5</b>	<b>368.7</b>	<b>72.2</b>	<b>50.7</b>	<b>78.4</b>	<b>108.5</b>	<b>108.2</b>	<b>107.4</b>
Canada	28.5	29.7	29.9	11.4	7.8	10.4	96.9	96.0	96.6
United States of America	329.9	316.8	338.7	60.8	42.9	68.0	109.7	109.5	108.5
<b>EUROPE</b>	<b>403.1</b>	<b>393.0</b>	<b>397.6</b>	<b>64.9</b>	<b>42.9</b>	<b>54.5</b>	<b>137.7</b>	<b>137.9</b>	<b>137.8</b>
European Union	281.5	274.6	279.8	35.4	23.8	29.8	136.0	137.4	137.3
Russian Federation	67.2	64.5	67.0	17.9	7.5	11.1	131.4	128.7	128.5
Serbia	7.4	5.6	5.5	1.2	0.2	2.4	164.0	162.4	162.1
Ukraine	27.3	28.2	28.2	7.5	7.3	6.3	172.4	169.4	169.6
<b>OCEANIA</b>	<b>15.8</b>	<b>14.9</b>	<b>15.2</b>	<b>8.5</b>	<b>5.4</b>	<b>5.7</b>	<b>93.1</b>	<b>92.5</b>	<b>91.1</b>
Australia	13.7	12.7	13.0	8.0	4.9	5.2	103.9	103.4	101.7
<b>WORLD</b>	<b>2 280.1</b>	<b>2 333.2</b>	<b>2 402.0</b>	<b>514.0</b>	<b>510.9</b>	<b>568.8</b>	<b>151.8</b>	<b>152.5</b>	<b>153.3</b>
Developing countries	1 423.1	1 497.4	1 538.6	351.0	393.9	412.2	156.9	157.6	158.7
Developed countries	856.9	835.8	863.4	163.0	117.0	156.6	131.5	131.6	131.2
LIFDCs	557.7	589.0	599.6	100.7	115.1	109.8	156.8	159.0	160.9
LDCs	170.7	180.8	182.5	36.0	36.6	35.4	149.7	151.8	151.5

## APPENDIX TABLE 2(A): WHEAT STATISTICS

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes.....)									
<b>ASIA</b>	<b>300.9</b>	<b>310.3</b>	<b>318.5</b>	<b>62.2</b>	<b>64.8</b>	<b>63.2</b>	<b>15.4</b>	<b>20.2</b>	<b>20.4</b>
Bangladesh	0.9	1.0	1.0	3.0	2.2	2.2	-	-	-
China	115.9	120.6	121.8	3.5	4.9	5.4	0.5	0.4	0.4
of which Taiwan Prov.	-	-	-	1.3	1.4	1.4	-	-	-
India	82.8	94.9	93.6	0.1	-	-	0.2	7.0	7.0
Indonesia	-	-	-	6.2	6.5	6.5	0.1	0.1	-
Iran, Islamic Republic of	13.8	13.8	14.5	2.0	4.7	1.5	0.6	0.2	0.2
Iraq	2.3	2.1	2.2	3.6	3.7	3.7	-	-	-
Japan	0.7	0.9	0.9	5.7	6.0	6.0	0.3	0.3	0.3
Kazakhstan	16.6	9.8	14.1	-	-	-	8.0	6.5	7.0
Korea, Republic of	-	-	-	4.7	5.4	5.0	0.1	0.1	0.1
Pakistan	24.2	24.0	26.3	0.2	0.2	0.2	0.7	0.3	0.5
Philippines	-	-	-	3.3	3.2	3.5	-	-	-
Saudi Arabia	1.2	0.8	0.7	2.2	2.2	3.0	-	-	-
Thailand	-	-	-	2.0	1.6	2.0	0.2	0.1	0.2
Turkey	20.7	20.1	21.0	3.4	3.0	2.8	3.4	3.5	3.0
<b>AFRICA</b>	<b>24.7</b>	<b>24.8</b>	<b>28.2</b>	<b>39.4</b>	<b>35.8</b>	<b>35.8</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>
Algeria	3.1	3.4	3.6	5.8	5.8	5.4	-	-	-
Egypt	8.0	8.8	9.4	10.6	8.0	9.0	-	-	-
Ethiopia	3.2	3.5	3.5	1.3	1.0	0.9	-	-	-
Morocco	5.8	3.9	6.5	3.3	3.4	2.5	0.1	0.1	0.1
Nigeria	0.1	0.1	0.1	3.9	3.9	3.9	0.5	0.5	0.5
South Africa	1.8	1.9	1.7	1.5	1.5	1.6	0.2	0.3	0.2
Tunisia	1.4	1.8	1.8	1.7	1.5	1.5	0.1	0.1	0.1
<b>CENTRAL AMERICA</b>	<b>3.8</b>	<b>3.2</b>	<b>3.8</b>	<b>7.8</b>	<b>8.1</b>	<b>8.1</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>
Cuba	-	-	-	0.8	0.8	0.8	-	-	-
Mexico	3.8	3.2	3.8	3.9	4.3	4.3	0.7	0.8	0.7
<b>SOUTH AMERICA</b>	<b>23.7</b>	<b>17.8</b>	<b>21.2</b>	<b>12.9</b>	<b>14.1</b>	<b>14.4</b>	<b>11.8</b>	<b>11.8</b>	<b>8.8</b>
Argentina	13.1	9.0	11.0	-	-	-	8.0	7.5	5.5
Brazil	5.6	4.4	5.5	6.5	7.5	7.5	1.9	2.0	1.3
Chile	1.4	1.4	1.3	0.7	0.8	0.8	-	-	-
Colombia	-	-	-	1.5	1.4	1.6	-	-	-
Peru	0.2	0.2	0.2	1.6	1.7	1.7	-	-	-
Venezuela	-	-	-	1.6	1.7	1.8	-	-	-
<b>NORTH AMERICA</b>	<b>83.4</b>	<b>89.0</b>	<b>85.4</b>	<b>3.0</b>	<b>3.6</b>	<b>3.6</b>	<b>46.1</b>	<b>46.5</b>	<b>45.0</b>
Canada	25.1	27.2	29.4	0.1	0.1	0.1	17.2	18.5	19.0
United States of America	58.3	61.8	56.0	2.9	3.5	3.5	28.9	28.0	26.0
<b>EUROPE</b>	<b>217.6</b>	<b>191.7</b>	<b>220.7</b>	<b>7.6</b>	<b>12.4</b>	<b>10.1</b>	<b>40.7</b>	<b>39.1</b>	<b>42.0</b>
European Union	137.5	131.3	139.0	5.6	6.0	6.5	19.7	21.5	17.5
Russian Federation	53.2	37.7	55.0	0.1	2.5	0.5	14.4	10.3	15.0
Ukraine	20.0	15.8	20.2	-	1.3	0.5	6.0	6.8	9.0
<b>OCEANIA</b>	<b>26.7</b>	<b>22.4</b>	<b>24.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>18.4</b>	<b>20.0</b>	<b>18.0</b>
Australia	26.4	22.1	24.0	-	-	-	18.4	20.0	18.0
<b>WORLD</b>	<b>680.9</b>	<b>659.1</b>	<b>702.0</b>	<b>133.7</b>	<b>139.5</b>	<b>136.0</b>	<b>134.4</b>	<b>139.5</b>	<b>136.0</b>
Developing countries	322.7	331.8	343.0	108.0	107.9	106.7	20.2	26.1	22.8
Developed countries	358.2	327.3	359.1	25.7	31.6	29.3	114.2	113.4	113.2
LIFDCs	113.3	127.5	127.2	51.0	45.9	47.5	1.4	8.2	8.2
LDCs	11.2	12.7	12.9	16.0	14.2	14.2	0.1	-	-

# APPENDIX TABLE 2(B): WHEAT STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13	2013/14	2010-2012 average	2013	2014	09/10-11/12 average	2012/13	2013/14
		<i>estim.</i>	<i>f'cast</i>		<i>estim.</i>	<i>f'cast</i>		<i>estim.</i>	<i>f'cast</i>
	(..... million tonnes .....) )						(..... Kg/year .....) )		
<b>ASIA</b>	<b>341.6</b>	<b>357.1</b>	<b>358.1</b>	<b>92.9</b>	<b>95.9</b>	<b>98.4</b>	<b>64.3</b>	<b>64.1</b>	<b>64.7</b>
Bangladesh	3.3	3.4	3.2	2.9	2.9	2.9	19.0	19.0	18.1
China	121.1	126.0	122.8	43.5	35.9	39.8	64.2	63.6	63.5
of which Taiwan Prov.	1.2	1.4	1.4	0.3	0.4	0.4	47.1	47.2	47.1
India	80.7	84.0	86.6	12.9	21.7	21.2	59.8	59.8	61.8
Indonesia	5.7	6.3	6.7	1.8	2.1	1.9	18.9	19.1	19.9
Iran, Islamic Republic of	15.1	16.0	16.2	4.3	6.9	6.6	166.3	166.5	166.5
Iraq	5.5	5.8	5.9	0.8	1.4	1.4	141.4	141.6	141.5
Japan	6.0	6.4	6.4	0.7	0.9	0.9	41.9	42.3	42.3
Kazakhstan	7.0	7.1	7.2	3.8	2.9	2.9	147.2	146.3	146.3
Korea, Republic of	4.6	5.7	4.9	0.9	0.8	0.9	48.1	48.1	48.4
Pakistan	23.8	25.0	26.0	1.5	0.1	0.1	125.5	124.6	124.7
Philippines	3.0	3.3	3.5	1.0	1.4	1.4	25.1	25.1	26.0
Saudi Arabia	3.2	3.2	3.7	2.6	2.5	2.5	100.2	103.5	103.9
Thailand	1.7	1.9	1.8	0.4	0.3	0.3	14.2	12.9	12.1
Turkey	20.1	20.7	21.0	2.6	2.3	2.1	199.4	199.8	199.3
<b>AFRICA</b>	<b>60.8</b>	<b>63.5</b>	<b>64.6</b>	<b>16.9</b>	<b>15.0</b>	<b>13.9</b>	<b>51.0</b>	<b>50.5</b>	<b>50.1</b>
Algeria	8.6	9.0	9.1	3.0	3.8	3.9	210.9	211.6	211.1
Egypt	17.6	18.9	19.0	5.1	4.1	3.5	183.3	183.9	183.8
Ethiopia	4.4	4.5	4.5	0.6	0.2	0.1	44.3	44.4	42.0
Morocco	8.2	8.5	8.9	2.4	1.8	1.8	196.6	199.0	199.6
Nigeria	3.4	3.3	3.5	0.3	0.2	0.2	17.7	16.7	17.5
South Africa	3.1	3.2	3.2	0.6	0.6	0.5	59.3	60.2	60.2
Tunisia	3.0	3.1	3.2	0.8	1.0	1.0	216.9	217.4	215.2
<b>CENTRAL AMERICA</b>	<b>10.5</b>	<b>10.4</b>	<b>10.9</b>	<b>0.9</b>	<b>1.1</b>	<b>1.2</b>	<b>45.4</b>	<b>44.9</b>	<b>44.9</b>
Cuba	0.8	0.8	0.8	-	-	-	57.3	57.3	57.3
Mexico	6.8	6.7	7.2	0.4	0.5	0.7	50.5	50.1	50.5
<b>SOUTH AMERICA</b>	<b>24.9</b>	<b>25.0</b>	<b>25.3</b>	<b>6.4</b>	<b>4.1</b>	<b>5.4</b>	<b>59.4</b>	<b>59.1</b>	<b>59.2</b>
Argentina	5.1	5.1	5.1	2.2	0.7	1.1	116.8	116.9	117.0
Brazil	10.7	10.7	11.0	1.0	0.5	1.2	52.3	52.3	52.8
Chile	2.1	2.1	2.1	0.2	0.2	0.2	113.8	109.2	106.5
Colombia	1.4	1.4	1.4	0.3	0.4	0.6	27.3	27.4	27.6
Peru	1.8	1.8	1.8	0.4	0.6	0.7	57.4	56.9	56.2
Venezuela	1.7	1.7	1.8	0.2	0.2	0.2	56.4	56.1	56.8
<b>NORTH AMERICA</b>	<b>39.3</b>	<b>47.2</b>	<b>45.5</b>	<b>30.5</b>	<b>24.8</b>	<b>24.2</b>	<b>79.8</b>	<b>79.7</b>	<b>79.7</b>
Canada	8.0	9.7	9.6	7.1	4.9	6.0	81.4	81.1	81.8
United States of America	31.3	37.6	36.0	23.4	19.9	18.2	79.6	79.5	79.5
<b>EUROPE</b>	<b>185.6</b>	<b>176.1</b>	<b>182.2</b>	<b>32.7</b>	<b>20.4</b>	<b>27.0</b>	<b>110.9</b>	<b>110.8</b>	<b>110.6</b>
European Union	125.7	119.2	124.6	12.5	8.0	11.5	112.3	112.6	112.4
Russian Federation	38.6	35.8	37.3	13.9	5.7	8.9	101.6	100.7	100.6
Ukraine	13.0	12.5	12.5	4.6	4.7	3.8	122.9	121.0	121.0
<b>OCEANIA</b>	<b>7.7</b>	<b>6.9</b>	<b>7.0</b>	<b>5.5</b>	<b>3.0</b>	<b>3.0</b>	<b>69.2</b>	<b>68.3</b>	<b>67.4</b>
Australia	6.7	5.9	6.0	5.1	2.6	2.6	82.7	82.0	81.1
<b>WORLD</b>	<b>670.5</b>	<b>686.2</b>	<b>693.8</b>	<b>185.9</b>	<b>164.2</b>	<b>173.1</b>	<b>67.3</b>	<b>66.9</b>	<b>67.1</b>
Developing countries	404.5	421.2	424.0	107.3	105.6	108.2	60.0	59.7	60.0
Developed countries	266.1	265.0	269.7	78.6	58.7	64.9	96.4	96.4	96.1
LIFDCs	156.7	164.5	168.0	37.6	45.9	44.2	47.8	47.7	48.4
LDCs	26.4	27.8	27.7	9.4	8.1	7.9	27.5	27.5	26.9

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

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes.....)									
<b>ASIA</b>	<b>301.2</b>	<b>337.5</b>	<b>339.9</b>	<b>64.8</b>	<b>67.8</b>	<b>73.5</b>	<b>6.0</b>	<b>5.5</b>	<b>5.2</b>
China	186.9	217.0	222.9	8.8	11.5	14.4	0.4	0.4	0.3
of which Taiwan Prov.	0.1	0.1	0.1	4.5	4.5	4.8	-	-	-
India	39.9	42.2	38.8	-	-	-	3.2	3.0	2.5
Indonesia	17.9	19.0	19.0	1.8	1.5	2.0	0.1	0.1	0.1
Iran, Islamic Republic of	4.6	4.9	5.0	4.6	5.8	6.0	-	-	-
Japan	0.2	0.2	0.2	18.8	18.1	18.9	-	-	-
Korea, D.P.R.	2.0	2.4	2.4	0.3	0.3	0.3	-	-	-
Korea, Republic of	0.2	0.2	0.2	8.1	8.1	8.5	-	-	-
Malaysia	0.1	0.1	0.1	3.1	3.1	3.3	-	-	-
Pakistan	3.9	4.1	4.1	-	-	-	-	-	-
Philippines	6.8	7.4	6.8	0.4	0.1	0.3	-	-	-
Saudi Arabia	0.4	0.4	0.4	9.4	9.7	9.8	-	-	-
Thailand	5.0	5.1	5.2	0.3	0.2	0.4	0.6	0.3	0.5
Turkey	12.3	12.4	12.8	0.5	0.5	0.5	0.3	0.3	0.3
Viet Nam	4.6	4.8	4.6	1.2	1.3	1.4	-	-	-
<b>AFRICA</b>	<b>117.7</b>	<b>124.1</b>	<b>122.0</b>	<b>17.0</b>	<b>15.5</b>	<b>17.2</b>	<b>6.4</b>	<b>6.6</b>	<b>6.1</b>
Algeria	1.9	1.6	1.9	2.8	3.2	3.1	-	-	-
Egypt	8.1	7.8	7.3	6.1	4.6	5.6	-	-	-
Ethiopia	15.5	17.4	17.4	0.1	-	-	0.8	1.0	0.9
Kenya	3.4	3.9	3.5	0.7	0.2	0.9	-	-	-
Morocco	3.1	1.4	2.8	2.4	2.6	2.6	-	-	-
Nigeria	21.9	22.6	22.6	0.2	0.2	0.2	0.5	0.4	0.4
South Africa	12.8	13.3	12.6	0.3	0.2	0.2	2.4	1.7	2.0
Sudan	3.7	5.7	4.8	0.4	0.3	0.4	-	0.3	-
Tanzania, United Rep. of	4.9	5.0	4.9	-	-	-	0.1	0.1	-
<b>CENTRAL AMERICA</b>	<b>32.4</b>	<b>34.8</b>	<b>35.1</b>	<b>16.4</b>	<b>14.7</b>	<b>17.8</b>	<b>0.5</b>	<b>0.2</b>	<b>0.2</b>
Mexico	27.6	30.0	30.3	11.4	9.8	12.2	0.5	0.1	0.1
<b>SOUTH AMERICA</b>	<b>97.4</b>	<b>121.7</b>	<b>130.7</b>	<b>10.5</b>	<b>10.0</b>	<b>10.5</b>	<b>28.9</b>	<b>55.1</b>	<b>49.0</b>
Argentina	26.4	31.1	34.3	-	-	-	18.3	25.3	23.5
Brazil	57.0	74.1	80.8	1.2	0.9	0.6	8.8	27.0	23.0
Chile	1.9	2.1	1.9	1.3	1.3	1.3	0.1	0.1	0.1
Colombia	1.7	1.9	1.8	3.8	3.8	4.2	-	-	-
Peru	1.8	1.8	1.8	1.8	1.9	2.1	-	-	-
Venezuela	2.7	3.5	3.5	1.7	1.2	1.5	-	0.1	0.1
<b>NORTH AMERICA</b>	<b>357.3</b>	<b>310.7</b>	<b>383.2</b>	<b>4.0</b>	<b>6.3</b>	<b>4.0</b>	<b>53.9</b>	<b>28.3</b>	<b>38.1</b>
Canada	22.8	24.4	26.0	1.5	0.8	0.8	3.1	4.3	3.9
United States of America	334.6	286.3	357.1	2.5	5.5	3.1	50.8	24.0	34.3
<b>EUROPE</b>	<b>224.2</b>	<b>220.1</b>	<b>236.1</b>	<b>7.8</b>	<b>14.5</b>	<b>9.9</b>	<b>22.3</b>	<b>28.3</b>	<b>29.5</b>
European Union	149.5	142.3	152.9	6.3	12.2	8.0	5.2	6.0	6.2
Russian Federation	29.1	30.8	34.0	0.5	0.6	0.4	3.0	4.7	5.1
Serbia	7.1	4.5	6.8	-	-	-	1.5	1.0	1.0
Ukraine	26.3	29.9	31.8	0.1	0.5	0.3	12.3	16.0	16.7
<b>OCEANIA</b>	<b>12.8</b>	<b>11.8</b>	<b>12.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>5.5</b>	<b>5.0</b>	<b>4.9</b>
Australia	12.2	11.3	11.8	-	-	-	5.5	5.0	4.9
<b>WORLD</b>	<b>1 143.0</b>	<b>1 160.7</b>	<b>1 259.3</b>	<b>120.7</b>	<b>129.0</b>	<b>133.0</b>	<b>123.4</b>	<b>129.0</b>	<b>133.0</b>
Developing countries	530.2	599.6	609.3	87.6	87.8	97.9	38.8	65.5	58.0
Developed countries	612.8	561.1	650.1	33.1	41.1	35.2	84.6	63.5	75.0
LIFDCs	175.5	188.8	181.6	13.2	10.6	13.2	7.7	8.7	7.3
LDCs	68.6	77.0	74.5	2.4	2.1	2.4	3.6	5.1	4.1

# APPENDIX TABLE 3(B): COARSE GRAIN STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(. . . . . million tonnes . . . . .)						(. . . . . Kg/year . . . . .)		
<b>ASIA</b>	<b>358.5</b>	<b>387.7</b>	<b>404.5</b>	<b>69.7</b>	<b>90.0</b>	<b>93.7</b>	<b>15.3</b>	<b>15.7</b>	<b>15.8</b>
China	194.2	216.9	231.9	48.2	64.0	69.0	10.8	11.2	11.5
of which Taiwan Prov.	4.8	4.6	4.8	0.4	0.2	0.3	7.0	7.0	7.0
India	36.2	38.2	38.0	3.3	6.0	4.2	21.6	22.1	22.1
Indonesia	19.1	20.7	21.5	3.2	3.6	3.0	29.5	29.6	32.2
Iran, Islamic Republic of	9.0	9.4	10.3	1.3	3.6	4.3	1.4	1.3	1.3
Japan	19.2	19.0	18.9	1.6	1.3	1.4	29.3	29.3	29.4
Korea, D.P.R.	2.3	2.6	2.6	-	0.1	0.2	77.9	86.3	85.5
Korea, Republic of	8.4	8.1	8.4	1.6	1.7	2.0	4.4	4.3	4.3
Malaysia	3.2	3.2	3.4	0.3	0.1	0.1	1.7	1.6	1.6
Pakistan	4.1	4.3	4.2	1.1	0.9	0.9	9.2	9.1	8.3
Philippines	7.4	7.5	7.2	0.5	0.4	0.3	16.5	16.6	14.1
Saudi Arabia	9.6	10.5	10.2	1.8	1.9	1.9	3.7	3.5	3.4
Thailand	4.7	5.1	5.3	0.4	0.4	0.2	2.7	2.7	2.7
Turkey	12.6	12.6	13.0	1.8	1.8	1.8	16.9	16.5	16.3
Viet Nam	5.9	6.2	6.2	0.5	0.4	0.2	5.3	5.3	5.2
<b>AFRICA</b>	<b>127.2</b>	<b>132.7</b>	<b>134.7</b>	<b>17.6</b>	<b>17.8</b>	<b>16.2</b>	<b>76.9</b>	<b>77.9</b>	<b>77.6</b>
Algeria	4.5	4.8	4.9	1.0	0.9	0.9	19.9	19.7	19.4
Egypt	14.1	12.9	13.0	1.1	0.9	0.8	46.6	46.2	45.4
Ethiopia	14.6	16.2	16.5	1.2	1.8	1.8	140.1	143.4	144.4
Kenya	4.1	4.3	4.4	0.8	0.5	0.5	85.4	85.6	85.1
Morocco	5.1	4.6	5.2	1.4	0.9	1.1	52.9	52.9	52.2
Nigeria	21.7	22.3	22.4	0.6	0.6	0.6	91.9	89.9	88.4
South Africa	10.9	11.1	11.3	2.6	2.4	1.8	95.7	94.9	94.7
Sudan	4.4	5.1	5.1	0.2	0.6	0.6	86.7	89.2	90.2
Tanzania, United Rep. of	5.0	5.1	5.0	0.7	0.5	0.4	86.0	85.9	85.3
<b>CENTRAL AMERICA</b>	<b>48.8</b>	<b>49.3</b>	<b>52.2</b>	<b>3.2</b>	<b>3.0</b>	<b>3.5</b>	<b>99.8</b>	<b>98.3</b>	<b>98.9</b>
Mexico	39.0	39.6	41.9	2.3	2.1	2.6	140.8	141.1	141.5
<b>SOUTH AMERICA</b>	<b>79.6</b>	<b>83.6</b>	<b>87.5</b>	<b>14.3</b>	<b>13.0</b>	<b>17.6</b>	<b>27.3</b>	<b>27.2</b>	<b>27.2</b>
Argentina	8.2	9.9	10.4	2.3	2.1	2.5	7.4	7.3	7.2
Brazil	50.2	51.4	54.9	6.8	4.4	7.9	24.7	24.7	24.9
Chile	3.1	3.3	3.0	0.5	0.5	0.5	19.0	18.7	18.5
Colombia	5.6	5.7	6.0	1.7	1.6	1.5	42.2	41.4	40.9
Peru	3.6	3.7	3.8	0.6	0.6	0.7	25.0	24.5	24.2
Venezuela	4.3	4.7	4.8	0.4	0.5	0.6	50.4	51.2	50.4
<b>NORTH AMERICA</b>	<b>314.8</b>	<b>295.1</b>	<b>319.2</b>	<b>40.3</b>	<b>24.8</b>	<b>53.0</b>	<b>18.2</b>	<b>17.9</b>	<b>17.7</b>
Canada	20.1	19.7	20.0	4.3	2.9	4.4	5.3	4.8	4.8
United States of America	294.7	275.4	299.2	36.1	21.9	48.7	19.6	19.3	19.1
<b>EUROPE</b>	<b>213.7</b>	<b>212.9</b>	<b>211.4</b>	<b>31.6</b>	<b>22.0</b>	<b>27.0</b>	<b>22.0</b>	<b>22.0</b>	<b>22.2</b>
European Union	153.0	152.4	152.2	22.4	15.4	17.9	18.5	19.3	19.4
Russian Federation	28.0	28.1	29.0	3.9	1.8	2.1	25.3	23.5	23.5
Serbia	5.7	3.9	3.8	0.8	0.1	2.1	20.9	19.8	19.8
Ukraine	14.2	15.6	15.6	3.0	2.7	2.4	46.3	45.1	45.3
<b>OCEANIA</b>	<b>7.5</b>	<b>7.3</b>	<b>7.5</b>	<b>3.0</b>	<b>2.4</b>	<b>2.6</b>	<b>8.1</b>	<b>8.1</b>	<b>8.0</b>
Australia	6.8	6.5	6.7	2.9	2.3	2.5	10.5	10.2	10.1
<b>WORLD</b>	<b>1 150.0</b>	<b>1 168.6</b>	<b>1 216.9</b>	<b>179.8</b>	<b>173.0</b>	<b>213.7</b>	<b>28.5</b>	<b>28.9</b>	<b>29.1</b>
Developing countries	577.2	616.7	641.7	99.9	119.1	126.4	29.8	30.4	30.6
Developed countries	572.8	551.9	575.2	79.9	53.8	87.3	23.1	23.0	23.0
LIFDCs	179.3	189.5	190.9	20.7	25.3	21.9	39.6	40.4	40.7
LDCs	66.6	72.7	73.7	10.2	12.3	11.4	56.7	58.5	59.3

## APPENDIX TABLE 4(A): MAIZE STATISTICS

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes .....)									
<b>ASIA</b>	<b>253.0</b>	<b>289.3</b>	<b>292.8</b>	<b>48.3</b>	<b>50.2</b>	<b>55.6</b>	<b>5.0</b>	<b>5.0</b>	<b>4.5</b>
China	178.0	208.2	214.0	6.4	8.7	11.6	0.2	0.3	0.2
of which Taiwan Prov.	-	-	-	4.4	4.3	4.5	-	-	-
India	20.1	21.8	20.3	-	-	-	3.1	3.0	2.5
Indonesia	17.9	19.0	19.0	1.7	1.4	1.9	0.1	0.1	0.1
Iran, Islamic Republic of	1.7	1.7	1.7	3.7	4.5	4.5	-	-	-
Japan	-	-	-	15.7	15.0	15.5	-	-	-
Korea, D.P.R.	1.9	2.3	2.3	0.3	0.3	0.3	-	-	-
Korea, Republic of	0.1	0.1	0.1	8.0	8.0	8.4	-	-	-
Malaysia	0.1	0.1	0.1	3.1	3.1	3.3	-	-	-
Pakistan	3.4	3.5	3.5	-	-	-	-	-	-
Philippines	6.8	7.4	6.8	0.3	0.1	0.3	-	-	-
Thailand	4.8	5.0	5.0	0.3	0.2	0.4	0.6	0.3	0.5
Turkey	4.3	4.6	4.6	0.3	0.4	0.4	0.2	0.2	0.2
Viet Nam	4.6	4.8	4.6	1.1	1.2	1.4	-	-	-
<b>AFRICA</b>	<b>65.3</b>	<b>68.8</b>	<b>66.5</b>	<b>14.5</b>	<b>13.2</b>	<b>15.0</b>	<b>5.0</b>	<b>4.8</b>	<b>4.5</b>
Algeria	-	-	-	2.5	2.8	2.9	-	-	-
Egypt	7.2	7.0	6.5	6.0	4.6	5.5	-	-	-
Ethiopia	5.8	7.2	7.2	-	-	-	0.3	0.6	0.5
Kenya	3.1	3.6	3.2	0.6	0.2	0.8	-	-	-
Morocco	0.2	0.1	0.2	1.9	2.1	2.1	-	-	-
Nigeria	9.2	9.7	9.7	0.2	0.2	0.2	0.4	0.3	0.3
South Africa	12.3	12.8	12.1	0.2	-	-	2.3	1.7	2.0
Tanzania, United Rep. of	3.8	3.9	3.8	-	-	-	0.1	0.1	-
<b>CENTRAL AMERICA</b>	<b>24.8</b>	<b>26.3</b>	<b>26.8</b>	<b>14.1</b>	<b>12.5</b>	<b>14.5</b>	<b>0.5</b>	<b>0.2</b>	<b>0.2</b>
Mexico	20.4	21.8	22.4	9.1	7.6	9.0	0.5	0.1	0.1
<b>SOUTH AMERICA</b>	<b>86.0</b>	<b>106.2</b>	<b>116.8</b>	<b>8.6</b>	<b>8.3</b>	<b>8.7</b>	<b>25.4</b>	<b>48.7</b>	<b>43.9</b>
Argentina	19.9	21.2	25.7	-	-	-	15.0	19.0	18.5
Brazil	54.5	71.3	77.8	0.7	0.7	0.4	8.8	27.0	23.0
Chile	1.4	1.5	1.4	0.7	0.6	0.6	-	-	-
Colombia	1.6	1.8	1.7	3.3	3.3	3.5	-	-	-
Peru	1.5	1.5	1.5	1.7	1.8	2.0	-	-	-
Venezuela	2.2	3.0	3.0	1.6	1.2	1.5	-	0.1	0.1
<b>NORTH AMERICA</b>	<b>331.9</b>	<b>286.9</b>	<b>353.8</b>	<b>1.9</b>	<b>3.7</b>	<b>1.4</b>	<b>47.8</b>	<b>22.7</b>	<b>30.6</b>
Canada	11.0	13.1	13.8	1.4	0.7	0.7	0.5	1.2	0.6
United States of America	320.9	273.8	340.0	0.5	3.0	0.7	47.3	21.5	30.0
<b>EUROPE</b>	<b>92.4</b>	<b>94.5</b>	<b>105.5</b>	<b>6.1</b>	<b>11.7</b>	<b>7.7</b>	<b>12.5</b>	<b>18.1</b>	<b>19.3</b>
European Union	60.9	56.0	64.8	5.5	11.0	7.0	1.9	1.0	1.5
Russian Federation	4.8	8.2	8.7	0.1	0.1	0.1	0.8	2.3	2.5
Serbia	6.7	4.0	6.4	-	-	-	1.5	1.0	1.0
Ukraine	14.6	21.0	22.0	-	-	-	8.2	13.5	14.0
<b>OCEANIA</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.1</b>	<b>0.1</b>
<b>WORLD</b>	<b>853.9</b>	<b>872.7</b>	<b>962.8</b>	<b>93.7</b>	<b>99.5</b>	<b>103.0</b>	<b>96.3</b>	<b>99.5</b>	<b>103.0</b>
Developing countries	415.1	476.0	488.8	68.4	67.9	76.9	33.5	56.8	51.0
Developed countries	438.8	396.6	474.0	25.3	31.7	26.1	62.8	42.6	52.1
LIFDCs	106.3	114.5	110.7	12.0	9.6	12.1	6.3	6.8	5.7
LDCs	36.0	39.6	38.7	1.7	1.6	1.7	2.4	3.3	2.7

## APPENDIX TABLE 4(B): MAIZE STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(..... million tonnes.....)						(..... Kg/year.....)		
<b>ASIA</b>	<b>294.8</b>	<b>322.9</b>	<b>339.5</b>	<b>60.0</b>	<b>78.5</b>	<b>82.9</b>	<b>9.4</b>	<b>9.7</b>	<b>9.8</b>
China	182.9	205.5	220.6	46.3	62.1	66.9	7.6	8.0	8.3
of which Taiwan Prov.	4.6	4.4	4.5	0.3	0.2	0.2	5.4	5.4	5.4
India	16.6	18.2	17.8	2.2	3.6	3.6	7.2	7.9	7.6
Indonesia	19.1	20.6	21.4	3.2	3.6	3.0	29.1	29.1	31.8
Iran, Islamic Republic of	5.3	5.5	6.0	0.8	2.0	2.2	1.0	1.0	1.0
Japan	15.9	15.6	15.5	0.8	0.7	0.7	26.8	26.8	26.9
Korea, D.P.R.	2.2	2.5	2.5	-	0.1	0.2	76.0	83.2	82.7
Korea, Republic of	8.1	7.9	8.2	1.5	1.6	1.9	1.9	1.8	1.8
Malaysia	3.2	3.2	3.4	0.3	0.1	0.1	1.7	1.6	1.6
Pakistan	3.5	3.6	3.5	1.1	0.9	0.9	7.2	7.0	6.4
Philippines	7.3	7.4	7.2	0.5	0.4	0.3	16.5	16.6	14.1
Thailand	4.5	4.9	5.1	0.4	0.4	0.2	1.2	1.2	1.2
Turkey	4.5	4.8	4.9	0.5	0.5	0.5	13.1	12.8	12.6
Viet Nam	5.8	6.1	6.1	0.5	0.4	0.2	5.3	5.3	5.2
<b>AFRICA</b>	<b>73.5</b>	<b>77.5</b>	<b>78.3</b>	<b>11.3</b>	<b>12.0</b>	<b>10.7</b>	<b>39.2</b>	<b>40.3</b>	<b>40.0</b>
Algeria	2.4	2.8	2.9	0.3	0.4	0.4	3.7	3.6	3.5
Egypt	13.1	12.0	12.1	1.0	0.8	0.7	43.2	42.9	42.1
Ethiopia	5.3	6.5	6.7	0.3	0.7	0.7	48.2	51.4	53.7
Kenya	3.8	4.0	4.0	0.7	0.4	0.4	80.8	80.9	80.8
Morocco	2.0	2.2	2.3	0.5	0.7	0.7	10.6	10.6	10.4
Nigeria	8.9	9.5	9.6	0.4	0.4	0.4	30.6	30.5	30.3
South Africa	10.3	10.4	10.7	2.4	2.2	1.6	91.3	91.3	91.1
Tanzania, United Rep. of	4.0	3.9	3.8	0.5	0.3	0.2	65.6	65.9	64.1
<b>CENTRAL AMERICA</b>	<b>38.7</b>	<b>38.9</b>	<b>40.7</b>	<b>2.6</b>	<b>2.4</b>	<b>2.9</b>	<b>98.7</b>	<b>97.1</b>	<b>97.6</b>
Mexico	29.3	29.5	30.8	1.7	1.5	2.0	140.4	140.1	140.6
<b>SOUTH AMERICA</b>	<b>69.9</b>	<b>72.5</b>	<b>76.5</b>	<b>12.9</b>	<b>11.2</b>	<b>16.1</b>	<b>25.9</b>	<b>25.8</b>	<b>25.8</b>
Argentina	5.1	5.9	6.4	1.5	1.0	1.8	7.3	7.1	7.0
Brazil	47.4	48.3	51.7	6.5	4.0	7.5	23.7	23.6	23.9
Chile	2.0	2.0	1.9	0.3	0.4	0.4	16.8	16.6	16.4
Colombia	5.0	5.1	5.2	1.6	1.5	1.5	40.7	39.9	39.4
Peru	3.3	3.4	3.4	0.6	0.6	0.7	18.9	18.7	18.5
Venezuela	3.9	4.2	4.3	0.4	0.4	0.5	49.9	50.7	49.9
<b>NORTH AMERICA</b>	<b>293.7</b>	<b>274.6</b>	<b>297.3</b>	<b>33.8</b>	<b>21.1</b>	<b>48.0</b>	<b>15.0</b>	<b>14.8</b>	<b>14.7</b>
Canada	11.8	12.1	12.5	1.5	1.9	3.0	3.3	3.2	3.2
United States of America	281.9	262.6	284.9	32.4	19.2	45.0	16.3	16.1	15.9
<b>EUROPE</b>	<b>85.9</b>	<b>92.5</b>	<b>90.4</b>	<b>11.6</b>	<b>9.4</b>	<b>12.9</b>	<b>7.7</b>	<b>8.3</b>	<b>8.2</b>
European Union	64.3	69.0	68.8	7.8	6.5	8.0	8.7	9.7	9.5
Russian Federation	4.1	6.4	6.2	0.7	0.5	0.5	1.1	1.1	1.2
Serbia	5.3	3.4	3.4	0.7	-	2.1	19.2	18.2	18.1
Ukraine	6.5	8.1	8.1	1.5	1.3	1.2	12.2	13.2	13.0
<b>OCEANIA</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>2.5</b>	<b>2.5</b>	<b>2.4</b>
<b>WORLD</b>	<b>857.0</b>	<b>879.4</b>	<b>923.3</b>	<b>132.3</b>	<b>134.7</b>	<b>173.8</b>	<b>17.4</b>	<b>17.8</b>	<b>17.9</b>
Developing countries	447.8	482.6	505.6	83.3	100.9	109.9	18.2	18.7	18.8
Developed countries	409.2	396.8	417.6	48.9	33.8	63.9	14.0	14.3	14.2
LIFDCs	110.4	117.5	118.4	14.6	17.4	16.2	20.1	20.9	21.0
LDCs	34.3	37.9	38.2	6.2	7.6	7.2	26.2	27.4	27.7

## APPENDIX TABLE 5(A): BARLEY STATISTICS

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes.....)									
<b>ASIA</b>	<b>19.9</b>	<b>19.3</b>	<b>20.3</b>	<b>14.2</b>	<b>14.9</b>	<b>15.4</b>	<b>0.7</b>	<b>0.4</b>	<b>0.5</b>
China	2.0	2.0	2.1	2.2	2.3	2.5	-	-	-
India	1.6	1.6	1.7	-	-	-	-	-	-
Iran, Islamic Republic of	2.9	3.2	3.2	0.9	1.3	1.5	-	-	-
Iraq	0.9	0.8	0.8	-	0.1	0.1	-	-	-
Japan	0.2	0.2	0.2	1.3	1.4	1.6	-	-	-
Kazakhstan	2.2	1.5	2.0	-	-	-	0.5	0.2	0.4
Saudi Arabia	-	-	-	7.4	7.5	7.5	-	-	-
Syria	0.7	0.8	0.8	0.4	0.4	0.4	-	-	-
Turkey	7.4	7.1	7.5	0.1	0.1	0.1	0.2	0.2	0.2
<b>AFRICA</b>	<b>7.7</b>	<b>6.0</b>	<b>7.7</b>	<b>1.4</b>	<b>1.4</b>	<b>1.1</b>	-	-	-
Algeria	1.8	1.5	1.8	0.3	0.4	0.2	-	-	-
Ethiopia	1.8	1.9	1.9	-	-	-	-	-	-
Libya	0.1	0.1	0.1	0.4	0.4	0.4	-	-	-
Morocco	2.9	1.2	2.6	0.4	0.3	0.3	-	-	-
Tunisia	0.6	0.8	0.8	0.3	0.3	0.2	-	-	-
<b>CENTRAL AMERICA</b>	<b>0.6</b>	<b>1.0</b>	<b>0.8</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	-	-	-
Mexico	0.6	1.0	0.8	0.1	0.1	0.1	-	-	-
<b>SOUTH AMERICA</b>	<b>3.7</b>	<b>6.0</b>	<b>5.0</b>	<b>0.8</b>	<b>0.6</b>	<b>0.6</b>	<b>1.8</b>	<b>3.6</b>	<b>3.1</b>
Argentina	2.8	5.1	4.0	-	-	-	1.7	3.5	3.0
<b>NORTH AMERICA</b>	<b>12.4</b>	<b>12.8</b>	<b>13.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>1.3</b>	<b>1.7</b>	<b>1.8</b>
Canada	8.3	8.0	8.5	-	-	-	1.2	1.5	1.6
United States of America	4.1	4.8	4.8	0.3	0.4	0.5	0.1	0.2	0.2
<b>EUROPE</b>	<b>85.0</b>	<b>79.0</b>	<b>82.9</b>	<b>0.8</b>	<b>1.6</b>	<b>1.3</b>	<b>9.2</b>	<b>9.6</b>	<b>9.6</b>
Belarus	1.9	2.0	2.0	-	0.2	0.2	-	0.1	0.1
European Union	56.6	54.4	55.7	0.2	0.3	0.4	3.0	4.8	4.5
Russian Federation	15.1	14.0	16.0	0.3	0.5	0.3	2.1	2.3	2.5
Ukraine	9.8	7.0	7.7	-	0.5	0.3	4.0	2.4	2.5
<b>OCEANIA</b>	<b>8.4</b>	<b>7.4</b>	<b>8.2</b>	-	-	-	<b>4.5</b>	<b>3.8</b>	<b>4.0</b>
Australia	8.1	7.1	7.9	-	-	-	4.5	3.8	4.0
<b>WORLD</b>	<b>137.8</b>	<b>131.6</b>	<b>138.1</b>	<b>17.6</b>	<b>19.0</b>	<b>19.0</b>	<b>17.6</b>	<b>19.0</b>	<b>19.0</b>
Developing countries	28.1	29.1	29.9	14.5	15.0	15.0	1.9	3.8	3.3
Developed countries	109.7	102.6	108.2	3.1	3.9	4.0	15.6	15.3	15.7
LIFDCs	5.6	5.6	5.6	0.2	0.2	0.2	-	-	-
LDCs	2.4	2.3	2.3	-	-	-	-	-	-



## APPENDIX TABLE 5(B): BARLEY STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(..... million tonnes.....)						(..... Kg/year.....)		
<b>ASIA</b>	<b>33.6</b>	<b>33.8</b>	<b>34.1</b>	<b>6.7</b>	<b>7.3</b>	<b>8.5</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>
China	4.3	4.2	4.2	0.9	1.0	1.3	0.1	0.1	0.1
India	1.6	1.6	1.7	-	-	-	1.1	1.1	1.2
Iran, Islamic Republic of	3.7	3.9	4.2	0.5	1.6	2.1	0.4	0.4	0.3
Iraq	0.9	1.0	0.9	0.1	-	-	3.9	3.9	3.8
Japan	1.6	1.6	1.7	0.5	0.4	0.5	2.4	2.4	2.4
Kazakhstan	1.7	1.4	1.5	0.2	0.1	0.2	1.2	1.2	1.2
Saudi Arabia	7.3	7.9	7.5	1.8	1.8	1.8	1.1	1.0	1.0
Syria	1.5	1.3	1.2	0.9	0.4	0.4	12.3	12.2	12.2
Turkey	7.4	7.1	7.4	1.2	1.2	1.2	1.1	1.1	1.0
<b>AFRICA</b>	<b>8.9</b>	<b>8.0</b>	<b>8.6</b>	<b>2.2</b>	<b>1.2</b>	<b>1.4</b>	<b>3.6</b>	<b>3.5</b>	<b>3.5</b>
Algeria	1.9	1.9	1.9	0.6	0.5	0.5	16.3	16.2	15.9
Ethiopia	1.8	1.9	1.9	0.1	0.1	0.1	18.7	18.2	17.8
Libya	0.5	0.5	0.5	-	-	-	12.6	12.0	11.8
Morocco	3.0	2.1	2.7	1.0	0.2	0.4	42.2	42.2	41.7
Tunisia	1.0	1.1	1.1	0.3	0.2	0.2	8.7	8.5	8.4
<b>CENTRAL AMERICA</b>	<b>0.7</b>	<b>1.0</b>	<b>0.8</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	-	-	-
Mexico	0.7	1.0	0.8	0.1	0.2	0.2	-	-	-
<b>SOUTH AMERICA</b>	<b>2.6</b>	<b>2.7</b>	<b>2.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
Argentina	1.0	1.2	1.2	0.4	0.4	0.2	-	-	-
<b>NORTH AMERICA</b>	<b>11.3</b>	<b>11.0</b>	<b>11.2</b>	<b>3.7</b>	<b>2.4</b>	<b>2.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
Canada	6.9	6.2	6.2	1.8	0.8	1.0	0.3	0.3	0.3
United States of America	4.4	4.8	5.0	1.9	1.6	1.6	0.6	0.5	0.5
<b>EUROPE</b>	<b>79.6</b>	<b>72.8</b>	<b>74.3</b>	<b>14.6</b>	<b>8.8</b>	<b>9.1</b>	<b>1.6</b>	<b>1.5</b>	<b>1.5</b>
Belarus	1.9	1.9	1.9	0.2	0.3	0.5	-	-	-
European Union	55.6	50.9	51.5	11.1	6.4	6.5	0.8	0.8	0.8
Russian Federation	14.5	12.6	13.7	1.9	0.7	0.8	0.4	0.3	0.3
Ukraine	5.7	5.6	5.6	1.2	1.1	1.0	13.9	12.5	12.6
<b>OCEANIA</b>	<b>3.8</b>	<b>3.7</b>	<b>3.9</b>	<b>2.1</b>	<b>1.7</b>	<b>2.0</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
Australia	3.4	3.4	3.6	2.1	1.7	2.0	0.3	0.3	0.3
<b>WORLD</b>	<b>140.4</b>	<b>133.1</b>	<b>135.6</b>	<b>29.8</b>	<b>22.1</b>	<b>24.0</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>
Developing countries	40.6	40.4	40.8	8.3	7.9	8.7	1.1	1.1	1.1
Developed countries	99.8	92.7	94.8	21.5	14.1	15.2	1.3	1.2	1.2
LIFDCs	5.7	5.9	5.7	0.6	0.6	0.7	1.2	1.2	1.2
LDCs	2.4	2.3	2.3	0.2	0.2	0.2	1.9	1.9	1.9

## APPENDIX TABLE 6(A): SORGHUM STATISTICS

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes .....) )									
<b>ASIA</b>	<b>9.6</b>	<b>9.0</b>	<b>9.0</b>	<b>1.8</b>	<b>2.1</b>	<b>1.9</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
China	2.1	2.0	2.0	0.1	0.4	0.2	-	-	-
India	6.6	6.0	6.0	-	-	-	0.1	-	-
Japan	-	-	-	1.5	1.4	1.5	-	-	-
<b>AFRICA</b>	<b>25.7</b>	<b>27.6</b>	<b>27.2</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>	<b>0.7</b>
Burkina Faso	1.7	1.9	1.8	-	-	-	0.1	0.2	0.2
Ethiopia	3.8	3.8	3.8	0.1	-	-	0.3	0.2	0.2
Nigeria	8.8	8.9	8.9	-	-	-	0.1	0.1	0.1
Sudan	3.1	4.5	4.0	0.4	0.3	0.3	-	0.1	-
<b>CENTRAL AMERICA</b>	<b>6.9</b>	<b>7.4</b>	<b>7.4</b>	<b>2.1</b>	<b>2.0</b>	<b>3.0</b>	-	-	-
Mexico	6.5	7.0	7.0	2.1	2.0	3.0	-	-	-
<b>SOUTH AMERICA</b>	<b>6.1</b>	<b>7.7</b>	<b>7.4</b>	<b>0.9</b>	<b>0.9</b>	<b>1.1</b>	<b>1.6</b>	<b>2.8</b>	<b>2.0</b>
Argentina	3.2	4.3	4.1	-	-	-	1.6	2.8	2.0
Brazil	1.7	2.0	2.1	-	-	-	-	-	-
Venezuela	0.5	0.5	0.5	-	-	-	-	-	-
<b>NORTH AMERICA</b>	<b>8.0</b>	<b>6.3</b>	<b>10.8</b>	-	<b>0.3</b>	-	<b>3.2</b>	<b>2.2</b>	<b>4.0</b>
United States of America	8.0	6.3	10.8	-	0.3	-	3.2	2.2	4.0
<b>EUROPE</b>	<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>	-	-	-
European Union	0.7	0.6	0.6	0.3	0.6	0.3	-	-	-
<b>OCEANIA</b>	<b>2.0</b>	<b>2.2</b>	<b>1.7</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.7</b>	<b>1.0</b>	<b>0.6</b>
Australia	2.0	2.2	1.7	-	-	-	0.7	1.0	0.6
<b>WORLD</b>	<b>59.2</b>	<b>61.1</b>	<b>64.3</b>	<b>6.3</b>	<b>7.0</b>	<b>7.5</b>	<b>6.5</b>	<b>7.0</b>	<b>7.5</b>
Developing countries	48.2	51.6	50.8	4.1	4.3	5.4	2.6	3.7	2.8
Developed countries	11.0	9.6	13.5	2.2	2.6	2.1	4.0	3.3	4.7
LIFDCs	32.7	34.1	33.6	0.9	0.6	0.8	0.9	0.9	0.8
LDCs	15.2	17.4	16.9	0.6	0.4	0.6	0.7	0.8	0.7

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

	Production			Imports			Exports		
	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
(..... million tonnes .....) )									
ASIA	18.7	19.8	17.8	0.5	0.6	0.6	0.2	0.1	0.1
AFRICA	19.0	21.6	20.7	0.1	0.1	0.1	0.6	1.0	0.9
CENTRAL AMERICA	0.1	0.1	0.1	0.1	0.2	0.2	-	-	-
SOUTH AMERICA	1.5	1.8	1.6	0.2	0.1	0.1	0.1	0.1	0.1
NORTH AMERICA	5.1	4.7	5.3	1.8	1.9	2.0	1.6	1.7	1.7
EUROPE	46.0	45.7	46.8	0.4	0.6	0.5	0.5	0.6	0.6
OCEANIA	1.8	1.6	1.8	0.1	0.1	0.1	0.2	0.1	0.2
<b>WORLD</b>	<b>92.2</b>	<b>95.4</b>	<b>94.2</b>	<b>3.2</b>	<b>3.5</b>	<b>3.5</b>	<b>3.0</b>	<b>3.5</b>	<b>3.5</b>

## APPENDIX TABLE 6(B): SORGHUM STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(..... million tonnes.....)						(..... Kg/year.....)		
<b>ASIA</b>	<b>11.4</b>	<b>11.1</b>	<b>10.9</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>1.6</b>	<b>1.5</b>	<b>1.5</b>
China	2.2	2.3	2.2	0.5	0.5	0.5	0.3	0.4	0.4
India	6.6	6.0	6.0	0.1	0.1	0.1	4.8	4.2	4.2
Japan	1.5	1.5	1.5	0.3	0.2	0.2	-	-	-
<b>AFRICA</b>	<b>26.2</b>	<b>27.3</b>	<b>27.7</b>	<b>2.1</b>	<b>1.8</b>	<b>1.5</b>	<b>20.0</b>	<b>19.8</b>	<b>19.8</b>
Burkina Faso	1.6	1.7	1.7	0.1	0.2	0.1	81.3	79.0	79.2
Ethiopia	3.6	3.7	3.6	0.2	0.1	0.1	33.8	33.4	31.5
Nigeria	8.8	8.8	8.8	0.1	0.1	0.1	43.1	42.1	41.1
Sudan	3.7	4.3	4.3	0.2	0.4	0.4	74.1	76.0	75.0
<b>CENTRAL AMERICA</b>	<b>9.2</b>	<b>9.2</b>	<b>10.4</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.9</b>	<b>0.7</b>	<b>0.7</b>
Mexico	8.7	8.8	10.0	0.5	0.4	0.4	-	-	-
<b>SOUTH AMERICA</b>	<b>5.4</b>	<b>6.5</b>	<b>6.7</b>	<b>0.9</b>	<b>1.2</b>	<b>1.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
Argentina	1.6	2.3	2.3	0.4	0.7	0.5	-	-	-
Brazil	1.7	2.0	2.1	0.2	0.4	0.4	-	-	-
Venezuela	0.5	0.5	0.5	-	0.1	0.1	-	-	-
<b>NORTH AMERICA</b>	<b>5.0</b>	<b>4.6</b>	<b>6.1</b>	<b>0.8</b>	<b>0.6</b>	<b>1.4</b>	<b>-</b>	<b>-</b>	<b>-</b>
United States of America	5.0	4.6	6.1	0.8	0.6	1.4	-	-	-
<b>EUROPE</b>	<b>1.3</b>	<b>1.6</b>	<b>1.2</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
European Union	1.1	1.2	0.9	0.3	0.2	0.2	0.4	0.4	0.4
<b>OCEANIA</b>	<b>1.6</b>	<b>1.5</b>	<b>1.3</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
Australia	1.5	1.4	1.2	0.6	0.3	0.3	-	-	-
<b>WORLD</b>	<b>60.1</b>	<b>61.8</b>	<b>64.3</b>	<b>6.2</b>	<b>5.5</b>	<b>5.8</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>
Developing countries	50.3	52.4	53.9	4.2	4.3	3.7	5.0	4.9	4.9
Developed countries	9.8	9.4	10.4	2.0	1.2	2.1	0.3	0.3	0.3
LIFDCs	33.0	33.5	33.9	2.2	2.0	1.7	9.4	9.2	9.2
LDCs	15.5	16.7	17.1	1.8	1.7	1.4	14.7	14.9	15.2

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

	Total Utilization			Stocks ending in			Per caput food use		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2010-2012 average	2013 <i>estim.</i>	2014 <i>f'cast</i>	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	(..... million tonnes.....)						(..... Kg/year.....)		
ASIA	18.8	19.9	20.1	1.9	3.1	1.3	3.7	3.8	3.9
AFRICA	18.5	19.9	20.1	2.0	2.8	2.6	14.2	14.3	14.4
CENTRAL AMERICA	0.2	0.3	0.3	-	-	-	0.2	0.5	0.5
SOUTH AMERICA	1.6	1.8	1.6	0.1	0.1	0.1	0.9	0.8	0.8
NORTH AMERICA	4.7	4.9	4.5	2.0	0.8	1.0	2.6	2.6	2.5
EUROPE	46.9	45.9	45.5	5.2	3.6	4.9	12.5	12.0	12.2
OCEANIA	1.6	1.6	1.7	0.2	0.3	0.3	5.2	5.2	5.2
<b>WORLD</b>	<b>92.4</b>	<b>94.3</b>	<b>93.8</b>	<b>11.5</b>	<b>10.7</b>	<b>10.2</b>	<b>5.9</b>	<b>6.0</b>	<b>6.0</b>

## APPENDIX TABLE 8(A): RICE STATISTICS

	Production			Imports			Exports		
	09/10-11/12 average	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>
(..... million tonnes, milled equivalent.....)									
<b>ASIA</b>	<b>425.5</b>	<b>444.5</b>	<b>453.0</b>	<b>15.7</b>	<b>18.2</b>	<b>17.7</b>	<b>25.1</b>	<b>30.3</b>	<b>29.5</b>
Bangladesh	33.1	33.7	34.1	0.8	0.1	0.1	-	-	-
China	136.3	141.1	142.8	1.1	3.0	3.0	0.7	0.3	0.3
of which Taiwan Prov.	1.1	1.2	1.2	0.3	0.2	0.3	0.1	0.1	-
India	96.8	104.2	106.0	0.1	0.1	0.1	3.1	10.3	8.6
Indonesia	41.3	43.5	45.4	1.4	1.8	1.3	-	-	-
Iran, Islamic Republic of	1.4	1.5	1.5	1.2	1.5	1.3	-	-	-
Iraq	0.1	0.1	0.1	1.2	1.4	1.4	-	-	-
Japan	7.7	7.7	7.7	0.7	0.6	0.7	0.2	0.2	0.2
Korea, D.P.R.	1.6	1.8	1.7	0.1	0.3	0.3	-	-	-
Korea, Republic of	4.5	4.0	4.2	0.4	0.2	0.5	-	-	-
Malaysia	1.6	1.7	1.8	1.0	1.1	1.1	-	-	-
Myanmar	20.3	19.8	20.5	-	-	-	0.8	0.6	0.7
Pakistan	6.0	5.4	6.2	-	0.1	0.1	3.2	2.8	2.9
Philippines	10.7	11.8	12.4	1.8	1.1	1.0	-	-	0.1
Saudi Arabia	-	-	-	1.1	1.3	1.4	-	-	-
Sri Lanka	2.7	2.6	2.8	0.1	-	-	-	-	-
Thailand	22.8	23.8	24.2	0.4	0.8	0.5	9.4	7.0	7.0
Viet Nam	27.0	29.1	29.0	0.5	0.6	0.6	6.7	7.7	8.2
<b>AFRICA</b>	<b>16.2</b>	<b>17.5</b>	<b>18.1</b>	<b>10.4</b>	<b>13.5</b>	<b>12.9</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>
Cote d'Ivoire	0.4	0.4	0.4	1.0	1.3	1.3	-	-	-
Egypt	3.6	4.5	4.7	0.2	0.4	0.3	0.4	0.4	0.5
Madagascar	3.0	3.0	2.9	0.1	0.3	0.3	-	-	-
Nigeria	2.5	2.5	2.6	2.1	3.0	2.7	-	-	-
Senegal	0.4	0.5	0.5	0.7	1.2	0.9	-	-	-
South Africa	-	-	-	0.9	1.3	1.2	-	-	-
Tanzania, United Rep. of	1.0	0.7	0.9	0.1	0.2	0.2	-	-	-
<b>CENTRAL AMERICA</b>	<b>1.9</b>	<b>1.8</b>	<b>1.9</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	-	<b>0.1</b>	-
Cuba	0.4	0.4	0.4	0.5	0.4	0.4	-	-	-
Mexico	0.1	0.1	0.1	0.6	0.6	0.6	-	-	-
<b>SOUTH AMERICA</b>	<b>16.8</b>	<b>16.4</b>	<b>16.6</b>	<b>1.2</b>	<b>1.6</b>	<b>1.6</b>	<b>2.8</b>	<b>3.4</b>	<b>3.1</b>
Argentina	1.0	1.1	1.0	-	-	-	0.6	0.6	0.6
Brazil	8.5	7.8	8.0	0.7	0.7	0.7	0.8	1.1	0.9
Peru	1.9	2.0	1.9	0.1	0.3	0.2	-	-	-
Uruguay	1.0	1.0	1.0	-	-	-	0.9	1.0	0.9
<b>NORTH AMERICA</b>	<b>6.9</b>	<b>6.3</b>	<b>6.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>3.4</b>	<b>3.3</b>	<b>3.4</b>
Canada	-	-	-	0.3	0.3	0.4	-	-	-
United States of America	6.9	6.3	6.0	0.6	0.6	0.7	3.4	3.3	3.4
<b>EUROPE</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>1.6</b>	<b>1.7</b>	<b>1.8</b>	<b>0.3</b>	<b>0.6</b>	<b>0.5</b>
European Union	1.9	1.9	1.8	1.2	1.3	1.4	0.2	0.3	0.3
Russian Federation	0.7	0.7	0.7	0.2	0.2	0.2	0.1	0.3	0.2
<b>OCEANIA</b>	<b>0.2</b>	<b>0.6</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.1</b>	<b>0.4</b>	<b>0.5</b>
Australia	0.2	0.6	0.7	0.2	0.1	0.1	0.1	0.4	0.5
<b>WORLD</b>	<b>470.2</b>	<b>489.9</b>	<b>499.1</b>	<b>32.4</b>	<b>38.6</b>	<b>37.6</b>	<b>32.4</b>	<b>38.6</b>	<b>37.6</b>
Developing countries	452.2	471.9	481.5	27.7	33.4	32.4	28.3	34.1	33.0
Developed countries	17.9	18.0	17.7	4.7	5.1	5.2	4.1	4.6	4.6
LIFDCs	213.6	227.1	232.7	15.8	18.0	16.8	4.7	12.1	10.6
LDCs	73.7	74.8	76.4	6.5	7.0	6.8	2.0	1.9	2.2

# APPENDIX TABLE 8(B): RICE STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	2009-2011 average	2012 <i>estim.</i>	2013 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>
	(..... million tonnes, milled equivalent.....)						(..... Kg/year.....)		
<b>ASIA</b>	<b>397.7</b>	<b>412.5</b>	<b>420.4</b>	<b>130.3</b>	<b>154.3</b>	<b>167.0</b>	<b>81.2</b>	<b>81.4</b>	<b>81.9</b>
Bangladesh	32.3	33.9	34.1	5.8	7.0	6.7	150.0	152.9	153.0
China	128.8	132.4	134.0	70.0	84.7	94.4	76.9	76.6	76.5
of which Taiwan Prov.	1.3	1.4	1.4	0.2	0.1	0.1	53.3	57.7	57.8
India	90.8	92.8	96.0	22.4	23.8	23.5	71.8	71.4	72.4
Indonesia	39.8	43.4	45.1	4.4	6.2	6.4	157.3	161.2	165.1
Iran, Islamic Republic of	2.6	2.7	2.8	0.3	0.5	0.5	31.6	32.1	32.4
Iraq	1.3	1.5	1.5	0.1	0.1	0.1	41.1	45.0	45.9
Japan	8.2	8.1	8.2	2.5	2.6	2.7	58.6	57.8	57.6
Korea, D.P.R.	1.6	2.0	2.0	-	0.1	0.1	60.1	72.2	74.0
Korea, Republic of	4.7	4.6	4.5	1.4	1.6	1.7	72.6	69.8	68.5
Malaysia	2.6	2.7	2.8	0.3	0.2	0.3	83.9	85.3	86.0
Myanmar	19.7	19.6	19.7	6.0	5.8	5.3	229.4	230.9	231.1
Pakistan	3.1	3.1	2.9	0.8	0.6	0.3	14.8	13.8	12.8
Philippines	12.3	13.3	13.2	3.0	1.9	1.5	120.1	124.5	124.6
Saudi Arabia	1.1	1.3	1.4	0.2	0.2	0.2	40.8	45.0	46.6
Sri Lanka	2.6	2.8	2.7	0.3	0.3	0.2	113.0	116.9	117.0
Thailand	11.8	12.3	12.9	6.5	12.6	17.0	128.0	130.3	132.5
Viet Nam	20.5	21.1	21.4	3.6	2.9	3.1	188.5	188.7	188.8
<b>AFRICA</b>	<b>25.6</b>	<b>28.7</b>	<b>30.1</b>	<b>2.9</b>	<b>3.3</b>	<b>3.0</b>	<b>22.2</b>	<b>23.8</b>	<b>24.6</b>
Cote d'Ivoire	1.4	1.7	1.7	-	0.1	0.1	64.0	74.0	74.7
Egypt	3.9	3.9	4.2	1.0	0.6	0.7	41.4	40.3	42.6
Madagascar	3.0	3.1	3.3	0.2	0.2	0.2	126.9	126.1	127.0
Nigeria	4.4	5.5	5.6	0.3	0.7	0.3	24.6	28.9	29.0
Senegal	1.1	1.2	1.3	0.1	0.3	0.4	79.6	83.5	86.5
South Africa	0.9	0.9	1.2	-	-	0.1	16.5	16.9	22.2
Tanzania, United Rep. of	1.0	1.1	1.0	0.1	0.1	-	18.3	19.1	19.0
<b>CENTRAL AMERICA</b>	<b>3.8</b>	<b>3.9</b>	<b>4.0</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>18.5</b>	<b>18.5</b>	<b>18.5</b>
Cuba	0.8	0.8	0.8	-	-	-	66.7	65.9	66.0
Mexico	0.8	0.7	0.8	-	-	-	6.8	6.6	6.7
<b>SOUTH AMERICA</b>	<b>15.1</b>	<b>16.1</b>	<b>14.9</b>	<b>2.8</b>	<b>1.8</b>	<b>1.6</b>	<b>35.6</b>	<b>36.9</b>	<b>34.3</b>
Argentina	0.4	0.4	0.4	0.1	-	-	9.2	8.8	8.7
Brazil	8.1	9.0	7.6	1.7	1.1	0.9	39.9	42.7	37.1
Peru	2.0	2.1	2.1	0.4	0.3	0.3	62.3	63.5	64.5
Uruguay	0.1	0.1	0.1	0.1	0.1	-	7.4	7.6	7.6
<b>NORTH AMERICA</b>	<b>4.5</b>	<b>3.7</b>	<b>4.2</b>	<b>1.3</b>	<b>1.3</b>	<b>1.1</b>	<b>11.1</b>	<b>9.5</b>	<b>10.6</b>
Canada	0.3	0.3	0.4	-	-	-	10.1	10.1	10.1
United States of America	4.1	3.4	3.9	1.2	1.3	1.1	11.2	9.5	10.6
<b>EUROPE</b>	<b>3.7</b>	<b>3.9</b>	<b>4.0</b>	<b>0.5</b>	<b>0.6</b>	<b>0.5</b>	<b>4.7</b>	<b>4.8</b>	<b>5.1</b>
European Union	2.7	2.9	3.0	0.5	0.5	0.5	5.1	5.3	5.5
Russian Federation	0.7	0.7	0.7	-	-	-	4.6	4.3	4.5
<b>OCEANIA</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>-</b>	<b>0.1</b>	<b>0.1</b>	<b>14.8</b>	<b>16.4</b>	<b>16.2</b>
Australia	0.2	0.3	0.3	-	-	-	9.7	11.3	11.2
<b>WORLD</b>	<b>451.0</b>	<b>469.5</b>	<b>478.4</b>	<b>138.2</b>	<b>161.7</b>	<b>173.7</b>	<b>56.0</b>	<b>56.4</b>	<b>56.8</b>
Developing countries	432.7	451.7	459.5	133.8	157.1	169.2	67.0	67.4	67.6
Developed countries	18.3	17.8	18.9	4.4	4.6	4.5	12.1	11.7	12.3
LIFDCs	215.9	228.7	235.0	41.0	45.2	43.9	69.1	70.2	70.9
LDCs	75.6	79.2	80.3	15.4	17.1	16.2	65.1	65.9	65.7

## APPENDIX TABLE 9: CEREAL SUPPLY AND UTILIZATION IN MAIN EXPORTING COUNTRIES (*million tonnes*)

	Wheat <sup>1</sup>			Coarse Grains <sup>2</sup>			Rice (milled basis)		
	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>	2011/12	2012/13 <i>estim.</i>	2013/14 <i>f'cast</i>
	<b>UNITED STATES (June/May)</b>			<b>UNITED STATES</b>			<b>UNITED STATES (Aug./July)</b>		
Opening stocks	23.5	20.2	19.9	32.3	27.8	21.9	1.5	1.3	1.1
Production	54.4	61.8	56.0	324.0	286.3	357.1	5.9	6.3	6.0
Imports	3.1	3.4	3.5	2.9	5.8	2.9	0.6	0.7	0.7
<b>Total Supply</b>	<b>80.9</b>	<b>85.4</b>	<b>79.4</b>	<b>359.2</b>	<b>319.9</b>	<b>382.0</b>	<b>8.0</b>	<b>8.3</b>	<b>7.8</b>
Domestic use	32.2	37.6	36.0	290.3	275.4	299.2	3.5	3.8	3.7
Exports	28.6	27.9	25.2	41.1	22.6	34.1	3.2	3.4	3.1
Closing stocks	20.2	19.9	18.2	27.8	21.9	48.7	1.3	1.1	1.1
	<b>CANADA (August/July)</b>			<b>CANADA</b>			<b>THAILAND (Nov./Oct.)<sup>3</sup></b>		
Opening stocks	7.5	5.9	4.9	3.7	3.4	2.9	7.7	12.6	17.0
Production	25.3	27.2	29.4	23.0	24.4	26.0	23.4	23.8	24.2
Imports	0.1	0.1	0.1	1.0	0.6	0.5	0.8	0.5	0.2
<b>Total Supply</b>	<b>32.8</b>	<b>33.2</b>	<b>34.4</b>	<b>27.6</b>	<b>28.4</b>	<b>29.5</b>	<b>31.8</b>	<b>36.9</b>	<b>41.4</b>
Domestic use	9.4	9.7	9.6	19.1	19.7	20.0	12.3	12.9	13.5
Exports	17.5	18.7	18.8	5.1	5.8	5.1	7.0	7.0	7.5
Closing stocks	5.9	4.9	6.0	3.4	2.9	4.4	12.6	17.0	20.4
	<b>ARGENTINA (Dec./Nov.)</b>			<b>ARGENTINA</b>			<b>INDIA (Oct./Sept.)<sup>3</sup></b>		
Opening stocks	3.7	1.6	0.7	1.9	4.1	2.1	21.5	23.8	23.5
Production	14.5	9.0	11.0	32.8	31.1	34.3	105.3	104.2	106.0
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
<b>Total Supply</b>	<b>18.2</b>	<b>10.6</b>	<b>11.7</b>	<b>34.8</b>	<b>35.2</b>	<b>36.4</b>	<b>126.9</b>	<b>128.1</b>	<b>129.6</b>
Domestic use	5.1	5.1	5.1	9.8	9.9	10.4	92.8	96.0	98.6
Exports	11.5	4.8	5.5	20.8	23.3	23.5	10.3	8.6	7.6
Closing stocks	1.6	0.7	1.1	4.1	2.1	2.5	23.8	23.5	23.4
	<b>AUSTRALIA (Oct./Sept.)</b>			<b>AUSTRALIA</b>			<b>PAKISTAN (Nov./Oct.)<sup>3</sup></b>		
Opening stocks	6.3	4.9	2.6	3.0	2.5	2.3	0.3	0.6	0.3
Production	29.9	22.1	24.0	12.6	11.3	11.8	6.2	5.4	6.2
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
<b>Total Supply</b>	<b>36.2</b>	<b>27.0</b>	<b>26.6</b>	<b>15.6</b>	<b>13.7</b>	<b>14.1</b>	<b>6.5</b>	<b>6.0</b>	<b>6.5</b>
Domestic use	6.7	5.9	6.0	6.8	6.5	6.7	3.1	2.9	3.2
Exports	24.7	18.5	18.0	6.3	4.9	4.9	2.8	2.9	2.9
Closing stocks	4.9	2.6	2.6	2.5	2.3	2.5	0.6	0.3	0.4
	<b>EU (July/June)</b>			<b>EU</b>			<b>VIET NAM (Nov./Oct.)<sup>3</sup></b>		
Opening stocks	10.7	11.4	8.0	19.9	19.3	15.4	2.9	2.9	3.1
Production	137.6	131.3	139.0	149.0	142.3	152.9	28.2	29.1	29.0
Imports	7.1	6.0	6.5	7.3	12.2	8.0	0.6	0.6	0.6
<b>Total Supply</b>	<b>155.5</b>	<b>148.7</b>	<b>153.5</b>	<b>176.2</b>	<b>173.8</b>	<b>176.2</b>	<b>31.7</b>	<b>32.7</b>	<b>32.6</b>
Domestic use	127.6	119.2	124.6	150.5	152.4	152.2	21.1	21.4	21.6
Exports	16.5	21.5	17.5	6.5	6.0	6.2	7.7	8.2	7.7
Closing stocks	11.4	8.0	11.5	19.3	15.4	17.9	2.9	3.1	3.4
	<b>TOTAL OF ABOVE</b>			<b>TOTAL OF ABOVE</b>			<b>TOTAL OF ABOVE</b>		
Opening stocks	51.6	44.0	36.1	60.8	57.1	44.5	33.9	41.2	44.9
Production	261.8	251.3	259.4	541.4	495.4	582.2	168.9	168.9	171.4
Imports	10.3	9.5	10.1	11.2	18.6	11.4	2.1	1.9	1.6
<b>Total Supply</b>	<b>323.6</b>	<b>304.8</b>	<b>305.6</b>	<b>613.4</b>	<b>571.1</b>	<b>638.1</b>	<b>204.9</b>	<b>212.1</b>	<b>217.9</b>
Domestic use	180.9	177.4	181.2	476.6	463.9	488.4	132.7	137.1	140.5
Exports	98.8	91.3	85.0	79.7	62.6	73.8	31.0	30.1	28.8
Closing stocks	44.0	36.1	39.4	57.1	44.5	76.0	41.2	44.9	48.6

<sup>1</sup> Trade data include wheat flour in wheat grain equivalent. For the EU semolina is also included.

<sup>2</sup> **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.

<sup>3</sup> Rice trade data refer to the calendar year of the second year shown.

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

	Production <sup>1</sup>			Imports			Exports		
	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>
<b>ASIA</b>	<b>128.0</b>	<b>133.4</b>	<b>133.6</b>	<b>73.0</b>	<b>84.6</b>	<b>86.1</b>	<b>2.3</b>	<b>3.0</b>	<b>2.3</b>
China	59.3	60.2	60.4	53.0	64.6	65.7	1.2	1.2	1.1
of which Taiwan Prov.	0.1	0.1	0.1	2.4	2.2	2.4	-	-	-
India	35.5	37.6	37.5	0.2	0.2	0.2	0.6	1.0	0.6
Indonesia	8.9	9.9	10.3	2.0	2.1	2.1	0.1	0.1	0.1
Iran, Islamic Republic of	0.7	0.9	0.9	0.8	0.6	0.7	-	-	-
Japan	0.3	0.2	0.3	5.9	5.5	5.5	-	-	-
Korea, Republic of	0.2	0.2	0.2	1.6	1.4	1.4	-	-	-
Malaysia	4.6	4.9	5.0	0.7	0.5	0.7	-	-	-
Pakistan	4.8	5.8	5.3	1.2	1.4	1.1	-	-	-
Thailand	0.7	0.8	0.8	1.9	2.1	2.2	-	-	-
Turkey	2.3	2.5	2.5	2.3	2.2	2.0	0.1	0.1	0.1
<b>AFRICA</b>	<b>17.1</b>	<b>16.9</b>	<b>17.4</b>	<b>3.1</b>	<b>3.1</b>	<b>3.2</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>
Nigeria	4.8	5.1	4.9	-	-	-	0.2	0.2	0.1
<b>CENTRAL AMERICA</b>	<b>1.2</b>	<b>1.2</b>	<b>1.3</b>	<b>5.9</b>	<b>6.4</b>	<b>5.7</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
Mexico	0.7	0.8	0.8	5.2	5.8	5.2	-	-	-
<b>SOUTH AMERICA</b>	<b>131.0</b>	<b>126.1</b>	<b>153.9</b>	<b>1.8</b>	<b>1.2</b>	<b>1.3</b>	<b>46.0</b>	<b>51.3</b>	<b>56.5</b>
Argentina	49.0	44.9	53.9	0.5	0.3	0.2	9.7	8.3	11.3
Brazil	70.2	70.3	84.4	0.1	0.1	0.1	30.0	36.4	37.0
Paraguay	6.9	4.7	8.8	-	-	-	4.4	3.9	5.1
<b>NORTH AMERICA</b>	<b>114.5</b>	<b>113.0</b>	<b>112.9</b>	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>50.6</b>	<b>51.7</b>	<b>49.1</b>
Canada	17.8	20.1	19.6	0.7	0.5	0.5	10.8	12.5	11.4
United States of America	96.7	92.9	93.3	1.3	1.4	1.3	39.8	39.3	37.8
<b>EUROPE</b>	<b>50.1</b>	<b>57.5</b>	<b>53.5</b>	<b>19.6</b>	<b>17.7</b>	<b>18.2</b>	<b>4.1</b>	<b>4.7</b>	<b>4.2</b>
European Union	28.8	29.6	27.8	17.8	16.3	16.7	0.8	0.8	0.6
Russian Federation	8.2	12.4	11.1	1.1	0.9	1.0	0.3	0.5	0.3
Ukraine	10.9	13.1	12.3	-	-	-	2.7	3.0	3.0
<b>OCEANIA</b>	<b>3.4</b>	<b>5.4</b>	<b>5.0</b>	<b>0.1</b>	<b>0.1</b>	<b>-</b>	<b>1.6</b>	<b>3.1</b>	<b>3.2</b>
Australia	3.0	5.0	4.6	-	-	-	1.5	3.0	3.1
<b>WORLD</b>	<b>445.2</b>	<b>453.6</b>	<b>477.5</b>	<b>105.4</b>	<b>115.0</b>	<b>116.4</b>	<b>105.6</b>	<b>115.0</b>	<b>116.4</b>
Developing countries	271.9	272.6	300.7	76.9	88.9	89.9	49.2	55.3	59.6
Developed countries	173.2	181.0	176.9	28.5	26.1	26.5	56.4	59.7	56.8
LIFDCs	131.9	136.8	136.9	57.6	69.7	70.4	3.1	3.8	3.0
LDCs	10.8	10.7	11.0	0.4	0.6	0.3	0.4	0.4	0.5

<sup>1</sup> 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 (*million tonnes*)

	Imports			Exports			Utilization		
	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>
<b>ASIA</b>	<b>36.4</b>	<b>41.4</b>	<b>43.3</b>	<b>41.7</b>	<b>44.9</b>	<b>48.0</b>	<b>83.1</b>	<b>93.6</b>	<b>97.0</b>
Bangladesh	1.3	1.5	1.6	-	-	-	1.6	1.8	1.8
China	10.6	10.8	12.2	0.6	0.5	0.6	30.7	33.9	35.9
of which Taiwan Prov.	0.4	0.4	0.4	-	-	-	0.8	0.9	0.9
India	8.8	10.2	11.0	0.5	0.5	0.5	18.3	19.8	20.1
Indonesia	0.1	0.1	0.1	19.1	21.2	22.7	6.4	9.1	9.6
Iran	1.3	1.5	1.6	0.2	0.2	0.1	1.7	1.8	1.9
Japan	1.2	1.3	1.3	-	-	-	3.0	3.2	3.1
Korea, Republic of	0.9	1.0	1.0	-	-	-	1.3	1.4	1.4
Malaysia	2.0	2.9	2.3	18.1	19.0	20.3	3.7	4.2	4.4
Pakistan	2.2	2.4	2.6	0.1	0.1	0.1	3.8	4.2	4.2
Philippines	0.5	0.6	0.6	1.1	0.9	1.1	1.2	1.2	1.1
Singapore	0.7	1.1	1.0	0.3	0.2	0.2	0.4	0.8	0.8
Turkey	1.2	1.6	1.6	0.3	0.6	0.5	2.3	2.5	2.6
<b>AFRICA</b>	<b>8.1</b>	<b>8.5</b>	<b>8.8</b>	<b>1.6</b>	<b>1.7</b>	<b>1.8</b>	<b>13.5</b>	<b>14.2</b>	<b>14.4</b>
Algeria	0.6	0.7	0.6	-	-	-	0.7	0.8	0.7
Egypt	1.8	1.9	1.9	0.3	0.4	0.4	2.0	1.9	2.1
Nigeria	1.0	0.9	1.1	0.1	0.1	0.1	2.6	2.7	2.8
South Africa	0.7	0.8	0.8	0.1	0.1	0.1	1.1	1.3	1.2
<b>CENTRAL AMERICA</b>	<b>2.3</b>	<b>2.5</b>	<b>2.5</b>	<b>0.7</b>	<b>0.9</b>	<b>1.0</b>	<b>4.5</b>	<b>4.9</b>	<b>4.8</b>
Mexico	1.2	1.4	1.4	0.1	0.1	0.1	2.9	3.3	3.2
<b>SOUTH AMERICA</b>	<b>2.4</b>	<b>2.9</b>	<b>2.9</b>	<b>9.0</b>	<b>8.8</b>	<b>8.9</b>	<b>13.3</b>	<b>15.4</b>	<b>15.5</b>
Argentina	0.1	0.1	0.1	5.8	5.2	5.4	2.4	3.5	3.3
Brazil	0.5	0.6	0.6	1.9	2.1	2.0	7.1	7.4	7.6
<b>NORTH AMERICA</b>	<b>4.3</b>	<b>4.8</b>	<b>4.8</b>	<b>6.5</b>	<b>6.7</b>	<b>7.0</b>	<b>17.4</b>	<b>19.1</b>	<b>19.0</b>
Canada	0.6	0.6	0.6	2.7	3.4	3.3	1.0	1.2	1.0
United States of America	3.7	4.2	4.3	3.8	3.2	3.8	16.5	17.9	17.9
<b>EUROPE</b>	<b>13.3</b>	<b>12.7</b>	<b>13.7</b>	<b>6.0</b>	<b>8.5</b>	<b>8.1</b>	<b>36.3</b>	<b>36.5</b>	<b>36.6</b>
European Union	10.7	10.3	11.2	2.3	2.9	2.8	30.1	30.0	30.0
Russian Federation	1.1	1.0	1.1	0.8	1.8	1.6	3.9	4.0	4.1
Ukraine	0.5	0.3	0.4	2.6	3.4	3.3	1.0	1.0	1.1
<b>OCEANIA</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>
Australia	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7
<b>WORLD</b>	<b>67.3</b>	<b>73.4</b>	<b>76.7</b>	<b>67.3</b>	<b>73.3</b>	<b>76.7</b>	<b>169.3</b>	<b>184.7</b>	<b>188.4</b>
Developing countries	46.8	52.8	55.0	53.4	56.9	60.3	109.4	122.6	126.4
Developed countries	20.4	20.6	21.7	13.8	16.5	16.4	59.9	62.1	62.0
LIFDCs	32.0	34.4	37.3	23.4	25.5	27.6	76.1	84.8	88.0
LDCs	4.7	5.2	5.3	0.5	0.4	0.4	7.7	8.3	8.4

<sup>1</sup> Includes oils and fats of vegetable, marine and animal origin.



**APPENDIX TABLE 12: TOTAL MEALS AND CAKES STATISTICS<sup>1</sup> (million tonnes)**

	Imports			Exports			Utilization		
	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	08/09-10/11 average	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>
<b>ASIA</b>	<b>27.6</b>	<b>31.0</b>	<b>31.2</b>	<b>13.8</b>	<b>15.1</b>	<b>15.7</b>	<b>115.1</b>	<b>131.6</b>	<b>132.9</b>
China	3.4	3.2	2.7	1.5	1.3	1.9	60.6	72.3	73.8
of which Taiwan Prov.	0.4	0.5	0.5	-	-	-	2.3	2.4	2.4
India	0.1	0.1	0.2	4.8	5.5	5.4	11.9	11.7	11.4
Indonesia	2.9	3.6	3.7	3.0	3.3	3.6	3.5	5.6	5.6
Japan	2.7	2.8	2.9	-	-	-	7.0	6.8	6.8
Korea, Republic of	3.4	3.5	3.5	0.1	0.1	0.1	4.7	4.6	4.5
Malaysia	1.0	1.1	1.2	2.3	2.5	2.5	1.8	1.8	1.9
Pakistan	0.5	0.7	0.7	0.2	0.2	0.1	3.0	3.5	3.6
Philippines	1.7	1.8	1.9	0.5	0.5	0.5	2.2	2.2	2.2
Saudi Arabia	0.5	0.6	0.6	-	-	-	0.5	0.6	0.7
Thailand	2.8	3.2	3.3	0.1	0.1	0.1	4.8	5.5	5.6
Turkey	1.0	1.9	1.7	-	0.4	0.2	3.3	3.9	3.9
Viet Nam	3.2	3.3	3.5	0.1	0.1	0.1	3.3	4.0	4.1
<b>AFRICA</b>	<b>3.9</b>	<b>4.6</b>	<b>4.6</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>10.0</b>	<b>11.1</b>	<b>11.1</b>
Egypt	0.7	1.0	1.0	-	-	-	2.1	2.7	2.6
South Africa	1.1	1.2	1.2	0.1	0.1	0.1	1.8	1.9	1.9
<b>CENTRAL AMERICA</b>	<b>3.3</b>	<b>3.6</b>	<b>3.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>7.9</b>	<b>8.3</b>	<b>8.1</b>
Mexico	1.8	2.0	1.8	0.1	0.1	0.1	5.8	6.2	6.1
<b>SOUTH AMERICA</b>	<b>4.5</b>	<b>5.0</b>	<b>5.3</b>	<b>43.4</b>	<b>45.9</b>	<b>44.3</b>	<b>23.5</b>	<b>23.0</b>	<b>23.8</b>
Argentina	-	-	-	26.3	27.1	25.4	2.5	2.9	3.1
Bolivia	-	-	-	1.1	1.4	1.5	0.2	0.2	0.2
Brazil	0.2	0.3	0.3	13.2	14.7	14.5	14.9	13.4	13.9
Chile	0.9	1.0	1.1	0.4	0.3	0.4	1.3	1.4	1.4
Paraguay	-	-	-	0.9	0.8	1.5	0.4	0.6	0.6
Peru	0.8	0.9	0.9	1.4	1.3	0.8	0.9	1.1	1.1
Venezuela	1.3	1.2	1.4	-	-	-	1.4	1.4	1.4
<b>NORTH AMERICA</b>	<b>3.2</b>	<b>4.4</b>	<b>4.7</b>	<b>12.2</b>	<b>13.5</b>	<b>13.8</b>	<b>33.5</b>	<b>36.2</b>	<b>33.1</b>
Canada	1.2	1.2	1.2	3.1	4.2	4.4	2.2	2.3	2.2
United States of America	2.0	3.2	3.5	9.1	9.3	9.4	31.4	33.8	30.9
<b>EUROPE</b>	<b>31.0</b>	<b>32.5</b>	<b>30.9</b>	<b>5.1</b>	<b>7.6</b>	<b>7.4</b>	<b>61.2</b>	<b>62.0</b>	<b>60.3</b>
European Union	28.6	29.4	28.1	1.2	1.6	1.6	54.4	53.8	51.9
Russian Federation	0.5	0.6	0.6	1.0	2.1	1.8	3.5	4.5	4.7
Ukraine	0.1	0.1	-	2.5	3.3	3.4	0.8	0.8	0.9
<b>OCEANIA</b>	<b>2.1</b>	<b>2.3</b>	<b>2.5</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>2.7</b>	<b>3.0</b>	<b>3.2</b>
Australia	0.7	0.8	0.8	-	0.1	0.1	1.3	1.4	1.5
<b>WORLD</b>	<b>75.6</b>	<b>83.5</b>	<b>82.6</b>	<b>75.8</b>	<b>83.4</b>	<b>82.6</b>	<b>254.0</b>	<b>275.2</b>	<b>272.6</b>
Developing countries	35.1	39.6	39.9	58.1	61.9	61.0	146.0	163.5	165.3
Developed countries	40.6	43.9	42.7	17.7	21.6	21.2	108.0	111.7	107.2
LIFDCs	11.9	13.6	13.3	11.1	12.0	12.8	90.2	105.3	106.3
LDCs	0.5	0.6	0.6	0.4	0.4	0.4	3.6	3.7	3.7

<sup>1</sup> 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*)

	Production		Imports		Exports		Utilization	
	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>	2011/12 <i>estim.</i>	2012/13 <i>f'cast</i>
<b>ASIA</b>	<b>67.6</b>	<b>68.7</b>	<b>26.5</b>	<b>25.5</b>	<b>15.0</b>	<b>11.3</b>	<b>77.6</b>	<b>79.6</b>
China	12.6	14.7	5.1	3.3	0.1	0.1	17.3	17.5
India	28.1	26.6	0.2	0.9	3.7	0.8	23.2	24.5
Indonesia	2.5	2.6	3.0	3.1	-	-	5.6	5.8
Japan	0.8	0.8	1.4	1.4	-	-	2.3	2.2
Korea, Republic of	-	-	1.7	1.6	0.4	0.3	1.3	1.4
Malaysia	-	-	1.6	1.6	0.1	0.1	1.5	1.6
Pakistan	5.2	5.3	0.1	0.1	0.2	0.2	5.1	5.2
Philippines	2.2	2.4	-	-	0.4	0.4	1.9	2.1
Thailand	10.6	10.3	-	-	7.9	8.0	2.2	2.3
Turkey	2.4	2.4	-	0.2	-	-	2.4	2.6
Viet Nam	1.5	1.6	-	0.1	0.2	0.3	1.3	1.4
<b>AFRICA</b>	<b>10.4</b>	<b>10.8</b>	<b>9.8</b>	<b>10.1</b>	<b>2.6</b>	<b>2.2</b>	<b>18.1</b>	<b>18.6</b>
Algeria	-	-	1.6	1.6	0.3	0.3	1.4	1.3
Egypt	2.0	2.0	1.2	1.2	-	-	3.1	3.2
Ethiopia	0.4	0.4	0.1	0.1	-	-	0.5	0.5
Kenya	0.6	0.6	0.3	0.3	-	-	0.9	0.9
Mauritius	0.4	0.4	-	-	0.4	0.4	0.1	0.1
Mozambique	0.4	0.5	-	-	0.2	0.3	0.2	0.2
South Africa	1.9	2.0	0.2	0.2	0.3	0.4	1.9	2.0
Sudan	0.7	0.9	0.5	0.5	-	-	1.2	1.3
Swaziland	0.7	0.7	-	-	0.6	0.6	0.1	0.1
Tanzania, United Rep. of	0.3	0.3	0.2	0.2	-	-	0.5	0.5
<b>CENTRAL AMERICA</b>	<b>12.6</b>	<b>14.1</b>	<b>0.9</b>	<b>0.6</b>	<b>4.9</b>	<b>5.2</b>	<b>8.5</b>	<b>8.7</b>
Cuba	1.4	1.6	-	-	0.7	0.9	0.7	0.7
Dominican Republic	0.6	0.6	0.1	-	0.2	0.2	0.4	0.4
Guatemala	2.7	2.7	-	0.1	1.9	1.9	0.9	0.8
Mexico	5.3	6.6	0.5	0.1	1.1	1.7	4.5	4.6
<b>SOUTH AMERICA</b>	<b>44.0</b>	<b>46.6</b>	<b>2.0</b>	<b>2.2</b>	<b>23.4</b>	<b>26.7</b>	<b>21.8</b>	<b>22.1</b>
Argentina	2.1	2.1	-	-	0.2	0.3	1.8	1.8
Brazil	36.2	38.6	-	-	22.1	25.6	13.3	13.6
Colombia	2.3	2.4	0.3	0.3	0.8	0.7	1.8	2.0
Peru	1.1	1.1	0.3	0.3	-	-	1.3	1.4
Venezuela	0.6	0.6	0.7	0.6	-	-	1.1	1.2
<b>NORTH AMERICA</b>	<b>7.8</b>	<b>8.5</b>	<b>4.6</b>	<b>3.9</b>	<b>0.3</b>	<b>0.2</b>	<b>12.2</b>	<b>12.1</b>
United States of America	7.7	8.4	3.3	2.6	0.2	0.2	10.6	10.6
<b>EUROPE</b>	<b>28.7</b>	<b>26.6</b>	<b>5.7</b>	<b>5.8</b>	<b>3.3</b>	<b>2.1</b>	<b>30.1</b>	<b>31.0</b>
European Union	18.9	17.3	3.7	3.6	2.2	1.3	19.3	19.5
Russian Federation	5.5	5.2	0.8	0.9	0.2	0.2	6.1	6.2
Ukraine	2.5	2.4	-	-	0.2	0.3	2.0	2.2
<b>OCEANIA</b>	<b>4.2</b>	<b>4.7</b>	<b>0.3</b>	<b>0.3</b>	<b>3.1</b>	<b>3.5</b>	<b>1.4</b>	<b>1.5</b>
Australia	4.0	4.5	-	-	3.0	3.5	1.1	1.1
Fiji	0.2	0.2	-	-	0.1	0.1	-	0.1
<b>WORLD</b>	<b>175.2</b>	<b>180.0</b>	<b>49.9</b>	<b>48.5</b>	<b>52.5</b>	<b>51.1</b>	<b>169.8</b>	<b>173.5</b>
Developing countries	131.9	137.5	35.1	34.2	45.6	45.0	118.7	121.8
Developed countries	43.3	42.5	14.8	14.3	7.0	6.2	51.1	51.7
LIFDCs	61.0	62.6	21.8	21.2	6.6	2.9	76.0	78.1
LDCs	3.9	4.3	5.3	5.6	0.7	0.5	8.9	9.0

**APPENDIX TABLE 14: TOTAL MEAT STATISTICS<sup>1</sup> (million tonnes)**

	Production		Imports		Exports		Utilization	
	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>
<b>ASIA</b>	<b>128 342</b>	<b>131 140</b>	<b>14 589</b>	<b>14 685</b>	<b>4 791</b>	<b>5 011</b>	<b>138 140</b>	<b>140 814</b>
China	83 736	85 255	3 726	3 877	1 816	1 692	85 647	87 440
of which Hong Kong, SAR	201	201	1 926	2 012	840	722	1 287	1 491
India	6 593	7 072	2	2	1 365	1 567	5 230	5 507
Indonesia	3 050	3 100	51	46	5	5	3 096	3 141
Iran, Islamic Republic of	2 256	2 322	201	176	32	33	2 425	2 464
Japan	3 259	3 242	3 149	3 133	10	11	6 397	6 365
Korea, Republic of	2 136	2 369	1 039	852	35	36	3 140	3 184
Malaysia	1 698	1 706	264	269	43	46	1 919	1 929
Pakistan	2 793	2 910	4	4	49	52	2 748	2 861
Philippines	2 871	2 936	350	342	26	28	3 195	3 250
Saudi Arabia	775	782	1 037	1 059	61	65	1 751	1 776
Singapore	115	116	317	336	25	25	407	428
Thailand	2 682	2 698	91	95	850	927	1 923	1 867
Turkey	2 646	2 685	94	100	331	381	2 408	2 404
Viet Nam	4 229	4 305	1 161	1 176	20	20	5 370	5 460
<b>AFRICA</b>	<b>17 265</b>	<b>17 549</b>	<b>2 810</b>	<b>2 927</b>	<b>143</b>	<b>146</b>	<b>19 932</b>	<b>20 330</b>
Algeria	619	622	100	106	-	-	719	727
Angola	236	245	563	618	-	-	799	863
Egypt	1 910	1 958	442	426	4	4	2 349	2 380
Nigeria	1 454	1 469	1	1	-	-	1 456	1 470
South Africa	2 876	2 913	463	489	31	31	3 307	3 371
<b>CENTRAL AMERICA</b>	<b>8 879</b>	<b>8 954</b>	<b>2 629</b>	<b>2 707</b>	<b>545</b>	<b>582</b>	<b>10 962</b>	<b>11 079</b>
Cuba	300	305	267	272	-	-	567	577
Mexico	6 108	6 133	1 651	1 758	293	334	7 465	7 557
<b>SOUTH AMERICA</b>	<b>38 878</b>	<b>39 862</b>	<b>1 085</b>	<b>1 091</b>	<b>7 704</b>	<b>8 005</b>	<b>32 259</b>	<b>32 948</b>
Argentina	4 838	5 119	40	43	552	608	4 326	4 553
Brazil	24 083	24 518	72	70	6 222	6 407	17 933	18 181
Chile	1 485	1 526	278	281	314	330	1 449	1 477
Colombia	2 256	2 263	96	107	11	14	2 340	2 357
Uruguay	648	668	31	33	362	379	318	322
Venezuela	1 680	1 785	477	461	-	-	2 157	2 246
<b>NORTH AMERICA</b>	<b>46 829</b>	<b>46 809</b>	<b>2 407</b>	<b>2 573</b>	<b>9 373</b>	<b>9 176</b>	<b>39 863</b>	<b>40 206</b>
Canada	4 312	4 233	809	835	1 720	1 715	3 402	3 354
United States of America	42 516	42 575	1 584	1 723	7 653	7 461	36 447	36 837
<b>EUROPE</b>	<b>57 636</b>	<b>57 621</b>	<b>5 190</b>	<b>5 163</b>	<b>4 746</b>	<b>4 578</b>	<b>58 081</b>	<b>58 206</b>
Belarus	1 035	1 071	166	172	390	404	811	838
European Union	45 018	44 696	1 393	1 390	4 094	3 856	42 317	42 230
Russian Federation	7 705	7 951	2 733	2 759	28	32	10 409	10 678
Ukraine	2 049	2 059	389	328	129	175	2 308	2 212
<b>OCEANIA</b>	<b>6 021</b>	<b>6 232</b>	<b>420</b>	<b>439</b>	<b>2 583</b>	<b>2 703</b>	<b>3 858</b>	<b>3 967</b>
Australia	4 141	4 264	220	235	1 720	1 804	2 641	2 695
New Zealand	1 389	1 470	54	56	860	896	583	631
<b>WORLD</b>	<b>303 850</b>	<b>308 167</b>	<b>29 130</b>	<b>29 585</b>	<b>29 885</b>	<b>30 200</b>	<b>303 095</b>	<b>307 552</b>
Developing countries	184 137	188 220	16 966	17 219	13 129	13 689	187 974	191 750
Developed countries	119 713	119 947	12 164	12 366	16 756	16 511	115 122	115 802
LIFDCs	28 406	29 283	2 977	3 011	1 567	1 769	29 816	30 525
LDCs	10 320	10 499	1 418	1 491	6	5	11 732	11 984

<sup>1</sup> Including "other meat".

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

	Production		Imports		Exports		Utilization	
	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>
<b>ASIA</b>	<b>17 175</b>	<b>17 624</b>	<b>3 571</b>	<b>3 746</b>	<b>1 697</b>	<b>1 885</b>	<b>19 000</b>	<b>19 482</b>
China	6 474	6 532	566	702	154	132	6 887	7 102
India	2 761	3 032	1	1	1 346	1 548	1 416	1 485
Indonesia	530	560	45	40	1	1	574	599
Iran, Islamic Republic of	250	260	152	140	2	2	401	399
Japan	519	505	739	776	2	2	1 256	1 276
Korea, Republic of	312	336	349	320	3	3	606	653
Malaysia	31	32	163	170	9	10	185	192
Pakistan	1 500	1 500	3	3	27	28	1 476	1 475
Philippines	305	310	129	125	6	8	428	427
<b>AFRICA</b>	<b>6 723</b>	<b>6 814</b>	<b>718</b>	<b>703</b>	<b>75</b>	<b>77</b>	<b>7 365</b>	<b>7 440</b>
Algeria	127	125	94	100	-	-	221	225
Angola	102	104	129	135	-	-	231	239
Egypt	800	816	317	285	1	1	1 116	1 100
South Africa	850	870	9	8	11	10	848	868
<b>CENTRAL AMERICA</b>	<b>2 549</b>	<b>2 543</b>	<b>371</b>	<b>407</b>	<b>381</b>	<b>402</b>	<b>2 539</b>	<b>2 548</b>
Mexico	1 820	1 800	231	277	182	205	1 869	1 872
<b>SOUTH AMERICA</b>	<b>15 025</b>	<b>15 411</b>	<b>493</b>	<b>494</b>	<b>2 219</b>	<b>2 367</b>	<b>13 298</b>	<b>13 538</b>
Argentina	2 500	2 675	2	2	185	200	2 317	2 477
Brazil	9 307	9 500	62	60	1 458	1 550	7 911	8 010
Chile	198	195	173	176	7	7	364	364
Colombia	945	930	2	2	10	12	937	920
Uruguay	488	500	-	-	325	340	163	160
Venezuela	496	498	235	235	-	-	731	733
<b>NORTH AMERICA</b>	<b>12 925</b>	<b>12 500</b>	<b>1 266</b>	<b>1 424</b>	<b>1 505</b>	<b>1 479</b>	<b>12 653</b>	<b>12 486</b>
Canada	1 057	1 000	301	315	317	312	1 012	1 018
United States of America	11 868	11 500	961	1 105	1 188	1 167	11 637	11 464
<b>EUROPE</b>	<b>10 367</b>	<b>10 340</b>	<b>1 426</b>	<b>1 430</b>	<b>574</b>	<b>547</b>	<b>11 218</b>	<b>11 223</b>
European Union	7 641	7 603	305	315	377	347	7 569	7 571
Russian Federation	1 649	1 665	996	990	8	9	2 636	2 646
Ukraine	365	360	7	7	18	20	353	347
<b>OCEANIA</b>	<b>2 801</b>	<b>2 908</b>	<b>58</b>	<b>55</b>	<b>1 765</b>	<b>1 841</b>	<b>1 082</b>	<b>1 107</b>
Australia	2 131	2 188	12	10	1 290	1 343	842	840
New Zealand	650	700	10	10	472	495	188	215
<b>WORLD</b>	<b>67 564</b>	<b>68 140</b>	<b>7 903</b>	<b>8 259</b>	<b>8 216</b>	<b>8 598</b>	<b>67 155</b>	<b>67 824</b>
Developing countries	38 357	39 260	4 269	4 420	4 358	4 717	38 219	38 962
Developed countries	29 206	28 881	3 634	3 839	3 859	3 881	28 936	28 862
LIFDCs	10 604	11 005	698	666	1 510	1 712	9 792	9 958
LDCs	4 184	4 240	189	196	4	3	4 369	4 434

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

	Production		Imports		Exports		Utilization	
	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>
<b>ASIA</b>	<b>7 827</b>	<b>7 884</b>	<b>442</b>	<b>487</b>	<b>47</b>	<b>48</b>	<b>8 222</b>	<b>8 323</b>
Bangladesh	205	210	-	-	-	-	205	210
China	3 932	3 932	159	185	6	5	4 085	4 113
India	910	920	-	-	12	13	898	908
Iran, Islamic Republic of	240	245	11	12	-	-	251	257
Pakistan	450	455	-	-	18	20	432	435
Saudi Arabia	88	89	55	58	5	5	138	142
Turkey	300	310	1	1	-	-	301	311
<b>AFRICA</b>	<b>2 906</b>	<b>2 942</b>	<b>31</b>	<b>31</b>	<b>27</b>	<b>28</b>	<b>2 910</b>	<b>2 944</b>
Algeria	195	195	3	4	-	-	198	199
Nigeria	470	475	-	-	-	-	470	475
South Africa	163	160	5	5	-	-	168	165
Sudan	482	484	-	-	-	-	482	484
<b>CENTRAL AMERICA</b>	<b>132</b>	<b>134</b>	<b>18</b>	<b>17</b>	-	-	<b>150</b>	<b>150</b>
Mexico	102	104	8	7	-	-	110	111
<b>SOUTH AMERICA</b>	<b>324</b>	<b>325</b>	<b>6</b>	<b>7</b>	<b>22</b>	<b>23</b>	<b>308</b>	<b>309</b>
Brazil	115	117	6	7	-	-	121	123
<b>NORTH AMERICA</b>	<b>87</b>	<b>89</b>	<b>95</b>	<b>93</b>	<b>6</b>	<b>5</b>	<b>176</b>	<b>177</b>
United States of America	72	73	79	77	6	5	144	145
<b>EUROPE</b>	<b>1 287</b>	<b>1 276</b>	<b>174</b>	<b>181</b>	<b>29</b>	<b>31</b>	<b>1 432</b>	<b>1 426</b>
European Union	972	956	154	160	22	24	1 104	1 092
Russian Federation	195	200	10	10	-	-	205	210
<b>OCEANIA</b>	<b>1 035</b>	<b>1 105</b>	<b>31</b>	<b>34</b>	<b>692</b>	<b>735</b>	<b>375</b>	<b>404</b>
Australia	565	622	1	1	342	375	224	248
New Zealand	470	483	2	2	350	360	122	125
<b>WORLD</b>	<b>13 599</b>	<b>13 755</b>	<b>798</b>	<b>849</b>	<b>823</b>	<b>871</b>	<b>13 573</b>	<b>13 733</b>
Developing countries	10 415	10 502	500	548	96	99	10 819	10 951
Developed countries	3 184	3 253	297	301	727	772	2 754	2 782
LIFDCs	4 075	4 145	39	42	14	15	4 100	4 173
LDCs	1 859	1 899	5	5	-	-	1 864	1 905

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

	Production		Imports		Exports		Utilization	
	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>
<b>ASIA</b>	<b>63 944</b>	<b>65 717</b>	<b>3 429</b>	<b>3 239</b>	<b>451</b>	<b>472</b>	<b>66 882</b>	<b>68 473</b>
China	53 361	54 806	1 252	1 233	377	392	54 236	55 648
of which Hong Kong, SAR	140	140	524	500	122	120	541	520
India	329	329	1	1	-	-	330	330
Indonesia	730	737	1	1	-	-	731	737
Japan	1 297	1 305	1 283	1 251	1	1	2 580	2 555
Korea, D.P.R.	115	120	2	2	-	-	117	122
Korea, Republic of	1 086	1 280	508	356	2	1	1 551	1 625
Malaysia	230	230	13	10	7	8	236	232
Philippines	1 655	1 700	101	101	6	6	1 750	1 795
Thailand	870	875	3	3	28	35	844	843
Viet Nam	3 160	3 200	37	35	20	20	3 177	3 215
<b>AFRICA</b>	<b>1 300</b>	<b>1 320</b>	<b>268</b>	<b>295</b>	<b>8</b>	<b>8</b>	<b>1 560</b>	<b>1 606</b>
Madagascar	56	56	-	-	-	-	56	56
Nigeria	243	245	-	-	-	-	243	245
South Africa	320	320	43	45	4	4	360	361
Uganda	120	123	-	-	-	-	120	123
<b>CENTRAL AMERICA</b>	<b>1 758</b>	<b>1 795</b>	<b>801</b>	<b>826</b>	<b>121</b>	<b>135</b>	<b>2 438</b>	<b>2 487</b>
Cuba	180	182	42	45	-	-	222	227
Mexico	1 227	1 255	614	645	100	116	1 741	1 784
<b>SOUTH AMERICA</b>	<b>5 218</b>	<b>5 334</b>	<b>172</b>	<b>189</b>	<b>888</b>	<b>921</b>	<b>4 502</b>	<b>4 603</b>
Argentina	331	350	32	35	1	1	361	384
Brazil	3 330	3 370	1	2	711	733	2 620	2 639
Chile	584	620	25	30	174	185	435	465
Colombia	185	187	36	46	-	-	221	233
Venezuela	175	178	29	25	-	-	204	203
<b>NORTH AMERICA</b>	<b>12 538</b>	<b>12 616</b>	<b>703</b>	<b>706</b>	<b>3 540</b>	<b>3 380</b>	<b>9 663</b>	<b>9 931</b>
Canada	1 980	1 952	264	268	1 206	1 200	1 039	1 020
United States of America	10 558	10 664	434	433	2 334	2 180	8 620	8 906
<b>EUROPE</b>	<b>27 256</b>	<b>26 901</b>	<b>1 664</b>	<b>1 613</b>	<b>2 479</b>	<b>2 260</b>	<b>26 440</b>	<b>26 254</b>
Belarus	427	443	135	139	145	154	417	428
European Union	22 813	22 357	20	20	2 266	2 040	20 567	20 337
Russian Federation	2 518	2 608	1 088	1 098	2	2	3 604	3 704
Serbia	290	290	19	15	10	10	299	295
Ukraine	600	590	263	200	29	25	833	765
<b>OCEANIA</b>	<b>493</b>	<b>482</b>	<b>254</b>	<b>272</b>	<b>35</b>	<b>34</b>	<b>713</b>	<b>721</b>
Australia	352	340	195	211	34	33	514	518
Papua New Guinea	67	67	6	6	-	-	73	73
<b>WORLD</b>	<b>112 506</b>	<b>114 165</b>	<b>7 290</b>	<b>7 141</b>	<b>7 522</b>	<b>7 211</b>	<b>112 198</b>	<b>114 074</b>
Developing countries	70 394	72 329	3 302	3 206	1 463	1 532	72 192	73 994
Developed countries	42 112	41 836	3 989	3 935	6 058	5 679	40 006	40 080
LIFDCs	4 045	4 119	245	251	10	10	4 280	4 360
LDCs	1 432	1 466	187	208	-	-	1 619	1 674

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

	Production		Imports		Exports		Utilization	
	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>	2012 <i>estim.</i>	2013 <i>f'cast</i>
<b>ASIA</b>	<b>37 474</b>	<b>37 978</b>	<b>7 093</b>	<b>7 137</b>	<b>2 571</b>	<b>2 580</b>	<b>41 994</b>	<b>42 535</b>
China	18 510	18 517	1 743	1 751	1 263	1 148	18 990	19 121
of which Hong Kong, SAR	47	47	1 073	1 075	649	550	470	572
India	2 447	2 643	-	-	6	5	2 441	2 638
Indonesia	1 671	1 681	-	-	-	-	1 671	1 681
Iran, Islamic Republic of	1 750	1 800	37	-	29	30	1 758	1 770
Japan	1 430	1 420	1 093	1 073	7	8	2 516	2 485
Korea, Republic of	727	742	169	162	30	32	866	872
Kuwait	39	39	133	120	1	1	172	159
Malaysia	1 435	1 442	68	67	27	28	1 476	1 481
Saudi Arabia	590	595	810	818	30	32	1 370	1 381
Singapore	96	96	146	155	11	11	231	240
Thailand	1 550	1 560	2	2	770	840	782	721
Turkey	1 700	1 712	84	90	311	360	1 473	1 442
Yemen	155	160	105	105	-	-	260	265
<b>AFRICA</b>	<b>4 926</b>	<b>5 034</b>	<b>1 762</b>	<b>1 866</b>	<b>24</b>	<b>25</b>	<b>6 664</b>	<b>6 876</b>
Angola	23	24	301	330	-	-	324	354
South Africa	1 520	1 540	405	431	10	11	1 914	1 960
<b>CENTRAL AMERICA</b>	<b>4 321</b>	<b>4 362</b>	<b>1 420</b>	<b>1 440</b>	<b>41</b>	<b>43</b>	<b>5 700</b>	<b>5 758</b>
Cuba	36	37	210	215	-	-	246	252
Mexico	2 857	2 872	784	815	10	12	3 631	3 675
<b>SOUTH AMERICA</b>	<b>18 004</b>	<b>18 481</b>	<b>412</b>	<b>400</b>	<b>4 508</b>	<b>4 627</b>	<b>13 908</b>	<b>14 254</b>
Argentina	1 825	1 910	6	6	331	371	1 500	1 545
Brazil	11 300	11 500	2	2	4 029	4 100	7 273	7 402
Chile	675	685	79	75	125	130	629	630
Venezuela	1 000	1 100	213	200	-	-	1 213	1 300
<b>NORTH AMERICA</b>	<b>21 031</b>	<b>21 354</b>	<b>332</b>	<b>338</b>	<b>4 284</b>	<b>4 273</b>	<b>17 013</b>	<b>17 428</b>
Canada	1 237	1 243	225	233	177	183	1 284	1 293
United States of America	19 794	20 111	102	100	4 107	4 090	15 723	16 130
<b>EUROPE</b>	<b>17 531</b>	<b>17 908</b>	<b>1 761</b>	<b>1 773</b>	<b>1 579</b>	<b>1 654</b>	<b>17 713</b>	<b>18 027</b>
European Union	12 550	12 738	814	795	1 347	1 363	12 017	12 170
Russian Federation	3 252	3 388	593	615	17	20	3 828	3 983
Ukraine	1 035	1 060	118	120	81	130	1 072	1 050
<b>OCEANIA</b>	<b>1 272</b>	<b>1 308</b>	<b>72</b>	<b>73</b>	<b>50</b>	<b>52</b>	<b>1 296</b>	<b>1 328</b>
Australia	1 071	1 092	11	12	40	40	1 044	1 064
New Zealand	175	190	1	1	10	12	166	179
<b>WORLD</b>	<b>104 560</b>	<b>106 425</b>	<b>12 852</b>	<b>13 026</b>	<b>13 059</b>	<b>13 254</b>	<b>104 288</b>	<b>106 205</b>
Developing countries	60 992	62 094	8 803	8 932	7 117	7 245	62 677	63 779
Developed countries	43 568	44 331	4 048	4 095	5 942	6 009	41 611	42 426
LIFDCs	7 970	8 264	1 961	2 018	27	25	9 904	10 257
LDCs	2 215	2 246	1 010	1 055	1	1	3 224	3 300

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

	Production			Imports			Exports		
	2009-2011 average	2012	2013	2009-2011 average	2012	2013	2009-2011 average	2012	2013
		<i>estim.</i>	<i>f'cast</i>		<i>estim.</i>	<i>f'cast</i>		<i>estim.</i>	<i>f'cast</i>
<b>ASIA</b>	<b>266 731</b>	<b>289 431</b>	<b>301 619</b>	<b>23 223</b>	<b>28 013</b>	<b>29 598</b>	<b>5 245</b>	<b>5 881</b>	<b>6 032</b>
China	41 128	44 233	46 745	4 407	6 478	7 080	176	211	191
India <sup>1</sup>	122 057	133 700	139 000	281	162	122	223	411	510
Indonesia	1 307	1 395	1 465	1 535	1 746	1 833	165	87	77
Iran, Islamic Republic of	7 460	7 900	8 200	330	401	546	232	316	319
Japan	7 702	7 632	7 532	1 203	1 385	1 436	12	2	2
Korea, Republic of	2 059	1 899	1 918	504	560	615	12	13	15
Malaysia	74	76	77	1 053	1 221	1 269	270	405	446
Pakistan	35 503	37 866	39 115	155	317	343	31	38	42
Philippines	15	18	20	1 375	1 379	1 397	288	168	159
Saudi Arabia	1 877	2 100	2 200	2 071	2 948	3 200	1 531	1 923	1 925
Singapore	-	-	-	1 355	1 341	1 303	597	571	559
Thailand	850	870	880	782	973	860	127	116	113
Turkey	13 714	16 700	18 400	215	161	160	182	200	221
<b>AFRICA</b>	<b>42 754</b>	<b>45 684</b>	<b>46 564</b>	<b>9 292</b>	<b>8 841</b>	<b>8 764</b>	<b>1 424</b>	<b>1 208</b>	<b>1 165</b>
Algeria	2 527	3 180	3 339	2 432	2 504	2 463	9	10	10
Egypt	5 751	5 850	5 900	1 273	1 436	1 403	768	581	511
Kenya	4 229	4 280	4 350	23	24	21	33	15	10
South Africa	3 198	3 340	3 375	104	211	227	89	100	100
Sudan	7 472	7 600	7 675	290	274	264	-	-	-
Tunisia	1 088	1 120	1 130	65	78	78	54	41	41
<b>CENTRAL AMERICA</b>	<b>16 238</b>	<b>16 510</b>	<b>16 582</b>	<b>4 025</b>	<b>4 446</b>	<b>4 367</b>	<b>532</b>	<b>534</b>	<b>506</b>
Costa Rica	943	1 014	1 065	31	40	42	109	128	120
Mexico	10 813	11 111	11 107	2 338	2 636	2 651	151	128	113
<b>SOUTH AMERICA</b>	<b>64 229</b>	<b>69 520</b>	<b>71 818</b>	<b>2 330</b>	<b>3 836</b>	<b>3 223</b>	<b>3 180</b>	<b>3 800</b>	<b>3 617</b>
Argentina	10 787	11 493	11 500	23	39	36	1 749	2 074	1 882
Brazil	30 777	33 045	34 036	658	969	906	175	72	76
Colombia	7 532	7 600	7 650	27	173	103	18	5	3
Uruguay	1 916	2 200	2 266	13	20	20	840	1 150	1 162
Venezuela	2 293	2 481	2 580	1 100	1 867	1 391	-	-	-
<b>NORTH AMERICA</b>	<b>95 743</b>	<b>99 307</b>	<b>100 038</b>	<b>1 609</b>	<b>1 698</b>	<b>1 691</b>	<b>4 329</b>	<b>5 384</b>	<b>5 282</b>
Canada	8 285	8 450	8 500	261	259	263	148	159	169
United States of America	87 457	90 856	91 537	1 332	1 420	1 410	4 180	5 224	5 112
<b>EUROPE</b>	<b>214 226</b>	<b>217 662</b>	<b>218 816</b>	<b>5 218</b>	<b>5 936</b>	<b>6 092</b>	<b>14 440</b>	<b>16 145</b>	<b>16 295</b>
Belarus	6 569	6 863	7 200	37	52	57	2 013	2 234	2 618
European Union	153 251	156 400	156 550	906	906	913	10 974	12 477	12 261
Russian Federation	32 015	31 912	32 230	3 456	3 987	4 117	158	96	90
Ukraine	11 315	11 380	11 722	154	189	183	616	601	571
<b>OCEANIA</b>	<b>26 369</b>	<b>29 292</b>	<b>28 990</b>	<b>807</b>	<b>848</b>	<b>851</b>	<b>17 680</b>	<b>20 715</b>	<b>21 779</b>
Australia <sup>2</sup>	9 171	9 480	9 320	563	574	584	3 244	3 245	3 451
New Zealand <sup>3</sup>	17 129	19 742	19 600	72	86	64	14 433	17 466	18 324
<b>WORLD</b>	<b>726 290</b>	<b>767 407</b>	<b>784 427</b>	<b>46 503</b>	<b>53 618</b>	<b>54 587</b>	<b>46 830</b>	<b>53 667</b>	<b>54 676</b>
Developing countries	359 349	389 182	404 015	37 054	43 119	43 870	10 227	11 285	11 180
Developed countries	366 941	378 225	380 413	9 450	10 499	10 714	36 603	42 380	43 494
LIFDCs	174 522	189 439	196 017	11 066	10 472	10 450	2 182	1 932	1 951
LDCs	30 895	33 084	33 786	3 003	3 073	3 049	123	136	149

<sup>1</sup> Dairy years starting April of the year stated (production only).

<sup>2</sup> Dairy years ending June of the year stated (production only).

<sup>3</sup> 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). 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<sup>1</sup>

	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2010	2011	2010	2011	2010	2011	2012 <i>estim.</i>	2010	2011	2012 <i>estim.</i>
	<i>Million tonnes (live weight equivalent)</i>				<i>USD billion</i>			<i>USD billion</i>		
<b>ASIA</b>	<b>48.7</b>	<b>48.8</b>	<b>52.4</b>	<b>55.5</b>	<b>41.0</b>	<b>49.7</b>	<b>52.0</b>	<b>35.5</b>	<b>42.5</b>	<b>44.1</b>
China <sup>2</sup>	16.4	16.8	37.0	38.9	15.7	19.8	21.0	10.2	12.1	12.2
of which: Hong Kong SAR	0.2	0.2	-	-	0.5	0.5	0.8	3.0	3.5	3.7
Taiwan Prov.	0.9	0.9	0.3	0.3	1.9	2.3	2.3	0.9	1.0	1.0
India	4.7	4.3	3.8	4.6	2.4	3.4	3.4	0.1	0.1	0.1
Indonesia	5.4	5.7	2.3	2.7	2.6	3.2	3.6	0.3	0.4	0.4
Japan	4.1	3.8	0.7	0.6	1.9	1.9	1.8	14.9	17.3	18.0
Korea, Rep. of	1.7	1.7	0.5	0.5	1.6	2.0	2.0	3.2	3.9	3.7
Philippines	2.6	2.4	0.7	0.8	0.6	0.6	0.8	0.1	0.2	0.2
Thailand	1.8	1.9	1.3	1.0	7.1	8.2	8.1	2.1	2.7	3.1
Viet Nam	2.4	2.5	2.7	2.8	5.1	6.2	7.0	0.5	0.7	1.0
<b>AFRICA</b>	<b>7.7</b>	<b>7.6</b>	<b>1.3</b>	<b>1.4</b>	<b>4.9</b>	<b>4.8</b>	<b>5.1</b>	<b>3.3</b>	<b>4.5</b>	<b>5.1</b>
Ghana	0.4	0.3	-	-	-	-	-	0.1	0.3	0.2
Morocco	1.1	1.0	-	-	1.5	1.4	1.6	0.1	0.1	0.1
Namibia	0.4	0.4	-	-	0.8	0.8	0.8	0.1	-	0.1
Nigeria	0.6	0.6	0.2	0.2	0.3	0.1	0.3	0.7	1.2	1.5
Senegal	0.4	0.4	-	-	0.2	0.3	0.3	-	-	-
South Africa	0.6	0.5	-	-	0.6	0.6	0.6	0.2	0.3	0.4
<b>CENTRAL AMERICA</b>	<b>2.5</b>	<b>2.4</b>	<b>0.3</b>	<b>0.3</b>	<b>1.8</b>	<b>2.0</b>	<b>2.2</b>	<b>1.2</b>	<b>1.3</b>	<b>1.5</b>
Mexico	1.5	1.6	0.1	0.1	0.8	1.1	1.1	0.5	0.6	0.7
Panama	0.2	0.2	-	-	0.2	0.1	0.1	-	-	0.1
<b>SOUTH AMERICA</b>	<b>9.5</b>	<b>14.0</b>	<b>1.6</b>	<b>2.1</b>	<b>9.9</b>	<b>12.5</b>	<b>12.7</b>	<b>2.4</b>	<b>2.8</b>	<b>2.8</b>
Argentina	0.8	0.8	-	-	1.3	1.5	1.3	0.1	0.2	0.2
Brazil	0.8	0.8	0.5	0.6	0.2	0.2	0.2	1.1	1.3	1.2
Chile	2.7	3.1	0.7	1.0	3.4	4.5	4.4	0.3	0.4	0.4
Ecuador	0.4	0.5	0.3	0.3	1.8	2.5	2.9	0.2	0.3	0.2
Peru	4.3	8.2	0.1	0.1	2.5	3.1	3.3	0.2	0.1	0.1
<b>NORTH AMERICA</b>	<b>5.6</b>	<b>6.2</b>	<b>0.7</b>	<b>0.6</b>	<b>8.9</b>	<b>10.4</b>	<b>10.5</b>	<b>17.8</b>	<b>20.1</b>	<b>20.3</b>
Canada	0.9	0.9	0.2	0.2	3.8	4.2	4.3	2.3	2.6	2.7
United States of America	4.4	5.2	0.5	0.4	4.7	5.8	5.8	15.5	17.5	17.6
<b>EUROPE</b>	<b>13.8</b>	<b>13.3</b>	<b>2.5</b>	<b>2.7</b>	<b>39.9</b>	<b>45.8</b>	<b>43.0</b>	<b>47.9</b>	<b>55.2</b>	<b>53.1</b>
European Union <sup>2</sup>	5.4	5.0	1.3	1.3	25.2	29.5	27.5	42.7	49.0	46.7
of which Extra -EU					4.2	5.2	5.5	23.6	26.7	24.9
Iceland	1.1	1.1	-	-	1.8	2.2	2.2	0.1	0.1	0.1
Norway	2.7	2.3	1.0	1.1	8.8	9.5	8.9	1.1	1.3	1.4
Russian Federation	4.1	4.3	0.1	0.1	2.8	3.3	3.1	2.4	2.7	2.7
<b>OCEANIA</b>	<b>1.2</b>	<b>1.2</b>	<b>0.2</b>	<b>0.2</b>	<b>2.5</b>	<b>2.3</b>	<b>2.6</b>	<b>1.5</b>	<b>1.7</b>	<b>1.9</b>
Australia	0.2	0.2	0.1	0.1	0.9	1.0	1.0	1.3	1.5	1.6
New Zealand	0.4	0.4	0.1	0.1	1.1	0.9	1.2	0.1	0.1	0.1
<b>WORLD<sup>3</sup></b>	<b>89.0</b>	<b>93.5</b>	<b>59.0</b>	<b>62.7</b>	<b>108.9</b>	<b>127.6</b>	<b>128.2</b>	<b>109.6</b>	<b>128.1</b>	<b>128.8</b>
Excl. Intra-EU					87.9	103.2	106.2	90.5	105.8	106.9
Developing countries	64.3	69.2	54.9	58.7	55.8	67.4	70.4	27.0	33.1	34.7
Developed countries	24.6	24.3	4.1	4.0	53.0	60.2	57.8	82.6	95.1	94.1
LIFDCs	21.0	20.7	9.7	11.3	8.4	9.9	10.7	3.2	4.4	4.8
LDCs	9.1	9.3	2.5	2.7	2.2	2.5	2.2	0.6	0.7	0.8

<sup>1</sup> Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fish meal and fish oil.

<sup>2</sup> Including intra-trade. Cyprus is included in the European Union as well as in Asia.

<sup>3</sup> For capture fisheries production, the aggregate includes also 19 214 tonnes in 2010 and 19 566 in 2011 of not identified countries, data not included in any other aggregates.

## APPENDIX TABLE 21: SELECTED INTERNATIONAL PRICES FOR WHEAT AND COARSE GRAINS (USD/tonne)

Period	Wheat			Maize		Barley		Sorghum
	US No. 2 Hard Red Winter Ord. Prot. <sup>1</sup>	US Soft Red Winter No. 2 <sup>2</sup>	Argentina Trigo Pan <sup>3</sup>	US No. 2 Yellow <sup>2</sup>	Argentina <sup>3</sup>	France feed Rouen	Australia feed Eastern States	US No. 2 Yellow <sup>2</sup>
<b>Annual (July/June)</b>								
2004/05	154	138	123	97	90	132	123	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	274	247	248
2011/12	300	259	264	281	269	276	250	264
2012 – May	279	252	251	269	246	274	248	219
2012 – June	288	250	263	268	238	260	254	234
2012 – July	352	318	314	330	285	294	303	293
2012 – August	362	332	335	328	294	299	311	296
2012 – September	372	341	336	323	278	313	310	286
2012 – October	382	339	332	320	274	312	308	290
2012 – November	373	346	345	324	294	318	309	289
2012 – December	359	325	360	310	288	312	310	288
2013 – January	328	311	362	303	294	309	308	287
2013 – February	328	297	358	303	283	301	302	288
2013 – March	323	286	346	309	276	286	284	296
2013 – April	324	279	324	282	242	289	281	261
2013 – May	329	278	315	295	257	273	289	254

<sup>1</sup> Delivered United States f.o.b. Gulf; <sup>2</sup> Delivered United States Gulf; <sup>3</sup> Up River f.o.b.

Sources: International Grain Council and USDA

## APPENDIX TABLE 22: TOTAL WHEAT AND MAIZE FUTURES PRICES (USD/tonne)

	July		September		December		March	
	July 2013	July 2012	Sep. 2013	Sep. 2012	Dec. 2013	Dec. 2012	Mar. 2014	Mar. 2013
<b>Wheat</b>								
Apr 17	260	228	262	233	267	241	272	247
Apr 24	254	232	257	238	262	247	267	253
May 1	265	236	268	242	274	250	279	257
May 8	259	226	263	231	269	240	275	248
May 15	255	224	258	229	264	237	270	244
May 22	253	252	256	256	261	263	267	268
<b>Maize</b>								
Apr 17	252	239	226	213	215	209	219	213
Apr 24	243	239	215	219	208	213	212	218
May 1	255	248	226	217	217	212	221	217
May 8	249	245	218	212	209	208	214	212
May 15	256	235	222	206	209	203	213	207
May 22	259	235	220	207	209	205	213	210

Source: Chicago Board of Trade (CBOT)

## APPENDIX TABLE 23: SELECTED INTERNATIONAL PRICES FOR RICE AND PRICE INDICES

Period	International prices (USD per tonne)				FAO indices (2002-2004=100)				
	Thai 100% B <sup>1</sup>	Thai broken <sup>2</sup>	US long grain <sup>3</sup>	Pakistan Basmati <sup>4</sup>	Total	Indica			Aromatic
						High quality	Low quality	Japonica	
<b>Annual (Jan/Dec)</b>									
2007	335	275	436	677	161	156	160	168	157
2008	695	506	782	1077	294	296	287	314	251
2009	587	329	545	937	253	229	196	341	232
2010	518	386	510	881	229	211	212	264	231
2011	565	464	577	1060	251	237	250	274	227
2012	588	540	567	1137	240	230	242	248	236
<b>Monthly</b>									
2012 – May	613	554	544	1138	240	233	243	246	235
2012 – June	619	545	565	1121	239	233	240	249	231
2012 – July	600	537	573	1150	241	230	241	254	234
2012 – August	584	532	585	1142	242	232	242	252	240
2012 – September	602	540	600	1149	247	236	248	259	241
2012 – October	595	544	600	1120	246	234	248	256	241
2012 – November	598	545	608	1185	244	235	244	254	244
2012 – December	599	546	608	1312	240	229	237	246	258
2013 – January	611	558	616	1350	240	230	239	241	269
2013 – February	616	562	624	1369	242	232	242	239	282
2013 – March	594	557	644	1365	242	231	242	237	285
2013 – April	586	551	649	1362	240	228	240	237	286
2013 – May	574	539	652	1375	240	226	238	241	286

<sup>1</sup> White rice, 100 percent second grade, f.o.b. Bangkok.

<sup>2</sup> A1 super, f.o.b. Bangkok.

<sup>3</sup> United States No.2, 4 percent broken f.o.b.

<sup>4</sup> 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 high (low) quality referring to rice with less (equal to or more) than 20 percent broken. 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 (USD/tonne)

Period	International prices (USD per tonne)					FAO indices (2002-2004=100)		
	Soybeans <sup>1</sup>	Soybean oil <sup>2</sup>	Palm oil <sup>3</sup>	Soybean cake <sup>4</sup>	Rapeseed meal <sup>5</sup>	Oilseeds	Edible/soap fats/oils	Oilcakes/meals
<b>Annual (Oct/Sept)</b>								
2003/04	322	632	488	257	178	121	114	116
2004/05	275	545	419	212	130	105	104	105
2005/06	259	572	451	202	130	100	125	107
2006/07	335	772	684	264	184	129	148	153
2007/08	549	1 325	1 050	445	296	217	245	202
2008/09	422	826	627	385	196	156	145	180
2009/10	429	924	806	388	220	162	174	215
2010/11	549	1 308	1 147	418	279	215	256	221
2011/12	562	1 235	1 051	461	295	214	232	224
<b>Monthly</b>								
2011 - October	502	1 216	995	378	243	194	224	194
2011 - November	491	1 228	1 054	353	224	191	235	186
2011 - December	476	1 163	1 026	346	227	185	227	182
2012 - January	500	1 223	1 062	371	234	193	234	189
2012 - February	512	1 245	1 100	385	255	199	239	192
2012 - March	542	1 283	1 152	426	287	209	245	205
2012 - April	575	1 308	1 182	474	335	221	251	225
2012 - May	570	1 210	1 081	492	330	217	234	235
2012 - June	570	1 187	996	503	315	215	221	246
2012 - July	660	1 234	1 010	584	353	244	226	273
2012 - August	682	1 254	994	619	365	252	226	285
2012 - September	669	1 276	960	604	374	250	225	279
2012 - October	617	1 183	844	555	359	233	206	264
2012 - November	595	1 148	816	539	378	226	200	268
2012 - December	603	1 153	772	553	396	229	197	279
2013 - January	591	1 192	838	512	367	226	205	268
2013 - February	597	1 164	862	513	381	228	206	266
2013 - March	588	1 117	853	503	367	224	201	259
2013 - April	559	1 099	841	521	300	214	199	266
2013 - May	498	1 077	849	527	404	192	199	267

<sup>1</sup> Soybeans: US, No.2 yellow, c.i.f. Rotterdam.

<sup>2</sup> Soybean oil: Dutch, fob ex-mill.

<sup>3</sup> Palm oil: Crude, c.i.f. Northwest Europe.

<sup>4</sup> Soybean cake: Pellets, 44/45 percent, Argentina, c.i.f. Rotterdam.

<sup>5</sup> Rapeseed meal: 34 percent, Hamburg, f.o.b. ex-mill.

Note: The FAO indices are calculated using the Laspeyres formula; the weights used are the average export values of each commodity for the 2002-2004 period. The indices are based on the international prices of five selected seeds, ten selected oils and fats and seven 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 (2002/04 = 100)
	Raw Sugar	White	
<b>Annual (Jan/Dec)</b>	<i>(US cents/lb)</i>		
2005	9.9	13.18	140.3
2006	14.8	18.97	209.6
2007	10.1	13.96	143.0
2008	12.8	16.07	181.6
2009	18.1	22.16	257.3
2010	21.3	27.25	302.0
2011	26.0	31.41	368.9
2012			
<b>Monthly</b>			
2011 - October	25.5	30.7	361.2
2011 - November	24.0	28.8	339.9
2011 - December	23.0	27.4	326.9
2012 - January	23.6	28.2	334.3
2012 - February	24.1	28.8	342.3
2012 - March	24.1	29.0	341.9
2012 - April	22.8	27.3	324.0
2012 - May	20.8	25.2	294.6
2012 - June	20.5	25.9	290.4
2012 - July	22.9	28.2	324.3
2012 - August	20.9	25.8	296.2
2012 - September	20.0	25.4	283.7
2012 - October	20.3	25.3	288.2
2012 - November	19.3	23.7	274.5
2012 - December	19.3	23.5	274.0
2013 - January	18.9	22.9	267.8
2013 - February	18.3	22.6	259.2
2013 - March	18.5	23.5	262.0
2013 - April	17.8	22.7	252.6
2013 - May	17.6	21.9	250.1

## APPENDIX TABLE 26: SELECTED INTERNATIONAL PRICES FOR MILK PRODUCTS AND DAIRY PRICE INDEX

Period	International prices (USD per tonne)				FAO dairy price index (2002-2004=100)
	Butter <sup>1</sup>	Skim milk powder <sup>2</sup>	Whole milk powder <sup>3</sup>	Cheddar cheese <sup>4</sup>	
<b>Annual (Jan/Dec)</b>					
2006	1 774	2 218	2 193	2 681	128
2007	2 959	4 291	4 185	4 055	212
2008	3 607	3 278	3 846	4 633	220
2009	2 335	2 255	2 400	2 957	142
2010	4 043	3 127	3 464	4 010	200
2011	4 473	3 657	3 860	4 310	221
2012	3 310	3 163	3 232	3 821	189
<b>Monthly</b>					
2012 - May	3 100	2 807	3 000	3 625	176
2012 - June	2 975	2 863	2 800	3 600	173
2012 - July	2 850	2 838	2 875	3 600	173
2012 - August	2 942	2 975	2 955	3 600	176
2012 - September	3 175	3 325	3 194	3 775	188
2012 - October	3 250	3 400	3 300	3 925	194
2012 - November	3 250	3 363	3 375	3 950	195
2012 - December	3 292	3 408	3 333	4 000	197
2013 - January	3 375	3 463	3 363	4 000	198
2013 - February	3 575	3 588	3 538	4 025	203
2013 - March	4 138	4 020	4 525	4 225	225
2013 - April	4 588	5 394	5 550	4 500	259
2013 - May	4 275	4 738	5 206	4 600	250

<sup>1</sup> Butter, 82 percent butterfat, f.o.b. Oceania; indicative traded prices

<sup>2</sup> Skim Milk Powder, 1.25 percent butterfat, f.o.b. Oceania, indicative traded prices

<sup>3</sup> Whole Milk Powder, 26 percent butterfat, f.o.b. Oceania, indicative traded prices

<sup>4</sup> Cheddar Cheese, 39 percent maximum 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

Period	Bovine meat prices (USD per tonne)			Ovine meat price (USD per tonne)	Pig meat prices (USD per tonne)		
	Australia	United States	Brazil	New Zealand	United States	Brazil	Germany
<b>Annual (Jan/Dec)</b>							
2006	2 547	3 803	2 219	4 033	1 986	2 134	1 935
2007	2 603	4 023	2 367	4 120	2 117	2 200	1 907
2008	3 138	4 325	3 785	4 585	2 270	3 000	2 364
2009	2 636	3 897	3 118	4 276	2 202	2 223	2 035
2010	3 351	4 378	3 919	5 045	2 454	2 747	1 913
2011	4 041	4 516	4 816	6 631	2 648	3 023	2 169
2012	4 142	4 913	4 492	6 091	2 676	2 784	2 233
<b>Monthly</b>							
2012 – March	4 269	5 003	4 544	6 451	2 790	2 755	2 177
2012 – April	4 236	5 095	4 611	6 443	2 704	2 848	2 250
2012 – May	4 109	5 059	4 536	6 193	2 569	2 790	2 162
2012 – June	4 045	4 781	4 422	5 913	2 608	2 663	2 118
2012- July	3 988	4 660	4 313	5 927	2 650	2 618	2 029
2012 – August	4 041	4 650	4 418	5 816	2 655	2 657	2 253
2012 – September	3 974	4 748	4 365	5 882	2 640	2 772	2 512
2012 – October	4 010	4 722	4 512	5 866	2 719	2 929	2 507
2012 – November	4 247	4 947	4 495	5 827	2 636	2 901	2 372
2012 – December	4 316	5 326	4 436	5 893	2 705	2 854	2 280
2013 – January	4 307	5 171	4 382	5 751	2 753	2 852	2 253
2013 – February	4 280	5 562	4 365	5 490	2 710	2 898	2 283
2013 - March	4 227	5 271	4 430	5 354	2 781	2 955	2 221

**Bovine meat prices:**

**Australia:** up to Oct02 : cow forequarters frozen boneless, 85% chemical lean, cif US port (East Coast) ex-dock; from Nov02: chucks and cow forequarters

**USA:** Frozen beef, export unit value

**Brazil:** Frozen beef, export unit value

**Ovine meat prices**

**New Zealand:** Lamb, frozen whole carcasses, wholesale price Smithfield Mkt. London

**Pig meat prices:**

**USA:** Frozen pigmeat, export unit value

**Brazil:** Frozen pigmeat, export unit value

**Germany:** Monthly market price for pig carcase grade E

## APPENDIX TABLE 28: SELECTED INTERNATIONAL MEAT PRICES AND FAO MEAT PRICE INDICES

Period	Poultry meat prices (USD per tonne)		FAO indices (2002-2004=100)				
	United States	Brazil	Total meat	Bovine meat	Ovine meat	Pig meat	Poultry meat
<b>Annual (Jan/Dec)</b>							
2006	734	1 180	119	119	103	123	122
2007	935	1 443	125	125	105	125	151
2008	997	1 896	153	157	117	152	184
2009	989	1 552	133	134	109	131	162
2010	1 032	1 781	152	163	128	138	177
2011	1 147	2 083	177	189	169	153	206
2012	1 228	1 931	175	190	155	153	201
<b>Monthly</b>							
2012 – March	1 243	1 921	178	194	164	152	201
2012 – April	1 267	1 945	180	196	164	154	204
2012 – May	1 272	1 899	175	192	158	148	202
2012 – June	1 228	1 768	170	186	150	146	190
2012- July	1 206	1 775	167	182	151	143	189
2012 – August	1 207	1 845	170	185	148	151	194
2012 – September	1 227	2 035	175	184	150	161	208
2012 – October	1 249	2 066	177	186	149	164	211
2012 – November	1 232	2 062	178	193	148	158	210
2012 – December	1 206	2 093	179	198	150	155	210
2013 – January	1 248	2 009	177	195	146	155	207
2013 – February	1 218	2 113	179	199	140	156	212
2013 - March	1 210	2 191	178	195	136	156	217

### Poultry meat prices:

USA : Broiler cuts, export unit value

Brazil : Export unit value for chicken (f.o.b.)

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.



## APPENDIX TABLE 29: FISH PRICE INDICES (2002-2004=100)

Period	Total	Aquaculture	Capture	White fish	Salmon	Shrimp	Pelagic e/tuna	Tuna	Other fish
<b>Annual (Jan/Dec)</b>									
2006	102	99	105	110	109	98	112	102	93
2007	109	100	116	119	110	101	118	116	98
2008	119	104	130	130	114	108	134	139	104
2009	109	103	114	113	120	96	126	126	98
2010	119	119	119	121	141	107	130	125	110
2011	154	149	157	195	124	173	175	166	151
2012	144	124	157	146	107	207	195	176	145
<b>Monthly</b>									
2012 - May	145	128	154	148	156	101	202	198	179
2012 - June	143	125	154	145	146	105	203	194	176
2012 - July	141	121	153	143	140	103	225	196	173
2012 - August	144	121	159	140	139	101	244	215	176
2012 - September	142	119	156	149	137	102	235	193	168
2012 - October	142	117	158	142	138	107	207	193	172
2012 - November	143	122	156	142	141	110	230	187	171
2012 - December	148	123	164	143	150	110	192	203	184
2013 - January	149	125	165	140	158	112	190	210	185
2013 - February	152	131	168	138	163	115	185	214	182
2013 - March	155	142	170	136	174	118	185	214	184
2013 - April	158	151	171	132	186	119	182	221	182
2013 - May	168	161	173	132	195	123	182	221	183

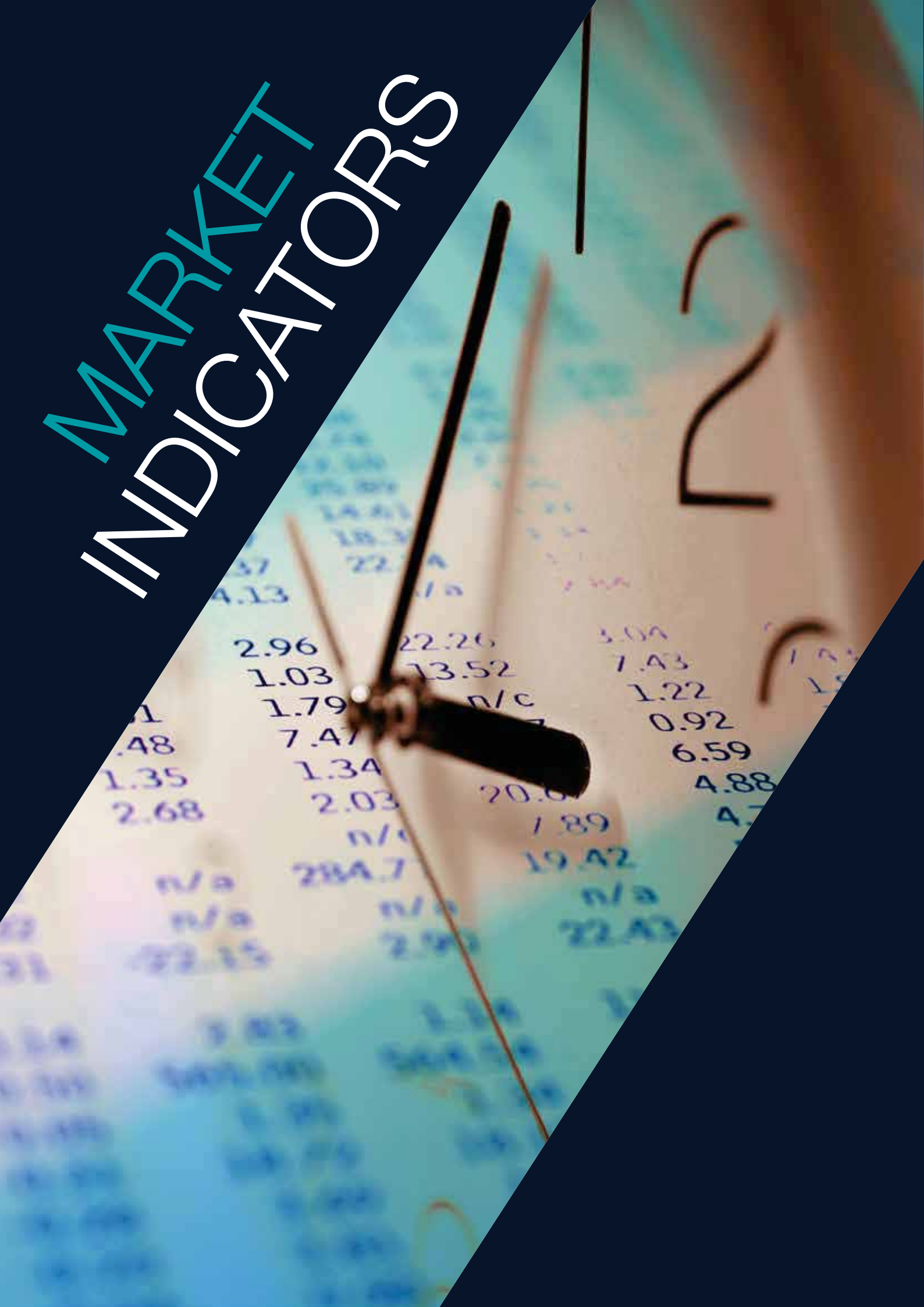
Source= Norwegian Seafood Council.

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 2008-2012
Sugar (ISA daily price)	US cents per lb	23-05-13	17.32	17.82	20.14	19.95
Coffee (ICO daily price)	US cents per lb	22-05-13	123.33	129.55	157.68	150.78
Cocoa (ICCO daily price)	US cents per lb	22-05-13	105.84	105.80	104.96	126.77
Tea (FAO Tea Composite Price)	USD per kg	30-04-13	2.80	2.98	2.89	2.72
Cotton (COTLOOK A index)	US cents per lb	30-04-13	92.57	94.45	100.10	96.31
Jute "BTD" (Fob Bangladesh Port)	USD per tonne	22-05-13	600.00	600.00	490.00	610.63

# MARKET INDICATORS



## INVESTMENT FLOWS

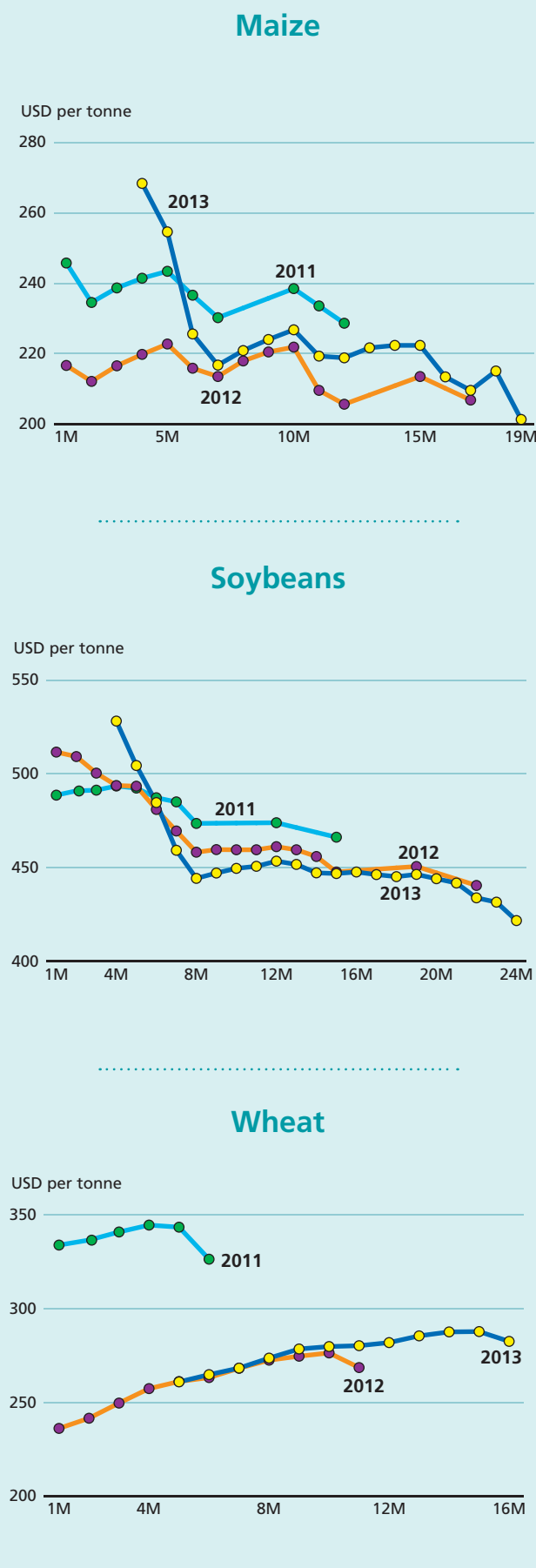
Article by Ann Berg, Senior Commodity Analyst

For the first time in over a decade, global trading volumes in futures contracts declined in North America, Europe and Pacific/Asia in 2012 – falling by about 15 percent. However, agricultural volumes proved an exception, experiencing an increase of 24 percent over 2011, which was a year of steep volume drop following the collapse of two US brokerage firms. In spite of the increase, the 2012 volumes still did not exceed those of 2010, which was a record volume year for the sector. In 2013, declining prices and subdued volatility seem to be depressing the hedge fund and passive index fund product sector, which had seen customer withdrawals after two years of negative returns [see “Commodity Hedge Funds in Retreat?” in the Special Feature section of this report]. Most components of the commodity sector – industrial metals, such as aluminum and copper, soft commodities, such as cocoa, coffee and sugar, and livestock – seem to be in a downtrend. A recent sharp drop in the price of gold, a market once revered as the ultimate safe haven, has left some commodity investors disillusioned. Contrarily, the impacts of the much debated US and European Regulatory reform measures appear to have been negligible for agricultural futures trade volumes, since they mostly focused on the OTC swaps market, of which agriculture comprises a very small fraction.

### Forward curves

One persistent feature of the US maize, soybean and wheat markets has been their forward curve structures. Owing to their yearly production cycles, grain markets normally exhibit ascendant prices referred to as “contango” for the first 6 to 9 months of the crop year and thereafter descendant prices, referred to as “backwardation”. However, maize and soybeans exhibited high levels of backwardation soon after the 2012 harvest. The maize situation was exacerbated by the much reduced supply and the continued diversion of the grain into fuel. Holding excess storage, farmers have been unwilling to sell their maize unless paid high cash premiums, while ethanol plants have drawn available maize away from the narrow band of delivery points located along the Illinois River, creating a constant shortage of delivery supplies. The net result has been an abnormally backwardated structure with calendar spreads such as Mar/May and May/July reaching historically high inversions. Similarly in soybeans, shifting demand from South American ports to US Gulf, particularly by China, has kept cash basis levels at premiums to futures, leading to almost no soybean deliveries for current crop year.

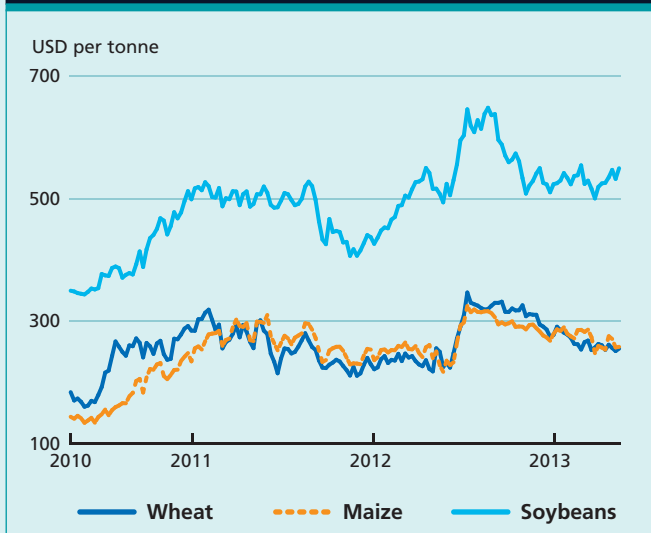
Figure 4. Forward curves snapshots as of 15 May 2011, 2012, 2013



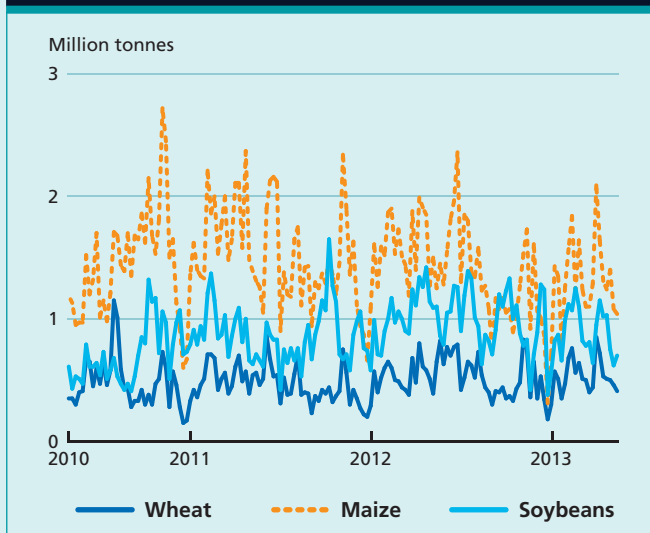
and steeply backwardated forward curves. The Soft Red Wheat contract has remained mostly in contango, but at levels less upward sloping than previous years as cash and futures convergence has improved. In general, markets

have performed their proper function by encouraging some demand rationing and an expansion of planted hectares for the 2013/2014 marketing season.

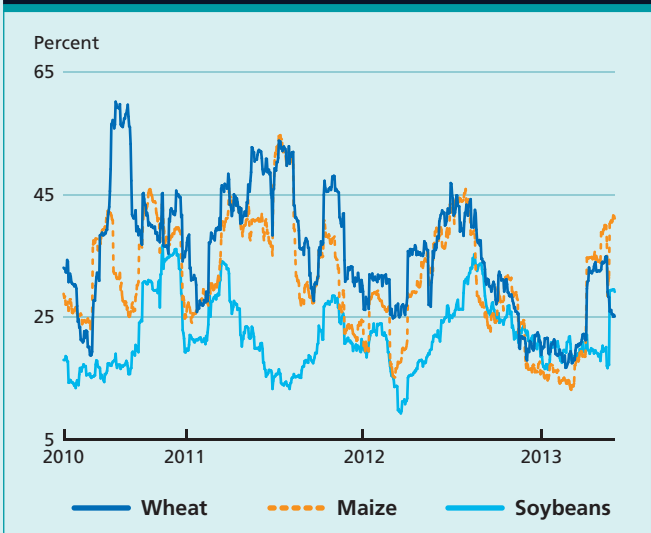
**Figure 1. CME futures prices**



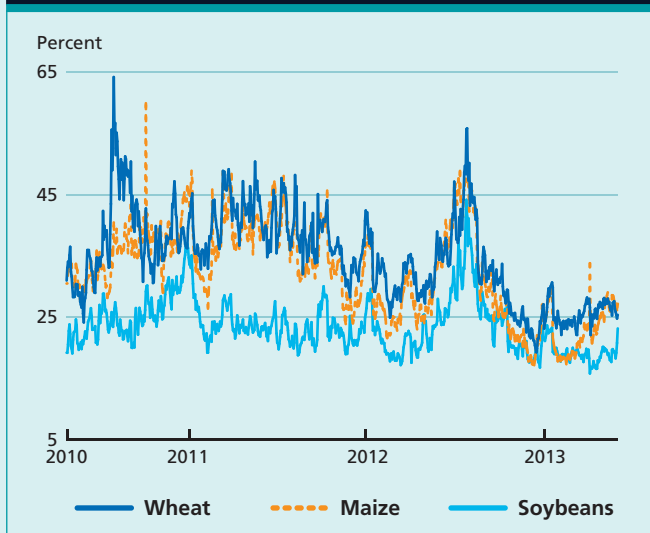
**Figure 2. CME futures volumes**



**Figure 3. Historical volatility (30 days)**



**Figure 4. Implied volatility**



# OCEAN FREIGHT RATES

Contributed by the International Grains Council (IGC) [www.igc.org.uk](http://www.igc.org.uk)

## OCEAN FREIGHT MARKET (OCTOBER 2012 - MID-MAY 2013)

Over the past seven months, dry bulk ocean freight rates in the grain-carrying sectors registered some gains from mid-February on the back of improved demand for commodities, notably on routes from South America and the US Gulf. Atlantic demand continued to draw tonnage from South East Asia, thus underpinning the Pacific market. A severe congestion in Brazil's ports was also supportive. In March, the Baltic Dry Index (BDI) increased by one-fourth, to the highest level of 2013, while the average of indices of three grains-carrying sectors soared by 35 percent. However, surplus tonnage continued to weigh and in April and the beginning of May rates in the Panamax and Supramax sectors started to retreat amid reduced volumes of trade, partly due to early-May holidays. Overall, since last September, the average of the three grain-carrying indices registered a net gain of some 38 percent, while the Baltic Dry Index (BDI) added just 11 percent, following a nearly 20 percent fall in Capesize values due to a weaker demand for raw materials. In the near-term, the market is expected to remain rather weak due to an over-capacity of

tonnage and insufficient demand. Piracy continued to be a problem, pushing insurance premiums higher on routes along Africa's east and west coasts, the Arabian Sea and the Indian Ocean.

**Panamax** rates remained volatile in both basins, with a sharp rise in mid-November, followed by a fall in December/January due to limited trading. However, from mid-February the market firmed on improved chartering activity and tightening supply of early vessels, notably on routes from the US Gulf and South America, underpinned by grain and soybeans shipments. In the Pacific, the market continued to draw support from mineral shipments, particularly from Australia and Indonesia. Overall, since the beginning of October 2012, the Baltic Panamax Index (BPI) more than doubled by the end of March, to the highest level in ten months. The Atlantic market eased more recently on surplus tonnage, with vessels ballasting from the Pacific and Indian Oceans into the Atlantic in search of better rates putting pressure on Atlantic rates.

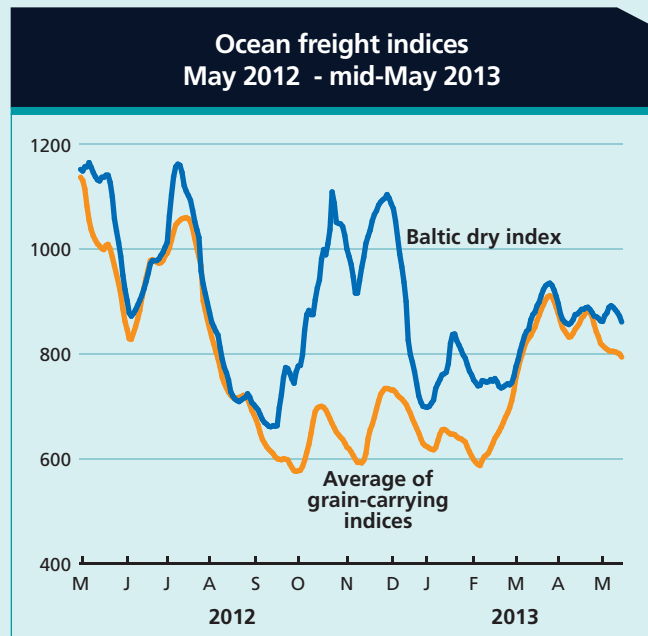
Similarly to the **Panamax** sector, **Handysize/Supramax** rates rebounded in mid-February, with good returns for spot tonnage in the Atlantic, notably on routes from South America and the US Gulf. In the Pacific, mineral shipments from Indonesia to China and India continued to

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 2012	36	22	52	53
May 2012	39	22	52	53
June 2012	40	20	51	52
July 2012	39	21	53	54
August 2012	34	18	48	49
September 2012	30	17	46	47
October 2012	30	18	47	48
November 2012	28	16	44	45
December 2012	28	18	42	43
January 2013	29	19	43	44
February 2013	28	20	44	45
March 2013	30	23	46	47
April 2013	32	23	45	46

provide support. In April/early May Atlantic rates slipped amid sluggish demand, with South America remaining one of the major loading areas. Over the October/mid-May period, the Baltic Handysize Index (BHSI) advanced by 19 percent, while the Baltic Supramax Index (BSI) gained 4 percent.

**Capesize** rates fell sharply in December 2012 due to an oversupply of tonnage and a weak demand for minerals. The market remained weak during the following months, with the Baltic Capesize Index decreasing by nearly 20 percent since the beginning of October 2012.



## FOOD IMPORT BILLS

### Global food import bills expected to stabilize in 2013

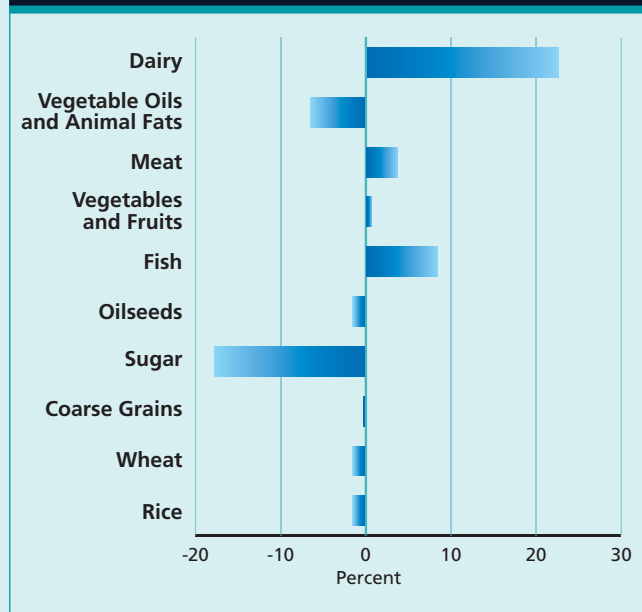
At USD 1.09 trillion, world expenditures on imported foodstuffs in 2013 are tentatively forecast to remain close to last year's level, but 13 percent below the record of 2011.

The stability of the global import expenditure masks considerable movements across individual product bills. Freight costs, which are not expected to vary significantly from 2012 levels, also contribute to stability. Of the commodities foreseen to undergo the largest changes, products in the animal protein category, including meat, dairy and fish, could rise together by as much as 8 percent to around USD 354 billion. The expected increase in these bills is based on much larger volumes of imports as well as higher world quotations, especially for dairy products and fish. By contrast, lower international prices anticipated for sugar and vegetable oils could result in import bills falling by 18 percent and 6 percent, respectively, for these products. Similarly, falling prices of beverages are expected to result in a decline of 9 percent in total expenditures on coffee, tea and cocoa. As for cereals, reduced import volumes of rice and wheat could bring cereal bills down by 2 percent, notwithstanding firm international quotations.

The tendency for global import bills to be steady in 2013 extends to many of the most economically vulnerable nations, such as those in the groups of Least

Developed Countries (LDCs), Low Income Food Deficit Countries (LIFDCs) and those geographically situated in sub-Saharan Africa. Prospects for abundant domestic crops in these countries in 2013, particularly for staples, are expected to limit their need to rely on foreign supplies. However, with much lower international prices for key export primary commodities, such as sugar and tropical beverages, the terms-of-trade in food and agriculture for commodity-dependent countries may also deteriorate.

### Forecast changes in global food import bills by type 2013 over 2012 (%)



## Forecast import bills of total food and major foodstuffs (USD billion)

	World		Developed		Developing		LDC		LIFDC		Sub-Saharan Africa	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
<b>TOTAL FOOD (of which)</b>	<b>1 091.7</b>	<b>1 094.0</b>	<b>675.7</b>	<b>677.7</b>	<b>416.0</b>	<b>416.3</b>	<b>29.1</b>	<b>28.6</b>	<b>193.3</b>	<b>193.9</b>	<b>36.9</b>	<b>37.5</b>
Vegetable and fruits	190.6	191.8	144.7	145.6	45.8	46.1	2.6	2.6	17.8	17.9	2.7	2.7
Cereals	164.4	163.3	76.9	73.2	87.4	90.1	9.4	9.7	35.9	38.4	12.7	13.5
Meat	118.8	128.7	89.3	92.1	29.5	36.6	1.8	1.8	6.9	10.3	2.4	2.6
Fish	112.5	121.8	85.5	92.5	27.0	29.3	0.6	0.6	7.9	8.5	3.1	3.4
Dairy	45.8	56.2	29.6	36.3	16.2	19.9	0.9	1.0	4.4	5.3	1.3	1.6
Veg. oils and animal fats	99.1	92.8	44.0	41.2	55.0	51.5	5.8	5.3	33.6	32.7	4.7	4.2
Oilseeds	77.3	76.2	25.5	25.3	51.8	50.9	0.6	0.4	43.8	43.4	0.3	0.3
Sugar	47.0	38.7	22.5	18.5	24.5	20.3	3.2	2.8	12.7	10.5	3.3	2.9

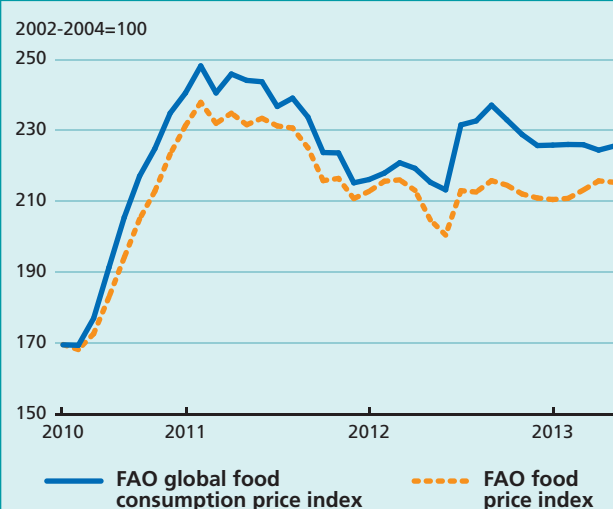
## FAO PRICE INDICES

FAO Global Food Consumption Price Index remain stable<sup>1</sup>

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://faostat.fao.org/>).

From the end of last year through May 2013, the index has registered little movement, in contrast to the volatility of earlier months. This pattern reflects relatively stable prices of wheat and rice, as cereals carry a much higher weight in total consumption than in trade (50 percent versus 18 percent), which also explain the index's departure from the FAO Food Price Index.

## The FAO global food consumption and food price indices (April 2011 to April 2013)



## Contact

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<sup>1</sup> The FAO Global Food Consumption Price Index is published twice a year in *Food Outlook*.

## The FAO Food Price Index nearly unchanged in May at 215 points<sup>2, 3</sup>

The **FAO Food Price Index** averaged 215.2 points in May 2013, very close to its April value of 215.8 points but 10 points (5 percent) higher than in May last year. At that level, the index is nearly 10 percent below the peak reached in February 2011. The small decline in May was the result of falling dairy and sugar prices, which more than offset an increase in cereals. Oils and meat prices remained unchanged.

The **FAO Cereal Price Index** averaged 238.9 points in May, up 4 points (1.9 percent) from April and nearly 17 points (7.8 percent) above May last year. Last month's increase was mostly associated with a strong rebound in maize prices, mostly a reaction to tightening export supplies and planting delays in the United States. By contrast, wheat and rice quotations were largely unchanged from the previous month.

The **FAO Oils/Fats Price Index** averaged 199.0 points in May, unchanged from April. While palm oil prices gained strength following a drop in global inventories from their recent record-high levels, soy oil values eased further reflecting higher than anticipated export availabilities in

Argentina and the encouraging outlook for the United States' 2013/14 soybean crop.

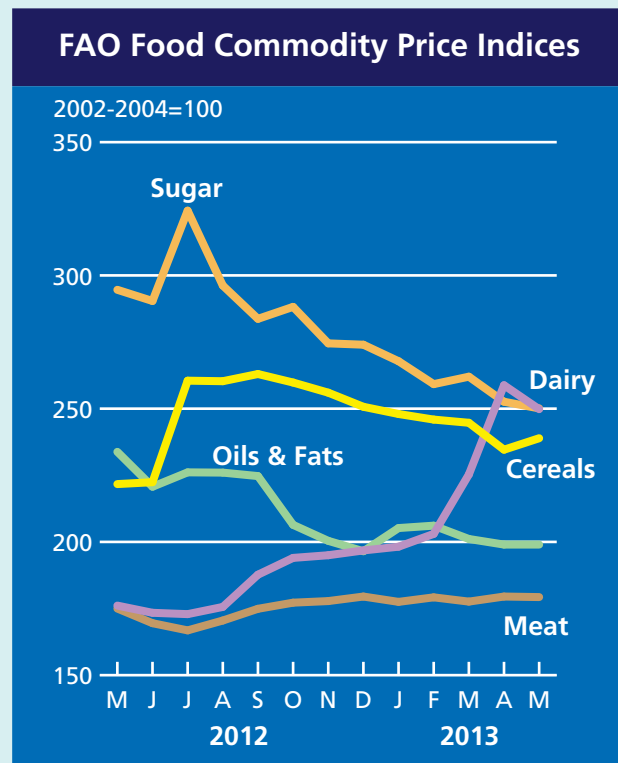
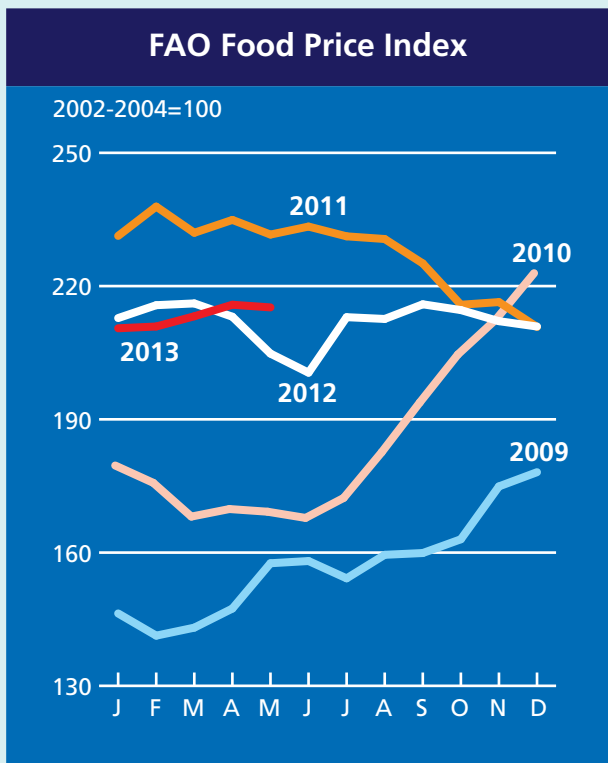
The **FAO Dairy Price Index** averaged 249.8 points in May, a fall of 9 points (3.5 percent) from the exceptionally high level recorded in April. Amongst the products that make up the index, skimmed milk powder experienced the sharpest fall (-12.2 percent), followed by butter (-6.8 percent) and whole milk powder (-6.2 percent), while the average price of cheddar cheese rose slightly. Supplies of milk products for trade are still constrained by weather related factors affecting milk production in most of the major exporting countries.

The **FAO Meat Price Index** averaged 179.3 points in May – about the same as in April. The index has remained within the narrow band of 177 – 179 points since October 2012. For the different categories of meat which compose the index, poultry prices continued to edge higher, reaching an all-time high. Prices were also up for ovine meat, but largely unchanged for the other meat categories.

The **FAO Sugar Price Index** averaged 250.1 points in May, down 2.6 points (1 percent) from April. Sugar prices continued to soften in May, driven by favourable harvesting conditions in Brazil, the world's largest producers and exporter, which boosted cane harvest. More generally, the price slide reflects the prospect of more abundant global supplies, combined with weaker import demand.

<sup>2</sup> The FAO food price indices are updated on a monthly basis and are available on: <http://www.fao.org/worldfoodsituation>

<sup>3</sup> All changes referred to in this section, in absolute or percentage terms, are calculated based on unrounded figures.





## FAO food price index

	Food Price Index <sup>1</sup>	Meat <sup>2</sup>	Dairy <sup>3</sup>	Cereals <sup>4</sup>	Oils and Fats <sup>5</sup>	Sugar <sup>6</sup>
2000	90.4	95.8	95.4	85.2	67.8	116.1
2001	93.4	96.5	107.1	86.5	67.6	122.6
2002	89.9	89.5	82.2	94.4	87.0	97.8
2003	97.7	96.8	95.1	98.1	100.8	100.6
2004	112.4	113.7	122.6	107.5	112.2	101.7
2005	117.3	120.1	135.4	103.5	103.6	140.3
2006	126.7	118.5	128.0	121.7	112.5	209.6
2007	158.7	125.1	212.4	166.9	170.0	143.0
2008	199.8	153.2	219.6	237.8	227.2	181.6
2009	156.9	132.9	141.6	173.7	150.9	257.3
2010	185.3	152.2	200.4	182.6	194.2	302.0
2011	227.6	176.6	220.5	246.9	252.3	368.9
2012	211.8	175.1	188.6	241.3	225.3	305.7
2012 May	204.8	175.0	176.1	221.7	233.8	294.6
June	200.5	169.5	173.4	222.4	220.7	290.4
July	213.0	166.8	172.9	260.5	226.1	324.3
August	212.6	170.5	175.6	260.3	226.0	296.2
September	215.9	174.9	187.7	263.0	224.7	283.7
October	214.6	177.2	194.0	259.8	206.4	288.2
November	212.1	177.8	195.0	256.0	200.4	274.5
December	210.9	179.5	196.8	250.7	196.5	274.0
2013 January	210.5	177.5	198.2	248.0	205.2	267.8
February	210.9	179.2	203.0	245.9	206.1	259.2
March	213.2	177.6	225.3	244.7	201.1	262.0
April	215.8	179.5	258.8	234.6	199.0	252.6
May	215.2	179.3	249.8	238.9	199.0	250.1

<sup>1</sup> **Food Price Index:** Consists of the average of five commodity group price indices mentioned above weighted with the average export shares of each of the groups for 2002-2004: in total 55 commodity quotations considered by FAO Commodity Specialists as representing the international prices of the food commodities noted are included in the overall index.

<sup>2</sup> **Meat Price Index:** Computed from average prices of four types of meat, weighted by world average export trade shares for 2002-2004. Quotations include two poultry products, three bovine meat products, three pig meat products, and one ovine meat product. Where more than one quotation exists for a given meat type, they are weighted by assumed fixed trade shares. Prices for the two most recent months may be estimates and subject to revision.

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

<sup>4</sup> **Cereals Price Index:** This index is compiled using the grains and rice price indices weighted by their average trade share for 2002-2004. The grains Price Index consists of International Grains Council (IGC) wheat price index, itself average of nine different wheat price quotations, and one maize export quotation; after expressing the maize price into its index form and converting the base of the IGC index to 2002-2004. The Rice Price Index consists of three components containing average prices of 16 rice quotations: the components are Indica, Japonica and Aromatic rice varieties and the weights for combining the three components are assumed (fixed) trade shares of the three varieties.

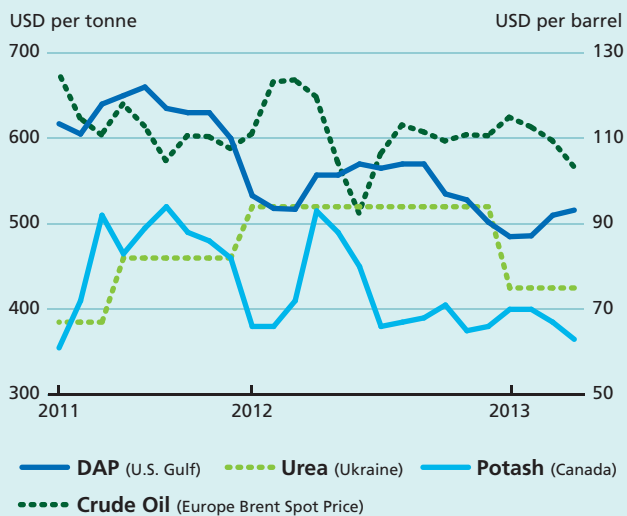
<sup>5</sup> **Oil and Fat Price Index:** Consists of an average of 11 different oils (including animal and fish oils) weighted with average export value shares of each oil product for 2002-2004.

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

## OTHER MARKET INDICATORS

### Monthly fertilizers and crude oil prices: April 2011 to April 2013

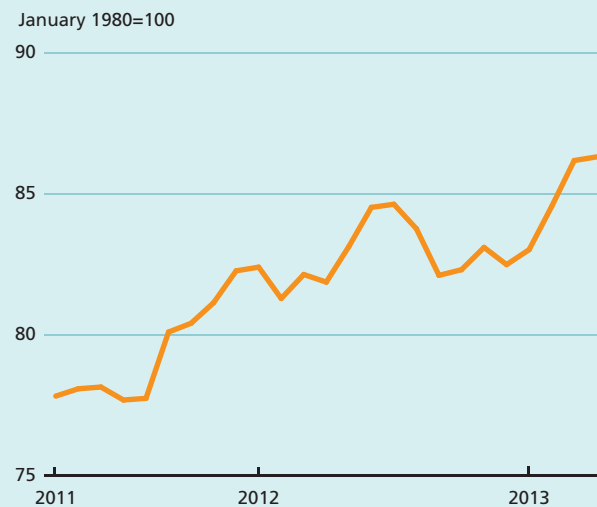
International fertilizer prices generally eased over the past twelve months. By April 2013, the benchmark prices had fallen year-on-year by 29 percent in the case of urea, by 18 percent for potash and by 7 percent for diammonium phosphate (DAP). Continued sluggish world economic growth also weighed on crude oil prices, bringing the quotation of the EU Brent to a 10-month low of USD 103.5 per barrel.



Sources: IMF, World Bank

### Price-adjusted Major Currencies US Dollar Index: April 2011 to April 2013

For much of the past six months, the US Dollar has again risen against major currencies, gaining as much as 5 percent of its value in real terms and dampening commodity prices in world markets. The upward trend in US Dollar strength is firmly established. When viewed over a 24-month horizon, the appreciation in real terms stands at almost 11 percent.



<sup>1</sup> Price-adjusted major currencies US Dollar index  
Source: US Federal Reserve



AGRICULTURAL MARKET  
INFORMATION SYSTEM

# INTRODUCING THE AMIS INDICATOR PAGES

<http://www.amis-outlook.org/amis-monitoring/indicators>



## PRICES AND PRICE VOLATILITY

Providing information on international commodity prices is key to AMIS's mission of monitoring global food markets. International commodity prices might indicate changes in supply and demand in major producing and consuming countries, or signal policy actions such as a tightening of trade measures or changes in governmental purchase and stocking regimes, which have proved to be important drivers of food prices and food price security at global level.



## STOCKS AND UTILIZATION

Low stock levels have had a large impact on price volatility during recent food price surges. Stocks can provide an effective temporary buffer against an unexpected supply or demand shock, so estimating and monitoring their size at global level, especially as regards expected utilization, helps determine market risk. The stock level of major exporters is a particularly important indicator of available supply in global markets.



## ENERGY AND OTHER INDICATORS

Several factors impact on international commodity markets, including energy prices, the cost of fertilizer, and the dollar exchange rate. High energy prices, in particular, have been identified as one of the main causes of the agricultural price spike of 2008/09. The cost of fertilizer affects the agricultural production process and thus the price of commodities. And the dollar exchange rate defines a country's terms of trade.

**F**ood 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 May 2013. The next Food Outlook report will be published in November 2013.**

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