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Food Outlook

Global Market Analysis

HIGHLIGHTS

Food prices have averaged 8 percent lower during the first ten months of 2012 compared to the same period last year. Considerably lower international prices and freights, together with less cereal purchases are predicted to reduce global expenditures on imported foodstuffs. The 2012 forecast for global food import bills is set at USD 1.14 trillion, 10 percent lower than the record which was set last year.

CEREALS

Global cereal supply and demand balance is forecast to tighten considerably in 2012/13, due mainly to declines in wheat and maize production. World cereal production is forecast to fall by 2.7 percent from previous year's record crop, leading to a 25 million tonne contraction in world stocks.

WHEAT

A tightening in world supply and demand balance is keeping wheat prices above the 2011 levels. Latest information confirms a smaller wheat crop in 2012 and, with projected utilization exceeding production, stocks are expected to be drawn down sharply, especially major exporters' stocks. World trade in 2012/13 is forecast to fall below the previous season's peak.

COARSE GRAINS

World coarse grains supply and demand balance in 2012/13 is extremely tight with FAO's latest forecast for production in 2012 pointing to a 2.5 percent decline from the 2011 record and stocks falling to historic lows, a factor which continues to underpin international prices.

RICE

World rice production in 2012 may surpass last season's record, supported by favourable growing conditions. Steadfast import demand together with very ample export availabilities are sustaining an expansion of trade in 2012, with a further, albeit small, increase foreseen in 2013.

CASSAVA

World cassava output is expected to increase vigorously in 2012 and may continue to do so in 2013, sustained by growth in Africa, where cassava remains a strategic crop for both food security and poverty alleviation. Prospects are more uncertain in Asia, where the sector expansion next year will largely depend the competiveness of cassava in the production of ethanol relative to other feedstocks. In 2012, world trade in cassava products is set to undergo a marked increase, entirely sustained by industrial demand.

OILSEEDS

The 2012/13 oilcrop season is opening under the legacy of a tight 2011/12 balance and a disappointing soybean crop in the United States. Current supply and demand forecasts for the new season provide limited scope for a relaxation in prices – at least until prospects for record South American soy crops are confirmed.

SUGAR

World sugar production is forecast to reach a new record, more than sufficient to cover projected global sugar consumption. Large export availabilities in key supplying countries, along with a rebuilding of sugar inventories in major importing countries, are expected to boost trade in 2012/13.

MEAT

Global meat markets are challenged by high feed prices, stagnating consumption, and falling profitability, with growth in total output slowing down to 2 percent. With international prices close to record highs, growth in world trade is also decelerating.

MILK

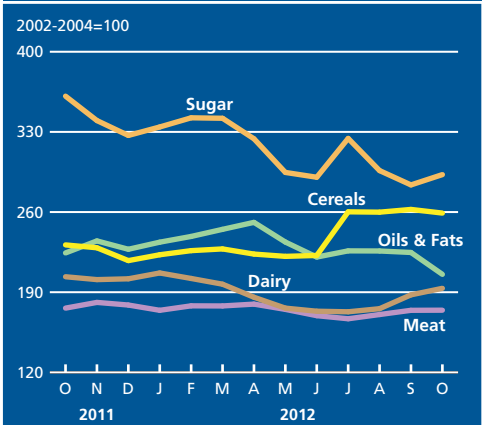
International prices of dairy products are rising in the face of limited export supplies. Milk production continues to grow in many countries, especially in Asia, Oceania and South America.

FISH

Weakening import demand caused international fish prices to drop in the first half of 2012. The dip mainly affected farmed species, while quotations for wild fish, such as tuna, fared better.

TABLE OF CONTENTS

FAO Commodity Price Indices
(October 2011 - October 2012)



Acknowledgements

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Cereal market summary

This season's world cereal supply and demand balance is proving much tighter than in 2011/12 with global production falling short of the projected demand and cereal stocks declining sharply. However, the tightening is not uniform across all cereals. While this season's maize and wheat supplies are compromised by disappointing harvests, supplies of rice are ample, which is prompting a further build-up of inventories.

Global cereal production in 2012 is expected to fall by 2.7 percent from previous year's record crop, but almost match the second best performance of 2008. The overall decrease reflects a 5.5 percent reduction in wheat, and a 2.5 percent decline in coarse grains, while the global rice crop is seen to grow by 0.7 percent above last season record. Severe droughts this year in the United States and across a large part of Europe and into central Asia have been the main cause of the reduced wheat and coarse grains crops.

World cereal utilization in 2012/13 is projected to decline slightly from the previous season, but still anticipated to exceed production. Wheat utilization is set to decline by 1.4 percent, mostly on lower feed use after the previous season's record. Total utilization of coarse grains is forecast to drop nearly 1 percent, largely because of reduced industrial maize use for ethanol production in the United States. By contrast, world rice utilization could increase by 1.5 percent, helping cereal consumption to remain stable.

Based on the latest forecasts for global production and utilization, world cereal stocks at the close of crop seasons ending in 2013 could fall to 497 million tonnes, 4.8 percent (25 million tonnes) less than their opening level. The decline would also reduce the world cereal stock-to-use ratio from 22.6 percent in 2012 to 20.6 percent in 2013, which compares with the low of 19.2 percent registered in 2007/08.

This season's shrinking supplies have tended to lift international prices. In October, the FAO Cereal Price Index averaged 259 points, down slightly from September, but 12.0 percent higher than in October last year. Reduced export supplies and more expensive grains are forecast to result in a 6.9 percent contraction in cereal trade in 2012/13.

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World cereal market at a glance[1]

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			*%*
WORLD BALANCE				
Production	**2 258.8**	**2 348.0**	**2 284.0**	**-2.7**
Trade[2]	**285.0**	**315.2**	**293.5**	**-6.9**
Total utilization	**2 278.8**	**2 327.0**	**2 313.9**	**-0.6**
Food	1 058.1	1 071.2	1 082.3	1.0
Feed	765.1	792.9	787.7	-0.7
Other uses	455.6	463.0	443.9	-4.1
Ending stocks	**505.8**	**522.6**	**497.4**	**-4.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	153.1	153.2	152.9	-0.2
LIFDC[3] (kg/year)	159.3	159.5	159.0	-0.3
World stock-to-use ratio (%)	**21.7**	**22.6**	**20.6**	
Major exporters stock-to-disappearance ratio (%)	**17.3**	**18.2**	**16.6**	

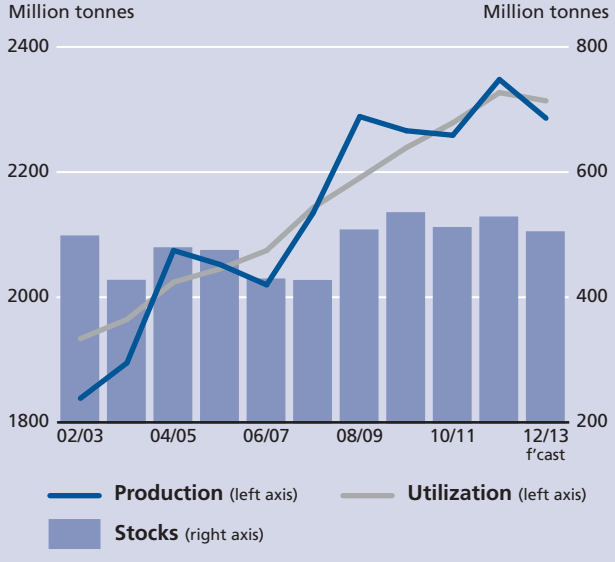
FAO CEREAL PRICE INDEX (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	183	247	239	-5.2

[1] Rice in milled equivalent.

[2] Trade refers to exports based on a July/June marketing season for wheat and coarse grains and on a January/December marketing season for rice.

[3] Low-Income Food-Deficit countries.

Cereal production, utilization and stocks



Wheat market summary

FAO's latest forecast for global wheat production in 2012 points to a 5.5 percent decline from last year's record level to 661 million tonnes. This forecast, which is considerably below expectations earlier in the year, largely reflects the impact of severe drought in eastern Europe and central Asia, but also the reduced prospects in the southern hemisphere. Biggest declines are expected in the CIS countries, where production by the three largest wheat producers, Kazakhstan, the Russian Federation and Ukraine, is forecast to fall by 36 million tonnes.

Global wheat utilization in 2012/13 is projected to drop slightly to 687 million tonnes. At this level, total utilization would exceed production for the second consecutive season. Feed use of wheat, which peaked in 2011/12, is likely to decline but still remain above average, due to the very tight maize supply. However, world wheat trade is likely to contract sharply – by 8.2 percent from the record volume registered in 2011/12 – to only 135 million tonnes. This fall reflects larger supplies in several wheat importing countries but also some reduction in feed wheat import demand and tighter exportable supplies.

Against this backdrop, world wheat stocks could be cut by 11.9 percent from their opening level, to 167 million tonnes by the close of the crop seasons ending in 2013. At this level, the world wheat stock-to-use ratio could drop to 24.0 percent, from 27.4 percent in 2011/12, but still remain above the 22 percent low registered in 2007/08. The ratio of major wheat exporters' closing stocks to their total disappearance – defined as domestic utilization plus exports – is also expected to fall sharply, to 13.9 percent from 18.2 percent in the previous season. This confirms a significant tightening of the global wheat supply-and-demand balance in 2012/13.

FAO's early outlook points to a rebound in world wheat production in 2013. Current prices are higher than a year ago and, given demand prospects, wheat remains an attractive option for producers. Thus, weather permitting, plantings in most major producing countries are expected at least to match those of last year or even to increase, especially in those areas affected by drought in 2012. International wheat prices are unlikely to retreat to lower levels without a strong rebound in world production in 2013.

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World wheat market at a glance

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**655.3**	**699.4**	**661.2**	**-5.5**
Trade[1]	**125.3**	**147.0**	**135.0**	-8.2
Total utilization	**663.0**	**697.6**	**687.5**	**-1.4**
Food	468.2	473.8	479.1	1.1
Feed	120.3	146.3	136.1	-7.0
Other uses	74.4	77.6	72.2	-7.0
Ending stocks	**192.7**	**189.2**	**166.7**	**-11.9**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	67.7	67.7	67.7	0.0
LIFDC (kg/year)	49.8	50.0	50.2	0.4
World stock-to-use ratio (%)	**27.6**	**27.5**	**24.0**	
Major exporters stock-to disappearance ratio[2] **(%)**	**20.1**	**18.2**	**13.9**	

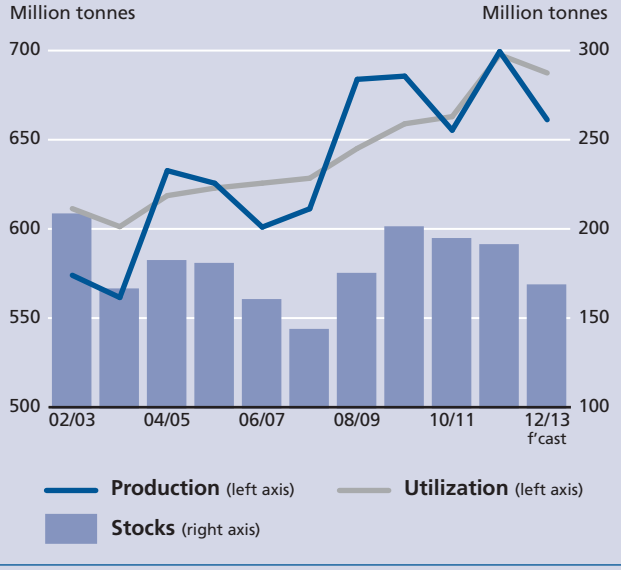
FAO WHEAT PRICE INDEX[3] **(2002-2004=100)**	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	169	222	208	-9.2

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

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

[3] Derived from International Grains Council (IGC) wheat index.

Wheat production, utilization and stocks



Coarse grain market summary

The latest forecast for world production of coarse grains in 2012 stands at about 1 137 million tonnes, sharply down from earlier forecasts and 2.5 percent below 2011's record crop. The devastating summer drought in the United States reversed an otherwise positive outlook for the 2012/13 marketing season. The reduced US maize crop is largely behind a 3.2 percent decline in global maize output in 2012, to around 856 million tonnes. World barley production also fell this year, by 3.4 percent, to 130 million tonnes, mainly due to a decrease in the CIS countries. One positive outcome has been the expansion in sorghum production, which is forecast to increase by 9 percent in 2012, to nearly 61 million tonnes, mostly due to good prospects in Africa, the largest producing region.

Tight supply and high prices are likely to result in a slightly smaller world utilization of coarse grains to 1 152 million tonnes in 2012/13, the first decline after nearly ten years of undisrupted expansion. The anticipated decrease reflects a fall in maize-based ethanol production in the United States, by as much as 10 percent from the previous year. Feed utilization is expected to contract by almost 1 percent, with declines in the developed countries offsetting increases in the developing countries, especially in Asia.

In spite of lower projected use, world utilization would still exceed this year's production, resulting in a drawdown of stocks and a sharp drop in the global stocks-to-use ratio as well as the major exporters' stock-to-disappearance ratio. The tightening of the supply-and-demand balance has pushed up prices of major coarse grains to very high levels, which are in part responsible for the forecast of an 8 percent contraction in world trade in 2012/13, to 121 million tonnes. International maize prices surged to record levels in early September and, while they have retreated somewhat in recent weeks, the market remains vulnerable given the run-down stock levels in the United States, the world's largest exporter.

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World coarse grain market at a glance

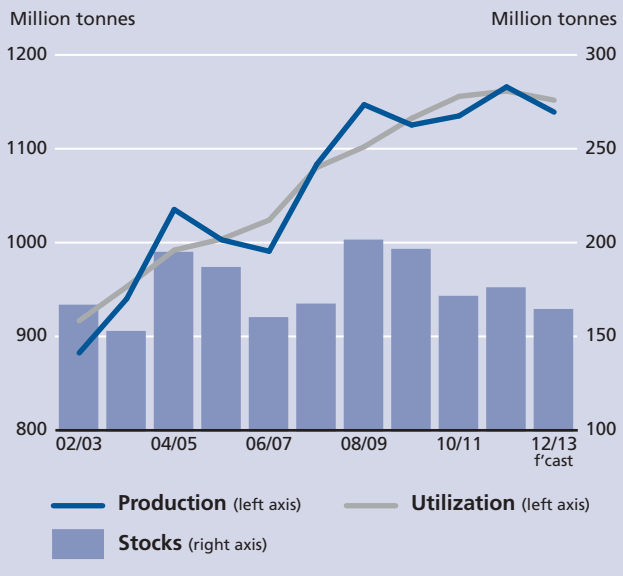
	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**1 135.0**	**1 165.9**	**1 136.9**	**-2.5**
Trade[1]	**123.3**	**131.0**	**121.0**	-7.6
Total utilization	**1 155.8**	**1 161.5**	**1 151.8**	**-0.8**
Food	200.7	201.6	201.7	0.0
Feed	633.0	634.6	639.0	0.7
Other uses	322.1	325.2	311.1	-4.3
Ending stocks	**169.5**	**174.0**	**161.0**	**-7.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	29.1	28.9	28.5	-1.4
LIFDC (kg/year)	40.8	40.0	39.3	-1.8
World stock-to-use ratio (%)	**14.6**	**15.1**	**13.0**	
Major exporters stock-to disappearance ratio[2] **(%)**	**10.5**	**10.3**	**8.9**	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	176	277	279	-0.8

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

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

Coarse grain production, utilization and stocks



Rice market summary

The 2012 rice season is unfolding positively in most regions, as a revival of the monsoon rains has allayed fears of a repeat of the 2009 drought in India. As a result, global production is forecast to exceed last year's record by about 1 percent and reach 486 million tonnes (milled rice basis), a level more than sufficient to cover world consumption in 2012/13 and enable countries to increase their end-of-season inventories.

Import demand was particularly strong in 2012, supported by a decline in export prices from the high 2011 levels, as large export availabilities intensified competition among several of the world suppliers. Consequently, international trade in rice is anticipated to grow by 2.5 percent in calendar 2012 to a new high of 37.3 million tonnes. Early prospects for 2013 are also positive, with trade forecast even higher, at 37.5 million tonnes. Among the major developments driving trade in rice this year and probably next are the very large size of China's imports, contrasting with subdued purchases by traditional importers, such as Bangladesh, Indonesia and the Philippines. As regards exports, India is expected to displace Thailand as the world's major rice exporter in 2012.

Global rice utilization in 2012/13 is predicted to increase by 1.4 percent to 475 million tonnes, of which 402 million tonnes are destined for human consumption, with only small amounts diverted to feed or industrial uses. Per capita food consumption is expected to reach an estimated average of 56.8 kg per year, up from 56.7 kg in 2011/12.

While international prices were rather subdued in the first four months of the year, they resumed an upward trend in May 2012, sustained by the high price policy implemented by Thailand and, in recent months, by pressure from other cereal markets. Thus, although prospects for increasingly abundant rice supplies would call for a retrenchment of rice quotations in 2013, their future direction will be very much influenced by the policies of the major country players, in particular Thailand, and developments in the wheat and maize markets.

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World rice market at a glance

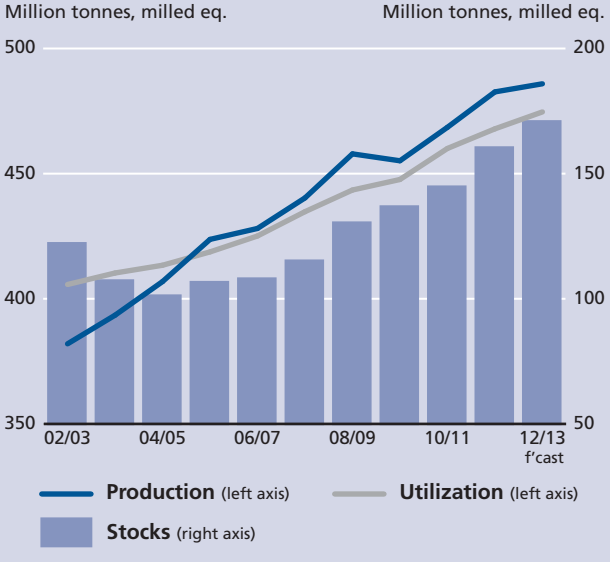
	2010/11	2011/12 *estim.*	2012/13 *f'cast*	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**468.5**	**482.7**	**485.9**	**0.7**
Trade[1]	**36.4**	**37.3**	**37.5**	0.5
Total utilization	**460.1**	**467.9**	**474.7**	**1.5**
Food	389.1	395.8	401.5	1.4
Ending stocks	**143.7**	**159.3**	**169.8**	**6.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	56.3	56.6	56.7	0.2
LIFDC (kg/year)	68.7	69.4	69.5	0.1
World stock-to-use ratio (%)	**30.7**	**33.6**	**35.5**	
Major exporters stock-to disappearance ratio[2] **(%)**	**21.2**	**26.0**	**27.1**	

FAO RICE PRICE INDEX (2002-2004=100)	2010	2011	2012 *Jan-Oct*	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	229	251	238	-5.5

[1] Calendar year exports (second year shown).

[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

Rice production, utilization and stocks



Cassava market summary

World cassava output in 2012 is expected to reach 282 million tonnes, an increase of 7 percent from the level of 2011, and the fourteenth annual rise in succession. The expansion, which has been particularly prominent in recent years, is being driven by increasing industrial applications of cassava in East and Southeast Asia, especially for ethanol, and rising demand for food in the African continent.

World trade in cassava products, entirely sustained by industrial demand, is set to undergo a marked expansion by 2012. This is the result of the price competitiveness that cassava has gained over maize thanks, by and large, to policies in Thailand, the world's leading international supplier of cassava products. International prices of chips and starch have been remarkably stable and low in spite of very strong demand and highly volatile grain markets.

The outlook for 2013 points to a continued expansion of production in Africa, where cassava remains a strategic crop for both food security and poverty alleviation. In Asia, prospects remain far from certain, depending on how the price relation between maize and cassava evolves and on the competiveness of cassava in the production of ethanol relative to other feedstocks. These outcomes will be heavily influenced by Thailand's "price pledging scheme" and in particular, the degree of price discounting in sales from official stockpiles. The region's uncertainty has been compounded by the recent weakness of domestic root prices in major producing countries that do not administer domestic price supports. The extent of these price falls cast doubt on the degree of market incentive for producers to plant cassava for the new season.

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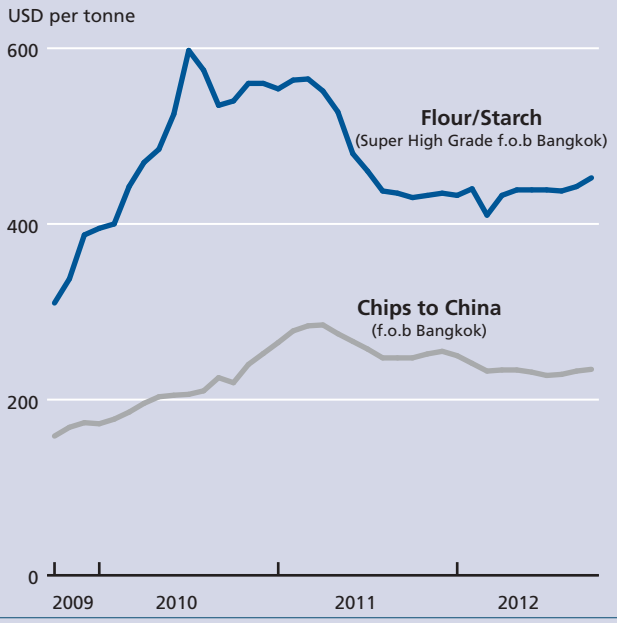
World cassava market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes, fresh root eq.			*%*
WORLD BALANCE				
Production	**242.0**	**263.3**	**281.7**	**7.0**
Trade	**21.8**	**25.3**	**33.3**	**31.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	17.1	18.6	19.9	7.0
Developing (kg/year)	21.5	23.3	25.0	7.0
LDC (kg/year)	69.3	72.7	75.0	3.3
Sub-Saharan Africa (kg/year)	111.1	123.5	130.9	6.0
Trade share of prod. (%)	**9.3**	**8.3**	**9.0**	**8.2**

FAO CASSAVA PRICES[1] (USD/tonne)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
Chips to China (f.o.b. Bangkok)	208	263	235	-11.6
Starch (f.o.b. Bangkok)	507	489	435	-13.1
Thai domestic root prices	79	80	78	-2.6

[1] Source: Thai Tapioca Trade Association.

International cassava prices (October 2009 - October 2012)



Oilseeds market summary

The 2012/13 oilcrop season is opening under the legacy of a tight 2011/12 balance and with a disappointing soybean crop in the United States. Last season's tightness mainly resulted from short global soybean supplies which, combined with firm soy demand, led to a significant drawdown in world stocks. With global stock-to-use ratios falling to critically low levels, international prices embarked on a new upward trend in 2012. Oilseed and meal quotations, in particular, climbed virtually without interruption until August, setting new records. Only oils/fats prices departed from this tendency as the arrival of abundant palm oil supplies on the world market coincided with a weak demand for the product.

The 2012/13 season started with very low opening stocks, but also with disappointing first harvests, especially in the United States, where the new soybean crop (the harvest of which is nearing completion) was hit by severe drought. The US production shortfall is likely to limit global export availabilities over the first half of the current season. Although record-high soy prices are expected to strongly stimulate plantings in South America (where the season is about to start), harvests in the region are several months away, meaning that favourable weather conditions throughout the growing season will be required for current forecasts of a record crop to materialize.

Overall, the current 2012/13 outlook points to an improvement in the global supply and demand balance for oilcrop products, in particular oilmeals. Built into this forecast are expectations that persistently high prices are going to ration demand for oilmeals and that growth in the demand for oils/fats could be contained by a lower uptake of vegetable oils by the biodiesel industry.

Considering that only a partial recovery in global stock levels and stock-to-use ratios appears possible, international markets are expected to remain vulnerable, leaving limited room for a relaxation in prices, at least until prospects for record soy crops in South America are confirmed.

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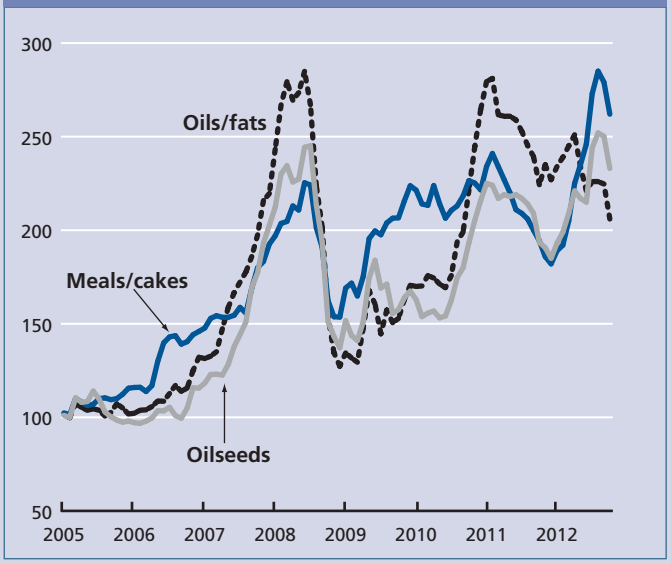
World oilseed and product market at a glance

	2010/11	2011/12 *estim.*	2012/13 *f'cast*	Change: 2012/13 over 2011/12
	million tonnes			%
TOTAL OILSEEDS				
Production	468.0	452.3	474.3	4.9
OILS AND FATS				
Production	181.3	181.2	186.7	3.0
Supply	208.7	211.8	215.9	1.9
Utilization	177.0	183.9	186.1	1.2
Trade	92.4	96.6	98.6	2.1
Stock-to-utilization ratio (%)	*17.3*	*15.9*	*16.0*	
MEALS AND CAKES				
Production	118.4	111.0	119.8	7.9
Supply	137.1	131.6	136.3	3.6
Utilization	114.4	116.9	117.7	0.7
Trade	69.9	71.7	73.8	2.9
Stock-to-utilization ratio (%)	*18.0*	*14.1*	*15.0*	

FAO PRICE INDICES (Jan-Dec) (2002-2004=100)	2010	2011	2012 *Jan-Oct*	Change: Jan-Oct 2012 over Jan-Oct 2011 %
Oilseeds	165	216	223	3.2
Meals/cakes	216	218	239	9.6
Oils/fats	182	256	231	-9.8

Note: Refer to table 14 for further explanation regarding definitions and coverage.

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



Sugar market summary

According to FAO initial forecasts for 2012/13 season, world sugar production is set to increase by 3.8 million tonnes, or 2.2 percent, from 2011/12. For the third consecutive year, production is anticipated to surpass consumption, with the surplus expected to hover around 5.4 million tonnes, contributing to a rebuilding of sugar stocks to relatively comfortable levels. The growth in sugar output is attributed to an expansion in area and input use, sustained by remunerative international sugar prices and a return to more normal weather patterns. Falling sugar outputs in India, the EU and Thailand are anticipated to be offset mainly by expansions in Brazil, the world's largest producer, and Australia. World sugar consumption is set to grow by about 2 percent in 2012/13, reflecting increases in several developing countries that benefited from income gains and falling domestic sugar prices. Large export availabilities in key supplying countries will be balanced, to some extent, by a rebounding of purchases by traditional importers aiming to beef up stocks as a protection against future price instability, which could lessen the possibility of price dips in the coming months.

World sugar market at a glance

	2010/11	2011/12 *estim.*	2012/13 *f'cast*	Change: 2012/13 over 2011/12
	million tonnes			*%*
WORLD BALANCE				
Production	**165.6**	**173.5**	**177.3**	**2.2**
Trade	**54.8**	**52.1**	**52.9**	**1.6**
Total utilization	**160.9**	**168.6**	**171.9**	**1.9**
Ending stocks	**56.3**	**59.3**	**62.2**	**4.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	23.4	24.1	24.3	0.8
LIFDC (kg/year)	15.4	16.4	16.6	1.3
World stock-to-use ratio (%)	**35.0**	**35.2**	**36.2**	

ISA DAILY PRICE AVERAGE (US cents/lb.)	2010	2011	2012 *Jan-Oct*	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	21.3	26.0	22.0	-17.0

International Sugar Agreement (ISA)

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Meat and meat products market summary

Struggling with high feed prices and stagnating consumption, global meat production in 2012 is forecast to grow by less than 2 percent to 302 million tonnes. As falling industry profitability has translated into modest output gains in the developed countries, most of the world expansion is likely to take place in the developing countries, which now account for 60 percent of world output. Virtually all of the sector growth in 2012 is forecast to stem from the feed-dependent poultry and pigmeat sectors, as gains in both bovine and sheep meat outputs are anticipated to be modest.

Concerns about the profitability of the meat sector have been compounded by a weakening of the growth of export markets, with trade expansion anticipated to slow down to 2 percent from 8 percent in 2011. Global meat exports are expected to edge up by about 600 000 tonnes to 29.4 million tonnes in 2012, mainly sustained by increased poultry and pig meat flows and with much of the market expansion likely to be captured by developing countries, in particular Brazil and India.

Escalating feed prices and slowing meat production growth have pushed up international meat prices in late 2012, to levels approaching the highs attained in 2011. Accordingly, the FAO meat price index, which has jumped by 5 percent since July 2012, averaged 174 points between January and October, which compares with 176 for the same period last year. Most of the recent increase in the meat price index reflect price gains for poultry and pigmeat, which have soared by 9 percent and 12 percent respectively since July.

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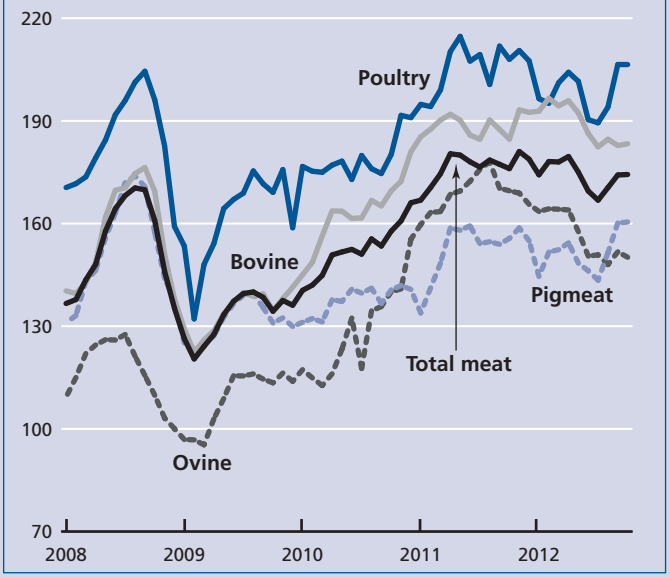
World meat market at a glance

	2010	2011 *estim.*	2012 *f'cast*	Change: 2012 over 2011
	million tonnes			%
WORLD BALANCE				
Production	**294.2**	**297.1**	**301.8**	**1.6**
Bovine meat	66.7	66.6	66.8	0.4
Poultry meat	98.9	102.3	104.5	2.2
Pigmeat	109.3	108.8	110.8	1.9
Ovine meat	13.7	13.8	13.9	0.9
Trade	**26.7**	**28.8**	**29.4**	**2.2**
Bovine meat	7.7	8.0	8.0	1.0
Poultry meat	11.7	12.7	13.0	2.4
Pigmeat	6.2	7.1	7.4	3.0
Ovine meat	0.8	0.7	0.8	1.9
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	42.5	42.4	42.5	0.4
Developed (kg/year)	79.2	78.9	79.0	0.0
Developing (kg/year)	32.4	32.4	32.7	1.0

FAO MEAT PRICE INDEX (2002-2004=100)	2010	2011	2012 *Jan-Oct*	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	152	157	174	-1.0

FAO international meat price indices (2002-2004 = 100)



Dairy market summary

International prices of dairy products began to strengthen in mid-2012, reversing the steady decline that had characterized the previous twelve months. The change in trend resulted from a tightening of supplies to the world market. Availabilities are anticipated to be finely balanced until at least the end of the year, as output in the Northern Hemisphere is now trending seasonally downwards and only a limited increase is anticipated during the new production year in the Southern Hemisphere. The absence of substantial growth in milk output in the principal exporting countries is likely to mean a further upward movement in prices.

World milk production in 2012 is forecast to grow by 3.0 percent to 760 million tonnes – a higher rate than the average for recent years. Asia is expected to account for most of the increase, with output also growing in Oceania and South America.

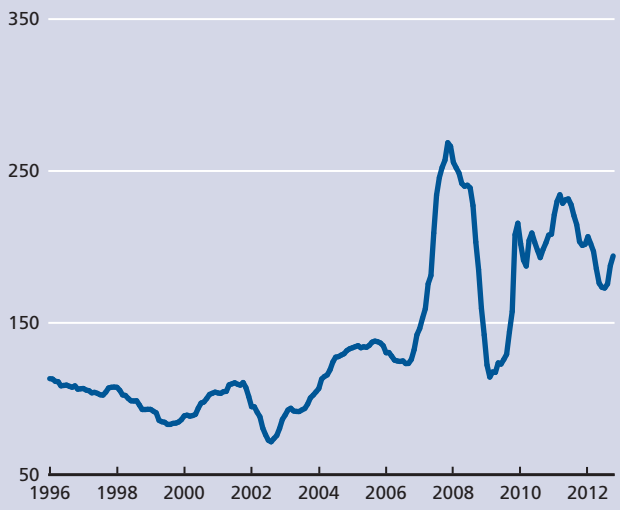
World trade in dairy products is expected to continue expanding in 2012. Demand remains firm, with imports anticipated to reach 52.9 million tonnes of milk equivalent, up 4.6 percent from 2011. Most of the growth in demand will come from Asia, followed by Africa.

World dairy market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes, milk equiv.			%
WORLD BALANCE				
Total milk production	**722.9**	**737.9**	**759.6**	**3.0**
Total trade	**47.8**	**50.5**	**52.9**	**4.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	104.6	105.6	107.5	1.8
Developed (kg/year)	234.1	234.9	238.1	1.4
Developing (kg/year)	69.4	70.8	72.7	2.8
Trade share of prod. (%)	**6.6**	**6.8**	**7.0**	**1.6**

FAO DAIRY PRICE INDEX (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	200	221	187	-16.6

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.

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Fish and fishery products market summary

International prices of fish and fish products have been under downward pressure in 2012, in particular farmed species, while prices of captured fish have fared better. The price dip was the result of a reduced consumer demand, the effect of which was contained in the captured fish sector by a downsizing of production. These tendencies were reflected in the FAO fish price index, which shows international fish prices sliding by almost 7 percent in the first ten months of the year compared with the same period in 2011.

World production of fish is forecast to rise by 1.3 percent to 157.5 million tonnes in 2012, less than half the 5 percent expansion rate registered in 2011. The increase this year would be entirely due to aquaculture, while supplies from capture fisheries may decline somewhat, as rising fuel costs and difficulty to pass them down to customers limit the activity of the fishery fleet.

International trade in fish and fishery products is foreseen to expand by 2.5 percent to 59.9 million tonnes, live weight, as importers are expected to take advantage of falling prices to step up purchases. However, demand by the EU, the world's largest fish import market, has been weak due to economic downturns in some southern European markets.

World fish consumption as food is now anticipated to increase by 2.6 percent in the course of the year, prompting a 1.5 percent gain in per capita food consumption to 19.2 kg per year. All of the increase would correspond to aquaculture fish, as intake of wild fish is expected to decline somewhat, consistent with the changes in the relative prices.

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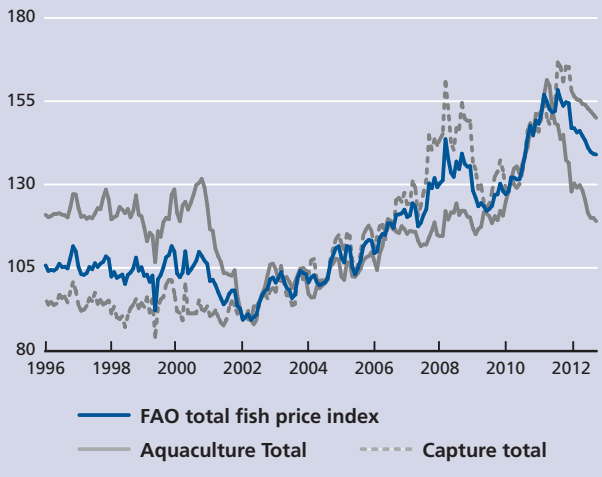
World fish market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes			*%*
WORLD BALANCE				
Production	**148.5**	**155.5**	**157.5**	**1.3**
Capture fisheries	88.6	91.9	90.2	-1.8
Aquaculture	59.9	63.6	67.3	5.8
Trade value (exports USD billion)	**109.1**	**127.1**	**130.5**	**2.6**
Trade volume (live weight)	**56.7**	**58.5**	**59.9**	**2.5**
Total utilization	**148.5**	**155.5**	**157.5**	**1.3**
Food	128.3	132.0	135.4	2.6
Feed	15.0	18.3	16.6	-9.4
Other uses	5.1	5.2	5.5	5.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/year)	18.6	18.9	19.2	1.5
From capture fisheries (kg/year)	9.9	9.8	9.7	-1.5
From aquaculture (kg/year)	8.7	9.1	9.5	4.6

FAO FISH PRICE INDEX[1] (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	137	154	143	-6.7

[1] Data source: Norwegian Seafood Council

FAO fish price index (2002-2004 = 100)



Data source: Norwegian Seafood Council

Market assessments

WHEAT

PRICES

International prices are up sharply from the previous year[1]

This year's decline in world wheat production and a tightening supply-and-demand balance have pushed up international wheat prices since the start of the 2012/13 marketing season in July. The worsening crop prospects, especially in the CIS countries, coupled with an even tighter maize situation that is encouraging more wheat feeding, continued to underpin wheat prices.

In October, weaker pace in trade activity, combined with generally favourable winter wheat planting conditions in the Northern Hemisphere countries, exerted some downward pressure on prices, but wheat markets received support from the expectation of export restrictions being imposed in Ukraine. In addition, concerns over the quality as well as the size of this year's wheat crop in Australia (which is beginning to be harvested) contributed to the price strength during the second half of October. Overall, the benchmark **US wheat (No.2 Hard Red Winter, f.o.b. Gulf)** values averaged USD 373 per tonne in October, nearly unchanged from September but up 6 percent from July and as much as 24 percent higher than in the same period last year. The October average would still be 23 percent below March 2008, the month when wheat prices peaked at an all-time high. Wheat futures have also strengthened since the start of the season. In October, futures drifted to 4-month lows before reverting to higher levels, mostly on signs of tightening export supplies from the Black Sea. By late October, **wheat futures for December delivery** on the Chicago Board of Trade (CBOT) were priced at around USD 318 per tonne, up 38 percent from the values quoted for the corresponding period last year.

[1] Additional price analysis is included in the Market Indicators section of this report.

PRODUCTION

Latest information confirms a smaller world wheat production in 2012

FAO's latest forecast for global wheat production in 2012 stands at 661 million tonnes, 5.5 percent below last year's level, but close to the average of the past five years. This level is considerably below expectations earlier in the year, largely reflecting the impact of severe drought in eastern Europe and central Asia, but also weather and, in some cases, policy factors in the key southern hemisphere producing countries, which have reduced prospects for the 2012 crop.

Most of the contraction in global wheat production reflects the negative effects of drought in the major producing CIS countries. Wheat output in the **Russian Federation** is estimated 30 percent down from 2011. A similar decline in percentage terms is estimated in **Ukraine**, while in **Kazakhstan**, output is reported to be less than half last year's bumper crop. All combined, output in these three countries is estimated to have fallen by about 36

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

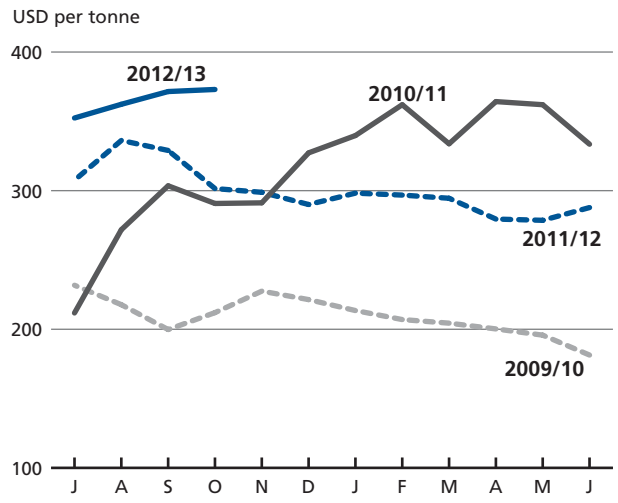
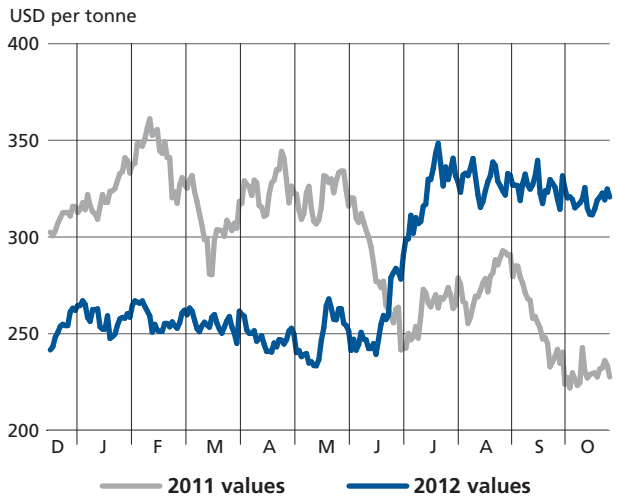


Figure 2. CBOT wheat futures for December



million tonnes. In other parts of Europe, wheat output also declined, particularly in some central and southeastern countries, where conditions during the growing season were unfavourably dry. Following recent downward revisions for some northern countries, which are among the last to complete harvesting (the United Kingdom in particular), the **EU's** aggregate wheat output is estimated to drop by 4.9 percent in 2012.

In the Asian Far East sub-region, record 2012 crops were gathered in the key producers, namely **China** and **India**, while in the Near East, results have been mixed: good crops were gathered in **Afghanistan** and the **Islamic Republic of Iran** but outputs were down elsewhere, reflecting dry conditions and/or the negative impact of civil disturbances. The 2012 harvest results were also mixed in North Africa, where production recovered in **Algeria** but was sharply reduced in **Morocco** due to dry conditions. In North America, wheat production in the **United States** is estimated to have increased by 13.5 percent to an above-average level of 61.8 million tonnes, while in **Canada**, output is expected to be above average and 5.8 percent higher than in 2011.

In the Southern Hemisphere, the 2012 aggregate wheat production in South America is forecast to decline by some 12 percent compared with 2011, mainly reflecting a reduced output expected in **Argentina**, the sub-region's main producing country. The decline follows a significant contraction in the area planted due to diversion of land to more profitable crops, mainly barley, in addition to dry weather at sowing time. In Oceania, prospects for the wheat crop in **Australia** are mixed, reflecting varied winter rainfall and moisture conditions. The country's output is forecast to contract by about 24 percent from last year's record due to lower yields expected in some major producing areas affected by dry conditions, particularly Western Australia. In Southern Africa, provisional estimates point to a 10 percent decline in the sub-region's 2012 wheat production to 2.1 million tonnes, largely reflecting a smaller crop expected in **South Africa**, the major producer, due to reduced plantings.

Wheat planting for 2013

In many parts of the Northern Hemisphere, the winter wheat crops for harvest in 2013 are already being planted or are due to be sown in the next few weeks. With current wheat prices higher than a year ago and utilization expected to outstrip production for the second year in succession in 2012/13, wheat remains an attractive option for producers. Thus, weather permitting, plantings in most major producing countries are expected to at least match those of last year, or to increase, especially in those areas affected by drought in 2012.

Table 1. World wheat market at a glance

	2010/11	2011/12 *estim.*	2012/13 *f'cast*	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**655.3**	**699.4**	**661.2**	**-5.5**
Trade[1]	**125.3**	**147.0**	**135.0**	-8.2
Total utilization	**663.0**	**697.6**	**687.5**	**-1.4**
Food	468.2	473.8	479.1	1.1
Feed	120.3	146.3	136.1	-7.0
Other uses	74.4	77.6	72.2	-7.0
Ending stocks	**192.7**	**189.2**	**166.7**	**-11.9**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	67.7	67.7	67.7	-
LIFDC (kg/year)	49.8	50.0	50.2	0.4
World stock-to-use ratio (%)	**27.6**	**27.5**	**24.0**	
Major exporters stock-to disappearance ratio[2] (%)	**20.1**	**18.2**	**13.9**	

FAO WHEAT PRICE INDEX[3] (2002-2004=100)	**2010**	**2011**	**2012** *Jan-Oct*	**Change: Jan-Oct 2012 over Jan-Oct 2011** %
	169	222	208	-9.2

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

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

[3] Derived from International Grains Council (IGC) wheat index.

Table 2. Wheat production: leading producers[1]

	2011 *estim.*	2012 *f'cast*	Change: 2012 over 2011
	million tonnes		%
European Union	137.5	130.8	-4.9
China (Mainland)	117.4	119.0	1.4
India	86.9	93.9	8.1
United States	54.4	61.8	13.6
Russian Federation	56.2	39.0	-30.6
Australia	29.5	22.5	-23.7
Canada	25.3	26.7	5.5
Pakistan	24.3	24.0	-1.2
Turkey	21.8	20.1	-7.8
Ukraine	22.3	15.5	-30.5
Kazakhstan	22.7	10.8	-52.4
Iran Islamic Rep. of	13.5	13.8	2.2
Argentina	13.7	11.5	-16.1
Egypt	8.4	8.7	3.6
Uzbekistan	6.3	6.7	6.3
Other countries	59.2	56.4	-4.7
World	**699.4**	**661.2**	-5.5

[1] Countries listed according to their position in global production (average 2010-2012).

In the **United States**, some 80 percent of the expected winter wheat crop was sown by late October, on par with the average pace of planting. However, soil conditions are too dry in some main producing parts of the Great Plains, adversely affecting germination and emergence. In Europe, conditions for planting in the **EU** have been generally favourable with the exception of some parts of **Bulgaria**, **Hungary** and **Romania**, where soil moisture is limited. Early indications point to some area expansion, particularly in **Germany** and **Poland** after reductions last year. In the **Russian Federation**, winter wheat planting was largely completed under satisfactory weather conditions, with the exception of some key southern growing areas where soil moisture levels remained low after the summer drought. In **Ukraine**, winter wheat planting has been completed under warm weather and satisfactory moisture conditions. The area sown is reported to match that of last year, but the rate of germination should be much improved. In Asia, the 2013 wheat crop planting is virtually complete in **China** on an area estimated to be similar to that of the previous year. Planting was underway in **India** and **Pakistan** as of October and will continue until mid-December. In India the area under wheat is expected to remain similar to last year's high level.

Figure 3. Black sea (Kazakhstan, Russian Federation and Ukraine) wheat production and exports

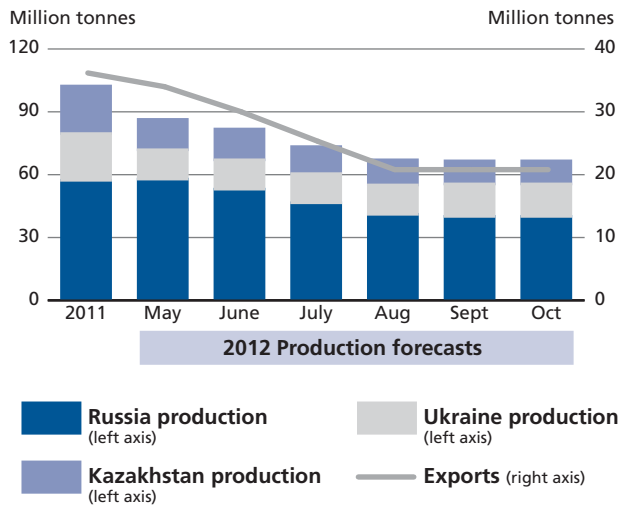
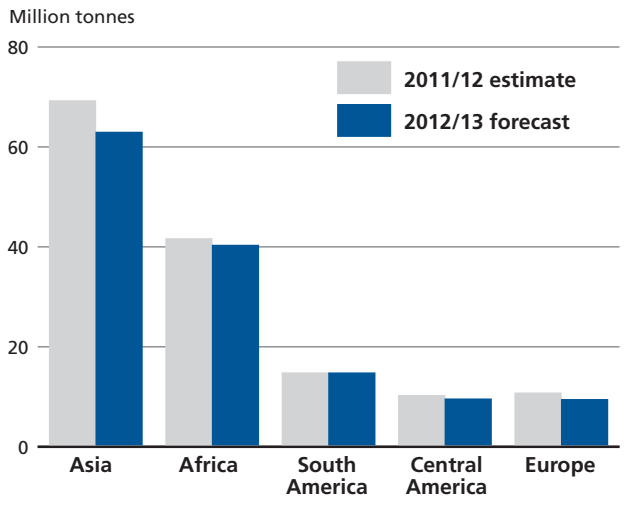


Figure 4. Wheat imports by region



TRADE

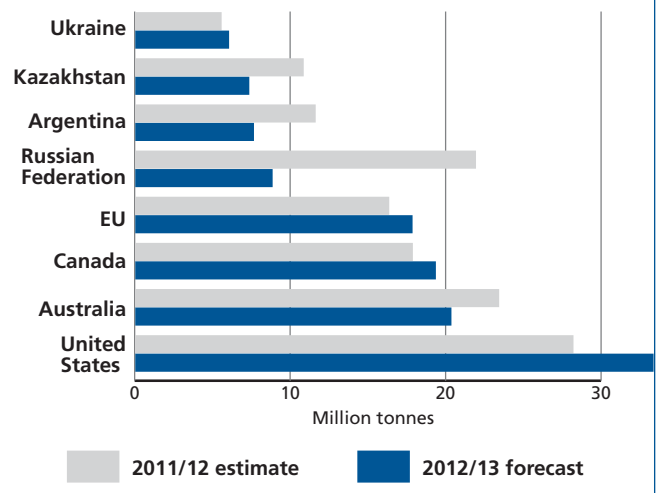
Wheat trade in 2012/13 markedly below the 2011/12 record

World wheat trade (exports) in 2012/13 (July/June), which includes wheat flour in grain equivalent, is forecast to reach 135 million tonnes, down as much as 8 percent, or 12 million tonnes, from the record volume registered in 2011/12. The contraction mainly reflects higher supplies in several wheat importing countries and reduced import demand for feed wheat compared with the previous season's exceptionally high level. The forecast for 2012/13 world trade has been cut by a further 500 000 tonnes since October,[2] following downward revisions to wheat imports in Asia and Europe.

Total wheat imports by Asia are currently forecast to reach 61.7 million tonnes, down 9 percent, or 6 million tonnes, from the 2011/12 record. Most of the decrease is expected: in **Uzbekistan** (-1.2 mt) and **Afghanistan** (- 1 mt), reflecting this year's bumper crops; in the **Philippines** (-0.8mt), due to large wheat stocks and good rice supplies; in **China** (-1mt), because of the increase in domestic production; and in the **Republic of Korea** and **Thailand**, mostly due to reduced demand for feed wheat. In Africa, aggregate wheat imports are put at 39 million tonnes, down 1.3 million tonnes from 2011/12. Most of the reduction is forecast for North Africa, while total imports by countries in sub-Saharan Africa are expected to remain close to the previous season's level. Increases in domestic production in **Algeria** and **Egypt** are expected to result in smaller wheat purchases by the two countries (by -1.1mt and -1.7mt respectively) while imports by **Morocco** could rise significantly (by 1.7mt) because of the unfavourable dry weather conditions that delayed planting and resulted in a 36 percent cut in wheat production this year. Given the tight domestic supply situation, Morocco recently suspended its 17 percent import duty on soft wheat, effective from the

[2] FAO Cereal Supply and Demand Brief - October 2012: http://www.fao.org/worldfoodsituation/wfs-home/en/

Figure 5. Major wheat exporters



beginning of October 2012 until the end of this year. In Latin America and the Caribbean, total imports in 2012/13 are forecast to approach 22 million tonnes, down slightly from the previous season. While wheat imports by **Brazil**, the region's largest wheat importer, are set to increase by 300 000 tonnes to compensate for a reduction in this year's harvest, purchases by **Mexico**, the second largest wheat importer in the region, may drop by 700 000 tonnes, notwithstanding a fall in production. Lower wheat imports by Mexico reflect a cut in wheat utilization in the livestock sector, given the prospect for larger supplies of alternative feed grains such as sorghum. Imports in Europe are forecast to dip to 8.2 million tonnes, down 14 percent from the previous season. The **EU** accounts for all of this anticipated decrease, with total imports by the EU falling to 6 million tonnes from an exceptionally high level of 7.5 million tonnes registered in 2011/12. The decrease reflects this year's reduction in feed use and tighter export supplies from the Black Sea.

Based on the current trade prospects for 2012/13, which point to a significant decline from the previous season, global wheat export supplies are likely to be sufficient in spite of production shortfalls in a number of major exporting countries. Shipments from the **Russian Federation** and **Kazakhstan** are forecast to be heavily constrained by the drop in their wheat outputs in 2012. Wheat exports by the Russian Federation could plunge to 8.5 million tonnes from nearly 22 million tonnes in 2011/12, while sales from Kazakhstan may drop by one-third, to 7 million tonnes. Wheat shipments from **Argentina** and **Australia** are also expected to be curtailed significantly this season – by 35 percent and 13 percent, respectively – because of the forecast decline in this year's wheat harvests. Smaller exports also are anticipated from **Brazil**, amid rising domestic prices of wheat and wheat flour. Given the fall in **Ukraine's** wheat production this year, it's wheat exports in 2012/13 is forecast to decline to 5.7 million tonnes, with nearly 4 million tonnes already delivered since the start of the season. Wheat sales from the **United States** are forecast to increase by 19 percent, to 33 million tonnes, following a strong recovery in this year's production. Exports from **Canada** and the **EU** are also envisaged to rebound, by at least 9 percent each, to 19 million tonnes and 17.5 million tonnes respectively in 2012/13.

UTILIZATION

Wheat utilization falling below the 2011/12 peak

World wheat **utilization** in 2012/13 is forecast to reach 687 million tonnes, down 1.5 percent from the exceptionally high level in the previous season, but still slightly above the 10-year average trend. The projected decline in total wheat utilization in 2012/13 would be mostly on account of a lower feed usage of wheat by the animal sector, which had reached an all-time high in the previous season amid very tight supplies of alternative feed. World **feed utilization** of wheat is currently forecast at 136 million tonnes, down 7 percent from 2011/12. In terms of volume, the bulk of the reduction from the previous season is expected in China following a surge in 2011/12 to a record 26 million tonnes, and in the EU, where feed use is projected down 2 million tonnes from the previous season, reaching 53 million tonnes. By contrast, feed utilization of wheat in the United States is forecast at a record 8.6 million tonnes, almost double the previous season's level, driven by the high priced and tight maize supply.

Global **food consumption** of wheat is likely to reach 479 million tonnes, up 1.1 percent from the previous season. At this pace, world per capita consumption of wheat is expected to remain steady at around 67.7 kg per annum, with the per capita consumption remaining at 60.4 kg in the developing countries and at 97.4 kg in the developed countries. While year-to year consumption variations at country level are generally small, this often masks variations within a country and differences among income groups. In North Africa and the Near East, where wheat consumption is among the highest in the world, high wheat prices are raising concern amid political instability and tensions.

The **other uses** of wheat – which include industrial use, seeds and post-harvest losses – are expected to total 72 million tonnes, down 5.4 percent from the previous season. Most of the decrease would be in wastage, which tends to

vary proportionally with world production. Thus, this year's anticipated 5 percent drop in world wheat production would result in some declines also in post-harvest loss. However, industrial use of wheat in 2011/12 is forecast to rise, albeit modestly, to 20 million tonnes, according to the International Grains Council. Most of the expansion is expected in the EU, where wheat used for ethanol production (excluding non-fuel use) is projected at 4.8 million tonnes, up 1 million tonnes from 2011/12.

STOCKS

Lower wheat inventories and stock-to-use ratios

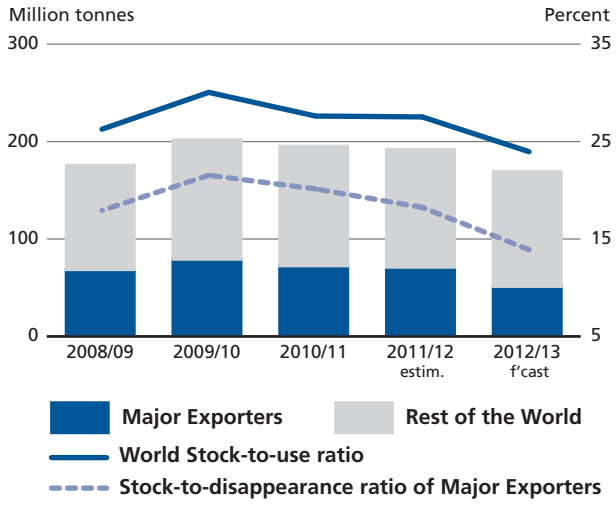
World wheat stocks by the close of the crop seasons ending in 2013 are forecast to fall to 167 million tonnes, 12 percent, or 23 million tonnes lower than their opening level and down 5 million tonnes from the previous forecast published (on-line) in October.[3] The sharp decline from the previous season reflects the drop in this year's world wheat production, which will necessitate drawing on inventories in order to meet anticipated utilization in 2012/13.

The downward adjustment since October reflects revisions to stock estimates in **China,** which have been lowered by 3 million tonnes. A surge in China's feed use of wheat in 2011/12 resulted in smaller carry-over stocks into 2012/13 marketing season than had been anticipated. In spite of wheat production being up 2 million tonnes this year and expectation of a 7 million tonne cut in wheat feed use in 2012/13, China's ending stocks are now expected to fall to 39 million tonnes, down 2.3 million tonnes from their revised opening level, which is the lowest in over a decade. The forecast for wheat inventories in the **United States** also has been lowered since October, by 1.2 million tonnes, a decline that takes into account the expected increase in wheat exports and record feed usage in 2012/13.

The bulk of the decline in world wheat stocks this season is likely to occur in countries where production fell, most notably in **Australia** (-2.5 mt), **EU** (- 1.4mt), **Kazakhstan** (-4 mt), **Turkey** (- 1 mt), the **Russian Federation** (-5.2mt) and **Ukraine** (-3.4 mt). Lower stocks are also forecast for the **United States** (-2.4mt) and **China** (-2.3mt), which more than offsets the inventory build-ups in **India** (+2.6mt), the **Islamic Republic of Iran** (+500 000 tonnes) and **Indonesia** (+500 000 tonnes),

Based on the latest forecast for ending stocks and global utilization, the world wheat stock-to-use ratio could drop to 24.0 percent, from the 27.5 percent estimated in 2011/12. At this level, the ratio would stand as the second lowest since the FAO records began (in 1980). The lowest ratio, 22 percent, was registered in 2007/08. In addition, the ratio of major wheat exporters' closing stocks to their total disappearance – defined as domestic utilization plus exports – is also expected to fall sharply, to 13.9 percent from 18.2 percent in the previous season. This ratio is still higher than the 12.9 percent low registered in 2007/08, but well below the 18.6 percent projected at the start of the current season, thus pointing to a significant tightening of global wheat supply-and-demand balance in 2012/13.

Figure 6. Wheat stocks and ratios



COARSE GRAINS

PRICES

Tight supplies push up international prices to near record levels[4]

In spite of some declines in recent weeks, international prices of maize followed an upward trend from the beginning of the current season in July until it peaked in late August to early September, and then drifted lower in October. The upward price movement closely followed repeated downward adjustments to production prospects in the United States as crop conditions worsened due to the severe drought (Figure 3). Unfavourable prospects for wheat production in the CIS countries also provided support to

[3] FAO Cereal Supply and Demand Brief - October 2012: http://www.fao.org/worldfoodsituation/wfs-home/en/

[4] Additional price analysis is included in the Market Indicators section of this report.

maize markets, given the region's importance as a leading supplier of feed wheat to world markets. In October, prices of major coarse grains fell slightly on early signs of demand rationing from the livestock and biofuels sectors and slowing trade activity, especially with regard to export pace from the United States. The benchmark **US yellow maize (No. 2 delivered Gulf)** averaged US$ 320 per tonne in October, down slightly from September but US$ 45 per tonne, or 16 percent, above the average price in October 2011. The **EU and Australian feed barley prices** have largely followed maize markets in recent months. In October, they stood from 15 percent to 18 percent above the corresponding period last year.

In October, United States futures prices became generally more stable as harvests neared completion. The maize market exhibited some upward price movement following the October USDA report, which indicated that the 2013 ending stocks-to-use ratio would fall to a critically low level. By late October, **maize futures for December delivery on the Chicago Board of Trade (CBOT)** were quoted around USD 297 per tonne, up 16 percent from the values quoted for the same period last year.

PRODUCTION

Global coarse grains output decreases in 2012, contradicting the early season's promising outlook

FAO's latest forecast for world production of coarse grains in 2012 stands at about 1 137 million tonnes, sharply down from earlier forecasts and 2.5 percent below the previous year's record. By far, the bulk of the decrease since the start of the season is attributed to the **United States**, which witnessed one of the largest turnarounds ever recorded for its maize crop: comparing prospects at planting time until harvest, favourable sowing conditions and attractive prices prompted farmers to plant one of the largest maize areas ever recorded but, thereafter, the season was characterized by widespread severe drought, which devastated crops throughout the major growing areas. The reduction in the **United States** maize crop also accounts for most of the year-on-year decrease in global **maize** output, now forecast at 856 million tonnes, 3.2 percent down from 2011.

In Europe, summer drought in central and eastern parts of the region also reduced yield potential for maize crops as the season progressed, resulting in smaller crops than earlier forecast. Output in the **EU** for 2012 is now estimated

Figure 7. Maize export price (US No. 2 yellow, Gulf)

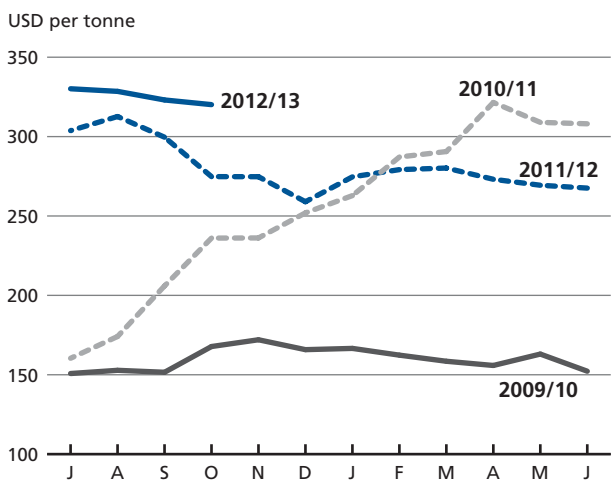


Figure 8. CBOT maize futures for December

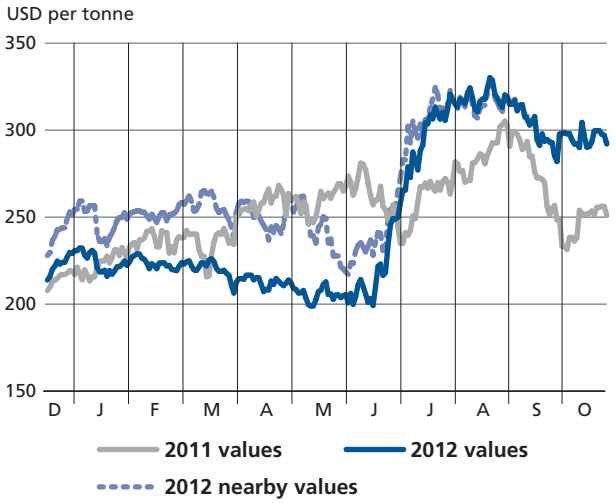


Figure 9. World maize production

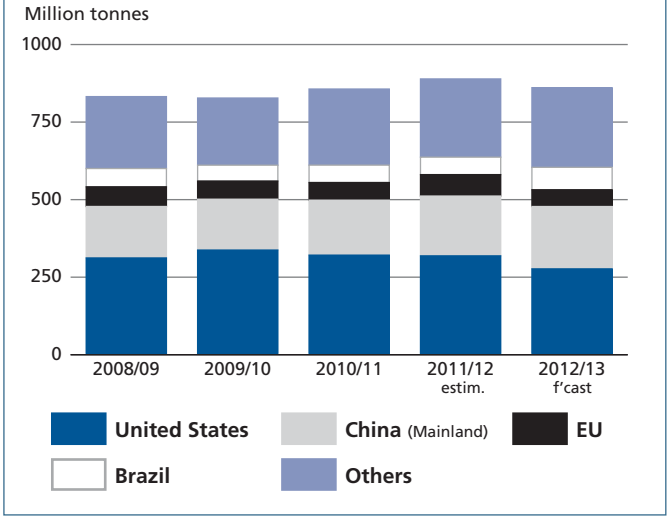


Table 3. World coarse grain market at a glance

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**1 135.0**	**1 165.9**	**1 136.9**	**-2.5**
Trade[1]	**123.3**	**131.0**	**121.0**	-7.6
Total utilization	**1 155.8**	**1 161.5**	**1 151.8**	**-0.8**
Food	200.7	201.6	201.7	0.0
Feed	633.0	634.6	639.0	0.7
Other uses	322.1	325.2	311.1	-4.3
Ending stocks	**169.5**	**174.0**	**161.0**	**-7.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	29.1	28.9	28.5	-1.4
LIFDC (kg/year)	40.8	40.0	39.3	-1.8
World stock-to-use ratio (%)	**14.6**	**15.1**	**13.0**	
Major exporters stock-to disappearance ratio[2] **(%)**	**10.5**	**10.3**	**8.9**	

FAO COARSE GRAIN PRICE INDEX (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011
				%
	176	277	279	-0.8

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

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

Table 4. Coarse grain production: leading producers[1]

	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes		%
United States	324.0	284.6	-12.2
China (Mainland)	201.3	209.8	4.2
European Union	150.3	138.2	-8.1
Brazil	59.0	75.2	27.5
India	42.1	40.0	-5.0
Argentina	32.8	29.9	-8.8
Mexico	24.7	30.6	23.9
Russian Federation	34.2	30.5	-10.8
Ukraine	33.3	29.1	-12.6
Canada	21.9	23.8	8.7
Nigeria	22.3	22.8	2.2
Indonesia	17.6	18.9	7.4
Ethiopia	16.9	16.3	-3.6
South Africa	11.5	12.6	9.6
Turkey	12.5	12.4	-0.8
Other countries	161.5	162.2	0.4
World	**1 165.9**	**1 136.9**	-2.5

[1] Countries listed according to their position in global production (average 2010-2012).

at some 54 million tonnes, 21.8 percent down from 2011. In Asia, latest information confirms a significant increase in maize production in the Far East sub-region, largely on the back of a new record output in **China**. In Africa, the maize harvest in the Western Africa subregion is set to recover slightly from last year's reduced level. By contrast, in Eastern Africa, aggregate maize output is forecast to decrease for the second year in succession after the 2010 bumper crop, but should nevertheless approach the average of the past five years. In Central America and the Caribbean, the aggregate 2012 maize output is forecast to register a sharp recovery from 2011 to almost 27 million tonnes. The sharp increase mainly reflects a rebound anticipated in **Mexico**, the largest producer of the subregion, where the aggregate 2012 maize production is forecast to recover by 26.8 percent from the 2011 drought-reduced level. Prospects for the 2012 main rain-fed summer maize crops are favourable in the country following adequate precipitation in recent months, while the 2012 secondary season harvested earlier in the year was good due to higher plantings and a recovery in yields.

In the Southern Hemisphere, the main maize crops were harvested earlier in the year. In South America, harvesting of the 2012 second season maize is virtually completed, with the aggregate production of the first and second seasons estimated at a record high of some 107 million tonnes. This mainly reflects a bumper second season maize crop in **Brazil**, following an increase in the area planted and favourable weather, which more than offset the drought-reduced output in **Argentina**. Sowing of the **2013** maize crop is currently underway. Persistent rains in Argentina and hot weather in Brazil have caused planting delays in some areas. However, in both countries, the overall area planted is anticipated to be close to the high levels of 2012. In Southern Africa, generally adverse weather conditions in 2012 depressed maize production (harvests completed in July) to levels below 2011, but the aggregate output, estimated at 22.8 million tonnes, was still above the five-year average. Although **South Africa** registered a significant increase of about 11 percent, this was more than offset by declines in most of the other countries in the subregion.

FAO's latest forecast for world 2012 **barley** production stands at about 130 million tonnes, 3.4 percent down from the 2011 level and below the five-year average. Similar to wheat, most of the contraction was on account of the CIS countries, where crop yields were severely reduced by drought, more than offsetting increased production in the **EU**, the **United States** and **Canada**, among the other main barley producers.

The forecast of world **sorghum** output in 2012 is put at about 60.8 million tonnes, almost 9 percent up from 2011.

Figure 10. US maize production and stock-to-use ratio

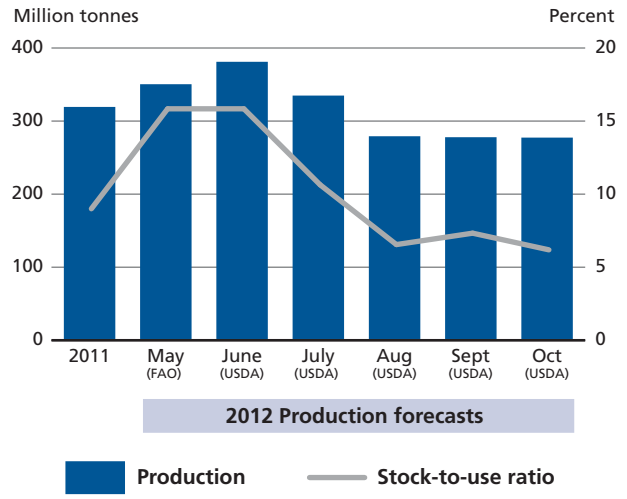
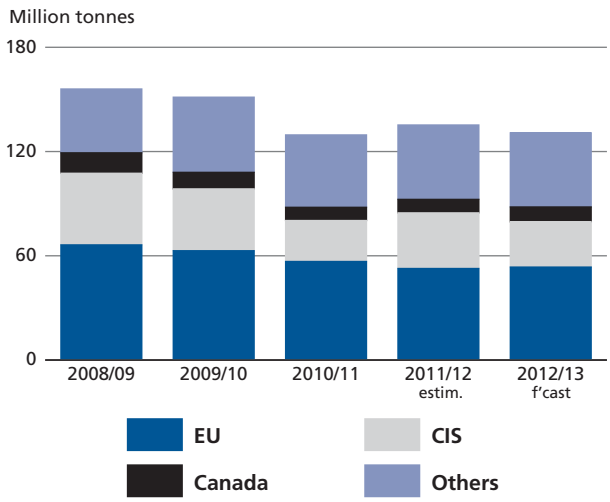


Figure 11. World barley production



Prospects are generally favourable for the harvests underway or soon to start in Africa's main producing countries in the Western and Eastern subregions. In **Sudan**, where harvesting of sorghum starts from late October, output is expected to recover sharply from last year's drought-affected crop to reach 4 million tonnes.

TRADE

Coarse grains trade to fall sharply in 2012/13

World trade (exports) in coarse grains is forecast to fall to 121 million tonnes in 2012/13 (July/June), down 7.6 percent (10 million tonnes) from the 2011/12 estimate, which has been revised up from October[5] by almost 6 million tonnes to a record 131 million tonnes. The upward revision to the 2011/12 trade estimate is mostly on account of higher than anticipated shipments from **Argentina**, **Australia**, the **United States** and **South Africa**. This season's decline in world trade is largely driven by reduced maize and barely exports.

International **maize** trade in 2012/13 is currently forecast at 94 million tonnes, down almost 7 percent from the previous season's near record volume of almost 101 million tonnes. The sharp decrease mostly reflects this season's exceptional reduction in maize supply in the United States, the world's largest producer and exporter of maize. World trade in **barley** is also forecast to drop sharply this season, by 19 percent, to 17.5 million tonnes, mostly on reduced shipments from Australia and the Russian Federation. However, trade in **sorghum** is forecast to expand by 13.4 percent to reach 6 million tonnes, mainly on higher imports by EU and Mexico. Trade in other coarse grains (millet, rye, oats and other grains) is expected to change little from the previous season's level, totalling roughly 3.5 million tonnes.

The bulk of this season's decline in coarse grains imports is likely to occur in **Asia**, where total imports are put at around 62 million tonnes, down 5.5 million tonnes from 2011/12. Maize imports by **China** (Mainland) are forecast to reduce by half, from 4 million tonnes in 2011/12 to 2 million tonnes, following this year's record harvest. Other Asian countries expected to curb coarse grains imports significantly in 2012/13 include: **Saudi Arabia**, importing 1 million tonnes less barley due to large purchases last season and therefore high carryover stocks; the **Republic of Korea**, importing 500 000 tonnes less maize than in 2011/12 mostly because of high international prices; **Indonesia**, reducing imports by at least 300 000 tonnes, following this year's record maize production; the **Philippines** and **Vietnam**, reducing imports by at least 200 000 tonnes each, on back of this year's bumper maize harvests in both countries.

In **Africa**, total coarse grains imports in 2012/13 are forecast to remain steady at around 18.6 million tonnes. In North Africa, a decline of 500 000 tonnes in maize imports by **Egypt** due to this year's rebound in production is likely to be offset by larger maize and barley imports by **Morocco** given this year's sharp decline in domestic production. Morocco has also suspended import tariffs on barley (as well as durum wheat) until the end of 2012 to ease domestic market prices. In other parts of Africa, maize imports by **Kenya** are

[5] FAO Cereal Supply and Demand Brief - October 2012: http://www.fao.org/worldfoodsituation/wfs-home/en/

Figure 12. Coarse grain imports by region

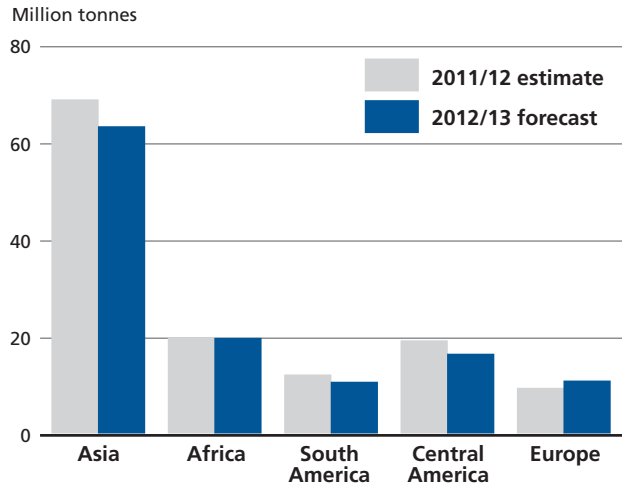
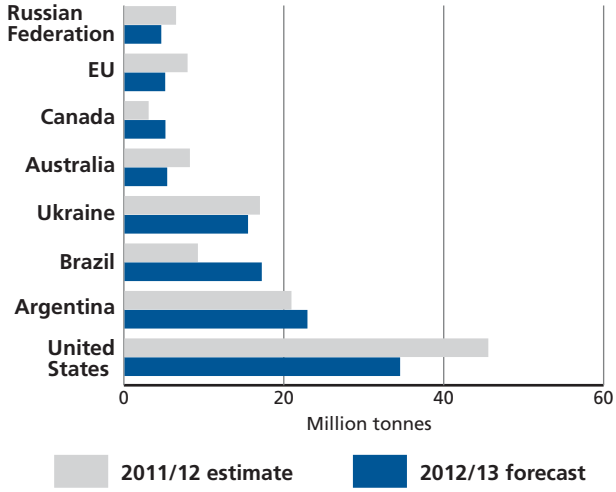


Figure 13. Major coarse grain exporters



forecast to increase by 500 000 tonnes in 2012/13 mostly because of the drop in domestic production. By contrast, a strong rebound in sorghum production this year in **Sudan** is expected to reduce sorghum imports by 600 000 tonnes.

Imports by several countries in **Latin America and the Caribbean** are forecast to be cut in 2012/13. Total imports by the region are currently put at nearly 25 million tonnes, down 4.3 million tonnes from 2011/12. In **Mexico**, the subregion's largest buyer of coarse grains, maize imports are forecast to fall to 8.5 million tonnes, 3 million tonnes below the record volume imported in 2011/12. The likely decline reflects this year's anticipated strong recovery in domestic production from the drought-reduced harvest last year. Maize imports are also anticipated to slide by 600 000 tonnes in **Venezuela** because of the expected increase in domestic production. In **Europe**, maize imports by the **EU** are forecast to increase by 1.5 million tonnes, to 7.5 million tonnes, mostly in response to this year's fall in production.

High prices are in part to blame for the anticipated contraction of world trade this season. International quotations have surged this season primarily because of shrinking supplies in the United States, the world's largest maize exporter. Maize exports from the **United States** could decline by as much as 12 million tonnes (28 percent) to 31 million tonnes, the smallest level in 40 years according to the USDA. This drop would be partially offset by larger shipments from a number of other exporters, in particular **Brazil**, whose shipments are forecast to hit a new record, at 16.5 million tonnes, up almost 8 million tonnes from the previous season. This puts Brazil nearly at a par with **Argentina** as the world's second largest maize exporter. Reduced sales of maize and barley by the **EU** and **Ukraine** as well as lower exports of barley by **Australia** are expected to partially offset larger shipments from **Canada**, where this season's exports could reach 1.6 million tonnes for barley and 1 million tonnes for maize. Among the other leading exporters, maize sales from **South Africa** are forecast to decline from the previous season's level of 2.4 million tonnes, in spite of the increase in 2012 production. The reduction of South Africa's exports in 2012/13 in part reflects the need for the country to rebuild its depleted stocks. However, exports from **Zambia** could remain at the previous season's high level of 950 000 tonnes, with the country establishing itself as the second largest regional supplier of white maize (used as food staple) after South Africa.

UTILIZATION

Total utilization of coarse grains in 2012/13 to decline for the first time since 2002/03

World utilization of coarse grains in 2012/13 is forecast to fall to 1 152 million tonnes, down almost 1 percent (10 million tonnes) from the previous season and almost 5 percent below the 10-year trend. The decline follows nearly ten years of undisrupted expansion, which was largely supported by increasing demand for feed and industrial use. Growth had already started decelerating in 2011/12, reflecting a tightening of maize supplies and a slowdown in maize-based ethanol production, but a contraction of utilization, as projected for 2012/13, would be the first since 2002/03.

This reduction would be entirely driven by falling coarse grain demand for processing into **ethanol** in the United States, the world's largest maize-based ethanol producer. High maize prices combined with a saturated domestic ethanol

Table 5. Maize use for ethanol (excluding non-fuel) in the United States

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12 *estim.*	2012/13 (*f'cast*)
				Thousand tonnes				
Maize production	282 263	267 503	331 177	307 142	332 549	316 165	313 918	271 938
Ethanol use	40 716	53 837	77 453	93 396	116 616	127 538	127 005	114 305
Yearly change (%)	21	32	44	21	25	9	-0.4	-10
As production (%)	14	20	23	30	35	40	40	42

Source: WASDE-USDA (October 2012)

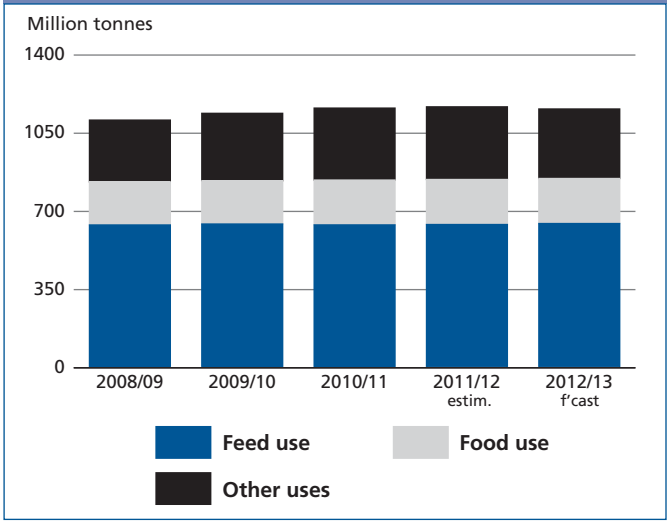
market in the United States are expected to result in the first significant contraction in ethanol output in over a decade, down 10 percent from the previous year, which would result in a similar reduction in maize demand. In spite of this decrease, nearly 42 percent of this year's domestic maize crop (or 114 million tonnes) is expected to be used for ethanol production compared to 40 percent in the previous season. However, the increased share reflects a lower maize production estimate and not a greater use of maize by the ethanol sector.

Global **feed** utilization of coarse grains, which normally constitutes nearly 56 percent of the total use, is forecast at 639 million tonnes in 2012/13, barely increasing from the previous season's level. Global feed utilization has remained nearly flat after a decline in 2008/09, mostly because the increase in feed use among the developing countries is offsetting the steady decline in the developed countries. Total feed use of coarse grains in 2012/13 in the latter group is currently forecast to reach 309 million tonnes, down 3 percent from the previous season and almost 14 percent lower than before the declining trend started in 2007/08. By contrast, total feed use in the developing countries is forecast to grow by 4.3 percent to 330 million tonnes in 2012/13, a level which, for the first time, would exceed feed utilization of coarse grains in the developed countries.

Much of the anticipated contraction in feed use in the developed countries would be due to the United States, where maize use for feed is officially forecast to decline for the fifth consecutive year, to 110 million tonnes (including residual), down 8 percent (10 million tonnes) from 2011/12. In spite of sharp increases in wheat usage for feed, total use of grains (including wheat) for feed in the United States has been drifting lower in recent years, in part reflecting their substitution with distiller dried grains (DDG), a by-product of ethanol production. By contrast, feed use by several countries in Asia and Latin America and the Caribbean has continued to expand, driven by rising demand for livestock products. Even with high grain prices during the current season, several countries are expected to boost their feed use of coarse grains, in particular China (up 6 percent or 7 million tonnes), Brazil (up 5 percent or 2 million tonnes) and Indonesia (up 22 percent or 1.7 million tonnes).

Total **food** consumption of coarse grains is forecast to remain steady at around 202 million tonnes, resulting in a small decline in the annual per capita consumption of coarse grains from 29.0 kg in 2011/12 to 28.5 kg in 2012/13. Most of the fall is expected in the CIS and countries in Central America. However, in Africa, where several coarse grains constitute important food staples, total food use is put at 83 million tonnes, up 2.5 percent from the previous season, leading to a steady per capita level of around 77 kg.

Figure 14. Coarse grain utilization



STOCKS

Coarse grains stocks at their lowest in six years

World stocks of coarse grains for seasons ending in 2013 are currently forecast at 161 million tonnes, down 13 million tonnes from their opening level. This sharp decline follows a small recovery in the previous season and puts world reserves at their lowest level since 2006/07. As a result, the **world stock-to-use ratio** for coarse grains is expected to approach

13 percent, which would be two percentage points below the estimated ratio in 2011/12 and the lowest since 1980 when FAO started to compile data on stocks.

Most of the anticipated decrease in world stocks is likely to be concentrated among the major exporters, particularly the **United States,** following the devastating drought. Based on the latest projections by the USDA (published in October), total maize inventories in the United States could shrink by as much as 37 percent (9.4 million tonnes) this season to only 15.7 million tonnes, pushing down its stock-to-use ratio to its lowest level in 20 years. Another significant decline is forecast for the **EU,** where maize and barley inventories are expected to decline sharply. This is especially the case for maize, which is forecast to fall by 3.5 million tonnes to 6 million tonnes, driven by the decline in 2012 production. A sharp reduction is also anticipated in **Argentina** where a disappointening maize crop could result in a drawing down of stocks by 1.3 million tonnes, to 1 million tonnes. Also in **Australia**, stocks are forecast to be drawn down, mostly barley stocks, because of lower production. Smaller barley inventories are anticipated for **Ukraine** as a result of the fall in domestic production while in the **Russian Federation**, total inventories of coarse grains (barley and maize) are expected to remain unchanged.

By contrast, among other major exporters, **Brazil** is expected to end the season with significantly larger inventories. This year's record maize crop is expected to boost Brazilian maize stockpile to 8.5 million tonnes (up 3.5 million tonnes from the previous season) in spite of a surge in exports and increasing domestic feed use. Stocks in **Canada** are also expected to end at a higher level this season, especially for barley, the production of which has increased in 2012. Overall, the **major exporters' stocks-to-disappearance ratio** (i.e. domestic consumption plus exports) could decline to a critical level of 9 percent, compared to 10 percent in 2011/12, which was already very low in historical terms.

Among other major variations coarse grains inventories in **China** are forecast to increase by 7 percent to nearly 58 million tonnes following this year's record crop. However, smaller maize stocks are anticipated in **Indonesia** because of strong growth in feed use while barley inventories in **Saudi Arabia** are forecast to decline on expectation of smaller imports. In Africa, following the poor 2012 harvest in **Morocco**, barley stocks are expected to be halved while in South Africa, maize inventories are projected smaller, given strong exports.

Figure 15. Coarse grain stocks and ratios

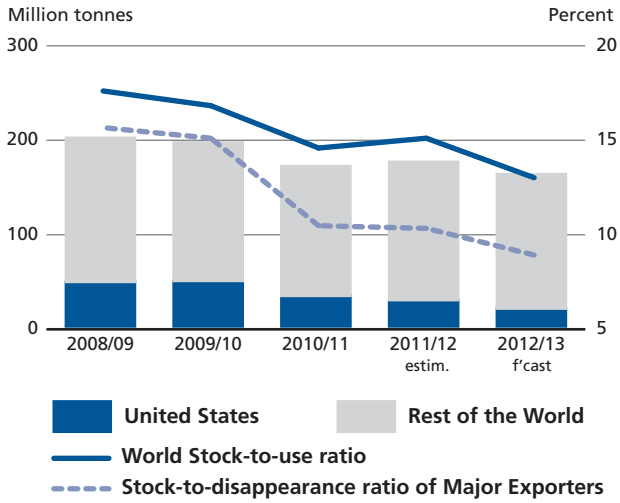


Table 6. Major Grains Policies and other Developments: mid-April - October 2012 *

Country	Product	Date	Policy Instrument	Description
Algeria	Durum and Barley	June	Import ban	Introduced durum and barley import ban until end of 2012 due to good production prospects and ample stocks.
	Maize	Sept.	Import ban	Suspended maize import duties for 11 months, in an effort to ease domestic market prices.
Argentina	Maize	Sept.	Export quota	Approved additional 2.75 million tonnes of maize export from 2011/2012 crop, for a total of 16.45 million tonnes. In addition, authorized 15 million tonnes of maize export from 2012/13 crop.
	Wheat	Oct.	Export quota	Increased wheat exports quota by 1 million tonnes, reaching 5 million tonnes for the 2012/13 crop.
Black Sea Region	Wheat	June	Futures market	The Chicago Mercantile Exchange Group (CME) launched the Black Sea Wheat futures contract with physical delivery to be based in Russia, Ukraine and Romania.
Brazil	Grains	July	Finance and Credit Facilities	Expanded farm credit by 7.5 percent from last year to BRL 115.2 billion (USD 55 billion) for planting, harvesting and selling crops (including grains) as well as investments in land and machinery.
Burundi	Maize flour and Wheat flour	May	Import tariff	Removed import taxes on basic foods, including maize flour and wheat flour.
Canada	Wheat and Barley	April	Export subsidies	Introduced subsidies to grain handlers for the shipment of grain through the Arctic port, Churchill, in order to promote wheat and barley exports from those locations after the end of Canadian Wheat Board (CBW) monopoly. The government will offer incentives of CAD 25 million (USD 25.1 million) over the next five years.
China	Maize	May	Import ban	Removed import ban on Argentine maize (by the General Administration of Quality Supervision and Quarantine), but it can only be processed by selected processors.
	Maize	August	Subsidies	Provided CNY 600 million (USD 95.3 million) in subsidies to protect maize fields in northeastern and northern China from armyworms and fields in southern rice-producing areas from rice planthoppers and rice blast disease.
	Wheat	Sept.	Minimum support price	Increased Minimum Support Price (MSP) of wheat by 10 percent, to CNY 2.240 per tonne (USD 356).
	Maize and Wheat	Oct.	Import tariff rate quota	Confirmed low-tariff import quota for maize and wheat at 9.6 million tonnes and 7.2 million tonnes, respectively.
European Union	Wheat	June	Import tariff	Extended suspension of import duties for low and medium quality wheat until December 2012, in an effort to ensure availability, given tight stocks and high prices.
	Maize	Sept.	GMO policies and regulations	Extended (France) ban on genetically modified crops cultivation, especially maize.
	Wheat	Sept.	Futures market measure	Introduced delivery limit on feed wheat futures and options by the NYSE Commodity Exchange. Effective from January 2013, delivery limit is set at 2 000 contracts.
	Maize	Oct.	GMO policies and regulations	Authorized import of genetically modified (GM) maize (MIR162) produced by Syngenta for food and feed use and processing in the EU.

* Note: The May 2012 issue of Food Outlook covered policy developments from mid-October 2011 to mid-April 2012

Country	Product	Date	Policy Instrument	Description
India	Wheat	May	Food assistance	Increased supplies of subsidized wheat and rice for state-run welfare programmes by 10 million tonnes to 65 million tonnes, in an effort to trim stocks and free storage space.
	Maize	May	Minimum support prices	Increased MSP for a number of crops, in order to boost production of summer sown crops. The MSP for maize increased 20 percent, to USD 212 per tonne.
Kazakhstan	Grains	May	Subsidies	Provided a government subsidy of USD 27 per tonnes until the end of the marketing year for all deliveries to Black Sea and Baltic ports, in an effort to achieve grain exports of USD 13 million per tonnes in 2011/12 (July/June).
	Grains	August	Subsidies	Suspended state subsidy for the transportation of grains to the Black Sea and Baltic ports due to rising grain prices.
Morocco	Wheat, Durum and Barley	May	Import tariff	Suspended wheat import tariff until end of May 2012, but then will be reinstated and increased to 17.5% from first of June through the end of the year. Import tariffs on durum and barley remain suspended until end of 2012.
	Wheat	Sept.	Import subsidy	Reduced subsidies for imported soft wheat. Between 1 October and end-December 2012, millers will receive 85 percent (instead of 100 percent) of any excess between soft wheat reference price – MAD 2.600 per tonnes (USD 300) – and the import price.
Nigeria	Wheat, wheat flour	July	Tariff	Set new levy on wheat and wheat flour imports, increasing the existing duties from 5 percent to 20 percent, and from 65 percent to 100 percent respectively.
Russian Federation	Grains	June	Other measures affecting exports	Lowered grain handling tariff by 5 percent, to RUB 600 per tonnes (USD 18) in an effort to boost exports following adverse weather conditions in winter (winterkill) and spring (drought).
	Grains	Oct.	Government market intervention	Determined to sell 1 million tonnes of grains from intervention stocks in the market to halt grain price hikes and stabilize the domestic market. The intervention will take place in Siberia, the Urals and the Far East regions, 10–15 percent lower than market price.
Turkey	Wheat, Maize and Barley	Sept.	Import measure	Approved duty-free import of 1 million tonnes of wheat and 500 000of maize and barley until May 2014.
Ukraine	Grains	Sept.-Oct.	Export measures	Informal agreement between the Ministry of Agriculture and Grain Trade Unions on a maximum volume of grain exports in 2012/13 marketing season.

RICE

PRICES

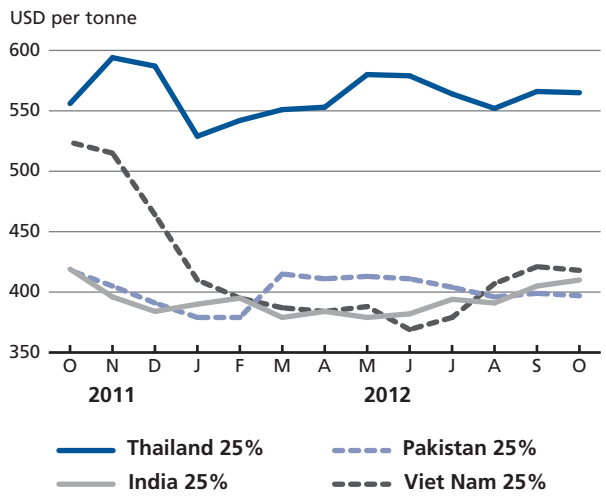
Steady despite a massive supply overhang

International rice prices were rather subdued in the first four months of 2012, but have since shown a tendency to firm, influenced by large government purchases and stock building in Thailand, and active buying by African countries and China. The strengthening of prices has become even more evident since August, when drought in the United States raised concern over future maize and wheat availability for trade. Nonetheless, between January and October, international rice prices were down 6 percent year-on-year, amid abundant world supplies and prospects for good production outcomes in 2012. The decline in prices from last year would have been stronger had it not been for Thailand's rice pledging programme, recently extended to cover the 2012 main crop, which has kept several million tonnes of rice away from world markets, albeit temporarily.

In October 2012, the FAO All Rice Price Index (2002-2004=100) averaged 244 points, up from 235 points in January, but nine points lower than in October 2011. The weakening of prices from last year was particularly evident for Japonica and aromatic rice, but less pronounced for both lower and higher quality Indica rice. Across the various trade origins, Thailand's' extension of its high producer price policy generally kept fob prices at a premium compared to other sources, with the benchmark Thai 100% B rice quoted at USD 595 per tonne in October. Although a seasonal tightening of supplies and logistic difficulties recently lifted prices in India, Pakistan, the United States and Viet Nam, quotations for the first ten months averaged lower in these countries than in 2011, while they moved higher in Thailand.

As for international rice prices in the coming months, their direction remains uncertain. On the one hand, policy initiatives have been launched by several exporting countries to prevent prices from dipping while, on the other, competition for markets is intensifying. The recent lifting of the export ban in Egypt, Australia's return in force as a seller, and sustained shipments from Brazil and the Russian Federation may indeed add to the woes of the five leading exporters – India, Pakistan, Thailand, United States and Viet Nam – which are already facing shrinking import demands in some of their traditional markets.

Figure 16. Export prices for lower quality rice



PRODUCTION[6]

To hit a new record as fears of poor monsoon rains in India subside

With all of the 2012 main rice crops either harvested or at the harvest stage, the outlook for world rice production is becoming more evidence-based. Nonetheless, production forecasts could still undergo major changes, as the Northern Hemisphere secondary crops, which make up an important share of the 2012 season output, are only now being put in the ground for harvesting in early 2013.

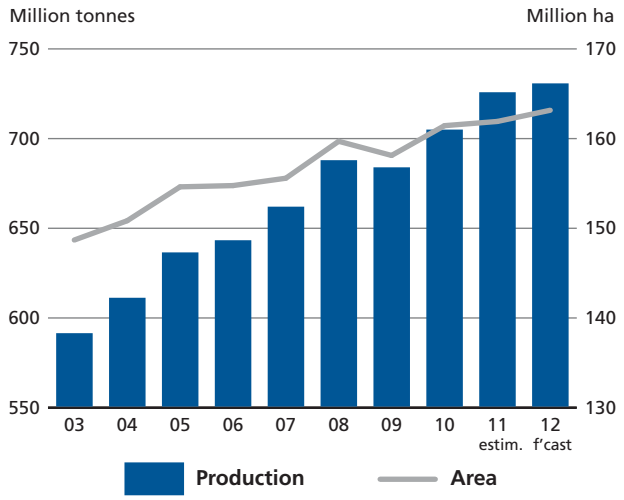
The past few months of the 2012 season were dominated by concern over a possible recurrence of an El Niño Southern Oscillation (ENSO) weather anomaly and slow progress of the monsoon rains in India, the second largest rice producer. However, in August and September, India's fears were tempered by more generous pattern of the rainfall, and meteorological centres' predictions reverted back to a weak or neutral ENSO. At the same time, production prospects were downgraded for several countries that recently suffered from flooding or heavy storms.

According to the latest forecasts, world rice production in 2012 is poised to rise 0.7 percent to a new high of 486 million tonnes, 2 million tonnes higher than foreseen in September. The relatively modest increase from last year principally reflects large shortfalls expected in India and Brazil, as most of the other major producers are heading towards record crops. Indeed, overall, the 2012 season has been unfolding favourably, with fewer severe setbacks reported so far.

In ***Asia***, about 441 million tonnes are expected to be harvested this season, 3 million tonnes more than in 2011. Within the region, **China** is forecast to harvest a record

[6] Production figures are all expressed in milled rice equivalent, unless stated otherwise.

Figure 17. Global rice paddy production and area



output, as increased minimum purchase prices incited farmers to plant more. Despite some incidence of pests and diseases, the country may collect 140.4 million tonnes, 2 percent more than in 2011. Production prospects in **India** were marred until August by below-normal precipitation, but have since been bolstered by a revival of the monsoon rains. While the resulting replenishment of water reserves should foster an expansion of the secondary Rabi crop, the rains may have come too late for the main Kharif crop to be unscathed. As a result, the country is predicted to harvest 100 million tonnes in 2012/13, 4 million tonnes less than its outstanding 2011/12 season, but still the second best result in history. **Indonesia** garnered a good main paddy crop in the first half of the year and the official forecast remains positive despite reports of drought problems in recent months. Among the other major producers, **Bangladesh**, the **Philippines**, **Thailand** and **Viet Nam** are all anticipated to face large increases in absolute terms, with more modest gains expected for **Afghanistan**, **Japan**, the **Islamic Republic of Iran**, the **Democratic Republic of Korea**, **Laos**, **Malaysia**, **Pakistan**, **Sri Lanka** and **Timor Leste**. By contrast, in addition to **India**, prospects are negative for **Cambodia**, due to poor precipitation early in the season; the **Chinese Province of Taiwan**, because of losses incurred from tropical storm Talim; the **Republic of Korea**, reflecting both the long term contraction in plantings and excessive rains; and **Nepal**, owing to less favourable growing conditions.

The FAO forecast for production in ***Africa*** has been upgraded by some 500 000 tonnes since October and now stands at 17.3 million tonnes, 4.4 percent larger than in 2011. This excellent outlook partly reflects an official 15 percent increase in **Egypt**, where attractive prices again prompted farmers to exceed their cultivation limits. Favourable growing conditions and a strong expansion of plantings are also expected to result in widespread output gains across the region, especially in **Mali**, **Ghana**, **Mozambique**, **Sierra Leone** and **Tanzania** and even in flood-stricken **Nigeria**. However, excessive rainfall and inundations are reported to have caused extensive damage in **Benin**, **Burkina Faso**, **Cameroon and Niger**. Prospects are also negative in **Madagascar**, where the main crop harvested early this year was impaired by irregular rains and storms.

In ***Latin America and the Caribbean***, the season is foreseen to conclude with a 6 percent production decline. In Central America and the Caribbean, reduced acreage is expected to depress production in **Costa Rica**, **Cuba** and **Panama**, but the outlook remains positive for the **Dominican Republic** and **Nicaragua**, where the sector is benefiting from government support.

In South America, where most countries have already concluded the 2012 paddy season, this is anticipated to end with a 7 percent contraction, reflecting a cut in plantings prompted by expectations of lower margins and insufficient water supplies for irrigation. Production is estimated to have fallen especially in **Brazil**, but also in **Argentina**, **Ecuador** and **Uruguay**, while prospects remain positive for **Bolivia**, **Chile, Colombia**, **Guyana**, **Paraguay**, **Peru** and **Venezuela.**

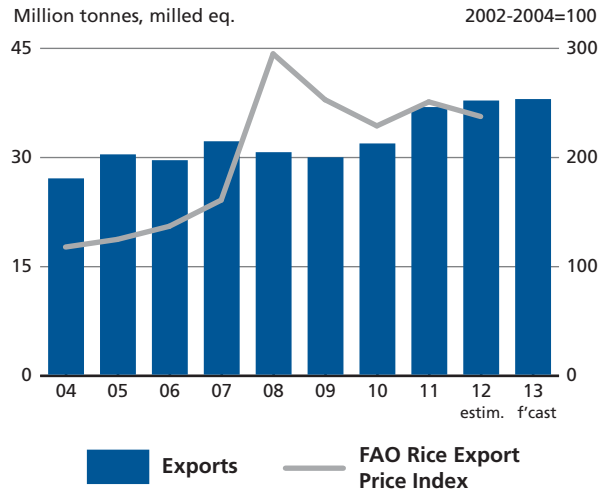
In the ***rest of the world***, **Australia** reported a 34 percent increase in output to 646 000 tonnes, the highest level since 2006, despite cold temperatures and diseases impairing yields, as abundant water availability enabled farmers to expand the area planted by some 44 percent. Record yields are in turn expected to foster an 8 percent production recovery in the **United States**. The **Russian Federation** is also heading towards an excellent season outcome, with production expected to reach a record, sustained by growing usage of high yielding varieties. By contrast, the season is likely to end negatively in the **EU**, constrained by unfavourable weather conditions, which depressed output of virtually all member countries, including Italy and Spain, the two largest EU rice producers.

TRADE

To reach new highs in 2012 and 2013

FAO has revised up its forecasts for international trade in rice for calendar 2012 and 2013 to over 37 million tonnes. The adjustments follow reports of a spate of purchases by countries in the Near East, Africa and also by China, which

Figure 18. World rice trade and FAO rice export price index



have warranted a 1.5 million tonne increase of the 2012 world import forecast, to 37.3 million tonnes. The entire 1.5 million tonne increase is expected to be supplied by India, now expected to supplant Thailand from its long lasting supremacy by becoming the 2012 leading rice exporter. The October forecast for world rice trade in 2013 has undergone an even stronger upward revision of 2 million tonnes, as many of the tendencies foreseen for 2012 are expected to linger into next year.

International rice trade in calendar 2012 is now anticipated to expand by 2 percent to a new high of 37.3 million tonnes (milled basis). Although still preliminary, the 2013 forecast points to a slightly larger level of 37.5 million tonnes, as ample supplies in exporting countries may intensify competition for world markets and foster a further easing of prices.

The increase of world trade in **2012** reflects expectation of a sharp rise of ***imports*** by countries in the Near East and Africa, in particular by the **Islamic Republic of Iran** and **Nigeria** and, in South America, by **Brazil** and **Venezuela.** The increase would also be driven by a surge of rice purchases by **China**, which last year turned into a net importer position for the first time since 1996. High domestic prices have continued to fuel China's purchases in 2012, to a level forecast to reach some 2 million tonnes by yearend, more than three times the level imported in 2011. Another major development for rice trade in 2012 is a sharp retrenchment from the world market by **Bangladesh** and, especially, by **Indonesia** and the **Philippines**. For many years, Indonesia and the Philippines vied with Nigeria for the status of largest rice importer, but now both are running self-sufficiency policies and restraining their reliance on world markets. Indonesia is now foreseen to halve imports to 1.3 million tonnes in 2012, with a more contained drop of 22 percent to 900 000 tonnes forecast for the Philippines. Although **Nigeria** is also engaged in ambitious rice development programmes, the announced heightening of import taxes in 2012 had the effect of prompting a rush of purchases, now expected to propel imports by 17 percent to a record 2.8 million tonnes this year. As for ***exports*** in 2012, the most outstanding development is the emergence of India as the top rice supplier, after decades of Thailand's hegemony. The displacement of **Thailand** from its leadership was mainly the result of the pledging programme run by the Thai government to guarantee high prices to producers, which has severely hindered the country's competitive edge. As a result, Thai exports are now forecast to plunge from 10.7 million tonnes in 2011 to 6.5 million tonnes this year. Much of the Thailand's shortfall is poised to be captured by **India**, which, since lifting its ban on regular rice exports in November 2011, has seen deliveries soar, supported by ample domestic supplies and relatively low prices. The country is now anticipated to ship 9 million tonnes in 2012, a dramatic increase from the 4.8 million tonnes exported in 2011. Among the other key suppliers, both the **United States** and **Viet Nam** are forecast to step up deliveries, by 8 percent and 6 percent respectively, while **Pakistan** may sell slightly less this year. Among the other exporters, **Brazil**, **Ecuador**, **Myanmar** and **Uruguay** are forecast to cut deliveries, mostly reflecting short availabilities, while **Australia**, **Cambodia** and **Egypt** are all predicted to export more.

Figure 19. China (Mainland): Net rice imports

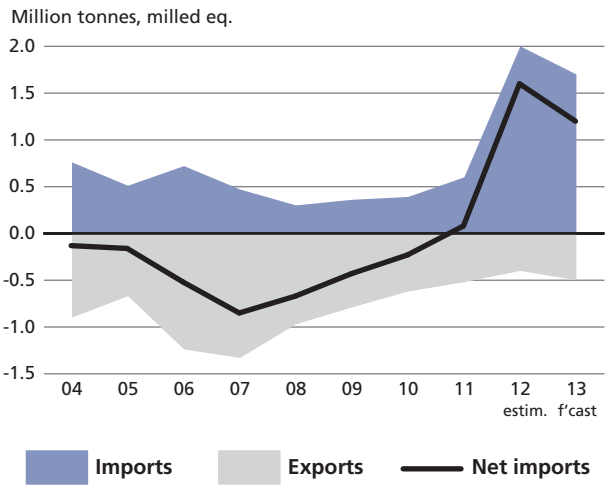


Figure 20. Rice imports by region

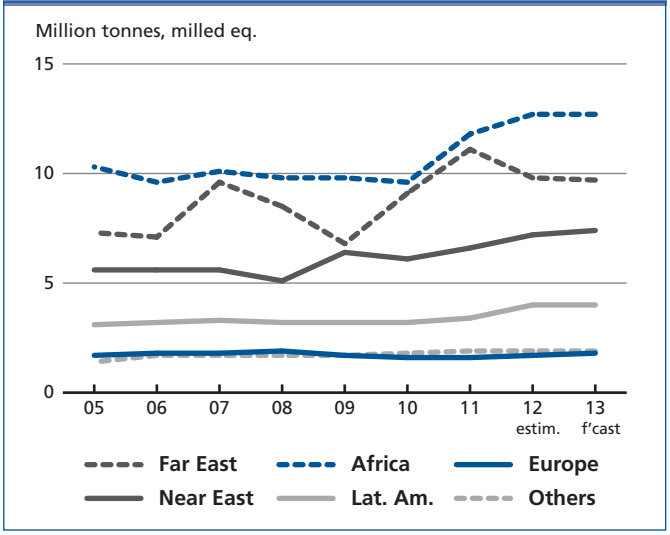
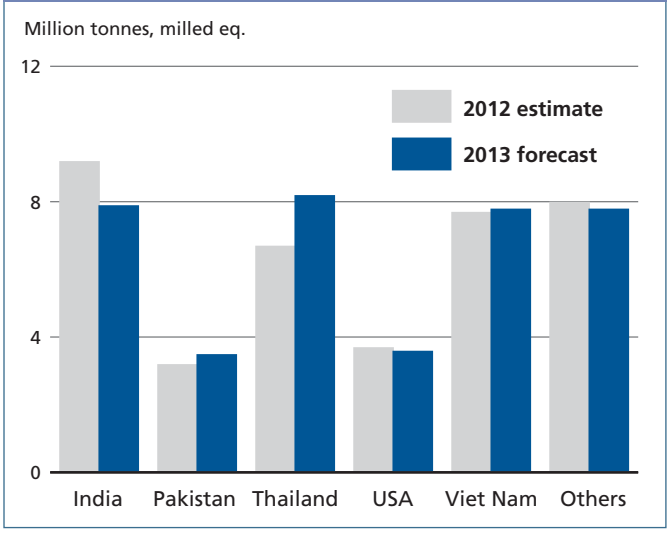


Figure 21. Rice exports by the major exporters



Many of the factors that have sustained international trade in rice over the current year are anticipated to manifest again in **2013**, which may translate into a small increase of the volume of rice exchanged to 37.5 million tonnes. Overall, ***imports*** by Near East countries are forecast to keep rising, sustained by widespread increases across the sub-region, including **Iraq**, notwithstanding an expected decline of shipments to the **Islamic Republic of Iran**, which harvested a good 2012 paddy crop. Imports by African countries are predicted to remain around this year's high level of 12.7 million tonnes, although they may fall somewhat in **Nigeria**, following the announced implementation of new import protection measures. Difficulties to contain rice inflows from neighbouring countries may, nonetheless, keep Nigeria's imports around a high level of 2.6 million tonnes, meaning the country would retain its position as the largest rice importer. Among Far East countries, huge domestic supplies and reduced pressure to contain food inflation are expected to bring **China's** imports down to 1.7 million tonnes, still a high level for the country's standards. While the **Philippines** appears in a position to curb shipments again next year, high domestic prices and tight supplies may prompt a rebounding of purchases by **Indonesia** to 1.5 million tonnes. On the ***export*** side, the announced continuation of the pledging programme along with huge public rice inventories are expected to induce **Thailand** to release supplies and actively promote sales next year. As a result, Thai shipments may rebound by 23 percent to 8 million tonnes in 2013, which could make the country recover its leading position among exporters. **Australia**, **Cambodia**, **Egypt**, **Pakistan** and **Viet Nam** are also expected to sell more. The increase in **Egypt** follows a recent relaxation of restraints on non-broken rice.

By contrast, a tightening of supplies and an expected easing of world prices may depress deliveries by **Brazil**, **India** and the **United States**.

UTILIZATION

Population growth and a long-term shift of diets in Africa and the Near East sustain rice consumption

Global rice utilization in 2012/13 is predicted to increase by 1.4 percent to 475 million tonnes driven largely by population. Being a major staple food, over 85 percent of the total, or 402 million tonnes, are estimated to be destined for human consumption, with only small amounts diverted to feed or industrial uses. Per capita consumption is expected to reach an estimated average of 56.8 kg per year, up from 56.7 kg in the previous year. Retail rice prices have subsided in some locations, but in general remain higher than last year and even more so if compared with 2010. Yet, more important appears to be the long term shift of diets towards in Near East Asia and in Africa to include more rice. The volume of rice destined to other uses (corresponding to seeds, non-food industrial uses and post-harvest losses), is projected to remain stable at around 60 million tonnes, and some 12.5 million tonnes could be diverted towards animal feeding.

STOCKS

World rice inventories to increase again

Global rice production in 2012 is now foreseen to outpace consumption in 2012/13 by an even larger amount than

Figure 22. Rice production, utilization and stocks

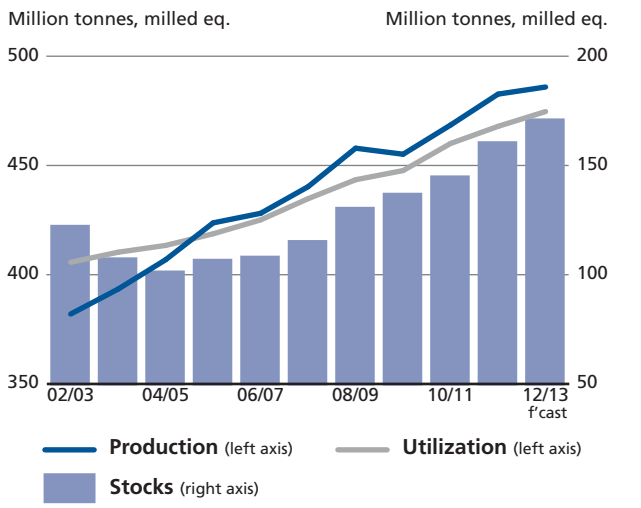


Figure 23. Stocks held by the five major rice exporters and stock-to-disappearance ratio

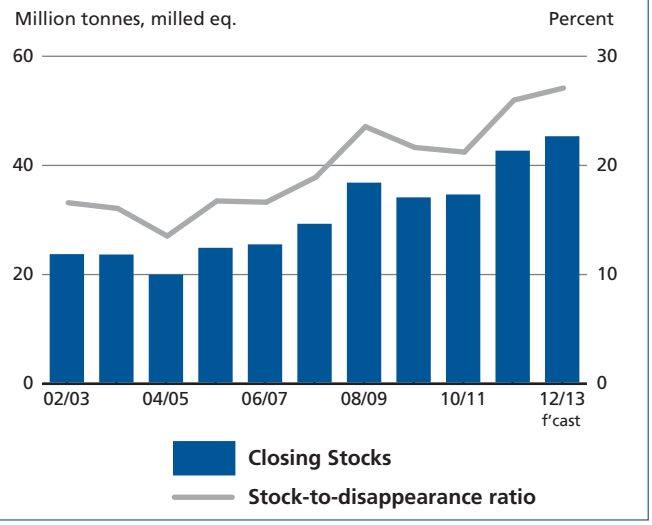


Table 7. World rice market at a glance

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**468.5**	**482.7**	**485.9**	**0.7**
Trade[1]	**36.4**	**37.3**	**37.5**	0.5
Total utilization	**460.1**	**467.9**	**474.7**	**1.5**
Food	389.1	395.8	401.5	1.4
Ending stocks	**143.7**	**159.3**	**169.8**	**6.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	56.3	56.6	56.7	0.2
LIFDC (kg/year)	68.7	69.4	69.5	0.1
World stock-to-use ratio (%)	**30.7**	**33.6**	**35.5**	
Major exporters stock-to disappearance ratio[2] **(%)**	**21.2**	**26.0**	**27.1**	
FAO RICE PRICE INDEX (2002-2004=100)	**2010**	**2011**	**2012** Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	229	251	238	-5.5

[1] Calendar year exports (second year shown).

[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam.

predicted in October, resulting in 4 million tonnes upward revision in 2013 closing inventories. Compared to 2012, world rice carryover stocks are expected to rise by 7 percent, or 10 million tonnes, to a new high of almost 170 million tonnes, marking the eighth consecutive year of stock accumulation. As a result, the world rice stock-to-use ratio is forecast to rise to 35.5 percent in 2013, from an estimated 33.6 percent in 2012. The size of rice reserves is reportedly creating problems in several countries, including India and Thailand, where large old crop stocks and the need to create room for forthcoming new harvests are compelling private and government operators to look for extra storage space.

Much of the expected increase in 2013 world carryover inventories is projected to be concentrated in **China** and **Thailand**, fostered in the latter by large government purchases under its rice pledging programme which is swelling the public stockpile. While **Viet Nam** may also register an increase, numerous other countries are expected to close the season with smaller reserves. This would especially be the case in **India**, reflecting the crop shortfall and sustained exports, although public stocks are still expected to exceed the mandated minimum level of 7.2 million tonnes. Among other exporters, **Myanmar**, **Pakistan** and the **United States** are all anticipated to hold less rice by the closure of their marketing years. Overall, carryovers in the five leading exporting countries (India, Pakistan, Thailand, Viet Nam and the United States) are anticipated to rise by 6 percent which would raise their stock-to-disappearance ratio from 26 percent in 2012 to 27 percent in 2013. As for importers, **Indonesia** is forecast to build up stocks thanks to production gains and efforts to raise the size of public reserves. By contrast, inventories may need to be drawn down in key import markets, especially **Brazil**, the **EU, Nigeria,** and the **Philippines**.

Table 8. Monthly retail prices of rice in selected markets

ASIA	Historical monthly price trend (2007–2012)	Latest available: Month	USD/Kg	Latest quotation available compared to: /1 3 months earlier	1 year earlier	2 years earlier
Bangladesh: Dhaka (coarse)		Oct-12	0.35	1%	-10%	-12%
Bhutan: Samdrup Jongkhar (white)		Aug-12	0.35	7%	7%	-2%
Cambodia: Phnom Penh (mix)*		Sep-12	0.44	-1%	-4%	6%
China: 50 City Avg. (japonica second quality)		Sep-12	0.88	3%	3%	18%
India: Delhi		Sep-12	0.47	5%	8%	14%
Indonesia: Ntl. Avg.		Sep-12	1.09	1%	8%	24%
Lao PDR: Vientiane (glutinous first quality)		Sep-12	0.78	-23%	-23%	-32%
Mongolia: Ulaanbaatar		Aug-12	1.25	4%	5%	-6%
Myanmar: Ntl. Avg.		Jun-12	0.44	0%	-11%	-5%
Nepal: Kathmandu (coarse)		Jun-12	0.41	3%	3%	6%
Pakistan: Karachi (irri)		Oct-12	0.53	0%	14%	41%
Philippines: Ntl. Avg. (well-milled)		Sep-12	0.85	1%	2%	4%
Sri Lanka: Colombo (white)		Oct-12	0.45	4%	9%	11%
Thailand: Bangkok (5% broken)*		Aug-12	0.54	-4%	10%	31%
Viet Nam: Dong Thap (25% broken)		Sep-12	0.38	11%	-18%	7%
WESTERN AFRICA						
Benin: Cotonou (imported)		Aug-12	1.00	0%	0%	0%
Burkina Faso: Ouagadougou (imported)*		Oct-12	0.75	6%	-1%	12%
Cape Verde: Santiago (imported)		Aug-12	1.23	2%	12%	20%
Chad: N'Djamena (imported)		Aug-12	0.95	-6%	-3%	10%
Mali: Bamako*		Oct-12	0.74	1%	-6%	17%
Mauritania: Nouakchott (imported)		Jul-12	0.70	3%	-2%	-27%
Niger: Niamey (imported)*		Oct-12	0.79	0%	0%	0%
Senegal: Dakar (imported)		Jul-12	0.83	-8%	11%	11%
CENTRAL AFRICA						
Cameroon: Yaundé		Jun-02	0.86	0%	0%	0%
Dem. Rep. Congo: Kinshasa (imported)		Aug-12	1.23	1%	9%	13%
EASTERN AFRICA						
Burundi: Bujumbura		Aug-12	1.15	-18%	23%	26%
Rwanda: Kigali*		Oct-12	1.30	3%	37%	63%
Somalia: Mogadishu (imported)		Jul-12	0.73	-20%	-38%	-36%
Uganda: Kampala*		Oct-12	1.14	5%	19%	100%
United Rep. of Tanzania: Dar es Salaam*		Oct-12	0.98	-4%	45%	44%

Table 8. Monthly retail prices of rice in selected markets (cont'd))

	Historical monthly price trend	Latest available: Month	USD/Kg	Latest quotation available compared to: /1 3 months earlier	1 year earlier	2 years earlier
SOUTHERN AFRICA	2007 2008 2009 2010 2011 2012			-100 0 100	-100 0 100	-100 0 100
Madagascar: Ntl. Avg. (local)		Sep-12	0.53	6%	4%	14%
Malawi: Lilongwe		Sep-12	1.29	3%	17%	86%
Mozambique: Maputo		Sep-12	0.87	0%	-4%	-5%
CENTRAL AMERICA AND THE CARIBBEAN	2007 2008 2009 2010 2011 2012			-100 0 100	-100 0 100	-100 0 100
Costa Rica: Ntl. Avg. (first quality)		Aug-12	1.56	-1%	0%	4%
Dominican Rep: Santo Domingo (first quality)		Sep-12	1.13	-2%	-6%	-5%
El Salvador: San Salvador		Sep-12	1.09	0%	0%	5%
Guatemala: Ntl. Avg. (second quality)		Jul-12	1.15	0%	3%	5%
Haiti: Port-au-Prince (imported)		Oct-12	1.07	11%	0%	9%
Honduras: Tegucigalpa (second quality)*		Aug-12	0.83	1%	1%	13%
Mexico: Mexico City (sinaloa)*		Sep-12	0.84	2%	4%	34%
Nicaragua: Ntl. Avg. (second quality)		Sep-12	0.93	2%	11%	12%
Panama: Panama City (first quality)		Aug-12	1.15	0%	2%	6%
SOUTH AMERICA	2007 2008 2009 2010 2011 2012			-100 0 100	-100 0 100	-100 0 100
Bolivia: La Paz (grano de oro)*		Sep-12	0.88	5%	0%	-3%
Brazil: Ntl. Avg.		Sep-12	1.11	16%	23%	12%
Colombia: Bogotá (first quality)*		Sep-12	1.35	-1%	15%	35%
Ecuador: Quito (long grain)*		Sep-12	1.04	4%	14%	21%
Peru: Lima (corriente)		Sep-12	0.95	0%	-1%	20%
NORTH AMERICA	2007 2008 2009 2010 2011 2012			-100 0 100	-100 0 100	-100 0 100
United States: City Avg. (long grain, uncooked)		Sep-12	1.51	0%	-5%	-5%
EUROPE	2007 2008 2009 2010 2011 2012			-100 0 100	-100 0 100	-100 0 100
Italy: Milan (arborio volano)*		Sep-12	1.06	0%	-30%	-24%
Russian Federation: Ntl. Avg.		Sep-12	1.28	-1%	-8%	-10%

/1 *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.*

Table 9. Major Rice Policy Developments: May to October 2012

Country	Product	Date	Policy Instrument	Description
Bangladesh	Rice	May	Government procurement, purchasing prices	Set a procurement target of 900 000 tonnes of Boro rice and 150 000 tonnes of Boro paddy, to be purchased at USD 338 and 217 per tonne (taka 28 and 18 per kilogram) between 3 May and 30 September 2012.
	Rice	July	Export ban	Lifted ban on aromatic rice exports, in place since 2008.
	Rice	August	Export ban	Renewed the ban on non-aromatic rice exports until June 2013.
Burundi	Rice	June	Import tariff	Suspended the 75 percent rice import duty, applicable under the Common External Tariff of the East African Community, for a period of six months.
China (Mainland)	Rice	Oct.	Import quota	Left the tariff-rate import quota for 2013 unchanged at 5.32 million tonnes.
Chinese Province of Taiwan	Rice	July	Production support	Announced that farmers incurring losses from floods caused by tropical storm Talim would be extended assistance through subsidized credit and purchase of damaged produce.
Colombia	Rice	May	Import quota	Approved the importation of 35 000 tonnes of paddy from Andean Community to be brought into the country by 15 June 2012.
Costa Rica	Rice	July	Support prices	Court sentence ruled in favor of rice producers and instructed damages be paid to them. In addition to instructing that producer prices be fixed based on technical criteria, the court ruling also set a higher producer price of USD 614 per tonne (colones 23 131 per 73.6 kg bag).
Cote d'Ivoire	Rice	April	Consumer prices	Instituted ceiling prices for imported rice, ranging from USD 585 to 881 per tonne (FCFA 297 to 447 per kilo), depending on the various rice varieties and origins.
	Rice	July	Import agreement	Reached a government-to-government agreement with Thailand for the provision of 240 000 tonnes of rice.
	Rice	August	Import duties and taxes	Suspended import duties and taxes on rice for a period of three months.
	Rice	Sept.	Production support	Announced that USD 3.9 billion (FCFA 2 trillion) would be invested in the local rice and cocoa industry through 2015. Funds would be utilized to improve yields, rehabilitate infrastructure and distribute inputs.
Cuba	rice	May	Production support	Announced that USD 450 million would be invested in the sector through 2016, to purchase machinery and equipment, boost seed production and improve storage and processing capacity.
Ecuador	Rice	May	Support prices	Raised minimum producer prices by 7 percent to USD 367 per tonne.
Egypt	Rice	Sept.	Export ban	Lifted the ban on milled rice exports, effective 1 October 2012, and instituted an export tax of USD 161 (pounds 1000) per tonne.
	Rice	Sept.	Government procurement, purchasing prices	Allocated a budget of USD 161 million (pounds 1.0 billion) to fund purchase of 500 000 tonnes of paddy from the local market. Prices paid to farmers to be raised to USD 322-330 (pounds 2000–2050) per tonne of paddy.
	Rice	Sept.	Cultivation limits	Announced that fines levied on farmers exceeding rice cultivation limits during the 2011 and 2012 season would be cancelled and that debts for farmers owing USD 1 600 (pounds 10 000) or less would be written off.
Ghana	Rice	Oct.	Support prices	Raised minimum guaranteed prices for the 2012/2013 season by 25 percent to USD 307 (Cedi 50 per 85 kilo bag) per tonne of paddy.

Country	Product	Date	Policy Instrument	Description
India	Grains	May	Food subsidies	Approved an additional allocation of 6.0 million tonnes of subsidized grains for distribution to above poverty line (APL) families under the public welfare scheme. Poorest districts in 12 states will also be extended an extra grain allocation of 1.54 million tonnes, while states and Union territories will be permitted to lift and distribute six-month's worth of grain quotas at once.
	Rice	June	Support prices	Raised minimum support prices by 16 percent to USD 236 (rupees 12 500) per tonne of common varieties and USD 242 (rupees of 12 800) per tonne of grade-A paddy.
	Grains	July	Food subsidies	Approved an additional allocation of 5.0 million tonnes of subsidized grains for distribution to below poverty line (BPL) families under the public welfare scheme, effective until March 2013.
	General	August	Production support	Introduced the Diesel Subsidy Scheme and Enhanced Seed Subsidy Scheme to support farmers in drought-hit areas. The schemes will provide affected producers with a 50 percent subsidy on the costs of diesel used to power supplementary irrigation until 30 September 2012 and will raise ceilings of subsidies on seeds by 40 percent in the case of cereals to USD 13 (rupees 700) per quintal, by 67 percent for pulses and oilseeds to USD 38 (rupees 2 000) per quintal and by 25 percent in the case of coarse cereals to USD 19 (rupees 1 000) per quintal.
	Rice	Sept.	Production support	Announced that it would prioritize development of rice production in seven eastern states, as part of the "Bringing the Green Revolution to Eastern India" program, while encouraging cultivation of alternate crops in the northern states of Punjab and Haryana amid concerns over depleting water tables and deteriorating soil health.
Indonesia	Rice	Sept.	Import agreement	Renewed import agreement with Viet Nam, giving Indonesia the option to buy up to 1.5 million tonnes of rice annually on a government-to-government basis, until 2017.
	Rice	Sept.	Production support	Announced that a budget of USD 20 million (rupiah 199 billion) would be allocated to compensate farmers who have incurred significant losses from drought.
Jamaica	Rice	April	Production target	Announced a rice development programme with the aim of substituting 15 percent of the country's annual rice imports with local produce.
Kenya	Rice	June	Import tariff	Lowered the 75 percent rice import duty applicable under the Common External Tariff of the East African Community for an additional year. Reduced duty on rice from all origins set at 35 percent or USD 200 per tonne.
Korea, Republic of	Rice	Sept.	Import restrictions	Temporarily halted imports and sales of rice from the United States, amid concerns over arsenic levels in supplies.
Korea, Republic of	Rice	Oct.	Import restrictions	Lifted suspension of sales and imports of rice from the United States, after examinations allayed health fears concerning levels of arsenic in supplies.
Lao PDR	Rice	Sept.	Support prices	Announced the institution of minimum prices for glutinous paddy. During the 2012/2013 season, farmers are to receive between USD 300-360 per tonne (kip 2 500- 3 000 per kilo) of glutinous paddy sold to public and private entities, a level that can be negotiated down, should the quality of produce be deemed inferior.
Malaysia	Rice	Sept.	Budgetary allocations/ Production support	As part of its 2013 budgetary allocations, announced the establishment of four new granaries in the states of Sabah, Sarawak and Pahang, for a total coverage of 19 000 ha and cost of USD 46 million (ringgit 140 million). An insurance scheme for 172 000 smallholders with less than 10 ha of holdings will be introduced, while production incentives, including price support measures and subsidies on fertilizers, seeds, are to continue with a budget of USD 783 million (ringgit 2.4 billion).
Malaysia/Australia	Rice	May	Trade agreement	Signed the Malaysia-Australia Free Trade Agreement, to come into force in January 2013. Under the accord, Australian deliveries will be undertaken under an open licensing system, permitting any entity to apply for rice import licenses as of 2023. Malaysia is also to introduce a bound import tariff of 30 percent on rice shipments originating from Australia in 2023, which will be reduced annually until it is completely phased out in 2026.
Mali	Rice	June	Import tariffs, taxes and consumer prices	Extended the suspension of VAT taxes and import duties on rice until August and lowered the price ceiling on rice to USD 621 per tonne (FCFA 315 per kilogram) at wholesale level and to USD 670 per tonne (FCFA 340 per kilogram) at retail level.
Myanmar	Rice	Sept.	Stock release	Released supplies from public reserves to prevent increases in domestic quotations, after floods hit various parts of the country.
Nepal	Rice	July	Export ban	Lifted the ban on rice exports that had been in place since 2008.

Country	Product	Date	Policy Instrument	Description
Nigeria	Rice	May	Customs valuation	Set the benchmark price for customs valuation at USD 699 per tonne, applicable during the second and third quarters of 2012.
	Rice	Oct.	Import tariff	Announced that effective 1 January 2013, imported husked and milled/semi-milled rice would attract a 10 percent duty and a 100 percent levy.
	Rice	Oct.	Production support	Announced that it would distribute seeds to farmers to help them replant crops as part of a flood-recovery plan.
Peru	Rice	May	Production support	Announced plans to purchase 20 000 tonnes from small-scale farmers in main producing regions through the National Food Assistance Program (PRONAA) at harvest time, in addition to promoting rice exports and setting out measures to address producer debt burdens and to support harvesting and marketing activities.
Philippines	Rice	July	Import quota	Issued official statements suggesting that, pending the completion of negotiations on the extension of quantitative restrictions on rice, an out-of-quota duty rate of 50 percent will continue to apply for volumes imported outside of the 350 000 tonne minimum-access volume.
Rwanda	Rice	June	Import tariff	Approved a reduction in the 75 percent rice import duty applicable under the Common External Tariff of the East African Community for one year. Reduced duty on rice set at 30 percent or USD 200 per tonne.
Senegal	Rice	April	Consumer prices	Following consultations with industry stakeholders, set reference retail prices of USD 552 per tonne (FCFA 280 per kilo) of ordinary rice and of USD 857 per tonne (FCFA 435 per kilo) in the case of fragrant rice.
Sri Lanka	Rice	June	Export restrictions	Announced that rice and paddy exports would be stopped to ensure sufficient domestic availabilities until new supplies from the 2013 main crop arrive in local markets. Subsequent official statements clarified that some exports, including those of specialty rice, would still be permitted and that a minimum export price would be put in place.
Tanzania, United Republic of	Rice	June	Production support	Announced that, under the Tanzania Agriculture and Food Security Investment Plan (TAFSIP), USD 10.4 million (shillings 16.7 billion) would be allocated to boost output over 350 000 ha across five regions, by enhancing irrigation, processing and marketing capacities.
Thailand	Rice	Oct.	Government procurement, support prices	Approved a budget of USD 7.7 billion (bath 240 billion) to extend the Paddy Pledging Program to 2012–2013 main season crops. The programme is to run between, 1 October 2012 and 28 February 2013, with a mortgaging target of 15.0 million tonnes of main crop paddy. Farmers will continue receiving between USD 446–646 (baht 13 800–20 000) per tonne of paddy, without limits on quantities pledged set.
Viet Nam	Rice	May	Production support/Land conservation	Approved measures to arrest the conversion of area dedicated to rice cultivation to other uses, requiring that all transfers meet specific criteria and receive prior approval by authorities. Effective 1 July 2012, the new provision will also extend USD 25 (Dong 500 000) of financial support per hectare of wet paddy cultivated each year and cover between 50–70 percent of costs of fertilizers and other inputs when crops incur significant damages due to natural disasters or disease. Financial provisions to support land reclamation or rehabilitation for paddy cultivation purposes were also included.
	Rice	July	Government procurement	Announced that exporters would purchase 500 000 tonnes of summer-autumn paddy between 10 July and 10 August to support domestic quotations during harvest time.
	Rice	Oct.	Minimum export prices	Raised minimum export prices for 5 percent broken rice to USD 460 and to USD 435 per tonne in the case of 25 percent broken rice.

CASSAVA

PRICES

International quotations of cassava are flat to lower despite rising demand

Monthly prices of internationally traded cassava products, mostly confined to East and Southeast Asia, have been exceptionally stable for the past 15 months. Over this period, Thai starch (Super High Grade, f.o.b. Bangkok) has fluctuated within a band of USD 410–443 per tonne, being quoted at the upper bound in October 2012. Likewise, prices of Thai chips (f.o.b. Bangkok) moved between USD 228 and USD 255, but are currently being traded at the lower end. On an annual basis, quotations are down 12–13 percent from 2011 levels.

These price developments have come at a time when regional demand for cassava products has been at an all-time high, led by strong and considerably volatile quotations of maize, cassava's main substitute. The stability of cassava quotations has been mainly related to the pledging scheme in Thailand, under which large official stockpiles have been accumulated for subsequent sale to private traders at a discount.

The continuing slump in the demand for pellets for animal feed in traditional import markets has increasingly exposed internationally traded cassava products to the rapidly changing dynamics of industrial sectors. Cassava blended with protein-rich meals, such as soymeal, is an effective substitute for coarse grains and wheat in feed, but throughout much of 2012, adequate grain supplies in the EU once again limited its need to import cassava feed ingredients.

Table 9. World cassava market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes, fresh root eq.			%
WORLD BALANCE				
Production	**242.0**	**263.3**	**281.7**	**7.0**
Trade	**21.8**	**25.3**	**33.3**	**31.7**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	17.1	18.6	19.9	7.0
Developing (kg/year)	21.5	23.3	25.0	7.0
LDC (kg/year)	69.3	72.7	75.0	3.3
Sub-Saharan Africa (kg/year)	111.1	123.5	130.9	6.0
Trade share of prod. (%)	**9.3**	**8.3**	**9.0**	**8.2**

FAO CASSAVA PRICES[1] (USD/tonne)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
Chips to China (f.o.b. Bangkok)	208	263	235	-11.6
Starch (f.o.b. Bangkok)	507	489	435	-13.1
Thai domestic root prices	79	80	78	-2.6

[1] Source: Thai Tapioca Trade Association.

PRODUCTION

Global cassava production set to reach new heights in 2012

World cassava output in 2012 is expected to reach 282 million tonnes, an increase of 7 percent from the level of 2011, and the fourteenth annual consecutive rise. The expansion, which has been particularly prominent in recent

Table 10. World cassava production

	2009	2010	2011*	2012**
		(000 tonnes)		
WORLD	**242 002**	**242 023**	**263 303**	**281 718**
Africa	**123 675**	**130 535**	**145 040**	**153 751**
Nigeria	36 822	42 533	52 403	57 564
Congo, Democratic Republic of	15 055	15 050	15 195	15 495
Ghana	12 231	13 504	14 910	15 463
Angola	12 828	13 859	14 334	14 825
Mozambique	9 100	9 331	10 133	10 549
Tanzania, United Republic of	5 916	4 392	4 700	5 029
Uganda	2 952	3 017	2 712	2 654
Malawi	3 823	4 001	4 259	4 300
Benin	3 996	3 596	4 100	4 092
Cameroon	2 950	3 024	3 100	3 178
Rwanda	2 020	2 377	2 798	3 293
Madagascar	3 020	3 009	2 702	3 132
Côte d'Ivoire	2 262	2 307	2 352	2 399
Other Africa	*10 701*	*10 535*	*11 341*	*11 779*
Latin America	**32 742**	**33 217**	**33 900**	**34 710**
Brazil	24 404	24 524	25 330	26 035
Paraguay	2 610	2 624	2 638	2 652
Colombia	2 202	2 364	2 264	2 170
Other Latin America	*3 525*	*3 705*	*3 667*	*3 853*
Asia	**85 387**	**78 087**	**84 177**	**93 068**
Thailand	30 088	22 006	21 912	26 601
Indonesia	22 039	23 918	25 957	28 170
Viet Nam	8 530	8 596	9 898	10 294
India	9 623	8 060	8 743	8 870
China, mainland	8 700	8 000	9 000	10 000
Cambodia	3 497	4 247	5 158	4 750
Philippines	2 044	2 101	2 210	2 967
Other Asia	*865*	*1 159*	*1 298*	*1 415*
Oceania	**198**	**185**	**187**	**189**

* Estimate
** Forecast

Figure 24. International cassava prices (October 2009-October 2012)

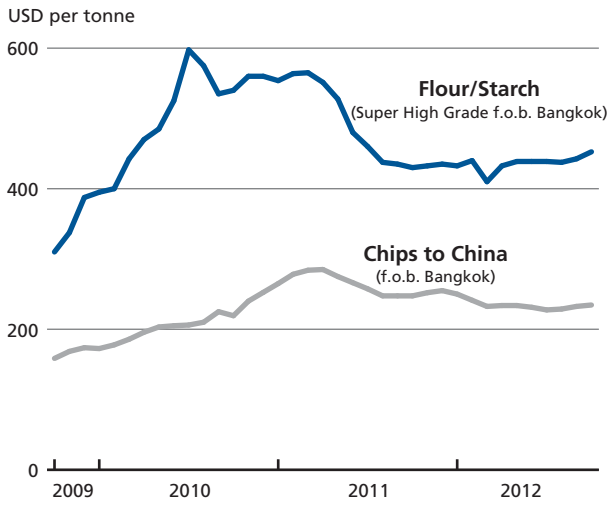
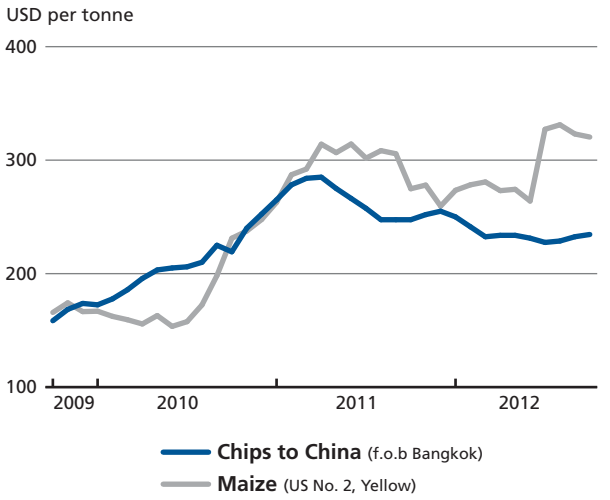


Figure 25. Maize and cassava chip prices



years, is being driven by increasing industrial applications of cassava in East and Southeast Asia, especially ethanol and, equally, by consumer demand for cassava food products in Africa, confirming the important role of the crop in regional food security,

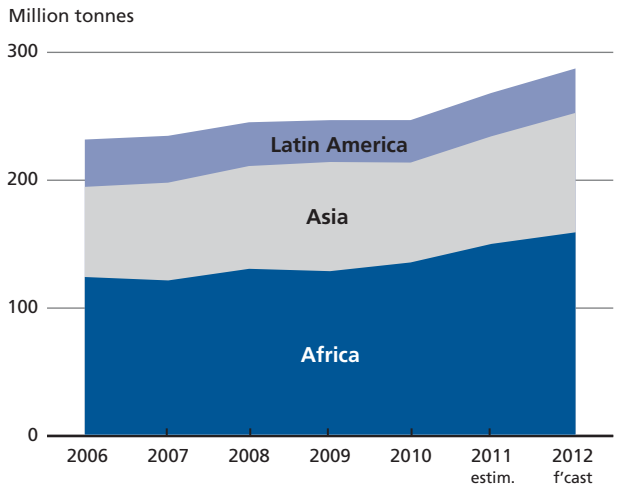
With price volatility again the feature of global markets for staples in 2012, cassava's role as a strategic crop to reduce cereal imports and to promote rural development is being further strengthened in many vulnerable countries in ***Africa***. Not only does the crop require relatively few inputs on the production side, it gives farmers great flexibility in the timing of harvest, and also competes favourably in terms of price and diversity in which the commodity enters diets compared to other staples. Furthermore, cassava's tolerance to erratic weather conditions makes the crop important in climate change adaption strategies. These attributes are supporting long-term programmes for the commercialization of cassava as a food crop in Africa, principally in processed form, and are also behind government food-security initiatives with the support of international donors.

However, as the crop is still usually grown under subsistence agriculture conditions, an accurate assessment of cassava production in the region is particularly difficult. Nonetheless an expansion of over 6 percent, to 154 million tonnes, is foreseen in 2012, far outstripping population growth. Within Africa, virtually all the major growing countries appear set to harvest exceptional cassava crops. Beginning with **Nigeria**, the world's leading producer, official estimates for the preceding year set the trajectory of the harvest to reach a record 58 million tonnes in 2012. Renewed political support for the utilization of cassava is, by and large, behind the prospective 10 percent increase in Nigeria's 2012 crop. Among the other large regional producers, sustained investment in the sector, particularly in productivity, is likely to boost **Ghana's** cassava output by 4 percent to over 15 million tonnes in 2012. While less buoyant in terms of growth, a similar harvest level is expected in the **Democratic Republic of Congo**. Food security drives and favourable growing conditions could also yield strong gains in **Angola**, **Mozambique** and the **United Republic of Tanzania**. By contrast, 2012 cassava output in **Uganda** remains highly uncertain, due to the entrenchment of mosaic disease in the eastern part of the country.

While the rapid introduction of new improved varieties is providing a boost to productivity throughout Africa, it also brings with it a major risk, in the form of disease transmission, as the propagation method relies on distributing stems from potentially infected plants. However, plant scientists in Europe have developed a new genetic strain that is purportedly showing resistance to both brown streak and mosaic, the major cassava diseases that jeopardize regional food security.

In ***Asia***, 2012 cassava production is set to increase by 11 percent to 93 million tonnes. The industrial utilization of cassava in the form of alcohol and ethanol has been the main driver of the 80 percent expansion in the crop's cultivation throughout the region in the past ten years alone. Many sectors, principally in Southeast Asia, have benefited from the expansion of cassava cultivation and from subsidies and mandatory ethanol-gasoline blending requirements. Underpinning the region's cassava prospects for 2012 is a likely strong rebound of output in **Thailand**.

Figure 26. World production of cassava



The pink hibiscus mealybug outbreak that afflicted the crop in 2010 and, to some extent, in 2011, appears to be under control with production foreseen to increase by 21 percent to 27 million tonnes in the current year. Cassava in Thailand benefits from significant government assistance, principally in the form of price support under a "pledging scheme". At the end of the 2012 fiscal year in September, Thai authorities were reported to have spent only 60 percent of the 44 billion baht (USD 1.43 billion) initially set aside for purchasing cassava roots. Under a new six-month pledging scheme, which began on 1 October 2012, the Government will pay 2.50 baht per kg (USD 82 per tonne) for cassava roots, with monthly incremental increases reaching a maximum of 2.75 baht per kg (USD 90 per tonne) in March 2013. Authorities have announced their intention to buy 15 million tonnes of roots, with an upper limit of 200 kg awarded per farmer participating in the scheme.

In **China**, cassava production could reach 10 million tonnes in response to the rising demand for cassava as a feedstock in the country's ethanol sector. In recent years, China's large-scale investments outside of its borders to increase cassava output for ethanol production have fostered an expansion of the crop in **Cambodia, Lao People's Democratic Republic** and **Viet Nam**. In **Viet Nam**, measures to rein in cassava area to a maximum of 450 000 ha by 2015 on environmental grounds have had little impact to date, with acreage officially reported to have increased over 6 percent in 2011 to 558 000 ha. However, a slump in China's import demand for Viet Nam's cassava resulted in farmgate prices falling by around 30 percent during the year. A lack of international demand for cassava in **Cambodia** resulted in a sharp downturn in prices and a subsequent contraction in cassava area in the country. As a consequence, cassava production is set to fall by 8 percent to 4.8 million tonnes in 2012.

In contrast to the rest of the region, cassava sectors in **Indonesia** and the **Philippines** are more important for food security than for industrial uses. Dietary diversification programmes in the two countries have targeted cassava as a substitute for rice. For instance, in the Philippines, cassava is a priority commodity under the Food Staple Sufficiency Program (FSSP) that also aims to strengthen national resiliency by focusing on food staples that can withstand climate change. In South Asia, cassava also plays a role in food security. In **India**, the long term slide in cassava area, particular in the major growing state of Kerala, continues unabated, falling by 35 percent in the last decade. However, productivity gains in the order of 50 percent over the decade have prevented a major slump in output, despite considerable price volatility (37 percent) and little price growth (1 percent in the past two years alone). Productivity gains along with the consolidation of the sector are sustaining a 1.5 percent growth in 2012 to around 9 million tonnes.

The cassava production outlook for ***Latin America and the Caribbean*** points to a small expansion in 2012, reflecting an increase in output in **Brazil**, the region's largest producer. Favourable growing conditions have boosted yields, resulting in a harvest increase of 3 percent, despite a 4 percent area contraction from last year.

UTILIZATION

Increasing demand from the food and fuel sectors underpins cassava utilization

The demand for cassava from ethanol sectors, especially in Asia, will again emerge as the major driver of growth in world cassava utilization. A typical ethanol distillery can produce about 280 litres (222 kg) of 96 percent pure ethanol from 1 tonne of cassava roots with 30 percent starch content. In **China**, an estimated 780 million litres of ethanol could be produced from cassava in 2012, requiring close to 6 million tonnes of dried cassava (also known as "tapioca"). The utilization of cassava-based ethanol is not confined to China. In **Viet Nam,** for instance, the state-owned refiner PetroVietnam has announced that it will export around 85 percent of its cassava-based fuel-grade ethanol production until 2013, when a mandate will be implemented that requires 5 percent of all gasoline sold in the country to be ethanol blended. The PetroVietnam plant began operating in March 2012 and uses raw sliced cassava to produce up to 100 million litres of ethanol per year. In **Thailand**, the cassava and sugarcane-based ethanol sectors have

recently attracted over 1 billion baht (USD 326 million) in investment for up-scaling operations within the nation and in neighbouring countries.

Regarding food utilization, initiatives that promote cassava to meet rising dietary needs have been undertaken in many countries, especially in **sub-Saharan Africa**. The consumption of cassava (in the form of fresh roots, granulated and flour-based products) continues on an upward trend in the region. With the expected overall production increase in 2012, per capita food availability could rise by around 7 kg to around 131 kg per year (equivalent to some 40 kg of dried products) in the subregion. Measures to promote domestic cassava flour over imported cereals, either for direct consumption or through blending, remain active throughout the world and constitute an important determinant in boosting cassava food consumption. For instance, **Brazil** mandates the blending of 10 percent cassava flour with wheat flour for bread making, an initiative estimated to absorb 50 percent of the country's cassava crop. In **Nigeria**, legislation for a 10 percent blending mandate took effect in 2005 but only 5 percent was enacted, due to a shortage of cassava flour. However, in an effort to deepen the blending ratio, the Government of Nigeria imposed a further levy on imported wheat flour in July 2012, bringing the overall duty to 100 percent. Furthermore, it is currently drawing up a proposal to divert funds from tariff revenue towards a "cassava bread development fund". Nigeria currently imports around 3.5 million tonnes of wheat at an estimated cost of USD 1 billion.

Utilization of cassava as animal feed, in the form of dried chips and pellets, is mostly concentrated in Latin America and the Caribbean, especially **Brazil**. Elsewhere, demand for cassava feed ingredients remains fairly weak, exemplified by the total collapse in the international market for cassava pellets. For instance, in Europe, cassava applications in the manufacture of feed ingredients, which had been prominent in the past, have been virtually non-existent in the last two years. In Asia, the use of roots as a direct animal feeding stuff has also been in decline, given the higher returns obtained from processing cassava roots for industrial applications. However, compound feed demand involving cassava in **Thailand** is set to rise substantially due to higher poultry production.

TRADE

Global cassava trade set to sharply expand in 2012

At 16.6 million tonnes (chip and pellet weight equivalent), world trade in cassava products is likely to soar in 2012, surpassing last year's record volume by more than 30 percent. International cassava trade is being increasingly driven by industrial demand of the product, particularly from **China**, and 2012 has been no exception. **Thailand** has resumed its position as the world's dominant supplier, after undergoing a difficult year in 2011 in meeting the demand for high quality cassava (a starch content of 30 percent or more) at competitive prices. The current expectation is that Thailand could register a 28 percent increase over last year in aggregate cassava exports, mostly chips and starch, reaching 11.7 million tonnes (chip and pellet weight equivalent). With the regional market for cassava expanding, **Viet Nam** and **Cambodia** have managed to sustain international supplies at 2.4 million tonnes and 1 million tonnes of cassava products, respectively in 2012.

Figure 27. World trade in cassava products (chip and pellet equivalent)

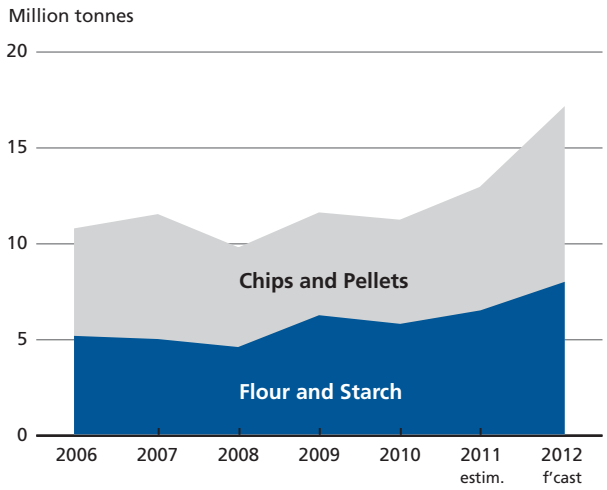


Table 11. World exports of cassava (product weight equivalent)

	2009	2010	2011	2012
	000 tonnes			
Total	**11 291**	**10 912**	**12 636**	**16 645**
Flour and Starch	**5 929**	**5 483**	**6 185**	**7 618**
Thailand	4 993	4 864	5 363	6 651
Viet Nam	600	250	500	600
Others	*335*	*369*	*323*	*367*
Chips and Pellets	**5 362**	**5 430**	**6 451**	**9 028**
Thailand	4 411	4 364	3 723	5 000
Viet Nam	500	550	1 500	1 800
Cambodia	100	250	1 000	1 000
Nigeria				*1 000*
Others	*351*	*266*	*228*	**228**

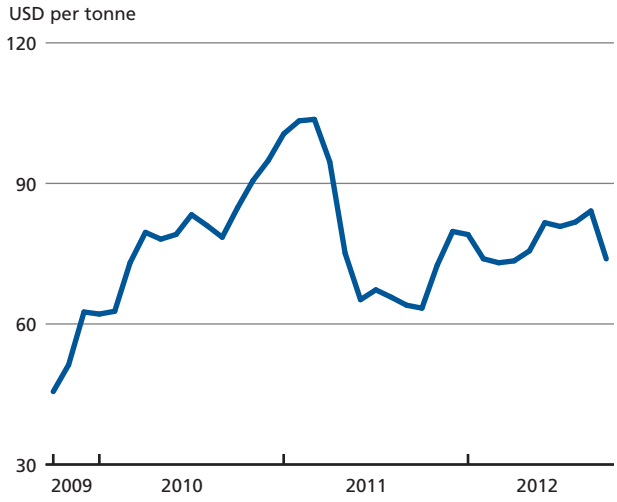
Table 12. Thai trade* in cassava (product weight equivalent)

	2009	2010	2011	2012
		000 tonnes		
Total	**9 405**	**9 227**	**9 086**	**11 651**
Flour and starch total	**4 993**	**4 864**	**5 363**	**6 651**
Japan	746	719	801	841
China	1 220	1 322	1 293	1 460
Chinese Provence of Taiwan	684	549	570	505
Indonesia	617	695	1 065	2 023
Malaysia	414	417	462	615
Others	*1 312*	*1 161*	*1 173*	*1 207*
Chips and pellets	**4 411**	**4 364**	**3 723**	**5 000**
China	4 237	4 287	3 687	4 964
Republic of Korea	111	0	0	0
European Union	17	0	0	0
Others	*46*	*77*	*36*	*36*

Source: Thai Tapioca Trade Association (TTTA), FAO

[1] In product weight of chips and pellets

Figure 28. Thai root producer prices (October 2009 - October 2012)



Higher international quotations of maize, compounded by considerable volatility, have combined to boost the demand for cassava as a substitute. Imports of **chips and pellets** continue to be driven by the need to fulfil capacity in the growing alcohol sector (including ethanol), mostly in China. Demand for chips by the country is set to underpin international trade in this product in 2012 by 40 percent to over 9 million tonnes. As for cassava **starch and flour**, global transactions are also expected to rise considerably, by around 23 percent, to 7.6 million tonnes by the end of the year.

Since the European market collapsed as the major destination for cassava in 2009, the international market has been largely orientated towards supplying neighbouring destinations in East and Southeast Asia. Prospects for a wider international market involving other continents have remained elusive. However, Nigeria entered the global arena in 2012, securing an order to supply China with 1 million tonnes of cassava chips, and signed a memorandum of understanding to provide an Australian company with 500 000 tonnes of cassava chips on an annual basis. In addition, in gearing up to supply international markets, the Nigerian Railway Corporation has commenced transporting chips from cassava growing states to the port of Lagos for onward bound shipments.

OUTLOOK

Growth prospects for world cassava sectors are increasingly delimited along the lines of geography that characterize the role of cassava in the agricultural economy. For instance, as cassava is principally a food crop in Africa, the sector is providing a strong stimulus for rural development, poverty alleviation, economic growth and, ultimately, food security. Countries considering mandatory blends of cassava flour with (mostly imported) wheat flour in bread making will also reap the benefits of falling import bills and foreign exchange savings. These considerations are providing cassava sectors in the region with a more assured long-term footing and are, by and large, behind an impressive annual average growth rate of 5 percent throughout the past decade.

In Asia, the sector is being strongly guided by highly competitive industrial procurement, including starch and alcohol, particularly fuel ethanol, which renders the outlook uncertain. However, policies in Thailand have played an influential role in determining the 2012 regional outcome and are likely to continue doing so in the near term. It is reported that the support scheme in Thailand had left public stockpiles of more than 9.5 million tonnes of cassava products by July 2012, with 7.8 million tonnes of starch and the remainder in the form of chips. Releases of cassava supplies from public inventories have been made at discounted prices, a major factor behind the stability of prices witnessed during the year. Continuation of the cassava pledging scheme in Thailand will be instrumental in sustaining production and exports from the country in 2013. But a return to competitively priced maize quotations may lead industries to shift towards the grain substitute, which would considerably weaken the demand for cassava. Prospects will therefore depend on how the price relative evolves and on the management

of current inventories, as well as the outcome of the new price pledging scheme.

Adding to the region's uncertainty has been the reported weakening of domestic prices in Viet Nam and in Cambodia. Root prices in Viet Nam are down 30 percent from last year's levels, which could result in a contraction in plantings, as has already happened in Cambodia.

OILSEEDS, OILS AND MEALS[7]

PRICES[8]

Market fundamentals leave limited room for price relaxation in 2012/13

After easing during most of 2011, prices for oilcrops and derived products embarked on a new upward trend in January 2012. As illustrated by the relevant FAO price index, international quotations for oilseeds, led by soybean, increased almost uninterruptedly until August 2012. The price indices for both oilseeds and oilmeals rose above previous records and the Chicago Board of Trade's (CBOT) futures contracts for soybean climbed to unprecedented levels.

The renewed surge in prices reflects a progressive tightening in global supply and demand for oilcrops as a whole, and soybeans in particular. After reduced soybean crops weighed heavily on the 2011/12 (October/September) marketing year, severe losses in the United States' recent soy crop have affected the 2012/13 season, along with poor prospects for global sunflower, rape and cottonseed production in Europe, Canada, China and India. While oilcrop supplies and export availabilities have fallen short of original expectations, global demand for oilseeds products, in particular oilmeals, continued to rise, notably in key importing countries such as China. To satisfy domestic and international demand during 2012, major stock-holding countries released an important part of their inventories. Together, these developments have driven global 2011/12 stock-to-use ratios to critically low levels, explaining the recent strong appreciation of oilseeds and meal prices.

Figure 29. FAO monthly international price indices for oilseeds, oils/fats and meals/cakes (2002-2004=100)

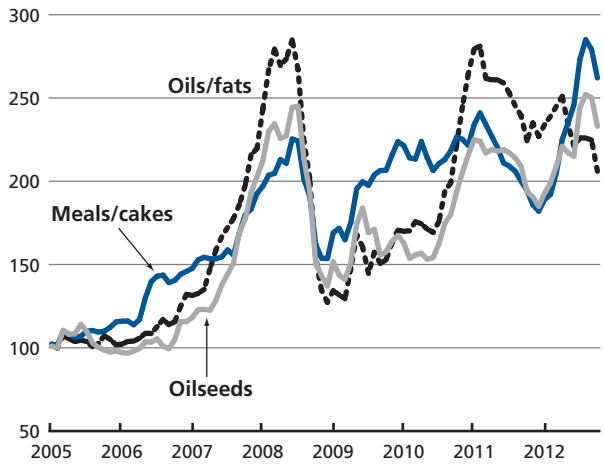
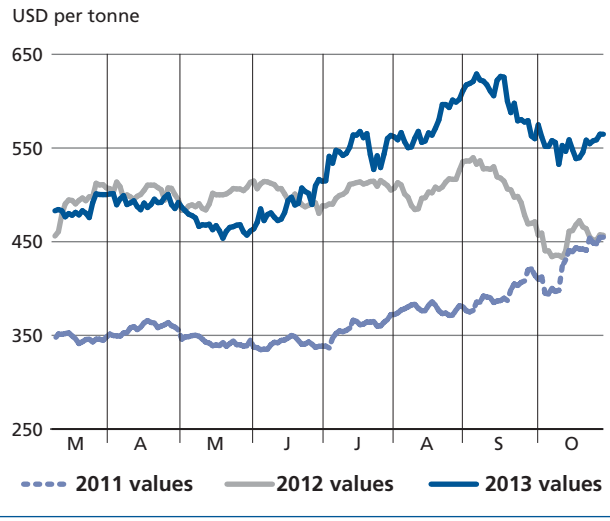


Figure 30. CBOT soybean futures for March



With respect to oils and fats, market values initially followed the general upward trend in prices. However, towards May 2012, prices of oils and fats, in particular palm oil, started falling. Palm values dropped as rising output in Southeast Asia coincided with a slowdown in global export demand, which led to a build-up in stock. Weakening mineral oil prices also contributed to the decrease in oils/fats values.

Current forecasts for 2012/13 point to a modest improvement in the supply and demand balances for oils/fats and especially oilmeals, also because persistently high prices

[7] 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. Hence, production data for oils (cakes) derived from oilseeds refer to the oil (cake) equivalent of the current production of the relevant oilseeds, i.e. they do not reflect the outcome of actual oilseed crushing. 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.

[8] For details on prices and corresponding indices, see appendix Table A24.

Figure 31. FAO monthly price index for oilseeds (2002-2004=100)

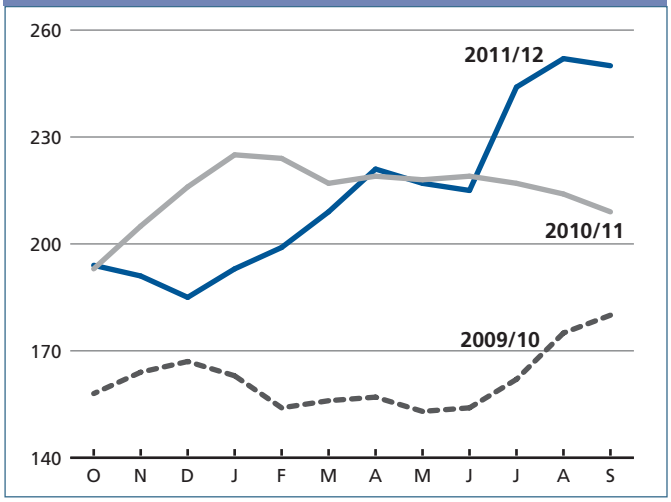


Figure 32. FAO monthly price index for oils/fats (2002-2004=100)

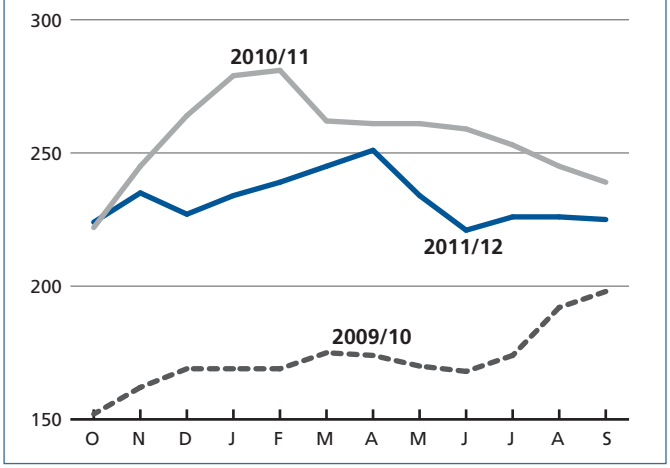
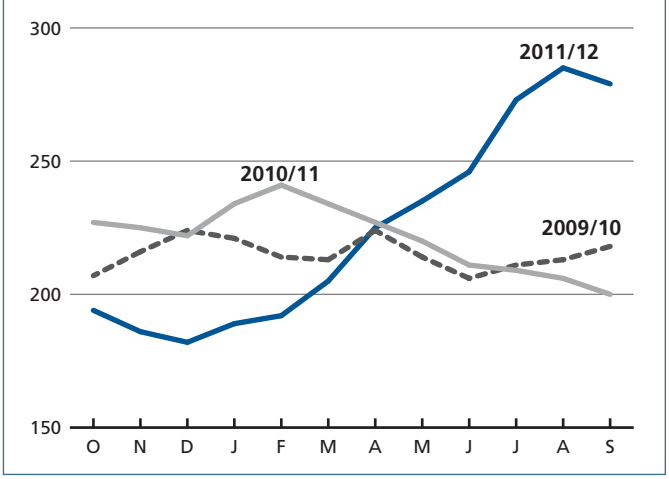


Figure 33. FAO monthly price index for meals/ cakes (2002-2004=100)



are expected to ration demand. However, considering that global stock levels would remain relatively low, international markets are likely to remain vulnerable, leaving limited scope for prices to subside. In particular, the supply forecast for 2012/13 relies heavily on the expectation of a bumper soybean harvest in South America next year, which will only be realized if weather conditions remain favourable throughout the growing season. Should these conditions materialize, international meal prices could ease in the second half of the 2012/13 season.

OILSEEDS

Oilseed production possibly climbing to a new record in 2012/13

Following last season's exceptional decline, world oilcrop production is forecast to recover in 2012/13, possibly hitting a new record of 474 million tonnes. Unlike in the last season, when it fell by over 3 percent, global production is anticipated to rise by 5 percent in 2012/13, sustained by a strong recovery in global soybean output. By contrast, cotton, rape and sunflowerseed, which yielded record harvests last season, are expected to experience a sizeable decrease.

The global soybean production forecast for 2012/13 mainly builds on expectations of another production decline in the United States along with very strong gains in South America. In the **United States**, where harvesting is close to completion, production is estimated to drop by about 8 percent, basically repeating last year's experience. Hit by extremely hot and dry weather, this year's crop is currently pegged at 77.8 million tonnes, a five-year low that is well short of the initial forecast of 87.2 million tonnes released by the USDA in June 2012. While plantings were higher compared to last year, yields are estimated to have dropped by approximately 10 percent. In **Canada**, total output is expected to remain about unchanged, despite poor yield performance, thanks to this year's considerable expansion in harvested area. The unexpected shortfall in US production and the associated surge in international soy prices have enhanced the crop's competitiveness, which is expected to boost plantings in South America, where sowings are about to start. **Brazil** and **Argentina** are foreseen to expand their soy plantings by some 2.3–2.5 million hectares (or 10-15 percent) each, implying new record areas. Based on these estimates and assuming normal weather conditions throughout the growing season, South America's 2013 soybean harvest is tentatively forecast to reach a record 151 million tonnes, which not only is well above last season's drought-affected outcome, but also 10 percent higher

Table 13. World production of major oilseeds

	2010/11	2011/12 estim.	2012/13 f'cast	Change 2012/13 over 2011/12 %
	million tonnes			
Soybeans	265.2	239.8	268.6	12.0
Rapeseed	60.8	61.5	60.1	-2.3
Cottonseed	43.7	46.5	43.3	-6.8
Groundnuts (unshelled)	36.9	36.6	37.0	1.2
Sunflower seed	33.1	38.8	35.2	-9.3
Palm kernels	12.6	12.8	13.5	4.8
Copra	4.9	5.3	5.4	2.5
Total	**457.2**	**441.4**	**463.3**	**4.9**

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.

Table 14. 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			%
TOTAL OILSEEDS				
Production	468.0	452.3	474.3	4.9
OILS AND FATS[1]				
Production	181.3	181.2	186.7	3.0
Supply[2]	208.7	211.8	215.9	1.9
Utilization[3]	177.0	183.9	186.1	1.2
Trade[4]	92.4	96.6	98.6	2.1
Stock-to-utilization ratio (%)	*17.3*	*15.9*	*16.0*	
MEALS AND CAKES[5]				
Production	118.4	111.0	119.8	7.9
Supply[2]	137.1	131.6	136.3	3.6
Utilization[3]	114.4	116.9	117.7	0.7
Trade[4]	69.9	71.7	73.8	2.9
Stock-to-utilization ratio (%)	*18.0*	*14.1*	*15.0*	

FAO PRICE INDICES (Oct-Sep) (2002-2004=100)	2009/10	2010/11	2011/12	Change: 2011/12 over 2010/11 %
Oilseeds	162	215	214	-0.5
Meals/cakes	215	221	224	1.4
Oils/fats	174	256	232	-9.4

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

[2] Production plus opening stocks.

[3] Residual of the balance.

[4] Trade data refer to exports based on a common October/September marketing season.

[5] 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.

Note: Refer to footnote 7 in the text for further explanation regarding definitions and coverage.

than the previous high. In other parts of the world, **China** reported a likely contraction in its recently harvested soybean crop, owing, similar to last year, to shifts in plantings and a shrinking arable land base. Conversely, in **India**, production has expanded further, with a continued focus on the regional export market. The same applies to the **Ukraine**, an emerging soybean supplier.

The year-on-year production declines anticipated for oilcrops other than soybean reflect both unfavourable weather conditions and reductions in sown area. While sunflowerseed production has primarily suffered from adverse weather in the **EU**, the **Ukraine** and **Russian Federation**, global cottonseed output is expected to drop on account of reduced plantings in **China** and **India**. The anticipated fall in global rapeseed production reflects significant, weather-induced yield losses in **Canada**, combined with low plantings and poor yields in **China**.

OILS AND FATS[9]

Oils/fats supplies to grow modestly for the second consecutive season

The 2012/13 crop forecasts translate into a 3 percent increase in global oils/fats production to 187 million tonnes, which compares with a stagnation last season and buoyant growth rates in preceding years. Oil extraction from annual oilcrops is anticipated to grow by about 3 million tonnes. The increase reflects a strong expansion in global soyoil production (5.4 million tonnes or 13 percent above 2011/12), whereas sunflower, rapeseed and cottonseed oil are expected to fall short of last season's record. As to perennial oilcrops, oil palm is anticipated to add 2.8 million tonnes to global oil production, representing an about average annual increase of 5 percent. As in previous years, **Indonesia's** growth is expected to outpace that of rivalling **Malaysia**. Global olive oil production could suffer a sharp decline, with total output estimated to fall by 0.7 million tonnes.

Global oils/fats supplies, which comprise 2012/13 production plus global 2011/12 ending stocks, are forecast to expand by less than 2 percent, thus growing at a below average rate for the second consecutive season. Supply is constrained by low inventories at the beginning of the new season. With regard to key producers, domestic availability is set to expand, in particular in **Indonesia**, **Argentina** and **Brazil**, followed by **Malaysia**, mostly on account of the

[9] 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 34. Global production and utilization of oils/fats

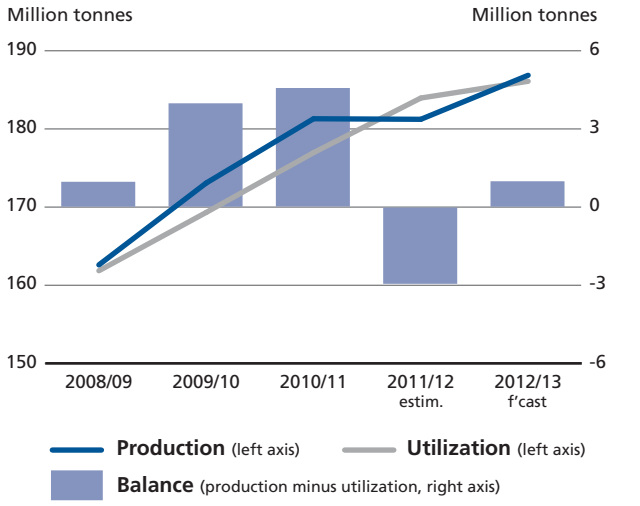
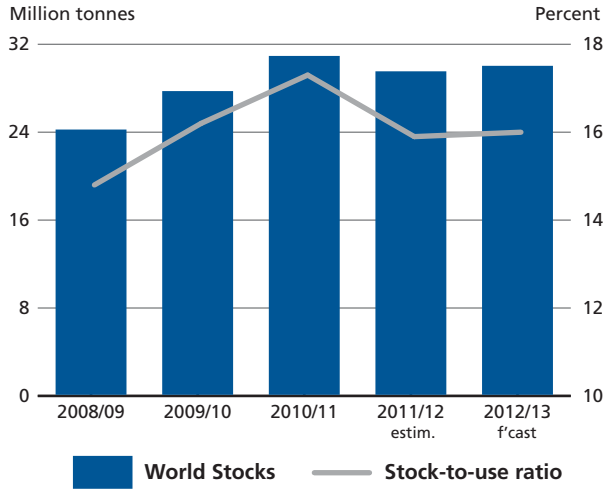


Figure 35. World closing stocks and stock-to-use ratio of oils/fats (including the oil contained in seeds stored)



anticipated expansion in soybean and palm oil production. By contrast, domestic availability is forecast to drop markedly in the **United States**, **Canada** and the **EU**, while less important falls are anticipated in **China**, the **Russian Federation** and the **Ukraine**.

Growth in oils/fats consumption to slow down markedly

Global demand for oils/fats is tentatively forecast at 186 million tonnes in 2012/13, only 2 million tonnes (or 1 percent) above last season's level. For comparison, global consumption expanded, on average, by more than 4 percent during the last three seasons. This anticipated slowdown is due to the prospect of weak global economic growth, reduced demand from the biofuel industry and persistently firm oils/fats prices. With respect to individual oils, contraction of demand for rape and sunflowerseed, reduced expansion in palm and poor growth in soy oil all contribute to the anticipated stagnation in utilization. While this is expected to drop among developed economies, it should continue growing among developing nations, although at considerably lower rates than in previous years and therefore without discernible effects on average per capita consumption levels.

With respect to the uptake of vegetable oil by the biodiesel industry, which in past years accounted for one-third or more of global consumption growth, private sources are pointing to a slowdown in demand expansion. For 2012/13, demand from biodiesel producers is forecast to rise by 3–5 percent, compared with at least 10 percent in recent years. The two main reasons for the slowdown are persistently firm feedstock prices that have curtailed the industry's profit margins and the recent reviews of domestic policies governing biofuel utilization in a number of countries that have resulted in delayed introduction of higher mandatory consumption targets. Furthermore, international trade in biofuels and in their respective feedstocks seems to be increasingly affected by voluntary or official requirements concerning sustainable production certification. Reportedly, in several countries, industry capacity utilization rates have been falling sharply as a result of these developments.

As in past years, much of the increase in global demand is expected to originate in Asia, with **China** as a dominant player and with food and oleochemical uses as main areas of growth. However, compared to the last two seasons, consumption growth in Asia could falter in 2012/13, reflecting possible lower overall economic growth. Interestingly, in **Indonesia**, consumption is anticipated to increase faster than in the rest of Asia, due to further expansion in the country's palm oil refining industry. In South America, consumption should grow by no more than 1 percent, mostly because of **Argentina**, where demand expansion in the biodiesel industry is likely to undergo a drastic deceleration as a result of reduced export opportunities. Furthermore, with regard to domestic biodiesel consumption, **Argentina** and **Brazil** have not raised their mandatory blending rates since 2010. While a shift to higher rates has been promised, no firm dates have been fixed for their implementation.

In the **United States**, total consumption growth is forecast to be minimal. Assuming the nation's increased biodiesel consumption targets are met, stagnation, if not a

Figure 36. Total oil/fat imports by region or major country (including the oil contained in seed imports)

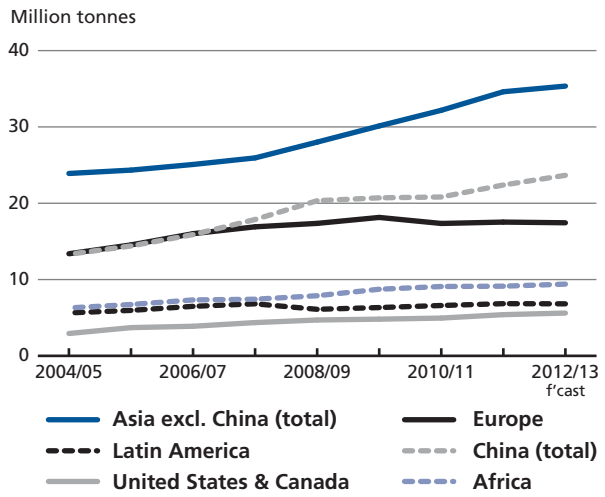
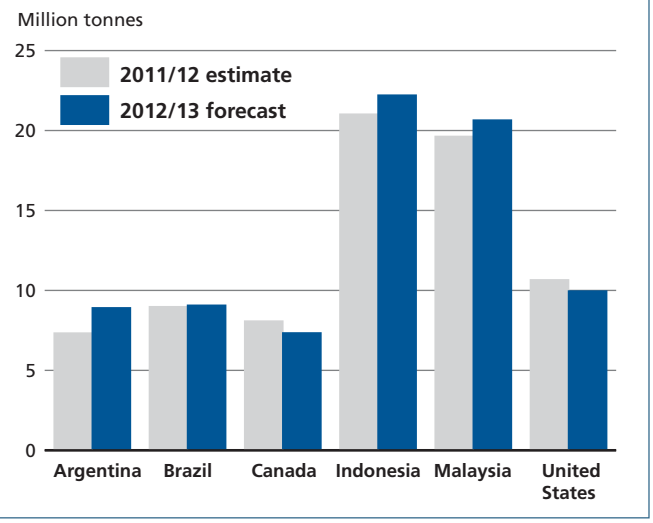


Figure 37. Oil/fat exports by major exporters (including the oil contained in seed exports)



slight decrease, in oils/fats uses for food purposes appears possible. By contrast, **EU** consumption could fall to a 4-year low, largely owing to lower demand from the biofuel industry. Reportedly, over the last two years, several EU biodiesel manufacturers have suffered substantial losses. Furthermore, uncertainty about future regulations regarding the eligibility and certification of specific vegetable oils as biofuel feedstock are said to be negatively affecting the industry.

Supply and demand balance for oils/fats to remain tight

While in 2011/12 global utilization of oils/fats exceeded world production, the reverse is expected in 2012/13. However, the production surplus is forecast to amount to less than 1 million tonnes, or only 0.3 percent, which points to continued tightness and market vulnerability. In addition, the currently anticipated levels of consumption and production allow for only a partial recovery in global inventories – after last seasons' sharp fall. Presently forecast at 29.7 million tonnes (measured as oil/fat inventories plus the oil contained in stored oilseeds), 2012/13 ending stocks still remain almost 1 million tonnes below the 2010/11 level. As to major stockholding countries, a significant rebuilding of inventories is only anticipated in **Argentina**, **Brazil** and **Indonesia**, thanks to the expected increases in domestic production. Conversely, a strong decline in inventories may take place in the **United States**. Following this year's renewed production problems, United States inventories are projected to fall to the lowest level in 9 years. Similarly, in **China** and the **EU**, inventories could fall below the levels recorded in recent years.

Given the only modest recovery anticipated in global inventories, the world oils/fats stock-to-use ratio is unlikely to recover much from last season's marked fall. This suggests that international oils/fats prices could remain firm during 2012/13.

Weak growth anticipated in global oils/fats trade

In 2012/13, global trade in oils/fats (including the oil contained in traded oilseeds) is forecast to grow by at most 2 million tonnes, or 2 percent. Global trade in palm oil is projected to expand by over 2 million tonnes, or 5 percent, while soyoil transactions are expected to rebound by 5 percent from last season's drop. On the other hand, combined trade in sunflower and rapeseed oil is anticipated to fall by 1.5 million tonnes (or almost 10 percent), following poor harvests in major producing countries.

With respect to major exporters, **Indonesia** and **Malaysia** are expected to boost their palm oil shipments by about 1 million tonnes each, while exports in the soy complex are expected to rise, especially from **Argentina** and, to a lesser extent, from **Brazil**. Conversely, strong year-on-year drops are likely in the **United States**, **Canada**, the **Russian Federation** and **Ukraine** due to poor domestic crops. In the case of the United States, the world's leading supplier of soyoil (including the oil contained in soybean sales), exports should fall for the third consecutive season, reaching a 6-year low. The anticipated drop would lead to a further shift in market share in favour of South American exporters.

With regard to imports, buyers in Asia, notably **China** and **India**, continue to account for most of the growth in global imports. Although China is estimated to buy 1.3 million

tonnes more than last season, imports would grow less than in the past, in line with this season's slowing consumption. Elsewhere, poor domestic crops in the **United States** and the **Russian Federaton** should stimulate overseas purchases. On the contrary, in the **EU**, the world's second largest import market after China, import volumes are seen falling for the second consecutive season, in line with the anticipated contraction in domestic consumption.

MEALS AND CAKES[10]

Global meal supplies anticipated to recover in 2012/13

Provided the current crop forecasts materialize, global meals/cakes production could surge by close to 8 percent to 120 million tonnes (expressed in protein equivalent) in 2012/13, not only recovering fully from last season's drop, but also setting a new record. Mirroring the projected boost in global soybean production, world soymeal output would soar to 13 percent above last season. Such increase, together with more modest rises in palmkernel and fishmeal, would more than compensate for the sizeable falls expected in other meals, namely sunflower, cotton and rapeseed meal. Global oilmeal supplies, which comprise 2012/13 production and 2011/12 ending stocks (including the meal contained in oilseed inventories), should also grow, although at less than half the rate anticipated for production. This is due to last season's exceptional drawdown in global inventories that followed the shortfall in global soybean production and led to 2012/13 beginning stocks being roughly 15 percent less than in the last two seasons. With respect to the main suppliers, the record crops anticipated in South America should boost meal supplies in **Brazil** and **Argentina**, and, among Asian countries, also in **India**. By contrast, poor harvests are expected to translate into much reduced domestic supplies in **Canada**, **China**, the **EU** and the **United States.**

Global use of meals/cakes to remain virtually unchanged from last season

A significant rise in world meal consumption seems unlikely in 2012/13, as record-high meal prices are expected to ration global demand. The present situation tallies with that observed in 2007/08, 2008/09 and again in 2011/12, when strong rises in international meal prices markedly depressed demand growth. Considering that prices are high not only for oilmeals but also for maize, the livestock sector may well respond through less intensive feeding and downsizings of herds, which would affect global demand for feedstuffs. As to main oilmeal-feeding countries, weak or zero growth in domestic consumption is anticipated for **Brazil**, **China**, the **EU**, **India**, **Japan**, **Mexico** and **Thailand**, whereas a proper drop is expected in the **United States**.

Global meal production should be adequate to satisfy demand

Unlike last season, when global meal demand outpaced global production and led to a sharp drop in inventories,

[10] 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.

Figure 38. Global production and utilization of meals/cakes (in protein equivalent)

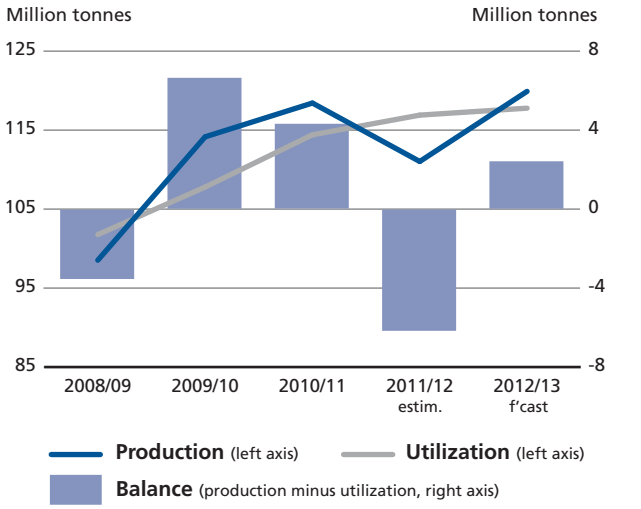
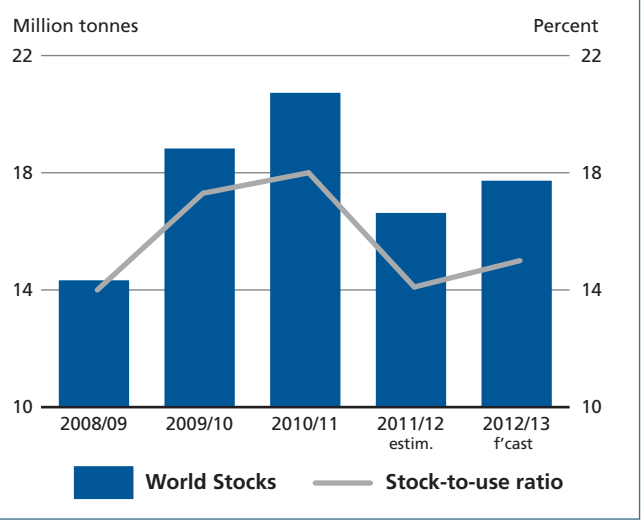


Figure 39. World closing stocks and stock-to-use ratio of meals/cakes (in protein equivalent and including the meal contained in seeds stored)



production in 2012/13 is expected to exceed consumption by about 2 million tonnes (expressed in protein equivalents) or about 2 percent. Regarding individual meals, the excess of production over demand applies to soybean meal, the most widely used meal, whereas a deficit is projected for sunflower, rape, cotton and fish meal. Based on current forecasts, a partial replenishment of global inventories should be achievable this season: global stocks are projected to increase by almost 7 percent or about 1 million tonnes (expressed in protein equivalents and comprising the meal contained in stored oilseeds). However, the stock build-up would be largely concentrated in only two countries, **Argentina** and **Brazil**, while a further drawdown of inventories appears inevitable in both the **United States** and **China**, where meal reserves could fall to 5-year lows. A similar picture emerges with regard to the global stock-to-use ratio: although improving somewhat from last season's critically low level, in 2012/13, the ratio is unlikely to return to values seen prior to last season's drop.

Continued growth expected in global meal trade

In 2012/13, world trade in meals/cakes is anticipated to approach 74 million tonnes (expressed in protein equivalents and including the meal contained in oilseeds traded), with an annual percentage increase comparable to that recorded in the last two seasons. The forecast primarily reflects higher transactions of soymeal, which would make up for falling trade in sunflower and rapeseed meal.

Regarding exports, 2012/13 is expected to see a significant rise in the market share of South America, under the lead of **Brazil** and **Argentina**. Propelled by record crops and good profit margins, South America's exports could increase by over 10 percent from 2011/12. Provided the tentative crop forecasts materialize, the region's total shipments could exceed 43 million tonnes. The only other country able to expand meal shipments would be **India**. Conversely, in the **United States**, this year's new drop in soybean output, combined with the on-going drawdown of stocks, should curb export availabilities to lows not seen for the last 5 years. Also, **Canada**'s exports are expected to suffer a 9 percent cut from last season's record level. As a result of these adjustments, South America's share in global trade is expected to climb to 59 percent.

With regard to imports, sustained purchases by Asian countries, dominated by China, are expected to continue driving global import demand. Due to the recent stagnation in domestic supplies, **China**'s import requirements should continue to grow, possibly swelling to 23 million tonnes (in protein equivalent, including the meal contained in imported oilseeds). The prospect of further expansions in the country's crushing capacity contributes to this forecast. In the other important meal market, the **EU**, imports are expected to grow slightly and compensate, at least in part, the projected fall in domestic supplies.

Figure 40. Meal/cake imports by region or major country (in protein equivalent and including the meal contained in seed imports)

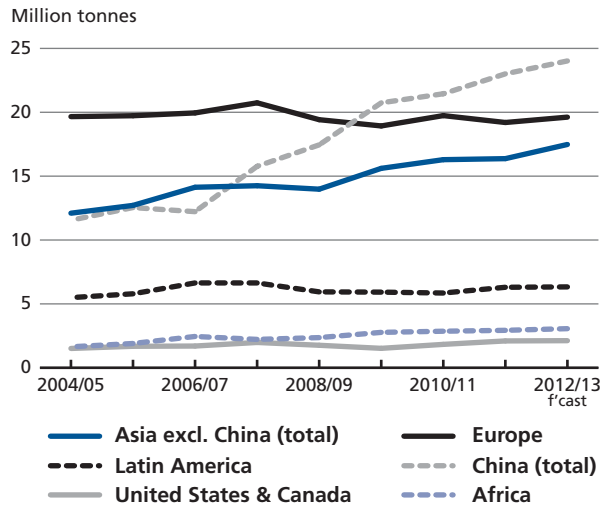
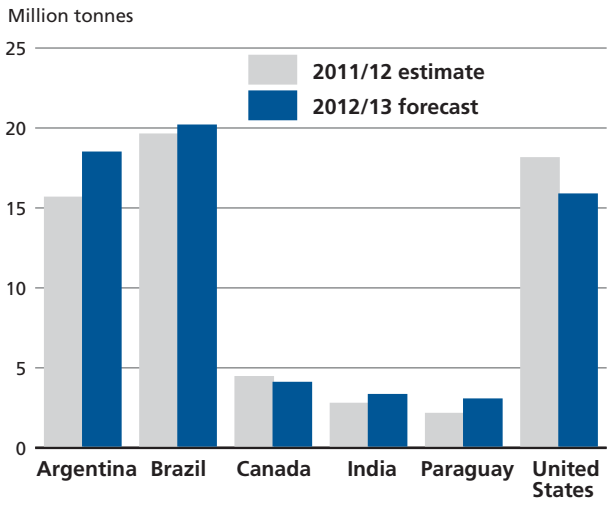


Figure 41. Meal/cake exports by major exporters (in protein equivalent and including the meal contained in seed exports)



SUGAR

PRICES

Sugar prices have recently eased on the back of positive production prospects for 2012/13 season

Since the beginning of 2012, international sugar prices have displayed high volatility. They started the year at a relatively high level of US 23.5 cents per pound in January 2012, before rising to US 24.1 cents per pound in March, and then initiating a steady decline in May and June. Prices increased again in July and August following reports of unfavourable weather in both Brazil and India. However, with improved harvesting conditions in Brazil, the world's largest sugar producer, and a return to a more normal pattern of the monsoon in India, prices retreated in September to average US 20 cents per pound. Overall, between January 2012 and September 2012, sugar quotations were 20 percent lower than the corresponding period of 2011, confirming a continuation of the steady decline initiated in January 2011. The downward trend can be attributed to a cumulative supply response following a global sugar deficit which underpinned the market between 2008/09 and 2010/11. Prices in the next few months are likely to remain under downward pressure given prospects of a third consecutive large world production surplus, which would bring the global stock-to-use ratio to a comfortable level of 36 percent.

PRODUCTION[11]

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

According to the latest FAO estimates, world sugar production is expected to reach 177.3 million tonnes in 2012/13, an increase of 2.2 percent over the 2011/12 season. The expected growth is attributed to an overall expansion in area planted to sugarcane in response to the relatively high sugar returns witnessed over the past three seasons. In addition, higher prices encouraged the use of fertilizers and other inputs which boosted sugar crop yields. The bulk of the expansion is expected to take place in the developing countries, where production is forecast to expand by 3.2 percent, compared with a decline of about 1 percent in the developed countries. Under the current forecast, world production in 2012/13 would be more than sufficient to allow for an increase in total consumption and a rebuilding of world inventories. The surplus is currently predicted in the order of 5.4 million tonnes, although it is likely to be subject to revisions as the season progresses.

In *South America*, production is anticipated to increase by 9.5 percent in 2012/13, amid generally favourable weather conditions and attractive prices. The expansion would be mainly due to output in **Brazil**, where the sector is set to recover significantly from the sharp fall of the previous season, to reach 38 million tonnes, 11.5 percent more than in 2011/12. Still, there remain many sources of uncertainties associated with this forecast, in particular related to weather during the 2013 harvesting season and to 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

Figure 42. International Sugar Agreement (ISA)

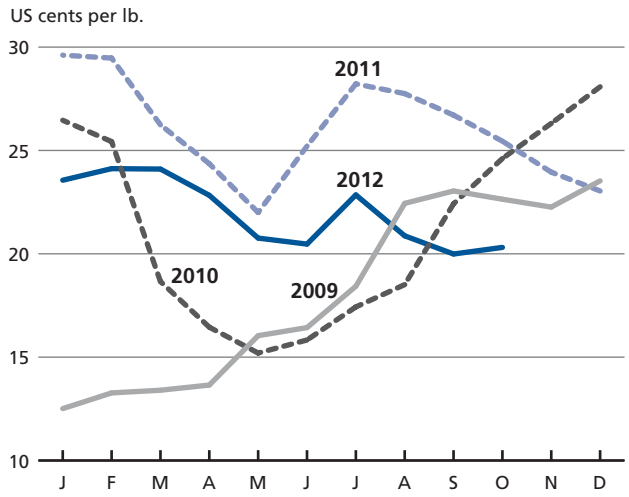
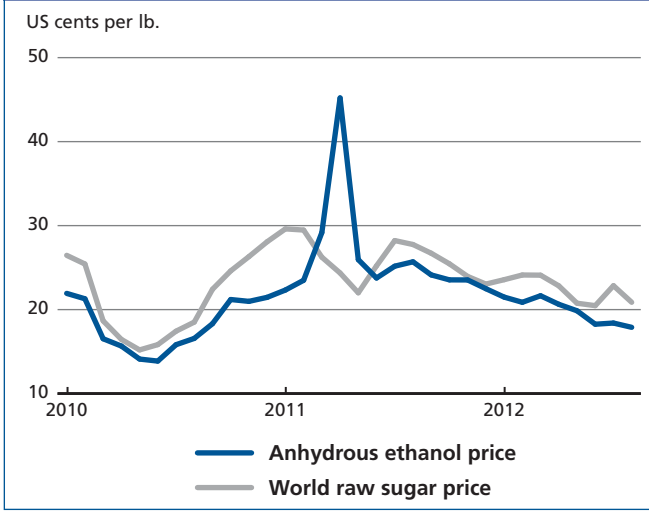


Figure 43. Ethanol vs sugar prices in Brazil (on a US cents/lb equivalent basis)



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

Table 15. World sugar market at a glance

	2010/11	2011/12 estim.	2012/13 f'cast	Change: 2012/13 over 2011/12
	million tonnes			%
WORLD BALANCE				
Production	**165.6**	**173.5**	**177.3**	**2.2**
Trade	**54.8**	**52.1**	**52.9**	**1.6**
Total utilization	**160.9**	**168.6**	**171.9**	**1.9**
Ending stocks	**56.3**	**59.3**	**62.2**	**4.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	23.4	24.1	24.3	0.8
LIFDC (kg/year)	15.4	16.4	16.6	1.3
World stock-to-use ratio (%)	**35.0**	**35.2**	**36.2**	

ISA DAILY PRICE AVERAGE (US cents/lb.)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	21.3	26.0	22.0	-17.0

Table 16. World sugar production

	2011/12	2012/13
	million tonnes	
Asia	67.6	67.2
Africa	10.7	11.2
Central America	12.6	12.9
South America	42.1	46.1
North America	7.6	8.0
Europe	28.7	27.2
Oceania	4.2	4.7
World	**173.5**	**177.3**
Developing countries	130.2	134.5
Developed countries	43.2	42.8

of cane converted into ethanol at the expense of sugar. The Government of Brazil already has announced that the amount of ethanol blended into gasoline will be raised back to 25 percent in 2013. The blending rate had been cut to 20 percent in October 2011, following a poor 2011/12 sugarcane harvest. Sugar production is expected to expand in **Colombia**, the second largest producer in the region, and to remain about unchanged in **Argentina**, where less than favourable weather hampered an expansion in cane production. In *Central America*, preliminary forecasts indicate production in **Mexico** will increase, sustained by relatively high sugar prices. In **Guatemala**, where higher than expected sugarcane yields boosted sugar output in 2011/12, no further increase is expected for the new season. In **Cuba**, a series of policy measures, including higher official support cane prices, is anticipated to boost output.

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 **South Africa**, the largest producer in the region, sugarcane production is expected to benefit from improved climatic conditions, as compared with the 2010/11 and 2011/12 seasons when the worst drought in 20 years curtailed yields and reduced harvested areas.

In *Asia*, sugar output is expected to decline slightly compared to the 2011/12 marketing season, driven by a fall in **India** and **Thailand**. Relatively attractive returns in 2010 and 2011 encouraged Indian farmers to heighten their sugarcane plantings and use of fertilizers. However, below average monsoon rains during the cane's critical growing stage is likely to have affected yields negatively, even though a return of normal rains later in the season brought some relief to crops. Still, sugar production in the country is anticipated to decline by 5 percent to 26.6 million tonnes. Estimates remain preliminary at this stage, and further reductions may be seen as the season progresses, especially if large amounts of cane are diverted from sugar to gur, a traditional sweetener made of unrefined non-centrifugal cane sugar, the prices of which have been rising. Latest estimates indicate that 2012/13 sugar output in **Thailand**, the world's second largest sugar exporter, will be lower than the all-time high recorded in the previous season, as less than favourable weather conditions hindered yields. Nonetheless, sugar output is expected to remain around the average of the past two seasons, sustained by recent investments made at farm and factory levels. Propelled by an expansion in area and yields, **China's** production is expected to surge in 2012/13, notably in Guangxi, China's sugar producing province, and Yunnan, the second largest. Financial assistance as well as the subsidized inputs that sugar mills provided to farmers were major contributing factors to boost plantings. In **Pakistan**, prospects for sugar production in 2012/13 are positive, following recent favourable monsoon rains. Outputs in 2012/13 are also likely to increase in **Indonesia** and **Vietnam,** but may remain stagnant in **Turkey** and **Japan**.

In *Europe*, the outlook for the **EU** points to a decrease in sugar production, largely due to unfavourable weather conditions hampering beet yields, notably in France and Germany. Nonetheless, EU's ending stocks are foreseen to return to historical levels, as about 900 000 tonnes of sugar are expected to be carried over from the 2011/12 season into 2012/13. Similarly, production is expected to fall in the

Figure 44. Sugar production by major producing countries

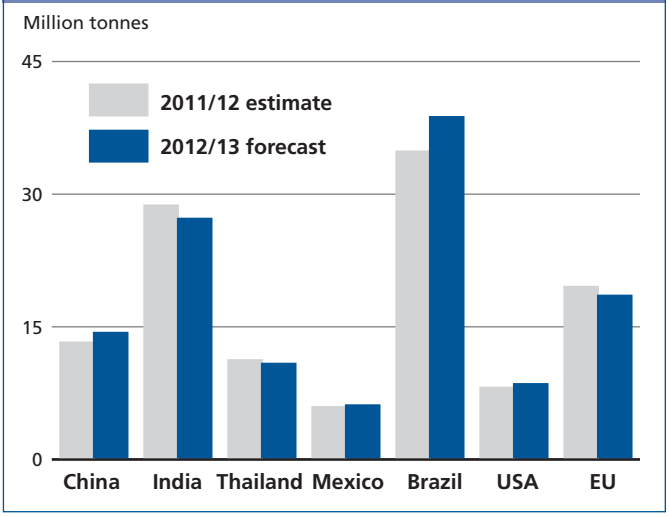
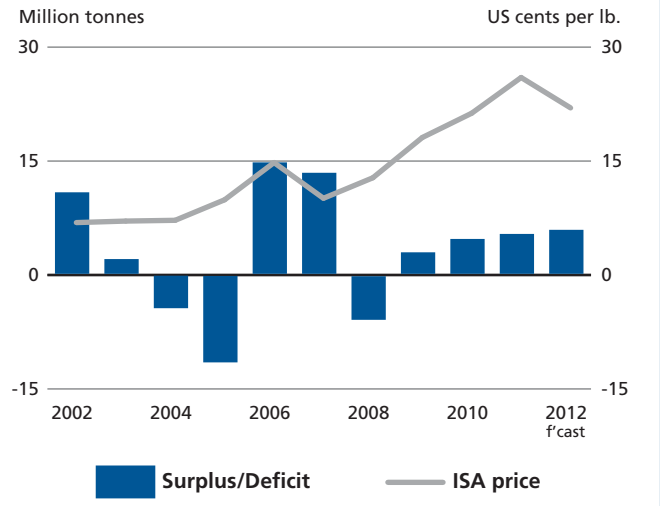


Figure 45. World sugar surplus/deficit



Russian Federation, as a result of delays in planting due to cold weather, in contrast with last year when a record-level crop was harvested. Losses from adverse weather conditions are also anticipated in **Ukraine**. In **Australia**, sugar production is set to rise by 12 percent, spurred by high domestic prices that have stimulated sharp increases in sugarcane area. In the *rest of the world*, production in the United States is forecast to surpass its 2011/12 level, sustained by increases in both beet and cane sugar outputs.

UTILIZATION

World sugar consumption sustained by lower prices

According to the latest FAO estimates, global sugar consumption is anticipated to reach 172 million tonnes in 2012/13, 3 million tonnes, or 2 percent more than in 2011/12. This compares with a 2.2 percent 10-year average growth rate. Large supply availabilities and lower prices are expected to underpin sugar intake for the new season. However, with a third consecutive large production surplus in sight this season, some building of stocks can be expected, which would dampen the pressure for international sugar prices to weaken further. Under current prospects, world per capita sugar consumption is anticipated to rise from 24.1 kg in 2011/12 to 24.3 kg in 2012/13. Aggregate sugar utilization in developing countries is estimated to expand by 2.4 percent, or 3 million tonnes, to 121.5 million tonnes, or 71 percent of global consumption. In the generally more mature markets of developed countries, consumption is to increase by less than 1 percent, to 50.4 million tonnes. However, a further downgrade in global economic prospects for 2013 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 situation.

TRADE

World trade to grow as export availabilities increase

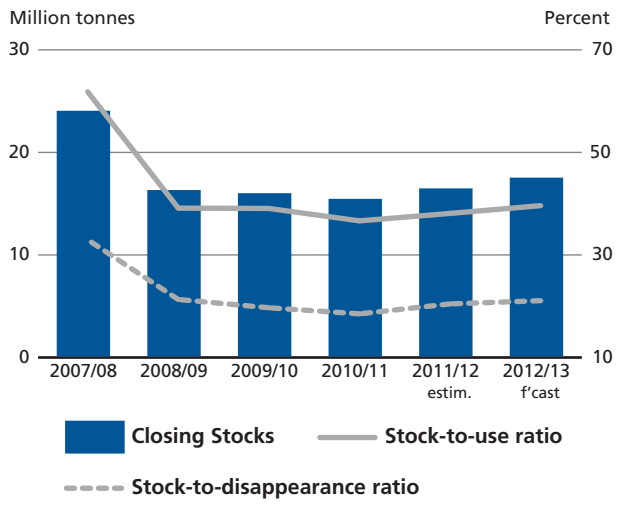
The latest FAO estimates of world sugar trade for 2012/13 (October/September) stands at 53 million tonnes, 1.6 percent more than in the previous season. The main feature of sugar trade in the 2012/13 season is an anticipated rebounding of Brazilian exports, which contracted last year amid tight domestic supplies. The country is expected to supply close to 44 percent of world trade in 2012/13. However, the final volume will very much depend on the United States ethanol import demand. With maize prices in the United States at a very high level, demand for ethanol-based sugarcane from Brazil is likely to increase, which would trim sugar availability for export from the country. Likewise, sugar deliveries from **Thailand**, the second largest exporter, are expected to expand slightly above last year's record, spurred by abundant supply availabilities. The bulk is forecast to be shipped in raw form (about 70 percent) to neighbouring countries, including **China**, **Indonesia**, **Malaysia** and the **Republic of Korea**. Thailand is also expected to fill its 2013 tariff rate quota (TRQ) with the United States of 15 000 metric tonnes, raw value. Due to the foreseen fall in sugar output, shipments from **India** may decline to an estimated 2.3 million tonnes, down from 3 million tonnes last season. India's competitiveness on the international market will also

be constrained by rising production costs, especially given current prospects for falling world prices.

Deliveries from **Australia**, the world's third largest supplier, are set to rise from their 2011/12 levels, as exportable surplus expands sustained by greater domestic production. However, exports still remain below the country's historical levels of 3.61 million tonnes. A bumper crop is also expected to boost 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 be sustained by greater availabilities and competitive pricing. Sugar has become a key source of foreign exchange earnings for the country, with large investment targeting refined sugar export markets. The United States, the Republic of Korea, and Canada are the main destinations of Guatemala's sugar export. Similarly, sales by **Mexico** are anticipated to increase on account of greater production. 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.

In light of the large domestic supplies, imports in Asia are forecast to decline somewhat in 2012/13. Much of the contraction would stem from lower purchases by **China**, reflecting expectations of an increasing domestic production and a slowdown in state purchases as stocks regain comfortable levels. After being the main driver of imports between 2009 and 2011, 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, Malaysia** and **Indonesia** are predicted to increase – in part to fulfil recent expansions in refining capacity for the latter country. In *Europe,* shipments to the EU are forecast to fall due to ample domestic availabilities. However, estimates for imports may be revised upwards if the ratification of the free trade agreement between Colombia, Peru and the EU takes effects in 2013. A similar agreement between the EU and six countries in Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) could take effect also next year, which would add pressure for EU's imports to increase further. As a result of falling domestic production, imports by the **Russian Federation**, once the world's largest sugar market, are expected to rise from 1 million tonnes in 2011/12 to 1.2 million tonnes in 2012/13. In the *rest of the world*, purchases by the United States**,** about half of which are managed through a TRQ system of 1.4 million tonnes, are forecast to drop somewhat, in light of the expected higher output. Total imports by countries in *Africa* are expected to expand further, in line with rising domestic consumption resulting from increasing population and per capita income.

Figure 46. Stocks held by the five major sugar exporters, stock-to-use ratio and stock-to-disappearance ratio



MEAT AND MEAT PRODUCTS

Despite high meat prices, prospects for growth in world output dampened down by high feed costs and market uncertainty

In 2012, meat producers, who were previously heading towards a year of expansion, have been scrambling to rebalance livestock supplies, as weak consumption and high feed costs depressed profit margins. Against this backdrop, global meat output is expected to grow by 2 percent only in 2012, to 301.8 million tonnes. Much of the expansion is anticipated to be concentrated in the developing countries, as more industrialized operations in the developed countries retrench in response to escalating costs and lacklustre consumption prospects.

Since the surge of grain prices in July 2012, the FAO meat price index has risen by 5 percent to 174, still short of the record levels witnessed in late 2011. However, compared with the beginning of the year, prices are virtually unchanged, with the meat index valued at 174-175 points. The apparent stability of the index masks diverging price movements of the various meat categories, with the feed-dependent poultry and pigmeat sectors gaining 5 percent and 11 percent between January and October. By contrast,

beef prices, which hit new records in the first few months of the year, have shed 5 percent since January, with an even more pronounced decline of 8 percent observed in the sheepmeat market.

BOVINE MEAT

Global beef production growth dampened by drought, high feed prices and policies

Low cattle numbers in developed countries, high feed prices and reduced industry profitability are contributing to stagnating global beef production for the fifth consecutive year. With output virtually flat at 66.8 million tons in 2012, limited supplies led to near record beef prices in the first months of the year, with reduced animal numbers portending higher prices in 2013. This is despite an on-going liquidation of cattle in the **United States**, the world's largest beef producer, triggered by the 2012 drought, allegedly the worst in half a century. The downsizing of the US herd, initiated in 2008, has pushed cattle numbers to a 60 year low. Similarly, lingering drought problems are depressing slaughter weights and output in the **Russian Federation, Ukraine** and **Mexico.** In the **EU**, beef output is plummeting to the lowest level since the 1960s, partly reflecting an increasing efficiency in dairy production, which has reduced the number of dairy animals for slaughter, combined with lower government support to the sector. By contrast, favourable weather, excellent pasture and abundant forages are behind a 4 percent increase in beef output in **New Zealand** and a more modest gain in **Australia.** In **Canada,** production is anticipated to remain stable.

Figure 47. Gains in global meat trade in 2012

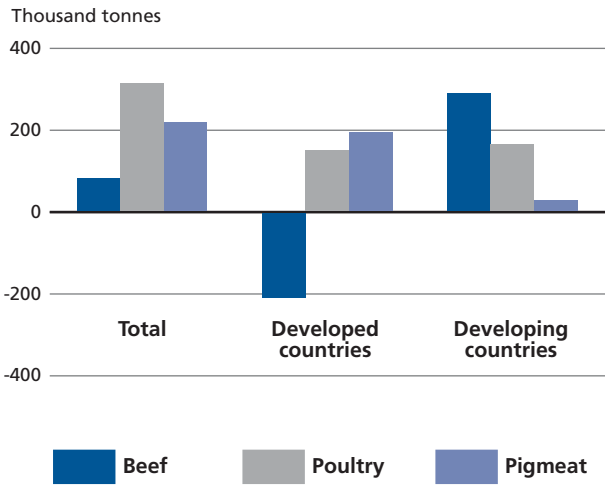


Table 17. World meat market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes			*%*
WORLD BALANCE				
Production	**294.2**	**297.1**	**301.8**	**1.6**
Bovine meat	66.7	66.6	66.8	0.4
Poultry meat	98.9	102.3	104.5	2.2
Pigmeat	109.3	108.8	110.8	1.9
Ovine meat	13.7	13.8	13.9	0.9
Trade	**26.7**	**28.8**	**29.4**	**2.2**
Bovine meat	7.7	8.0	8.0	1.0
Poultry meat	11.7	12.7	13.0	2.4
Pigmeat	6.2	7.1	7.4	3.0
Ovine meat	0.8	0.7	0.8	1.9
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	42.5	42.4	42.5	0.4
Developed (kg/year)	79.2	78.9	79.0	0.0
Developing (kg/year)	32.4	32.4	32.7	1.0

FAO MEAT PRICE INDEX (2002-2004=100)	**2010**	**2011**	**2012** *Jan-Oct*	**Change: Jan-Oct 2012 over Jan-Oct 2011** *%*
	152	157	174	-1.0

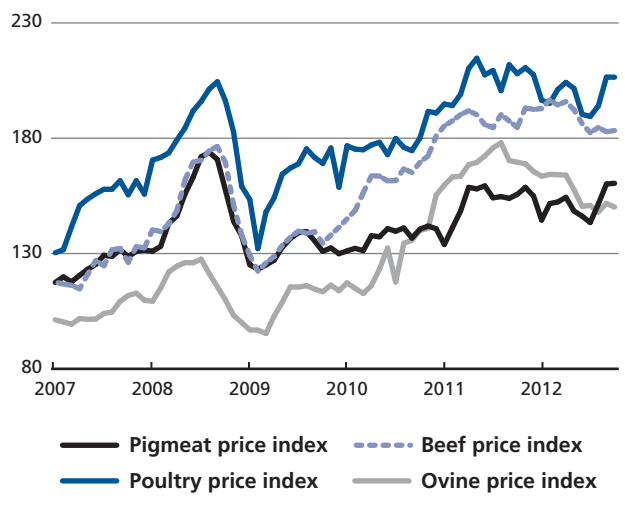
The contraction of output in the developed countries is anticipated to be offset by increases in the developing countries. In South America, cattle availabilities and slaughter have been rising particularly in **Argentina**, **Brazil, Paraguay** and **Uruguay,** following several years of herd rebuilding. In **Argentina**, historically high cattle prices and favourable profit margins are expected to boost beef production by 4 percent, despite restrictive export policies and the closure of an estimated 100 processing plants over the past two years. In Asia, production is expanding in **India** and **Vietnam,** sustained by investments into new processing operations. Beef output is forecast to soar in the **Republic of Korea,** reflecting a surge in slaughter numbers in response to government slaughter subsidies. In **China**, the sector is forecast to contract for the second consecutive year, as labour shortages and high production costs force small producers to exit the sector. In Africa, an early year FMD-outbreak in **Egypt** was followed by extensive culling of animals, with negative implications for output in the country. In the rest of the region, drought and high animal mortality rates in countries in the Horn of Africa and the Sahel also weighted negatively on bovine meat output in the region.

Imports of bovine meat rise despite high prices; India moves into position as the world's largest exporter

Despite price-induced declines in consumption in major developed markets, domestic supplies shortages are sustaining global demand for bovine meat trade, now forecast to rise by 1 percent to 8 million tonnes. Marked increases in imports are expected in the **United States,** the world's largest beef importer (and a major exporter), to compensate for domestic production shortfalls. Deliveries to the **Russian Federation** are also expected to be somewhat larger, reflecting the WTO-led increase in the preferential quota, as well as a new customs agreement with Belarus. By contrast, demands by **Japan** and the **Republic of Korea** are likely to weaken amid surging domestic supplies, while **Indonesia's** purchases of both live cattle and beef continue to be limited through restricted issuance of import licenses. In the **EU**, falling consumption is foreseen to depress imports for the third consecutive year, despite an increase of a zero-duty quota for high quality beef.

Competitive pricing of buffalo meat in **India** is boosting the country's deliveries to the Philippines, Malaysia, Vietnam and the traditional beef importing countries in the Gulf and Egypt. Overall, India's exports in 2012 are expected to grow by 17 percent to 1.4 million tonnes, which, if confirmed, would set the stage for the country to become the world top bovine meat exporter. Shipments from **Australia** and **New Zealand** are also anticipated higher this year, sustained by larger herds, favourable weather and pasture condition and a strong demand from the United States. Among South American producers, both **Brazil** and **Uruguay** are forecast to step up deliveries, capitalizing on the larger cattle inventories and, in the case of Brazil, on a relatively weak currency. Despite the closure of the Chile, Israel and EU markets, disease recovery should enable **Paraguay** to step up beef exports, by shifting export destination to neighbouring Brazil. By contrast, sales from **Canada** and, in particular, the **EU** and **the United States** are anticipated to plummet, constrained by limited supply of slaughter animals and high domestic prices. Export from **Argentina** may contract again this year, hindered by high domestic prices, a strong currency and the application of numerous export restraints, such as taxes and quotas.

Figure 48. Short beef supplies maintain high prices while poultry and pig meat prices pressured up by high feed prices



PIGMEAT

Disease recovery in Asia and a downsizing of operations in developed countries sustain pigmeat production in 2012

Disease recovery in Asia and a downsizing of operations through higher slaughter in many developed countries are expected to translate into a 2 percent increase in world pigmeat production to 110.8 million tons in 2012. This, along with a build up of pigmeat stocks in some countries, is exerting short-term downward pressure on prices in some local markets. The impact, however, is likely to be short-lived, with pigmeat prices on international markets already firming.

Herd liquidation is resulting in record slaughter and output in the **United States** while negative margins in **Canada** are behind pig farms bankruptcies and a contraction of output. In the **EU**, restructuring of the sector to comply with stringent welfare and environmental regulations is resulting in lower production. In the **Russian Federation**, the continued spread of African Swine Fever is anticipated to slow down output growth to 2 percent in 2012, which compares with an average 7 percent in the previous four years.

Nearly 90 percent of output gains in 2012 will be in the developing countries, specifically in Asia. In the region, policy support in **China**, the world's largest producer, is sustaining the sector expansion. A strong recovery from last year's FMD-depleted supplies is boosting output in the **Republic of Korea** while in **Japan**, output is returning to pre-tsunami levels. In **Vietnam,** policies and investments in feed and processing are behind an expected 5 percent output increase. In **Mexico**, the sector is expanding, underpinned by improved genetics and productivity, which are translating into increased piglets per litter and higher

animal weights. On the other hand, a rapid decline in hog prices is depressing production in **Thailand**.

Pigmeat trade continues to grow but Asia remains on the side lines

Stagnant consumption in traditional sources of exports, such as in **Canada,** the **EU** and the **United States,** are resulting in large excess supplies, which, along with firm import demand, are expected to boost global pigmeat trade by 3 percent to 7.4 million tons this year. Pigmeat imports by **China**, which surged in 2010 and 2011, in the wake of disease outbreaks, have continued to grow despite early year indications of adequate supplies and falling domestic prices, and may end up 6 percent larger by the end of the year. The **Russian Federation**, **Ukraine** and **Mexico** are also foreseen to step up their purchases. **Japan**'s imports are expected to record only a slight increase, as the sector recovers from the tsunami-related losses in 2011. Smaller volumes are forecast to flow to other Asian traditional markets, reflecting a stalling consumer demand and recoveries in production the **Republic of Korea** and the **Philippines.** Purchases by **Argentina** are also forecast to contract, as the recent resolution of a trade dispute with Brazil will only restore product movement between the two countries late this year.

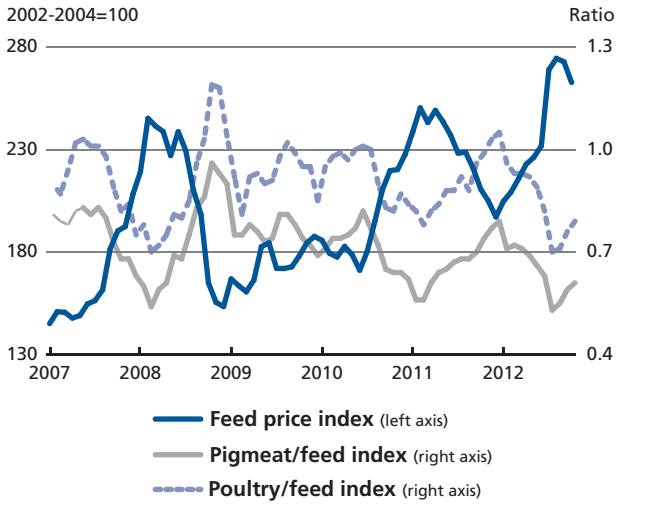
As for exports, increased availability in the **United States** is expected to boost US pigmeat deliveries to a record 2.3 million tonnes, 3 percent up from last year. Competitively priced product in the **EU** could also facilitate an increase of sales**,** despite this year's elimination of export restitutions for pork. Developing country exports are also rebounding. For instance, shipments from **Brazil** are recovering following the lifting of **Russian** restrictions on pigmeat from a number of processing units and a diversification of sales to other markets, in particular Hong Kong SAR, Ukraine and Angola. Sales by non-traditional exporters, such as **Chile** and **Mexico**, are also expected to rise, even sharply, in the case of Mexico, assisted by 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

Poultry production growth weakens in the face of high feed prices and falling profitability

High feed prices and stalling consumption growth are anticipated to weaken world poultry meat production growth to 2 percent in 2012, from 3.4 percent last year, reflecting a loss of momentum in both developing and developed countries. Global production is now forecast to rise by 2.2 million tonnes to 104.5 million metric tonnes, with two thirds of the increase originating in Asia.

Figure 49. Profitability for pork and poultry producers hit by inability to raise prices to factor in high feed costs



While chicken prices remains competitive and preferred by price-sensitive customers, difficulties in passing off higher feed costs have resulted in negative profit margins for the sector and lower year-to-year chick placements in the **United States** and **Brazil,** a situation expected to result in falling production in the two countries this year. Prospects are more positive in the **EU** and the **Russian Federation** with output expanding to meet firm domestic demands. Increased investment and a consumer shift from pork to poultry is underpinning an expansion of output in **China**. Production gains are also foreseen this year in **India, Indonesia, Japan, Malaysia** and **Thailand,** with oversupplies reported to be pressuring down prices and profitability in several of them. While twelve countries have registered outbreaks of avian influenza in 2012, persistent occurrences have curbed output in **Viet Nam** for the third successive year. This contrasts with **Mexico** where a mid-year outbreak of N7N1 affected production of eggs rather than broilers. Unlike in **Brazil**, the sector is expected to grow vigorously in **Argentina** which has moved into position as the world's fifth largest poultry producer, reflecting past years government supported investment and competitive feed prices. In **Saudi Arabia,** subsidies on imported animal feed are supporting the expansion of poultry output, which would lift the country's rate of self-sufficiency since last year from 38 percent to 46 percent.

Poultry trade growth slows as global import demand stalls

With adequate supplies in many Asian markets translating into lower regional import demand, global poultry trade is anticipated to rise by only 2.4 percent to 13 million tonnes in 2012. This would imply a severe loss of momentum compared with 2010 and 2011, when trade in poultry products rose by 6.7 percent and 8.8 percent respectively. Early year production expansion in **Japan, the Republic of Korea** and **the Philippines** are limiting imports into the region, despite larger shipments to **Singapore** and **Vietnam**. Deliveries to the **Russian Federation** in 2012 are expected to rebound after four years of contraction, more as a result of a custom agreement with Ukraine and Belarus than by the recent accession of the country to the WTO. Contrasting with the other regions, import growth for Africa as a whole is expected to remain sustained at around 12 percent in 2012. This tendency reflects the positive effects of income growth in several African countries, such as **Angola, Benin, Ghana,** and **the Republic of the Congo** which are translating into strong domestic demand and double digit import gains. Even deliveries to **South Africa** are moving up despite this year's imposition of anti-dumping duties on Brazilian shipments; a decision which Brazil is disputing at the WTO. Imports by **Egypt** are also anticipated to surge to record levels, following outbreaks of avian influenza, combined with FMD-induced high beef prices. By contrast, meat imports by the **Islamic Republic of Iran**, including poultry, which is increasingly supplied by neighbouring **Turkey**, have been stricken by the impact of sanctions.

Low margins and declining output are expected to result in only a modest expansion of poultry exports by the **United States** and **Brazil**, which together supply two thirds of global trade. Meanwhile, shipments from **Thailand** to the EU are forecast to rise vigorously, due to competitive pricing and the EU lifting of an eight-year AI-induced ban on fresh/chilled product. Likewise, exports from **Turkey,** which have benefited for the last several years from a rising regional demand, especially from Iraq, are forecast to grow by over 20 percent. Government investments are supporting record **Argentine** exports, particularly to regional markets, including **Venezuela** and **Chile**.

OVINE MEAT

Sheep and goatmeat markets steady as increased supplies prompt a decline of prices

Ovine meat markets have recovered from two years of declining supplies, with global output estimated up one percent to 13.9 million tonnes in 2012. Satisfactory pasture conditions have induced flock rebuilding throughout many of the major producing areas of Asia and Africa, including major producers as **Pakistan, the Islamic Republic of Iran, India** and **Turkey**. In Africa, output in 2012 was hit by drought, especially in the **Horn of Africa** and in the **Sahel of West Africa;** however, recent pasture regeneration has been observed over the past months portending a recovery in animal numbers in 2013. In **Central Africa**, recurring outbreaks of the virulent "peste des petits ruminants" are decimating goat flocks, posing a critical threat to regional sheep and goat flocks. **Syria** is one of the largest producers in the Middle East and sectarian strife is likely to have reduced output. Meanwhile, sheep meat production in the developed countries, which accounts for only 22 percent of global supplies, is forecast to increase only slightly, with lower output in **Europe** and the **North America** offset by a 4 percent increase in **Australia** and **New Zealand** which have benefited from favourable pasture conditions and high lamb crops.

Flock rebuilding results in increased animal numbers and increased sheepmeat export availabilities

A recovery in global supplies, combined by booming shipments to **China** and strong demand in many **Middle Eastern markets**, are supporting a 2 percent rise in sheep and goat meat trade in 2012 to 757,000 tonnes. Despite some flock rebuilding and a strong currency, **New Zealand's** lamb exports are expected up 3 percent stimulated in part by China's approval of more New Zealand processing sites for export. **Australian** shipments are recovering from three years of drought-reduced supplies. While imports by the **EU,** the **United States** and **Canada** are slipping as a result of the faltering consumer demand, imports by middle Eastern countries, in particular **Kuwait** and **Saudi Arabia,** are expected to keep rising, despite a sustained trade in live sheep and goats coming from Ethiopia, Sudan and Somalia.

Table 18. Major Meat Market Policy Developments: May to October 2012

Country	Product	Date	Policy Instrument	Description
Algeria	Poultry	August	State market intervention	Removed VAT and exempted raw poultry materials and finished products from customs duties from 1 September 2012 until 1 August 2013 in order to reduce the price of white poultry meat and to help the struggling poultry sector.
Argentina	Beef	August	WTO complaint filed	Filed a complaint with WTO against the US over its restrictions on imports of Argentinean beef and meat products in late August. Argentina claims that the restrictions, applied on sanitary grounds, have no scientific justification.
	Pork	Sept./Oct.	Import ban	Stopped to release import declarations for Brazilian pork in September; in October, the two countries signed an agreement to resume trade.
Australia	Pig	July	State market intervention	Increased the pig slaughter levy for "marketing" from AUD 1.35 to AUD 2.25. This increase will occur in three 30-cent tranches over four years from 1 July 2012. The levy for "research and development" (R&D) of AUD 1.00 remains equal. The pig slaughter levy is collected from producers to support the predominant industry body, Australian Pork Limited (APL), in undertaking marketing, R&D and policy activities on behalf of the industry.
Brazil	Poultry	June	WTO complaint filed	Filed complaint with WTO against the anti-dumping duties South Africa imposed on Brazilian chicken.
	Pigs	July	State market intervention	Under the pork buyback programme, 76 000 metric tonnes of excess live swine were bought back at a guaranteed minimum price for pigs of BRL 0.40/kg (USD 0.20). Also, a special credit line was put in place for pig farmers to buy piglets at a price of BRL 3.60/kg (USD 1.77/kg) as well as the extension of debt funding and investment.
	Pig, poultry	Sept.	State market intervention	Provides payroll tax relief to over 25 sectors of the economy, including the pig and poultry sectors. Exporting companies will not have to contribute to taxes (employer contribution to Social Security) on their production revenues.
Canada	Livestock	August	State market intervention	Offered livestock tax deferrals to producers in drought-affected municipalities which allows eligible producers in designated areas to defer income tax on the sale of breeding livestock for one year to help replenish breeding stock in the following year. In addition, producers have access to assistance through existing business risk management (BRM) programmes.
China	Meat	Oct.	Price control	Provided VAT exemption for wholesale or retail sale of fresh meat and egg products listed in "Circular 75" as of 1 October 2012.
European Union	Poultry	July	Import ban lifted	Lifted 8-year ban on the imports of fresh chicken meat from Thailand as of 1 July, after no bird flu case was reported in Thailand for more than three consecutive years.
	Livestock	July	Animal welfare regulations	Adopted a resolution in support of the new EU Animal Welfare Strategy 2012–2015, encouraging the European Commission to better enforce existing animal welfare (AW) legislation, to further expand AW legislation based on sound science and to pursue inclusion of AW standards in the international arena and in all its bilateral trade agreements.
	Beef	August	Import quota increased	Increased the zero-duty quota for high quality beef from 20 000 mt to 45 000 mt. Further, the European Commission changed the quota management system to a first come, first served approach. Previously (from 2009), the quota had been controlled by issuing import licenses on a monthly basis.
Fiji	Poultry	August	Import ban	Banned poultry imports from Brazil due to the risks associated with diseases on the packaging entering the country.

Country	Product	Date	Policy Instrument	Description
Hong Kong	Poultry	May	Import restrictions lifted	Resumed the import of the poultry from mainland provinces after bird flu.
Indonesia	Cattle	Sept.	Subsidies	Provided IDR 300 million (USD 32 000) government support to each farmer's group developing cattle ranches in the region, targeting self-sufficiency in beef-supply by 2014.
Japan	Pork	August	Import restrictions	Completed risk assessment of pork from the southern Brazilian state of Santa Catarina, Brazil's only foot-and-mouth disease (FMD) free state.
Korea, Rep. of	Cattle, pig	Oct	State Market Intervention	Decided to promote slaughter (through subsidies) as well as the consumption of domestic beef and pork to stabilise the domestic cattle and pig markets in response to the ongoing price falls and rising livestock numbers.
Kyrgyzstan	Poultry	July	Import ban	Banned the import of poultry and poultry products from Ireland following the outbreak of H5N2 there in March.
Libya	Cattle	Sept.	Import ban lifted	Lifted a 9-year ban on Canadian cattle, dating back to the 2003 discovery of mad cow disease in Canada.
New Zealand	Chicken	July	Animal welfare regulations	Introduced new standards covering the welfare of chickens raised for their meat. The new code of welfare came into effect on 26 July 2012, replacing the previous regulation issued in 2003.
Oman	Poultry	Sept.	Import-ban lifted	Lifted import ban on poultry from India put in place due to bird flu concerns in March 2012.
Philippines	Poultry	August	Import ban	Banned temporarily imports of poultry from the province of Utrecht, the Netherlands, due to an outbreak of low pathogenic avian influenza (LPAI) in the province.
Russian Federation	Poulty	July	Subsidies reduced	Reduced poultry industry support until 2020 cutting the financing program by more than half – from 250 billion roubles (USD 8.34 billion) to 100 billion roubles (USD 3.2 billion) The measure is part of the decision to cut funding for agriculture in light of the country's accession to the WTO.
	Livestock, pork	July	Import duties	Cut the import duty for shipments inside the annual quota of 430 000 tonnes (kept equal until 2020) to zero following the formal access to the WTO on August, 22 2012, and reduced above-quota duty from 75% to 65%. After 2020, the import quota will be replaced by a flat 25% duty. Further, the import duty for livestock was reduced to 5%, and for sub products to 15%.
	Pigs	August	Import ban lifted	Lifted the restrictions on imports of breeding swine from the Czech Republic.
	Cattle	August	Import ban	Imposed import ban on cattle from Switzerland after cases of Schmallenberg virus.
	Pork	August	Import ban lifted	Lifted import ban on Brazilian pork. Brazilian companies lost trading permissions to Russia last year due to serious disputes between the veterinary services of the two countries.
	Poultry	August	Import restrictions	Restricted imports of some poultry products from the Netherlands after Dutch outbreak of avian influenza H7N7 in the Utrecht region.
	Cattle	Sept.	Import ban lifted	Lifted a 5-year-old ban on breeding cattle from British Columbia (Canada) allowing for immediate exports to the Russian market.
	Pork	Sept.	Import restrictions	Tightened controls on US pork exports after finding listeria and antibiotics in a shipment of pork from the US.
Russian Federation-Belarus-Kazakhstan	Poultry	July	Import ban	Ban by Customs Union of poultry from Mexico, due to the recent outbreak of avian influenza.

Country	Product	Date	Policy Instrument	Description
Saudi Arabia	Chicken	Oct.	Export-ban	Banned the export of chicken in a bid to control spiralling prices that have triggered a public campaign on social networks to boycott poultry food.
Sri Lanka	Poultry	Oct.	Price control	Consumer Affairs Authority increased imposed price controls on chicken by 30 rupees per kg.
Taiwan	Beef	July	Animal welfare regulations	Passed bill setting maximum level of ractopamine allowed in imported beef at 10 ppb. Previously, Taiwan had banned all meat imports with any residual ractopamine.
Ukraine	Poultry	July	Import ban	Banned imports of poultry, poultry products and raw material from several provinces of China due to outbreaks of avian influenza.
	Pig, cattle	Oct.	State Market Intervention	Allocated USD 3.3 million in compensation for farmers who have suffered losses as a result of African swine fever. Cattle farmers are also being compensated USD 436 000 for losses.
United Arab Emirates	Beef	August	Import restrictions lifted	Granted full market access to Canadian beef producers, including beef from animals over 30 months of age.
United States (Codex Alimentarius Commission)	Livestock	July	Animal Health Regulations	The Codex Alimentarius Commission adopted official maximum residue limit (MRL) on the feed additive ractopamine, a big win for trade interests of the US, Brazil and Canada. However, some countries, such as China and EU, have zero tolerance policies for ractopamine residues in meat products, and Taiwan recently adopted a MRL allowed.
United States	Beef	Auugust	Import restrictions lifted	Resumed beef imports from Japan, suspended since April 2010 after foot-and-mouth disease was found in Japanese cows.
	Livestock	Sept.	State Market Intervention	Expanded USD 11.8 million in additional financial and technical assistance to help crop and livestock producers in 22 additional states.

MILK AND MILK PRODUCTS

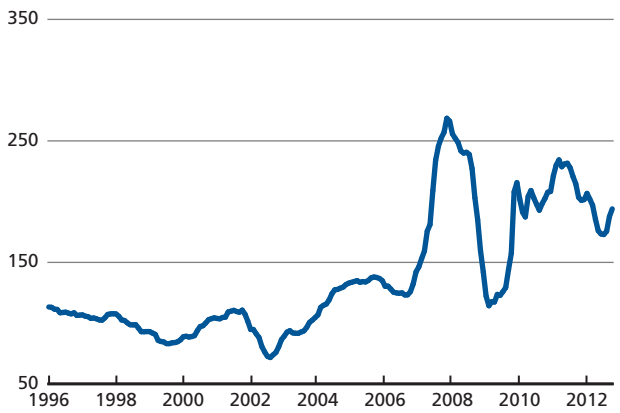
Prices rise in the face of limited availability on the international market

International prices of dairy products began to strengthen in mid-2012, reversing the steady decline that had characterized the previous 12 months. The change in trend resulted from a tightening of supplies to the world market. Availabilities are anticipated to be finely balanced until at least the end of the year, as output in the Northern Hemisphere is now trending seasonally downwards and only limited growth is anticipated during the new production year in the Southern Hemisphere.

The FAO international dairy products price index (2002–2004=100) stabilized at 173 during June and July but had risen to 194 by October. Prices strengthened for all the products that constitute the index, especially skimmed milk powder (SMP) which registered an increase of USD562 per tonne, or 20 percent, after its mid-year low. In the same period, whole milk powder (WMP) prices also rose, by USD 425 per tonne or 15 percent, as did quotations for butter, which were up USD 400 per tonne or 14 percent, and cheddar cheese, which increased by USD 175 per tonne or 5 percent.

Over the past three years, the dairy index has oscillated around a value of 200, meaning prices for dairy products overall are approaching the average level for this period. With publicly financed inventories at minimal levels in the **EU** and the **United States,** the market remains sensitive to sudden changes in milk production and availability of milk products. The absence of substantial growth in milk output in the principal exporting countries is likely to mean a further upwards movement in prices.

Figure 50. 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 19. World dairy market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes, milk equiv.			%
WORLD BALANCE				
Total milk production	**722.9**	**737.9**	**759.6**	**3.0**
Total trade	**47.8**	**50.5**	**52.9**	**4.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	104.6	105.6	107.5	1.8
Developed (kg/year)	234.1	234.9	238.1	1.4
Developing (kg/year)	69.4	70.8	72.7	2.8
Trade share of prod. (%)	**6.6**	**6.8**	**7.0**	**1.6**

FAO DAIRY PRICE INDEX (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011 %
	200	221	187	-16.6

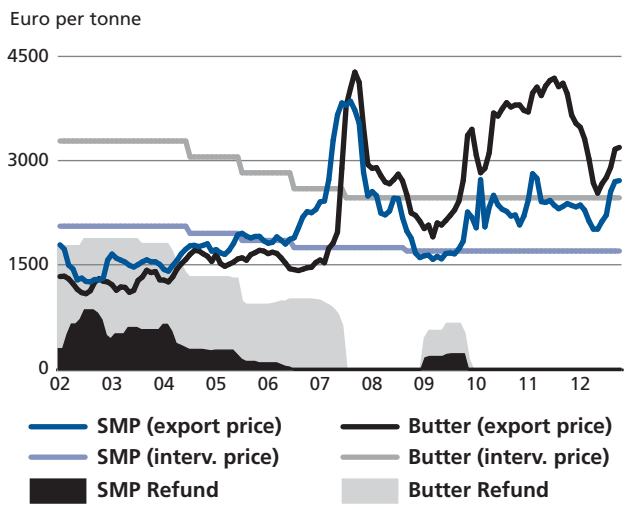
PRODUCTION

World milk production to grow by 3 percent in 2012, sustained by gains in Asia, Oceania and South America

World milk production in 2012 is forecast to grow by 3.0 percent to 760 million tonnes – a higher rate than the average for 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 million tonnes to 132 million tonnes. Dynamic domestic demand provides the main impetus for growth, as India is largely absent from the international market for dairy products. Unlike many countries, expansion in herd size, rather than rising productivity, is the principal engine behind the rise in 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 beginning to recover from the 2011 foot-and-mouth disease outbreak which required the slaughter of 8 percent of the dairy herd and led to a corresponding drop in production.

In Africa, a small increase in milk output is anticipated for 2012, even though a number of countries in the region have suffered adverse weather, which has limited growth. For example, a below-average rainy season in northern Kenya led to water shortages and poor pasture conditions, while poor rainfall in south-eastern and coastal areas and flooding in western Kenya resulted in higher prices for feed and fodder. High maize prices are expected to constrain growth

Figure 51. EU intervention prices, price and export refund for butter and skim milk powder



in milk production in **South Africa** in 2012, leaving it only slightly higher. Elsewhere in the region, an outbreak of foot-and-mouth disease in **Egypt** led to higher calf mortality and may limit growth in milk output.

Rising incomes and firm regional and international demand have favoured dairy production growth in several countries in Latin America and the Caribbean. Even more important, most South American countries had very good pasture conditions during the 2011/2012 production year. Overall, South American milk production expanded by over 5 percent in 2011 and a similar rate of increase is foreseen for 2012, when its output is expected to reach 71 million tonnes. The strongest gains this year are forecast for **Argentina**, **Ecuador** and **Uruguay,** with output in **Brazil** and **Chile** also growing. Conditions have been favourable for pasture production, and there is an optimistic perspective on the future international market for dairy products, leading to increased investment in new technology and improved animal genetics. In Central America, milk output in **Mexico**, the largest producer, is expected to be constrained by drought, which may trigger herd reduction and 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 rise to 90.3 million tonnes, an increase of almost 2 percent, reflecting dairy herd expansion in response to positive national and international demand. Until July, monthly production was above the same period in the previous year, but an unfavourable milk/feed price ratio since then has led some farmers to cut back. Output in **Canada** is set to remain stable at 8.3 million tonnes, within the limits set by the milk quota system.

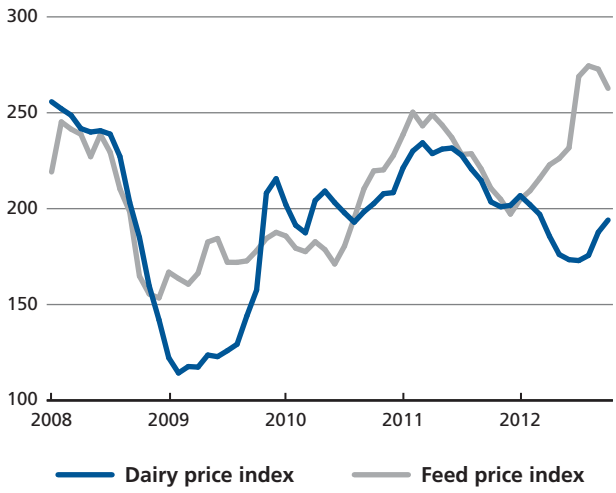
In Europe, **EU** milk production is forecast to rise by only 1.5 percent to 157.9 million tonnes in 2012, as improved milk yields continue to more than compensate for reduced cow numbers. Weather early in the year was generally favourable for pasture growth, which set the basis for a positive start. However, subsequently some member countries suffered dry conditions or even drought, in particular Romania, Hungary and Bulgaria, while others, such as Ireland, the United Kingdom and northern France, had excessive rain which adversely affected both pasture and forage. As a result, several European countries faced rising feed prices and deteriorating pasture quality. Although EU production limits are being raised by 1 percent per year in preparation for the 2015 abolition of its quota system, it now appears that some producers will not be able to avail themselves of the increase because of the adverse weather

Table 20. Major exporters of dairy products

	2008-10 *Average*	2011 *prelim.*	2012 *f'cast*
		thousand tonnes	
WHOLE MILK POWDER			
World	**2 066**	**2 247**	**2 373**
New Zealand	791	1110	1210
EU*	464	390	360
Argentina	126	201	230
Australia	130	116	117
SKIM MILK POWDER			
World	**1 330**	**1 713**	**1 733**
EU*	263	518	520
United States	341	436	450
New Zealand	331	362	363
Australia	142	140	159
BUTTER			
World	**841**	**826**	**877**
New Zealand	396	414	455
EU*	149	126	115
Belarus	69	62	64
United States	56	64	60
Australia	63	41	55
CHEESE			
World	**2 063**	**2 406**	**2 534**
EU*	603	683	750
Saudi Arabia	200	284	341
New Zealand	267	253	280
United States	139	226	254
Egypt	133	175	130
Australia	160	168	170

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

Figure 52. FAO indices of dairy and feed prices (2002-2004=100)



conditions described above. Furthermore, milk prices have not increased to reflect higher production costs, which will also act as a brake on growth. Milk production in the **Russian Federation** is anticipated to show a modest increase in 2012, following two years of decline, supported by an improvement in profitability and a concomitant slowing in dairy herd contraction. In neighbouring **Ukraine**, milk production also appears to be stabilizing, following a period of prolonged decline, due to government programmes to support the sector.

In Oceania, sustained high prices for dairy products on the international market and associated levels of profitability have stimulated milk production. In **New Zealand**, output rebounded strongly during the 2011/12 season and closed 10 percent higher at 19.7 million tonnes, due to an increase in herd size combined with above average pasture conditions, especially during the second-half of the season. The new season has begun well and deliveries are running ahead of the same period in 2011/12. However, it is unlikely that the previous season's exceptional performance will be improved upon, and final output is expected to reach around 19.0 million tonnes. In both New Zealand and Australia, herd health and condition are reported to be the best they have been for a number of years. In **Australia**, herd rebuilding and favourable weather conditions were behind a 4 percent increase in milk production during the 2011/12 season, to 9.5 million tonnes. The 2012/13 Australian milk year has opened with less than favourable, cool and wet weather. Furthermore, an increase in the price of feed grain, which accounts for approximately 25 percent of total costs, may prompt farmers to feed less, which would result in lower average milk production per cow. For 2012/13, milk output in the country is expected to grow by 2 percent to some 10.2 million tonnes.

TRADE

Limited export availability and strong import demand drive up international dairy prices

World trade in dairy products is expected to continue to expand in 2012. Demand remains firm and imports are forecast to reach 52.8 million tonnes of milk equivalent, up 4.8 percent from 2011. Asia will continue to be the main market for dairy products, accounting for some 51 percent of world imports. In 2012, significant additional demand is expected from **China, Saudi Arabia, Indonesia, Japan, Singapore,** the **United Arab Emirates**, **Malaysia, Vietnam** and **Sri Lanka**. Elsewhere in Asia, the **Philippines, Thailand and** the **Republic of Korea** should also remain important markets, but the level of their imports is not expected to rise. Growth is anticipated among a number of significant importing countries in North Africa and Latin America and the Caribbean, including **Egypt, Mexico**, **Venezuela** and **Brazil**. Conversely, **Algeria**, which was the fourth largest importer in 2011, is expected to cut its purchases due to carry-over stocks of milk powder from the previous year. Supplies from the main exporting countries are foreseen as being finely balanced for the remainder of 2012, and perhaps into the first part of 2013.

Whole milk powder (WMP) – Prices rise from July in the face of supply uncertainties

International WMP prices began increasing in mid-2012, following several months of decline. In June, they had dropped to USD 2 800 per tonne, while by October they stood at USD 3 300 – an increase of 18 percent. Prices during the first part of the year were weakened by a strong closing of the 2011/2012 season in the Southern Hemisphere, resulting in larger than expected export availability. However, a lack of any substantial production increase in the Northern Hemisphere, in part as a result of climatic extremes, and uncertainty over Southern Hemisphere availability for the 2012/2013 season have raised prices since July. World exports of WMP are projected to show continued growth in 2012, rising by 126 000 tonnes to reach 2.4 million tonnes. Sustained demand is forecast for Asia, the main market, as well as for several importers in North Africa and Latin America and the Caribbean. **China, Algeria** and **Venezuela**, the major importing countries (in order of volume) make up over 30 percent of world WMP trade. Imports by Venezuela are expected to show a substantial increase, with some growth in imports by China,

while purchases by Algeria are anticipated to decline as a result of retained stock from the previous year. Imports of WMP by China levelled off after having substantial growth in 2009 and 2010, although with current annual purchases of around 350 000 tonnes, it remains the largest market. Since 2011, buyer interest has focussed more on SMP, with China also on course to become the largest importer of this product. Purchases by a number of other important WMP importing countries, including (in order of volume) **Saudi Arabia, United Arab Emirates, Sri Lanka, Indonesia** and **Oman,** are expected to grow. 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**, **Argentina**, **Belarus** and **Uruguay** will supply most of the increase in trade, as limited milk supplies and more profitable alternative uses are expected to curb export availability from the **EU** and **Australia**. Altogether, the six exporters supply 85 percent of the international WMP market.

Skim milk powder (SMP) – Prices up on limited export supplies

Trade in SMP is anticipated to rise by 1 percent in 2012, to 1.7 million tonnes. In the face of limited export availability, SMP prices rose from a low of USD 2 838 per tonne in mid-2012, to reach USD 3 400 in October. Factors behind the increase are similar to those described for WMP. However, supplies of SMP to the world market are expected to be more constrained as manufacturers place emphasis on other products in the context of overall tight 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, Malaysia** and the **Philippines**, followed by **Singapore, Egypt, Saudi Arabia** and **Thailand**. Overall demand is expected to remain firm in these markets. **China,** in particular, is anticipated to increase its purchases substantially, by 65 000 tonnes, and is on course to become the major importer of SMP by the middle of the decade, after becoming the principal market for WMP in 2010. Higher imports are also anticipated (in order of volume) for **Mexico, Indonesia** and **Malaysia.** Conversely, purchases by **Algeria**, fourth ranked in terms of world imports, are anticipated to decrease as stocks are drawn down to meet domestic demand. Over 85 percent of world exports are supplied by (in order of volume) the **EU,** the **United States, New Zealand** and **Australia**. For 2012, the largest increase in supplies is expected to come from the **United States** and **Australia.** In the face of limited export supplies this year, **Saudi Arabia's** and **Switzerland's** participation in the international market may become more important than in the past. Exports by the **EU** and **New Zealand** are anticipated to remain at levels similar to the previous year, as emphasis is placed on the production of other milk products.

Butter – Market is well-balanced, prices may trend higher

Pressure for international prices to rise has been less for butter than for its co-product, SMP. Butter prices reached a low of USD 2 850 per tonne in July, representing a substantial reduction from the peak levels of 2011, when they touched a high of USD 4 880. Since July 2012, prices have risen somewhat, to stand at USD 3 250 in October. Trade in butter is forecast to grow by 6 percent in 2012, to 878 000 tonnes. This is anticipated to be a consequence of increased deliveries by **New Zealand, Belarus, Australia, Uruguay** and **Switzerland** compensating for a fall in sales from the **EU,** the **United States** and **Argentina**. In the case of the EU, lower profitability for butter has led to more emphasis on using milk for cheese production. Furthermore, at present, international butter prices are not competitive with those on the EU internal market. **New Zealand** is the predominant supplier of butter to the world, accounting for over half of trade. Demand for butter imports comes principally from **Southeast Asia**, the **Middle East** and the **Russian Federation**. Additionally, as a result of trading agreements, the **EU** is both an important butter importer (ranking third) and exporter (ranking second). Purchases by most of the main importing countries – **Egypt**, the **EU, Saudi Arabia** and **China** – are anticipated to increase during 2012, while imports by the **Russian Federation** may decline as a result of increased domestic production.

Cheese – Prices move upwards from September

Among the dairy commodities, cheese prices traditionally have been more stable – reflecting the wide variety of cheese available, each with its own distinct characteristics. This makes cheese less subject to supply and demand fluctuation than the standardized products. Even in the case of a generic cheese, such as cheddar, 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. Consequently, while cheese prices moved somewhat lower during the first half of 2012, the degree of decline was not as great as for the other milk-based commodities. After remaining at a low of USD 3 600 per tonne from May to August, the price had risen to USD 3 925 by October. Trade in cheese is forecast to grow by 5.3 percent in 2012, to 2.5 million tonnes, sustained by robust import demand. The

world 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,** 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. Elsewhere, several of the most important cheese importers, including the **Russian Federation, Japan, Saudi Arabia, Mexico,** the **Republic of Korea** and **Egypt,** focus more on industrial cheese, both for direct consumption and for use by the processing industry, although each market may have 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, Argentina, Switzerland,** the **Ukraine, Uruguay** and **Turkey**.

Table 21. Dairy Market Policy Developments: January to October 2012

Country	Product	Date	Policy Instrument	Description
Australia-Malaysia	Milk, Dairy products	May	Free Trade Agreement	Signed Free trade Agreement 22 May to take effect 1 January 2013. Under the Agreement, Australia and Malaysia will cut tariffs earlier and on a wider range of goods. The Agreement also addresses other barriers to trade and simplifies administration for traders.
Australia	Milk	July	Market intervention	Increased the dairy levy from 1 percent to 10 percent for every 1 million litres of milk produced. The increase, voted in April by Australian dairy farmers, improved the scale of investment and services provided by the dairy industry through the levy funds.
Brazil	Milk	July	State market regulation	Passed a new law to give producers greater bargaining power: dairies will have to reveal in advance (on the 25th of each month preceding delivery) what they will pay farmers each month.
China	Food/Dairy	June	Food safety measures	Released a 5-year Food Safety Plan which includes safety standards for dairy products, specifying limits for dangerous ingredients.
	Milk powder	Sept.	Food safety measures	Placed a ban on adding colostrum to infant formula milk powder or infant foods.
EU	Milk	Feb.	Quota regulation	Signed off on an EU regulation that will allow contracts between dairy farmers and processors after quotas expire in 2015. Agreed to by EU Member States.
	Poultry	Oct.	Export refunds reduced	Reduced export refunds for frozen whole chickens (65%-70%) from Euro 32.50 per 100 kg to Euro 21.70/100 kg.
India	Milk, Dairy products	Jan.	Production policy	Initiated the National Dairy Plan (NDP) in response to growing consumer demand for dairy products as well as sustained food inflation. It aims to increase milk production in India by 6 million tonnes each year for the next 15 years. The first phase of the plan has a financial outlay of USD 416 million (over INR 20 billion) and will have an implementation period of 6 years. The NDP will be managed by the National Dairy Development Board (NDDB).
	Milk, Dairy products	Jan.	Import ban	Extended the import prohibition on milk and milk products from China for six months. The ban includes milk and milk products including chocolates and chocolate products, candies and confectionary as well as prepared foods that have milk or milk solid ingredients and originated in China.
	Whey and whey products	May	Export regulations	Amended the policy for the export of casein and casein products, moving them from "prohibited" to "restricted" category, thus permitting casein exports under license.
	Skimmed milk powder	June	Export measure	Amended export promotional measure to include skimmed milk powder (SMP). The program incentivizes exports through a duty credit scrip at 5 percent of the fob value of the export.
	Skimmed milk powder	June	Export ban lifted	Lifted the ban on the export of SMP to improve finances of dairy firms and help milk producers. The government had banned SMP exports in February 2011 to contain rise in domestic milk prices.
	Milk, Dairy products	July	Import ban extended	Extended the ban on the import of milk and milk products from China until 23 July 2013 or until further orders. The ban was a precautionary measure taken after melamine adulteration was found in Chinese milk powder imports.
Mexico	Skimmed milk powder	Jan.	Import quota	Announced the 2012 Milk Powder TRQ: duty-free import of 80 000 MT under the Most Favored Nations (MFN) as part of its World Trade Organization (WTO) commitments. This excludes US milk powder which will continue to be granted unlimited duty-free access under NAFTA.

Country	Product	Date	Policy Instrument	Description
Mexico	Dairy products	May	State Market Regulation	Published two official norms related to the regulation of dairy products on 3 May 2012: NOM-155-SCFI-2012 "Milk- Denomination, physical-chemical specifications, commercial information, and testing methods" and NOM-183-SCFI-2012 "Dairy formulas and combined dairy formulas- denomination, physical-chemical specifications, commercial information, and testing methods."
Norway	Cheese	Oct.	Import duties	Announced a new range of import duties for foreign cheese products, such as grana padano, parmigiano reggiano and pecorino.
Peru	Milk powder	Oct.	Import duties	Imposed a 21 percent surtax on imported milk powder.
Russian Federation	Cheese	Feb.	Import ban	Banned imports of cheese from selected Ukrainian facilities due to products' noncompliance with the Russian technical regulation on dairy products.
	Cheese	May	Import ban relaxed	Relaxed some restrictions on the import of cheese and allowed some imports with compulsory laboratory testing of each shipment.
	Milk, Dairy products	Aug.	WTO accession	Announced that, following the formal access to the WTO on 22 August 2012, the duty on dairy products will fall from its current 19.8 percent to 14.9 percent (fully implemented); some whey products will be subject to tariff rate quotas (TRQs); imports entering the market within the quota will face lower tariffs; and higher duties will be applied to products imported outside the quota.
Russian Federation-Belarus-Kazakhstan (Custom Union-CU)	Milk, Dairy products	April	Technical regulations	Discussed major differences on the CU technical regulation "On milk and dairy products" and agreed to exclude "vegetable-milk containing products"; tighten tolerances for antibiotic residues (effective 1 July 2015); and cancel categories of milk with establishment of maximum level of bacterial insemination and somatic cells content (effective 1 July 2017).
	Dairy products	Sept.	Import restrictions	Imposed temporary export restrictions on 5 Ukrainian dairy producers as of 4 October 2012, after publishing the results of the System Audit conducted by CU veterinary specialists in June 2012, and completely delisted one dairy processing facility. The CU-wide restriction affects producers of cheese, dried milk and butter.
Ukraine	Raw milk	June	State Price Regulations	Added raw milk to the list of products subject to state price regulations, which already included dried milk and butter. On August 30, the Cabinet of Ministers of Ukraine set a minimum price for milk procured from households at USD 0.27 (UAH 2.2) per liter (before value added tax).
	Milk, dairy products	July	Free Trade Agreement	Ratified Free Trade Agreement (FTA) with seven Commonwealth of Independent States countries, namely Russian Federation, Kazakhstan, Belarus, Kirgizstan, Moldova, Tadzhikistan and Armenia, on July 30, 2012.
	Dairy products	August	Import ban	Banned imports of milk powder and other dairy products from Belarus.
United Arab Emirates	Dairy products	Jan.	Import restrictions	Liberalized trade in 12 areas, including dairy, as part of efforts to strengthen UAE economic competitiveness by curbing monopolistic practices and avoiding unjustified price rises.
United States - Indonesia	Dairy products	July	Trade Agreement	Agreed to a process to facilitate issuance of import permits to Indonesian importers that import dairy products from the US.

FISH AND FISHERY PRODUCTS

GLOBAL FISH ECONOMY IN 2012

Overview

Faltering import demand has put **international prices** of fish and fish products under downward pressure in 2012.

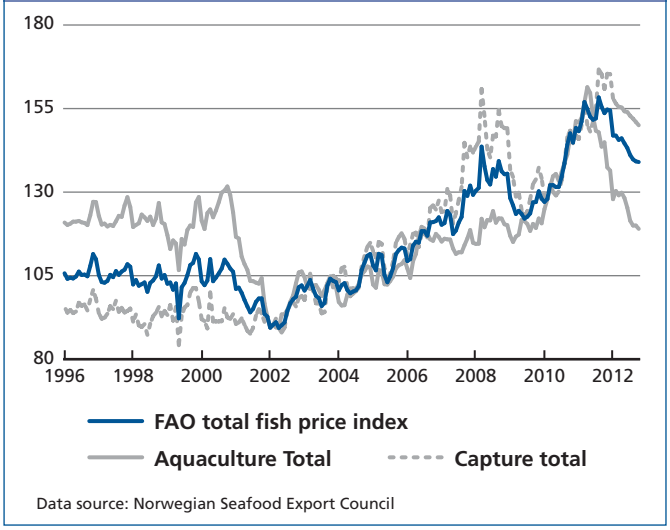
Table 22. World fish market at a glance

	2010	2011 estim.	2012 f'cast	Change: 2012 over 2011
	million tonnes			%
WORLD BALANCE				
Production	**148.5**	**155.5**	**157.5**	**1.3**
Capture fisheries	88.6	91.9	90.2	-1.8
Aquaculture	59.9	63.6	67.3	5.8
Trade value (exports USD billion)	**109.1**	**127.1**	**130.5**	**2.6**
Trade volume (live weight)	**56.7**	**58.5**	**59.9**	**2.5**
Total utilization	**148.5**	**155.5**	**157.5**	**1.3**
Food	128.3	132.0	135.4	2.6
Feed	15.0	18.3	16.6	-9.4
Other uses	5.1	5.2	5.5	5.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/year)	18.6	18.9	19.2	1.5
From capture fisheries (kg/year)	9.9	9.8	9.7	-1.5
From aquaculture (kg/year)	8.7	9.1	9.5	4.6

FAO FISH PRICE INDEX[1] (2002-2004=100)	2010	2011	2012 Jan-Oct	Change: Jan-Oct 2012 over Jan-Oct 2011
				%
	137	154	143	-6.7

[1] Data source: Norwegian Seafood Council

Figure 53. The FAO Fish Price Index (2002-2004=100)



Data source: Norwegian Seafood Export Council

Farmed species, such as shrimp, salmon and, more recently, Mediterranean seabass, have been particularly affected, with their quotations dropping considerably, while prices of captured fish fared better. These tendencies were reflected in the FAO fish price index, which shows international fish prices sliding by 7 percent in the first ten months of the year compared with the same period in 2011. Most of the decline was caused by an 18 percent dip in farmed fish prices, while the decline in prices of captured fish was limited to only 1 percent because the sector responded to the weakening of demand and rising fuel costs by curtailing their fishing operations. As a result, quotations of wild species, such as tuna and other pelagic, have remained high, which underscores the fact that world fish demand remains species-specific, with limited substitution in the short run.

World production of fish is currently forecast to rise by 1.3 percent to 157.5 million tonnes in 2012, less than half the 5 percent expansion rate registered in 2011. The increase this year would be entirely due to aquaculture, which is forecast to generate 67.3 million tonnes in 2012, up 5.8 percent from 2011. By contrast, supplies from capture fisheries are expected to decline by 1.8 percent to 90.2 million tonnes, due mainly to lower catches of anchoveta in South America, and reflecting the sector's difficulty to pass rising fuel costs down to customers, which has prompted the sector to limit the activity of the fishery fleet. The biomass situation of a number of fish species stock has improved, mainly as a result of more effective fisheries management in recent years. As a result, many fishing quotas have been raised for 2013. In particular, the fishing allowance for Arctic cod has been set at 1 million tonnes, which is 30 percent larger than in 2012 and a record high. Moreover, the new assessment of the North Atlantic bluefin tuna has found significantly higher stock levels than expected, which could foster future increases in fishing quotas, although probably not in the coming year.

International trade in fish and fishery products is currently anticipated to expand by 2.5 percent to 59.9 million tonnes live weight, as importers are expected to take advantage of falling prices to step up purchases, especially ahead of the holiday season. However, demand by the EU, the world's largest fish import market, has been weak due to the economic crisis in some southern European markets. The difficult economic situation also impacted trade with third countries because the EU, like the US and Japan, outsources the processing of many fish products to countries such as China, Viet Nam and Thailand.

World fish **consumption as food**, which accounts for about 86 percent of total supply, is now anticipated to

increase by 2.6 percent, to 135.4 million tonnes in 2012. This would raise per capita food consumption by 1.5 percent to 19.2 kg in 2012. All of the increase would come from consumption of farmed fish, as intake of wild fish is expected to decline somewhat, consistent with the changes in the relative prices. However, fish **utilization as feed** may drop by 9 percent to 16.6 million tonnes, given that less raw material is available for meal production.

REVIEW BY FISH PRODUCT

Shrimp

Difficult economic situations in the EU cause trade to weaken but production problems may result in price rebounding

Weakening interest from buyers has negatively affected the **EU** demand for shrimp, with imports down 11 percent during the first half of 2012 on a year-to-year basis, and demand abating in all major markets except France. The Danish shrimp industry, a major processor and re-exporter, has been especially hit, and has witnessed a 17 percent drop in exports. The slowing economic growth in China has also cooled the country's import demand. By contrast, **US** shrimp imports increased by 3 percent during the first half of the year, boosted by lower prices. Over the same period, deliveries to **Japan** rose by 2 percent, as retailers took advantage of the lower international prices to promote the product aggressively, a trend that is continuing in the second half of the year.

As for exports, supply of *vannamei* (Pacific white shrimp) from **India** continued to be adequate during autumn, but the harvest of other species was poor. In **Viet Nam**, the shrimp crop has been affected by disease, which has forced some Vietnamese processors to source *vannamei* from Thailand and India for export processing. In **Thailand**, a government scheme to stabilize the price of *vannamei* has been well-received by shrimp farmers resulting in the firming of shrimp prices during the third quarter.

Figure 54. Main shrimp importing markets

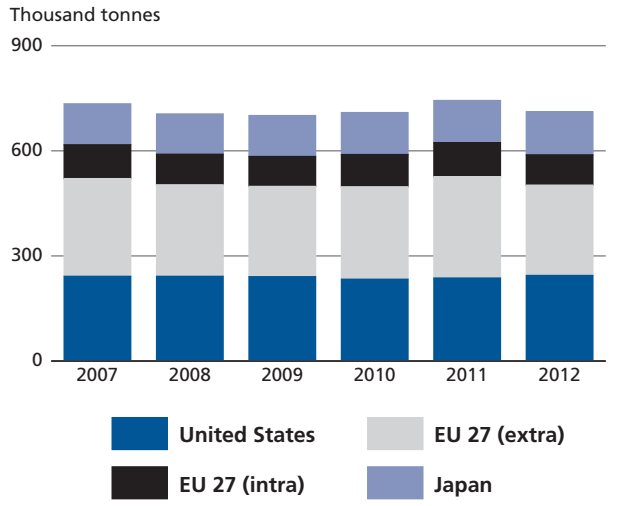


Table 23. Shrimp imports by product (Japan)

	January - June					
	2007	2008	2009	2010	2011	2012
	(thousand tonnes)					
Live	0.0	0.0	0.1	0.1	0.0	0.3
Fresh/chilled	0.0	0.0	0.0	0.0	1.0	-
Frozen, raw	85.3	84.1	85.2	86.4	83.6	85.7
Dried/salted/in brine	1.0	1.1	1.8	1.5	1.6	1.4
Cooked, frozen	8.0	9.1	8.7	9.7	9.8	11.3
Cooked & smoked	0.2	0.1	0.1	0.1	0.2	0.2
Prepared/preserved*	22.4	20.6	20.9	21.3	23.6	23.2
Sushi (with rice)	0.1	0.0	0.1	0.7	1.5	1.0
Total	**117**	**115**	**116.9**	**119.8**	**120.4**	**123.1**

(incl. tempura shrimp) Source: Japan Customs/INFOFISH

Tuna

Reduced catches of most tuna species propel prices to record levels,

Demand for tuna by canners and lower catches in the major fishing grounds have pushed raw tuna prices to record highs. Landings of yellowfin and skipjack in the Pacific Ocean remain low, putting a lot of pressure on canneries. Imports of tuna loins for canning continued to decline in **Spain, France** and **Italy**. On the other hand, abundance of the supply of bigeye tuna from the western Indian Ocean caused auction prices in the **Japanese** sashimi market to plummet earlier this year. With the beginning of autumn, sales increased at the Tsukiji auction market which usually sells high quality bluefin and bigeye. Reportedly, the number of *sushi* restaurants in Japan declined by 10 percent during 2006–2011, and those that remain now serve less tuna and more salmon, which is expected to depress import of tuna while boosting import of farmed salmon. There seems to be some recovery in the **United States'** fresh tuna market. Although supplies are dominated by the cheaper yellowfin tuna, the United States imports of the higher value bigeye and bluefin tuna have increased from last year.

In the bluefin tuna market, the International Commission for the Conservation of Atlantic Tunas (ICCAT) recently announced a significant increase in the Atlantic bluefin biomass stock. Although it is not clear whether catch quotas for 2013 will be increased, it is certainly good news for the sector. Tariffs continue to be important in tuna trade. The

Table 24. Frozen tuna imports (Japan)

	January-June					
	2007	2008	2009	2010	2011	2012
	(thousand tonnes)					
Yellowfin	31.4	27	22.9	24.8	22.7	28.3
Bigeye	41.7	45.0	39.6	41.6	32.1	42.2
Skipjack	11.2	16.9	32.0	32.5	20.4	15.8
S. bluefin	0.1	0.0	1.0	1.2	0.5	0.6
Albacore	4.7	1.9	3.1	7.5	9.4	5.9
N. Bluefin	1.3	3.9	3.7	0.9	1.6	3.2
Total	**90.4**	**94.7**	**102.3**	**108.5**	**86.7**	**96.2**

Source: INFOFISH

decision of the European Commission to extend present tariffs under the Generalized System of Preferences (GSP) up to December 2014 has been welcomed by the **Ecuadorian** tuna industry, as it gives the country one more year to negotiate an agreement with the EU before its GSP access expires.

Canned tuna

High raw material costs cause canned sales to drop

The canned tuna industry is facing a number of challenges, including a weakening of demand in major markets, high raw material prices and increasing pressure from environmentalist groups. Nonetheless, the ending of the ban on fish aggregation devices (FADs) during fishing operations on 1st October 2012 is expected to boost skipjack supplies during the last quarter of the year. The increase in supply is unlikely to depress quotations as demand remains strong, especially in **North Africa** and the **Near East**. Demand for canned tuna remains sluggish in the **United States,** where per capita canned tuna consumption declined from 1.59 kg in 2000 to 1.18 kg in 2011, despite attempts by suppliers to revive demand by introducing new products. In Europe, economic woes and high prices have affected canned tuna consumption. **France** saw its imports decline by 11 percent during the semester, as did the **UK**. However, **Japan** increased canned tuna imports significantly, by 13 percent in quantity and 22 percent in value against the previous year.

Export quantities from **Thailand** dropped by almost 25 percent during the first semester, reflecting lower sales to the United States, its major market, but remained at 2011 levels in value terms.

Groundfish

Higher fishing quotas for many groundfish species push prices down

Norway's 2012 fishing season for cod has been the best since 1947, with an unavoidable negative effect on prices. Fishermen and exporters alike now fear that cod prices may tumble further, especially during 2013, when the quota for Arctic cod (mainly shared between Norway and the Russian Federation) increases by 30 percent, to 1 million tonnes. The United States Pacific cod fishery has also benefited from an expansion in the total allowable catch quota (TAC) for the Alaska cod fishery to 353 350 tonnes in 2012, a 10 percent and 40 percent increase over the levels stipulated in the 2011 TAC and 2010 TAC, respectively. The heightening of the quota is an indication that cod biomass is rebuilding to more sustainable levels and that most of the major groundfish stocks are therefore in an healthier state.

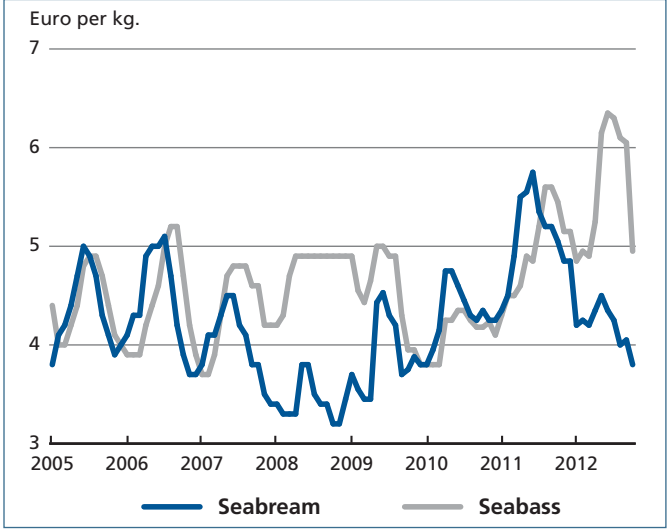
German imports of frozen Alaska pollock fillets have declined markedly over the last five years, reaching 73 000 tonnes during the first semester of 2012. **French** pollock fillet imports also dropped this year. **Japanese** imports of surimi during the first half of the year increased by 12 percent to 116 000 tonnes, valued at JPY 32.2 billion, an increase of 22 percent. Imports from the **United States** amounted to 40 700 tonnes, a 31 percent increase from the same period last year, while those from **China** suffered a 33 percent decrease.

Seasbass and seabream

Difficult economic situation in Southern Europe put pressure on prices

Contracting demand in traditional markets in southern Europe has forced seabass and seabream producers to look elsewhere for growth. As a result, the **Russian Federation**, **countries in Northern, Central and Eastern Europe**, as well as the **United States** have become important complementary markets.

Figure 55. Prices of seabass and seabream in Italy, origin Greece



Source: European Price Report

The situation is difficult for producers, as demand is not likely to pick up in the near future. Bass prices remained high for quite some time, but started falling at the end of the third quarter. The situation is more difficult for bream, as ample supply has depressed prices to farmers, while retail prices remain too high for large crisis-hit consumer groups in Europe. The **Italian** market continues its modest upward trend in import volumes. **Greece** remains the dominant supplier with **Turkey** as a distant second. **France** and **Spain**'s imports fell over the first semester, a situation unlikely to improve for the rest of the year.

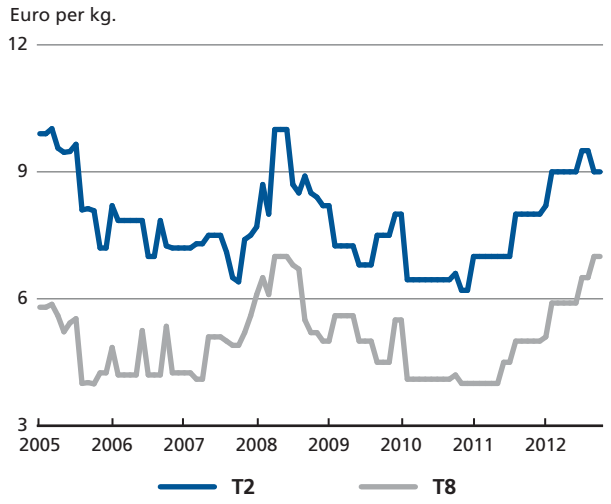
Cephalopods

Higher landings push prices down

Supplies of octopus improved significantly during the third quarter thanks to higher summer quotas that caused prices to drop by up to 30 percent. The squid market has also seen price reductions resulting from abundant landings in **Japan** and **Argentina**. Japanese landings of flying squid have been strong lately and price reductions have stimulated demand. It is expected that supplies of large squid will grow from now on, causing prices to drop further. Japan is still the largest market for squid in terms of value, while its main supplier, **China,** is the largest in terms of volume. China remains the largest producer of cephalopods in the world. **Spain** and the **United States** increased imports in 2012, the latter by 26 percent. In Italy, imports were down by 26 percent during the first half of the year.

Vietnam, the main supplier of China's cuttlefish market, suffered losses due to lack of buyer interest, with prices dropping by 60 percent. In general, Asian demand for cephalopod, particularly for value-added products, is expected to grow in the longer term, diverting supplies from European markets.

Figure 56. Prices of octopus (whole, frozen) in Spain, origin Morocco



Source: European Price Report

Pangasius

Falling production in Viet Nam

Industry sources in **Viet Nam** expect production of pangasius to decline this year from 1.6 million tonnes to 1.2 million tonnes. Global demand for pangasius is reportedly strong, although Vietnamese exports to the EU declined by 11 percent from the same period in 2011. In the **Dutch** market, certified pangasius from the Aquaculture Stewardship Council (ASC) has been available since September.

In the **United States**, pangasius continues to gain popularity among American consumers. In a recently published report, the National Marine Fisheries Service indicated that pangasius was the sixth most preferred seafood among Americans in 2011. During the first half of 2012, 50 300 tonnes of frozen catfish were imported, 34 percent higher than the same period in 2011.

In the **Republic of Korea**, sale of frozen fish is increasing at large discount stores, as consumers look for less expensive products with a long shelf life. From January to August 2012, South Korea imported 87 800 tonnes of frozen fillets, of which close to 40 000 tonnes were frozen pangasius fillet from **Viet Nam**.

Tilapia

Consumers shift to cheaper frozen product

Total **Chinese** tilapia exports between January and June 2012 grew by 8 percent in volume and 5 percent in value from the same period in 2011. The frozen fillet category experienced the highest growth in volume with an increase of 21 percent.

In the **United States**, per capita tilapia consumption declined by 11 percent from 0.65 kg in 2010 to 0.58 kg in 2011. A weak market affected demand for fresh high-value tilapia in particular, but in general the United States' appetite for tilapia continues to be strong. During the first half of 2012, the United States increased imports of frozen tilapia by 32 percent, reaching close to 100 000 tonnes. Frozen fillet accounted for 82 percent of the total, with China supplying nearly 90 percent. Industry sources attribute the surge in 2012 imports to a steady decline in prices since the end of 2011.

Although EU consumers prefer pangasius over tilapia, supplies of tilapia are increasing from non-traditional sources such as **Belgium** (+20 percent), **Germany** (+116 percent) and the **UK** (+644 percent). Imports from Europe's major suppliers, **China** and **Indonesia**, continued to decline during the first half of the year.

Salmon

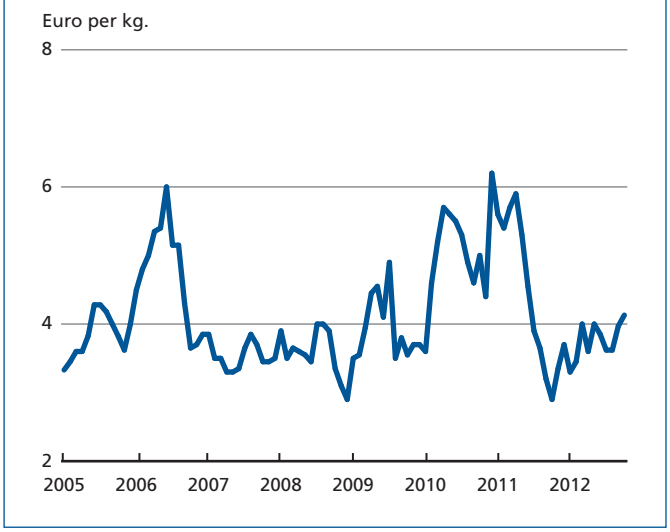
Uncertain demand sees salmon prices fluctuate in nervous market

Demand for salmon in Europe has been dampened somewhat by economic problems, whereas the **Japanese** market showed remarkable growth during the first six months of 2012, with total salmon imports up a solid 24 percent over 2011. In general, prices have been on the low side and are predicted to remain so for a couple of months, although market nervousness is expected to cause much variability from week to week.

On the supply side, **Chile** has fully recovered from the infectious salmon anaemia (ISA) outbreak, which decimated the sector in 2007. Chile's salmon industry is fully back in business, with exporters focusing on traditional markets in **Japan** and the **United States**. However, the increasing production volumes are having a devastating effect on prices. In the first semester of 2012, salmon and trout prices have reached their lowest levels since 2010, dropping 17 percent. Chile continues to be the United States' main salmon fillet supplier, leaving **Norway** behind in terms of export quantity.

Norway continues to focus on fresh shipments, mainly to Europe, including the **Russian Federation**, and to **Japan**, but production problems could cause total Norwegian output to stagnate in 2013. For **UK** exporters, the **United States** market has become the major destination, overtaking **France**.

Figure 57. Prices of salmon in Europe, origin Norway



Source: European Price Report

Small pelagics

Mackerel

The mackerel dispute over fishing quota continues between **Iceland** and the **Faroe Islands** on one side and the **EU** and **Norway** on the other. Matters are also complicated by the fact that the Faroe Islands constitute an autonomous region of **Denmark**. In Europe, **Norwegian** exports of mackerel during the first six months of 2012 increased 28 percent, to 78 400 tonnes. In **Japan**, domestic mackerel landings during 2012 have been well above previous years.

Herring

Catches have been good during 2012 in several parts of the North Sea. **Norway's** exports of frozen herring have been stable during 2012 compared with 2011, with the average export price increasing 38 percent for all herring products and 23 percent for whole frozen herring.

Herring prices are cyclical, however, and the market expects prices for whole frozen herring to decline during the next quarter.

Anchovies and sardines

The anchovy quota determined by the International Council for the Exploration of the Sea (ICES) to be shared between **France** and **Spain** has been reduced by 29 percent for the next season. Landings in **Peru** declined by 54 percent to just 1.2 million tonnes for the first 5 months of the year, although the start of the second season has been much better. As a result of the tight supply situation, prices for anchovies have risen sharply in recent months, putting further upward pressure on meal prices.

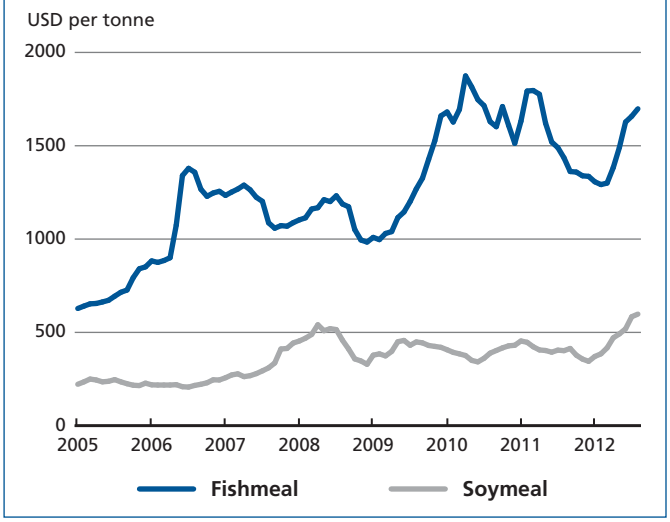
The canned sardine market seems to be improving in Europe, with the two largest importers, **France** and the **UK**, increasing imports in 2012. In the United States, however, imports have dropped dramatically.

Fishmeal and fishoil

Declining quotas and catches will keep market tight

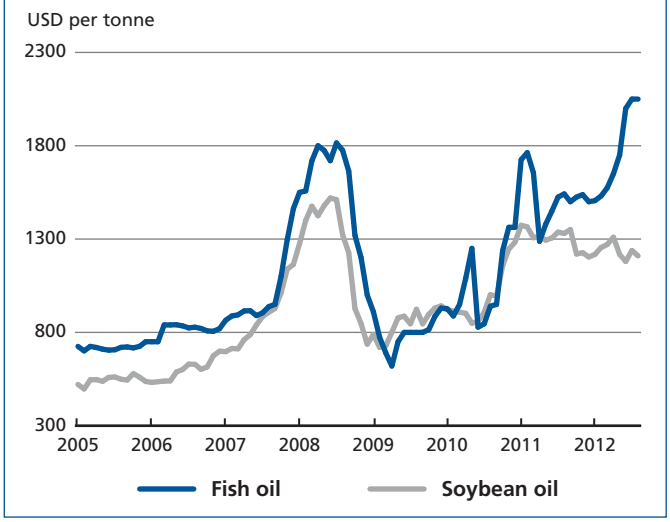
Despite the expectations of only a mild El Niño during 2012/2013, lower anchovy quotas for 2012 are likely to limit fishmeal production. Due to strong international demand for fishmeal combined with reduced soymeal production, upward pressure on prices can be expected. **Chile's** production remains relatively stable, and both Chile and **Peru's** exports of fishmeal rose during the first semester due to local inventory. The biggest growth in demand for Peruvian fishmeal was from **Germany**, the major European import hub for fish meal. German fishmeal imports from January to June increased by 60 percent over last year. **United Kingdom** imports declined by 9 percent during the

Figure 58. Prices of fishmeal and soymeal



Source: Oil World, GLOBEFISH AN 11702, 11706

Figure 59. Prices of fish oil and soybean oil



Source: GLOBEFISH AN 12002, 12003

same period and remain significantly lower than historic levels.

Peruvian exports of fish oil increased by 53 percent during the first half of 2012 compared with the same period in 2011. However, total fish oil production is 22 percent lower in the first half of 2012 than the same period last year. Demand for fish oil has been fairly met through the end of the year, and upward pressure is unlikely in the coming quarter. The factors most likely to influence prices in the near future are spillover effects from the soybean oil and rapeseed oil markets, due to drought conditions in North America.

Bivalves

Mixed outlook as production problems impact oyster and mussel markets

Oyster prices remain strong, as mortality of juveniles during the summer reduced supplies.

In Canada, Newfoundland's 2012 mussel season has been satisfactory, with exports of fresh live mussel going mainly to the United States. In Chile, limited supply of seed could affect 70 percent of mussel production in 2013.

French mussel imports declined from 31 100 tonnes to 21 900 tonnes in the first six months of 2012, a drop of 29 percent from 2011. During the same period, import demand in **Italy** fell nearly 28 percent, from 17 900 tonnes to 12 800 tonnes.

United States scallop imports are down compared to 2011, in particular from **China**. In **France.** Demand declined in the first six months of 2012 to 9 600 tonnes from 12 400 tonnes in the same period in 2011.

Demand from domestic markets in South America is expected to be high in 2013 with campaigns launched in **Peru**, **Brazil** and **Chile** to boost consumption of seafood, including bivalves. This will have positive effects for artisanal fishermen and native communities that make their livings catching bivalves, as well as for small-scale aquaculture.

Special features

AMIS: CELEBRATING ITS FIRST BIRTHDAY

(Article by Denis Drechsler, AMIS Project Manager)

This September marked the first anniversary of the Agricultural Market Information System (AMIS), a G20 initiative to enhance food market transparency and encourage coordination of policy action in response to market uncertainty. Hosted by the Food and Agriculture Organization of the United Nations (FAO), AMIS brings together all the major producer countries of agricultural commodities and currently covers four crops: wheat, maize, rice and soybeans. The initiative was officially launched on 15-16 September 2011 in Rome.

While still building its institutional framework, AMIS succeeded in delivering several important results in its first year of operation and gradually assumed its role as a provider of independent market analysis and outlook as well as a platform for effective policy dialogue. This development has nurtured hopes that the initiative can play an important role in promoting market stability. Expectations were particularly high during the summer months when a drought significantly cut production forecasts in the United States, the world's largest producer and exporter of maize, which had important implications for international food markets. AMIS helped prepare an adequate response to this situation – notably, not to intervene – by providing relevant information materials and facilitating exchanges among representatives of AMIS countries.

The 2012 "maize shock" illustrates that, at times, the contribution of AMIS might well be to persuade against, rather than foster, policy action. Although there were expectations that AMIS would convene the Rapid Response Forum, its main policy platform to react to market uncertainty, such a meeting did not take place – first, because the market situation did not warrant this reaction and, second, because it would have sent the wrong signal concerning the gravity of the situation. Market developments since then suggest that this decision was appropriate.

Overall, enhancing country engagement and defining effective working relations with country focal points constituted one of the main focus areas during AMIS's first 12 months. Meetings of its Global Food Market Information Group in February and October 2012 were particularly instrumental in this regard. The Information Group unites technical experts from participating countries, usually from national ministries of agriculture or statistical offices, to promote an exchange on the current market situation and outlook. For AMIS, the Information Group is set to become the primary source of regular, reliable, accurate and timely information on supply and demand of individual countries, as well as prices of the AMIS crops. Furthermore, the Information Group will facilitate the timely collection of national policy developments that could impact on the market situation and outlook.

Regular exchange with countries also helped identify capacity building needs and areas for better collaboration. AMIS endorsed two capacity building projects in 2012, which, over the next three years, will strengthen statistical offices in Bangladesh, India, Nigeria, Thailand and the Philippines. In order to ensure sustainability of interventions, project activities will be conducted in close partnership with the relevant national authorities and, if needed, with regional organizations. In addition, all activities will be aligned with national development strategies, and will support and complement existing systems.

Apart from serving participating countries, AMIS also reached out to the broader public to promote a better understanding of international grains markets. In its first 12 months, AMIS introduced several information products to provide comprehensive overviews and in-depth analyses of relevant market developments and trends. The launch of the AMIS database was a particularly important milestone. Based on agricultural statistics provided by participating countries, the AMIS Market Monitor – first released in August 2012 – reviews the global market situation on a monthly basis and informs of any developments that could result in market disturbances. In addition, important progress was made in the identification of relevant market and policy drivers that can cause vulnerabilities. One of these indicators, the stocks-to-use ratio, was analyzed in detail with a view to deriving threshold levels that indicate market risk (see summary article by Eugenio Bobenrieth, Brian Wright and Di Zeng on pages 71-74).

Finally, the AMIS Secretariat welcomed a new member. Following already close collaboration over the past 12 months, the International Grains Council formally joined AMIS in October 2012. The Council is the tenth member organization of the AMIS Secretariat, along with FAO, IFPRI, IFAD, OECD, UNCTAD, the UN High Level Task Force, the World Bank, WFP and WTO. Given its key position in international grains markets, the Council will further strengthen the analytical and statistical capacity of AMIS to provide crucial market information in the years to come.

STOCKS-TO-USE RATIOS AND PRICES AS INDICATORS OF VULNERABILITY IN GLOBAL CEREAL MARKETS[1]

Article contributed by Eugenio Bobenrieth, Brian Wright and Di Zeng[2]*

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

In analyses of global grain market fluctuations, price is assumed to indicate the state of the market. Traditionally, most attention has been paid to harvest disturbances as determinants of price jumps. In general, on a daily basis, news of negative yield shocks boosts prices, and unexpectedly high harvests have the opposite effect.

Consumer demand fluctuations have traditionally received much less attention as determinants of volatility, because the major drivers of demand – population growth and the changes in income – have usually been far less variable than production. Indeed in wealthy countries demand for grains as food is very stable, and demand for meat and other products from grain-fed animals responds at best modestly to income, and the effects of population growth change only slowly.

Given current production shocks have long been seen as the dominant "fundamental" influence on market fluctuations, when confronted with a spike in the price of a grain while its production appears to be close to trend, observers tend to blame "non-fundamental" influences such as speculation, market manipulation or panic, which are difficult to predict. Consequently attention tends to shift to measures to limit speculation and manipulation in order to prevent them from damaging the operation of the market. Unfortunately, this focus shift to regulation generates more confusion, as there is no consensus on how market restrictions can moderate price behavior, especially when some substitute markets are beyond the regulators' reach.

In the often-confusing discussions of the price spikes that have occurred since 2007, two other key variables have been relatively neglected until recently, namely the unprecedented demand shifts related to biofuels, and the size of world grain stocks.

Experienced market participants know that the size of stocks relative to normal consumption influences market behavior. Indeed, at one time FAO used the size of the "stocks to use ratio" (SUR) relative to a benchmark as an index of market tightness. But few countries measure stocks directly. For example, as China's role as a producer and consumer of grains rose, the extreme uncertainty about the size of its stocks of each major grain in turn reduced the precision of global SURs of each grain as indicators of vulnerability to spikes. Radical revisions of FAO global stocks, to adjust for clear errors that implied that China's stocks were negative, highlighted the problems with global stocks data. More recently, noting, for example, the emergence of a spikes in the price of rice when rice supply appeared to be adequate given demand, some writers have concluded that stocks data are unimportant and indeed unhelpful for understanding recent market behavior.

Our interpretation is quite different. In an environment with unanticipated rapid expansion of biofuels from grain ethanol and oilseeds, the traditional SUR can seem adequate when new biofuel demand can make the SUR recognizing this expansion seem very low. In analyzing recent market behavior, it becomes crucial to calculate the SUR with respect to next year's demand, shifted by biofuels, rather than by last year's use.

Here, however, we do not wish to focus on the influence of the emergence of biofuels on recent market behavior[3]. Instead, we argue that much of the recent history of prices and production in global markets for the major grains becomes substantially more comprehensible when interpreted using what we know about storage decisions designed to maximize expected profit from storage by buying when price is low and selling when the price is higher, as well as what we can infer about substitutability among the grains as human foods and animal feeds. Despite the obstacles posed by highly unreliable stocks data, and the fact that prices are not representative of what most consumers pay, much of the annual movement in the price for the aggregate of calories from the major grains

[1] This article is an informal summary of work presented in the paper "Stocks-To-Use Ratios as Indicators of Vulnerability to Spikes in Global Cereal Markets", presented at the 2nd Session of the AMIS Global Food Market Information Group, FAO Headquarters, Rome, October 3 2012.

[2] Eugenio Bobenrieth is a professor at Departamento de Economía Agraria, Instituto de Economía, and a Research Fellow at Finance UC, Pontificia Universidad Católica de Chile. Brian Wright is a professor, and Di Zeng is a postdoctoral researcher at Department of Agricultural and Resource Economics, University of California, Berkeley. Work on this article was supported by the Energy Biosciences Institute, and by CONICYT/Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT) Projects 1090017 and 1050562. Eugenio Bobenrieth acknowledges partial financial support from Grupo Security through Finance UC, and from Project NS 100046 of the Iniciativa Científica Milenio of the Ministerio de Economía, Fomento y Turismo, Chile.

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[3] This issue is discussed in Wright, B. D. 2011. "The Economics of Grain Price Volatility." Applied Economic Perspectives and Policy, Vol. 33, No. 1: 32-58. DOI:10.1093/aepp/ppq033.

clearly is related to movements in the SUR for an index of the aggregate calories available from supplies of the major grains.[4] Indeed the price movements of wheat, maize or rice are more closely correlated to movements in the aggregate calorie SUR than to movements in the SUR of any of the three grains alone. For the small set of major price spikes in the years since 1960, SUR data complement current price data in warning of vulnerability to price spikes.

To avoid the complications introduced by biofuels, we focus on data up to 2007, before most of the rapid expansion of biofuels took place. First consider the relation of production to price.

Figure 1 shows annual production of aggregate calories available from reported production of the three major grains, and the price of calories as an average of the grain prices weighted by calorie content.[5] Two points are obvious. First there is a strong positive trend in the production and a negative trend in price. Second, the fluctuations of production around trend are not reliably related to the movements of price.

Figure 1. Calories from the major grains: production and real price

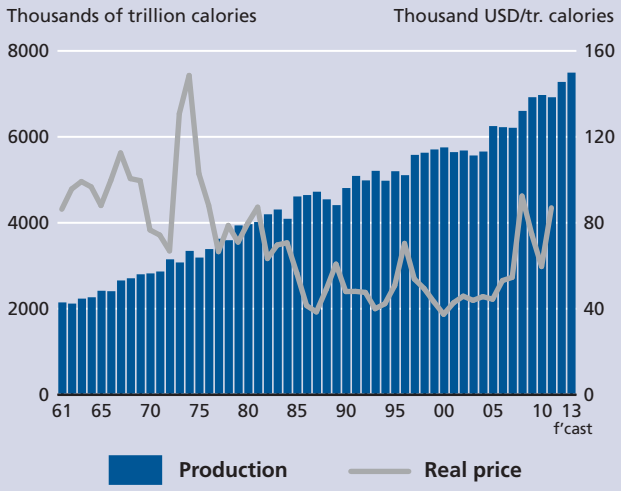
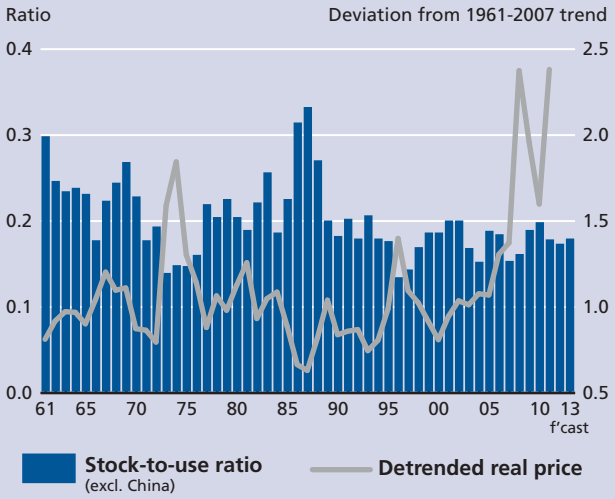


Figure 2. Calories from the major grains: stocks-to-use ratio (excluding China) vs. de-trended real price



However, price of calories appears much more closely related to the calorie SUR. The two series are shown in Figure 2, in which price has been de-trended.

Peaks in price are quite regularly related to low points in the SUR. Coincidence of price peaks with minimal stocks is a feature of the behavior implied by the standard economic model of commodity storage. In this model, storers intent on maximizing expected profits aim to "buy low, sell high". They add to stocks until current price plus the cost of storage equals the expected value of price next year. When aggregate stocks of the major grains are adequate, and trade is not restricted, an output shortfall in one grain can be cushioned by a drawdown of those stocks. But storability is not always useful in moderating a shock to demand or supply. When total stocks of the major grains are already around the minimal level needed for the workings of the market, their cushion is not available – markets in aggregate cannot borrow food from future production, so a further production shortfall causes a price jump high enough to cause current consumption to fully accommodate a shortfall.

The presence of discretionary stocks renders the identification of production shocks and their timing, by inspection of price time series alone, extremely difficult. Indeed the correlations between production and de-trended real price, both adjusted to remove log-linear

[4] In focusing on the aggregate market of calories, we follow Roberts, M. J. and W. Schlenker. 2009, World Supply and Demand of Food Commodity Calories. American Journal of Agricultural Economics 91(5): 1235-1242. Roberts and Schlenker) also consider soybeans in their calorie aggregate.

[5] World wheat, maize (corn), and rice (milled) production data are from USDA/FAS/PSDO. The weight-calories conversion rates are from USDA/ National Nutrient Database. All annual price data are deflated into real price indices using the annual Manufactures Unit Value Index (MUV) from World Bank/GEM Commodities. Note that this index behaves very differently from the United States Consumer Price Index, especially in recent decades; results using the latter could be substantially different.

[6] One important disruptive influence is restriction of exports when prices are high, to protect consumers in the exporting country. See Martin, W. and Anderson, K., 2012. "Export Restrictions and Price Insulation During Commodity Price Booms," American Journal of Agricultural Economics, vol. 94(2), pages 422-427.

trends, for wheat, maize and rice from 1961 to 2007 are only 0.33, 0.09 and 0.21, respectively. On the other hand, the correlation between grain calorie SURs and the price of each of the three major grains is at least 0.47 in absolute value.

Storage can transmit effects of a shock in one grain market to the price of another in a later period, further complicating inferences about the underlying drivers of price volatility. A grain price can spike even if stocks of that grain are substantial. When rice had a moderate spike in 1998, stocks appeared adequate. Low global stocks of one of the three grains are neither necessary nor sufficient for a price spike.[6] But if a drop in the output of grain calories occurs when aggregate calorie stocks are low, large spikes in the price of each of the major grains are likely to occur, as reflected in the price of aggregate calories in 1973. In sum, understanding grain price spikes requires looking at production and consumption disturbances in the context of the current stocks situation, taking account of inter-grain substitution in consumption at the margin.

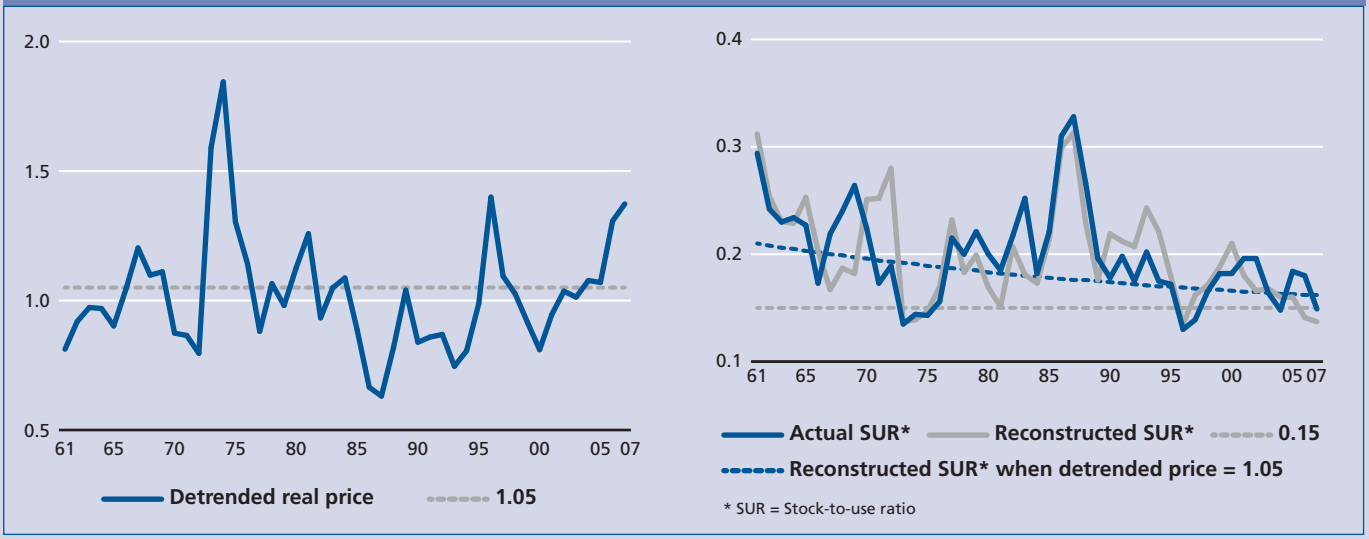
If price and stocks are measured perfectly, trade is costless and instantaneous, and all information is known by all, then price and stocks are two sides of the same coin as indicators of market vulnerability to price spikes. Stocks data then add nothing to the value of price data as a warning indicator. To examine whether current stocks are completely consistent with the price data, we estimated, using a maximum likelihood procedure, a simple storage model with linear demand, normally distributed yield disturbances, perfectly inelastic supply, and a fixed interest rate with no other storage cost. From the estimated model, based on observations of prices alone, we calculated the SUR implied for each price in the sample series for calories.

As noted above, the first and quite remarkable implication of this figure is that the implied SURs for aggregate calories trace the observed values quite well. This is important, as it supports the relevance of the simple storage in explaining actual price behavior. In fact, the match is much better for aggregate calories than in a similar exercise focused on rice or wheat alone.

As de-trended normalized price rises to around 1.05 the expected variation of price next period appears to become somewhat more sensitive to further increase in the conditional variance of next period's price. Thus 1.05 might be chosen as a threshold price for increasing vulnerability to price fluctuations. The dashed decreasing curve in figure 3 indicates the SUR corresponding to such threshold price; around this curves the variance of price or the probability of stockouts becomes increasingly sensitive to a further fall in SUR.

However there were substantial differences between the implied and observed SURs, and they are also important. They suggest that the information in prices relative to warnings of vulnerability is not identical to the information in stocks. This is not surprising. In the market for grains in particular, it is very clear that information is incomplete, and that the information about the current situation at any time is difficult and costly to obtain and organize. This is amply illustrated by market responses to releases of the World Agricultural Supply and Demand Estimates (WASDE) reports of stocks and harvest prospects compiled and released by the United States Department of Agriculture during the

Figure 3. De-trended price vs. observed and reconstructed SURs for grain calories



crop year. These reports, which aim at nothing more than aggregating information in principle observable literally "on the ground," very frequently cause prices on commodity markets to jump upon their release. Hence, before release, stocks estimates apparently contain information not anticipated and therefore not reflected in current prices or in other accessible data.

Further, as emphasized above, prices recorded in the global grain market do not accurately represent the marginal value to global consumers. Prices faced by consumers vary by quality and location, and in some countries they might reflect taxes or trade bans that distort prices. Similarly, stocks data are not accurately reported. Private stocks are difficult to measure accurately. Public stocks are often managed in a way that reflects government objectives rather than market reality and, in many cases, the size of public stocks is kept secret for strategic purposes and must be estimated by data gatherers.

We now address the following key question: in a world with unreliable but widely available price data, can unreliable stocks data add valuable, though error-ridden, information about market vulnerability to near-term shortages of supply and spikes in price?

Given the small number of significant spikes in the price data, we can only consider this question informally. For calories, one dominant spike occurs in 1973-75, and other spikes occur in 1967, 1980-81, 1996 and 2006-07. The 1973 spike is preceded by an SUR below its critical level, at a time when price was quite low. Thus overall SUR signaled a warning not evident in calorie prices in 1972. Of the lesser spikes, the SUR gave warnings stronger than information evident in price in 1966, and again in 1995. The spike in 2007 is anomalous to the extent that it reflects anticipation of higher demand due to new biofuels legislation in the United States and the European Union. Such large unanticipated demand shocks are not evident in the prior histories of these markets, nor are they reflected in our estimates.[7] The critical SUR for calories gives a warning not matched by information from current price one year before two of the other three smaller spikes.

This work suggests several areas for further empirical investigation. The first is the hypothesis presented here that the storage model explains a substantial amount of the movement in the prices and stocks of major grains. Second, the fact that the SUR of aggregate calories is more highly correlated with the prices of each major grain than is the price or SUR of each grain individually highlights the importance of substitution between grains at the margin, which merits further work building on the lead of Roberts and Schlenker (2010) who extend the analysis to recognize supply response.[8] Third, the analysis should be extended to recognize spatial variation in production and consumption, trade and trade restrictions. Finally, we have offered evidence that stocks of calories add extra information beyond that contained in prices with respect to warnings of impending vulnerability of markets to spikes. Given price and stocks data are both problematic, use of both together appears preferable to reliance on either alone as an indicator of possible price spikes. Collection and timely publication of more accurate stocks data is likely to improve global capacity to identify and respond to threats to the stability of the supply of the major grains that furnish a major portion of the calories needed by the world's growing population.

[7] Truncation of the sample interval at 2007 was a compromise between concern for sample size and desire to avoid, as far as possible, contamination from the effects of the new policy regime including the large, persistent and unprecedented demand shift.

[8] See Roberts, M.J., and W. Schlenker. 2010. Identifying Supply and Demand Elasticities of Agricultural Commodities: Implications for the US Ethanol Mandate. NBER Working Paper Series No. 15921. Cambridge: NBER for a model considering supply response.

Statistical appendix tables

NOTES

General

- FAO estimates and forecasts are based on official and unofficial sources.
- Unless otherwise stated, all charts and tables refer to FAO data as source.
- Estimates of world imports and exports may not always match, mainly because shipments and deliveries do not necessarily occur in the same marketing year.
- Tonnes refer to metric tonnes.
- All totals are computed from unrounded data.
- Regional totals may include estimates for countries not listed. The countries shown in the tables were chosen based on their importance of either production or trade in each region. The totals shown for Central America include countries in the Caribbean.
- Estimates for China also include those for the Taiwan Province, Hong Kong SAR and Macao SAR, unless otherwise stated.
- '-' 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.

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Stocks

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

COUNTRY CLASSIFICATION

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

References are also made to special country groupings: Low-Income Food-Deficit Countries (LIFDCs), Least Developed Countries (LDCs). The LIFDCs include 70 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 1 855 in 2008). The LDCs group currently includes 50 countries with low income as well as weak human resources and low level of economic diversification. The list is reviewed every three years by the Economic and Social Council of the United Nations.

DISCLAIMER

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

Table A1 (a). Cereal statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**992.9**	**1 069.3**	**1 075.8**	**139.7**	**153.0**	**141.4**	**43.4**	**54.0**	**54.6**
Bangladesh	34.3	36.0	36.6	4.2	2.1	3.4	-	-	-
China	426.8	457.6	470.4	10.9	18.6	15.0	1.0	0.9	1.0
India	213.7	233.2	233.9	0.2	0.3	0.3	5.5	14.3	16.5
Indonesia	57.6	59.1	62.2	8.6	9.7	9.6	0.2	0.1	0.2
Iran, Islamic Republic of	17.7	19.2	19.7	9.9	8.8	6.8	0.8	0.2	0.2
Iraq	3.0	3.9	3.1	4.8	5.3	5.4	-	-	-
Japan	8.7	8.6	8.6	25.2	24.9	25.0	0.4	0.5	0.5
Kazakhstan	16.1	26.4	13.1	0.1	-	-	7.0	11.4	7.3
Korea, Republic of	5.0	4.5	4.3	12.6	13.1	12.1	0.1	0.1	0.1
Myanmar	21.0	20.6	20.8	0.2	0.2	0.2	0.8	0.8	0.9
Pakistan	32.9	34.6	34.4	1.2	0.3	0.3	4.2	3.5	4.1
Philippines	17.5	18.1	19.2	5.2	5.3	4.2	-	-	-
Saudi Arabia	1.9	1.6	1.5	11.7	14.2	12.9	-	-	-
Thailand	26.7	27.8	28.8	2.4	3.8	2.9	10.2	7.2	8.7
Turkey	31.6	34.8	33.0	4.1	4.5	3.8	3.4	3.7	3.7
Viet Nam	30.7	33.2	34.2	3.6	4.7	4.2	6.7	7.5	7.6
AFRICA	**153.9**	**156.5**	**158.7**	**65.4**	**71.9**	**70.4**	**7.5**	**8.8**	**8.1**
Algeria	4.1	4.2	5.3	8.2	9.3	8.1	-	-	-
Egypt	20.3	20.0	21.0	15.8	18.9	16.6	0.4	0.4	0.7
Ethiopia	17.2	20.4	19.6	1.5	1.1	1.1	0.5	0.9	0.5
Morocco	7.8	8.6	5.3	5.4	6.2	8.4	0.2	0.2	0.1
Nigeria	24.1	25.2	25.7	6.1	6.8	6.7	1.0	0.9	0.9
South Africa	15.2	13.5	14.4	2.4	3.1	2.6	2.3	2.6	2.5
Sudan	4.9	2.7	5.2	2.2	2.8	2.2	0.1	-	-
CENTRAL AMERICA	**40.5**	**35.1**	**40.6**	**24.7**	**29.4**	**26.0**	**1.5**	**1.1**	**1.0**
Mexico	34.1	28.4	34.0	14.6	19.0	15.7	1.3	0.9	0.9
SOUTH AMERICA	**133.7**	**148.4**	**159.0**	**23.9**	**26.3**	**24.7**	**38.3**	**49.4**	**53.9**
Argentina	36.4	47.6	42.5	-	-	-	23.3	32.2	30.1
Brazil	71.6	73.8	88.2	8.3	9.0	8.4	10.4	11.6	18.4
Chile	3.3	3.4	3.6	2.3	2.3	2.2	0.1	0.1	0.1
Colombia	3.6	3.5	3.7	5.0	5.5	5.3	0.1	0.1	0.1
Peru	3.9	3.8	4.0	3.3	3.8	3.8	-	-	-
Venezuela	3.7	3.2	4.3	3.2	3.8	3.2	-	-	0.1
NORTH AMERICA	**455.6**	**431.5**	**403.1**	**8.3**	**8.1**	**9.8**	**105.4**	**96.0**	**93.6**
Canada	50.4	47.2	50.5	2.2	1.6	1.4	20.9	19.9	23.5
United States of America	405.2	384.3	352.6	6.1	6.5	8.5	84.5	76.2	70.1
EUROPE	**457.6**	**463.2**	**411.1**	**16.4**	**19.5**	**19.8**	**65.2**	**75.0**	**57.1**
European Union	297.9	289.8	270.7	12.5	15.6	15.8	27.7	23.5	22.2
Russian Federation	87.9	91.2	70.3	0.7	0.7	0.7	16.3	27.6	12.6
Serbia	9.1	9.0	8.2	-	-	0.1	1.9	1.7	1.1
Ukraine	45.4	55.7	44.7	0.2	0.2	0.2	19.0	21.5	20.5
OCEANIA	**37.1**	**43.9**	**35.5**	**1.4**	**1.4**	**1.4**	**19.9**	**31.0**	**25.2**
Australia	36.2	43.0	34.7	0.2	0.1	0.1	19.9	31.0	25.2
WORLD	**2 271.2**	**2 348.0**	**2 284.0**	**279.9**	**309.6**	**293.5**	**281.2**	**315.2**	**293.5**
Developing countries	1 267.2	1 346.7	1 383.6	217.4	241.7	226.7	80.4	98.0	106.6
Developed countries	1 004.1	1 001.2	900.4	62.5	67.9	66.7	200.7	217.3	186.9
LIFDCs	496.1	524.6	533.7	83.2	88.3	85.0	12.5	22.9	24.7
LDCs	148.2	152.2	157.2	25.6	24.3	24.3	5.3	6.6	6.1

Table A1 (b). Cereal statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**1 072.9**	**1 143.3**	**1 156.5**	**295.9**	**331.9**	**338.9**	**161.7**	**162.6**	**162.1**
Bangladesh	36.9	38.8	39.5	8.2	10.1	10.7	172.2	176.1	178.4
China	428.1	468.1	473.2	166.1	180.0	191.2	152.2	151.3	151.0
India	206.5	214.8	216.2	45.4	48.4	49.9	153.8	155.1	152.6
Indonesia	63.6	68.8	72.1	8.9	12.1	11.4	212.3	215.3	217.7
Iran, Islamic Republic of	25.7	26.4	26.8	5.1	5.0	5.5	199.1	201.4	202.9
Iraq	7.7	8.6	8.6	0.6	1.7	1.5	188.6	191.6	192.6
Japan	33.6	33.2	33.5	4.7	5.0	4.8	129.7	130.1	129.8
Kazakhstan	9.7	10.5	9.9	2.3	6.0	1.9	163.1	163.5	163.5
Korea, Republic of	17.3	17.4	17.1	3.5	4.4	3.7	126.2	124.1	125.8
Myanmar	20.6	20.8	21.1	5.3	4.1	3.1	263.4	264.7	265.3
Pakistan	30.2	30.5	30.7	3.3	3.0	2.9	150.9	149.7	150.7
Philippines	22.5	23.8	24.0	4.3	3.7	3.1	161.8	164.1	165.5
Saudi Arabia	13.6	14.8	15.4	3.5	4.2	3.1	149.9	151.2	152.5
Thailand	17.7	19.2	19.1	7.1	13.9	17.9	144.2	144.0	144.1
Turkey	32.6	34.7	34.1	4.2	5.2	4.3	223.3	224.9	223.8
Viet Nam	27.7	30.1	30.4	5.1	5.5	5.9	207.9	210.3	208.7
AFRICA	**207.4**	**220.1**	**225.4**	**33.4**	**38.3**	**34.3**	**149.7**	**151.3**	**151.5**
Algeria	12.3	13.3	13.7	3.4	3.8	3.6	233.1	234.8	234.1
Egypt	34.6	36.3	37.1	6.4	8.8	8.5	267.9	268.7	268.3
Ethiopia	17.9	20.1	20.3	1.3	2.2	2.1	181.7	187.3	188.4
Morocco	12.5	14.5	14.0	2.5	3.6	3.2	247.8	259.1	259.0
Nigeria	29.2	31.1	31.8	1.3	1.4	1.2	135.9	138.5	139.0
South Africa	14.3	14.9	15.4	3.6	3.2	2.4	170.1	168.4	166.8
Sudan	7.0	6.5	7.5	2.0	1.0	0.9	140.5	140.7	141.5
CENTRAL AMERICA	**63.6**	**64.2**	**65.1**	**5.3**	**3.9**	**4.5**	**166.6**	**166.9**	**165.6**
Mexico	47.2	47.2	48.3	3.5	2.1	2.7	203.1	202.9	202.4
SOUTH AMERICA	**117.4**	**125.6**	**128.7**	**21.0**	**20.1**	**21.6**	**121.2**	**121.2**	**119.0**
Argentina	12.9	15.9	15.1	3.7	5.4	3.1	133.4	131.6	131.1
Brazil	67.8	71.6	74.8	9.3	6.3	10.0	114.6	114.2	111.5
Chile	5.5	5.6	5.6	0.7	0.7	0.7	140.5	144.4	136.8
Colombia	8.7	9.0	9.0	2.2	2.0	2.0	108.1	106.1	104.6
Peru	7.2	7.6	7.7	1.2	1.4	1.5	144.7	146.0	145.2
Venezuela	7.0	6.9	7.4	0.8	0.8	0.7	132.7	133.6	133.0
NORTH AMERICA	**354.9**	**353.2**	**333.2**	**78.8**	**58.6**	**47.4**	**109.4**	**107.1**	**108.4**
Canada	28.7	27.5	27.3	12.5	9.3	9.7	98.2	95.2	96.0
United States of America	326.2	325.7	305.9	66.3	49.3	37.7	110.7	108.4	109.8
EUROPE	**403.4**	**404.1**	**389.2**	**70.3**	**61.0**	**45.1**	**139.9**	**140.9**	**140.6**
European Union	281.5	280.4	269.8	41.1	33.4	27.4	135.1	137.6	137.7
Russian Federation	68.7	68.2	63.9	18.1	12.4	7.0	145.0	142.4	142.3
Serbia	7.1	7.7	7.4	1.5	0.7	0.3	164.3	163.7	163.4
Ukraine	26.5	28.2	28.4	6.7	11.4	7.4	175.3	172.3	167.7
OCEANIA	**16.5**	**16.6**	**15.7**	**7.7**	**8.7**	**5.7**	**91.7**	**92.6**	**92.0**
Australia	14.4	14.5	13.6	7.2	8.2	5.2	101.7	103.1	102.9
WORLD	**2 236.1**	**2 327.0**	**2 313.9**	**512.4**	**522.6**	**497.4**	**152.4**	**153.2**	**152.8**
Developing countries	1 382.0	1 471.9	1 494.1	340.5	373.4	384.6	157.3	158.2	157.7
Developed countries	854.1	855.1	819.8	171.9	149.2	112.9	132.8	132.7	132.8
LIFDCs	556.3	586.0	597.8	104.5	118.0	114.5	157.6	159.5	159.0
LDCs	165.0	172.9	177.4	31.7	34.5	32.7	149.5	151.5	152.0

Table A2 (a). Wheat statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**287.9**	**313.0**	**308.6**	**61.1**	**68.0**	**61.7**	**13.6**	**18.4**	**18.9**
Bangladesh	0.9	1.0	1.1	3.4	1.8	2.8	-	-	-
China	114.3	117.4	119.0	2.6	4.8	3.8	0.1	0.1	0.1
of which Taiwan Prov.	-	-	-	1.2	1.4	1.3	-	-	-
India	80.0	86.9	93.9	0.1	0.2	0.1	-	1.5	5.0
Indonesia	-	-	-	5.8	6.5	6.5	-	-	-
Iran, Islamic Republic of	12.6	13.5	13.8	3.9	2.2	1.7	0.8	0.2	0.2
Iraq	1.9	2.4	2.1	3.5	3.8	3.7	-	-	-
Japan	0.7	0.7	0.7	5.3	6.1	6.0	0.3	0.3	0.3
Kazakhstan	13.2	22.7	10.8	-	-	-	6.6	10.5	7.0
Korea, Republic of	-	-	-	4.1	5.1	4.6	0.1	0.1	0.1
Pakistan	22.8	24.3	24.0	1.1	0.2	0.2	1.1	0.5	0.8
Philippines	-	-	-	3.1	4.0	3.2	-	-	-
Saudi Arabia	1.5	1.1	1.0	1.7	2.9	2.3	-	-	-
Thailand	-	-	-	1.5	2.6	1.9	0.1	0.2	0.2
Turkey	19.4	21.8	20.1	3.3	3.7	3.0	3.1	3.3	3.4
AFRICA	**23.0**	**25.5**	**24.3**	**38.4**	**40.4**	**39.1**	**1.3**	**1.1**	**1.0**
Algeria	2.6	2.8	3.5	5.7	6.3	5.2	-	-	-
Egypt	7.9	8.4	8.7	10.0	11.7	10.0	-	-	-
Ethiopia	3.0	3.4	3.3	1.3	1.1	1.1	-	-	-
Morocco	5.0	6.0	3.9	3.3	3.5	5.2	0.2	0.2	0.1
Nigeria	0.1	0.1	0.1	3.9	3.8	3.9	0.5	0.5	0.5
South Africa	1.9	2.0	1.8	1.4	1.6	1.4	0.2	0.2	0.2
Tunisia	1.1	1.6	1.5	1.8	1.6	1.6	0.1	0.1	0.1
CENTRAL AMERICA	**4.0**	**3.6**	**3.3**	**7.1**	**9.0**	**8.3**	**1.1**	**0.9**	**0.8**
Cuba	-	-	-	0.8	0.8	0.8	-	-	-
Mexico	4.0	3.6	3.3	3.3	5.2	4.5	1.0	0.8	0.8
SOUTH AMERICA	**21.4**	**24.3**	**21.3**	**12.6**	**13.5**	**13.5**	**9.8**	**14.9**	**10.1**
Argentina	11.1	13.7	11.5	-	-	-	7.0	11.3	7.3
Brazil	5.6	5.7	5.3	6.5	6.7	7.0	1.4	1.8	1.0
Chile	1.4	1.3	1.4	0.6	0.9	0.8	-	-	-
Colombia	-	-	-	1.4	1.6	1.4	-	-	-
Peru	0.2	0.2	0.2	1.6	1.7	1.7	-	-	-
Venezuela	-	-	-	1.6	1.7	1.7	-	-	-
NORTH AMERICA	**89.0**	**79.7**	**88.5**	**3.0**	**3.0**	**3.5**	**45.9**	**45.4**	**52.0**
Canada	26.2	25.3	26.7	0.1	-	0.1	17.3	17.5	19.0
United States of America	62.8	54.4	61.8	2.9	3.0	3.4	28.6	27.8	33.0
EUROPE	**225.7**	**223.4**	**192.3**	**7.8**	**9.5**	**8.2**	**45.2**	**43.2**	**32.1**
European Union	141.8	137.5	130.8	5.8	7.5	6.0	22.6	16.0	17.5
Russian Federation	55.7	56.2	39.0	0.1	-	0.2	13.5	21.6	8.5
Ukraine	21.2	22.3	15.5	-	-	-	8.5	5.2	5.7
OCEANIA	**23.9**	**29.8**	**22.9**	**0.7**	**0.7**	**0.7**	**15.2**	**23.1**	**20.0**
Australia	23.6	29.5	22.5	-	-	-	15.2	23.1	20.0
WORLD	**675.0**	**699.4**	**661.2**	**130.7**	**144.2**	**135.0**	**132.0**	**147.0**	**135.0**
Developing countries	309.4	329.7	332.8	105.8	114.5	108.9	18.3	23.6	22.6
Developed countries	365.6	369.7	328.4	25.0	29.7	26.0	113.7	123.4	112.4
LIFDCs	113.5	121.7	129.4	51.8	54.2	51.3	1.3	2.8	6.3
LDCs	10.8	10.7	12.7	16.4	14.6	14.7	0.2	-	-

Table A2 (b). Wheat statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**330.2**	**360.4**	**357.8**	**98.9**	**103.4**	**97.5**	**64.5**	**64.8**	**65.0**
Bangladesh	3.2	3.4	3.4	2.3	3.0	3.5	18.9	19.2	19.1
China	114.9	131.0	125.0	49.3	41.7	39.4	64.6	63.7	63.6
of which Taiwan Prov.	1.2	1.4	1.3	0.3	0.4	0.4	47.0	47.2	47.2
India	79.8	83.8	86.5	19.3	20.0	22.5	60.1	61.4	61.8
Indonesia	5.6	5.8	6.0	2.5	3.5	4.0	20.5	20.5	21.1
Iran, Islamic Republic of	14.7	15.3	15.6	4.1	3.2	3.7	165.8	166.5	166.5
Iraq	5.4	5.7	5.8	0.5	1.4	1.4	141.3	141.5	141.6
Japan	5.8	6.4	6.3	0.6	0.9	0.8	41.6	42.4	42.2
Kazakhstan	7.1	7.8	7.8	2.2	5.7	1.8	147.8	147.6	147.5
Korea, Republic of	4.1	4.8	4.9	0.6	1.3	1.0	48.6	47.3	49.1
Pakistan	23.1	23.4	23.5	1.4	1.5	1.4	126.2	125.8	126.6
Philippines	3.0	3.3	3.4	0.6	1.3	1.2	26.0	27.4	27.4
Saudi Arabia	2.9	4.0	3.7	1.7	1.8	1.4	105.4	102.6	102.4
Thailand	1.3	2.2	1.9	0.3	0.6	0.5	13.9	13.0	12.9
Turkey	19.4	21.1	20.7	2.2	3.4	2.4	197.7	199.6	198.5
AFRICA	**58.7**	**63.1**	**64.0**	**14.1**	**16.9**	**15.6**	**50.8**	**51.2**	**50.8**
Algeria	8.3	8.8	9.1	2.6	3.1	2.9	210.8	212.7	212.3
Egypt	17.0	18.4	18.8	4.1	6.2	6.1	182.7	183.4	182.8
Ethiopia	4.3	4.4	4.5	0.4	0.5	0.4	44.1	44.9	45.6
Morocco	7.9	9.1	9.0	1.4	2.1	2.1	193.8	204.4	205.0
Nigeria	3.4	3.6	3.6	0.3	0.2	0.2	18.4	18.3	18.5
South Africa	3.0	3.1	3.1	0.6	0.6	0.6	57.8	56.8	56.3
Tunisia	3.0	3.0	3.1	0.9	0.9	0.8	216.8	216.7	217.4
CENTRAL AMERICA	**10.1**	**11.6**	**10.5**	**1.0**	**0.9**	**1.2**	**45.6**	**45.5**	**44.9**
Cuba	0.8	0.8	0.8	-	-	-	57.4	57.3	57.3
Mexico	6.4	7.8	6.8	0.5	0.4	0.6	50.8	50.6	50.1
SOUTH AMERICA	**24.7**	**25.4**	**25.4**	**5.9**	**5.4**	**5.0**	**59.4**	**59.8**	**59.1**
Argentina	5.0	5.1	5.1	2.2	1.8	1.2	116.7	116.9	116.9
Brazil	10.6	10.8	10.9	1.3	0.6	1.0	52.2	52.3	52.3
Chile	2.0	2.2	2.1	0.2	0.2	0.2	110.1	114.5	106.3
Colombia	1.3	1.4	1.4	0.2	0.4	0.4	27.2	27.8	27.4
Peru	1.7	1.8	1.8	0.3	0.5	0.6	57.4	57.5	56.9
Venezuela	1.6	1.7	1.7	0.2	0.2	0.2	56.2	57.0	54.4
NORTH AMERICA	**39.6**	**41.1**	**44.9**	**29.8**	**26.1**	**23.4**	**80.2**	**79.8**	**79.7**
Canada	7.6	8.9	8.5	7.2	5.9	5.6	82.2	80.4	81.1
United States of America	32.0	32.2	36.4	22.6	20.2	17.8	80.0	79.8	79.5
EUROPE	**184.5**	**188.0**	**177.7**	**34.1**	**30.7**	**20.6**	**112.6**	**112.9**	**113.0**
European Union	124.9	127.8	120.2	15.4	11.4	10.0	111.6	112.6	112.8
Russian Federation	38.7	38.5	35.9	13.2	10.1	4.9	112.4	111.3	111.2
Ukraine	12.5	13.2	13.2	3.6	7.6	4.2	124.0	122.3	121.0
OCEANIA	**7.8**	**8.1**	**7.1**	**4.6**	**5.9**	**3.4**	**69.5**	**69.1**	**68.3**
Australia	6.9	7.1	6.1	4.2	5.5	3.0	82.7	82.8	82.0
WORLD	**655.7**	**697.6**	**687.5**	**188.3**	**189.2**	**166.7**	**67.6**	**67.7**	**67.7**
Developing countries	390.7	425.3	422.5	112.5	113.4	111.2	60.2	60.4	60.4
Developed countries	265.0	272.3	264.9	75.8	75.8	55.4	97.3	97.4	97.4
LIFDCs	159.8	168.6	173.4	42.3	49.6	50.8	49.3	50.0	50.2
LDCs	25.4	26.7	27.7	8.3	8.7	8.6	26.9	27.8	27.6

Table A3 (a). Coarse grain statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**288.3**	**318.9**	**326.5**	**62.9**	**67.7**	**62.2**	**4.7**	**6.8**	**6.3**
China	178.4	201.4	209.9	7.2	11.2	8.9	0.2	0.4	0.3
of which Taiwan Prov.	0.1	0.1	0.1	4.5	4.5	4.5	-	-	-
India	38.9	42.1	40.0	-	0.1	0.1	2.4	3.8	3.8
Indonesia	17.4	17.6	18.9	1.5	1.9	1.6	0.1	0.1	0.1
Iran, Islamic Republic of	3.6	4.3	4.4	4.7	5.0	3.6	-	-	-
Japan	0.2	0.2	0.2	19.3	18.1	18.3	-	-	-
Korea, D.P.R.	1.9	2.0	2.2	0.2	0.2	0.2	-	-	-
Korea, Republic of	0.2	0.2	0.2	8.1	7.7	7.1	-	-	-
Malaysia	0.1	0.1	0.1	2.9	3.1	3.1	-	-	-
Pakistan	3.9	4.1	4.1	-	-	-	-	-	-
Philippines	6.8	7.0	7.5	0.4	0.4	0.2	-	-	-
Saudi Arabia	0.5	0.5	0.5	8.9	10.0	9.2	-	-	-
Thailand	4.7	4.9	5.0	0.5	0.4	0.4	0.6	0.5	0.5
Turkey	11.7	12.5	12.4	0.6	0.5	0.5	0.2	0.3	0.3
Viet Nam	4.5	5.0	5.3	1.3	1.3	1.1	-	-	-
AFRICA	**114.8**	**114.4**	**117.1**	**16.5**	**18.7**	**18.6**	**5.6**	**7.2**	**6.3**
Algeria	1.5	1.5	1.8	2.4	2.9	2.8	-	-	-
Egypt	8.3	7.8	7.8	5.5	6.8	6.3	-	-	-
Ethiopia	14.1	16.9	16.3	0.2	-	-	0.5	0.9	0.5
Kenya	2.9	3.0	2.7	1.0	0.8	1.3	-	-	-
Morocco	2.8	2.6	1.4	2.1	2.7	3.2	-	-	-
Nigeria	21.8	22.3	22.8	0.1	0.2	0.2	0.5	0.4	0.4
South Africa	13.3	11.5	12.6	0.1	0.5	0.2	2.1	2.4	2.3
Sudan	4.4	2.3	4.6	0.4	1.0	0.4	0.1	-	-
Tanzania, United Rep. of	4.8	4.7	4.9	-	0.1	0.1	0.1	0.1	0.1
CENTRAL AMERICA	**34.7**	**29.7**	**35.6**	**15.6**	**18.1**	**15.3**	**0.4**	**0.2**	**0.2**
Mexico	30.0	24.7	30.6	10.6	13.1	10.5	0.3	0.1	0.1
SOUTH AMERICA	**95.9**	**106.4**	**121.2**	**10.1**	**11.1**	**9.6**	**25.6**	**30.9**	**40.8**
Argentina	24.4	32.8	29.9	-	-	-	15.7	20.2	22.2
Brazil	57.9	59.0	75.2	1.2	1.4	0.5	8.3	8.5	16.5
Chile	1.8	2.1	2.2	1.5	1.3	1.3	0.1	0.1	0.1
Colombia	1.7	1.8	1.9	3.5	3.8	3.8	-	-	-
Peru	1.8	1.8	1.8	1.6	1.9	1.9	-	-	-
Venezuela	2.9	2.6	3.5	1.5	1.8	1.2	-	-	0.1
NORTH AMERICA	**359.4**	**346.0**	**308.3**	**4.4**	**4.0**	**5.3**	**56.1**	**47.2**	**38.2**
Canada	24.2	21.9	23.8	1.7	1.2	1.0	3.6	2.4	4.5
United States of America	335.3	324.0	284.6	2.6	2.8	4.4	52.5	44.8	33.8
EUROPE	**229.4**	**237.0**	**216.2**	**7.0**	**8.3**	**9.8**	**19.7**	**31.2**	**24.5**
European Union	154.4	150.3	138.2	5.5	6.8	8.5	4.9	7.2	4.4
Russian Federation	31.6	34.2	30.5	0.4	0.5	0.3	2.7	5.8	3.9
Serbia	7.1	7.0	6.3	-	-	-	1.5	1.5	0.9
Ukraine	24.1	33.3	29.1	-	0.1	0.1	10.5	16.3	14.8
OCEANIA	**13.2**	**13.6**	**12.0**	**0.3**	**0.2**	**0.2**	**4.6**	**7.5**	**4.7**
Australia	12.6	13.0	11.5	-	-	-	4.6	7.5	4.7
WORLD	**1 135.7**	**1 165.9**	**1 136.9**	**116.7**	**128.1**	**121.0**	**116.7**	**131.0**	**121.0**
Developing countries	515.1	551.7	582.8	83.8	94.9	85.3	33.8	41.8	51.0
Developed countries	620.6	614.2	554.1	32.8	33.2	35.7	82.9	89.2	70.0
LIFDCs	173.8	179.5	181.3	15.2	16.8	16.1	6.4	9.3	8.5
LDCs	66.4	68.1	70.7	2.7	2.9	2.4	3.2	4.5	3.9

Table A3 (b). Coarse grain statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**345.7**	**371.4**	**381.5**	**67.6**	**76.0**	**77.7**	**15.7**	**15.8**	**15.1**
China	184.4	204.7	214.6	46.8	54.1	57.9	10.7	10.9	10.8
of which Taiwan Prov.	4.8	4.7	4.6	0.4	0.3	0.2	7.0	7.0	7.0
India	35.9	38.1	35.6	3.8	4.4	5.1	21.9	22.3	19.9
Indonesia	18.2	19.7	21.7	2.0	2.4	1.1	34.4	34.0	33.7
Iran, Islamic Republic of	8.3	8.3	8.2	0.8	1.3	1.3	1.4	1.3	1.3
Japan	19.6	18.7	19.0	1.7	1.5	1.3	29.2	29.3	29.3
Korea, D.P.R.	2.1	2.1	2.5	-	0.1	-	74.9	69.2	82.9
Korea, Republic of	8.4	7.9	7.6	1.5	1.6	1.3	4.5	4.5	4.3
Malaysia	2.9	3.3	3.2	0.3	0.1	0.1	1.7	1.6	1.6
Pakistan	4.0	4.2	4.1	1.1	1.0	1.0	9.7	9.5	9.3
Philippines	7.3	7.3	7.6	0.7	0.5	0.5	15.9	14.2	15.5
Saudi Arabia	9.6	9.6	10.4	1.7	2.3	1.6	3.7	3.6	3.5
Thailand	4.6	5.1	5.0	0.3	0.3	0.2	2.7	2.7	2.7
Turkey	12.5	12.9	12.6	1.9	1.7	1.8	17.0	16.7	16.5
Viet Nam	5.8	6.3	6.5	0.7	0.8	0.8	5.1	4.6	4.6
AFRICA	**123.1**	**128.5**	**131.8**	**16.1**	**17.9**	**15.5**	**77.0**	**76.5**	**76.8**
Algeria	3.9	4.5	4.6	0.8	0.7	0.7	20.0	19.7	19.4
Egypt	13.8	14.0	14.2	0.9	1.3	1.2	46.8	46.4	46.2
Ethiopia	13.5	15.6	15.8	0.9	1.7	1.7	136.7	141.8	142.0
Kenya	3.9	4.0	4.0	0.7	0.3	0.3	85.8	83.7	81.3
Morocco	4.6	5.3	5.0	1.1	1.5	1.1	52.9	53.5	52.9
Nigeria	21.3	22.1	22.7	0.7	0.7	0.6	92.9	91.9	92.0
South Africa	10.4	11.0	11.3	3.0	2.6	1.8	95.8	95.1	93.0
Sudan	4.8	3.9	4.8	0.5	-	0.2	89.4	83.3	84.2
Tanzania, United Rep. of	4.8	4.9	5.0	0.6	0.7	0.6	86.9	87.3	87.3
CENTRAL AMERICA	**49.6**	**48.5**	**50.4**	**3.9**	**2.6**	**3.0**	**102.2**	**102.0**	**101.2**
Mexico	40.0	38.6	40.6	2.9	1.7	2.1	145.1	144.7	144.6
SOUTH AMERICA	**77.5**	**84.7**	**88.6**	**13.7**	**13.7**	**15.8**	**26.0**	**26.0**	**26.0**
Argentina	7.5	10.4	9.6	1.5	3.6	1.9	7.5	7.4	7.3
Brazil	49.0	52.4	56.2	7.8	5.4	8.9	22.0	21.8	22.1
Chile	3.2	3.2	3.3	0.4	0.5	0.5	18.9	18.9	18.7
Colombia	5.4	5.7	5.7	1.8	1.5	1.6	42.5	42.0	41.4
Peru	3.5	3.7	3.8	0.5	0.6	0.6	25.0	25.0	24.5
Venezuela	4.4	4.3	4.7	0.5	0.6	0.5	50.1	51.3	51.2
NORTH AMERICA	**310.8**	**308.5**	**284.0**	**47.7**	**31.2**	**22.9**	**18.2**	**18.1**	**17.9**
Canada	20.8	18.2	18.4	5.2	3.4	4.0	5.9	4.7	4.8
United States of America	290.0	290.3	265.6	42.5	27.8	18.9	19.5	19.5	19.3
EUROPE	**215.2**	**212.0**	**207.5**	**35.7**	**29.8**	**23.9**	**22.6**	**22.9**	**22.6**
European Union	153.8	149.7	146.8	25.2	21.6	17.0	18.4	19.7	19.7
Russian Federation	29.4	29.0	27.2	4.9	2.3	2.0	28.2	26.2	25.9
Serbia	5.4	6.0	5.7	0.9	0.4	0.1	20.9	20.8	20.8
Ukraine	13.8	14.8	15.0	3.1	3.9	3.3	47.4	45.6	42.5
OCEANIA	**8.2**	**7.8**	**8.0**	**3.1**	**2.8**	**2.2**	**8.2**	**8.1**	**8.1**
Australia	7.4	7.0	7.2	3.0	2.7	2.1	10.6	10.4	10.2
WORLD	**1 130.1**	**1 161.5**	**1 151.8**	**187.8**	**174.0**	**161.0**	**28.7**	**28.8**	**28.5**
Developing countries	559.2	596.6	615.6	96.1	105.4	108.1	30.0	30.1	29.8
Developed countries	570.9	564.9	536.2	91.7	68.7	52.9	23.4	23.5	23.2
LIFDCs	180.3	188.4	191.4	20.8	23.0	20.7	39.9	40.0	39.3
LDCs	64.7	67.5	69.8	8.9	11.0	10.6	56.3	56.6	57.2

Table A4 (a). Maize statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**241.5**	**269.4**	**281.8**	**46.8**	**49.9**	**46.1**	**4.1**	**5.7**	**5.8**
China	169.1	192.8	201.0	5.0	8.5	6.4	0.1	0.3	0.3
of which Taiwan Prov.	-	-	-	4.4	4.3	4.3	-	-	-
India	19.4	21.6	22.5	-	0.1	0.1	2.3	3.8	3.8
Indonesia	17.4	17.6	18.9	1.4	1.8	1.5	0.1	0.1	0.1
Iran, Islamic Republic of	1.1	1.3	1.2	3.7	3.7	3.3	-	-	-
Japan	-	-	-	16.1	15.3	15.0	-	-	-
Korea, D.P.R.	1.8	1.9	2.1	0.2	0.2	0.2	-	-	-
Korea, Republic of	0.1	0.1	0.1	8.0	7.6	7.0	-	-	-
Malaysia	0.1	0.1	0.1	2.9	3.1	3.1	-	-	-
Pakistan	3.4	3.5	3.5	-	-	-	-	-	-
Philippines	6.8	7.0	7.5	0.3	0.4	0.2	-	-	-
Thailand	4.6	4.8	4.8	0.5	0.4	0.4	0.6	0.5	0.5
Turkey	4.3	4.2	4.6	0.4	0.4	0.4	0.1	0.1	0.1
Viet Nam	4.5	5.0	5.3	1.2	1.3	1.1	-	-	-
AFRICA	**62.5**	**64.8**	**64.1**	**14.0**	**15.7**	**15.9**	**4.3**	**5.6**	**4.9**
Algeria	-	-	-	2.2	2.7	2.6	-	-	-
Egypt	7.4	6.8	7.0	5.5	6.7	6.2	-	-	-
Ethiopia	5.0	6.3	6.0	-	-	-	0.2	0.3	0.1
Kenya	2.7	2.7	2.4	0.9	0.7	1.2	-	-	-
Morocco	0.2	0.2	0.1	1.7	2.0	2.2	-	-	-
Nigeria	8.8	9.5	9.5	0.1	0.2	0.2	0.4	0.3	0.3
South Africa	12.8	10.9	12.1	-	0.4	-	2.1	2.4	2.3
Tanzania, United Rep. of	3.9	3.6	3.8	-	0.1	0.1	0.1	0.1	0.1
CENTRAL AMERICA	**26.9**	**22.1**	**26.9**	**13.0**	**16.5**	**13.4**	**0.4**	**0.2**	**0.2**
Mexico	22.6	17.6	22.4	8.1	11.5	8.5	0.3	0.1	0.1
SOUTH AMERICA	**86.0**	**92.3**	**106.7**	**8.4**	**9.2**	**7.7**	**23.2**	**26.0**	**34.5**
Argentina	19.3	23.8	21.0	-	-	-	13.5	15.4	16.0
Brazil	55.4	56.3	72.3	0.7	0.9	0.2	8.3	8.5	16.5
Chile	1.4	1.4	1.6	0.9	0.7	0.6	-	-	-
Colombia	1.6	1.7	1.8	3.1	3.3	3.3	-	-	-
Peru	1.5	1.5	1.6	1.5	1.8	1.8	-	-	-
Venezuela	2.5	2.1	3.0	1.4	1.8	1.2	-	-	0.1
NORTH AMERICA	**329.2**	**324.6**	**283.5**	**2.1**	**1.7**	**2.9**	**48.9**	**42.9**	**32.0**
Canada	10.6	10.7	11.6	1.7	1.1	0.9	0.6	0.1	1.0
United States of America	318.6	313.9	271.9	0.4	0.6	2.0	48.3	42.9	31.0
EUROPE	**87.2**	**110.6**	**92.6**	**5.6**	**6.6**	**8.0**	**8.6**	**20.4**	**16.5**
European Union	59.5	69.0	54.0	4.8	6.0	7.5	1.4	3.0	1.0
Russian Federation	4.7	7.0	7.1	0.2	-	-	0.6	1.9	1.8
Serbia	6.7	6.5	5.8	-	-	-	1.5	1.5	0.9
Ukraine	11.0	22.3	20.8	-	-	-	5.1	13.7	12.5
OCEANIA	**0.5**	**0.5**	**0.6**	**-**	**-**	**-**	**-**	**0.1**	**0.1**
WORLD	**833.9**	**884.3**	**856.1**	**89.8**	**99.5**	**94.0**	**89.6**	**100.8**	**94.0**
Developing countries	402.5	435.9	465.5	64.8	74.2	66.8	29.9	34.9	43.0
Developed countries	431.4	448.4	390.6	25.0	25.3	27.2	59.7	65.9	50.9
LIFDCs	103.5	110.5	111.5	13.4	14.6	14.4	5.1	7.6	7.1
LDCs	33.4	37.6	36.3	1.9	1.7	1.8	2.0	3.0	2.7

Table A4 (b). Maize statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**282.3**	**305.9**	**319.8**	**57.8**	**66.0**	**68.9**	**9.5**	**9.5**	**9.8**
China	173.1	193.4	203.0	44.2	51.5	55.6	7.4	7.6	7.6
of which Taiwan Prov.	4.6	4.5	4.4	0.4	0.3	0.2	5.4	5.4	5.4
India	16.0	17.3	18.3	3.2	4.0	4.5	7.0	7.2	7.7
Indonesia	18.2	19.6	21.6	2.0	2.4	1.1	34.2	33.6	33.3
Iran, Islamic Republic of	4.7	4.5	4.5	0.4	0.5	0.5	1.0	1.0	1.0
Japan	16.4	15.3	15.6	0.9	0.8	0.7	26.7	26.8	26.8
Korea, D.P.R.	2.0	2.1	2.4	-	0.1	-	71.4	68.3	80.3
Korea, Republic of	8.2	7.7	7.4	1.5	1.5	1.2	2.0	2.1	1.8
Malaysia	2.9	3.3	3.2	0.3	0.1	0.1	1.7	1.6	1.6
Pakistan	3.5	3.5	3.5	1.1	1.0	1.0	7.7	7.3	7.2
Philippines	7.2	7.3	7.6	0.7	0.5	0.5	15.8	14.2	15.4
Thailand	4.4	4.9	4.8	0.3	0.3	0.2	1.3	1.2	1.2
Turkey	4.5	4.6	4.9	0.6	0.5	0.5	13.1	12.9	12.8
Viet Nam	5.7	6.2	6.4	0.7	0.8	0.8	5.0	4.6	4.6
AFRICA	**70.1**	**75.0**	**76.8**	**9.9**	**12.7**	**11.0**	**38.9**	**39.2**	**39.1**
Algeria	2.2	2.7	2.6	0.3	0.4	0.4	3.7	3.6	3.6
Egypt	12.8	13.1	13.3	0.9	1.2	1.1	43.4	43.0	42.9
Ethiopia	4.8	5.8	5.9	0.1	0.4	0.4	46.7	48.0	47.9
Kenya	3.6	3.6	3.7	0.7	0.3	0.2	80.7	78.9	77.3
Morocco	1.9	2.0	2.3	0.4	0.7	0.7	10.6	10.7	10.6
Nigeria	8.4	9.4	9.5	0.5	0.5	0.4	30.6	30.9	30.5
South Africa	9.8	10.3	10.7	2.8	2.4	1.6	91.1	91.2	89.4
Tanzania, United Rep. of	3.8	3.8	3.9	0.4	0.4	0.4	66.6	66.6	66.6
CENTRAL AMERICA	**39.6**	**38.9**	**39.9**	**3.0**	**2.2**	**2.4**	**101.0**	**100.7**	**100.0**
Mexico	30.4	29.4	30.6	2.1	1.3	1.5	144.8	144.1	144.1
SOUTH AMERICA	**68.5**	**74.5**	**77.8**	**12.5**	**11.8**	**14.2**	**24.5**	**24.5**	**24.5**
Argentina	4.8	6.9	6.1	0.9	2.3	1.0	7.3	7.2	7.1
Brazil	46.1	49.4	53.0	7.5	5.0	8.5	21.0	20.8	21.1
Chile	2.3	2.0	2.1	0.3	0.4	0.4	16.7	16.7	16.6
Colombia	4.9	5.1	5.1	1.8	1.5	1.5	41.0	40.5	39.9
Peru	3.1	3.4	3.4	0.5	0.6	0.6	18.9	18.9	18.7
Venezuela	3.9	3.8	4.2	0.4	0.5	0.4	49.6	50.8	50.7
NORTH AMERICA	**287.0**	**290.2**	**265.2**	**39.8**	**26.4**	**17.2**	**14.9**	**15.0**	**14.8**
Canada	11.7	11.2	11.2	1.6	1.3	1.5	3.3	3.3	3.2
United States of America	275.3	279.0	254.0	38.2	25.1	15.7	16.2	16.2	16.1
EUROPE	**83.6**	**93.1**	**87.9**	**11.1**	**13.3**	**9.5**	**7.5**	**8.6**	**8.4**
European Union	62.7	69.5	64.0	7.7	9.5	6.0	8.1	9.7	9.7
Russian Federation	4.4	5.0	5.2	0.2	0.3	0.4	2.5	2.5	2.5
Serbia	5.0	5.5	5.2	0.9	0.4	0.1	19.3	19.2	19.2
Ukraine	5.9	7.4	8.0	1.6	1.9	2.2	11.7	13.1	10.6
OCEANIA	**0.5**	**0.5**	**0.5**	**0.1**	**0.1**	**0.1**	**2.6**	**2.5**	**2.5**
WORLD	**831.6**	**878.2**	**868.0**	**134.1**	**132.5**	**123.4**	**17.3**	**17.6**	**17.7**
Developing countries	431.3	465.8	485.0	79.3	89.3	93.9	18.2	18.4	18.6
Developed countries	400.3	412.4	382.9	54.8	43.2	29.4	13.8	14.5	14.3
LIFDCs	109.4	116.4	120.9	14.0	17.5	15.6	20.2	20.4	20.7
LDCs	32.4	35.3	35.8	4.8	7.5	7.2	25.7	26.5	26.5

Table A5 (a). Barley statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**18.8**	**20.4**	**19.0**	**13.7**	**15.6**	**13.7**	**0.5**	**1.0**	**0.4**
China	2.5	1.6	2.0	2.0	2.6	2.3	-	-	-
India	1.4	1.7	1.7	-	-	-	-	-	-
Iran, Islamic Republic of	2.6	3.0	3.2	1.0	1.3	0.3	-	-	-
Iraq	0.7	1.1	0.6	-	-	0.1	-	-	-
Japan	0.2	0.2	0.2	1.3	1.2	1.5	-	-	-
Kazakhstan	2.0	2.6	1.3	-	-	-	0.4	0.8	0.2
Saudi Arabia	-	-	-	7.0	8.0	7.0	-	-	-
Syria	0.6	0.7	0.8	0.5	0.5	0.6	-	-	-
Turkey	6.8	7.6	7.1	0.2	0.1	0.1	0.1	0.2	0.2
AFRICA	**6.9**	**7.0**	**6.1**	**1.4**	**1.5**	**1.6**	**-**	**-**	**-**
Algeria	1.4	1.4	1.7	0.2	0.2	0.2	-	-	-
Ethiopia	1.8	1.9	1.9	-	-	-	-	-	-
Libya	0.1	0.1	0.1	0.4	0.4	0.4	-	-	-
Morocco	2.6	2.3	1.2	0.3	0.6	0.8	-	-	-
Tunisia	0.4	0.7	0.7	0.4	0.3	0.2	-	-	-
CENTRAL AMERICA	**0.7**	**0.5**	**1.0**	**0.1**	**0.1**	**0.1**	**-**	**-**	**-**
Mexico	0.7	0.5	1.0	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	**2.9**	**5.0**	**5.7**	**0.8**	**0.8**	**0.8**	**1.0**	**3.3**	**4.1**
Argentina	2.0	4.1	4.7	-	-	-	0.9	3.2	4.0
NORTH AMERICA	**14.3**	**11.1**	**13.4**	**0.4**	**0.4**	**0.5**	**1.6**	**1.1**	**1.8**
Canada	9.6	7.8	8.6	-	-	-	1.4	0.9	1.6
United States of America	4.7	3.4	4.8	0.4	0.4	0.5	0.2	0.2	0.2
EUROPE	**92.9**	**81.4**	**77.4**	**0.6**	**1.0**	**0.8**	**10.7**	**10.2**	**7.6**
Belarus	2.0	1.9	2.0	-	-	-	-	-	-
European Union	61.1	51.8	52.6	0.2	0.4	0.3	3.2	4.0	3.3
Russian Federation	17.2	16.9	14.5	0.2	0.4	0.3	2.1	3.6	2.0
Ukraine	11.0	9.1	6.7	-	-	-	5.3	2.5	2.2
OCEANIA	**8.3**	**8.9**	**7.3**	**-**	**-**	**-**	**3.6**	**6.1**	**3.7**
Australia	8.0	8.6	7.0	-	-	-	3.6	6.1	3.7
WORLD	**144.7**	**134.4**	**129.9**	**17.0**	**19.5**	**17.5**	**17.3**	**21.6**	**17.5**
Developing countries	25.7	28.6	28.6	14.0	16.1	14.1	1.1	3.5	4.2
Developed countries	119.0	105.8	101.2	3.0	3.3	3.4	16.2	18.2	13.3
LIFDCs	6.0	6.8	6.4	0.6	0.7	0.8	-	-	-
LDCs	2.3	2.4	2.3	-	-	-	-	-	-

Table A5 (b). Barley statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**32.9**	**33.8**	**33.7**	**7.1**	**7.6**	**6.4**	**0.6**	**0.7**	**0.7**
China	4.3	4.2	4.6	1.4	1.4	1.2	0.1	0.1	0.1
India	1.4	1.6	1.7	-	-	-	1.0	1.2	1.2
Iran, Islamic Republic of	3.6	3.8	3.7	0.4	0.8	0.8	0.4	0.4	0.4
Iraq	0.7	1.1	0.8	0.1	0.2	-	3.9	3.9	3.9
Japan	1.5	1.6	1.6	0.5	0.4	0.4	2.4	2.4	2.4
Kazakhstan	1.7	1.7	1.3	0.1	0.2	-	1.2	1.2	1.2
Saudi Arabia	7.2	7.1	7.7	1.6	2.2	1.5	1.1	1.0	1.0
Syria	1.5	1.5	1.5	1.2	0.5	0.5	12.4	12.2	12.2
Turkey	7.3	7.6	7.1	1.3	1.2	1.2	1.1	1.1	1.1
AFRICA	**8.1**	**8.8**	**8.2**	**1.9**	**1.7**	**1.2**	**3.6**	**3.6**	**3.5**
Algeria	1.6	1.7	1.9	0.5	0.3	0.3	16.3	16.1	15.9
Ethiopia	1.8	1.9	1.9	0.2	0.2	0.1	18.3	18.5	18.7
Libya	0.5	0.5	0.5	-	-	-	12.8	12.3	12.0
Morocco	2.6	3.2	2.4	0.7	0.8	0.4	42.2	42.7	42.2
Tunisia	1.0	0.9	0.9	0.3	0.2	0.2	8.8	8.6	8.5
CENTRAL AMERICA	**0.8**	**0.6**	**0.9**	**0.2**	**0.1**	**0.2**	**-**	**-**	**-**
Mexico	0.8	0.6	0.9	0.2	0.1	0.2	-	-	-
SOUTH AMERICA	**2.6**	**2.9**	**2.9**	**0.3**	**0.6**	**0.3**	**0.5**	**0.5**	**0.5**
Argentina	0.9	1.2	1.2	0.3	0.6	0.3	-	-	-
NORTH AMERICA	**12.3**	**10.2**	**10.7**	**4.4**	**2.5**	**3.4**	**0.5**	**0.5**	**0.5**
Canada	7.5	6.0	6.1	2.3	1.2	1.7	0.4	0.3	0.3
United States of America	4.8	4.2	4.6	2.1	1.3	1.7	0.6	0.5	0.5
EUROPE	**81.7**	**73.5**	**72.6**	**18.2**	**12.6**	**10.7**	**1.6**	**1.5**	**1.5**
Belarus	2.0	1.9	1.9	0.3	0.1	0.1	-	-	-
European Union	57.1	49.7	50.7	13.3	9.5	8.4	0.8	0.8	0.8
Russian Federation	15.1	14.4	12.8	3.1	1.1	1.1	0.4	0.3	0.3
Ukraine	5.7	5.8	5.4	1.2	1.7	0.9	14.5	13.1	12.5
OCEANIA	**4.2**	**3.8**	**3.9**	**2.2**	**1.9**	**1.5**	**0.2**	**0.2**	**0.2**
Australia	3.9	3.5	3.6	2.1	1.9	1.5	0.3	0.3	0.3
WORLD	**142.5**	**133.7**	**133.0**	**34.2**	**27.0**	**23.8**	**1.1**	**1.2**	**1.2**
Developing countries	39.2	40.8	40.7	8.6	8.8	7.0	1.1	1.1	1.1
Developed countries	103.3	92.9	92.2	25.6	18.2	16.8	1.3	1.2	1.2
LIFDCs	7.0	7.7	7.5	1.8	1.3	1.0	1.2	1.3	1.3
LDCs	2.4	2.4	2.4	0.2	0.3	0.2	1.9	1.9	1.9

Table A6 (a). Sorghum statistics

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**9.9**	**9.0**	**9.9**	**1.8**	**1.7**	**1.8**	**0.1**	**0.1**	**0.1**
China	2.0	2.1	2.0	0.1	0.1	0.1	-	-	-
India	7.0	6.0	7.0	-	-	-	-	-	-
Japan	-	-	-	1.5	1.4	1.5	-	-	-
AFRICA	**26.4**	**24.4**	**26.9**	**1.0**	**1.4**	**0.9**	**0.8**	**0.8**	**0.6**
Burkina Faso	1.8	1.5	1.7	-	-	-	0.1	0.2	0.2
Ethiopia	3.4	4.1	4.0	0.2	-	-	0.2	0.3	0.1
Nigeria	9.0	8.9	9.1	-	-	-	0.1	0.1	0.1
Sudan	3.8	1.9	4.0	0.3	0.9	0.3	0.1	-	-
CENTRAL AMERICA	**7.0**	**6.9**	**7.6**	**2.4**	**1.4**	**1.8**	**-**	**-**	**-**
Mexico	6.6	6.4	7.1	2.4	1.4	1.8	-	-	-
SOUTH AMERICA	**5.6**	**7.5**	**7.1**	**0.7**	**0.9**	**0.9**	**1.4**	**1.6**	**2.2**
Argentina	2.7	4.4	3.8	-	-	-	1.4	1.6	2.2
Brazil	1.8	1.9	1.9	-	-	-	-	-	-
Venezuela	0.4	0.5	0.5	-	-	-	-	-	-
NORTH AMERICA	**10.2**	**5.4**	**6.4**	**-**	**-**	**-**	**3.9**	**1.7**	**2.5**
United States of America	10.2	5.4	6.4	-	-	-	3.9	1.7	2.5
EUROPE	**0.6**	**0.7**	**0.6**	**0.5**	**0.2**	**0.4**	**-**	**-**	**-**
European Union	0.6	0.7	0.6	0.4	0.1	0.3	-	-	-
OCEANIA	**2.7**	**1.9**	**2.3**	**0.1**	**0.1**	**0.1**	**0.8**	**1.1**	**0.7**
Australia	2.7	1.9	2.3	-	-	-	0.8	1.1	0.7
WORLD	**62.3**	**55.9**	**60.8**	**6.7**	**5.7**	**6.0**	**7.0**	**5.3**	**6.0**
Developing countries	48.6	47.6	51.3	4.4	3.9	3.9	2.2	2.5	2.8
Developed countries	13.7	8.3	9.5	2.3	1.8	2.1	4.7	2.9	3.2
LIFDCs	33.6	30.8	34.3	1.0	1.3	0.7	0.8	0.8	0.6
LDCs	15.6	13.8	16.3	0.8	1.2	0.6	0.7	0.7	0.5

Table A7 (a). Other coarse grain statistics - millet, rye, oats and other grains

	Production			Imports			Exports		
	2008-2010 average	2011 estim.	2012 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	18.1	20.0	15.9	0.5	0.5	0.6	-	-	-
AFRICA	19.2	18.3	20.1	0.1	0.1	0.1	0.5	0.8	0.8
CENTRAL AMERICA	0.1	0.2	0.1	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	1.4	1.6	1.7	0.2	0.2	0.1	0.1	0.1	0.1
NORTH AMERICA	5.7	4.7	5.0	1.8	1.9	2.0	1.7	1.4	1.9
EUROPE	48.7	44.3	45.6	0.3	0.5	0.6	0.4	0.7	0.5
OCEANIA	1.7	2.2	1.8	0.1	0.1	0.1	0.2	0.2	0.2
WORLD	**94.8**	**91.3**	**90.1**	**3.1**	**3.4**	**3.5**	**2.9**	**3.2**	**3.5**

Table A6 (b). Sorghum statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**11.7**	**11.0**	**11.6**	**1.5**	**1.3**	**1.4**	**1.8**	**1.5**	**1.7**
China	2.1	2.2	2.1	0.8	0.7	0.7	0.4	0.4	0.4
India	7.2	6.1	6.8	0.2	0.1	0.3	5.4	4.4	4.8
Japan	1.4	1.5	1.6	0.3	0.3	0.2	-	-	-
AFRICA	**26.5**	**26.2**	**27.4**	**2.3**	**1.5**	**1.4**	**20.2**	**19.8**	**19.8**
Burkina Faso	1.6	1.5	1.6	0.2	0.1	0.1	85.8	74.9	73.8
Ethiopia	3.3	3.9	3.8	0.2	0.2	0.3	32.7	34.8	34.7
Nigeria	9.0	8.9	9.1	0.1	0.1	0.1	43.9	43.4	43.5
Sudan	4.1	3.3	4.2	0.4	-	0.1	75.2	71.5	72.2
CENTRAL AMERICA	**9.1**	**8.7**	**9.4**	**0.7**	**0.3**	**0.4**	**0.9**	**0.9**	**0.9**
Mexico	8.6	8.2	8.9	0.7	0.3	0.4	-	-	-
SOUTH AMERICA	**4.9**	**5.7**	**6.1**	**0.7**	**1.2**	**1.1**	**0.1**	**0.1**	**0.1**
Argentina	1.3	1.9	1.9	0.3	0.7	0.6	-	-	-
Brazil	1.8	1.7	1.9	0.2	0.3	0.3	-	-	-
Venezuela	0.4	0.5	0.5	-	0.1	0.1	-	-	-
NORTH AMERICA	**6.5**	**4.0**	**3.8**	**1.0**	**0.6**	**0.6**	**-**	**-**	**-**
United States of America	6.5	4.0	3.8	1.0	0.6	0.6	-	-	-
EUROPE	**1.2**	**1.1**	**1.0**	**0.4**	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**
European Union	1.1	1.0	0.9	0.4	0.2	0.2	0.4	0.4	0.4
OCEANIA	**1.9**	**1.7**	**1.8**	**0.7**	**0.4**	**0.3**	**0.2**	**0.2**	**0.2**
Australia	1.7	1.6	1.7	0.7	0.4	0.3	-	-	-
WORLD	**61.8**	**58.3**	**61.1**	**7.4**	**5.5**	**5.4**	**4.2**	**4.0**	**4.1**
Developing countries	50.5	49.7	52.7	4.9	4.1	4.1	5.1	4.9	5.0
Developed countries	11.3	8.6	8.4	2.5	1.4	1.3	0.3	0.3	0.3
LIFDCs	33.9	32.6	34.4	2.5	1.8	1.8	9.6	9.1	9.3
LDCs	15.6	15.4	16.4	2.0	1.3	1.3	14.7	14.5	14.7

Table A7 (b). Other coarse grain statistics - millet, rye, oats and other grains

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	18.7	20.7	16.4	1.2	1.1	1.0	3.7	4.0	3.0
AFRICA	18.4	18.5	19.4	2.0	1.9	1.9	14.3	14.0	14.2
CENTRAL AMERICA	0.2	0.3	0.2	-	-	-	0.2	0.3	0.3
SOUTH AMERICA	1.5	1.7	1.7	0.1	0.1	0.1	0.9	0.8	0.8
NORTH AMERICA	5.1	4.2	4.3	2.5	1.7	1.6	2.7	2.6	2.6
EUROPE	48.7	44.3	45.9	6.1	3.8	3.5	13.2	12.5	12.4
OCEANIA	1.6	1.8	1.7	0.2	0.4	0.3	5.2	5.2	5.2
WORLD	**94.1**	**91.3**	**89.8**	**12.0**	**9.0**	**8.5**	**6.0**	**6.1**	**5.5**

Table A8 (a). Rice statistics

	Production			Imports			Exports		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	2009-2011 average	2012 estim.	2013 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)								
ASIA	**416.7**	**437.4**	**440.6**	**15.7**	**17.4**	**17.5**	**25.1**	**28.8**	**29.5**
Bangladesh	32.3	33.8	34.2	0.8	0.3	0.5	-	-	-
China	134.2	138.8	141.5	1.1	2.6	2.3	0.7	0.5	0.5
of which Taiwan Prov.	1.1	1.1	1.1	0.3	0.2	0.3	0.1	0.1	-
India	94.8	104.3	100.0	0.1	0.1	0.1	3.1	9.0	7.7
Indonesia	40.2	41.4	43.2	1.4	1.3	1.5	-	-	-
Iran, Islamic Republic of	1.4	1.4	1.5	1.2	1.6	1.5	-	-	-
Iraq	0.1	0.1	0.1	1.2	1.4	1.4	-	-	-
Japan	7.8	7.6	7.6	0.7	0.7	0.7	0.2	0.2	0.2
Korea, D.P.R.	1.5	1.6	1.8	0.1	0.3	0.3	-	-	-
Korea, Republic of	4.7	4.2	4.1	0.4	0.4	0.4	-	-	-
Malaysia	1.6	1.7	1.7	1.0	1.1	1.2	-	-	-
Myanmar	19.4	18.9	18.9	-	-	-	0.8	0.7	0.7
Pakistan	6.2	6.2	6.3	-	0.1	0.1	3.2	3.0	3.3
Philippines	10.8	11.1	11.8	1.8	0.9	0.8	-	-	-
Saudi Arabia	-	-	-	1.1	1.3	1.4	-	-	-
Sri Lanka	2.7	2.6	2.9	0.1	-	-	-	-	-
Thailand	22.0	22.8	23.8	0.4	0.8	0.6	9.4	6.5	8.0
Viet Nam	26.2	28.2	28.9	0.5	0.6	0.6	6.7	7.5	7.6
AFRICA	**16.0**	**16.5**	**17.3**	**10.4**	**12.7**	**12.7**	**0.5**	**0.5**	**0.8**
Cote d'Ívoire	0.4	0.4	0.4	1.0	1.2	1.3	-	-	-
Egypt	4.1	3.9	4.5	0.2	0.4	0.3	0.4	0.4	0.7
Madagascar	3.0	2.9	2.7	0.1	0.3	0.3	-	-	-
Nigeria	2.3	2.7	2.8	2.1	2.8	2.6	-	-	-
Senegal	0.4	0.3	0.3	0.7	1.0	1.0	-	-	-
South Africa	-	-	-	0.9	1.0	1.0	-	-	-
Tanzania, United Rep. of	0.9	0.9	1.0	0.1	0.2	0.2	-	-	-
CENTRAL AMERICA	**1.8**	**1.8**	**1.8**	**2.1**	**2.3**	**2.4**	**-**	**0.1**	**0.1**
Cuba	0.3	0.4	0.4	0.5	0.5	0.5	-	-	-
Mexico	0.2	0.1	0.1	0.6	0.7	0.7	-	-	-
SOUTH AMERICA	**16.4**	**17.7**	**16.6**	**1.2**	**1.7**	**1.6**	**2.8**	**3.6**	**2.9**
Argentina	0.9	1.2	1.1	-	-	-	0.6	0.7	0.6
Brazil	8.1	9.1	7.8	0.7	0.9	0.9	0.8	1.2	0.9
Peru	1.9	1.8	2.0	0.1	0.2	0.2	-	-	-
Uruguay	0.9	1.2	1.0	-	-	-	0.9	0.9	0.8
NORTH AMERICA	**7.1**	**5.9**	**6.3**	**1.0**	**1.0**	**1.1**	**3.4**	**3.5**	**3.4**
Canada	-	-	-	0.3	0.3	0.4	-	-	-
United States of America	7.1	5.9	6.3	0.6	0.7	0.7	3.4	3.5	3.4
EUROPE	**2.5**	**2.8**	**2.7**	**1.6**	**1.7**	**1.8**	**0.4**	**0.5**	**0.4**
European Union	1.8	1.9	1.7	1.2	1.3	1.4	0.2	0.3	0.3
Russian Federation	0.6	0.8	0.8	0.2	0.2	0.2	0.1	0.2	0.2
OCEANIA	**0.1**	**0.5**	**0.7**	**0.5**	**0.4**	**0.4**	**0.2**	**0.4**	**0.5**
Australia	0.1	0.5	0.6	0.2	0.1	0.1	0.2	0.4	0.5
WORLD	**460.5**	**482.7**	**485.9**	**32.5**	**37.3**	**37.5**	**32.4**	**37.3**	**37.5**
Developing countries	442.6	465.3	468.0	27.7	32.3	32.5	28.3	32.6	33.1
Developed countries	17.9	17.3	17.9	4.7	4.9	5.0	4.1	4.7	4.5
LIFDCs	208.9	223.4	223.0	16.2	17.3	17.7	4.7	10.7	9.9
LDCs	71.0	73.4	73.7	6.5	6.7	7.2	2.0	2.0	2.2

Table A8 (b). Rice statistics

	Total Utilization			Stocks ending in			Per caput food use		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	2009-2011 average	2012 estim.	2013 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**397.0**	**411.6**	**417.2**	**129.5**	**152.5**	**163.7**	**81.5**	**82.0**	**82.0**
Bangladesh	32.4	34.0	34.6	5.8	7.0	7.1	150.2	153.5	155.8
China	128.8	132.4	133.6	70.0	84.2	93.9	76.9	76.7	76.5
of which Taiwan Prov.	1.3	1.3	1.3	0.2	0.1	0.1	53.3	53.9	52.6
India	90.8	92.9	94.1	22.4	24.0	22.3	71.8	71.4	71.0
Indonesia	39.8	43.3	44.4	4.4	6.2	6.3	157.3	160.8	162.8
Iran, Islamic Republic of	2.7	2.8	3.0	0.3	0.5	0.5	32.0	33.6	35.0
Iraq	1.3	1.4	1.5	0.1	0.1	0.1	41.1	44.1	45.0
Japan	8.2	8.1	8.2	2.5	2.7	2.7	58.9	58.4	58.3
Korea, D.P.R.	1.6	2.0	2.0	-	0.1	0.1	60.1	72.2	74.4
Korea, Republic of	4.7	4.7	4.6	1.4	1.6	1.4	73.0	72.4	72.3
Malaysia	2.6	2.7	2.8	0.3	0.2	0.3	83.9	85.3	85.7
Myanmar	19.0	19.1	19.2	5.1	3.9	2.9	251.3	252.1	252.8
Pakistan	3.1	2.9	3.1	0.8	0.5	0.5	15.0	14.4	14.8
Philippines	12.3	13.1	13.0	3.0	1.9	1.5	119.9	122.4	122.6
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	2.9	0.3	0.3	0.3	113.0	117.2	118.0
Thailand	11.8	11.9	12.2	6.6	13.0	17.2	127.6	128.3	128.5
Viet Nam	20.5	21.1	21.4	3.6	3.2	3.6	188.4	188.8	189.1
AFRICA	**25.6**	**28.5**	**29.6**	**3.2**	**3.5**	**3.2**	**22.0**	**23.6**	**23.9**
Cote d'Ívoire	1.4	1.6	1.7	-	0.1	0.1	62.2	70.9	73.5
Egypt	3.8	3.9	4.1	1.3	1.3	1.3	38.4	38.9	39.2
Madagascar	3.0	3.1	3.1	0.2	0.2	0.1	126.9	126.6	125.0
Nigeria	4.4	5.4	5.6	0.3	0.5	0.4	24.6	28.4	28.5
Senegal	1.1	1.2	1.2	0.1	0.1	0.1	79.0	81.4	83.0
South Africa	0.9	0.9	1.0	-	-	0.1	16.5	16.5	17.5
Tanzania, United Rep. of	1.0	1.1	1.1	-	-	-	18.8	19.3	19.7
CENTRAL AMERICA	**3.9**	**4.1**	**4.1**	**0.4**	**0.4**	**0.3**	**18.8**	**19.5**	**19.5**
Cuba	0.8	0.9	0.9	-	-	-	67.3	71.9	72.0
Mexico	0.8	0.9	0.9	-	-	-	7.2	7.6	7.6
SOUTH AMERICA	**15.3**	**15.4**	**14.8**	**1.3**	**1.0**	**0.9**	**35.9**	**35.4**	**33.9**
Argentina	0.4	0.4	0.4	0.1	-	-	9.2	7.3	6.8
Brazil	8.2	8.4	7.6	0.3	0.3	0.2	40.3	40.2	37.1
Peru	2.0	2.1	2.1	0.4	0.3	0.3	62.3	63.5	63.8
Uruguay	0.1	0.1	0.1	0.1	0.1	0.1	7.4	7.6	7.6
NORTH AMERICA	**4.5**	**3.6**	**4.3**	**1.3**	**1.3**	**1.1**	**11.1**	**9.2**	**10.9**
Canada	0.3	0.3	0.4	-	-	-	10.1	10.1	10.1
United States of America	4.1	3.3	4.0	1.2	1.3	1.0	11.2	9.1	10.9
EUROPE	**3.7**	**4.0**	**4.0**	**0.5**	**0.5**	**0.6**	**4.7**	**5.0**	**5.1**
European Union	2.7	2.9	2.8	0.5	0.5	0.5	5.0	5.3	5.2
Russian Federation	0.6	0.8	0.8	-	-	0.1	4.3	4.9	5.3
OCEANIA	**0.5**	**0.6**	**0.7**	**-**	**0.1**	**0.1**	**14.0**	**15.4**	**15.7**
Australia	0.2	0.3	0.3	-	0.1	0.1	8.4	10.0	10.7
WORLD	**450.4**	**467.9**	**474.7**	**136.2**	**159.3**	**169.8**	**56.1**	**56.6**	**56.7**
Developing countries	432.1	450.0	456.0	131.9	154.6	165.3	67.2	67.6	67.5
Developed countries	18.3	17.9	18.7	4.4	4.7	4.5	12.1	11.8	12.3
LIFDCs	216.3	229.0	233.0	41.4	45.4	43.0	68.4	69.4	69.5
LDCs	74.9	78.7	80.0	14.4	14.7	13.5	66.4	67.0	67.2

Table A9. Cereal supply and utilization in main exporting countries *(million tonnes)*

	Wheat[1]			Coarse Grains[2]			Rice (milled basis)		
	2010/11	2011/12 estim.	2012/13 f'cast	2010/11	2011/12 estim.	2012/13 f'cast	2010/11	2011/12 estim.	2012/13 f'cast
	UNITED STATES (June/May)			**UNITED STATES**			**UNITED STATES** (Aug./July)		
Opening stocks	26.6	23.5	20.2	48.1	32.3	27.8	1.2	1.5	1.3
Production	60.1	54.4	61.8	330.6	324.0	284.6	7.6	5.9	6.3
Imports	2.6	3.1	3.5	2.5	2.9	4.1	0.6	0.6	0.6
Total Supply	**89.3**	**80.9**	**85.5**	**381.2**	**359.2**	**316.5**	**9.4**	**8.0**	**8.3**
Domestic use	30.7	32.2	36.4	298.2	290.3	265.6	4.3	3.5	4.0
Exports	35.1	28.6	31.3	50.7	41.1	32.1	3.5	3.2	3.2
Closing stocks	23.5	20.2	17.8	32.3	27.8	18.9	1.5	1.3	1.0
	CANADA (August/July)			**CANADA**			**THAILAND** (Nov./Oct.)[3]		
Opening stocks	7.8	7.2	5.9	5.7	3.6	3.4	6.4	7.8	13.0
Production	23.2	25.3	26.7	22.4	21.9	23.8	23.8	22.8	23.8
Imports	0.1	0.1	0.1	1.3	1.0	0.9	0.4	0.8	0.6
Total Supply	**31.1**	**32.5**	**32.7**	**29.5**	**26.5**	**28.0**	**30.5**	**31.4**	**37.4**
Domestic use	7.7	8.9	8.5	19.9	18.2	18.4	12.0	11.9	12.2
Exports	16.2	17.7	18.6	6.0	4.9	5.5	10.7	6.5	8.0
Closing stocks	7.2	5.9	5.6	3.6	3.4	4.0	7.8	13.0	17.2
	ARGENTINA (Dec./Nov.)			**ARGENTINA**			**INDIA** (Oct./Sept.)[3]		
Opening stocks	1.3	3.7	1.8	0.8	1.6	3.6	21.4	21.5	24.0
Production	15.9	13.7	11.5	30.0	32.8	29.9	96.0	104.3	100.0
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Supply	**17.2**	**17.4**	**13.3**	**30.9**	**34.4**	**33.5**	**117.5**	**125.9**	**124.1**
Domestic use	5.1	5.1	5.1	9.1	10.4	9.6	91.1	92.9	94.1
Exports	8.4	10.5	7.0	20.2	20.4	22.0	4.8	9.0	7.7
Closing stocks	3.7	1.8	1.2	1.6	3.6	1.9	21.5	24.0	22.3
	AUSTRALIA (Oct./Sept.)			**AUSTRALIA**			**PAKISTAN** (Nov./Oct.)[3]		
Opening stocks	3.7	5.6	5.5	3.1	3.1	2.7	1.0	0.3	0.5
Production	27.4	29.5	22.5	11.4	13.0	11.5	4.8	6.2	6.3
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Supply	**31.1**	**35.1**	**28.1**	**14.4**	**16.2**	**14.2**	**5.9**	**6.5**	**6.9**
Domestic use	6.9	7.1	6.1	6.5	7.0	7.2	2.6	2.9	3.1
Exports	18.6	22.5	19.0	4.8	6.4	4.8	3.1	3.0	3.3
Closing stocks	5.6	5.5	3.0	3.1	2.7	2.1	0.3	0.5	0.5
	EU (July/June)			**EU**			**VIET NAM** (Nov./Oct.)[3]		
Opening stocks	15.5	10.7	11.4	28.0	21.3	21.6	3.5	2.9	3.2
Production	136.2	137.5	130.8	143.2	150.3	138.2	26.7	28.2	28.9
Imports	4.7	7.5	6.0	9.2	6.8	8.5	0.6	0.6	0.6
Total Supply	**156.4**	**155.7**	**148.2**	**180.3**	**178.4**	**168.2**	**30.7**	**31.7**	**32.6**
Domestic use	123.2	127.8	120.2	152.8	149.7	146.8	20.7	21.1	21.4
Exports	22.5	16.5	18.0	6.2	7.2	4.4	7.1	7.5	7.6
Closing stocks	10.7	11.4	10.0	21.3	21.6	17.0	2.9	3.2	3.6
	TOTAL OF ABOVE			**TOTAL OF ABOVE**			**TOTAL OF ABOVE**		
Opening stocks	54.9	50.6	44.8	85.7	61.9	59.0	33.4	34.0	42.0
Production	262.7	260.4	253.3	537.6	542.1	487.9	158.8	167.4	165.4
Imports	7.4	10.6	9.6	13.1	10.6	13.5	1.7	2.1	1.9
Total Supply	**325.0**	**321.7**	**307.7**	**636.3**	**614.6**	**560.4**	**194.0**	**203.5**	**209.3**
Domestic use	173.6	181.1	176.2	486.5	475.6	447.7	130.8	132.3	134.9
Exports	100.8	95.8	93.9	87.9	80.1	68.8	29.2	29.2	29.8
Closing stocks	50.6	44.8	37.6	61.9	59.0	43.8	34.0	42.0	44.6

[1] Trade data include wheat flour in wheat grain equivalent. For the **EU** semolina is also included.
[2] **Argentina** (December/November) for rye, barley and oats, (March/February) for maize and sorghum; **Australia** (November/October) for rye, barley and oats, (March/February) for maize and sorghum; **Canada** (August/July); **EU** (July/June); **United States** (June/May) for rye, barley and oats, (September/August) for maize and sorghum.
[3] Rice trade data refer to the calendar year of the second year shown.

Table A10. Total oilcrops statistics *(million tonnes)*

	Production[1]			Imports			Exports		
	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast	08/09-10/11 average	2011/12 estim.	2012/13 f'cast
ASIA	**127.7**	**132.1**	**129.2**	**73.1**	**82.9**	**86.2**	**2.3**	**2.6**	**2.2**
China	59.3	60.2	56.6	53.0	62.4	65.2	1.2	1.1	0.9
of which Taiwan Prov.	0.1	0.1	0.1	2.4	2.3	2.4	-	-	-
India	35.5	37.5	37.6	0.2	0.2	0.2	0.5	0.8	0.6
Indonesia	8.9	9.5	9.9	2.0	2.1	2.2	0.1	0.1	0.1
Iran, Islamic Republic of	0.7	0.9	0.9	0.8	0.4	0.8	-	-	-
Japan	0.3	0.3	0.3	5.9	5.5	5.5	-	-	-
Korea, Republic of	0.2	0.2	0.2	1.4	1.4	1.4	-	-	-
Malaysia	4.6	4.7	4.9	0.7	0.5	0.7	-	-	-
Pakistan	4.8	5.5	5.3	1.2	1.5	1.2	0.1	-	-
Thailand	0.7	0.8	0.8	1.9	2.1	2.2	-	-	-
Turkey	2.2	2.3	2.6	2.3	2.3	2.1	0.1	0.1	0.1
AFRICA	**17.1**	**16.9**	**17.0**	**3.1**	**3.1**	**3.4**	**0.9**	**0.9**	**0.9**
Nigeria	4.8	4.9	4.7	-	-	-	0.2	0.2	0.1
CENTRAL AMERICA	**1.2**	**1.2**	**1.2**	**5.9**	**6.3**	**6.2**	**0.2**	**0.2**	**0.2**
Mexico	0.7	0.8	0.8	5.2	5.7	5.6	-	-	-
SOUTH AMERICA	**130.8**	**126.4**	**161.9**	**1.7**	**1.6**	**1.5**	**46.1**	**51.1**	**60.5**
Argentina	49.0	44.9	61.6	0.5	0.3	0.2	9.7	8.4	14.2
Brazil	70.1	70.5	84.4	0.1	0.3	0.2	30.0	36.2	37.1
Paraguay	6.9	4.8	8.9	-	-	-	4.5	3.7	5.9
NORTH AMERICA	**114.4**	**112.8**	**107.3**	**2.0**	**2.0**	**2.1**	**50.6**	**51.2**	**46.4**
Canada	17.8	20.0	19.0	0.7	0.6	0.5	10.8	12.5	11.3
United States of America	96.7	92.9	88.3	1.3	1.4	1.5	39.8	38.7	35.2
EUROPE	**50.1**	**57.6**	**53.0**	**19.6**	**17.8**	**18.1**	**4.1**	**4.7**	**4.5**
European Union	28.8	29.8	28.0	17.8	16.4	16.5	0.8	0.9	0.8
Russian Federation	8.2	12.5	10.3	1.1	0.9	1.0	0.3	0.6	0.3
Ukraine	11.0	13.0	12.3	-	-	-	2.7	2.8	2.9
OCEANIA	**3.4**	**5.3**	**4.6**	**0.1**	**0.1**	**0.1**	**1.6**	**3.0**	**2.7**
Australia	3.0	4.8	4.2	-	-	-	1.5	2.9	2.7
WORLD	**444.7**	**452.3**	**474.3**	**105.4**	**113.8**	**117.4**	**105.6**	**113.8**	**117.4**
Developing countries	271.5	271.2	304.1	76.9	87.6	90.7	49.2	54.6	63.5
Developed countries	173.3	181.1	170.2	28.5	26.2	26.7	56.4	59.2	53.9
LIFDCs	131.9	135.9	132.8	57.9	67.9	70.5	3.0	3.4	3.0
LDCs	10.5	10.2	10.6	0.4	0.5	0.4	0.4	0.4	0.5

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

Table A11. Total oils and fats statistics [1] *(million tonnes)*

	Imports			Exports			Utilization		
	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*
ASIA	**36.4**	**40.8**	**42.1**	**41.7**	**44.5**	**46.7**	**83.8**	**93.0**	**95.8**
Bangladesh	1.3	1.4	1.4	-	-	-	1.6	1.7	1.7
China	10.7	10.7	11.5	0.6	0.5	0.5	31.3	34.8	36.0
of which Taiwan Prov.	0.4	0.5	0.4	-	-	-	0.8	0.9	0.9
India	8.8	10.0	10.2	0.5	0.5	0.4	18.3	19.7	20.2
Indonesia	0.1	0.1	0.1	19.1	20.6	21.8	6.5	8.3	8.9
Iran	1.3	1.4	1.5	0.2	0.1	0.1	1.7	1.7	1.8
Japan	1.2	1.2	1.3	-	-	-	3.0	3.1	3.1
Korea, Republic of	0.9	1.0	1.0	-	-	-	1.2	1.4	1.4
Malaysia	2.0	2.6	2.6	18.1	19.3	20.3	3.7	3.8	3.9
Pakistan	2.2	2.5	2.6	0.1	0.1	0.1	3.8	4.2	4.2
Philippines	0.5	0.7	0.6	1.1	1.0	1.1	1.3	1.2	1.1
Singapore	0.7	1.0	1.1	0.3	0.2	0.2	0.4	0.8	0.9
Turkey	1.2	1.6	1.5	0.3	0.6	0.5	2.3	2.5	2.6
AFRICA	**8.0**	**8.5**	**8.8**	**1.6**	**1.6**	**1.7**	**13.4**	**14.3**	**14.4**
Algeria	0.6	0.6	0.6	-	-	-	0.7	0.7	0.7
Egypt	1.8	2.1	1.9	0.3	0.3	0.3	2.0	2.2	2.2
Nigeria	1.0	1.1	1.3	0.1	0.1	0.1	2.6	2.9	2.9
South Africa	0.7	0.8	0.8	0.1	0.1	0.1	1.1	1.2	1.2
CENTRAL AMERICA	**2.3**	**2.4**	**2.4**	**0.6**	**0.8**	**0.8**	**4.5**	**4.8**	**4.8**
Mexico	1.2	1.3	1.3	0.1	0.1	0.1	2.9	3.1	3.2
SOUTH AMERICA	**2.3**	**2.6**	**2.6**	**9.0**	**8.8**	**9.3**	**13.2**	**15.2**	**15.4**
Argentina	0.1	0.1	0.1	5.7	5.3	5.7	2.4	3.4	3.4
Brazil	0.5	0.5	0.6	1.9	2.1	2.0	7.1	7.6	7.8
NORTH AMERICA	**4.3**	**4.9**	**5.1**	**6.5**	**6.6**	**6.4**	**17.5**	**19.1**	**19.3**
Canada	0.6	0.6	0.6	2.7	3.4	3.3	0.9	1.1	1.1
United States of America	3.7	4.3	4.5	3.8	3.3	3.2	16.5	18.0	18.2
EUROPE	**13.3**	**12.6**	**12.5**	**6.0**	**8.1**	**7.2**	**35.8**	**36.5**	**35.4**
European Union	10.7	10.3	10.0	2.3	2.6	2.5	29.6	30.1	28.9
Russian Federation	1.1	1.0	1.2	0.8	1.7	1.2	3.9	4.0	4.0
Ukraine	0.5	0.3	0.3	2.6	3.4	3.0	1.0	1.0	0.9
OCEANIA	**0.6**	**0.6**	**0.7**	**1.8**	**1.9**	**1.9**	**1.1**	**1.1**	**1.1**
Australia	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.8
WORLD	**67.1**	**72.3**	**74.1**	**67.2**	**72.3**	**74.1**	**169.4**	**183.9**	**186.1**
Developing countries	46.7	51.8	53.4	53.4	56.3	59.2	109.9	122.0	125.1
Developed countries	20.4	20.5	20.7	13.8	16.0	14.9	59.5	62.0	61.0
LIFDCs	31.9	34.6	35.9	23.4	24.9	26.4	76.7	85.0	87.4
LDCs	4.6	4.9	5.0	0.4	0.5	0.5	7.6	8.0	8.1

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

Table A12. Total meals and cakes statistics[1] *(million tonnes)*

	Imports			Exports			Utilization		
	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*	08/09-10/11 average	2011/12 *estim.*	2012/13 *f'cast*
ASIA	**27.6**	**30.1**	**30.4**	**13.8**	**14.3**	**15.7**	**114.8**	**131.9**	**135.6**
China	3.0	4.1	4.0	1.5	1.0	0.8	60.4	72.8	74.8
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	5.4	6.7	11.9	12.4	12.5
Indonesia	2.9	3.5	3.6	3.0	3.3	3.6	3.4	4.4	5.9
Japan	2.7	2.8	2.8	-	-	-	6.9	6.7	6.8
Korea, Republic of	3.4	3.5	3.4	-	-	-	4.5	4.5	4.5
Malaysia	1.0	1.2	1.2	2.3	2.5	2.6	1.9	1.9	1.9
Pakistan	0.5	0.7	0.7	0.2	0.2	0.1	3.0	3.5	3.7
Philippines	1.7	1.8	1.8	0.5	0.5	0.5	2.4	2.3	2.2
Saudi Arabia	0.5	0.6	0.6	-	-	-	0.5	0.7	0.7
Thailand	2.8	3.3	3.2	0.1	0.1	0.1	4.8	5.6	5.6
Turkey	1.0	1.3	1.4	-	-	-	3.3	3.8	3.8
Viet Nam	3.2	3.4	3.6	0.1	0.1	0.1	3.3	4.3	4.5
AFRICA	**3.8**	**4.4**	**4.5**	**0.9**	**0.9**	**0.9**	**10.0**	**10.9**	**11.0**
Egypt	0.6	0.8	0.9	-	-	-	2.0	2.5	2.6
South Africa	1.1	1.2	1.1	0.1	0.1	0.1	1.8	1.9	1.9
CENTRAL AMERICA	**3.3**	**3.5**	**3.6**	**0.2**	**0.2**	**0.2**	**7.9**	**8.3**	**8.3**
Mexico	1.8	2.0	2.0	0.1	0.1	0.1	5.8	6.2	6.2
SOUTH AMERICA	**4.6**	**5.1**	**5.3**	**43.5**	**46.2**	**48.8**	**23.3**	**23.0**	**22.8**
Argentina	-	-	-	26.4	27.7	29.4	2.5	2.2	1.7
Bolivia	-	-	-	1.1	1.3	1.4	0.2	0.2	0.2
Brazil	0.2	0.3	0.3	13.2	14.3	14.8	14.8	14.2	14.4
Chile	0.9	1.0	1.2	0.4	0.4	0.4	1.3	1.4	1.6
Paraguay	-	-	-	0.9	1.0	1.3	0.3	0.4	0.4
Peru	0.8	0.9	0.9	1.4	1.3	1.4	0.9	1.0	1.0
Venezuela	1.3	1.2	1.3	-	-	-	1.4	1.4	1.4
NORTH AMERICA	**3.2**	**4.4**	**4.4**	**12.1**	**13.4**	**11.0**	**33.5**	**35.3**	**34.1**
Canada	1.2	1.2	1.2	3.1	4.2	3.8	2.1	2.0	2.0
United States of America	2.0	3.2	3.2	9.0	9.2	7.2	31.5	33.3	32.1
EUROPE	**31.0**	**32.3**	**32.8**	**5.1**	**7.1**	**6.7**	**61.1**	**61.7**	**60.8**
European Union	28.6	29.6	30.2	1.2	1.5	1.4	54.4	54.2	53.5
Russian Federation	0.5	0.6	0.6	1.0	2.1	1.7	3.5	4.3	4.2
Ukraine	0.1	0.1	0.1	2.4	3.0	3.1	0.8	0.6	0.5
OCEANIA	**2.1**	**2.5**	**2.5**	**0.2**	**0.2**	**0.2**	**2.7**	**3.2**	**3.3**
Australia	0.7	0.8	0.8	-	-	-	1.3	1.4	1.5
WORLD	**75.6**	**82.3**	**83.4**	**75.7**	**82.3**	**83.5**	**253.3**	**274.3**	**275.9**
Developing countries	35.1	38.6	39.2	58.1	61.4	65.4	145.4	163.5	167.2
Developed countries	40.5	43.8	44.2	17.6	20.9	18.0	107.9	110.8	108.7
LIFDCs	11.9	13.1	13.1	11.1	11.6	12.9	89.9	105.2	108.7
LDCs	0.5	0.6	0.6	0.4	0.4	0.4	3.6	3.7	3.7

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

Table A13. Sugar statistics *(million tonnes, raw value)*

	Production		Imports		Exports		Utilization	
	2011/12 *estim.*	2012/13 *f'cast*	2011/12 *estim.*	2012/13 *f'cast*	2011/12 *estim.*	2012/13 *f'cast*	2011/12 *estim.*	2012/13 *f'cast*
ASIA	**67.6**	**67.2**	**26.4**	**26.2**	**14.3**	**13.2**	**77.3**	**79.2**
China	12.6	13.7	4.2	3.7	0.1	0.2	16.4	16.8
India	28.1	26.6	0.4	0.4	3.0	2.3	24.0	24.6
Indonesia	2.5	2.6	3.0	3.2	-	-	5.6	5.7
Japan	0.8	0.8	1.4	1.5	-	-	2.3	2.3
Korea, Republic of	-	-	1.6	1.6	0.3	0.3	1.3	1.4
Malaysia	-	-	1.6	1.7	0.1	0.1	1.6	1.6
Pakistan	5.2	5.2	0.4	0.5	0.3	0.2	5.3	5.5
Philippines	2.2	2.4	-	-	0.4	0.5	1.9	1.9
Thailand	10.6	10.2	-	-	7.3	7.4	2.8	2.9
Turkey	2.5	2.5	-	-	0.1	0.1	2.3	2.3
Viet Nam	1.5	1.6	0.2	0.2	0.2	0.3	1.4	1.5
AFRICA	**10.7**	**11.2**	**9.7**	**10.6**	**2.9**	**3.0**	**17.9**	**18.5**
Algeria	-	-	1.6	1.7	0.3	0.3	1.4	1.4
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	-	-
Mozambique	0.4	0.4	-	-	0.2	0.2	0.2	0.2
South Africa	2.0	2.2	0.4	0.4	0.3	0.4	2.2	2.2
Sudan	0.7	0.9	0.7	0.7	-	-	1.4	1.5
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	-	0.1	0.5	0.5
CENTRAL AMERICA	**12.6**	**12.9**	**0.9**	**0.8**	**5.3**	**5.6**	**8.1**	**8.1**
Cuba	1.4	1.6	-	-	0.7	0.9	0.7	0.7
Dominican Republic	0.6	0.6	-	-	0.2	0.2	0.4	0.4
Guatemala	2.7	2.7	-	0.1	1.9	1.9	0.8	0.8
Mexico	5.3	5.5	0.5	0.3	1.1	1.3	4.5	4.5
SOUTH AMERICA	**42.1**	**46.1**	**2.0**	**1.9**	**23.0**	**24.8**	**21.9**	**22.4**
Argentina	2.1	2.1	-	-	0.2	0.3	1.8	1.9
Brazil	34.2	38.1	-	-	21.4	23.2	13.7	14.0
Colombia	2.3	2.4	0.3	0.3	0.9	0.7	1.8	1.8
Peru	1.1	1.1	0.2	0.3	-	-	1.3	1.3
Venezuela	0.6	0.6	0.7	0.6	-	-	1.1	1.2
NORTH AMERICA	**7.6**	**8.0**	**5.0**	**4.8**	**0.3**	**0.3**	**12.2**	**12.3**
United States of America	7.5	7.9	3.6	3.5	0.2	0.2	10.8	10.9
EUROPE	**28.7**	**27.2**	**5.9**	**5.6**	**3.3**	**2.5**	**29.8**	**29.9**
European Union	18.9	17.9	3.7	3.2	2.2	1.5	19.2	19.3
Russian Federation	5.5	5.4	1.0	1.2	0.1	0.1	6.4	6.4
Ukraine	2.5	2.2	-	-	0.2	0.2	2.0	2.1
OCEANIA	**4.2**	**4.7**	**0.3**	**0.3**	**3.1**	**3.6**	**1.4**	**1.4**
Australia	4.0	4.5	-	-	3.0	3.5	1.1	1.1
Fiji	0.2	0.2	-	-	0.1	0.1	-	-
WORLD	**173.5**	**177.3**	**50.2**	**50.3**	**52.1**	**52.9**	**168.6**	**171.9**
Developing countries	130.2	134.5	34.7	35.4	45.0	46.0	118.6	121.5
Developed countries	43.2	42.8	15.5	15.0	7.0	6.9	50.0	50.4
LIFDCs	61.2	61.5	21.5	21.9	6.5	6.0	74.8	76.8
LDCs	4.0	4.2	5.5	5.9	0.9	0.9	8.8	9.2

Table A14. Total meat statistics[1] *(thousand tonnes, carcass weight equivalent)*

	Production		Imports		Exports		Utilization	
	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*
ASIA	**123 690**	**127 554**	**14 663**	**14 429**	**4 577**	**4 808**	**133 776**	**137 175**
China	80 196	82 089	3 898	3 771	1 887	1 747	82 207	84 113
of which Hong Kong, SAR	196	201	2 391	2 209	896	810	1 691	1 600
India	7 198	7 730	2	2	1 233	1 437	5 968	6 296
Indonesia	3 094	3 159	91	71	5	5	3 180	3 225
Iran, Islamic Republic of	2 654	2 713	269	127	28	21	2 895	2 818
Japan	3 134	3 197	3 149	3 105	7	9	6 277	6 293
Korea, Republic of	1 813	2 138	1 186	1 011	32	36	2 967	3 112
Malaysia	1 692	1 733	233	257	37	36	1 889	1 954
Pakistan	2 777	2 855	4	4	45	49	2 736	2 810
Philippines	2 809	2 908	339	298	22	37	3 126	3 170
Saudi Arabia	653	776	996	996	50	62	1 599	1 711
Singapore	115	116	301	316	26	24	390	408
Thailand	2 490	2 692	26	39	754	842	1 761	1 889
Turkey	2 225	2 288	93	93	256	313	2 062	2 067
Viet Nam	3 947	4 099	1 100	1 256	61	65	4 986	5 291
AFRICA	**16 076**	**16 151**	**2 303**	**2 524**	**149**	**152**	**18 230**	**18 523**
Algeria	623	632	66	95	1	-	688	727
Angola	170	173	478	506	-	-	647	679
Egypt	1 821	1 720	305	383	5	5	2 121	2 098
Nigeria	1 385	1 402	1	1	-	-	1 386	1 403
South Africa	2 965	3 008	413	451	32	30	3 345	3 429
CENTRAL AMERICA	**8 735**	**8 832**	**2 523**	**2 680**	**492**	**512**	**10 766**	**11 000**
Cuba	276	272	258	272	-	-	534	544
Mexico	6 039	6 101	1 555	1 681	223	262	7 371	7 520
SOUTH AMERICA	**38 044**	**38 579**	**1 071**	**1 142**	**7 317**	**7 519**	**31 798**	**32 202**
Argentina	4 724	4 992	75	38	530	522	4 268	4 509
Brazil	24 027	24 137	44	58	5 976	6 118	18 094	18 077
Chile	1 395	1 422	267	275	275	300	1 387	1 398
Colombia	2 146	2 153	81	92	11	14	2 215	2 231
Uruguay	598	602	25	30	325	358	298	274
Venezuela	1 583	1 617	502	559	-	-	2 085	2 176
NORTH AMERICA	**46 772**	**46 616**	**2 213**	**2 366**	**9 266**	**9 282**	**39 718**	**39 700**
Canada	4 366	4 380	735	777	1 742	1 777	3 359	3 380
United States of America	42 405	42 235	1 464	1 576	7 524	7 505	36 345	36 306
EUROPE	**57 845**	**57 978**	**4 673**	**4 810**	**4 519**	**4 610**	**57 999**	**58 177**
Belarus	1 007	1 038	130	141	317	393	820	786
European Union	45 578	45 380	1 431	1 374	3 999	4 001	43 010	42 753
Russian Federation	7 252	7 497	2 452	2 489	30	28	9 674	9 958
Ukraine	2 155	2 167	188	319	81	97	2 262	2 390
OCEANIA	**5 921**	**6 047**	**392**	**421**	**2 496**	**2 552**	**3 817**	**3 916**
Australia	4 141	4 214	199	224	1 669	1 697	2 672	2 741
New Zealand	1 290	1 340	52	51	825	853	517	539
WORLD	**297 082**	**301 755**	**27 838**	**28 372**	**28 816**	**29 436**	**296 104**	**300 692**
Developing countries	177 494	181 902	16 511	16 729	12 478	12 940	181 527	185 692
Developed countries	119 588	119 853	11 327	11 643	16 337	16 496	114 577	115 000
LIFDCs	112 593	115 402	4 929	5 137	2 815	3 050	114 707	117 489
LDCs	8 827	8 963	1 289	1 367	4	4	10 112	10 326

[1] Including "other meat".

Table A15. Bovine meat statistics *(thousand tonnes, carcass weight equivalent)*

	Production		Imports		Exports		Utilization	
	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*
ASIA	**16 908**	**17 424**	**3 483**	**3 489**	**1 586**	**1 790**	**18 755**	**19 083**
China	6 487	6 474	451	471	167	150	6 772	6 795
India	2 937	3 290	1	1	1 210	1 415	1 728	1 876
Indonesia	550	570	84	65	1	1	633	634
Iran, Islamic Republic of	415	420	194	95	1	2	608	513
Japan	501	508	740	741	2	2	1 218	1 256
Korea, Republic of	280	334	382	342	4	3	627	622
Malaysia	30	31	158	175	9	8	179	198
Pakistan	1 450	1 470	3	3	26	27	1 426	1 446
Philippines	300	310	118	100	5	9	413	402
AFRICA	**5 803**	**5 765**	**528**	**554**	**86**	**78**	**6 245**	**6 240**
Algeria	135	137	63	90	-	-	198	227
Angola	106	107	80	80	-	-	186	187
Egypt	775	682	231	245	1	1	1 005	926
South Africa	920	950	13	10	12	10	921	950
CENTRAL AMERICA	**2 567**	**2 589**	**441**	**462**	**316**	**345**	**2 692**	**2 706**
Mexico	1 820	1 825	275	297	111	150	1 984	1 972
SOUTH AMERICA	**14 516**	**14 819**	**452**	**493**	**2 022**	**2 080**	**12 946**	**13 231**
Argentina	2 530	2 620	2	2	220	175	2 312	2 447
Brazil	9 033	9 214	35	50	1 300	1 360	7 769	7 904
Chile	190	190	167	170	11	7	346	353
Colombia	930	935	2	2	6	12	926	925
Uruguay	473	482	-	-	292	325	181	157
Venezuela	450	450	231	254	-	-	681	704
NORTH AMERICA	**13 151**	**12 881**	**1 130**	**1 254**	**1 674**	**1 509**	**12 638**	**12 624**
Canada	1 154	1 160	279	280	379	364	1 054	1 076
United States of America	11 997	11 721	849	972	1 295	1 145	11 582	11 546
EUROPE	**10 852**	**10 519**	**1 371**	**1 355**	**520**	**452**	**11 703**	**11 422**
European Union	8 056	7 734	321	300	327	230	8 050	7 804
Russian Federation	1 637	1 626	934	940	8	8	2 563	2 558
Ukraine	399	395	8	10	14	11	393	395
OCEANIA	**2 770**	**2 808**	**60**	**58**	**1 755**	**1 784**	**1 041**	**1 067**
Australia	2 150	2 161	13	12	1 293	1 306	835	852
New Zealand	601	627	11	9	460	476	152	160
WORLD	**66 567**	**66 805**	**7 465**	**7 664**	**7 959**	**8 038**	**66 019**	**66 374**
Developing countries	36 720	37 459	4 022	4 115	3 995	4 280	36 720	37 245
Developed countries	29 847	29 346	3 443	3 549	3 965	3 758	29 299	29 129
LIFDCs	18 716	19 086	871	838	1 642	1 868	17 944	18 056
LDCs	3 194	3 235	172	173	2	1	3 364	3 406

Table A16. Ovine meat statistics *(thousand tonnes, carcass weight equivalent)*

	Production		Imports		Exports		Utilization	
	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*
ASIA	**8 146**	**8 224**	**352**	**421**	**46**	**40**	**8 452**	**8 605**
Bangladesh	203	211	-	-	-	-	203	211
China	3 903	3 902	124	152	9	4	4 018	4 051
India	895	910	-	-	11	8	884	902
Iran, Islamic Republic of	500	502	12	8	-	-	512	510
Pakistan	580	608	-	-	16	18	564	590
Saudi Arabia	90	90	45	60	4	5	131	146
Syria	208	205	-	-	-	-	208	205
Turkey	290	285	1	1	-	-	291	286
AFRICA	**2 864**	**2 872**	**32**	**32**	**26**	**26**	**2 870**	**2 878**
Algeria	196	198	-	2	-	-	196	200
Nigeria	445	450	-	-	-	-	445	450
South Africa	175	175	7	6	-	-	182	181
Sudan	505	500	-	-	-	-	505	500
CENTRAL AMERICA	**125**	**127**	**21**	**18**	**-**	**-**	**147**	**144**
Mexico	101	103	11	8	-	-	112	111
SOUTH AMERICA	**313**	**316**	**5**	**5**	**25**	**19**	**293**	**301**
Brazil	113	115	5	5	-	-	118	120
NORTH AMERICA	**87**	**83**	**101**	**86**	**10**	**5**	**178**	**164**
United States of America	71	68	81	70	10	5	143	133
EUROPE	**1 297**	**1 284**	**201**	**165**	**21**	**26**	**1 476**	**1 422**
European Union	993	977	181	146	14	19	1 161	1 104
Russian Federation	186	188	9	8	-	-	195	196
OCEANIA	**971**	**1 013**	**26**	**31**	**614**	**640**	**384**	**404**
Australia	523	549	1	1	285	300	239	250
New Zealand	448	464	2	2	329	340	122	125
WORLD	**13 804**	**13 919**	**739**	**757**	**743**	**757**	**13 800**	**13 918**
Developing countries	10 693	10 770	405	478	98	86	11 001	11 163
Developed countries	3 111	3 149	333	279	646	672	2 799	2 756
LIFDCs	9 130	9 211	123	160	39	33	9 214	9 338
LDCs	1 817	1 836	10	11	-	-	1 827	1 846

Table A17. Pigmeat statistics *(thousand tonnes, carcass weight equivalent)*

	Production		Imports		Exports		Utilization	
	2011 estim.	2012 f'cast	2011 estim.	2012 f'cast	2011 estim.	2012 f'cast	2011 estim.	2012 f'cast
ASIA	**60 433**	**62 150**	**3 561**	**3 447**	**357**	**336**	**63 659**	**65 278**
China	50 498	51 744	1 264	1 269	306	273	51 457	52 740
of which Hong Kong, SAR	135	140	618	612	44	38	709	714
India	320	310	1	1	1	1	320	311
Indonesia	680	690	1	1	-	-	681	690
Japan	1 267	1 275	1 275	1 281	1	1	2 558	2 555
Korea, D.P.R.	110	110	2	2	-	-	112	112
Korea, Republic of	837	1 067	646	520	1	2	1 492	1 603
Malaysia	240	250	16	16	4	6	253	261
Philippines	1 630	1 695	96	87	3	9	1 723	1 774
Thailand	850	850	2	2	22	26	830	826
Viet Nam	3 040	3 192	39	45	10	10	3 065	3 226
AFRICA	**1 229**	**1 247**	**225**	**238**	**8**	**8**	**1 446**	**1 477**
Madagascar	56	56	-	-	-	-	56	56
Nigeria	235	236	-	-	-	-	235	236
South Africa	310	310	42	45	3	4	349	352
Uganda	115	117	1	1	-	-	116	118
CENTRAL AMERICA	**1 708**	**1 726**	**701**	**770**	**117**	**117**	**2 292**	**2 379**
Cuba	168	166	38	42	-	-	206	208
Mexico	1 213	1 231	519	592	91	97	1 641	1 726
SOUTH AMERICA	**4 977**	**5 067**	**151**	**162**	**786**	**832**	**4 341**	**4 397**
Argentina	290	305	58	30	1	1	347	334
Brazil	3 209	3 241	1	1	648	670	2 562	2 572
Chile	528	535	19	22	137	160	410	397
Colombia	181	182	21	35	-	-	202	217
Venezuela	174	178	9	25	-	-	183	203
NORTH AMERICA	**12 286**	**12 525**	**662**	**704**	**3 440**	**3 565**	**9 482**	**9 659**
Canada	1 953	1 945	224	263	1 161	1 219	1 015	989
United States of America	10 333	10 580	433	436	2 278	2 346	8 461	8 665
EUROPE	**27 649**	**27 622**	**1 344**	**1 469**	**2 389**	**2 459**	**26 603**	**26 632**
Belarus	410	420	107	115	101	103	416	432
European Union	23 210	23 117	19	18	2 242	2 290	20 988	20 845
Russian Federation	2 429	2 482	960	965	2	2	3 387	3 445
Serbia	280	290	11	15	8	9	283	296
Ukraine	704	680	115	218	17	31	802	867
OCEANIA	**470**	**482**	**232**	**258**	**40**	**36**	**662**	**707**
Australia	330	340	176	200	39	35	467	507
Papua New Guinea	68	68	7	6	-	-	75	74
WORLD	**108 750**	**110 819**	**6 876**	**7 049**	**7 137**	**7 353**	**108 484**	**110 529**
Developing countries	66 572	68 408	3 295	3 271	1 264	1 289	68 609	70 407
Developed countries	42 178	42 412	3 581	3 778	5 873	6 064	39 875	40 122
LIFDCs	54 012	55 347	1 079	1 119	372	351	54 720	56 115
LDCs	1 239	1 257	160	168	1	1	1 399	1 424

Table A18. Poultry meat statistics *(thousand tonnes, carcass weight equivalent)*

	Production		Imports		Exports		Utilization	
	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*	2011 *estim.*	2012 *f'cast*
ASIA	**36 241**	**37 780**	**7 214**	**7 018**	**2 556**	**2 609**	**40 890**	**42 188**
China	17 858	18 510	2 052	1 873	1 390	1 304	18 520	19 079
of which Hong Kong, SAR	46	47	1 501	1 300	777	700	770	647
India	2 900	3 074	-	-	11	12	2 890	3 062
Indonesia	1 728	1 760	1	-	-	-	1 729	1 760
Iran, Islamic Republic of	1 723	1 775	63	22	27	18	1 760	1 779
Japan	1 354	1 402	1 098	1 050	4	7	2 438	2 445
Korea, Republic of	685	726	145	135	27	32	803	828
Kuwait	47	49	200	200	1	1	246	248
Malaysia	1 420	1 450	41	47	24	22	1 437	1 475
Saudi Arabia	469	592	785	750	35	46	1 219	1 296
Singapore	95	95	137	150	11	10	221	234
Thailand	1 373	1 580	2	1	695	770	681	811
Turkey	1 617	1 690	90	90	242	295	1 465	1 485
Yemen	147	149	83	80	-	-	230	229
AFRICA	**4 781**	**4 856**	**1 486**	**1 669**	**21**	**31**	**6 246**	**6 493**
Angola	8	8	287	310	-	-	295	318
South Africa	1 537	1 550	351	390	11	10	1 876	1 930
CENTRAL AMERICA	**4 217**	**4 271**	**1 343**	**1 412**	**57**	**48**	**5 502**	**5 634**
Cuba	34	35	185	190	-	-	219	224
Mexico	2 804	2 840	739	770	19	14	3 523	3 597
SOUTH AMERICA	**17 913**	**18 070**	**462**	**481**	**4 416**	**4 521**	**13 959**	**14 030**
Argentina	1 725	1 887	14	6	271	310	1 468	1 583
Brazil	11 641	11 536	2	2	4 004	4 064	7 639	7 474
Chile	650	670	81	83	117	124	614	629
Venezuela	950	980	262	280	-	-	1 212	1 260
NORTH AMERICA	**21 001**	**20 879**	**309**	**310**	**4 104**	**4 165**	**17 246**	**17 022**
Canada	1 221	1 237	209	215	182	175	1 249	1 277
United States of America	19 780	19 642	94	90	3 922	3 990	15 992	15 740
EUROPE	**16 852**	**17 357**	**1 594**	**1 655**	**1 504**	**1 588**	**16 943**	**17 424**
European Union	12 277	12 510	809	810	1 335	1 380	11 752	11 940
Russian Federation	2 910	3 110	503	530	19	17	3 394	3 623
Ukraine	1 001	1 041	63	90	50	55	1 014	1 076
OCEANIA	**1 292**	**1 323**	**70**	**70**	**46**	**52**	**1 314**	**1 344**
Australia	1 117	1 142	8	10	38	43	1 084	1 112
New Zealand	150	155	1	1	7	8	143	148
WORLD	**102 297**	**104 535**	**12 478**	**12 615**	**12 704**	**13 014**	**102 100**	**104 135**
Developing countries	59 484	61 232	8 701	8 774	7 020	7 182	61 166	62 823
Developed countries	42 813	43 304	3 777	3 841	5 684	5 832	40 934	41 313
LIFDCs	27 453	28 453	2 817	2 980	731	768	29 538	30 665
LDCs	1 951	2 005	921	990	2	2	2 871	2 993

Table A19. Milk and milk products statistics *(thousand tonnes, milk equivalent)*

	Production			Imports			Exports		
	2008-2010 average	2011 *estim.*	2012 *f'cast*	2008-2010 average	2011 *estim.*	2012 *f'cast*	2008-2010 average	2011 *estim.*	2012 *f'cast*
ASIA	**258 303**	**272 110**	**282 176**	**21 072**	**26 507**	**27 871**	**5 419**	**5 596**	**5 827**
China	40 579	43 053	45 333	3 323	5 342	6 338	317	219	220
India[1]	116 818	127 300	132 400	189	299	247	390	195	182
Indonesia	1 182	1 300	1 400	1 427	1 724	1 791	240	102	95
Iran, Islamic Republic of	7 563	7 570	7 100	210	419	332	158	270	330
Japan	7 871	7 474	7 590	1 250	1 373	1 423	13	6	3
Korea, Republic of	2 169	1 896	1 923	359	762	746	12	9	11
Malaysia	71	52	55	1 067	1 126	1 181	313	320	343
Pakistan	34 370	31 800	32 500	103	242	251	26	35	20
Philippines	13	10	10	1 315	1 360	1 277	289	344	278
Saudi Arabia	1 751	2 000	2 100	1 757	2 810	3 031	1 387	1 803	2 138
Singapore	-	-	1	1 344	1 392	1 366	654	583	563
Thailand	826	860	870	759	916	887	120	142	121
Turkey	12 797	15 000	16 500	252	141	181	140	254	209
AFRICA	**39 541**	**42 598**	**43 356**	**8 433**	**8 992**	**9 225**	**1 312**	**1 246**	**1 043**
Algeria	2 193	3 000	3 180	2 225	2 753	2 532	9	9	10
Egypt	5 793	5 850	5 850	952	1 441	1 717	668	834	647
Kenya	4 004	4 393	4 350	18	26	24	33	35	24
South Africa	3 158	3 223	3 280	97	119	205	104	93	92
Sudan	7 529	7 900	8 000	208	363	331	-	-	-
Tunisia	1 085	1 110	1 125	68	82	76	44	44	42
CENTRAL AMERICA	**16 267**	**16 455**	**16 531**	**4 087**	**4 463**	**4 568**	**490**	**587**	**536**
Costa Rica	917	965	1 010	33	39	45	73	151	112
Mexico	10 829	10 851	10 960	2 256	2 494	2 562	142	160	139
SOUTH AMERICA	**61 920**	**67 058**	**70 784**	**2 476**	**2 382**	**3 144**	**3 025**	**3 601**	**3 952**
Argentina	10 396	11 400	12 000	23	26	28	1 445	2 179	2 347
Brazil	29 558	31 543	32 800	478	850	849	404	106	90
Colombia	7 492	7 515	7 600	11	66	187	40	8	7
Uruguay	1 798	2 180	2 400	11	18	17	736	877	993
Venezuela	2 238	2 350	2 375	1 481	935	1 480	-	-	-
NORTH AMERICA	**94 711**	**96 861**	**98 595**	**2 118**	**1 935**	**1 921**	**4 192**	**5 231**	**5 468**
Canada	8 199	8 292	8 342	339	314	306	153	137	152
United States of America	86 511	88 568	90 250	1 763	1 602	1 595	4 037	5 092	5 314
EUROPE	**213 817**	**215 708**	**218 953**	**5 459**	**5 256**	**5 171**	**13 968**	**15 573**	**15 875**
Belarus	6 476	6 544	6 870	34	27	25	2 009	1 957	2 200
European Union	152 565	155 577	157 910	1 051	838	981	10 388	12 225	12 310
Russian Federation	32 255	31 640	32 000	3 592	3 485	3 191	207	100	91
Ukraine	11 540	11 085	11 200	144	124	171	731	625	511
OCEANIA	**25 517**	**27 062**	**29 236**	**790**	**841**	**877**	**16 236**	**18 685**	**20 154**
Australia[2]	9 211	9 102	9 484	548	594	612	3 319	3 056	3 311
New Zealand[3]	16 237	17 890	19 679	70	60	72	12 913	15 626	16 841
WORLD	**710 076**	**737 851**	**759 630**	**44 436**	**50 375**	**52 778**	**44 642**	**50 519**	**52 854**
Developing countries	345 894	367 159	381 292	34 102	40 411	42 997	10 066	10 878	11 208
Developed countries	364 182	370 692	378 338	10 334	9 964	10 074	34 576	39 640	41 644
LIFDCs	262 717	278 091	289 198	13 833	16 270	17 702	4 854	4 376	4 376
LDCs	28 086	30 087	30 792	2 630	3 282	3 255	112	135	143

[1] Dairy years starting April of the year stated (production only).
[2] Dairy years ending June of the year stated (production only).
[3] Dairy years ending May of the year stated (production only).
Note: Trade figures refer to the milk equivalent trade in the following products: butter (6.60), cheese (4.40), milk powder (7.60), skim condensed/evaporated milk (1.90), whole condensed/evaporated milk (2.10), yoghurt (1.0), cream (3.60), casein (7.40), skim milk (0.70). The conversion factors cited refer to the solids content method. Refer to IDF Bulletin No. 390 (March 2004).

Table A20. Fish and fishery products statistics [1]

	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2009	2010	2009	2010	2010	2011 estim.	2012 f'cast.	2010	2011 estim.	2012 f'cast.
	Million tonnes (live weight equivalent)				USD billion			USD billion		
ASIA	**46.9**	**48.7**	**49.5**	**53.3**	**40.6**	**49.4**	**53.4**	**35.5**	**42.5**	**45.7**
China[2]	15.8	16.4	35.1	37.0	15.2	19.4	21.2	10.2	12.1	12.4
of which: Hong Kong SAR	0.2	0.2	-	-	0.5	0.5	0.7	3.0	3.5	3.6
Taiwan Prov.	0.8	0.9	0.3	0.3	1.5	1.8	2.0	0.9	1.0	1.1
India	4.1	4.7	3.8	4.6	2.4	3.3	4.2	0.1	0.1	0.1
Indonesia	5.1	5.4	1.7	2.3	2.6	3.2	3.8	0.3	0.4	0.3
Japan	4.1	4.0	0.8	0.7	1.9	1.9	1.8	14.9	17.4	19.5
Korea, Rep. of	1.9	1.7	0.5	0.5	1.6	2.0	2.1	3.2	3.9	3.7
Philippines	2.6	2.6	0.7	0.7	0.6	0.6	0.8	0.1	0.2	0.2
Thailand	1.9	1.8	1.4	1.3	7.1	8.5	7.9	2.1	2.7	3.2
Viet Nam	2.3	2.4	2.6	2.7	5.1	6.2	7.1	0.5	0.7	1.0
AFRICA	**7.4**	**7.6**	**1.0**	**1.3**	**5.0**	**5.2**	**5.5**	**3.3**	**4.0**	**4.6**
Ghana	0.3	0.4	-	-	-	-	-	0.1	0.3	0.3
Morocco	1.2	1.1	-	-	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	0.6	0.6	0.7	1.0	1.1
Senegal	0.4	0.4	-	-	0.2	0.3	0.3	-	-	-
South Africa	0.5	0.6	-	-	0.6	0.6	0.6	0.2	0.3	0.4
CENTRAL AMERICA	**2.1**	**2.2**	**0.3**	**0.3**	**1.8**	**2.1**	**2.3**	**1.2**	**1.4**	**2.3**
Mexico	1.6	1.5	0.2	0.1	0.8	1.1	1.4	0.5	0.6	0.6
Panama	0.2	0.2	-	-	0.2	0.1	0.1	-	-	0.1
SOUTH AMERICA	**13.2**	**9.5**	**1.6**	**1.6**	**9.9**	**12.4**	**12.9**	**2.4**	**2.8**	**2.8**
Argentina	0.9	0.8	-	-	1.3	1.5	1.3	0.1	0.2	0.2
Brazil	0.8	0.8	0.4	0.5	0.2	0.2	0.2	1.1	1.3	1.2
Chile	3.5	2.7	0.8	0.7	3.4	4.5	4.8	0.3	0.4	0.4
Ecuador	0.5	0.4	0.2	0.3	1.8	2.5	2.8	0.2	0.3	0.3
Peru	6.9	4.3	-	0.1	2.5	3.1	3.2	0.2	0.1	0.1
NORTH AMERICA	**5.4**	**5.5**	**0.6**	**0.7**	**8.9**	**10.3**	**10.4**	**17.8**	**20.1**	**21.1**
Canada	1.0	0.9	0.2	0.2	3.8	4.2	4.3	2.3	2.6	2.7
United States of America	4.2	4.4	0.5	0.5	4.7	5.8	5.8	15.5	17.5	18.3
EUROPE	**13.3**	**13.8**	**2.5**	**2.5**	**40.5**	**45.0**	**43.4**	**49.3**	**55.6**	**54.0**
European Union[2]	5.2	5.3	1.3	1.3	25.9	29.3	28.6	44.1	49.5	47.9
of which Extra -EU					4.4	5.2	5.4	23.6	26.6	24.7
Iceland	1.1	1.1	-	-	1.8	2.2	2.4	0.1	0.1	0.1
Norway	2.5	2.7	1.0	1.0	8.8	9.4	8.6	1.1	1.3	1.4
Russian Federation	3.8	4.1	0.1	0.1	2.8	3.2	2.8	2.4	2.7	2.5
OCEANIA	**1.2**	**1.2**	**0.2**	**0.2**	**2.6**	**2.7**	**2.6**	**1.5**	**1.7**	**1.9**
Australia	0.2	0.2	0.1	0.1	0.9	1.1	0.9	1.3	1.4	1.6
New Zealand	0.4	0.4	0.1	0.1	1.1	1.2	1.2	0.1	0.1	0.1
WORLD[3]	**89.6**	**88.6**	**55.7**	**59.9**	**109.1**	**127.1**	**130.5**	**110.9**	**128.0**	**132.3**
Excl. Intra-EU					87.7	103.1	107.3	90.4	105.1	109.1
Developing countries	66.0	64.6	51.6	55.8	55.8	67.6	72.8	27.6	33.3	36.0
Developed countries	23.4	24.0	4.1	4.1	53.3	59.5	57.7	83.3	94.7	96.3
LIFDCs	19.9	21.0	8.6	10.6	8.5	10.2	12.0	3.2	4.0	4.4
LDCs	8.7	9.0	2.1	2.5	2.3	2.3	2.4	0.5	0.6	0.6

[1] Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fish meal and fish oil.
[2] Including intra-trade. Cyprus is included in the European Union as well as in Asia.
[3] For capture fisheries production, the aggregate includes also 168 754 tonnes in 2009 and 59 142 in 2010 of not identified countries, data not included in any other aggregates.

Table A21. Selected international prices for wheat and coarse grains *(USD/tonne)*

Period	Wheat			Maize		Barley		Sorghum
	US No. 2 Hard Red Winter Ord. Prot. [1]	US Soft Red Winter No. 2 [2]	Argentina Trigo Pan [3]	US No. 2 Yellow [2]	Argentina [3]	France feed Rouen	Australia feed Eastern States	US No. 2 Yellow [2]
Annual (July/June)								
2007/2008	361	311	322	200	192	319	300	206
2008/2009	270	201	234	188	180	178	179	170
2009/2010	209	185	224	160	168	146	154	165
2010/2011	316	289	311	254	260	274	247	248
2011/2012	300	259	264	281	269	276	250	264
2011 - October	301	255	260	275	276	266	237	265
2011 - November	299	256	239	275	271	260	238	275
2011 - December	290	246	223	259	241	274	233	261
2012 - January	298	257	249	275	258	296	251	271
2012 - February	297	262	263	279	267	294	273	268
2012 - March	294	259	260	280	270	272	254	266
2012 - April	279	255	252	273	256	237	280	242
2012 - May	279	252	251	269	246	248	274	219
2012 - June	288	250	263	268	238	254	260	234
2012 - July	352	318	314	330	285	303	294	293
2012 - August	362	332	335	328	294	311	299	296
2012 - September	372	341	336	323	278	310	313	286
2012 - October	373	339	332	320	274	308	312	290

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

Table A22. Wheat and maize futures prices *(USD/tonne)*

	December		March		May		July	
	Dec. 2012	Dec. 2011	Mar. 2013	Mar. 2012	May 2013	May 2012	July 2013	July 2012
Wheat								
Oct 1	325	224	329	238	329	246	314	249
Oct 8	316	223	320	237	320	246	309	250
Oct 15	312	229	316	241	317	250	306	256
Oct 22	323	232	327	245	328	252	315	256
Oct 29	315	237	321	250	323	258	317	264
Nov 5	318	234	323	244	326	252	321	258
Maize								
Oct 1	298	233	299	238	298	242	295	244
Oct 8	292	236	292	241	290	244	287	246
Oct 15	290	252	290	256	288	259	286	261
Oct 22	300	256	299	260	297	262	293	264
Oct 29	290	258	291	263	290	265	287	267
Nov 5	290	258	291	262	290	265	286	267

Source: Chicago Board of Trade (CBOT)

Table A23. Selected international prices for rice and price indices

Period	International prices *(USD per tonne)*				FAO indices *(2002-2004=100)*				
						Indica			
	Thai 100% B[1]	Thai broken [2]	US long grain [3]	Pakisan Basmati[4]	Total	High quality	Low quality	Japonica	Aromatic
Annual (Jan/Dec)									
2006	311	217	394	516	138	135	132	153	117
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	1008	251	237	250	274	227
Monthly									
2011 – October	620	505	639	963	253	255	261	252	229
2011 – November	649	553	597	950	254	252	262	256	225
2011 – December	620	560	569	890	242	238	253	248	210
2012 – January	548	515	546	950	235	221	238	252	215
2012 – February	563	530	535	950	229	223	239	230	214
2012 – March	567	543	524	950	235	229	242	242	214
2012 – April	569	546	514	825	233	227	242	239	205
2011 – May	613	554	544	881	238	233	243	246	214
2011 – June	619	545	565	931	238	233	240	249	215
2012 – July	600	537	573	931	239	230	241	254	216
2012 – August	584	532	585	935	240	232	242	252	223
2012 – September	602	540	600	875	245	236	248	259	219
2012 – October	595	545	600	935	244	234	248	256	226

[1] White rice, 100 percent second grade, f.o.b. Bangkok.
[2] A1 super, f.o.b. Bangkok.
[3] United States No.2, 4 percent brokens f.o.b.
[4] Basmati: ordinary, f.o.b. Karachi.

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 brokens. The sub-index for Aromatic Rice follows movements in prices of Basmati and Fragrant rice.
Sources: FAO for indices. Rice prices: Jackson Son & Co. (London) Ltd., Thai Department of Foreign Trade (DFT) and other public sources.

Table A24. Selected international prices for oilcrop products and price indices

Period	International prices *(USD per tonne)*					FAO indices *(2002-2004=100)*		
	Soybeans [1]	Soybean oil [2]	Palm oil [3]	Soybean cake [4]	Rapeseed meal [5]	Oilseeds	Edible/soap fats/oils	Oilcakes/meals
Annual (Oct/Sept)								
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	1308	1147	418	279	215	256	221
2011/12	562	1 235	1 051	461	295	214	232	224
Monthly								
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	262

[1] Soybeans: US, No.2 yellow, c.i.f. Rotterdam.
[2] Soybean oil: Dutch, fob ex-mill.
[3] Palm oil: Crude, c.i.f. Northwest Europe.
[4] Soybean cake: Pellets, 44/45 percent, Argentina, c.i.f. Rotterdam.
[5] 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.

Table A25. 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	
Annual (Jan/Dec)	*(US cents/lb)*		
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
Monthly			
October, 2011	25.5	30.7	361.2
November, 2011	24.0	28.8	339.9
December, 2011	23.0	27.4	326.9
January, 2012	23.6	28.2	334.3
February, 2012	24.1	28.8	342.3
March, 2012	24.1	29.0	341.9
April, 2012	22.8	27.3	324.0
May, 2012	20.8	25.2	294.6
June, 2012	20.5	25.9	290.4
July, 2012	22.9	28.2	324.3
August, 2012	20.9	25.8	296.2
September, 2012	20.0	25.4	283.7
October, 2012	20.3	25.8	288.2

Table A26. Selected international prices for milk products and dairy price index

	International prices *(USD per tonne)*				FAO dairy price index *(2002-2004=100)*
Period	**Butter [1]**	**Skim milk powder [2]**	**Whole milk powder [3]**	**Cheddar cheese [4]**	
Annual (Jan/Dec)					
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
Monthly					
2011 - October	4 075	3 346	3 475	4 029	204
2011 - November	3 825	3 400	3 588	3 944	201
2011 - December	3 784	3 433	3 658	3 946	202
2012 - January	3 913	3 425	3 619	4 113	206
2012 - February	3 900	3 369	3 600	4 088	202
2012 - March	3 650	3 200	3 481	3 950	196
2012 - April	3 500	3 025	3 294	3 700	185
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	172
2012 - August	2 942	2 975	2 955	3 600	175
2012 - September	3 175	3 325	3 194	3 775	187
2012 - October	3 250	3 400	3 300	3 925	194

[1] Butter, 82 percent butterfat, f.o.b. Oceania; indicative traded prices
[2] Skim Milk Powder, 1.25 percent butterfat, f.o.b. Oceania, indicative traded prices
[3] Whole Milk Powder, 26 percent butterfat, f.o.b. Oceania, indicative traded prices
[4] 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)

Table A27. Selected international meat prices and FAO meat price indices

	Bovine meat prices *(USD per tonne)*			Ovine meat price *(USD per tonne)*	Pig meat prices *(USD per tonne)*		
Period	**Australia**	**United States**	**Brazil**	**New Zealand**	**United States**	**Brazil**	**Germany**
Annual (Jan/Dec)							
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
Monthly							
2011 - October	3 860	4 490	4 768	6 663	2 729	3 165	2 170
2011 - November	4 165	4 716	4 824	6 636	2 693	3 304	2 233
2011 - December	4 192	4 835	4 642	6 507	2 749	3 148	2 144
2012 - January	4 196	4 910	4 598	6 426	2 658	2 817	1 991
2012 - February	4 277	5 050	4 649	6 456	2 772	2 802	2 149
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

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

Table A28. Selected international meat prices and FAO meat price indices

	Poultry meat prices (USD per tonne)		FAO indices (2002-2004=100)				
Period	United States	Brazil	Total meat	Bovine meat	Ovine meat	Pig meat	Poultry meat
Annual (Jan/Dec)							
2007	935	1443	125	125	105	125	151
2008	997	1896	153	157	117	152	184
2009	989	1552	133	134	109	131	162
2010	1032	1781	152	163	128	138	177
2011	1147	2083	177	189	169	153	206
Monthly							
2011- October	1 201	2 067	176	185	170	156	208
2011 - November	1 200	2 108	181	193	169	159	211
2011 - December	1 172	2 088	179	193	166	155	208
2012 - January	1 201	1 889	174	193	164	145	196
2012 - February	1 196	1 873	178	197	164	152	195
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

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 3 poultry meat product quotations (the average weighted by assumed fixed trade weights), 4 bovine meat product quotations (average weighted by assumed fixed trade weights), 2 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.

Table A29. Fish price indices (2002 - 2004 = 100)

Period	Total	Aquaculture	Capture	White fish	Salmon	Shrimp	Pelagic e/tuna	Tuna	Other fish
Annual (Jan/Dec)									
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
Monthly									
2011 - October	154	145	161	157	168	135	187	179	155
2011 - November	155	137	165	154	169	130	216	175	167
2011 - December	154	136	165	154	170	123	209	182	174
2012 - January	147	128	158	146	148	120	197	179	177
2012 - February	147	130	156	148	151	107	194	200	175
2012 - March	146	129	155	148	147	108	190	192	175
2012 - April	146	130	155	149	154	105	169	194	181
2012 - May	146	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	140	120	152	141	141	102	225	200	170
2012 - September	139	120	151	138	145	102	220	205	168
2012 - October	139	119	150	135	152	102	220	208	168

Source= Norwegian Seafood Export 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.

Table A30. Selected international commodity prices

	Currency and unit	Effective date	Latest quotation	One month ago	One year ago	Average 2007-2011
Sugar (ISA daily price)	US cents per lb	31-10-12	19.39	20.15	25.15	17.62
Coffee (ICO daily price)	US cents per lb	02-11-12	140.39	160.22	193.66	141.05
Cocoa (ICCO daily price)	US cents per lb	02-11-12	113.13	115.14	114.64	122.79
Tea (FAO Tea Composite Price)	USD per kg	30-09-12	3.00	3.00	2.82	2.54
Cotton (COTLOOK A index)	US cents per lb	25-10-12	83.24	81.64	101.82	96.42
Jute "BTD" (Fob Bangladesh Port)	USD per tonne	30-09-12	520.00	500.00	620.00	574.21

INVESTOR PARTICIPATION IN THE CME MAIZE, WHEAT AND SOYBEAN FUTURES AND OPTIONS MARKETS (2008-2012)

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INTRODUCTION

The high maize, wheat and soybean prices of 2012 have drawn attention to the role of investors in the Chicago Mercantile Exchange's (CME's) futures markets and how their participation in the markets this year compares with 2008 and 2011 when prices also reached record or near-record levels. This issue was highlighted by a recent United States court decision rejecting new Commodity Futures Trading Commission (CFTC) limits on speculative positions in a number of commodity markets. Although the ruling does not impact the higher speculative position limits that were implemented in the CME's maize, wheat and soybean markets in January 2012, it has revived discussion of this issue.

In this analysis, we examine volume, open interest, price and market participation patterns over the 2008 – 2012 period, with particular focus on the 2008, 2011 and 2012 price peaks. We draw on the CFTC's weekly "Commitments of Traders" data which show the number of long and short positions held by three categories of participants: i) producers, merchants, processors and other commercial users; ii) swap dealers who use exchange-traded futures and options to manage the risk of products they offer in the over-the-counter markets; and iii) money management firms that continually look for profit opportunities in futures and options, as in other markets.

ANALYSIS

This analysis is accompanied by two sets of figures. One set shows futures prices of the three commodities over the past five years. Our analysis focuses on levels and changes in the long and net long positions of the three participant groups over the period. The other set presents a consolidated measure of these levels and changes – net long positions of each group as a percent of total open interest in each market. For each commodity, we examine in detail eight points during the period – the 2008 price high and low, just prior to the start of the upward price trend leading to the 2011 price high, the 2011 price high and low, just prior to the start of the upward price trend leading to the 2012 price high, the 2012 price high, and the most recent data point available, October 9, 2012.

Similarities across the markets

The analysis reveals several similarities among the markets over the five year period. First, volume has increased significantly, particularly in soybean options. Between 2008 and 2012, the January-September average daily volume has grown as follows:

Second, the producers and other commercial user category is continuously net short, with the largest net short positions when prices are at their highs. This might be expected as they seek to lock in high prices through short hedging. Third, swap dealers are consistently net long but their share of total long

	Futures	Options
	%	
Maize	23	32
Wheat	40	26
Soybeans	42	82

positions and the size of their net long positions when prices are at their highs has dropped. At the 2012 price highs, for example, swap dealers held 19 percent of maize long open interest (compared with 24 percent in 2008), 31 percent of wheat long open interest (compared with 36 percent in 2008) and 15 percent of soybean long open interest (compared with 26 percent in 2008). Fourth, participation of the money managers is generally growing and yet the levels and market shares of their positions vary substantially, but differently, in the three markets. These variations and differences are discussed below.

Differences across the markets

Comparison of the 2012 price peaks with those of 2008 and 2011 reveals a number of differences. We describe the salient characteristics of the maize market first and then contrast it to the wheat and soybean markets.

Maize

In 2008 and 2011, the price peak was in June; in 2012, the peak was in August. The peak prices were successively higher in the three years – from USD 297/mt in 2008, to USD 310/mt in 2011, to USD 327/mt in 2012. The total open interest in the market at the peak in August 2012 of 2.1 million

Figure 1. CME maize prices October 2007 - October 2012

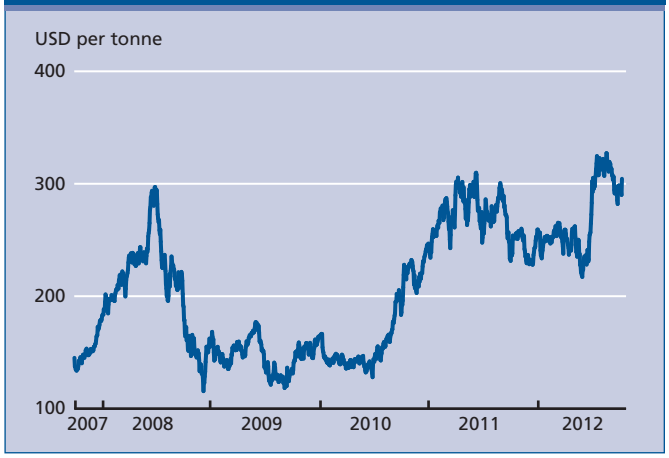
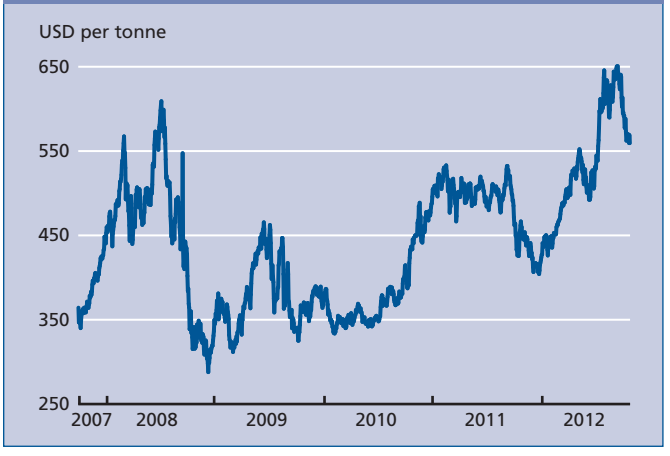


Figure 2. CME wheat prices October 2007 - October 2012

Figure 3. CME soybeans prices October 2007 - October 2012



contracts was slightly lower than the other two years, but not significantly so.

The position of the commercials was little changed in 2012. Their net short positions were about 4 percent less at the 2012 peak than in 2008 and 2011.

The swap dealers' position in the market at the price peaks diminished between 2008 and 2012, as noted above. Their share of total long open interest dropped from 24 percent to 19 percent and their net long positions dropped sharply from 385,000 to 222,000 contracts. Between 2011 and 2012, there was a less marked change with the market share of long open interest falling only from 21 percent to 19 percent and net long positions declining from 238,000 to 222,000 contracts.

Money managers were consistently net long at the three price peaks. In 2012, they recorded the highest net long position, 343,000 contracts compared to 319,000 and 245,000 in 2011 and 2008, respectively. Their long open interest as a share of the total was about 27 percent in 2012 and 2011, up from 21 percent in 2008.

Wheat

The price peaks in 2008 (USD 470/mt) and 2011 (USD 326/mt) were in February but the 2012 high was recorded in July (USD 347/mt) as concern heightened over Russian production and exports. Total open interest at the 2012 peak of 624,000 contracts was slightly higher than the 2008 peak but, in contrast with maize, was significantly lower (-14 percent) than 2011. Options open interest was higher in 2012, but futures open interest was lower.

Unlike maize, commercials' net short positions were sharply lower in 2012 (-19 percent) than in 2011, but higher (+5 percent) than in 2008.

As noted above, swap dealer presence in the maize markets declined steadily from 2008 to 2011 to 2012. In wheat, the pattern was different with swap dealers' positions lower than in 2008, but their long and net long positions much higher in 2011 than in the other two years. Net long positions of the swap dealers dropped 26 percent between the 2011 and 2012 price peaks, and their shares of total long open interest fell from 34 percent to 31 percent.

The patterns of participation of money managers are somewhat different in the maize and wheat markets. In wheat, money managers are net long at the price highs and net short at the price lows, unlike in the maize market where they are consistently net long. Furthermore, between 2011 and 2012, their share of total long open interest rose from 23 percent to 34 percent while their net long positions increased 40 percent. In maize, their net long positions also increased significantly from 2011 to 2012 but their share of total long open interest was little changed.

Figure 4. CFTC Maize; Net Long Positions as a % of Open Interest- Futures and Options; October 2007 - October 2012

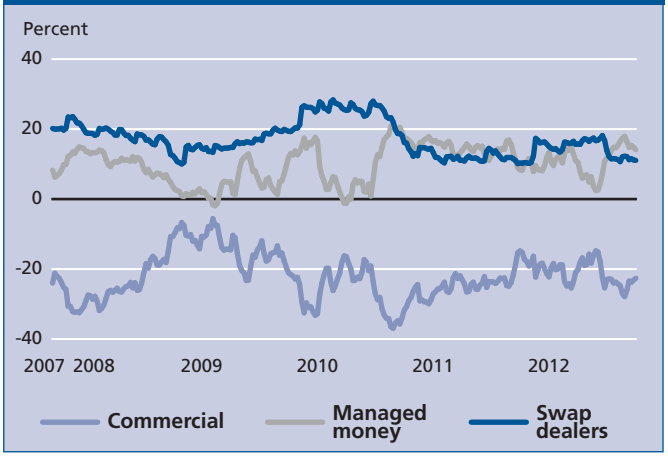


Figure 5. CFTC Wheat; Net Long Positions as a % of Open Interest- Futures and Options; October 2007 - October 2012

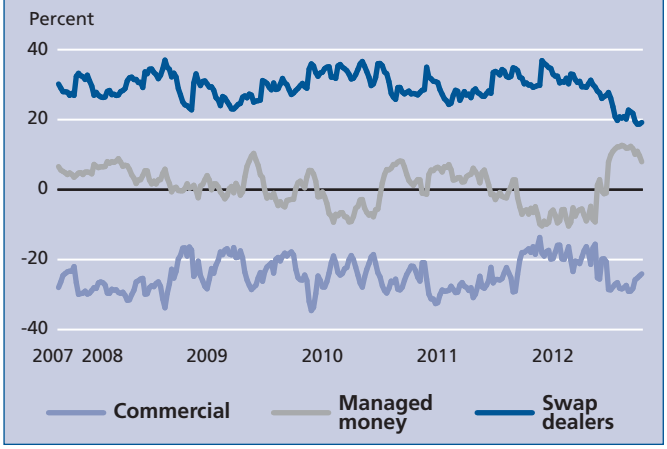
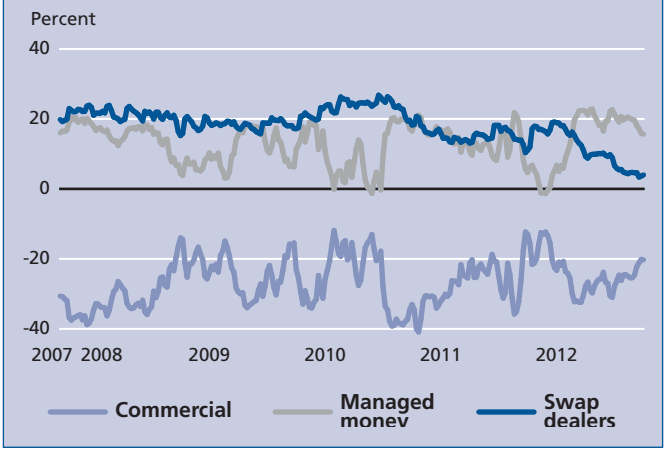


Figure 6. CFTC Soybeans; Net Long Positions as a % of Open Interest- Futures and Options; October 2007 - October 2012



Soybeans

The highest prices in soybeans were observed in July 2008 (USD 609/mt), February – August 2011 (about USD 533/mt), and September 2012 (USD 651/mt). In contrast with the maize and wheat markets, total open interest at the 2012 price peak was sharply higher – nearly double 2008 levels and 28 percent higher than 2011. Both futures and options open interest were higher, at 24 percent and 41 percent, respectively.

Unlike maize and wheat, net short positions of commercials in 2012 were much larger than in 2008 (+29 percent). They were little changed from 2011.

Swap dealer participation in the soybean market is declining, similar to maize and wheat. Their share of total long open interest and their net long positions declined steadily from 2008 to 2011 to 2012. However, the decline between 2011 and 2012 was more dramatic in soybeans. From 2011 to 2012, the share of total long open interest at the price highs fell from 21 percent to 15 percent (21 percent to 19 percent in maize; 34 percent to 31 percent in wheat), and net long positions fell approximately 55 percent (7 percent in maize and 26 percent in wheat).

Money managers were generally net long at the eight points examined over the past five years. Their shares of total long open interest increased from about 29 percent at the 2008 and 2011 price peaks to 32 percent in 2012. Their net long positions increased from 119,000 contracts in 2008, to about 173,000 contracts in 2011, and to about 238,000 contracts in 2012. Their steady increase in participation and the approximately 37% percent jump in net long positions from 2011 to 2012 were similar to the patterns observed in the wheat market.

CONCLUSIONS

The maize, wheat and soybean futures and options markets have become more active in the past five years, as measured by volume and open interest data. Examination of market shares of three major participant groups – commercial users, swap dealers and money managers – at the 2008, 2011, and 2012 price peaks reveals similarities and differences in their usage patterns and trends across the three markets. During the time of the 2012 price peak, the commercials' net short positions in maize were little changed from the 2008 and 2011 peaks, but were larger in soybeans and mixed in wheat. Swap dealers showed lower market shares in all three markets in 2012, albeit to different degrees. Money managers held significant long and net long positions in all markets, with particularly high levels in wheat and soybeans.

EVALUATING RECENT TRENDS IN FUTURES MARKETS

(Ann Berg, Senior Commodity Analyst)

This year is proving to be another high international grain and oilseed price year. It follows two other recent elevated price periods, namely 2008 and 2011, the two years used as bases for comparison. This note attempts to draw parallels and differences among the three years in order to help in evaluating recent market trends.

FUNDAMENTALS

In 2008 and, to a lesser extent in 2010 or 2011, supply shocks were of a different order. In 2008, following decades of a wheat supply overhang, increasing supply shortfalls caused the global wheat stocks-to-use ratio to fall to 22 percent, its lowest level since 1980, the year FAO started to keep records. The 2007/08 season is in fact remembered as the "food crisis" period because most importing countries were caught unprepared for the sudden swing from oversupply to undersupply. In 2010/11, owing mostly to drought and crop devastation in the Black Sea region, several sovereign market interventions such as export bans, export taxes and quotas induced importers to re-direct their demand for wheat to the United States, resulting in dramatic spikes in Chicago wheat futures prices.

INVESTMENT FLOWS

While growth in most industries or sectors in regions outside of emerging markets has been tepid since 2000, growth in futures markets across the globe has been unparalleled. Year-on-year volume increases of 30 percent have been common in traditional exchanges such as the Chicago Board of Trade (merged with the Chicago Mercantile Exchange). In agriculture, volumes approximately quadrupled over the 12 year period. Elsewhere, agricultural futures volumes in the Euronext-liffe rose over the same period from negligible levels to over a million MT per day in some contracts, such as milling wheat; India and China have also developed robust agricultural futures markets in recent years. The rise in futures volume can be roughly traced back to the deregulation of the United States financial sector, which allowed new entrants into futures markets, and the Commodity Futures Modernization Act of 2000, which allowed for a rapid increase in speculative position limits. Other factors, such as markets liberalization, exchange demutualization[1] and the advent of electronic trading, all played a crucial role in transforming futures markets from an insular business conducted by major grain companies and local speculators to a global barometer of food security.

Much debate has arisen from the large speculative inflows of money, sometimes referred to as "the financialization of futures". Many have blamed excessive speculation for the increased volatility witnessed since 2008 and for the intermittent price distortion observed in some markets, notably wheat, when cash and futures prices failed to converge. Contrarily, others have supported the role of speculation in agricultural futures trading, calling it a provider of needed liquidity and claiming that futures markets offer a vehicle to hedge against inflation.

However, the year 2012, more specifically the 2012/13 marketing season, poses a conundrum. Despite high grains and oilseed prices, volumes, volatility and investment flows stalled. Only soybeans, and to a lesser extent wheat, exhibit slightly higher trade volumes during the summer growing season than in 2010 (the highest volume year), whereas maize volumes are clearly lower. Implied volatilities in all three commodities have remained subdued as well. Finally, both the index fund investment[2] and swaps dealers[3] ownership show a decline in the level of participation on an absolute level and as a percentage of open interest. Indeed, the CME reported a 40 percent year-on-year drop in exchange volume (all products including financial futures) for August.

Although it is too early to project forward, commodity speculation for the moment appears to have lost its upward momentum. Anecdotal reports of a loss of "risk appetite" by large proprietary traders, as well as announcements of bank downsizing, may provide some explanation. In addition, a few European banks reported in August[4] that they were withdrawing their food-based commodity-linked products amid political pressures. In the United States, the collapse of two futures commission merchants (FCMs) and the disappearance of customer segregated funds have eroded traders' confidence in futures markets integrity. Some FCMs are closing their futures business due to the low interest rate environment (legally, an FCM can invest customer funds in "safe" interest bearing

[1] The restructuring of exchanges from not-for-profit membership organizations to for-profit publicly traded corporations.

[2] Reflects the total notional amount invested in Exchange traded funds (ETFs), commodity notes, and commodity indices such as the Goldman Sachs Index fund as reported by the Commodity Futures Trading Commission (CFTC).

[3] Swaps dealers are a trader category within the CFTC Commitment of Traders Report that offer clients investment products such as index funds or provide hedgers over the counter (OTC) swaps. Swaps dealers, in contrast to managed money – another trader category, are passive in their trade execution.

[4] "Banks withdraw Food Commodity Funds," Financial Times, August 14, 2012.

Market indicators

Figure 1. CME wheat futures prices

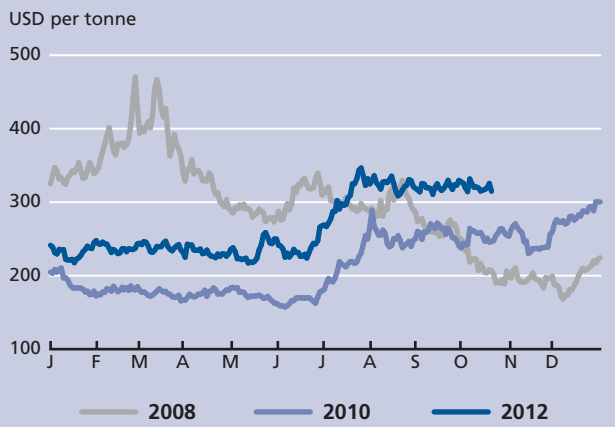


Figure 2. CME maize futures prices

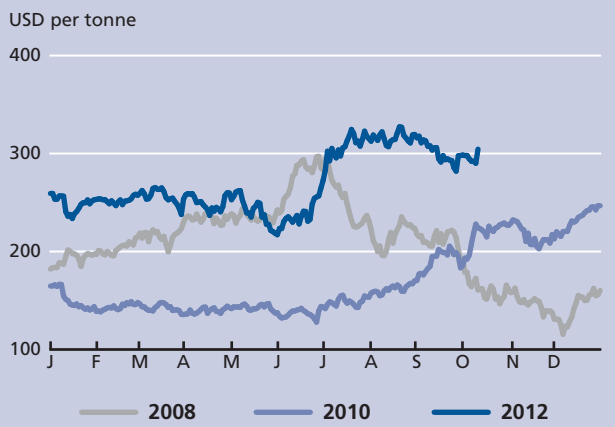


Figure 3. CME soybeans futures prices

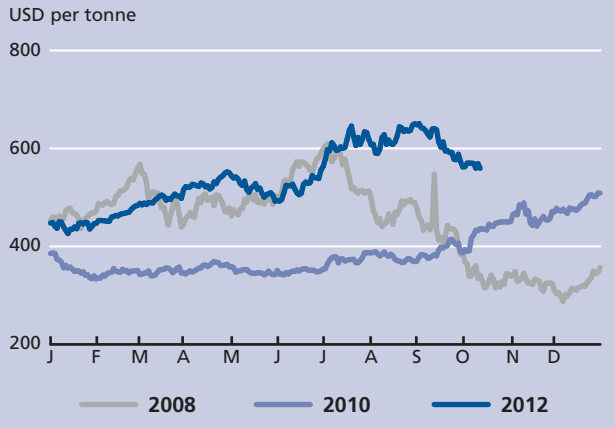


Figure 4. CME wheat futures volumes

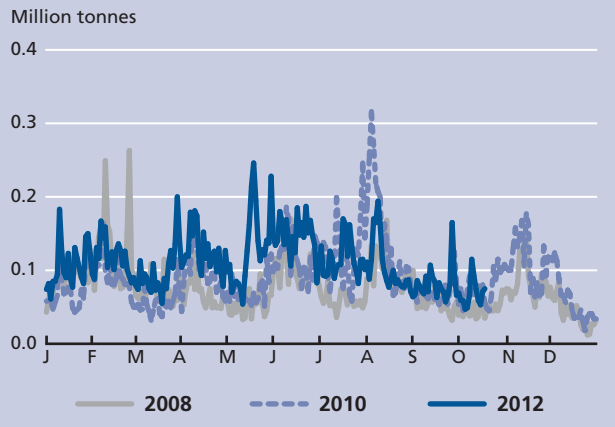


Figure 5. CME maize futures volumes

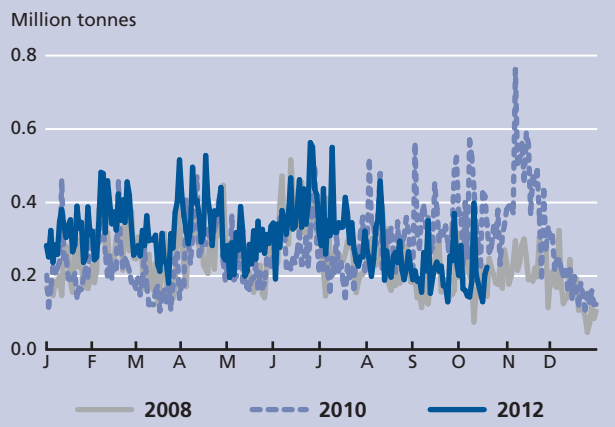
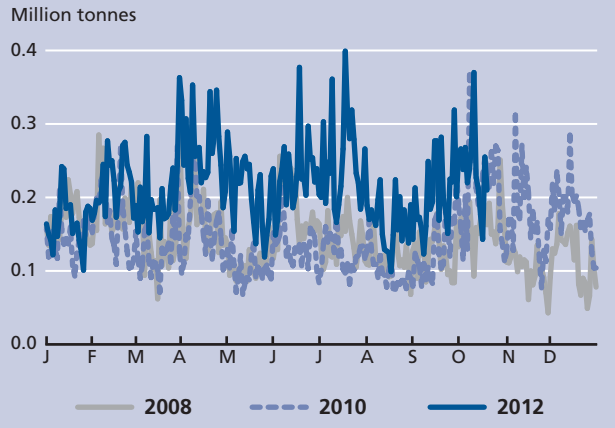


Figure 6. CME soybeans futures volumes



Market indicators

Figure 7. CME wheat implied volatility

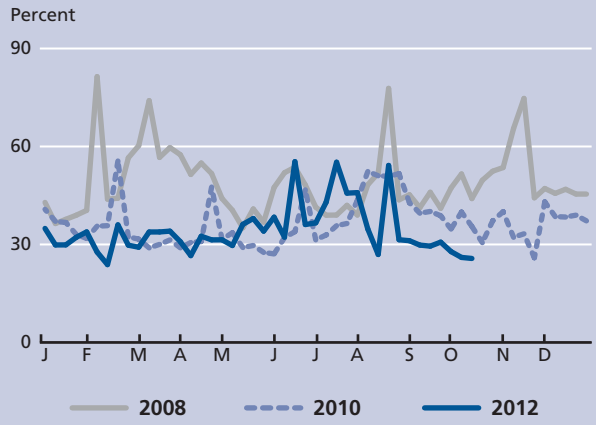


Figure 8. CME maize implied volatility

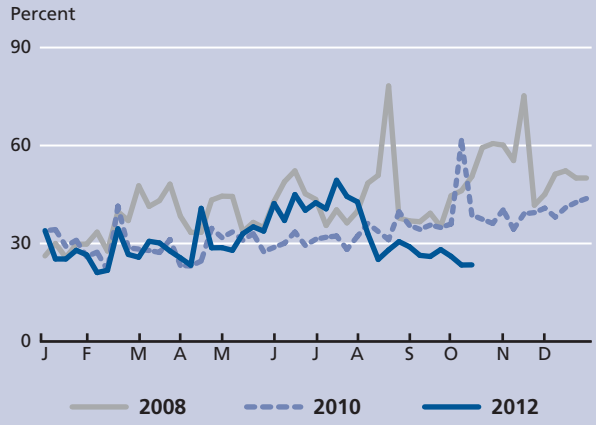


Figure 9. CME soybeans implied volatility

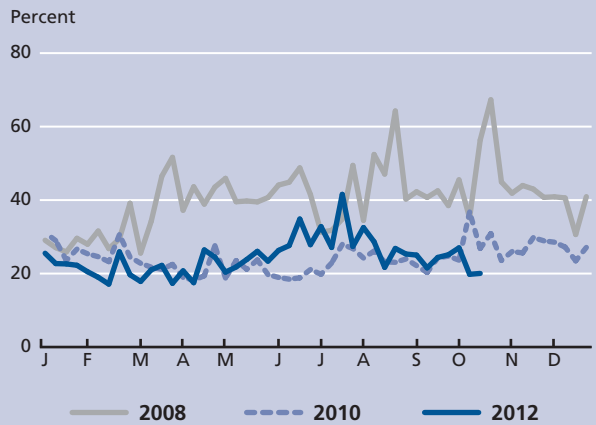


Figure 10. CFTC commitment of traders - wheat net length as % of open interest (Oct 2007 - Oct 2012)

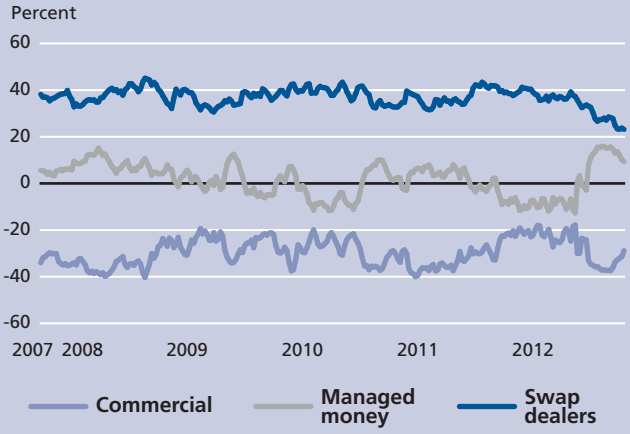


Figure 11. CFTC commitment of traders maize net length as % of open interest (Oct 2007 - Oct 2012)

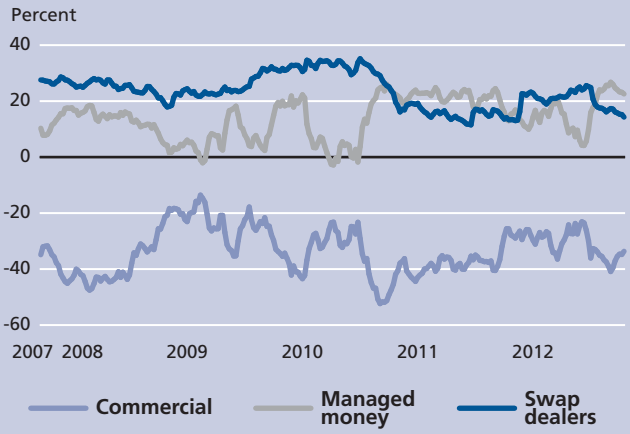


Figure 12. CFTC commitment of traders - soybeans net length as % of open interest (Oct 2007 - Oct 2012)

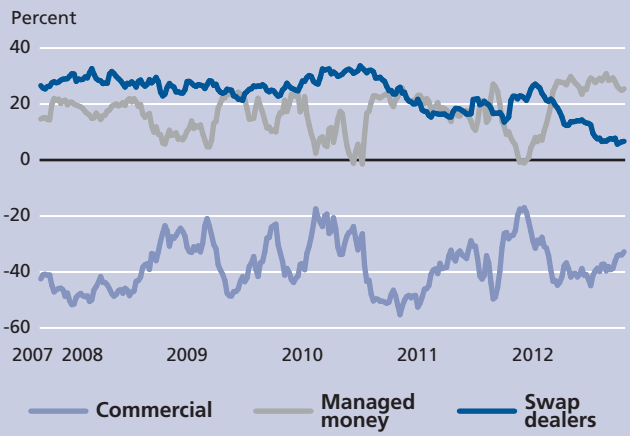


Figure 13. CFTC index investment data notional amounts

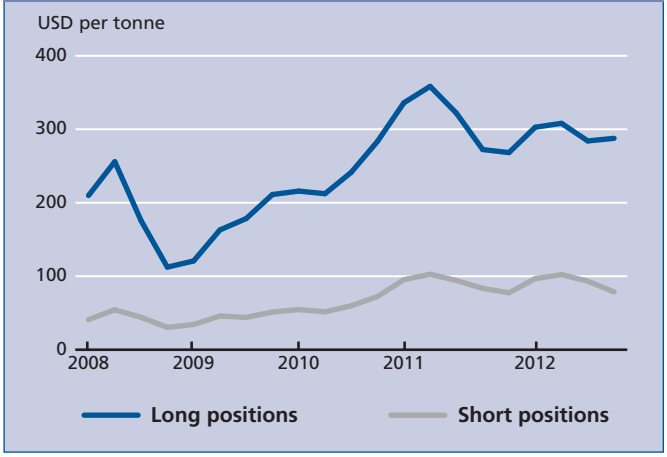
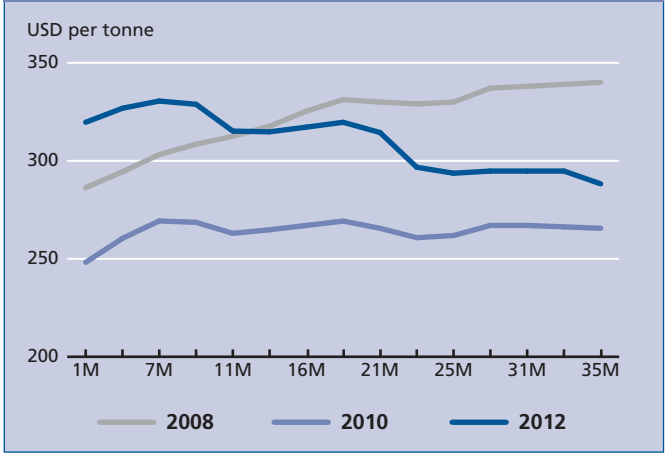


Figure 14. Wheat forward curves Snapshots as of 31 August 2008, 2010, 2012



instruments and keep the interest earned) and the cost burdens associated with Dodd-Frank legislation compliance. Finally a possible global demand slackening may presage fewer potential returns on commodity trading.

FORWARD CURVES

One interesting commodity price development, evidenced by the 2012 forward curves, is the unusual level of backwardation which has persisted into the maize and soybean harvest. Backwardation, characterized by downward sloping prices from one contract month to the next, is normal in the latter half of the crop marketing year when supplies start to diminish, encouraging producers and warehouses to sell remaining inventories and buyers to wait. Normally, markets display contango, upward sloping prices, during harvest to encourage storage. Even the wheat market, which has exhibited steep contango for several years due largely to the enormous stocks in the delivery market, shows a downward stair step pattern over the next three years.

This market structure is important because it may portend two things. First, although not always prescient, the wheat, maize and soybean markets are "predicting" that prices will be lower in the next few years. Second, the maize and soybean markets, which are more steeply backwardated than the wheat market, are reflecting that a rationing process has begun.

ARE HEDGERS RECLAIMING THEIR PRICING POWER?

Unlike past high-priced years, the cash markets in maize and soybeans are exceptionally strong. Producers, having

Figure 15. Maize forward curves Snapshots as of 31 August 2008, 2010, 2012

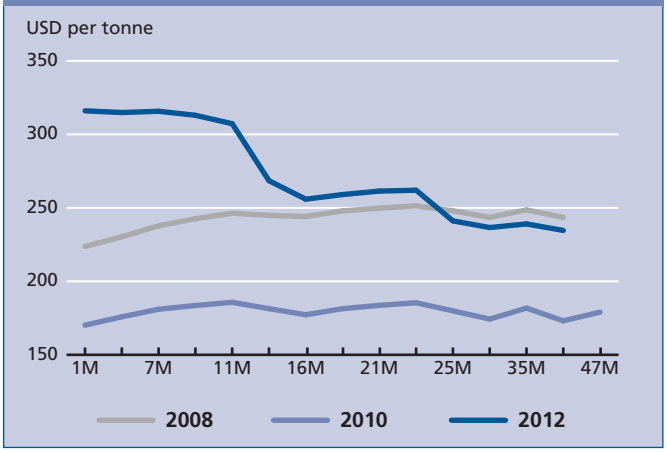
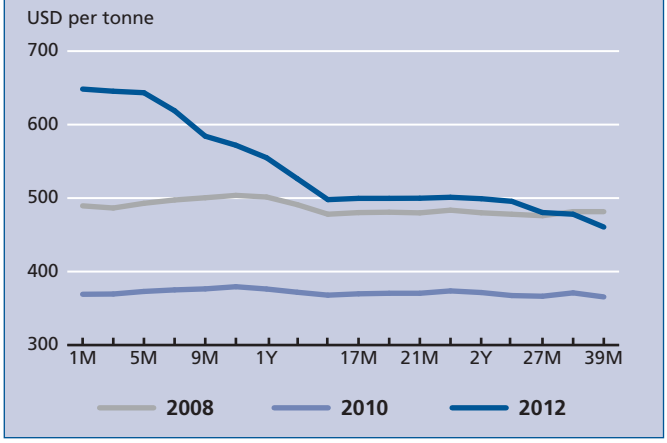


Figure 16. Soybeans forward curves Snapshots as of 31 August 2008, 2010, 2012



adequate space to store, are holding supplies off the market. Indeed, even with harvest almost complete, when basis bids are normally quoted at double digit discount levels to futures price, e.g. minus USD 0.25/bushel December maize futures, some soybean processors and maize end-users have raised basis bids to reflect a premium to futures prices. High basis bids combined with very low maize and soybean supplies in their respective delivery markets may be setting up a market scenario in which price volatility, if it occurs, would take place most likely during the delivery market period. Because speculators are forced to reduce their positions before the commencement of deliveries, these potential price swings would necessarily occur among bona fide hedgers rather than speculators. Indeed a preview of this type of market behavior in the maize market became apparent in 2011 when spreads (difference between the price of two contracts months) such as the March/May became highly volatile during the March 2011 delivery period.

Markets evolve constantly. Despite high prices in 2012, markets appear to be behaving more like the markets of normal years, exhibiting moderate to reduced levels of volatility, volumes and investor participation. Cash and futures prices are fairly convergent. Although it is too early to predict whether these trends will continue and whether some reduction in speculative investment is a causal factor, the recent market efficiency displayed in agricultural futures merits close monitoring and should be a welcome development for policy-makers involved with food security.

OCEAN FREIGHT RATES

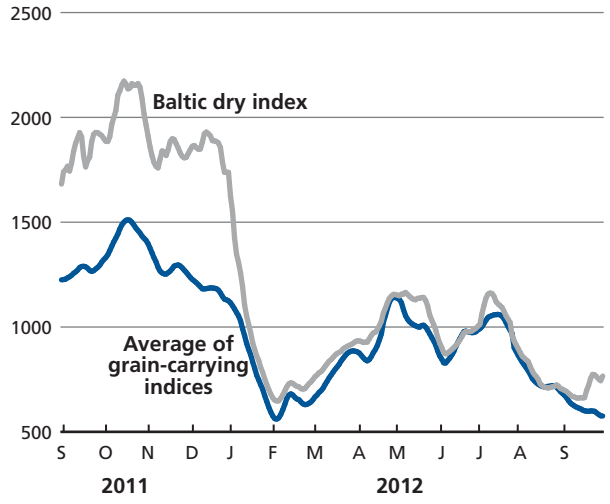
Contributed by the International Grains Council (IGC) www.igc.org.uk

OCEAN FREIGHT MARKET (September 2011 - September 2012)

Dry bulk ocean freight rates in the grain-carrying sectors remained volatile over the last six months and, despite temporary bounces in April and July, fell sharply thereafter on weaker demand for commodities, as global growth slowed. Surplus tonnage weighed on the market, including slippage from the previous year, with an estimated 166 million deadweight tons (dwt) of new fleet capacity, projected to enter the dry bulk sector in 2012-2014, representing more than one-quarter of the 598 million dwt of fleet capacity at the start of 2012. Piracy remained a problem, pushing insurance premiums higher on routes along Africa's east and west coasts, the Arabian Sea and the Indian Ocean. In the near-term, the market is expected to remain weak due to tonnage over-capacity. The average of the three grain-carrying indices registered a net fall of 34% over six months to end-September. The Baltic Dry Index (BDI), however, decreased by a more modest 18%, reflecting a recovery in Capesize values on renewed mineral demand in September.

In April, the Atlantic **Panamax** sector was underpinned by grain and soyabeans cargoes from South America and the US Gulf, with transatlantic roundtrips more than doubling over that month. However, the increase in rates was short-lived, and the market fell sharply in May, with more vessels ballasting from the weaker Pacific and Indian Oceans into the Atlantic. A slowdown in China's mineral demand also weighed. Some owners were laying-up vessels as rates dipped towards break-even levels. By the end of September, the

Ocean freight indices
September 2011 - September 2012



Baltic Panamax Index (BPI) had dropped by 60% since the beginning of April, to the lowest level since December 2008. In May/June, **Handysize/Supramax** rates increased in both basins on improved demand for grains and oilseeds. Rates in the Atlantic were underpinned by shipments from the South Atlantic, the US Gulf, eastern Mediterranean, northern Europe and the Black Sea. However, rates subsequently fell sharply, notably on transatlantic routes and for larger vessels in the Pacific, as demand suffered during the summer months. The monsoon in India reduced iron ore chartering activity, with

rates from the country's east coast to China falling. Over the April/September period, the Baltic Handysize Index (BHSI) fell by 16%, while the Baltic Supramax Index (BSI) lost 18%.

The **Capesize** market, having remained depressed during the summer months due to a persistent oversupply of tonnage, registered a sharp upturn in September, owing to a sizeable increase in China's iron ore and coal imports from Australia, Brazil and India, to replenish the country's dwindling supplies. The improved demand was reflected in the Baltic Exchange Capesize Index (BCI), which advanced by as much as 37% in September and overall was up 25% in five months..

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
Sep 11	42	27	53	54
Oct 11	45	29	55	56
Nov 11	46	28	57	58
Dec 11	44	26	57	58
Jan 12	42	25	55	56
Feb 12	36	21	49	50
Mar 12	35	21	49	50
Apr 12	36	22	52	53
May 12	39	22	52	53
Jun 12	40	20	51	52
Jul 12	39	21	53	54
Aug 12	34	18	48	49
Sep 12	30	17	46	47

FOOD IMPORT BILLS

Global food import bills firmly set to fall in 2012

Considerably lower international prices and freights, together with less cereal purchases are predicted to reduce global expenditures on imported foodstuffs in 2012. The 2012 forecast for global food import bills is set at USD 1.14 trillion, 10 percent lower than the record of last year.

The global food import bill is also likely to be marked by strong to moderate falls in the cost of most foodstuffs compared with 2011. In absolute terms, the largest declines are in vegetable and fruit (-USD 27 billion) and cereals (-USD 24 billion), with important reductions in the value of imports also foreseen for dairy products (-USD 14 billion), sugar (-USD 12 billion) and vegetable oils (-USD 11 billion). The only foodstuff not expected to have decreasing costs are oilseeds, which are set to rise by 10 percent (+USD 7 billion), and fish, by 3 percent (+USD 3 billion).

Much of the drop in the food import bill in 2012 has stemmed from sliding international quotations. The extent of price declines is expected to be more than sufficient to offset the impact of a foreseen expansion in the quantity of trade for most commodities, the notable exception being cereals, which could undergo a 5 percent contraction in volume. In the cereal market, 2012 wheat and maize trade volumes are expected to be down sharply (rice rose slightly) from 2011 levels. The decline in the developing countries is expected to be driven mostly by higher cereal production (reducing the dependence on high-priced grains in world markets). This situation contrasted to the two recent price-surge periods (2007/08 and 2010/11) when the cereal bills of developing countries spiked due to a combination of higher volumes and international prices.

Many of the most economically vulnerable nations are likely to face reduced import bills, with annual falls on the order of 12 percent foreseen for the least developed country (LDC) group as a whole and in sub-Saharan Africa. With improved production, particularly for cereals, and sustained import volumes at lower costs, many countries should experience an increase food availabilities in 2012. However, with much lower international prices for key export commodities, the terms of trade in food and agriculture for commodity-dependent developing countries may also deteriorate.

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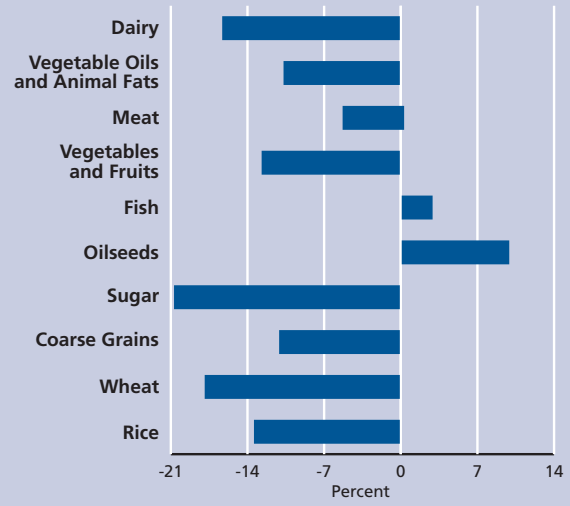
Forecast changes in global food import bills by type: 2012 over 2011 (%)



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

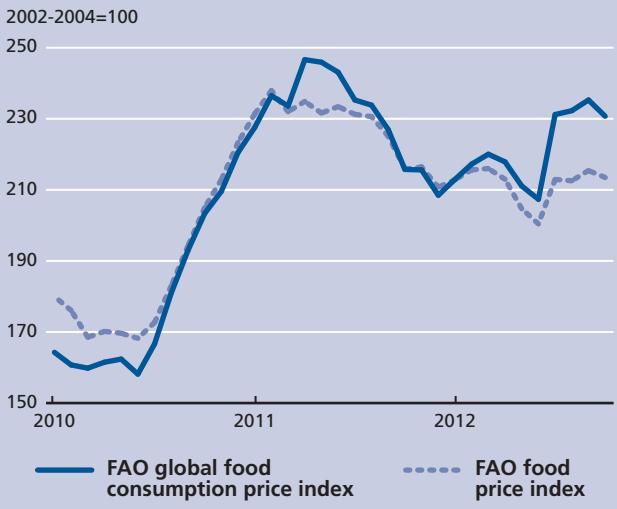
	World		Developed		Developing		LDC		LIFDC		Sub-Saharan Africa	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
TOTAL FOOD	**1 257 479**	**1 135 733**	**784 755**	**709 053**	**472 724**	**426 680**	**34 158**	**30 193**	**215 237**	**200 629**	**43 871**	**38 664**
Vegetable and fruits	217 424	190 441	165 130	144 637	52 293	45 804	2 925	2 562	20 297	17 778	3 073	2 692
Cereals	180 476	156 580	80 057	70 227	100 419	86 352	10 730	9 777	44 270	37 991	14 807	13 388
Meat	118 821	128 676	89 336	92 056	29 485	36 621	1 762	1 833	6 895	9 157	2 418	2 637
Fish	127 112	130 480	96 551	103 654	30 561	26 826	669	587	8 916	7 827	3 505	3 077
Dairy	87 967	73 907	56 558	47 257	31 409	26 650	2 009	1 589	10 703	9 286	2 806	2 295
Vegetable oils and animal fats	112 270	100 543	50 684	44 927	61 586	55 616	6 530	5 687	38 515	34 831	5 547	4 774
Oilseeds	73 409	80 490	26 277	26 799	47 132	53 691	390	615	38 928	45 306	347	365
Sugar	60 719	48 344	32 117	24 766	28 602	23 578	4 282	3 397	14 124	11 761	4 156	3 314

THE FAO PRICE INDICES

FAO Global Food Consumption Price Index remain volatile[1]

The **FAO Global Food Consumption Price Index** tracks changes in the cost of the global food basket as portrayed by the latest FAO world food balance sheet. Representative international prices for each of the commodities or commodity groups appearing in the balance sheet are weighted by their contribution to total calorie intake. After reaching a record of 247 points in April 2011, the index has since exhibited substantial volatility. By October 2012 the index stood at 231 points, some 24 points above the level of June, when the index had fallen to a 20 month low. Volatile prices of cereals are behind these developments including its departure from the FAO Food Price Index (FFPI). Being consumption based, the index gives a much higher weight to cereals than does the FFPI, which derives its weights from trade.

The FAO global food consumption and food price indices
(January 2010 to October 2012)



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

The FAO Food Price Index fell slightly in October[2, 3]

The **FAO Food Price Index** averaged 213 points in October 2012, down 2 points (1 percent) from September. The decline is largely due to reduced international prices of cereals and oils/fats which more than offset increases in sugar and dairy prices while meat values remained unchanged. Food prices averaged 8 percent lower during the first ten months of this year compared to the same period last year

The FAO **Cereal Price Index** averaged 259 points in October, down 3 points (1.2 percent) from September mostly because of slightly lower wheat and maize prices. The small decline in wheat prices reflects reduced trade activity, while maize values were down mostly due to slowing demand from the livestock and industrial sectors. Rice quotations were mostly stable. Compared to October 2011, the FAO Cereal Price Index is 12 percent higher, mostly on a 16 percent increase in wheat and coarse grains, while rice quotations were down by almost 4 percent. The cereal price index is still 15 points (5.4 percent) below its peak of 274 points registered in April 2008.

The FAO **Oils/Fats Price Index** averaged 206 points in October, dropping 18 points (8 percent) from September, and reaching its lowest level in two years. The slide in prices mainly reflects continued abundance in palm oil output in Southeast Asia, combined with weak world import demand. Higher than expected export availabilities of soy, rape and sunflower seed oil, and a general slowdown in global consumption growth also contributed to cooling the market.

The FAO **Meat Price Index** averaged 174 points in October, unchanged from September. International prices of pigmeat have stabilized, as strong gains in Europe and Brazil compensated falling US quotations. Prices in the other meat markets also remain close to their September levels, as pressure from rising feed costs is being countered by sluggish import

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

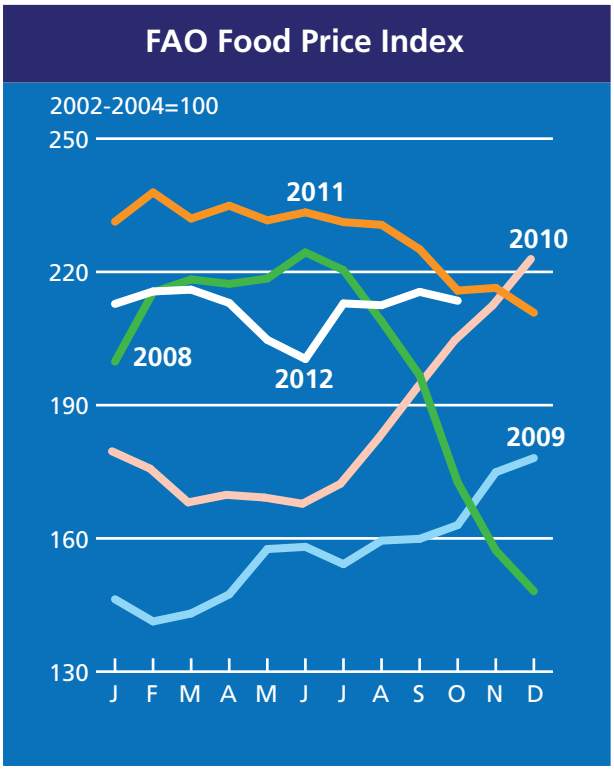
[3] All changes referred to in this section, in absolute or percentage terms, are calculated based on unrounded figures.

Market indicators

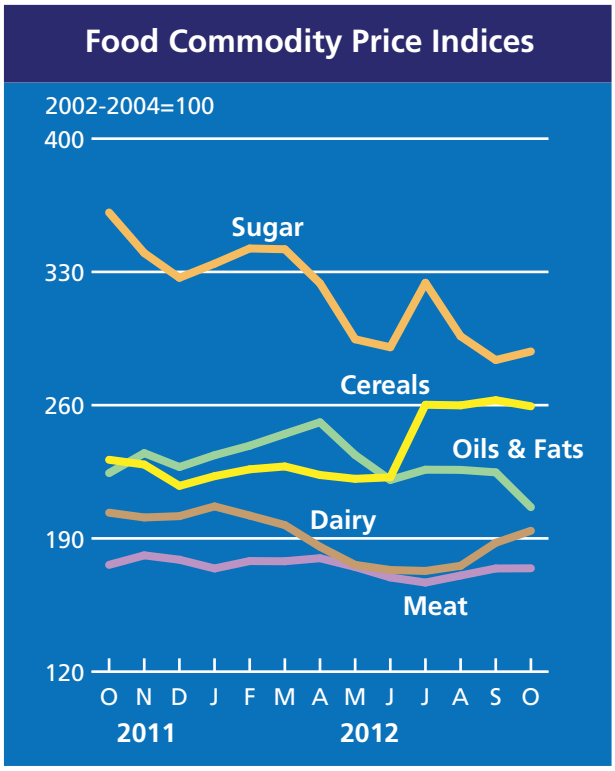
demand. Overall, meat prices between January and October were unchanged from the same period last year, although they retreated somewhat in the case of ovine and poultry meat.

The FAO **Dairy Price Index** averaged 194 points in October, up 6 points (3 percent) from September. Increases were recorded in all of the five dairy product groups, varying from 2.3 percent for skim milk powder and casein to 3.3 percent for whole milk powder and 4 percent for cheese. A seasonal tightening of supplies and low stocks, along with a firm world demand, are behind the stronger dairy quotations. However, prices for the ten first months of 2012 were sharply down compared to the very high levels witnessed in the same period in 2011.

The FAO **Sugar Price Index** averaged 288 points in October, up 4.5 points (1.6 percent) from September, and down 73 points (20.2 percent) from October last year. The recent increase in sugar quotations reflects short-term export tightness in Brazil, the world's largest sugar exporter, but prospects of large overall availabilities in the current 2012/13 marketing season limited the gain.



The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities.



The FAO Food Commodity Price Indices show changes in monthly international prices of major food commodities.

Market indicators

FAO food price index

		Food Price Index[1]	Meat[2]	Dairy[3]	Cereals[4]	Oils and Fats[5]	Sugar[6]
2000		90	96	95	85	68	116
2001		93	96	107	87	68	123
2002		90	90	82	94	87	98
2003		98	97	95	98	101	101
2004		112	114	123	107	112	102
2005		117	120	135	104	104	140
2006		127	119	128	122	112	210
2007		159	125	212	167	170	143
2008		200	153	220	238	227	182
2009		157	133	142	174	151	257
2010		185	152	200	183	194	302
2011		228	177	221	247	252	369
2011	October	216	176	204	231	224	361
	November	216	181	201	229	235	340
	December	211	179	202	218	227	327
2012	January	213	174	207	223	234	334
	February	216	178	202	226	239	342
	March	216	178	197	228	245	342
	April	213	180	186	223	251	324
	May	205	175	176	221	234	295
	June	200	170	173	222	221	290
	July	213	167	173	260	226	324
	August	213	170	176	260	226	296
	September	215	174	188	263	225	284
	October	213	174	194	259	206	288

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

[2] **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.

[3] **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.

[4] **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.

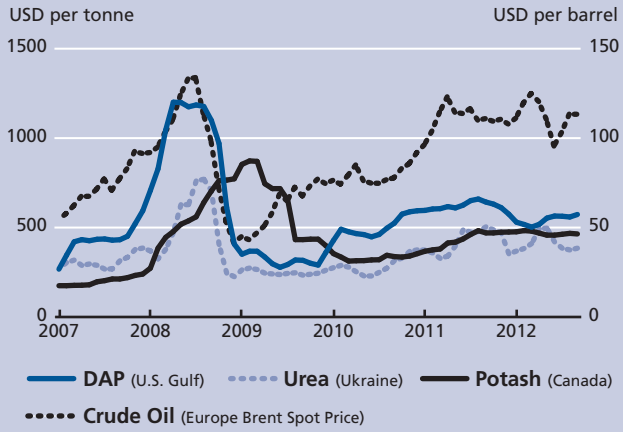
[5] **Oil and Fat Price Index**: Consists of an average of 11 different oils (including animal and fish oils) weighted with average export value shares of each oil product for 2002-2004.

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

OTHER INDICATORS

Monthly fertilizers and crude oil prices: September 2010 to September 2012

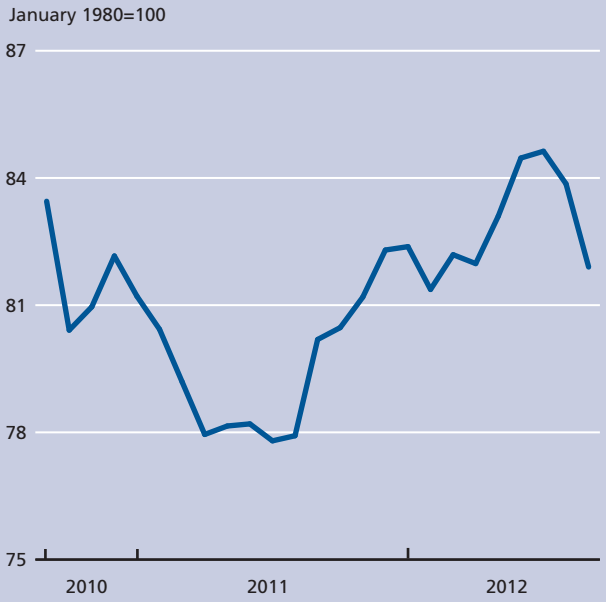
International fertilizer prices followed contrasting movements in 2012: Prices of diammonium phosphate (DAP) recovered in the course of the year, on reduced supplies from China and Australia, but still averaged 12 percent below 2011 between January and September. Potash prices over the period remained generally strong and 11 percent higher year-on-year, sustained by large imports by China. Urea quotations surged from January to May, but showed a tendency to weaken over the third quarter, reflecting slowing purchases by India and Pakistan. These movements kept the urea price average for the first nine months virtually unchanged in 2011 and 2012. Crude oil prices reached a 44 month-high in March 2012 reflecting threats of production disruptions in Middle East countries and fears of interventions limiting access to oil tankers in the in the Strait of Hormuz. After March, prices receded somewhat until June, on fears of a slump of demand, especially in Europe, before rebounding somewhat on renewed concern over limitations of ship movements in the Persian gulf.



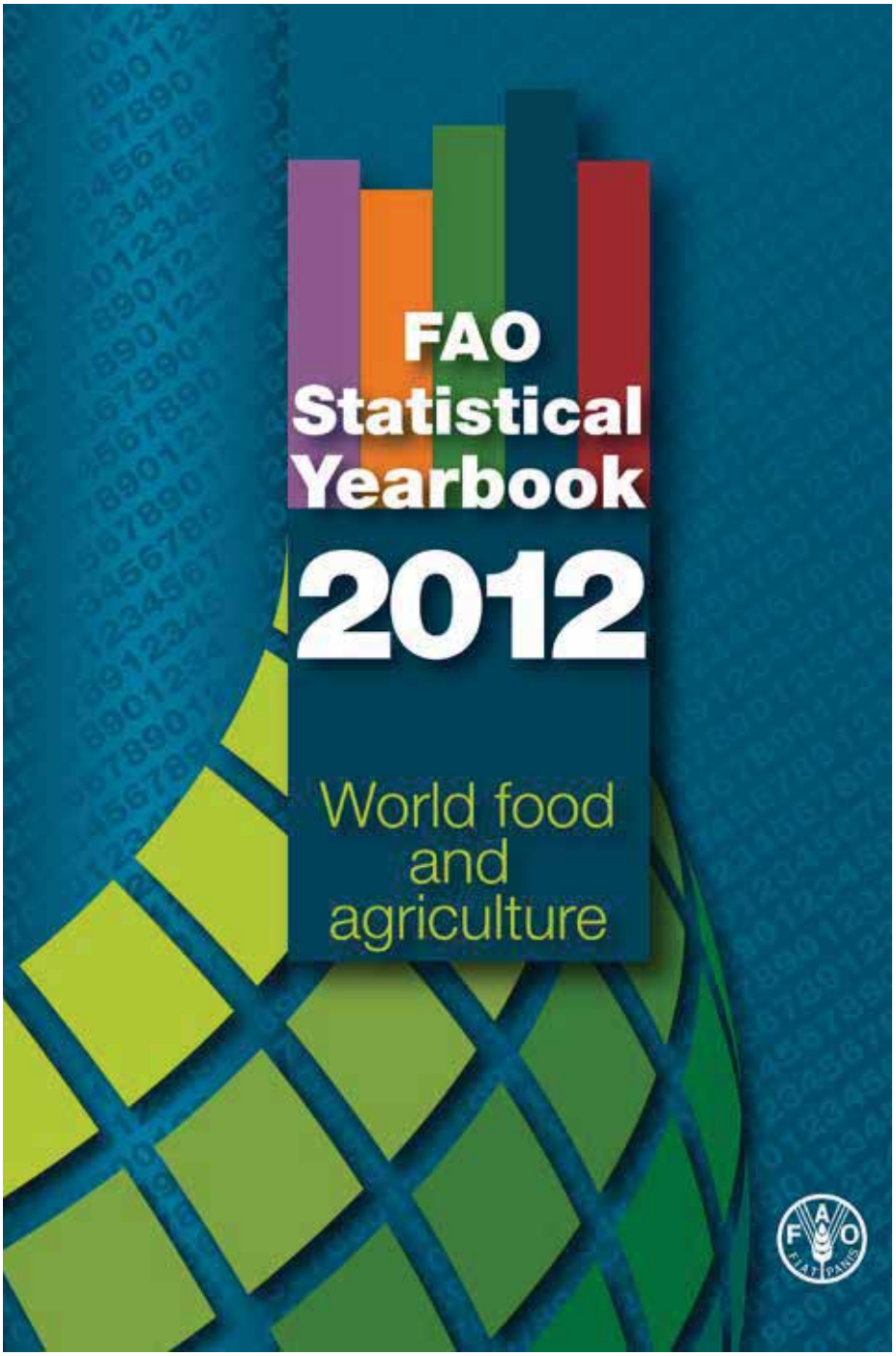
Sources: IMF, World Bank

Price-adjusted major currencies US Dollar Index: September 2010 to September 2012

Over much of the past twelve months, the US Dollar has risen against major currencies, gaining as much as five percent of its value in real terms. However, since September the dollar has begun to decline, reversing the earlier gains and lending support to international prices.



[1] Price-adjusted major currencies US Dollar index
Source: US Federal Reserve



The 2012 edition of the FAO Statistical Yearbook represents a break away from FAO tradition. Through employing data from global statistical providers, including FAO, the publication presents a visual synthesis of the major trends and factors shaping the global food and agricultural landscape and their interplay with broader environmental, social and economic dimensions. In doing so, it strives to serve as a unique reference point on the state of world food and agriculture for policy-makers, donor agencies, researchers and analysts as well as the general public.

The book is subdivided into four thematic parts:

- The setting measures the state of the agricultural resource base, by assessing the supply of land, labour, capital, inputs and the state of infrastructure, and also examines the pressure on the world food system stemming from demographic and macroeconomic change
- Hunger dimensions gauges the state of food insecurity and malnutrition, measuring the multitude of dimensions that give rise to and shape undernourishment
- Feeding the world evaluates the past and present capacity of world agricultural production and the role of trade in meeting changing food, feed and other demands
- Sustainability dimensions examines the sustainability of agriculture in the context of the pressure it exerts on the environment, including the interaction of agriculture with climate change, and how it can provide ecosystem services in relation to the bio-based economy

http://www.fao.org/economic/ess/syb/en/

GIEWS - food price data and analysis tool

www.fao.org/giews/pricetool/

Soaring international food prices in 2007-2008 resulted in higher domestic food prices in many developing countries affecting consumption of low-income populations and causing food riots. A period of high volatility in food commodity markets has entered its sixth successive year, putting in evidence the value of timely market information and analyses to adopt appropriate policy measures.

Between 2009 and 2011 EST-GIEWS developed an online food price data base and analysis tool with financial support of the Government of Spain. It has quickly become a leading world source of information on international and domestic food prices and for analysis on markets and food security.

First and second phase achievements

What's in the database?

- Monthly retail and wholesale prices *plus* Source of data (official data, network of informants, others)
- Staple food commodities (cereals, pulses , meat, fish ...) *plus* Per capita consumption, % of DES, SSR of commodity
- Selected markets in each country *plus* Geographic location and brief description of market

Coverage of database as of October 2012

- 1130 monthly domestic consumer price series in 82 countries
- 36 international cereal export price series

Key features of tool

- Quick browsing with interactive map and one-click chart view
- Powerful database search by commodity, country, geographic region or economic group
- Easy price comparisons with multi-series chart feature
- Customize charts quickly with options for:
  - *Nominal and/or real term prices*
  - *National currencies and/or US dollars*
  - *Local units of measure , kilograms or metric tonnes*
  - *Market seasons*
  - *Time period*
- Quick access to basic statistics for each price series (percent changes, standard deviation...)
- Download chart image, data and other information
- Save charts for return visits or e-mail links

Proposed future activites

- Maintain and expand the data base (additional countries, markets, key commodities, export prices, metadata)
- Integration of FAO-ESA Price Model to detect anomalies in price trends
- Bulk data download (for research work)
- Data/chart extraction service to provide dynamic updates to national web pages
- Develop a GIEWS price web page featuring analytical reports to complement the Price Tool
- Implement **National Price Tool** for country use and to improve flow of information to GIEWS
- Multi-lingual interface (French, Spanish, Chinese, Russian)

AMIS

This EST-GIEWS domestic price analysis activity complements and contributes to the G-20 AMIS initiative, which aims at supporting well-functioning international and national markets through provision of timely and transparent market information.

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

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 October 2012. The next Food Outlook report will be published in June 2013.