■ June 2011

Food Outlook

Global Market Analysis

FOCUS

Halfway into this turbulent year and with new marketing seasons for major food crops commencing soon, this is a critical time to evaluate current developments in global food markets and to draw the early outlook for 2011/12. In a remarkable turn of events, earlier prospects for more comfortable supply situations and stable prices gave way to increasingly worrisome outlooks and to an escalation of international prices to levels not seen in decades. In fact, the FAO food price index in May stood at a near historical high of 232 points, down only 6 points from the February record. While unfavourable weather was the main culprit, a host of other unpredictable factors negatively impacted stability in the food markets, including the catastrophe in Japan, an unprecedented wave of political unrests engulfing many countries in North Africa and the Near East, another strong increase in oil prices, prolonged uncertainty in financial markets and in the global economy.

In the cereal market, barley, maize and wheat are being, for the most part, influenced by production problems and depleting inventories. Maize stocks have fallen to a critical low in the United States, the world's largest maize producer and exporter. Rice is an exception thanks to a record world output and large opening stocks. In addition, generally good cereal production in importing countries, as opposed to exporting countries, also dampened the impact of high international prices this time around as compared with 2007/08. In the oilseeds sector, prices have also risen sharply, supported by a tightening supply and demand balance. Quotations for dairy and meat have not been spared, as prices have been propelled (to record levels in the case of meat) by climbing costs of production, low animal inventories and virtually exhausted product stockpiles. On the back of dwindling export supplies, sugar markets experienced a sharp price surge too, before retreating in recent months. Against this backdrop, food import bills are projected to soar to an all-time high of almost USD 1.3 trillion.

Positive price prospects always boost plantings and this year is no exception. Higher expected returns, combined with good weather, have already resulted in larger outputs in the southern hemisphere, for grains as well as for soybeans. Winter plantings in northern hemisphere countries have also registered notable increases. However, in many instances, the prospect for an expansion in grain production this year does not rest on larger plantings alone but also on expectation of a return to regular climatic conditions. In the Russian Federation, more normal weather after last year's devastating dryness is expected to improve supplies. Encouragingly, the country has announced the lifting of its export ban from July 2011. Weather permitting, excellent crops are also anticipated in Ukraine. However, difficult spring weather conditions prevail in many important producing regions, which eventually, may hamper yields. In Europe and North America, too much rain in some places (maize in the United States) and lingering dry condition in others (wheat in the United States and in the EU) are a major concern. With many countries already struggling with elevated domestic food prices, the conclusions of this year's harvests, especially for those crops that are currently the tightest, such as maize, will be decisive in determining future prices. Given the sharp run down on inventories and only modest overall global production increases for the majority of crops, world prices are likely to remain high and volatile. The most critical months still lie ahead in terms of shaping final crop outcomes. FAO is monitoring the situation closely and, as in the past, will keep the international community informed.

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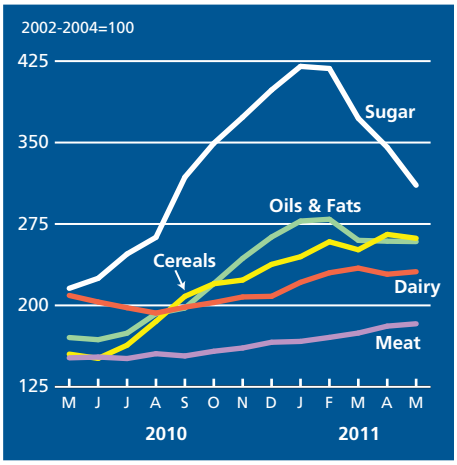
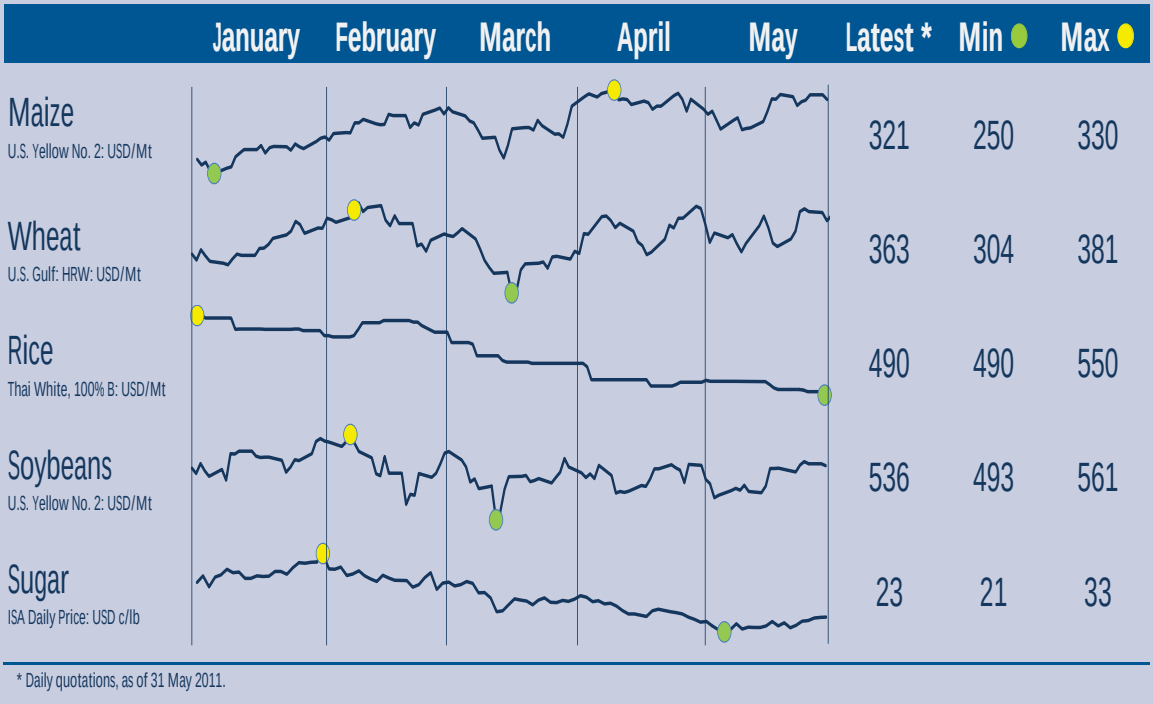
FAO Food Price Indices
(May 2010 - May 2011)



Prices at a glance, January-May 2011



* Daily quotations, as of 31 May 2011.

Acknowledgements

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Cereal market summary

An increase in world production in 2011 is expected to ease the prevailing tight market but will not replenish stocks sufficiently. FAO's first forecast for world cereal production in 2011 points to a record, indicating a rebound of 3.5 percent after a 1 percent decline in 2010. Expectations of yield recoveries and larger plantings are the main reasons for the increase. Global wheat output is expected to be 3.2 percent up from last year's reduced crop, mostly reflecting improved yield prospects in the Russian Federation. World production of coarse grains is set to increase by 3.9 percent, exceeding the 2008 record. Most of this increase is expected in the United States and the Commonwealth of Independent States (CIS). Although preliminary, world paddy production is also heading to a historic high, expanding by 1.8 percent amid expectations of improved climatic conditions.

The first forecast for total cereal utilization in 2011/12 points to an increase of 1.4 percent from 2010/11, compared with a 2 percent rise in 2010/11, as a result of a slowdown in the rate of increase of industrial use of cereals for production of biofuels. World cereal stocks at the close of crop seasons ending in 2012 are put at 494 million tonnes, which would be up only 1 percent from their sharply reduced opening levels. Rice inventories are forecast to increase most, while coarse grain may increase slightly and wheat may decline further. The small anticipated replenishment in world stocks will not be sufficient to lift the stocks-to-use ratio, which is hovering around a low 21 percent. FAO's first forecast of world trade in cereals in 2011/12 indicates a slight increase from 2010/11 with larger wheat imports, a decline in coarse grains and rice remaining steady. With total cereal production barely meeting consumption, international prices are likely to stay high, especially in the wheat and coarse grain markets. The removal of the Russian Federation export ban could help putting some downward pressure on prices but with uncertain crop prospects in the United States and leading producers in the EU, international cereal prices are expected to remain volatile.

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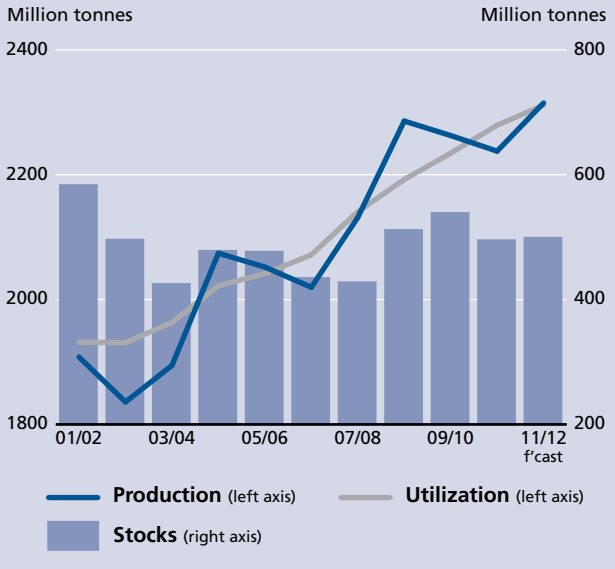
World cereal market at a glance [1]

	2009/10	2010/11 *estim.*	2011/12 *f'cast*	Change 2011/12 over 2010/11
	million tonnes			%
WORLD BALANCE				
Production	**2 262.7**	**2 237.6**	**2 314.9**	**3.5**
Trade [2]	**276.1**	**274.8**	**276.0**	**0.4**
Total utilization	**2 234.4**	**2 279.1**	**2 311.3**	**1.4**
Food	1 037.3	1 054.2	1 069.2	1.4
Feed	767.2	774.3	785.8	1.5
Other uses	430.0	450.7	456.3	1.2
Ending stocks	**533.6**	**490.0**	**493.9**	**0.8**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	151.9	152.5	152.9	0.3
LIFDC (Kg/year) [3]	156.9	158.0	158.9	0.6
World stock-to-use ratio (%)	**23.4**	**21.2**	**21.0**	
Major exporters' stock-to-disappearance ratio (%)	**18.6**	**15.3**	**15.4**	

FAO cereal price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	174	183	256	59.8

[1] Rice in milled equivalent
[2] Trade data refer 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

Following a sharp drop in world wheat production in 2010, global output is forecast to increase by 3.2 percent, to nearly 674 million tonnes, in 2011. The recovery is slightly less than had been anticipated under FAO's first production forecast, published in March, due to unusual spring weather in North America and parts of Europe. World production will not be sufficient to meet the expected demand, in spite of demand not rising as fast as in the previous season. World wheat utilization is forecast to increase by a mere 1 percent, to 677 million tonnes, in 2011/12. The growth in feed use is likely to slow in the new season, largely in anticipation of a recovery of coarse grains supplies in the CIS. World wheat inventory, which is forecast to end in 2011 well below the 2010 level, is anticipated to drop further by the close of 2012 seasons, to 183 million tonnes. At this level, the global stocks-to-use ratio in the new season (2011/12) could drift slightly lower, to around 27 percent, which would still be above the low 22.6 percent of 2007/08. Initial indications suggest a small rebound in world wheat trade after a plunge in 2010/11. At 125 million tonnes, world trade in 2011/12 will be 2 million tonnes higher than in 2010/11, mostly driven by larger imports by several countries in Asia and the EU. A sharp decline in wheat exports from the United States is forecast to be more than offset by larger deliveries from the CIS. In May, international wheat prices have reacted to weather concerns and uncertain production prospects. Prices remain below their February highs but with the United States wheat futures some 75 percent above the corresponding period last year, a return to more normal price levels is unlikely, at least during the first half of the new season (July-December).

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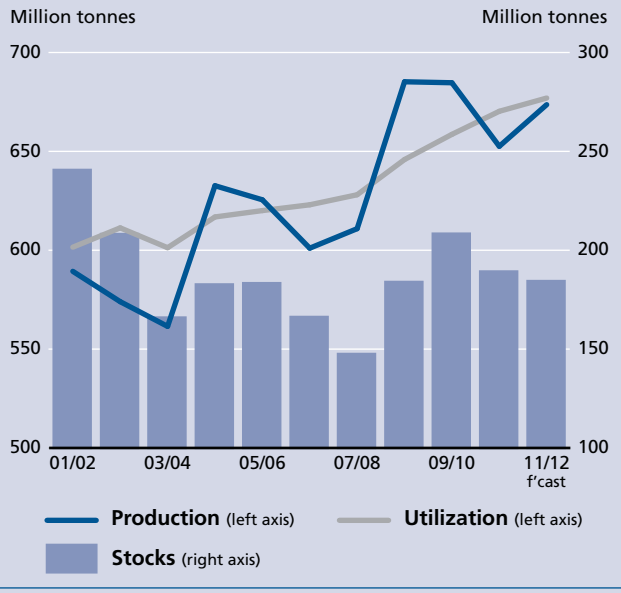
World wheat market at a glance

	2009/10	2010/11 estim.	2011/12 f'cast	Change 2011/12 over 2010/11
	million tonnes			%
WORLD BALANCE				
Production	**684.7**	**652.6**	**673.6**	**3.2**
Trade [1]	**129.8**	**123.0**	**125.0**	**1.6**
Total utilization	**658.6**	**670.3**	**677.0**	**1.0**
Food	463.3	468.1	472.0	0.8
Feed	121.0	125.3	127.5	1.8
Other uses	74.3	76.9	77.5	0.8
Ending stocks	**206.9**	**187.8**	**182.9**	**-2.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	67.8	67.7	67.5	-0.3
LIFDC (Kg/year)	54.4	54.0	53.9	-0.1
World stock-to-use ratio (%)	**30.9**	**27.7**	**27.1**	
Major exporters' stock-to-disappearance ratio (%) [2]	**21.8**	**18.9**	**17.9**	

FAO wheat price index * (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	154	169	242	72.2

* Derived from International Grains Council (IGC) Wheat Index
[1] Trade data refer to exports based on a common July/June marketing season
[2] Major exporters include Argentina, Australia, Canada, EU and the United States

Wheat production, utilization and stocks



Coarse grain market summary

At this early stage, the coarse grain supply and demand outlook for 2011/12 remains tentative. Unfavourable climatic conditions in the northern hemisphere where plantings of this year's crops are still incomplete, make the task of predicting the size of this year's harvest particularly complex. Nonetheless, the outlook for nearly all major producing countries is favourable and world production is forecast to reach a new high of 1 165 million tonnes, up 3.9 percent from 2010. However, this expected output may be just sufficient to meet anticipated utilization in 2011/12. Feed and industrial usages of coarse grains in 2011/12 are likely to increase, although not as fast as in 2010/11, leading to an increase of about 1.4 percent in total utilization. Against these expectations for production and utilization, world stocks are likely to recover slightly from the anticipated heavy drawdown in 2011, but the build-up may prove marginal at 1.3 percent, to 167.7 million tonnes. As a result, the stocks-to-use ratio will remain near historic lows International prices have been reflecting the tightening of coarse grain markets for many months, with quotations exceeding by 50 to more than 100 percent their corresponding 2010 levels. Maize in 2011/12 has traded at prices above the 2008 highs, with maize futures for old crop (harvested in 2010) quoted at a significant premium to the December new crop futures. World trade, which expanded sharply in 2010/11, is expected to decline slightly to 119 million tonnes. Elevated prices are certainly an important factor behind this contraction, but good crop prospects in several importing countries are also expected to keep imports in check. With the possibility of high prices eventually paving the way for some demand rationing, market prices may drift lower in 2011/12, although much will depend on the final harvest outcomes.

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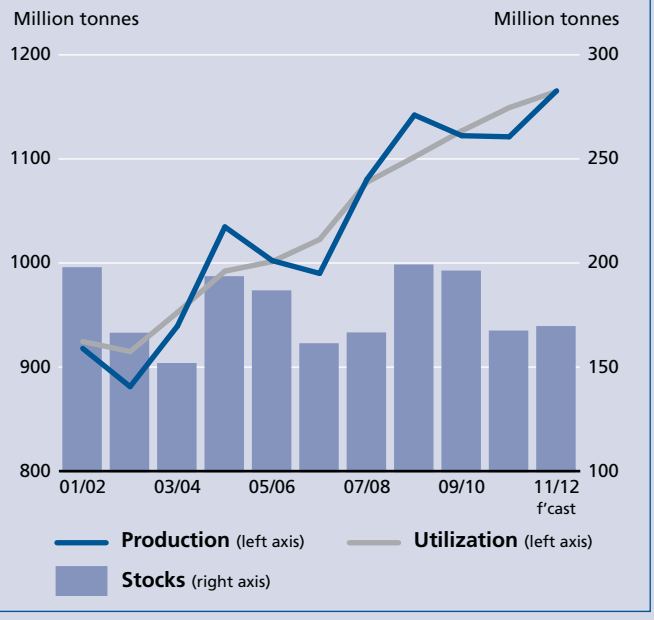
World coarse grain market at a glance

	2009/10	2010/11 estim.	2011/12 f'cast	Change 2011/12 over 2010/11
	million tonnes			%
WORLD BALANCE				
Production	**1 122.3**	**1 121.3**	**1 165.4**	**3.9**
Trade [1]	**115.0**	**120.0**	**119.0**	**-0.8**
Total utilization	**1 127.0**	**1 149.3**	**1 164.9**	**1.4**
Food	191.2	196.9	199.5	1.4
Feed	634.4	636.9	646.1	1.4
Other uses	301.4	315.4	319.2	1.2
Ending stocks	**194.4**	**165.5**	**167.7**	**1.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	28.0	28.5	28.5	0.2
LIFDC (Kg/year)	37.2	38.4	38.2	-0.4
World stock-to-use ratio (%)	**16.9**	**14.2**	**13.9**	
Major exporters' stock-to-disappearance ratio (%) [2]	**14.7**	**8.4**	**8.5**	

FAO coarse grain price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	157	176	279	82.4

[1] Trade data refer to exports based on a common July/June marketing season
[2] Major exporters include Argentina, Australia, Canada, EU and the United States

Coarse grain production, utilization and stocks



Rice market summary

The price strength that characterized the global rice market in the second part of 2010 started to wane in December. By May 2011, rice quotations were 3 percent below their January value, but still 22 percent above their May 2010 level.

Despite a season fraught with problems, which have resulted in lower crop performance than originally envisaged in November, global rice production is estimated to have risen by 1.8 percent to a new record in 2010. The early outlook for the 2011 crop is also positive, with the sector foreseen to grow by 2.6 percent under expectations of more normal weather conditions and steady support from governments.

Trade in rice is forecast to increase by 1.4 percent in 2011, to a level approaching the 2007 record, sustained by increased deliveries to countries in Africa, North America and Europe. Among exporters, Thailand and Viet Nam are likely to cover much of the expansion, while Egypt, Pakistan and the United States are foreseen to ship less than last year.

Global rice utilization is predicted to increase by 2 percent in 2011. On a per capita basis, rice food consumption is expected to remain stable, at around 56 kg per year, constrained by higher domestic prices, which have triggered a spate of government responses to keep food inflation in check.

With global production outpacing consumption, world rice stocks in 2011 are forecast to reach their highest level since 2002. Under current prospects for a continued expansion of world output, world rice reserves may escalate further in 2012.

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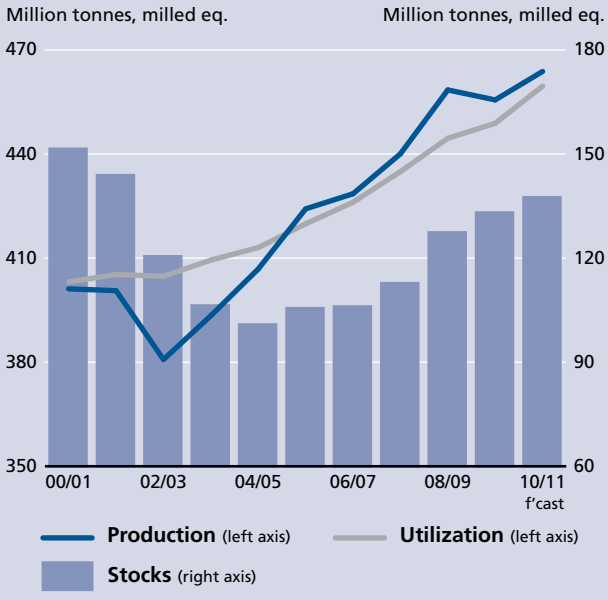
World rice market at a glance

	2008/09	2009/10 *estim.*	2010/11 *f'cast*	Change 2010/11 over 2009/10
	million tonnes			%
WORLD BALANCE (milled basis)				
Production	**458.5**	**455.6**	**463.8**	**1.8**
Trade [1]	**29.6**	**31.4**	**31.8**	**1.4**
Total utilization	**444.5**	**448.9**	**459.6**	**2.4**
Food	379.6	382.8	389.2	1.7
Ending stocks	**126.6**	**132.3**	**136.7**	**3.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	56.3	56.1	56.4	0.5
LIFDC (Kg/year)	68.5	68.0	68.2	0.3
World stock-to-use ratio (%)	**28.2**	**28.8**	**29.1**	**1.2**
Major exporters' stock-to-disappearance ratio (%) [2]	**21.7**	**19.4**	**18.6**	**-4.1**

FAO rice price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	253	229	249	11.7

[1] Calendar year exports (second year shown)
[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam
More detailed information on the rice market is available in the FAO Rice Market Monitor which can be accessed at:
http://www.fao.org/economic/est/publications/rice-publications/rice-market-monitor-rmm/en/

Rice production, utilization and stocks



Oilseeds market summary

The upward trend in world prices for oilseeds and derived products that started in 2009 continued into the current 2010/11 marketing year and, in February 2011, quotations for several oilseeds and derived products came close to the 2008 peaks. The renewed surge in prices mainly reflects a progressive tightening in global supplies combined with steady demand growth and robust buying interest by major importing countries. Spillover effects from increasingly tight grain markets contributed to this development. Although prices have eased somewhat in the last few months, responding to improved production prospects for soybean and palm oil, this relief is not likely to last. Indeed, initial forecasts for 2011/12 suggest that the current tightness in world oil/meal markets could well carry on, and possibly intensify, during the forthcoming season. At this point, the 2011/12 season will set out with low carry-in stocks and the prospect of an only marginal rise in total oilcrop production, due particularly to increased competition for arable land between oilseeds and grains. This means supplies in the coming season may not be sufficient to satisfy the steadily expanding oil and meal demand, which would imply further reductions in global inventories as well as in stock-to-use ratios and, in consequence, continued firmness in prices for oilcrops and oilcrop products in the months to come.

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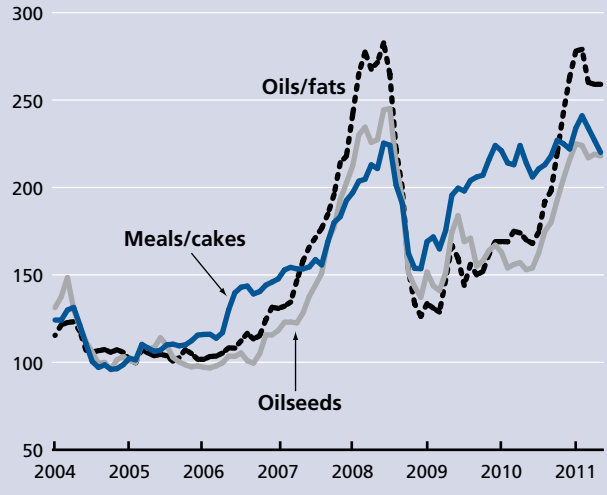
World oilseed and product markets at a glance

	2008/9	2009/10 *estim.*	2010/11 *f'cast*	Change 2010/11 over 2009/10
	million tonnes			%
TOTAL OILSEEDS				
Production	409.7	456.0	464.7	1.9
OILS AND FATS				
Production	161.2	172.2	175.2	1.7
Supply	184.5	195.6	201.0	2.8
Utilization	161.7	170.1	175.1	3.0
Trade	86.3	89.1	91.2	2.3
Stock-to-utilization ratio (%)	*14.5*	*15.2*	*14.7*	
MEALS AND CAKES				
Production	98.2	113.8	116.1	2.0
Supply	116.0	127.7	135.0	5.7
Utilization	102.9	107.6	116.1	7.9
Trade	62.3	67.2	71.2	6.0
Stock-to-utilization ratio (%)	*13.6*	*17.6*	*16.2*	

FAO price indices (Jan-Dec) (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
Oilseeds	161	172	221	40.8
Meals/cakes	194	217	231	6.5
Oils/fats	150	193	267	56.1

Note: Refer to Table 10 for further explanations regarding definitions and coverage

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



Sugar market summary

According to the latest FAO estimate, world sugar production is expected to reach 165.7 million tonnes in 2010/11, an increase of 5.8 percent over the 2009/10 season. For the first time since 2007/08, global production is to surpass consumption, but the surplus is not expected to be large enough to bring global sugar inventories back to normal levels. The increase in global production is largely attributed to bumper crops in Brazil and Thailand and a recovery in India. These increases were prompted by strong overall international sugar prices that prevailed in the past two seasons.

Although world sugar consumption is set to recover from a slowdown in 2009/10, amid buoyant economic growth in 2010/11, relatively high domestic sugar prices will contain the expansion. As a result, little growth in average per capita sugar intake is currently anticipated. World trade is expected to decline by 3.6 percent, as a result of reduced export availabilities in several major exporting countries. Under expectation of a return to normal weather patterns, early estimates for the new 2011/12 season indicate the likelihood of a large production surplus, reflecting expansion in planted areas. If confirmed, international sugar prices are likely to fall back from the peaks of early 2011. However, given the relatively low inventory levels, any unexpected weather events in major producing regions could again trigger sudden and sharp rises in international sugar prices.

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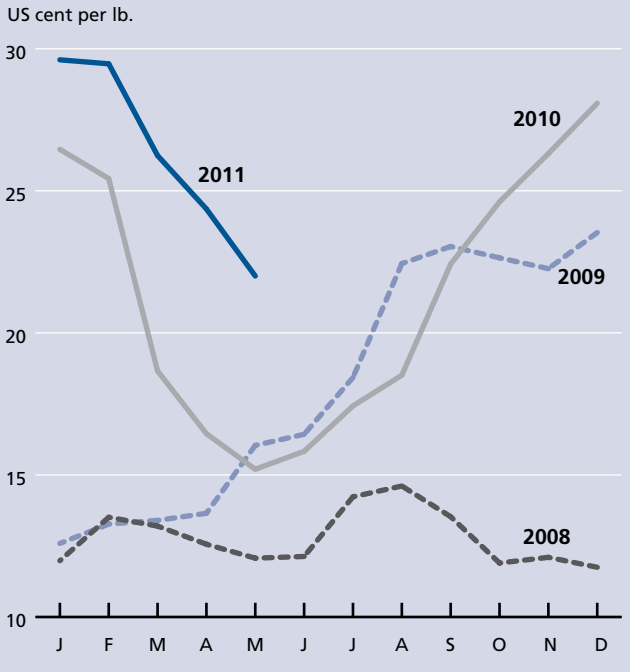
World sugar market at a glance

	2008/09	2009/10 estim.	2010/11 f'cast	Change: 2010/11 over 2009/10
	million tonnes			%
WORLD BALANCE				
Production	**151.0**	**156.6**	**165.7**	**5.8**
Trade	**47.5**	**53.2**	**51.3**	**-3.6**
Utilization	**160.7**	**162.5**	**165.1**	**1.5**
Ending stocks	**60.8**	**54.8**	**55.3**	**1.0**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	23.8	23.8	23.9	0.4
LIFDC (Kg/year)	16.2	16.3	16.1	-1.3
World stock-to-use ratio (%)	**37.8**	**33.7**	**33.5**	

ISA Daily Price Average (US cents/lb)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	18.1	21.2	26.3	28.9

International Sugar Agreement (ISA)



Meat and meat products market summary

High feed prices, disease outbreaks and depleted animal inventories are forecast to limit the expansion of global meat production to only 1 percent in 2011, to 294 million tonnes. The increase is anticipated to be driven by gains in the poultry and pig meat sectors, while world bovine and ovine meat outputs are expected to be constrained by a retention of animals for herd rebuilding.

Strong demand for imports, especially in Asia where a number of countries are facing tight supplies and high domestic prices, is expected to foster a 2.4 percent growth in world meat trade, bringing it to 26.8 million tonnes. Much of the expansion would stem from increased flows of pig meat, and to a lower extent, poultry and bovine meats. On the other hand, trade in ovine meat may stagnate, limited by short availabilities in traditional exporting countries.

Relatively high retail prices are foreseen to keep per caput meat consumption in 2011 stalling around 41.9 kg. In the developing countries, steady economic growth may foster a minimal increase to 32.0 kg, while per caput consumption in the developed countries is expected to remain at 78.4 kg.

International meat prices have maintained steady increases since January 2011, progressing by 5 percent over the first quarter, mainly sustained by a 10 percent increase in pig meat prices. In the near term, the combination of strong world import demand and limited export availabilities points toward a further firming of world meat prices in the next few months.

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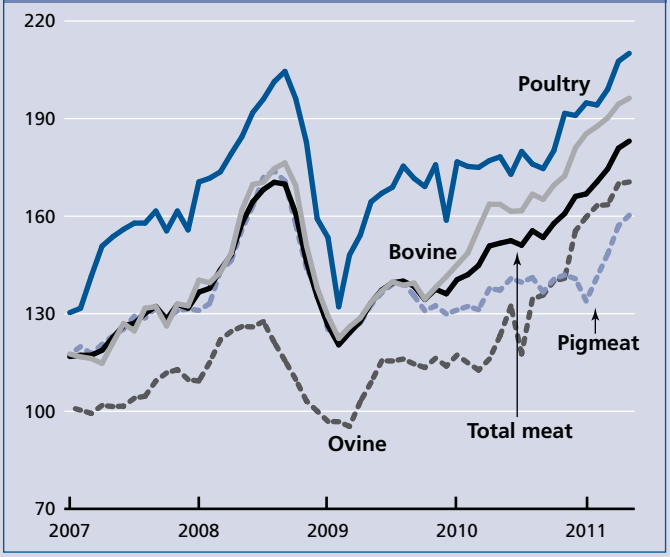
World meat markets at a glance

	2009	2010 estim.	2011 f'cast	Change: 2011 over 2010
	million tonnes			%
WORLD BALANCE				
Production	**283.2**	**290.6**	**294.0**	**1.1**
Bovine meat	64.9	64.9	65.0	0.2
Poultry meat	93.6	98.0	100.2	2.3
Pigmeat	106.3	109.2	110.0	0.7
Ovine meat	12.9	13.0	13.1	0.5
Trade	**25.2**	**26.2**	**26.8**	**2.4**
Bovine meat	7.2	7.5	7.7	1.9
Poultry	11.1	11.5	11.7	1.6
Pigmeat	5.8	6.1	6.4	5.0
Ovine meat	0.9	0.8	0.8	0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World *(kg/year)*	41.3	41.9	41.9	0.1
Developed *(Kg/year)*	78.0	78.4	78.4	0.0
Developing *(kg/year)*	31.1	31.8	32.0	0.5

FAO meat price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	133	152	175	19.9

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



Dairy market summary

Dairy prices surged during the first quarter of the year propelled by strong import demand in Asia and limited supplies in traditional exporting countries. During April, prices fell but bounced back in May as many countries in Northern Europe experienced lower than average rainfall. With the peak season in the region ending soon, international dairy prices during the remainder of the year will be highly dependent on weather conditions in the southern hemisphere.

FAO is currently forecasting world dairy production in 2011 to grow by 14 million tonnes or 2 percent, to 724 million tonnes. Much of the increase would be accounted for by developing countries, especially Argentina, Brazil, China and India, but the sector is also expected to advance in the developed countries, spearheaded by the EU, New Zealand and the United States.

Buoyant world import demand is anticipated to boost trade in dairy products by 5 percent to 48.3 million tonnes in liquid milk equivalent. The positive environment should foster growth in all major internationally traded dairy products, especially skim milk powder (SMP), whole milk powder (WMP) and cheese. The expansion in trade is expected to rely mainly on increased exports from Argentina, Belarus, the EU, New Zealand and the United States.

Sluggish production growth in a number of exporting countries led to a drawing down of public and private stocks to meet rising import demand. As such inventories are now at minimal levels, the availability of supplies for trade in 2011 is increasingly dependent on production performance. As a result, international dairy quotations will be particularly sensitive to climatic conditions for the rest of the year, both in relation to pasture growth and the availability and price of fodder and feed.

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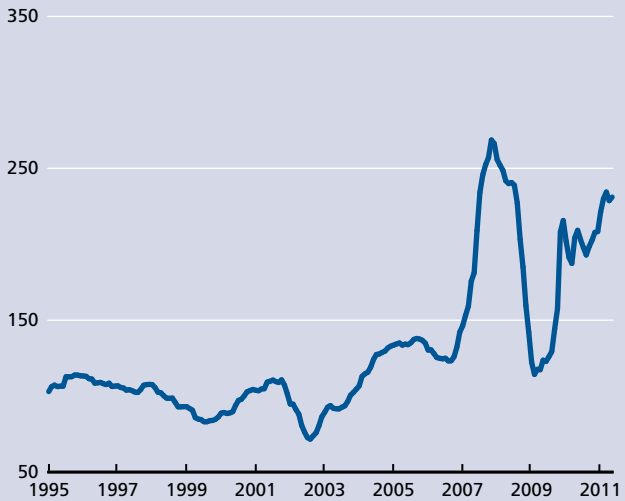
World dairy market at a glance

	2009	2010 estim.	2011 f'cast	Change: 2011 over 2010
	million tonnes milk equiv.			%
WORLD BALANCE				
Total milk production	**698.5**	**710.0**	**723.8**	**1.9**
Total trade	**44.0**	**46.0**	**48.3**	**4.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World *(kg/year)*	101.3	101.8	102.6	0.8
Developed countries *(Kg/year)*	235.7	235.0	235.2	0.1
Developing countries *(Kg/year)*	65.7	66.9	68.2	1.9
Trade - share of prod. (%)	6.3	6.5	6.7	

FAO dairy price index (2002-2004=100)	**2009**	**2010**	**2011 Jan-May**	**Change: Jan-May 2011 over Jan-May 2010 %**
	142	200	229	14.5

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.

Fish and fishery products market summary

Trade volumes and prices are both increasing in 2011, sustained by a dynamic demand, in particular from emerging economies. The price surges mainly reflect lagging supply, which, despite solid growth in overall aquaculture production, remains short of demand for a number of farmed species, including Atlantic salmon, trout, seabass and seabream, tilapia and Vietnamese catfish. In addition, growing domestic consumption of local fish products, especially in Asia and South America, is constraining export availability.

World production is set to reach a new record in 2011, at around 149 million tonnes. This is due to both the growth in aquaculture production and the comeback of small pelagic catches in South America after a weak 2010. Increased catches are also forecast for other important species, such as Atlantic cod, Alaska pollack and Atlantic mackerel. Higher fishing quotas and an increased supply of wild species indicate that the fisheries management measures implemented by many countries are having a positive long-term effect on the sector's sustainability.

The FAO Fish Price Index reached its highest level ever in April 2011. This means that the crisis experienced in late 2008 and throughout 2009, which depressed prices, margins and volumes of trade, is now a matter of the past for most operators. Demand is strong in developing countries and is rebounding in developed markets. Supply is increasing, but costs, especially of feed, labour and energy are also up, which means consumers are likely to face rising fish prices throughout 2011.

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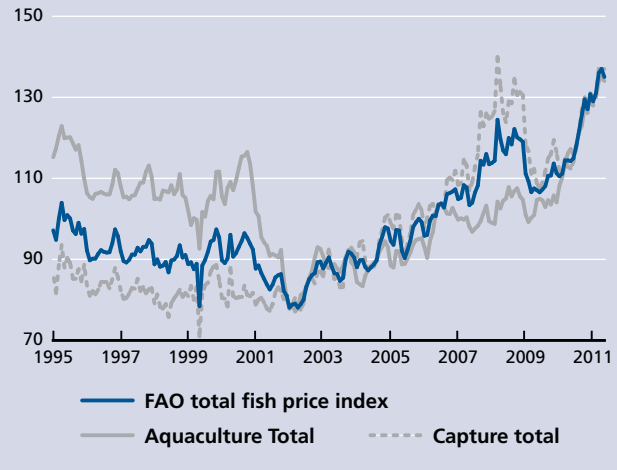
World fish market at a glance

	2009	2010 *estim.*	2011 *f'cast*	Change 2011 over 2010
	million tonnes			%
WORLD BALANCE				
Production	**144.6**	**145.1**	**149.0**	**2.7**
Capture fisheries	88.9	87.0	88.5	1.8
Aquaculture	55.7	58.1	60.4	4.0
Trade value (exports USD billion)	94.9	104.9	108.4	3.4
Trade volume (live weight)	54.9	55.2	55.4	0.4
Total utilization				
Food	117.8	120.0	121.7	1.4
Feed	20.0	17.7	20.3	14.4
Other uses	6.8	7.3	7.0	-4.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/year)	17.2	17.3	17.4	0.3
From capture fisheries (kg/year)	9.1	8.9	8.8	-2.1
From aquaculture (kg/year)	8.2	8.4	8.6	2.8

FAO Fish price index (2005=100)	2009	2010	2011	Change 2011 over 2010 %
	128	117	127	8.5

Data source: Norwegian Seafood Export Council

FAO fish price index (2005=100)



Data source: Norwegian Seafood Export Council

MARKET ASSESSMENTS

WHEAT

International wheat prices remain high

International wheat prices were highly volatile in May with prices reacting to weather concerns and an uncertain outlook for 2011 global wheat production. The benchmark US No.2 **Hard Red Winter, f.o.b.,** averaged USD 362 per tonne, down slightly from April but up 6.5 percent since the start of the year.

In late April and early May, rains in Europe and reports of significant expansion in plantings in Canada helped defuse fears of spring planting delays in the United States because of cool and wet conditions. However, the outlook for European wheat, particularly for France and Germany, later deteriorated due to lack of sufficient rains. Unusual weather in the United States also has increased the risk of much lower yields than initially anticipated, because of dry conditions in Kansas, the largest wheat producing state, accounting for almost one-quarter of United States winter wheat. Rainfall in Kansas for the period between December and May was one-half of the average. Nonetheless, the United States Department of Agriculture (USDA) World Agricultural Supply and Demand Estimates (WASDE) report of 13 May maintained relatively good production prospects for the United States as well as world crops, which exerted downward pressure on prices. Large fund liquidations helped push down prices before a rebound fuelled by continuing reports of adverse weather conditions.

Contributing to the tightening global wheat balance, weather anomalies in the United States, with wet conditions prevailing in the spring wheat states but dry in the winter wheat states, continued to influence wheat futures. Developments in **wheat futures in Chicago** were characterized by significantly high intra-day volatility (based on the high-low trading range) with prices reacting to many factors, including outside market developments. Although weather concerns have had less impact on the spot or old crop values, deteriorating growing conditions and reduced prospects for 2011 production highly influenced the September contracts. By late May, Chicago wheat futures for September delivery were quoted at around USD 304 per tonne, below its season high of USD 356 per tonne registered on 9 February 2011. With winter wheat futures 75 percent above the corresponding period last year, markets expect prices to remain high during the first half of the 2011/12 marketing season. The lifting of the export ban by the Russian Federation is likely to help prices to ease somewhat.

PRODUCTION

World wheat production to recover in 2011

FAO's latest forecast of 2011 global wheat production stands at 674 million tonnes, which is slightly below earlier expectations as exceptionally dry weather conditions in some parts of the United States and Europe have worsened the prospects for yields in the affected countries. However, at the current forecast level, global wheat output in 2011 would still be 3.2 percent up from last year's reduced crop,

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

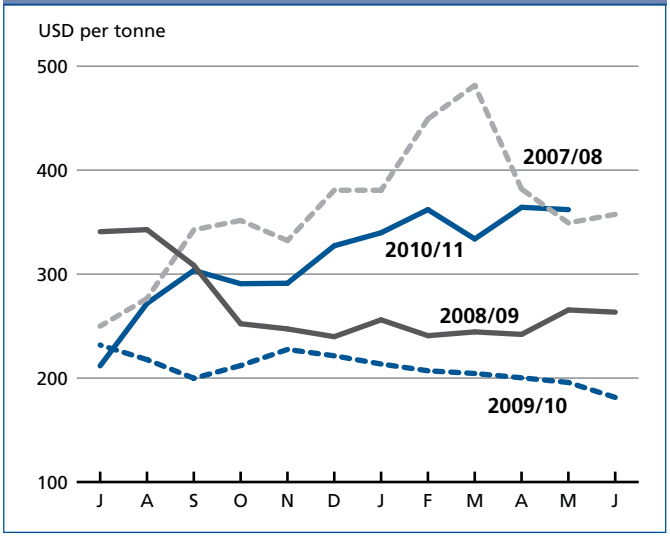
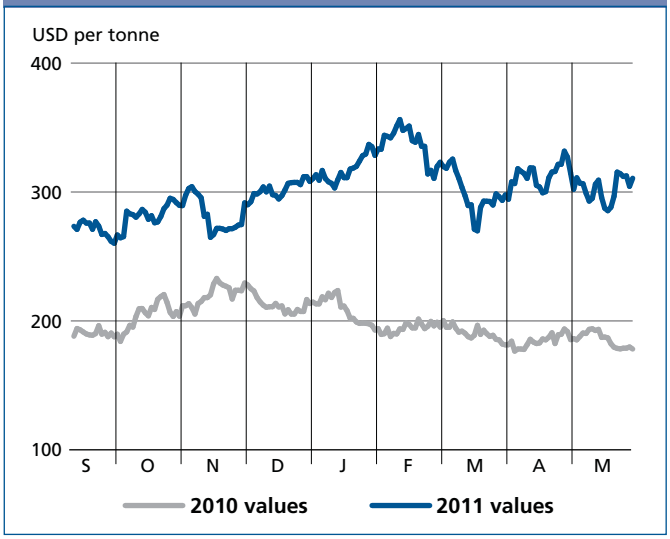


Figure 2. CBOT wheat futures for September



reflecting expectations of an overall larger area in response to strong prices and of yield recoveries in some areas, the Russian Federation in particular, that were affected by severe drought in 2010.

In the **EU**, the world's largest wheat producing region, latest indications point to a wheat crop of 137 million tonnes in 2011, up marginally from the 2010 harvest. Expectations earlier in the season were better, as planted area in the EU was estimated to have significantly increased from the previous year. However, exceptionally dry weather throughout the spring in some major producing areas, from the United Kingdom through France and Germany and into Poland, dampened yield prospects. Elsewhere in Europe, a strong recovery in production is still expected in the CIS region after last year's sharply reduced crop. In the **Russian Federation**, the winter wheat crop has been assessed in generally good-to-satisfactory condition, and recent rainfall has improved planting progress for the spring crop after delays caused by dryness. The country's wheat output in 2011 is currently forecast at 55 million tonnes, about one-third more than the reduced 2010 level. Also, **Ukraine** is forecast to harvest more wheat this year, with a 17 percent recovery in output to some 20 million tonnes. Although its plantings were relatively unchanged, growing conditions reportedly have been very favourable, in contrast to last year when poor rainfall affected some areas.

In North America, persisting severe drought in the **United States'** central and southern plains has caused further deterioration of crop conditions over the past weeks. Although winter plantings increased significantly, abandonment in drought-affected areas is expected to be well above average levels and the final area harvested may not be significantly higher than in 2010. In addition, yield potential has been reduced by a lack of precipitation. FAO currently forecasts the 2011 United States wheat output at 55 million tonnes, down 8.5 percent from last year. In **Canada**, this year's wheat area is forecast to rebound sharply, up some 17 percent from last year's low level in response to high prices. Although cool and wet weather has delayed planting this spring, there is time, until about mid-June, for crops to be planted successfully.

In Asia, prospects for the 2011 wheat crop in **China** remain satisfactory despite persistent lack of rainfall in some areas. Intensive government initiatives to provide irrigation and other inputs have mitigated the impact of the drought in affected areas. This year's output, forecast at 114.5 million tonnes, is just marginally down from last year's. Elsewhere in the Far East subregion, a record crop of nearly 84 million tonnes is being harvested in **India**, where high prices spurred a large area increase and growing conditions were

Table 1. World wheat market at a glance

	2009/10	2010/11 *estim.*	2011/12 *f'cast*	Change 2011/12 over 2010/11
	million tonnes			%
WORLD BALANCE				
Production	**684.7**	**652.6**	**673.6**	**3.2**
Trade [1]	**129.8**	**123.0**	**125.0**	**1.6**
Total utilization	**658.6**	**670.3**	**677.0**	**1.0**
Food	463.3	468.1	472.0	0.8
Feed	121.0	125.3	127.5	1.8
Other uses	74.3	76.9	77.5	0.8
Ending stocks	**206.9**	**187.8**	**182.9**	**-2.6**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	67.8	67.7	67.5	-0.3
LIFDC (Kg/year)	54.4	54.0	53.9	-0.1
World stock-to-use ratio (%)	**30.9**	**27.7**	**27.1**	
Major exporters' stock-to-disappearance ratio (%) [2]	**21.8**	**18.9**	**17.9**	

FAO wheat price index * (2002-2004=100)	**2009**	**2010**	**2011 Jan-May**	**Change: Jan-May 2011 over Jan-May 2010 %**
	154	169	242	72.2

* Derived from International Grains Council (IGC) Wheat Index
[1] Trade data refer to exports based on a common July/June marketing season
[2] Major exporters include Argentina, Australia, Canada, EU and the United States

Table 2. Wheat production: leading producers (2010 and 2011)

Country *	2010 *estim.*	2011 *f"cast*	Change: 2011 over 2010
	million tonnes		%
European Union	136.8	137.0	0.1
China (Mainland)	115.1	114.5	-0.5
India	80.8	84.3	4.3
United States of America	60.1	55.0	-8.5
Russian Federation	41.5	55.0	32.5
Canada	23.2	26.2	12.9
Australia	26.3	24.3	-7.6
Pakistan	23.3	24.0	3.0
Turkey	19.7	20.5	4.1
Ukraine	17.2	20.2	17.4
Kazakhstan	10.0	14.5	45.0
Iran Islamic Rep. of	13.5	13.5	0.0
Argentina	14.7	14.0	-4.8
Egypt	7.2	7.9	9.7
Uzbekistan	6.7	6.5	-3.0
Other countries	56.5	56.2	-0.5
World	**652.6**	**673.6**	**3.2**

* Countries listed according to their position in global production (average 2009-2011)

mostly favourable. In **Pakistan**, in spite of the severe flood-related damage to infrastructure and seed stocks last year, plantings of winter wheat are up and weather conditions during the season have been generally good. Hence the crop performance is forecast to improve over last year and match the record level of 2009. In Asia's CIS subregion, the bulk of the spring crop is cultivated in **Kazakhstan**, which is the major producer. Plantings are expected to be maintained at the relatively high level of the past two years, and assuming a recovery in yields after last year's drought-reduced level, a significant increase in production is forecast. In the Near East, overall wheat output this year looks likely to remain virtually unchanged. A forecasted increase in **Turkey** will be more than offset by reductions elsewhere in the subregion.

In North Africa, growing conditions for wheat production have generally improved this year after last year's drought. The main exception is **Tunisia** where conditions were unfavourably dry again, although not as bad as last year's. Overall production in the subregion is forecast to recover by about 14 percent from the 2010 reduced harvest.

In the southern hemisphere, where wheat sowing takes place from May to July in the major producing countries, plantings are expected to increase in response to this year's favourable price prospects. However, this may not translate into larger crops in **Australia** or **Argentina**, where yields are expected to return to average after bumper levels in 2010.

TRADE

World wheat trade up slightly in 2011/12

FAO's first forecast for world wheat trade (exports) in 2011/12 (July/June) stands at 125 million tonnes, up 2 million tonnes from 2010/11. Following a peak of 136 million tonnes in 2008/09, wheat trade fell sharply in 2009/10 and contracted further in 2010/11. The anticipated increase in 2011/12 would largely reflect increased imports to Asia and Europe that will more than offset a decline in Africa.

In **Asia**, aggregate wheat imports in 2011/12 are forecast at 56 million tonnes, 1.18 million tonnes more than estimated for 2010/11. In anticipation of smaller harvests in 2011, imports are forecast to increase mostly in **Afghanistan** and **Iraq.** Larger purchases by the **Republic of Korea are also expected,** but mostly for feed. **Saudi Arabia** may import more wheat in 2011/12, to compensate for declining domestic production and to build inventories. Saudi Arabia started buying foreign wheat in 2008/09, following a decision to reduce domestic production in the face of growing water scarcity. However, a sharp fall in imports is forecast for **Bangladesh,** reflecting large carryovers and abundant rice supplies.

In **Africa**, total wheat imports are forecast to reach 36.3 million tonnes, down 960 000 million tonnes from 2010/11. The decline mostly results from sharp reductions in imports by **Morocco** and, to a lesser extent, **Tunisia**, because of anticipated strong rebound in their domestic production. However, in **Egypt**, the world's largest wheat importer, imports are likely to remain steady at around 10 million tonnes. By contrast, imports are forecast to increase in 2011/12 in **Ethiopia** where higher food aid is needed for more than 2 million people affected by drought and surging domestic prices.

In **Latin America and the Caribbean**, 2011/12 imports are forecast close to 2010/11 level, at around 20 million

Figure 3. Wheat imports by region

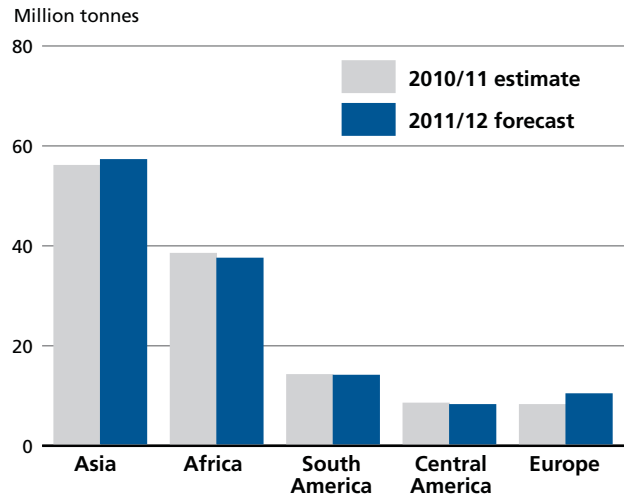
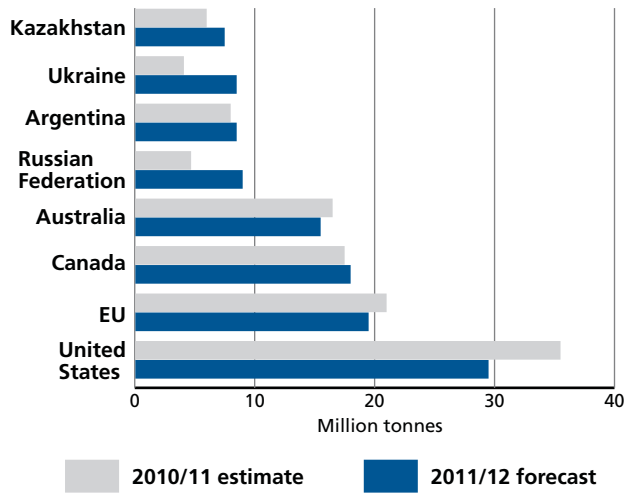


Figure 4. Wheat exporters



tonnes. Imports by **Brazil**, the region's largest wheat importer, may increase slightly, reaching 6.7 million tonnes, because of a possible decline in production (planting just started) from the previous year's record. In **Mexico**, the region's second largest wheat importer, imports are expected to fall slightly to 3.2 million tonnes, due to an anticipated increase in output.

In **Europe**, total wheat imports are forecast to climb to a three-year high of 9.1 million tonnes, mostly because of a 2.2 million tonne rise in wheat purchases by the **EU** to 7 million tonnes**.** This increase is expected to be prompted by competitive prices of wheat from the Black Sea region, following more abundant crops in 2011.

Regarding **exports**, availabilities for trade are likely to recover significantly in 2011/12 succeeding to a season dominated by the sudden shortfall in sales from the Black Sea, mostly after the export ban imposed by the **Russian Federation** early in the 2010/11 marketing season, A rebound of shipments from **Kazakhstan** and **Ukraine** will more than compensate for a likely plunge in **United States** shipments, due to a decline in its domestic production. At the same time, with the lifting of the export ban, sales from the **Russian Federation** could double in 2011/12, offsetting declines in exports by a number of other countries, including **Australia**, **Brazil** and the **EU**. **Argentina** and **Canada** also are forecast to export more in the new season compared with 2010/11. In total, shipments from the five major traditional wheat exporters (Argentina, Australia, Canada, EU and the United States), are expected to reach 88.5 million tonnes, representing 70 percent of anticipated world trade in 2011/12, down from 77 percent in 2010/11. This compares with exports of 23.5 million tonnes by the leading CIS exporters, (Kazakhstan, Russian Federation and Ukraine), representing 19 percent of world trade in 2011/12, up from 6.5 percent in 2010/11.

UTILIZATION

Wheat utilization may increase at a slower pace in 2011/12 than in 2010/11

Early estimates of world wheat utilization in 2011/12 point to only a 1 percent increase, to 677 million tonnes. This compares with a nearly 3 percent rise in 2008/09, 2 percent in 2009/10, and 1.7 percent in 2010/11. Nonetheless, the anticipated growth in wheat utilization in 2011/12 would still exceed the ten-year trend value for the second consecutive season. World utilization of wheat for **direct human consumption,** which accounts for 70 percent of total wheat usage, is forecast at 472 million tonnes, up nearly 1 percent from 2010/11. This translates into 67.5 kg per person globally, marginally below the 67.7 kg per capita estimated for 2010/11. The small decline largely mirrows the continuing fall in China (Mainland)[1], where per caput wheat consumption is forecast at 64.7 kg, down almost 9 kg since 2000/01. On the other hand, per capita wheat consumption in the world's second most populated country, India, has been rising slightly and slowly, by around 1 kg in the last decade, to 61.5 kg. Countries in North Africa and in Asia are among the world's leading per capita consumers of wheat, with Tunisia ranked first at almost 217 kg, followed by Algeria at 211 kg, Turkey at 196 kg, Morocco at 192 kg, Egypt at 182 kg and Syria at 187 kg. The average per capita wheat consumption in Libya is around 191 kg, but due to ongoing turmoil, consumption is predicted to drop by 4 kg per capita this year.

Total **feed utilization** of wheat is forecast to reach 127 million tonnes in 2011/12, up 1.7 percent from 2010/11. However, in 2010/11, feed usage is expected to expand at twice the pace, mostly due to sharp increases in the CIS. In the Russian Federation, 2010/11 feed use is estimated at 20.5 million tonnes, up 3.5 million tonnes, or 17 percent, from 2009/10. The surge reflects a tight domestic supply of coarse grains, barley in particular, and a more abundant supply of wheat as a result of the ban on its exports. A 2011 recovery in production of coarse grains and the resumption of wheat exports could result in a decline in wheat feed utilization in the Russian Federation during the new marketing season. Globally, the EU stands as the leading feed wheat market, with 53.5 million tonnes, estimated to have been used by the livestock sector in 2010/11, equivalent to 39 percent of its domestic wheat production, with a similar level forecast for 2011/12.

The **other uses** of wheat which include industrial use, seeds and post-harvest losses, are estimated to total 77 million tonnes in 2010/11, representing 12 percent of world wheat production. Little change is expected in 2011/12. While seeds and post-harvest losses account for the bulk of the other uses category, the **industrial use** of wheat has expanded continuously over the past decade, driven by larger utilization of wheat as feedstock for ethanol **biofuel**. According to the International Grain Council (IGC), in 2010/11 wheat used for production of ethanol (excluding non-fuel uses) is forecast to reach 6.8 million tonnes, most of it in the EU (around 5.4 million tonnes), followed by Canada and China. However, **starch manufacturing** still constitutes the primary industrial use of wheat, which, according to the IGC, has remained steady at around 11 million tonnes. The EU is again the leading market, using roughly 5 million

[1] All references to China refer to Mainland China unless otherwise specified.

tonnes of wheat for manufacturing starch each year. The other large market is China, with 1.8 million tonnes.

STOCKS

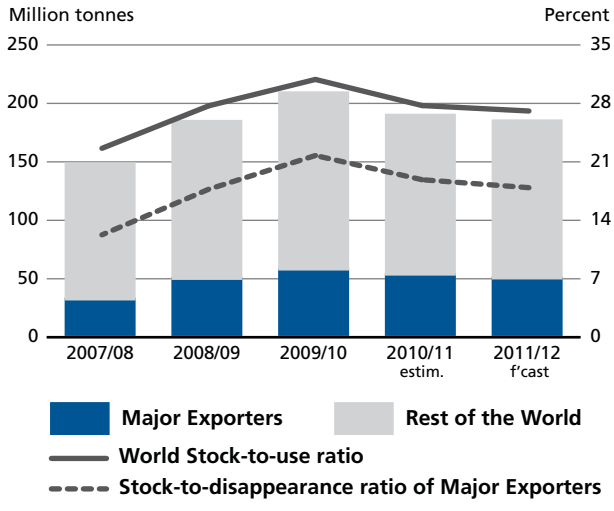
World wheat inventories declining further in 2012

Although world wheat production is forecast to rebound in 2011 after a sharp decline in 2010, the increase is not expected to be sufficient to replenish world reserves. Based on the current forecasts for production in 2011 and utilization in 2011/12, world wheat stocks are forecast to reach 183 million tonnes by the close of the crop seasons in 2012, down another 5 million tonnes from the anticipated reduced level in 2011. The **global stocks-to-use ratio** for 2011/12 is likely to fall from 28 percent to around 27 percent. This compares with 30 percent in 2010/11. The stock-to-use ratio for 2011/12 would be above the low of 22.6 percent registered in 2007/08, closely matching its five-year average (2004/05-2008/09).

In major exporting countries, total wheat stocks are forecast to contract for the second consecutive season (by 3.3 million tonnes), to 48 million tonnes, which is well above the 2008 low of 30 million tonnes. The bulk of the expected decline would be in the **United States,** following the expected 5 million tonne contraction of output in 2011. Nevertheless, the **ratio of stocks held by the major exporters to their disappearance** (i.e. domestic utilization plus exports) is likely to approach 18 percent, only 1 percent below 2010/11 and as much as 5.6 percent higher than in 2007/08.

Among large stockholders, such as **China** where wheat production decline is likely to be marginal, inventories are forecast to remain high and little changed, at around 57 million tonnes. In **India**, a record wheat output this year could boost exports without any significant repercussions for inventories, which are forecast to remain high, at around 18 million tonnes. In **CIS**, total wheat stocks are foreseen to rise slightly to 15.5 million tonnes, with most of the increase concentrated in the **Russian Federation** which may hold 4.2 million tonnes and **Uzbekistan**, at 3 million tonnes. However, inventories in Ukraine will be down slightly, to 3.3 million tonnes. Elsewhere, somewhat larger stocks are expected in **Egypt** and **Saudi Arabia.** Both countries aim to keep larger wheat reserves than in the past because of food security concerns.

Figure 5. Wheat stocks and ratios



COARSE GRAINS

PRICES

High international prices reflect tight supply and demand balance

Increased tightening of the global supply and demand balance of coarse grains during the 2010/11 marketing season, particularly barley and maize, pushed international prices above their 2008 peaks. Prospects for a huge drawdown of inventories in the United States, the world's largest maize exporter, has been a leading factor behind the maize price surge. The drop in barley production in the EU, the Russian Federation and Ukraine, coupled with tighter supplies of feed wheat, boosted international barley prices. By May 2011, **maize export prices** were generally 80 percent above their May 2010 quoted values, while **barley (feed)** prices soared by 50 to over 100 percent over the same period, depending on the origin. Prices of **sorghum**, the third largest traded coarse grain, were also up nearly 80 percent year-on-year. In recent weeks, the growing concern over unfavourable weather and its impacts on 2011 production have been the main reason underlying the price strength.

The benchmark **United States maize prices** (yellow, No. 2, f.o.b.) averaged USD 309 per tonne in May, up 18 percent from the start of the year. By late May, the tight supply condition in the United States drove up the **Chicago maize futures** for September delivery (old crop) to USD 287 per tonne, by as much as 90 percent above the corresponding period in 2010. The dwindling stock levels amid continuing exports, as well as the uncertainty over maize yields and production in 2011 have meant more price volatility. In recent months, the tightness in maize markets resulted in unusual convergence between maize and wheat

Figure 6. Maize export price (US no. 2 yellow, Gulf)

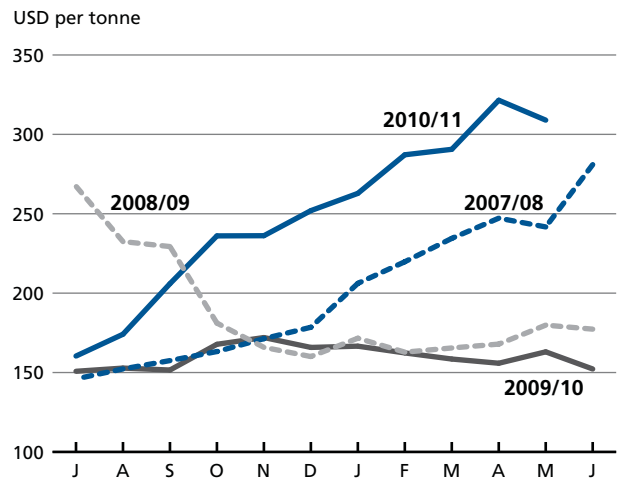
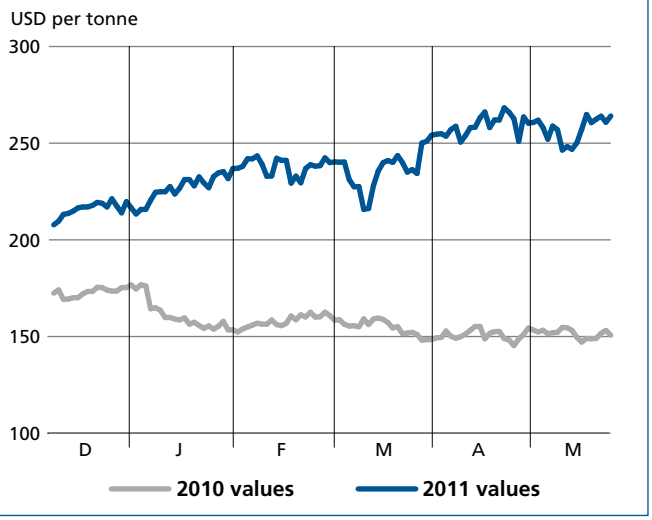


Figure 7. CBOT maize futures for December



prices. Moreover, with the old crop maize futures traded at a premium over the new crop quotations, a condition known as backwardation (a phenomenon usually associated with very low prevailing stocks), by late May, the premium for the July old crop delivery stood at over USD 30 per tonne compared with the futures delivery for December, which is the benchmark delivery month for new crop. The premium was higher in April, averaging USD 40 per tonne. With planting significantly hampered by excessive wet conditions in major growing regions of the United States corn belt, December futures gained throughout the spring and by late May, were quoted at USD 269 per tonne, up 80 percent from the corresponding period last year.

Based on the current forecast of a nearly 4 percent rise in world production of coarse grains, some price decline can be expected in 2011/12. However, weather conditions remain less than ideal in many important regions of the northern hemisphere where planting is still in progress. Given the low ending inventories from 2010 crop, particularly in the United States, and the expected continuation of strong global demand, any downward correction to the current forecast for production will underpin prices in the new 2011/12 season.

Table 3. World coarse grain market at a glance

	2009/10	2010/11 *estim.*	2011/12 *f'cast*	Change 2011/12 over 2010/11
	million tonnes			%
WORLD BALANCE				
Production	**1 122.3**	**1 121.3**	**1 165.4**	**3.9**
Trade [1]	**115.0**	**120.0**	**119.0**	**-0.8**
Total utilization	**1 127.0**	**1 149.3**	**1 164.9**	**1.4**
Food	191.2	196.9	199.5	1.4
Feed	634.4	636.9	646.1	1.4
Other uses	301.4	315.4	319.2	1.2
Ending stocks	**194.4**	**165.5**	**167.7**	**1.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	28.0	28.5	28.5	0.2
LIFDC (Kg/year)	37.2	38.4	38.2	-0.4
World stock-to-use ratio (%)	**16.9**	**14.2**	**13.9**	
Major exporters' stock-to-disappearance ratio (%) [2]	**14.7**	**8.4**	**8.5**	

FAO coarse grain price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	157	176	279	82.4

[1] Trade data refer to exports based on a common July/June marketing season
[2] Major exporters include Argentina, Australia, Canada, EU and the United States

PRODUCTION

Global output of coarse grains in 2011 could reach a record

FAO's first forecast for world production of coarse grains in 2011 stands at 1 165 million tonnes, a record level that is 3.9 percent up from last year and some 23 million tonnes above the previous high in 2008. The bulk of the increase is expected in the United States, the world's largest producer, where a record maize crop is forecast, as well as in the Russian Federation where production of coarse grains is set to recover sharply after last year's drought-reduced harvest.

Global output of **maize** in 2011 is forecast at about 876 million tonnes, 3.8 percent up from 2010. In the United States, the pace of planting has been well behind average

Figure 8. Barley production

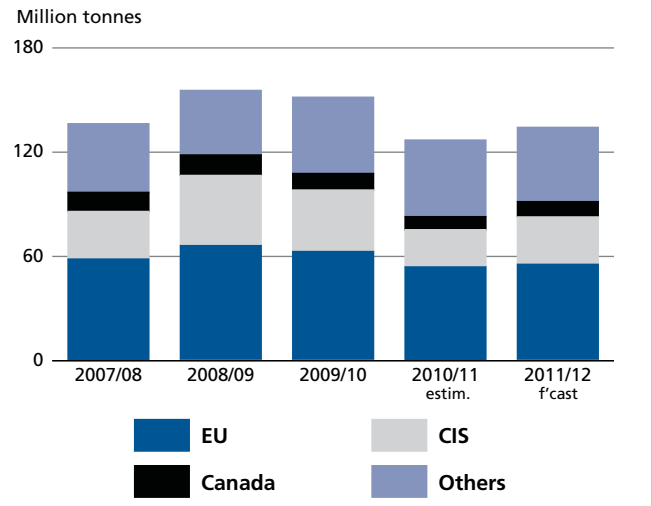


Table 4. Coarse grain production: leading producers (2010 and 2011)

Country *	2010 *estim.*	2011 *f"cast*	Change: 2011 over 2010
	million tonnes		*%*
United States of America	330.6	356.5	7.8
China (Mainland)	186.7	187.4	0.4
European Union	140.3	146.7	4.6
Brazil	58.4	60.2	3.1
India	40.1	41.4	3.2
Mexico	30.2	28.5	-5.6
Russian Federation	17.4	27.5	58.0
Argentina	30.0	27.0	-10.0
Ukraine	21.5	23.7	10.2
Canada	22.2	24.3	9.5
Nigeria	22.3	22.4	0.4
Indonesia	18.4	17.9	-2.7
Ethiopia	13.7	12.9	-5.8
South Africa	13.9	12.0	-13.7
Australia	13.5	12.3	-8.9
Other countries	162.1	164.7	1.6
World	**1121.3**	**1165.4**	**3.9**

* Countries listed according to their position in global production (average 2009-2011)

because of adverse weather. However, a record crop of 343 million tonnes is still forecast due to the expected large area increase which, if it materializes, would likely offset a decline in yield. In China, the world's second largest maize producer, output is expected to remain virtually unchanged from last year's record of 178 million tonnes. In the EU, 2011 maize production is expected to increase by some 6 percent to about 60 million tonnes. This largely reflects an expansion of area, as the average yield for the region should remain unchanged.

In the southern hemisphere, the main 2011 maize harvests are already complete or in the final stages. In South America, Brazil's aggregate output in 2011 is forecast at almost 58 million tonnes, a bumper crop that is 3 percent up from 2011, reflecting favourable growing conditions. By contrast, the recently completed 2011 harvest in Argentina was somewhat reduced by dry weather linked to La Niña earlier in the growing season. In southern Africa, prospects for the current main coarse grains season are mixed. In South Africa, the largest producer in the subregion, a 14 percent reduction in output to 11.5 million tonnes is forecast, due to less area planted in response to low maize prices in 2010. Elsewhere in the subregion, Malawi, Mozambique, Zambia and Zimbabwe are expecting similar or higher maize harvests compared with 2010, but reductions are forecast for Botswana, Lesotho and Namibia due to floods in January and a February dry spell.

FAO forecasts world output of **barley** in 2011 at 133 million tonnes, about 6 percent up from its reduced 2010 level. The European region, which accounts for the bulk of the world's barley production, expects output to recover from last year's poor level. Among the EU countries, prolonged dryness across major producing northern areas is beginning to cast doubts on this year's yield prospects, although a larger area sown should result in a larger output. Latest indications point to an aggregate harvest of about 54.6 million tonnes, about 3 percent up from 2010. In the Russian Federation, output is forecast to recover sharply from last year's drought-devastated level to some 13 million tonnes. Elsewhere, barley crops in North Africa have recovered somewhat after the 2010 drought.

The forecast for world **sorghum** output in 2010 stands at about 61 million tonnes, virtually unchanged from the previous year. Production is forecast to decrease somewhat in the United States but increase significantly in India. The current outlook for Africa points to some reduction in sorghum output this year but, with the season just getting underway in the major producing countries, forecasts remain tentative.

TRADE

World trade in coarse grains to decrease slightly in 2011/12

After a relatively strong (4 percent) expansion in 2010/11, world trade in coarse grains is likely to decline to 119 million tonnes in 2011/12, down 1 million tonnes. However, with coarse grain harvests in the northern hemisphere many months away and prevailing weather uncertainty, this forecast is very tentative. Among the major coarse grains,

Figure 9. Coarse grain imports by region

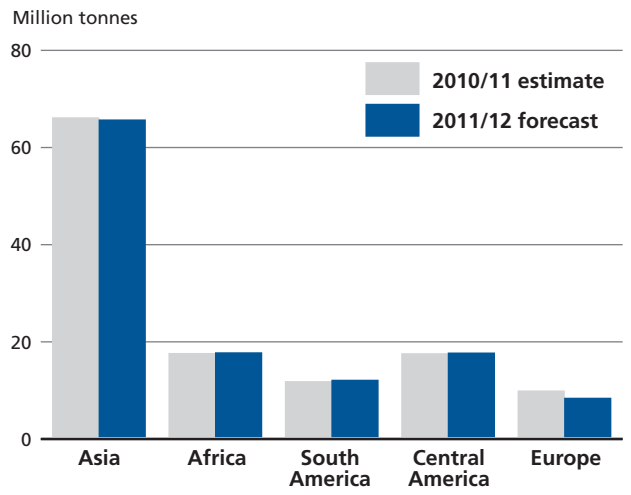
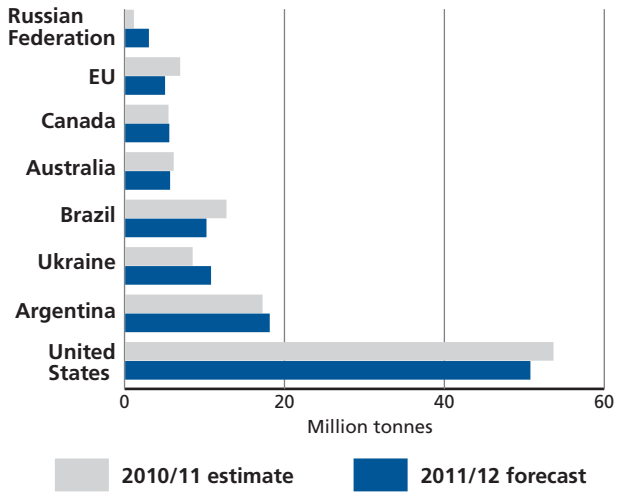


Figure 10. Coarse grain exporters



world trade in **maize** is expected to remain unchanged at the 2010/11 estimated level of around 94 million tonnes, the second highest volume after the record 102 million tonnes in 2007/08. However, world trade in **barley** and **sorghum** could decline slightly, to 15.5 million tonnes and 6 million tonnes, respectively, while small increases are foreseen for trade in **oats** (2.2 million tonnes), **rye** (400 000 tonnes) and **millet** (300 000 tonnes).

Even on a regional basis, coarse grain imports in 2011/12 should stay largely unchanged from 2010/11. In Asia, aggregate imports are forecast at 64.3 million tonnes, representing around 54 percent of the world total. **Japan,** the world's largest importer of coarse grains, mainly buys maize for animal feed. With its 2011/12 imports expected to reach 19.5 million tonnes, Japan will continue to account for over one-third of total coarse grain imports into Asia. Imports by Japan are expected to be little influenced by the March 2011 earthquake and nuclear disaster. Japan began purchasing maize in April for delivery through September with no delays in shipments or cancellation reported after the earthquake. In **Saudi Arabia**, total coarse grain imports are forecast at 9 million tonnes, up slightly from 2010/11. Saudi Arabia is the world's largest market for barley, which it uses as feed, and is expected to increase its purchases slightly, by 100 000 tonnes, to 6.8 million tonnes in 2011/12. This follows a sharp dip of 1.3 million tonnes in 2010/11 caused by changes in import regulations limiting profit margins by traders and requiring importers to obtain prior approval from the Ministry of Finance before opening letters of credit. In the **Republic of Korea**, maize imports are forecast to decline slightly, owing to some increase in purchases of feed wheat instead of maize. In **China**, with a record maize crop in 2010 and expectation of another bumper crop in 2011, imports are estimated to decline to 1 million tonnes in 2010/11 from an estimated 2 million tonnes in 2010/11. Maize purchases by **Indonesia** are forecast to increase in 2011/12, given the rising demand from its fast growing poultry sector. The other two major importers in Asia, the **Islamic Republic of Iran** and **Syrian Arab Republic**, are expected to import slightly more maize in 2010/11 to meet an anticipated increase in domestic demand.

In **Africa**, total coarse grain imports are forecast at 16.4 million tonnes, up marginally from the 2010/11 estimate. Reduced purchases by several countries in North Africa, due to their increased domestic production, would more than offset increases into sub-Saharan Africa. Deliveries to **Tunisia** are forecast to decline the most, by 200 000 tonnes, due to a strong recovery in domestic barley production. A small decline in barley imports is forecast for **Morocco** for the same reason. In **Egypt**, maize imports are expected to contract due to slowing feed demand, largely reflecting economic hardship and hikes in domestic food prices. By contrast, in **Kenya**, where maize is mostly for food, imports are forecast to double in 2011/12, reaching 1.2 million tonnes, to offset a production decline.

Total imports by countries in **Latin America and the Caribbean** are forecast to increase slightly, to 27 million tonnes. Most of the anticipated increase is expected in the region's largest buyer, **Mexico,** where imports are forecast to rebound to the 2009/10 peak of 11.3 million tonnes, amid a small decline in production and rising domestic maize prices. Higher imports are also forecast for **Chile** and **Colombia**, largely to meet increasing domestic feed demand. By contrast, in **Europe**, total imports are forecast at 7 million tonnes, down 1.5 million tonnes from 2010/11.

Most of the decline will be in the **EU**, in reaction to an expected increase in maize and barley production.

Regarding **export** prospects in 2011/12, larger sales are anticipated mostly from **Argentina** (maize), **India** (maize), the **Russian Federation** (barley) and **Ukraine** (barley and maize). On the other hand, maize shipments from **Brazil**, which in 2010/11 hit a record high of 12 million tonnes, **South Africa** and the **United States** are expected to decline in 2011/12, reflecting a tighter domestic balances. Similarly, exports of barley from **Australia** and the **EU** may decrease in 2010/11.

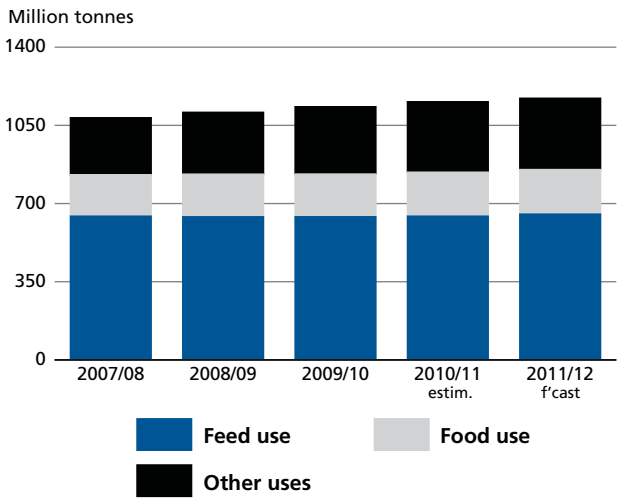
UTILIZATION

Feed and industrial use in 2011/12 to grow at a slower pace

Total utilization of coarse grains in 2011/12 is forecast to increase by 1.3 percent to nearly 1 165 million tonnes, which closely matches the current production forecast for 2011. At this level, total utilization would stay below the ten-year trend for the third consecutive year. In 2010/11, total utilization is expected to come closer in line with the long run tendency.

Most of the anticipated expansion in total utilization in 2011/12 will be driven by continuing growth in **feed utilization**, which is forecast to increase by 1.4 percent, to 646 million tonnes, accounting for 55 percent of the total. This rate of growth would be well below the 4 percent expansion estimated for the 2010/11 marketing season. The deceleration in 2011/12 mostly reflects a possible slowdown in feed use in the developing countries, many of which, such as in Egypt and Tunisia and several countries in Asia, are facing high prices which are denting feed use. In China, total feed use of coarse grains in 2011/12 is forecast to reach 117 million tonnes, up 3.6 percent from 2010/11. This represents a notable expansion but still falls short of the 4.7 percent rise in 2010/11 from 2009/10. China has become the world's second largest feed market for coarse grains after the United States, surpassing the EU for the second consecutive season. In the developed countries, a recovery in barley and maize production in several countries is expected to foster a resumption of the expansion in feed use of coarse grains. However, the overall increase may prove modest, at below 1 percent. The largest gains are likely to occur where production prospects for recovery are the strongest, most notably in the Russian Federation, where the expansion could reach 16 percent after a contraction of almost 34 percent in 2010/11. Stronger growth is also forecast for Canada and the EU. In the United States, high maize prices combined with large supplies of Distilled

Figure 11. Coarse grain utilization



Dried Grains (DDGs), a by-product of maize-based ethanol production used as an alternative feed, is likely to result in a small contraction in feed use for the fourth consecutive season.

World **food** consumption of coarse grains is forecast to increase by 1.4 percent in 2011/12, to 199 million tonnes, or 17 percent of total use. The anticipated increase would be less than in 2010/11, owing mostly to slower growth in consumption of coarse grains in the developing countries. Coarse grain use for human consumption occurs mostly in the developing countries, mostly in Africa, Asia and several countries in Latin America and the Caribbean where usage totals around 167 million tonnes,

Total **industrial** use of coarse grains is forecast to reach 260 million tonnes in 2011/12, up 2 percent from the estimated volume in 2010/11. The three largest industrial applications of coarse grains are ethanol, starch and brewing. The use of maize for production of ethanol has been a major driver of industrial use in recent years with the United States accounting for most of the global share and year-to-year rise. In fact, total use of maize destined for ethanol (biofuels) is estimated at around 137 million tonnes, of which the United States' share stands at 93 percent (127 million tonnes). Growth in the use of maize as feedstock for production of ethanol has been rapid. As shown in the table, it increased by over 20 percent per year before a sharp slowdown in 2010/11 and now has a growth predicted at only 1 percent based on the preliminary 2011/12 forecasts from the United States. Over the past decade, the amount of maize used for ethanol production in the United States has grown from less than 10 percent of domestic production to nearly 40 percent in 2010/11. Use of grains (mostly maize) for starch manufacturing has expanded rapidly in China from 3 million tonnes in 2001/02 to almost

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

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11 *estim.*	2011/12* (*f'cast*)
				Thousand tonnes				
Maize production	299 910	282 307	267 498	331 178	307 149	333 007	316 166	343 041
Ethanol use	33 611	40 726	53 837	77 453	93 396	116 032	127 005	128 275
Yearly change (%)	13	21	32	44	21	24	9	1
As production (%)	11	14	20	23	30	35	40	37

Source: WASDE-USDA. *May 2011 USDA's initial assessment of US and world crop supply

26 million tonnes at present, boosted by its fast economic growth. According to data from the International Grains Council, since 2008/09 China has surpassed the United States (24 million tonnes) to become the world leader in starch manufacturing from grains.

STOCKS

Stocks to increase slightly but not sufficiently

Based on the preliminary forecasts for 2011 production and 2011/12 utilization, world coarse grain stocks could increase slightly by the close of 2012 seasons, by around 2 million tonnes (1.3 percent) to around 168 million tonnes. This small anticipated increase follows a sharp decrease of 14 percent in 2011. With stocks increasing slightly in 2012, the **world stocks-to-use ratio** for coarse grains is forecast to fall further, from a low of 14.2 percent in 2010/11 to an even lower ratio of 13.9 percent in 2011/12, signalling a continuing tight supply and demand balance.

The low coarse grain inventory is a concern because the overall supply situation in major exporters does not seem to indicate much improvement compared with the tight situation in 2010/11. Ending inventories of the major exporters are forecast to total 49 million tonnes, unchanged from their low opening level, because some increases in the United States are being compensated by declines in **Canada** and the **EU**. As a result, the **major exporters' stocks-to-disappearance ratio** (i.e. domestic consumption plus exports) in 2011/12 is also expected to remain at the precariously low level of 8.5 percent. In the **United States**, the maize supply is already scarce with a 6.3 percent stocks-to-use ratio, the lowest of the past three decades. In spite of record production expected in 2011, this ratio may improve only slightly, to 7.8 percent, still the third lowest of the past three decades.

Elsewhere, good crop prospects could help keep stocks at relatively high levels, such as in **China** and **Indonesia,** or result in a build-up of inventories, such as in **Brazil** and the **CIS**.

Figure 12. US maize stocks and stock-to-use-ratio

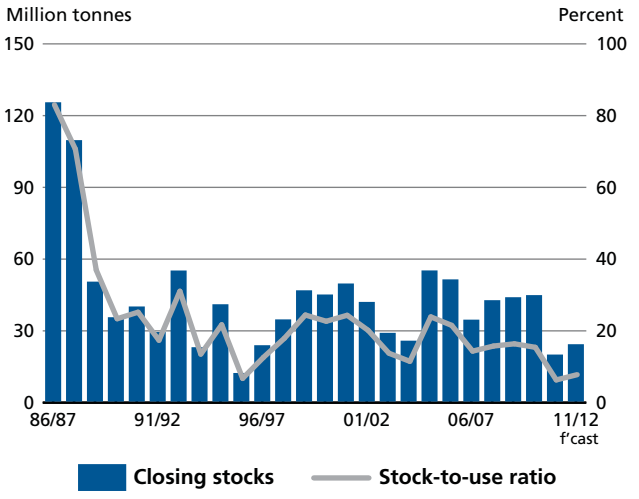


Figure 13. Coarse grain stocks and ratios

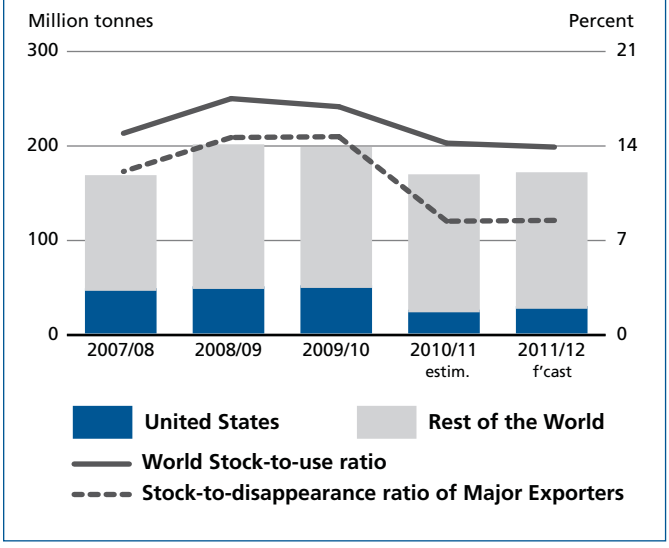


Table 6. Major Grain Policy Developments: July 2010 to May 2011 *

Country	Product	Date	Policy Instrument	Description
Algeria	Durum wheat	May-11	Import tariff	Import tariff on durum wheat, in force since July 2010, suspended for an indefinite period
Argentina	Maize	Nov-10	Export quota	Initial export quota of 2011 maize crop set at 5 million tonnes
	Wheat, Maize	Feb-11	Export quota	Additional wheat and maize export quota, allowing 1 million tonnes of wheat and 7 million tonnes of maize
Bangladesh	Wheat	Jul-10	Import quota	Imports of 400 000 tonnes of wheat allowed to stabilize market prices
	Wheat	Feb-11	Food subsidies	Food grains sold by government at subsidized prices to 300 000 most vulnerable civil servants
CIS (Kazakhstan, Russia, and Belarus)	Wheat, Rye, Oats	Mar-10	Import tariff	Wheat, rye and oats 5 percent import duty cancelled by the Customs Union of Kazakhstan, Russia, and Belarus until June 30th 2011
China	Wheat	Oct-10	Support price	Minimum support price for wheat raised by 5.5 percent
	Grains	Dec-10	Stock release and food subsidies	Grain reserve released 25 million tonnes of grain and soybeans to stabilize domestic prices
	Grains	Feb-11	Government procurement	Major state-linked grain buyers suspended purchases in order to combat food inflation
	Grains	Mar-11	Stock release	Two auctions resulted in sale of 1.1 million tonnes of wheat from government reserves, in response to strong demand from millers
Ethiopia	Cereals	Jul-10	Export ban	Export ban on cereals lifted following good harvests and lower domestic prices
	Grains	Jan-11	Price control	Maximum consumer prices established for 17 basic commodity items, including bread, rice, imported milk, pasta and meat
Egypt	Grains	Apr-11	Subsidies	Additional EGP 10 million (USD 168 million) allocated for food subsidies until the end of June, to slow rising food prices
EU	Wheat, Barley	Feb-11	Import duty	Import duties on low and medium quality wheat and feed barley suspended until 20 June 2011, in order to maintain sufficient supply of animal feed ingredients
India	Wheat	Jul-10	Food subsidies	More than 3 million tonnes of food grain distributed by government since May 2010 to targeted poor families, with an additional 457 000 tonnes of food grain, 182 000 tonnes of rice and 274 000 tonnes of wheat distributed to above-poverty-line families
	Grains	Mar-11	Productive asset infrastructure	Additional storage capacity for foodgrain in the rural sector created by new measures such as subsidies to storehouses and financial support to private sector investment
	Wheat	Apr-11	State market intervention	Government procurement price of wheat increased 4.5 percent to 11.7 rupees (USD 264) per tonne, to support farmers' incomes following a bumper harvest in 2010
Iran	Wheat	Sep-10	Import ban	Imports of several agricultural products, including wheat and rice, banned until December 2010, to support domestic producers

* Source: Fao Giews Country Policy Monitoring
Http://www.fao.org/giews/countrybrief/policy_index.Jsp

Country	Product	Date	Policy Instrument	Description
Kenya	Wheat, Maize	Mar-11	Input subsidies	Farmers provided with subsidized fertilizers, with 50 kg bags available at KES 1100 (USD 12.8), through a KES 1.8 billion (USD 20.9 million) government programme
	Maize	May-11	Import duty	Import duty on maize and wheat, and taxes on kerosene and diesel removed in an effort to reduce food inflation
Libya	Wheat	Jan-11	Food tax and import tariff	Taxes and custom duties removed on locally produced and imported food products, including wheat by-products, rice and vegetable oils
Mexico	Maize	Dec-10	Set up strategic reserve	Purchase of maize authorized in futures market to alleviate the impact of maize price increases on tortilla
Morocco	Soft wheat	Sep-10	Import tariff	Tariff on soft wheat imports suspended until 31 December 2010, in effort to ensure domestic supplies
	Durum wheat	Nov-10	Import tariff	Durum wheat 80 percent import tariff suspended until the end of 2010
	Wheat	Jan-11	Import subsidy	System introduced to compensate milling soft wheat importers from January to April 2011, if prices exceed MAD 2 600 (USD 303) per tonne at the "port exit", which includes cost and freight as well as importers' margin for the transfer of imported wheat
Pakistan	Wheat	Aug-10	Exports suspension	Planned exports of 2 million tonnes of wheat suspended after summer floods
	Wheat	Dec-10	Export quota	Private sector granted export licenses for 1 million tonnes of wheat, after export plans were suspended in August 2010 due to devastating floods
	Wheat	Feb-11	Minimum price and government procurement	Wheat procurement target for 2011 set at 6.5 million tonnes, with a minimum support price of Rs 950 per 40 kg (USD 11) in expectation of a bumper crop
Peru	Maize	Feb-11	Import tariff	Import tariff removed on some food products including maize and rice, in order to stabilize food prices
Oman	Wheat	Nov-10	Food subsidies	Wheat miller subsidies reintroduced in order to stabilize domestic flour prices
Russian Federation	Grains	Aug-10	Export ban	Export ban on wheat, wheat flour, barley, rye, rye flour and maize set to expire Dec 2010 subsequently extended to June 2011
	Grains	Dec-10	Stock release	Grains totaling 1.3 million tonnes released from intervention stocks and will be sold at low fixed prices to regions hit by drought during summer 2010
	Grains	Jan-11	Stock release	Additional 2 million tonnes of grains from intervention stocks released in regions hit by summer 2010 drought
	Grains	May-30	Elimination of export ban	Announced the liftingof export ban from 1 July 2011

Country	Product	Date	Policy Instrument	Description
	Wheat	Feb-11	Minimum price	Minimum prices of milling wheat will cover average production costs through July 2011, under agreement negotiated by the Russian Union of Grain Producers and Unions of Flour Millers and Bakers
Serbia	Wheat	Mar-11	Export ban	Three-month ban on wheat export set until 15 July 2011, after record exports of wheat in the first nine months of 2010/11 marketing year
Saudi Arabia	Wheat	Jan-11	Food stock policy	Wheat reserves set to double over three years to ensure adequate domestic supplies
South Korea	Grains	Feb-11	Food stock policy	Wheat, soybeans and maize added to state reserves, in addition to rice, to secure their stable supply
	Maize	Feb-11	Import tariff	Import tariffs removed on maize, soymeal and 32 other items to ensure supply and control of inflation
	Wheat, Maize	Apr-11	Institutional measure	International grain procurement company set up in an effort to secure supply of staple farm products, including wheat, beans and maize
Tanzania	Maize	Oct-10	Export ban	Ban on maize and maize flour exports dating from Jan 2009 lifted after good 2010 main season harvest
	Grains	May-11	Export ban	Ban on food exports reintroduced for at least three months in order to limit price increases
Turkey	Wheat	Dec-10	Import quota	Import wheat quota of 1 million tonnes at a zero tariff rate allowed to the Turkish Grain Board (TMO) until 31 Dec 2011
	Wheat	Feb-11	Import quota	Wheat and oats 130 percent import tariff suspended until 1 May 2011
Ukraine	Wheat, Maize, Barley	Oct-10	Export quotas	Export quota of 500 000 tonnes for wheat, 200 000 for barley, and three million for maize ended in 31 December 2010 but modified several times (in terms of length as well as amount) since April
	Grains	Dec-10	Tax	VAT 20 percent refund for grain exporters eliminated from 1 July 2011
	Maize	Apr-11	Export quota	Maize export quotas abolished from July 2011
	Wheat	May-11	Export quota	Export duties of 9 percent to replace export quotas from June to December 2011
	Wheat and barley	May-25	Export quotas	Wheat and barley export quotas abolished
United Arab Emirates	Wheat (bread)	Mar-11	Subsidies	Subsidies set for rice and bread in effort to curb inflation start in April 2011
Venezuela	Maize	May-11	State market intervention	Producer support price increased 30 percent for maize, rice and soybeans

RICE

INTERNATIONAL PRICES

Abundant supplies keep international rice prices stable to lower in the first half of 2011

The price strength that characterized the global rice market in the second part of 2010 started to subside in December. Since then, international rice prices have been stable to lower, as large supplies in major exporting countries shielded the market from the influence of soaring wheat and maize prices. As a result, and despite the lingering weakness of the United States Dollar against other major currencies, rice quotations in May 2011 were unchanged from the previous month and 3 percent below their January value. Diverging movements also brought the rice and wheat quotations closer, lowering the rice-to-wheat price ratio (Thai 100% B Rice-to-US No.2 Hard Red Wheat) from 1.6 in January to 1.4 in May. Yet, rice continues to be far more expensive in international markets than one year ago, with export quotes exceeding their May 2010 level by 22 percent.

The recent slide affected rice from all origins. In **Thailand**, the benchmark Thai white rice 100% B was quoted at USD 500 per tonne in May, down from USD 542 in January. The drop coincided with the expectation, subsequently confirmed, of copious second crops, which compounded the depressing effect of a 4 million tonne release of government-owned stocks that began in mid-2010. Quotations were also subdued in the **United States**, which saw the price of US N.2 4% rice drop by 14 percent between January and May to USD 518 per tonne, amid large availabilities, strong competition in traditional markets, and unease over the quality of the 2010 long-grain rice harvest. In **Viet Nam**, prices were likewise depressed by the harvest of a bumper winter-spring crop in February/March, but also by the devaluation of the Dong and the lowering of the government minimum rice export prices compared with January. In **Pakistan**, prices showed better resistance to the downward pressure, largely reflecting a thinning of supplies, already shortened by the flood related-losses incurred in the second part of last year.

PRODUCTION

Despite many setbacks, world rice production strikes a new record in 2010 – as weather improves, further gains may be expected in 2011

According to FAO's latest estimate of 696 million tonnes (464 million tonnes, milled basis), world paddy production in **2010** recovered by 1.8 percent from the previous

Figure 14. Diverging movements bring the rice and wheat quotations closer

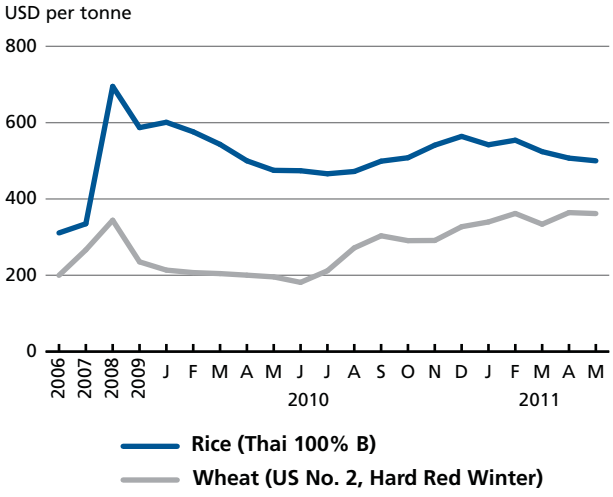


Figure 15. Rice export price (Thai 100% B, f.o.b. Bangkok)

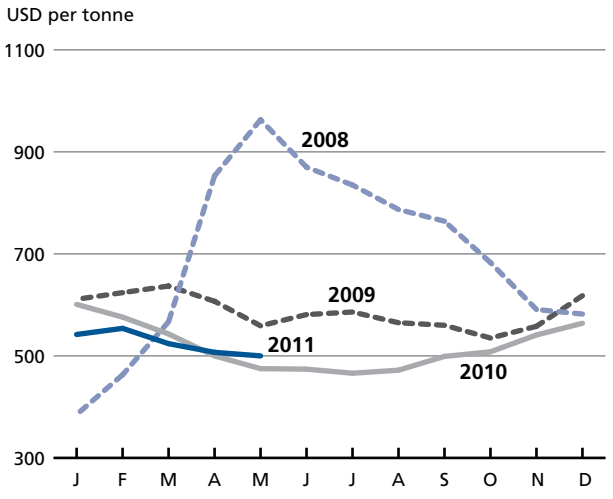
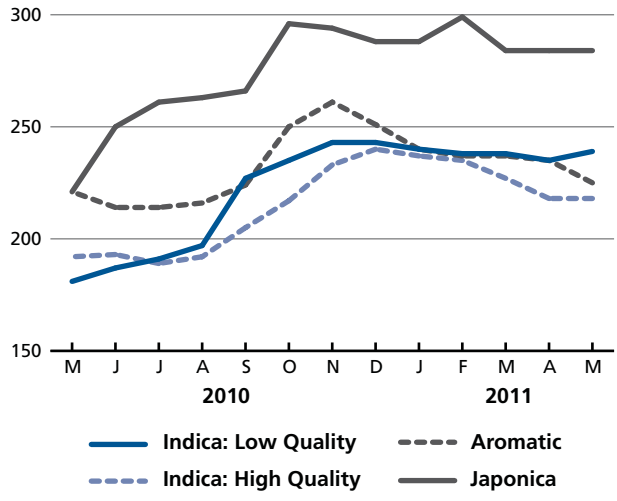


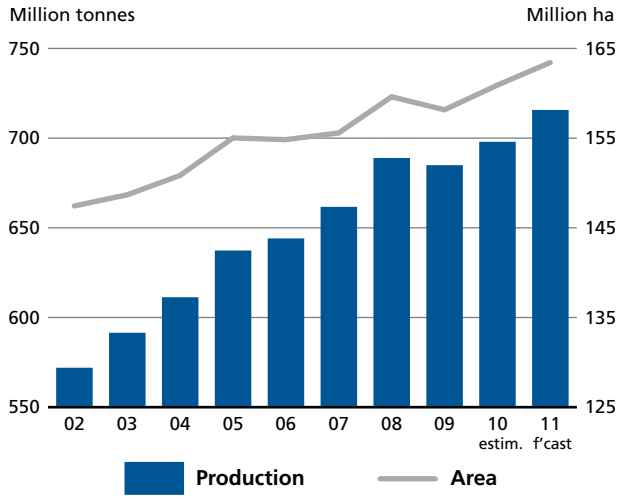
Figure 16. FAO rice price indices (2002-2004=100)



season's poor performance, setting a new record. This was a remarkable outcome, given the consecutive manifestation of El Niño and La Niña weather anomalies, which were associated with a series of droughts and floods across all continents. Much of the season's 13 million tonne increase in world paddy production reflects an upturn in **India**, where an erratic monsoon had impaired rice cultivation in 2009. In Asia, **Bangladesh, Indonesia, the Philippines** and **Viet Nam** also reaped substantially larger crops in 2010, in spite of unfavourable weather. However, the adverse growing conditions virtually suppressed growth in **China** and caused output to dip in the **Lao People's Democratic Republic**, **Myanmar, Pakistan,** the **Republic of Korea** and **Thailand**. In Africa, a government-led cut in rice cultivation in **Egypt** was compensated by sizeable gains in countries such as **Guinea**, **Mali, Nigeria** and **Sierra Leone**. In Latin America and the Caribbean, the prevalence of El Niño conditions depressed output, particularly affecting **Brazil**, **Colombia, Peru, Uruguay** and **Venezuela**. In the other regions, the **United States** gathered a record volume, following a 17 percent price-driven expansion of plantings, although the long-grain harvest was beset by quality problems; **Australia** collected its largest rice crop in four seasons; the **Russian Federation** crossed the 1 million tonne mark for the first time while cold weather depressed production in the **EU**.

Although very preliminary, world paddy production in **2011** is forecast to expand by 2.6 percent to 714 million tonnes (476 million tonnes, milled basis), amid expectations of improved weather conditions, as the influence of La Niña is predicted to fade away by June. Excellent progress of crops in most of the southern hemisphere countries, where the season is quite advanced, already tends to confirm this positive outlook. Governments are also maintaining their support to the sector, in a bid to keep food inflation in check and secure long-run supplies. In Asia, output is anticipated to grow by 2.5 percent to 645 million tonnes (430 million tonnes, milled basis), sustained by particularly large increases in **China** and **India** and a recovery in **Pakistan**. Many other countries in the region are expected to expand production, including **Bangladesh, Cambodia, Indonesia, the Democratic People's Republic of Korea, Nepal, the Philippines** and **Viet Nam,** with a recovery also foreseen in the **Chinese Province of Taiwan, the Republic of Korea, Malaysia, Myanmar** and **Thailand**. By contrast, the outlook has been marred in **Sri Lanka** by consecutive rounds of flood, and in **Japan** by the 11 March catastrophic earthquake, ensuing tsunami and the Fukushima nuclear plant radioactivity leakage. The event, dubbed the "triple crisis", particularly affected the Tohoku district, which accounts for a quarter of Japan's rice output. FAO estimates the disaster will result in a 43 000 ha cut in the area cultivated to rice in 2011, equivalent to about 300 000 tonnes. If confirmed, it would bring Japan's production down by 3 percent to 10.3 million tonnes. In Africa, the 2011 season is expected to yield 24.6 million tonnes, very close to the 2010 outcome, with progress in **Guinea**, **Mali**, **Nigeria** and other western countries compensating for a contraction in **Egypt** and **Madagascar**. In Latin America and the Caribbean, paddy production is forecast to rebound by 9.2 percent to 29.2 million tonnes in 2011, underpinned by a strong recovery in the southern part of the continent, in particular in **Argentina, Brazil, Colombia, Uruguay** and **Venezuela**, where harvesting of the 2011 main paddy crops is virtually completed. In the other regions, prospects are positive in **Australia**, which may garner about 800 000 tonnes, the largest volume since 2006; in the **EU**, owing to an expected recovery in Italy; and in the **Russian Federation.** However, the outlook is negative for the **United States,** where producers are expected to divert land from rice into more profitable crops and where plantings are being delayed by floods.

Figure 17. Global rice paddy production and area



TRADE

Improved export availability along with brisk import demand sustain 2011 rice trade

Reflecting a strong pace of shipments in the first quarter, FAO has slightly raised its forecasts of world rice trade in calendar 2011 to 31.8 million tonnes. At this level, the volume of exchange would be about 400 000 tonnes, or 1 percent above the 2010 level, and only some 200 00

tonnes short of the 2007 trade record. Firm import demand from African countries is anticipated to sustain this small increase, but volumes delivered to North America and Europe are also expected to rise. Larger shipments to these regions are now anticipated to more than compensate for reduced imports in Asia and in Latin America and the Caribbean, where large crops may depress purchases. On the export side, **Thailand** is still expected to account for much of the expansion, but volumes delivered by **Brazil, Cambodia, China, India, Uruguay** and, especially **Viet Nam** are also foreseen to rise, offsetting reduced exports from **Egypt, Pakistan** and the **United States**.

Although Asian countries remain the major destination of rice trade, they are anticipated to cut slightly their imports to 15.5 million tonnes in 2011, mainly due to **the Philippines** cutting its purchases by 41 percent to 1.3 million tonnes. The country's retrenchment is consistent with current prospects of good crops in 2010/11, but also reflects attempts by the new Government to streamline imports by the National Food Authority while increasing private sector participation in trade. The positive 2010 crop performance would enable **the Islamic Republic of Iran** and **Turkey** to import less in 2011. On the other hand, larger volumes are expected to be delivered to **Bangladesh, the Democratic Republic of Korea, Malaysia** and **Saudi Arabia**, either to build up reserves or for market distribution, to keep food inflation in check. In Africa, shipments to **Cameroon**, **Mozambique** and **South Africa** are expected to increase, but they may decrease in **Nigeria**, where rice import through land frontiers has been banned since January in an attempt to contain unregistered inflows. In the other regions, the **United States** and the **EU** are forecast to buy more, while relief from an enlarged 2011 crop may help **Australia** trim its purchases.

Among the various rice exporters, **Thailand** is forecast to expand deliveries by 7.4 percent to 9.7 million tonnes in 2011, owing to a release of supplies from the government stockpile, which will compensate for the reduced 2010 output. A 7 percent devaluation of **Viet Nam's** currency last February may help propel Viet Nam exports to a record 7.1 million tonnes, despite lower purchases by the **Philippines**, its most important customer. Although good season results are expected to boost **India's** exports by 15 percent to 2.3 million tonnes, these will remain well short of the 4.7 million tonnes sold in 2005–2007, prior to the imposition of export restrictions. Production gains are also expected to translate into greater deliveries by **Argentina**, **Australia**, **Brazil**, **Cambodia**, **China**, the **Russian Federation** and **Uruguay**. By contrast, exports from the **United States** are forecast to contract, amid

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

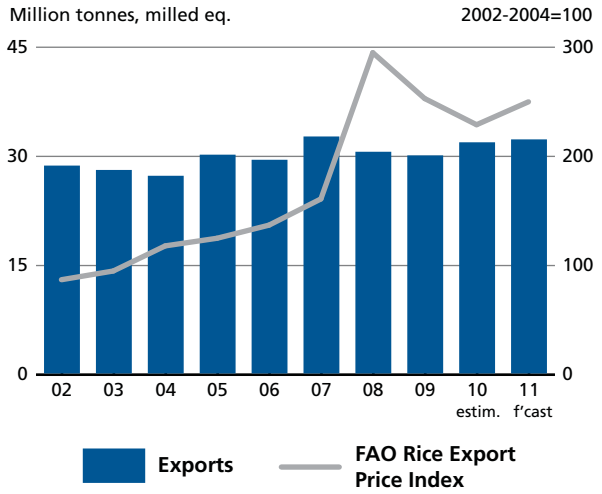


Figure 19. Rice imports by region

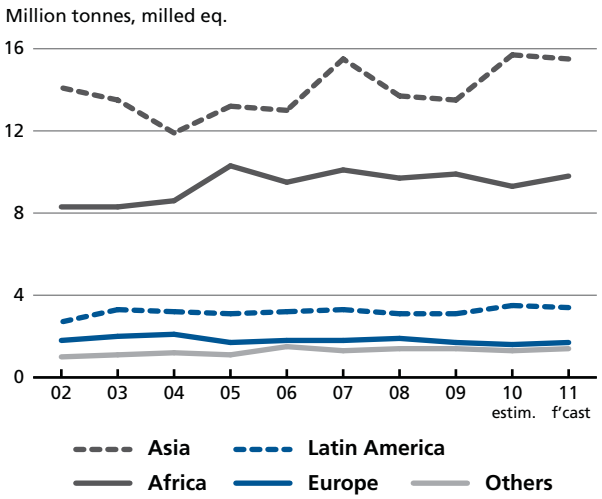
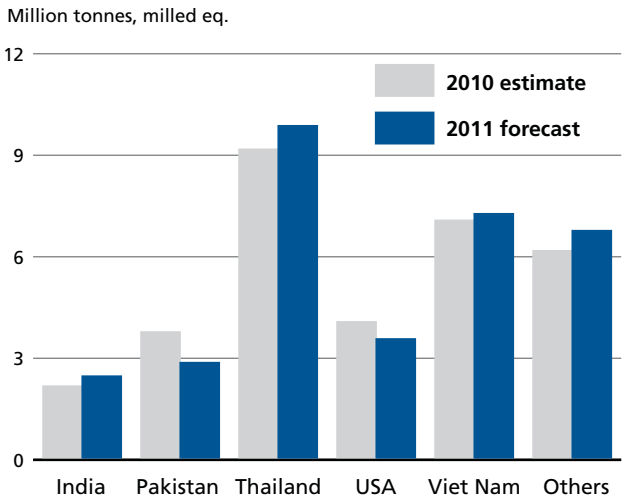


Figure 20. Rice exports by the major exporters



growing competition from Australia and the **EU** in the medium-grain rice market and poor quality of the **United States** long-grain crop. On the other hand, sales from **Pakistan**, the fourth largest rice exporter, may shrink by 25 percent, constrained by the heavy flood-related losses incurred last season, while reduced availability, along with export restrictions, could weigh negatively on shipments from **Egypt** and **Myanmar**.

CONSUMPTION

Per capita rice food consumption estimated to remain stable in 2011, with governments intervening to contain escalating domestic prices

Global rice utilization is forecast to increase by 2 percent in 2011, to 460 million tonnes, milled basis, on the back of good crops. Of the total, 389 million tonnes are gauged to be destined to direct human consumption, almost 7 million tonnes more than in 2010, which brings average annual rice food per capita to 56 kg in 2011, little changed from recent years' estimates. Supplies directed to animal feed are assessed to remain in the order of 12 million tonnes, with other end uses (including post-harvest losses) expected to rise by 8 percent to 58 million tonnes. Based on the preliminary forecast for production in 2011, rice utilization could reach 469 million tonnes in 2012, of which 398 million tonnes would be utilized for food, resulting in a rise in per capita food intake to 57 kg.

The inflationary pressure that characterized domestic food markets in 2010 did not spare rice. Sharply higher wholesale and retail prices were reported for rice over the past twelve months in virtually all continents, prompting the launch of measures to curb the increases or to smooth their impacts on the most vulnerable sections of the population. In Asia, rice prices continued to register gains in the first quarter of 2011 in **China , the Republic of Korea, Myanmar, Pakistan, Sri lanka** and **Viet Nam**. Increases were also reported in Africa, especially in **Chad, Niger, Somalia, Tanzania** and **Uganda**; in Latin America and the Caribbean in **Mexico** and **Peru**; and in the **EU**. The hikes witnessed during the past year were often the result of fast economic growth underpinning demand, but also reflected rising production and processing costs and rather loose monetary policies. Some governments reacted to the price surges by releasing supplies from public stocks through auctions. This was the case in **China**, which unloaded 13.43 million tonnes of rice on the market in 2010, as well as in **Bangladesh**, **the Republic of Korea** and the **Chinese Province of Taiwan**. Other measures included widening targeted distributions at subsidized prices, retail price controls, and trade policy actions aimed at facilitating imports or hindering exports.

Table 7. World rice market at a glance

	2008/09	2009/10 *estim.*	2010/11 *f'cast*	Change 2010/11 over 2009/10
	million tonnes			%
WORLD BALANCE (milled basis)				
Production	**458.5**	**455.6**	**463.8**	**1.8**
Trade [1]	**29.6**	**31.4**	**31.8**	**1.4**
Total utilization	**444.5**	**448.9**	**459.6**	**2.4**
Food	379.6	382.8	389.2	1.7
Ending stocks	**126.6**	**132.3**	**136.7**	**3.3**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	56.3	56.1	56.4	0.5
LIFDC (Kg/year)	68.5	68.0	68.2	0.3
World stock-to-use ratio (%)	**28.2**	**28.8**	**29.1**	**1.2**
Major exporters' stock-to-disappearance ratio (%) [2]	**21.7**	**19.4**	**18.6**	**-4.1**

FAO rice price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	253	229	249	11.7

[1] Calendar year exports (second year shown)
[2] Major exporters include India, Pakistan, Thailand, the United States and Viet Nam
More detailed information on the rice market is available in the FAO Rice Market Monitor which can be accessed at:
http://www.fao.org/economic/est/publications/rice-publications/rice-market-monitor-rmm/en/

STOCKS

Further build up of world rice stocks forecast in 2011

According to FAO's latest assessment, global rice inventories at the close of crop seasons ending in 2011 could reach 137 million tonnes, implying an increase of more than 4 million tonnes, or 3 percent, from 2010. At that level, the reserves would be sufficient to meet 29 percent of projected needs. Much of the increase would accrue in developing countries, where stocks could reach 132 million tonnes, 4 million tonnes more than in the previous year, but developed countries are also likely to build up reserves by 17 percent to 5 million tonnes. By contrast, stocks held by the five major rice exporters, as a group, are projected to fall by 3 percent to 29.2 million tonnes, with declines expected in **Thailand**, where the Government has been cutting the size of public inventories through massive releases since mid-2010, in **Viet Nam** on record exports, and in **Pakistan**, mainly due to the crop losses caused by flooding in August.

Table 8. Monthly retail prices of rice in selected markets

	Latest available quotation:		*Latest available quotation compared to:* [1]			
Asia	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Bangladesh: Ntl. Avg. (coarse)	May-11	0.41	-9%	-3%	16%	55%
Bhutan: Samdrup Jongkhar (white)	Apr-11	0.41	0%	-10%	9%	20%
Cambodia: Phnom Penh (mix)*	May-11	0.40	-10%	-8%	-15%	15%
China: Hubei (indica first quality)*	May-11	0.53	5%	13%	23%	26%
India: Delhi	May-11	0.51	0%	1%	4%	15%
Indonesia: Ntl. Avg.	Apr-11	1.01	-6%	3%	18%	31%
Japan: Tokyo Ku-area (non-glutinous)	Apr-11	4.89	0%	-2%	-6%	-10%
Republic of Korea: Ntl. Avg.	May-11	2.07	7%	11%	7%	-2%
Lao PDR: Vientiane (ordinary first quality)	Mar-11	1.12	0%	-3%	13%	13%
Mongolia: Ulaanbaatar	Apr-11	1.37	-4%	-6%	12%	15%
Myanmar: Ntl. Avg.	Feb-11	0.51	1%	9%	20%	32%
Nepal: Kathmandu (coarse)	Apr-11	0.48	0%	-3%	6%	-6%
Pakistan: Karachi (irri)	May-11	0.49	1%	15%	21%	26%
Philippines: Ntl. Avg. (well-milled)	Mar-11	0.80	1%	1%	0%	0%
Sri Lanka: Colombo (white)	Apr-11	0.53	3%	9%	12%	1%
Thailand: Bangkok (5% broken)*	Mar-11	0.44	-9%	2%	-8%	-26%
Viet Nam: Dong Thap (25% broken)	May-11	0.42	7%	3%	44%	47%
Western Africa	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Benin: Cotonou (imported)	Apr-11	1.06	-9%	-9%	-9%	-3%
Burkina Faso: Ouagadougou (imported)*	Apr-11	0.85	1%	13%	20%	4%
Cape Verde: Santiago (imported)	Apr-11	1.27	1%	3%	4%	11%
Chad: N'Djamena (imported)	Mar-11	1.00	21%	2%	2%	-6%
Mali: Bamako (imported)*	Apr-11	0.73	2%	14%	18%	10%
Niger: Niamey (imported)	Mar-11	1.01	6%	19%	19%	6%
Senegal: Dakar (imported)	Mar-11	0.84	-2%	0%	-2%	-2%
Central Africa	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Cameroon: Yaundé	Feb-11	0.92	2%	1%	1%	-6%
Dem. Rep. Congo: Kinshasa (imported)	Mar-11	1.18	4%	7%	5%	11%
Eastern Afirca	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Burundi: Bujumbura	Mar-11	1.08	0%	2%	-1%	3%
Djibouti: Djibouti (imported)*	Mar-11	0.74	6%	22%	20%	-19%
Rwanda: Kigali*	May-11	0.76	-10%	-4%	-16%	-28%
Somalia: Mogadishu (imported)	Apr-11	0.75	13%	11%	20%	17%
Uganda: Kampala*	May-11	0.95	54%	64%	15%	18%
United Rep. of Tanzania: Dar es Salaam*	May-11	0.87	11%	22%	7%	-3%
Southern Africa	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Madagascar: Ntl. Avg. (local)	Apr-11	0.60	-8%	11%	-	14%
Mozambique: Maputo	Apr-11	0.90	-6%	-3%	16%	29%
Central America and the Caribbean	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Costa Rica: Ntl. Avg. (first quality)	Mar-11	1.66	-	8%	9%	52%
Dominican Rep: Santo Domingo (first quality)	Apr-11	1.24	2%	8%	-2%	-1%
El Salvador: San Salvador	Mar-11	1.09	0%	4%	4%	-23%
Guatemala: Ntl. Avg. (second quality)	Mar-11	1.13	0%	1%	1%	0%
Haiti: Port-au-Prince (imported)	Apr-11	0.99	-27%	-4%	-18%	-3%
Honduras: Tegucigalpa (second quality)*	May-11	0.81	-6%	-3%	1%	-10%
Mexico: Mexico City (sinaloa)*	Apr-11	0.93	4%	28%	16%	-3%
Nicaragua: Ntl. Avg. (second quality)	Feb-11	0.89	-1%	1%	0%	-9%
Panama: Panama City (first quality)	Apr-11	1.09	0%	0%	4%	0%
South America	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Bolivia: La Paz (grano de oro)*	May-11	0.91	-2%	0%	-5%	-4%
Brazil: Ntl. Avg.	Apr-11	1.17	-5%	-6%	-8%	-21%
Colombia: Bogotá (first quality)*	Apr-11	1.16	-1%	13%	19%	-5%
Peru: Lima (corriente)	Apr-11	0.87	9%	19%	20%	-10%
Uruguay: Ntl. Avg.	Mar-11	0.97	1%	2%	0%	-5%
North America	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
United States: City Avg. (long grain, uncooked)	Apr-11	1.62	-1%	3%	-3%	-3%
Europe	*Month*	*USD/Kg*	*3 months earlier*	*6 months earlier*	*1 year earlier*	*2 years earlier*
Italy: Milan (arborio volano)*	May-11	2.06	6%	32%	52%	41%
Russian Federation: Ntl. Avg.	Apr-11	1.65	-1%	3%	7%	1%

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

* *Wholesale prices.*

Sources: FAO/GIEWS National Food Price database; Monthly Report on the Retail Price Survey, Japan Ministry of Internal Affairs and Communications; Korea Agricultural Marketing Information Service (KAMIS); U.S. Bureau of Labor Statistics (BLS); Associazione Industrie Risiere Italiane (AIRI).

Percentage price decrease

Percentage price increase

On the other hand, both **India** and the **United States** may close their crop seasons with larger carryovers. Among importing countries, **Bangladesh,** the **EU, Indonesia,** the **Islamic Republic of Iran** and **Saudi Arabia** are all foreseen to raise the size of their inventories, while they may fall in **Brazil,** the **Philippines, Malaysia, Nigeria** and the **Republic of Korea.**

Based on the very preliminary expectations for the 2011 season production, FAO's first forecast of global inventories in 2012 points to a further 5 percent increase to 143 million tonnes. If confirmed, this would be the eighth year of consecutive increases of world rice reserves and would raise the global stock-to-use ratio to 30 percent.

Figure 21. Global rice closing stocks and stock-to-use ratio

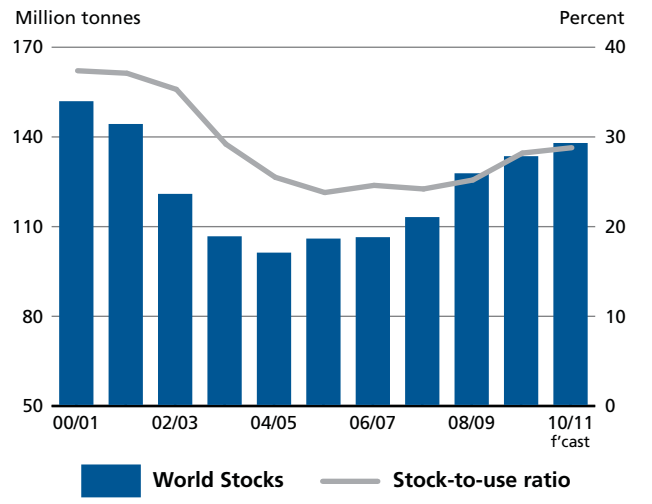
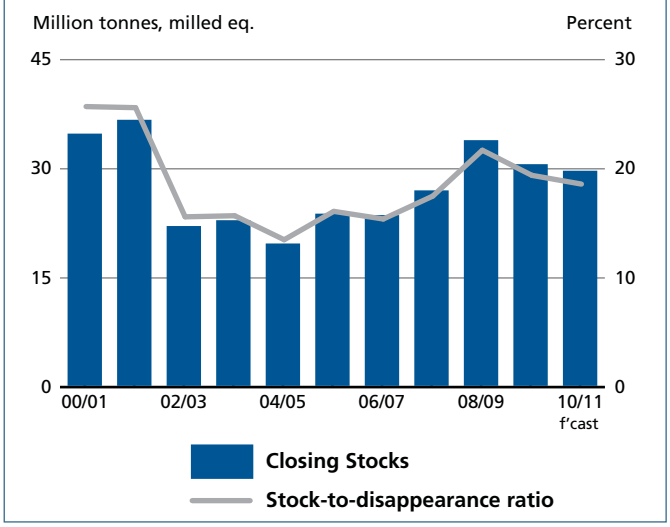


Figure 22. Stocks held by the five major rice exporters and stock-to-disappearance ratio



OILSEEDS, OILS AND MEALS[2,3]

PRICES[4]

Recent relief to prices not expected to last

After the dramatic rise and subsequent drop seen in 2008, prices in the oilseeds complex embarked on a new, gradual upward trend in 2009. This reflected a progressive tightening in global supplies together with a resumption of global demand growth and a robust buying interest by major importing countries.

With the onset of the 2010/11 marketing year (October/September), prospects of prolonged market tightness propelled prices further increases until February 2011, when prices of several oilseeds and derived products came close to their 2008 peaks (as illustrated by the respective FAO price indices). The new surge was caused by a concurrence of factors: downward corrections in soybean and palm oil production forecasts, because of adverse weather conditions; continued strong import demand for oilcrops and derived products, combined with a mounting reliance on the United States as principal supplier; prolonged weakness of the US Dollar; renewed policy driven growth in the demand for vegetable oil used as biodiesel feedstock; and price spillover effects from increasingly tight grain markets.

After February 2011, prices for oilseeds and derived products have eased. This was a response to the temporary slow-down in import demand and improved production prospects for soybeans and palm oil as well as for rape and sunflower seed. However, the price relief is not likely to last.

[2] Almost the entire volume of oilcrops harvested worldwide is crushed in order to obtain oils and fats for human nutrition or industrial purposes and cakes and meals 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. do not reflect the outcome of actual oilseed crushing nor take into account changes in oilseed stocks. 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.

[3] Notice to readers: The analysis of the overall supply and demand situation for oilseeds and derived products provided twice per year in *Food Outlook* is complemented by up-to-date information on market and policy developments in the *Monthly Price and Policy Update* (MPPU). Issued 10 times per year and published in English only, the bulletin reviews latest international price developments and spots specific policy, market and industry issues that are deemed important for the global oilseed economy. To read (and subscribe to) the MPPU please go to the following web page http://www.fao.org/economic/est/publications/oilcrops-publications/oilcrops-monthly-price-and-policy-update/en/

[4] For details on prices and corresponding indices, see Appendix Table A24.

Figure 23. FAO monthly international price indices for oilseeds, oils/fats and meals/cakes (2002-2004=100)

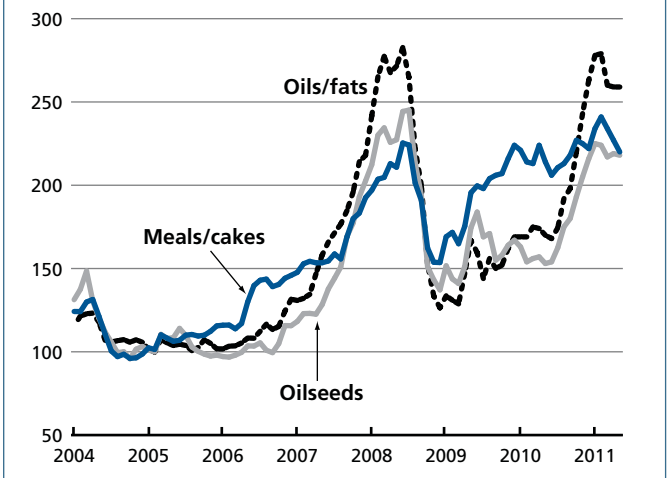


Figure 24. FAO monthly price index for oilseeds (2002-2004=100)

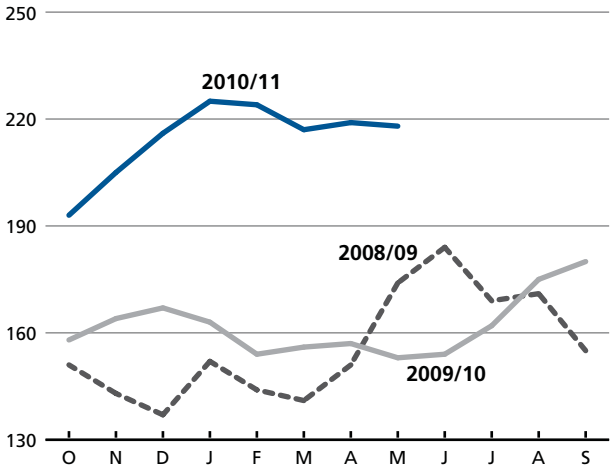


Figure 25. FAO monthly price index for oils/fats (2002-2004=100)

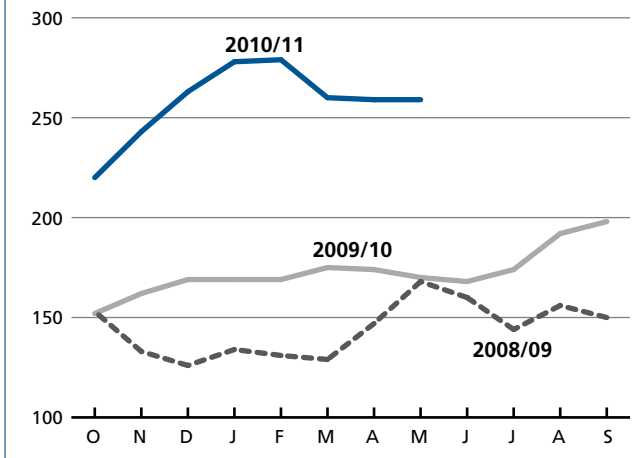
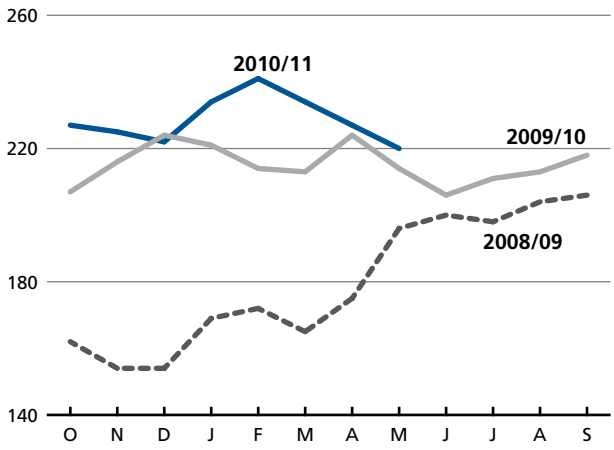


Figure 26. FAO monthly price index for meals/cakes (2002-2004=100)



First projections for 2011/12 suggest that the current overall tightness in world supply and demand could carry on, and possibly intensify, during 2011/12. At present, both, the oilseeds and the grain markets present an unusually tight supply and demand situation, which is resulting in increased competition for arable land in several countries. Especially in the United States, where plantings have just started for the 2011/12 soybean crop, the current soy-maize price ratio promises higher returns in maize, which may thus hinder an expansion in soybean. Moreover, oilseed crops already in the ground in the EU reportedly have suffered from adverse weather. Consequently, even barring further weather problems and assuming continued production gains in South America and Southeast Asia next year, global supplies might not be sufficient to satisfy the steadily expanding oil and meal demand. This would imply further reductions of global inventories and stock-to-use ratios and, hence, firming prices in the months to come. Recent market sentiments confirm this assessment: in the second half of May 2011, the CBOT soybean futures contract for September was traded around USD 495 per tonne, which compares with USD 338 one year earlier.

Figure 27. CBOT soybean futures for September

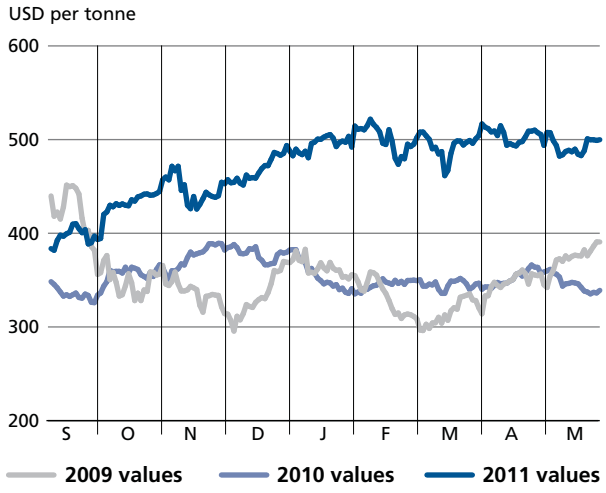


Table 9. World production of major oilseeds

	2008/09	2009/10 *estim.*	2010/11 *f'cast*	Change 2010/11 over 2009/10 %
	million tonnes			
Soybeans	211.6	259.9	263.5	1.4
Cottonseed	41.8	39.7	43.9	10.4
Rapeseed	58.3	61.4	60.0	-2.2
Groundnuts (unshelled)	35.6	34.7	36.5	5.3
Sunflower seed	34.6	32.4	32.6	0.5
Palmkernels	11.6	11.6	12.3	5.8
Copra	5.2	5.8	5.2	-10.4

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.

OILSEEDS

Global oilcrop production growing modestly in 2010/11

After last season's extraordinary rise, only a modest increase in world oilcrop production is expected in 2010/11. Estimated at 465 million tonnes, production should exceed last season's all-time record by no more than 2 percent. Growth will be mainly area-driven as average yield levels should remain close to those of last season.

Looking at individual oilcrops, a sizeable drop is reported for rapeseed and copra. Global soybean, cottonseed, groundnut and palmkernel production are forecast to increase.

World 2010/11soybean production should exceed last season's record by about 1 percent. Farmers have expanded plantings in response to firm soybean prices and generally favourable weather conditions. Among northern hemisphere producers, the **United States** reported a 1 percent drop in output, mostly due to a reduction in yields. In **China,** production reportedly remained about unchanged**,** while in **India**, extensive plantings and favourable weather led to a marked rise in output**.** Furthermore, record crops were harvested in **Canada,** the **Russian Federation** and **Ukraine**, where farmers expanded plantings, taking advantage of high prices and improved export opportunities. In **South America**, the 2010/11 harvest is just now approaching completion, and latest estimates point to a repeat of last year's record output; despite initial concerns that both plantings and productivity might suffer from dry La Niña weather, eventually, a slight increase in the area under soybean was reported and the general yield level should be well above the historic average. While prolonged dryness did cause production falls in **Argentina** and **Uruguay**, new all-time highs are expected in **Brazil** and **Paraguay**.

As to the other oilseeds, a strong rise is expected in global cottonseed production, mainly sustained by **Brazil**, **India** and the **United States**. With regard to rapeseed, global output should be well below the average of recent years, as adverse weather conditions lowered production in major producing areas, notably **Canada, China,** the **EU** and **Ukraine**. While unfavourable weather also hampered sunflower seed cultivation in **India** and the **Russian Federation**, global crop output is expected to remain about unchanged thanks to production increases in **Argentina** and **Ukraine**.

OILS AND FATS[5]

Global oil/fat supplies held up by ample carry-in stocks

Current 2010/11 crop estimates translate into a below average 1.7 percent increase in global oils/fats production. Oil extracted from annual oil crops is expected to remain virtually unchanged from last season, reflecting poor harvests of two high oil-yielding oilseeds - rape and sunflower seed. However, perennial crops are expected to compensate for this decrease, particularly palm oil, which is forecast to expand by over 4 percent after last year's exceptionally

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

Table 10. World oilseed and product markets at a glance

	2008/09	2009/10 estim.	2010/11 f'cast	Change 2010/11 over 2009/10
		million tonnes		%
TOTAL OILSEEDS				
Production	409.7	456.0	464.7	1.9
OILS AND FATS[1]				
Production	161.2	172.2	175.2	1.7
Supply[2]	184.5	195.6	201.0	2.8
Utilization[3]	161.7	170.1	175.1	3.0
Trade[4]	86.3	89.1	91.2	2.3
Stock-to-utilization ratio (%)	*14.5*	*15.2*	*14.7*	
MEALS AND CAKES[5]				
Production	98.2	113.8	116.1	2.0
Supply[2]	116.0	127.7	135.0	5.7
Utilization[3]	102.9	107.6	116.1	7.9
Trade[4]	62.3	67.2	71.2	6.0
Stock-to-utilization ratio (%)	*13.6*	*17.6*	*16.2*	

FAO price indices (Oct-Sep) (2002-2004=100)	2008/09	2009/10	2010/11 Oct-May	Change: Oct-May 2010/11 over Oct-May 2009/10 %
Oilseeds	156	162	215	35.2
Meals/cakes	180	215	229	5.5
Oils/fats	144	173	258	53.6

Note: Refer to footnote 2 in the text for further explanations regarding definitions and coverages

[1] Includes oils and fats of vegetable, animal and marine origin
[2] Production plus opening stocks
[3] Residual of the balance
[4] Trade data refer to exports based on a common October/September marketing season
[5] 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

poor growth, thanks to more favourable weather conditions across producing regions in Southeast Asia, as well as to further rises in mature areas, notably in **Indonesia**. Global oils/fats supplies in 2010/11, which comprise 2010/11 production plus 2009/10 ending stocks, should expand by almost 3 percent, reflecting large carry-in stock positions. However, the anticipated growth in supplies remains relatively weak in historic terms. Among main producing countries, domestic availability of oils/fats is set to expand in **Argentina**, **China**, **India**, **Indonesia** and, particularly, **Brazil**. By contrast, modest or no growth is expected in **Canada**, **Malaysia** and the **United States**, while an exceptional drop is likely in the **EU**.

World consumption to expand less than in past years

Expansion in global oil/fat demand is expected to proceed in 2010/11. However, with an anticipated rise of 3 percent, consumption growth would be below the rate recorded in past years. Persistently firm oils/fats prices are contributing strongly to this slowdown. In numerous developing countries, growth in demand is expected to decelerate. The exception is **China**, where oils/fats consumption is accelerating, primarily in the food sector. In **India** and **Indonesia**, Asia's second and third largest oil users, year-on-year rises should fall well behind past rates. Slowdowns are also expected among developed nations, notably the **EU** and the **United States**, where consumption expansion is constrained by thin domestic availabilities. Commodity-wise, the expansion in world oil/fat consumption is likely to rely primarily on soy oil for both food purposes and biodiesel feedstock, given the poor sunflower and rapeseed harvests and unusually tight palm oil supplies, which have resulted in more competitive soy oil prices.

Approximately half of the anticipated rise in global consumption is attributed to renewed demand growth in biodiesel industries. In fact, this year, biodiesel production is tentatively estimated to account for around 12 percent of total oils/fats utilization, compared with no more than 10 percent last year. Price is not the main driving force. Instead, the main drivers are higher mandatory blending rates in gasoline as well as support given to the biofuel sector in several countries and, consequently, further expansion in biofuel production capacities. In **Canada**, the **EU** and the **United States**, total consumption growth is largely due to biodiesel production. In **Argentina** and **Brazil**, rising domestic demand from the biodiesel sector continues to curtail export availabilities.

Figure 28. Global production and utilization of oils/fats

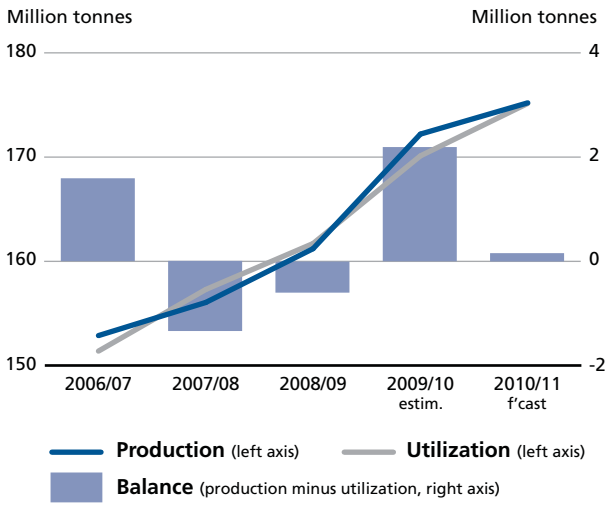
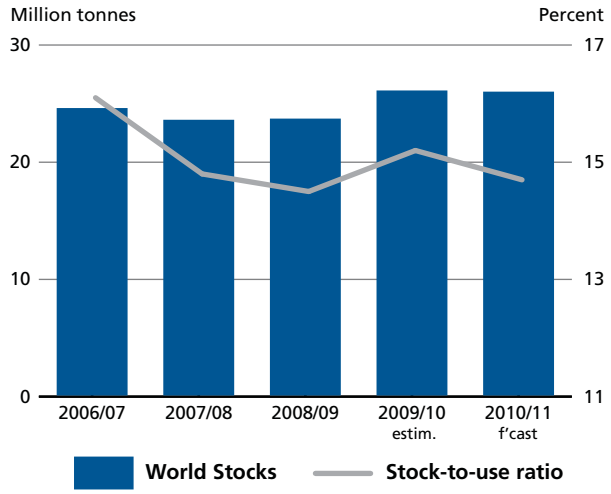


Figure 29. World closing stocks and stock-to-use ratio of oils/fats (including the oil contained in seeds stored)



Global stock-to-use ratio to fall again

As opposed to last season, when the global oils/fats output exceeded demand, production in 2010/11 is anticipated to just match consumption. Consequently, total inventories (measured as oil/fat stocks, plus the oil contained in stored oilseeds) are expected to remain about unchanged compared with last season. Rising soy oil inventories should compensate for lower ending stocks of rape and sunflower oil, and improved stock positions in **Argentina**, **Brazil**, **China**, **India** and **Malaysia**, are anticipated to offset reductions in **Canada**, the **EU**, **Indonesia** and the **United States**. When related to the projected world consumption, current stock forecasts indicate a global stock-to-use ratio of 14.7 percent, down from last season's 15.2 percent and close to the low levels recorded during and immediately after the 2007/08 crisis.

Trade in oils/fats to expand at a below average rate

In 2010/11, global trade in oils/fats (including the oil contained in traded oilseeds) is forecast at 91 million tonnes, which amounts to a year-on-year increase of 2.3 percent - well below the average rise of previous seasons. One reason for the relatively weak expansion is high international oil/fat prices and their depressing effect on import demand. Furthermore, growth in world export availability is being depressed by this year's slow increase in palm oil supplies as well as by the large domestic utilization for biodiesel production in the countries that are leading providers of soy oil.

Trade expansion is anticipated to rely primarily on soybean and palm oil. Among main soy oil suppliers, only **Brazil** can expect a strong expansion in exports (following the country's abundant harvest). In **Argentina** and the **United States**, poor domestic output and additional demand from biodiesel industries should constrain export growth. While **Indonesia** should be able to raise palm oil shipments by 1.4 million tonnes (or about 8 percent), in **Malaysia**, below-record production may lead to an unprecedented contraction in the volume of shipments. Interestingly, **Canada** is set to expand exports of rapeseed oil despite this season's poor harvest. The country is prepared to draw down inventories in an apparent effort to capitalize on high international rapeseed oil prices.

Figure 30. Total oil/fat imports by region or major country (including the oil contained in seed imports)

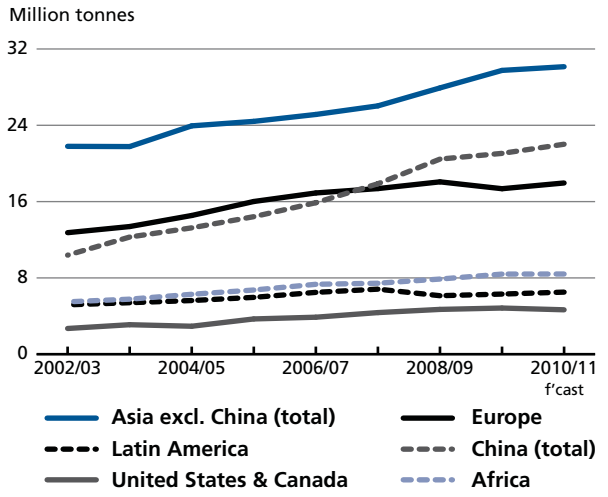
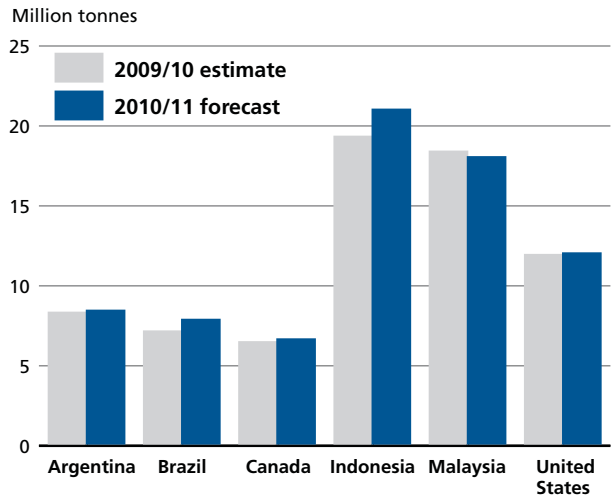


Figure 31. Oil/fat exports by major exporters (including the oil contained in seed exports)



As for imports, continued firmness in world prices is expected to curb growth, and could even reduce the volume of purchases in many developing countries. In Asia, the destination of nearly half the world trade, imports are estimated to expand by less than 3 percent on average, compared with 5 and 10 percent in the 2009/10 and 2008/09 seasons, respectively. The main exception is **China**, where imports are forecast to increase by 5 percent, due to poor harvests and continued strong economic growth. In the case of **India**, import requirements should fall. Not only did the country have a record crop outturn, its higher domestic prices have led to a release of stocks and an acceleration in crushing. In the **EU**, the leading developed country buyer, oils/fats imports are bound to rise as poor domestic harvests coincide with rising demand from biodiesel producers.

MEALS AND CAKES[6]

Global meal supplies sustained by abundant opening stocks

Based on the latest 2010/11 crop estimates, global meals/cakes production (measured in protein equivalent) should exceed last season's all-time record by a small margin of 2 percent. An anticipated drop in rapeseed meal is expected to be more than offset by a record soymeal output, and by a production recovery in sunflower and cottonseed as well as fishmeals. World supplies of meals/cakes in 2010/11, which comprise 2010/11 production plus 2009/10 ending stocks, are anticipated to expand by almost 6 percent. Improved soybean carry-in stocks have contributed strongly to the anticipated rise in global supplies. With regard to main producers, supplies are set to surpass previous records in **Brazil**, **Canada**, **China** and **India**, owing to ample opening stocks, abundant crops or a combination of the two. Although domestic availabilities in **Argentina** and the **United States** have improved marginally, they are estimated to fall short of historic records. By contrast, the **EU**'s combination of low carry-in stocks and poor harvests should result in an unusual drop in supplies.

Meal consumption to grow markedly in spite of firm prices

In spite of historically high prices, global consumption of meals/cakes (measured in protein equivalent) is estimated to expand by about 8 percent in 2010/11, well above the average rate of recent years. The expansion in demand will be primarily on account of soybean meal, the consumption of which should climb to an all-time high. About two thirds of the global consumption rise is expected to occur in Asia, with **China** alone responsible for over half of global growth. The 17 percent year-on-year surge in China's consumption is being driven by rising population and higher income levels that propel per capita consumption of livestock products. The country's livestock sector is estimated to absorb one quarter of world meal utilization. Significantly smaller growth is expected in the world's second and third largest consumers, the EU and the United States. In the **EU**, meal utilization should recover from recent drops, given a

Figure 32. Global production and utilization of meals/cakes (in protein equivalent)

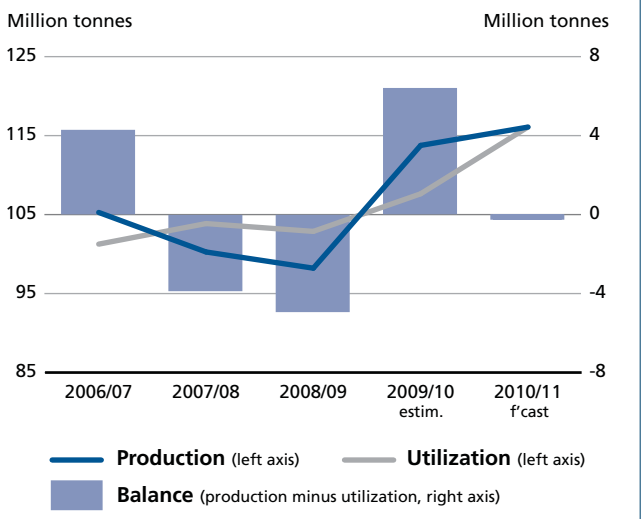
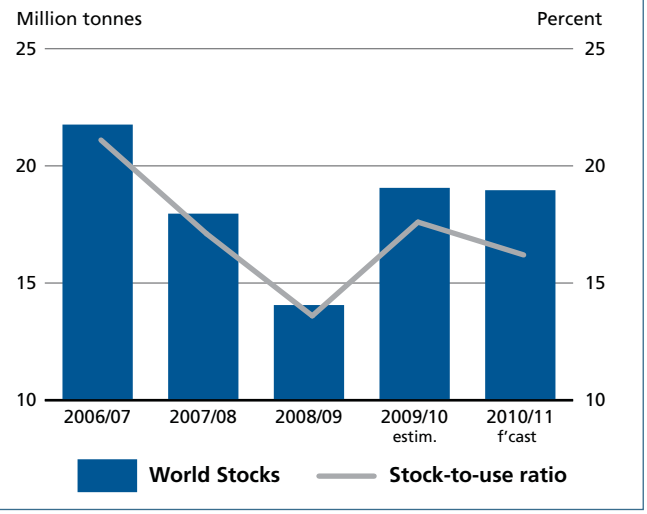


Figure 33. World closing stocks and stock-to-use ratio of meals/cakes (in protein equivalent and including the meal contained in seeds stored)



[6] This section refers to meals from all origins, which, in addition to products derived from the oilcrops discussed under the section on oilseeds, include fishmeal as well as meals of animal origin.

revival of livestock production and the relatively high prices of competing feed grains. By contrast, with only modest gains in livestock production and continued availability of attractively priced distilled dried grains, the **United States** consumption is expected to remain below historic levels.

Stock-to-use ratio to be pushed down by strong rise in consumption

Last season's abundance of meal production over consumption proved short-lived and 2010/11 global output is expected to just match demand. As a result, the level of global inventories (measured as meal stocks *per se,* plus the meal contained in stored oilseeds) is expected to remain unchanged from last season's about average level. Among major stockholding countries, **China**, where public stockholding expanded strongly in recent years, may face a contraction of stocks on account of large sales from public inventories launched by the Government (along with other measures) in an attempt to check food price inflation. In **Argentina**, inventories will need to be drawn upon to keep exports growing. By contrast, stock replenishments are expected in the **EU**, the **United States** and, in particular, **Brazil**. Due to the projected hefty increase in global meal consumption, the overall stock-to-use ratio is anticipated to fall again, thus departing from last season's comfortable level.

Trade in meals to expand further

Last season's strong rise in global meal/cake transactions is expected to be followed by another robust increase in 2010/11. World trade is forecast to expand by 6 percent, surpassing 71 million tonnes (expressed in protein equivalent and including the meal contained in oilseeds traded). Competitively priced soymeal is expected to account for virtually all of this season's growth. Headed by **Brazil**, South American suppliers are anticipated to supply the bulk of increased world meal exports, thanks to good harvests and/or ample opening stocks. The continent's share in total shipments is estimated at 55 percent. The **United States** is expected to be the world's single most important supplier. However, the country faces dismal domestic production growth and strong external competition from South America. Thus, United States sales are likely to remain below last season's record. A number of second-tier exporters, such as **Canada**, **Paraguay** and **Ukraine**, are set to drive up their exports to take advantage of favourable international prices. **India** should enjoy a strong recovery in soymeal shipments following this season's ample crop.

With regard to imports, more than half of the projected rise in global demand is expected to occur in Asia, primarily

Figure 34. Meal/cake imports by region or major country (in protein equivalent and including the meal contained in seed imports)

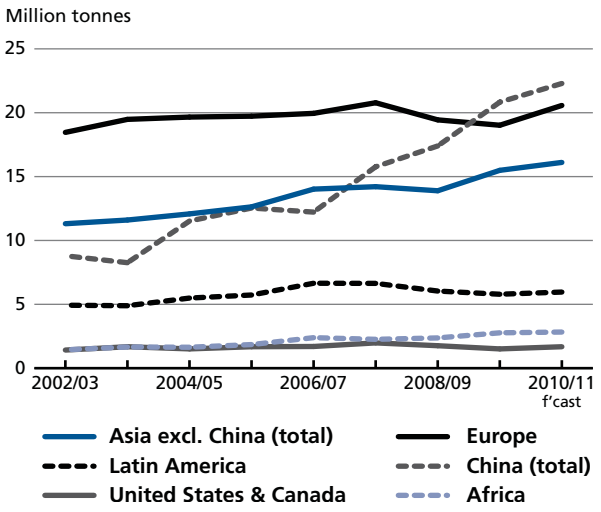
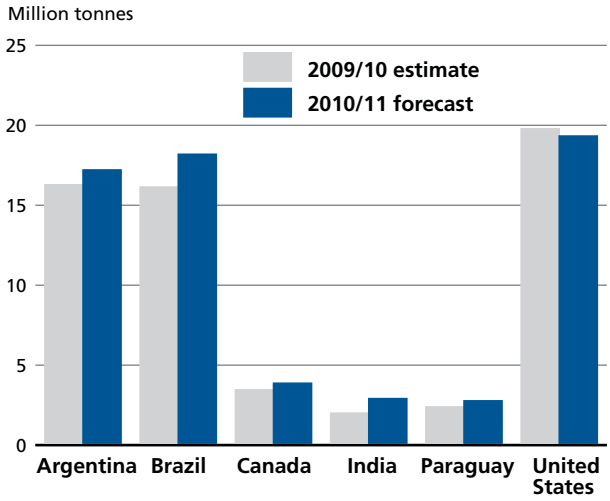


Figure 35. Meal/cake exports by major exporters (in protein equivalent and including the meal contained in seed exports)



in **China**, where meal purchases are forecast to exceed 22 million tonnes in protein equivalent, including the meal contained in imported oilseeds. In the **EU**, import volumes are estimated to return close to record levels after two seasons of decline.

EARLY PROSPECTS FOR 2011/12

With historically high world prices in the oilseed complex throughout 2010/11, farmers generally would be expected

to maintain 2011/12 oilseed plantings at last season's record level, at least in the northern hemisphere, where the new season oilcrops are currently being sown. However, as discussed below, there could be some important exceptions.

Starting with soybeans, in the United States, the area devoted to the new crop could fall slightly despite persistently high prices, because of better price prospects for alternative crops, in particular maize. Year-on-year, US plantings and production of soy are tentatively estimated to fall by 1 percent, assuming normal weather conditions. In China, in line with recent trends, soy plantings and production may contract further, reflecting reduced profitability in oilcrop production and a general intensification of competition for arable land. By contrast, in South America, where the new crop will be planted only later this year, the key producing countries may well head towards another record breaking output, as top earnings reaped over the 2010/11 season are likely to induce farmers to expand sowings. On aggregate, global soybean production is forecast to increase only marginally.

With regard to rapeseed, the 2010/11 drop in global output could be followed by a further slight decrease, which would drag down production to a four-year low, mainly on account of China and the EU. In China, output should be affected by a cut of plantings, while production in the EU is reported to be suffering from adverse weather. By contrast, in Canada, Ukraine and other CIS countries, production could rise, barring major weather problems, as farmers are expanding plantings and input use to capitalize on record-high international prices. Buoyant world market prices also could foster a significant expansion in global plantings and production of sunflower and cottonseed (assuming normal weather), with output climbing to near-record or record levels.

These individual crop forecasts would translate into a small rise of about 1.5 percent in global 2011/12 oilseed output, much like in 2010/11. As to perennial oilcrops, the preliminary outlook for palm oil points to an average increase in production next year, taking into account the biological yield cycle of oil palms in Southeast Asia. Obviously, any deviations from normal weather patterns in the major producing regions would significantly alter those prospects.

Should the above-mentioned forecasts materialize, global production of both oils and meals would increase only marginally. The corresponding rise in global supplies could be even smaller, given the low level of carry-in stocks. By contrast, the year-on-year rise in global oils and meals demand is anticipated to remain in a 3–6 percent range. Thus, additional reductions in global inventories are likely to be needed, resulting in a further deterioration of the stock-to-use ratios in 2011/12. Such a continued, or even increased, tightness of world supply and demand would sustain international prices of oilseeds and oilseed products. Eventually, persistently high prices could dent demand, but if and when this occurs will depend on a number of factors, such as prices of competing commodities, especially grains but also petroleum, economic growth in major consumer countries and globally, and changes in national policies.

SUGAR

PRICES

Sugar prices sharply down, as markets adjust to improved supply

After reaching a 30-year high of US 29.61 cents per pound[7] in January 2011, international sugar prices retreated slightly in February to US 29.47 cents per pound before embarking on a decisive downward trend. By April, prices averaged US 24.36 cents per pound, and by May, US 22.00 cents per pound, which was 26 percent below the January peak. The fall in prices was largely attributed to unexpected bumper crops in Brazil and Thailand, as well as to positive prospects for exports from India. As mentioned in the November 2010 issue of the Food Outlook, while a gradual increase in prices was to be expected given the tightening of the global market, the speed and magnitude of the price run-up were an overreaction and prices were likely to adjust downward by the end of the first quarter of 2011, when new supplies from Brazil enter the market. With the latest preliminary estimates showing a constructive production outlook for 2011/12, and a large production surplus anticipated after three consecutive seasons of tight markets, prices are likely to fall back to more normal levels. The large surplus is likely to facilitate a replenishment of relatively low global sugar inventories. It is doubtful that prices in the coming months will revert to their peaks of early 2011, barring extreme weather events in major producing regions.

PRODUCTION[8]

World sugar production to increase in 2010/11

With most of the 2010/11 sugar-cane and sugar-beet crops already harvested in the main producing areas, FAO's current

[7] USD 652.78/tonne

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

Figure 36. International Sugar Agreement (ISA)

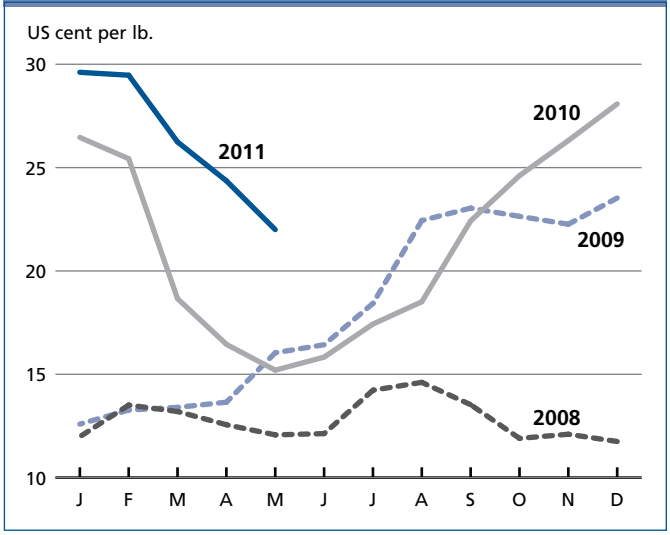


Table 11. World sugar market at a glance

	2008/09	2009/10 estim.	2010/11 f'cast	Change: 2010/11 over 2009/10
		million tonnes		%
WORLD BALANCE				
Production	**151.0**	**156.6**	**165.7**	**5.8**
Trade	**47.5**	**53.2**	**51.3**	**-3.6**
Utilization	**160.7**	**162.5**	**165.1**	**1.5**
Ending stocks	**60.8**	**54.8**	**55.3**	**1.0**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	23.8	23.8	23.9	0.4
LIFDC (Kg/year)	16.2	16.3	16.1	-1.3
World stock-to-use ratio (%)	**37.8**	**33.7**	**33.5**	

ISA Daily Price Average (US cents/lb)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	18.1	21.2	26.3	28.9

estimate for world sugar production in 2010/11 stands at 165.7 million tonnes, which is 3.1 million tonnes less than forecast in November 2010, but 5.8 percent larger than produced in 2009/10. The downward revision in output is largely due to lower than anticipated production in **Australia**, the **EU** and the **Russian Federation**, which more than offsets upward adjustments in **Mexico** and **Thailand**. Developing countries are forecast to harvest 128 million tonnes, 10 percent more than in 2009/10, led by increases in **India** and **Thailand.** By contrast**,** developed countries are anticipated to face a 4 percent contraction to 37.7 million tonnes. The world production surplus over consumption, which had been estimated at 2.7 million tonnes last November, has been cut to 0.7 million tonnes. As a result, global sugar stocks are unlikely to be replenished to their average level during this current season. On the other hand, preliminary forecasts for the 2011/12 season indicate the possibility of a large production surplus, in response to attractive sugar returns.

In *South America*, production is estimated to expand by 4 percent in 2010/11. Output in **Brazil** is set to reach just about 39 million tonnes, which is 4.6 percent above last season, but below early estimates, as drought hindered the development of late season sugar-cane varieties. However, better sugar yields, estimated at 141 kg/tonne of cane, offset the lower than anticipated cane production. It is estimated that by the end of the 2010/11 season, about 45 percent of total sugar-cane harvest will be allocated for the production of sugar. This is up from 44 percent in 2009/10 and reflects better margins than those realized when converting cane into ethanol. In **Colombia**, the second largest producer in the region, increases in sugar-cane area boosted production to 2.5 million tonnes in 2010/11, with high domestic sugar prices encouraging the transformation of cane into sugar over ethanol. Favourable growing conditions and expansion in cane planted area should underpin increases in **Argentina**, despite the implementation of new ethanol mandates that could restrain sugar expansion in the coming years.

In *Central America*, the sugar production forecast in **Mexico** has been raised, as more than adequate rains and improved input use boosted cane harvest. The bumper crop should enable the country to raise sugar exports to the United States under the North America Free Trade Agreement (NAFTA), at the expense of its domestic market which has increased imports of high fructose corn syrup (HFCS) from the United States as a substitute for locally produced sugar. In **Guatemala**, tropical storms and heavy rains hampered production. Despite higher cane yields, production in **Cuba** is expected to decline slightly from last year's level.

Notwithstanding difficult growing conditions in several producing countries, total sugar production in *Africa* is estimated at 11 million tonnes for the current 2010/11 season, up 2.5 percent from last year. The increase in output is associated with continuous expansion of area and processing capacity. Strong domestic consumption growth and improved access to the EU market under the Everything-But-Arms Initiative (EBA) and the EPAs are the forces shaping large investments in planted area and factories. Nonetheless,

deficiencies in trade infrastructure and on-farm machinery and equipment are constraining further gains in output and export. In **South Africa**, the largest sugar producer in the region, output is set to reach 2.4 million tonnes in 2010/11. This is slightly higher than last year, but still below the long-term average because of persisting dry weather in KwaZulu-Natal Province, where about 75 percent of South African sugar cane is produced. The drought period will also impact the 2011/12 season, as limited standing cane will likely be left for harvest. Sugar production in **Egypt**, the second largest producer in Africa, is expected to remain about the same as last year. While area under sugar cane has been stagnant over the years, beet sugar is making inroads, with planted area forecast to reach 145 000 ha, compared with 98 000 ha in 2009/10. The expansion is being driven by remunerative prices for beet, which have increased by 3 percent from the previous season. Production in the **Sudan** will reach 1 million tonnes, in response to the expansion in processing capacity. The country has plans to become an important ethanol producer, which should help to attract investment in its sugar-cane production capacity. Gains are also expected in **Kenya**, where output is set to grow by about 3.1 percent, in line with the November 2010 estimate, due to near normal rainfall in the western part of the country where most of the sugar-cane farming takes place. Nonetheless, periodic plant closures and delayed payments to farmers prevent the full use of available production capacity. In **Mozambique**, sugar output is expected to reach 500 000 tonnes, up 17.5 percent from last season, prompted by expansion in planted area, which has increased by 20 percent per year since 2000. Buoyant internal demand for sugar is the main force behind the expansion of the subsector, helped by the development of the food sector and improved distribution channels. Above average rainfall is set to boost sugar output in the **United Republic of Tanzania** to 335 000 tonnes, which is 14.6 percent higher than 2009/10.

The 2010/11 sugar marketing season in *Asia* has been dominated by a recovery in production in **India** and an unexpected bumper crop in **Thailand**. The overall output in the region is anticipated to reach 60.7 million tonnes, a 15.5 percent increase over the previous season. In India, good monsoon rains and a notable expansion in area planted to cane, forecast to increase by 15 percent to 4.8 million ha, are behind the expected significant increase in production. Record sugar-cane prices in 2009/10 encouraged farmers to expand planted area and fostered better crop management practices and input use. Increased mechanization of the subsector is also contributing to gains in productivity and expansion in sugar output. The latest estimates for Thailand indicate that sugar production will increase by 27 percent in 2010/11 due to better growing conditions in major cane areas. The sector should also benefit from a government decision to let the regulated industry's processing capacity expand. Despite a surge in area planted under beet (40 percent) in the three main beet producing regions, sugar production in **China** is expected to remain unchanged due to unfavourable weather conditions. In **Pakistan**, sugar production estimates for 2010/11 are put at 3.6 million tonnes, 8 percent higher than in 2009/10, as the crop largely benefited from flooding and the favourable weather conditions that followed in the main producing provinces of Punjab and Sindh. Output in **Japan** is now expected to decline in 2010/11, with decreases also anticipated in **Indonesia** and **Turkey**.

In *Europe*, the estimates of sugar production in the **EU** indicate a decline of 7.7 percent over 2010/11, largely due to adverse weather conditions that reduced beet yields. The tight market situation led the European Commission to implement a series of measures to alleviate the shortage. These included allowing out-of-quota sugar to be marketed in the EU, eliminating import duties, opening an import quota and limiting exports. Despite a significant increase of about 10 percent in area sown to beet, sugar output is expected to decline in the **Russian Federation,** as a result of severe drought conditions that damaged beet crops. Gains are anticipated in **Ukraine**, where the impact of the dry weather was less than early predictions.

In the *rest of the world*, despite frosts that hit sugar-cane areas in Florida, production in the **United States** is set to surpass 2009/10 by 4 percent, boosted by increased cane and beet yields. In **Australia**, high international prices in 2009 fostered a sharp increase in sugar-cane area, reversing the downward trend observed since 2002/03. However, the

Table 12. World sugar production

	2009/10	2010/11
	million tonnes	
Asia	52.5	60.6
Africa	10.8	11.1
Central America	11.6	11.7
South America	45.4	47.2
North America	7.3	7.6
Europe	23.9	22.7
Oceania	4.9	4.6
World	**156.6**	**165.7**
Developing countries	117.3	127.9
Developed countries	39.3	37.7

Figure 37. Sugar production by major producing countries

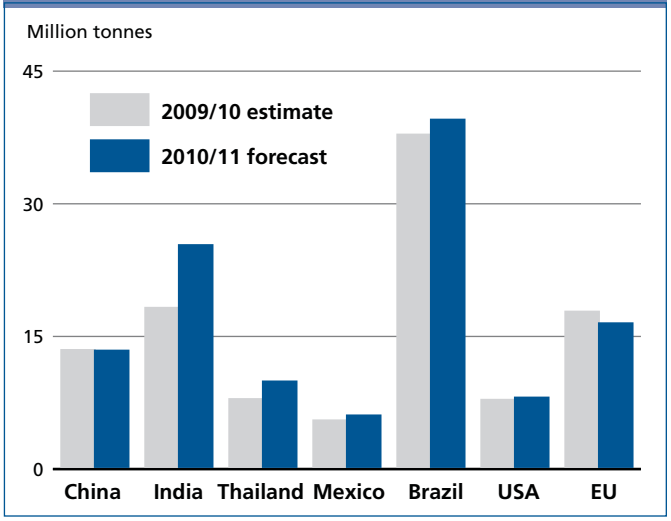
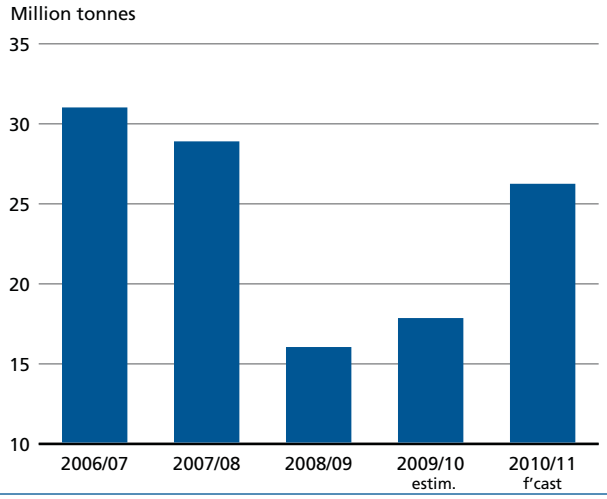


Figure 38. Sugar production in India



2010/11 season has been marred by excessive rains as well as tropical cyclone Yasi, which severely curtailed cane crops and damaged infrastructure in the state of Queensland.

UTILIZATION

World sugar consumption to increase, but still below long-term trend

The post-crisis recovery of the world economy is expected to sustain growth in sugar demand, mostly in emerging and developing countries. However, in 2010/11, world sugar consumption is forecast to expand by only 1.5 percent, barely in line with population, to 165.1 million tonnes, resulting in an average sugar per capita consumption virtually unchanged at 23.9 kg per annum. The 1.5 percent forecasted consumption growth is significantly slower than the long-term trend, reflecting the impact of high domestic and international sugar prices. The developing countries, which account for 71 percent of world total, are anticipated to increase sugar consumption by 1.4 percent, equivalent to about 1.6 million tonnes. In the generally more mature markets of the developed countries, consumption is to increase by 2 percent, or 0.9 million tonnes. Positive prospects for the global economy are expected to support sugar demand in 2011/12 and with a large production surplus expected for the next season, consumption should return on trend.

TRADE

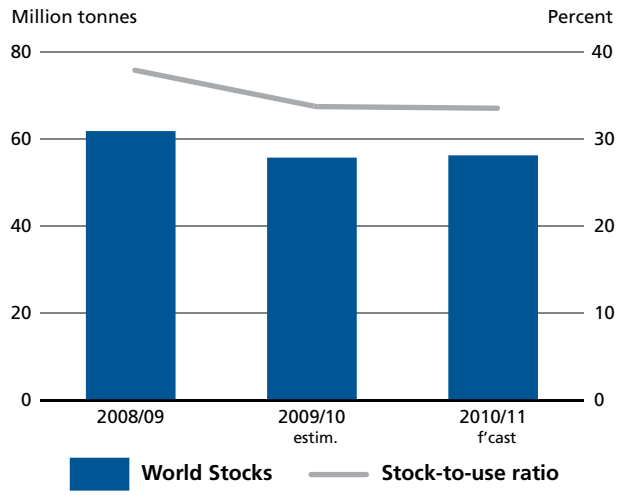
World trade to contract because of tight supplies

Latest FAO estimates of world sugar imports stand at about 51 million tonnes for 2010/11 (October/September), a 4.5 percent decline over the previous season, caused by a reduction in export availabilities. After being the main driver of growth in world sugar trade in 2009/10, **India** is expected to cut its imports by 83 percent to about 1 million tonnes in 2010/11, as a result of its production recovery and of the recent reinstatement of a 60 percent import duty.

In Europe, shipments to the **EU** are set to decline on the back of lower imports under the EBA and EPAs trade commitments, as international prices provide relatively better returns than the EU internal market. The European Commission has introduced a series of measures to alleviate market tightness. These include the opening of a 300 000-tonne tariff-rate quota (TRQ) and the use of 500 000 of out-of-quota sugar as quota sugar. Imports by the **Russian Federation**, the third largest sugar importer in 2009/10, are expected to increase by about 10 percent to 2.5 million tonnes, in order to compensate for expected shortfalls in domestic supply, with the bulk of the raw imports sourced in Brazil.

The outlook for Asia is one of steady import growth led by increases in population and income. Purchases by **Indonesia** are expected to increase by 27 percent to 2.9 million tonnes, to offset the production shortfall. **China** is projected to purchase 500 000 tonnes more than last season to accommodate rising sugar intake and replenish critically low national inventories. Last year, China used significant quantities of stocks to rein in domestic sugar prices. In the rest of the world, the **United States** is forecast to step up imports by 4 percent to 2.5 million tonnes, which should mainly originate from **Mexico**, with the existing TRQ filling the gap. Additional imports may be needed to rebuild reserves, as the United States' current stock level is at an historic low. Imports by countries in *Africa* are expected to

Figure 39. Sugar closing stocks and stock-to-use ratio



increase by around 4 percent to 9.8 million tonnes, mainly reflecting higher shipments into **Egypt** and **South Africa**.

Despite higher production in some exporting countries, global export availabilities are expected to shrink, as those countries will need to meet their own growing domestic consumption needs and to rebuild stocks that were used extensively during the first half of 2009/10, when international prices reached record levels. **Brazil**, the world's largest sugar exporter, is now expected to ship about 24.8 million tonnes, down 1.5 percent from 2009/2010, due to tight supply availability and attractive domestic sugar prices. Furthermore, bottlenecks in Brazil's port infrastructure, as witnessed during the previous season, may also constrain exports. In 2010/11, Brazil will account for about 50 percent of the global sugar market and be among those countries that benefited most from the relatively high world sugar prices. However, its rising input costs and the appreciation of its currency against the United States Dollar are endangering Brazil's overall competitive position. Sales from **Thailand**, the second largest sugar exporter, are now expected to increase by a substantial 24 percent, as a result of the bumper crop and attractive export prices. In addition, the government-endorsed expansion of sugar production capacity could also lead to larger exports in the near term. Deliveries from **Australia**, the third largest exporter, are likely to decrease from their 2009/10 levels, on the back of the anticipated output shortfall. Similarly, shipments from **Cuba**, **Guatemala** and **Mauritius** are foreseen to fall, reflecting strong internal demands and falling domestic productions.

MEAT AND MEAT PRODUCTS

INTERNATIONAL PRICES

Tight meat supplies push up prices to new record levels

In May 2011, the FAO meat price index hit a new high of 183 points. International prices of all meats have firmed since January, with particularly large gains recorded by pig meat. The price strength mainly reflects supply-driven factors, including adverse weather conditions in late 2010, herd rebuilding, animal diseases and rising input costs, which have virtually stalled global output growth. Viewed from a 12-month perspective, sheep and bovine meat had the strongest increases, which, based on their respective price indices, have climbed 38 and 20 percent, respectively since May 2010. Limited export availability in traditional supply countries combined with buoyant import demand are expected to maintain the upward trend of world meat prices in the short term. Meanwhile, high grain prices continue to constrain sector profitability.

BOVINE MEAT

Output stagnates for the third consecutive year

Low animal inventories and high prices are likely to characterize the global beef sector in 2011, as it did in 2010. Global beef production is expected to stagnate at 65 million tonnes, constrained by prospects of a 1 percent decline in production in developed countries, which account

Figure 40. FAO international meat price indices (2002-2004=100)

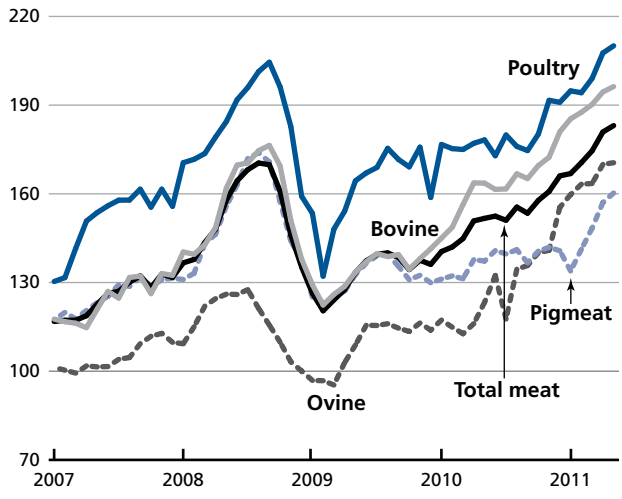


Table 13. World meat markets at a glance

	2009	2010 estim.	2011 f'cast	Change: 2011 over 2010
	million tonnes			%
WORLD BALANCE				
Production	**283.2**	**290.6**	**294.0**	**1.1**
Bovine meat	64.9	64.9	65.0	0.2
Poultry meat	93.6	98.0	100.2	2.3
Pigmeat	106.3	109.2	110.0	0.7
Ovine meat	12.9	13.0	13.1	0.5
Trade	**25.2**	**26.2**	**26.8**	**2.4**
Bovine meat	7.2	7.5	7.7	1.9
Poultry	11.1	11.5	11.7	1.6
Pigmeat	5.8	6.1	6.4	5.0
Ovine meat	0.9	0.8	0.8	0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World *(kg/year)*	41.3	41.9	41.9	0.1
Developed *(Kg/year)*	78.0	78.4	78.4	0.0
Developing *(kg/year)*	31.1	31.8	32.0	0.5

FAO meat price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	133	152	175	19.9

for 45 percent of global output. The contraction reflects the situation in **Canada** and the **United States**, which began the year with small cow herds, low replacement heifer numbers and even tighter feed supplies. On the other side of the globe, weather-affected cattle inventories in **Australia** and **New Zealand** are returning to normal, but herd rebuilding is curbing slaughter and output.

Rebounding from a nearly 2 percent decline in 2010, beef output in ***Latin America and the Caribbean*** is on the upturn, with output growth in **Brazil,** the world's second largest beef producer, more than compensating for the persistent downfall of **Argentina's** beef sector, which has reportedly lost 3 500 jobs over the past few years. The only uncertainty related to the strong outlook for the Brazilian sector concerns the possibility of a removal of Brazilian meat plants from the list of firms eligible to export to the Russian Federation. In **Argentina,** the reconstitution of depleted cattle herds and continued regulatory uncertainties are undermining output prospects, despite a near doubling in live cattle prices. In **Mexico**, domestic prices are reportedly 10 percent lower than those in the United States, which is promoting cross-border trade in cattle, resulting in only a marginal increase in Mexican beef output.

Beef production in ***Asia*** is expected to stagnate in 2011. Although average beef prices in **China** hit a four-year high in late 2010, slaughtering and hence, output are expected to fall as dairy producers struggle to rebuild herds after the 2008 nationwide melamine scandal. In **Pakistan**, production is forecast to contract by 2 percent, a consequence of the flood-related cattle losses suffered last year. In **Japan**, the northeastern provinces affected by the earthquake, ensuing tsunami and radioactive fallout accounted for about 10 percent of the cattle herd. Although no official estimate of the losses has been provided, FAO forecasts the country's production to contract by 5 percent in 2011, largely as a consequence of the disaster. In **Turkey**, prospects for more intense foreign product competition, following a relaxation of a beef import ban, are expected to hamper the sector growth. In the **Republic of Korea,** despite foot-and-mouth disease (FMD)-related cattle culls in late 2010, animal numbers are at near record levels which, combined with a relaxation of animal movement controls, is expected to stimulate beef output. In **Indonesia,** support from the Government, which is pursuing beef self-sufficiency, is forecast to sustain an expansion of production, in spite of the lowering of the live cattle import quota from 700 000 heads in 2010 to 500 000 heads this year. In **India,** strong export demand for lower-priced buffalo meat will prompt higher slaughter and output**.**

Favourable weather in **Africa** is resulting in good cereal crops and adequate forage, but drought conditions in parts of **East Africa**, particularly **Ethiopia, Kenya, Somalia** and **Uganda,** are leading to pasture and water shortages, higher livestock mortalities and disease outbreaks as producers move their animals in search of forage. Overall, the region's bovine meat production is anticipated to remain in the order of 5 million tonnes.

Despite high prices, beef trade prospects firm

World beef trade is expected to expand by 2 percent to 7.7 million tonnes in 2011, spurred by import demand in those countries facing fast economic growth or production shortages. Imports in Asia are forecast to expand by 5 percent, driven by vigorous demand in **Japan, Malaysia** and **the Republic of Korea.** Purchases are anticipated to increase in the **Chinese Province of Taiwan** despite the introduction of new residue-testing procedures that have created considerable uncertainty. Beef shipments to Middle Eastern countries, with the exception of Egypt, are also forecast up. This also concerns **Turkey**, currently a marginal beef importer, where high domestic prices prompted the Government to lift the ban on live cattle and beef imports late last year.

By contrast, in **Indonesia,** imports may drop to some 100 000 tonnes, following a cut of the preferential tariff quota from 120 000 tonnes in 2010 to 72 000 tonnes this year. Outside Asia, larger volumes of beef are expected to be imported by the **EU**, **the Russian Federation** and **Venezuela**, while they may decline in **Canada**, **Egypt**, **Mexico** and the **United States**.

Exports from **Brazil** and the **United States,** which supply one-third of world trade, are expected to increase in 2011. The largest gains are likely to be reaped by the **United States** which, benefiting from a continued weakness in the US Dollar and the reopening of previously Bovine Spongiform Encephalopathy (BSE)-restricted markets, could expand shipments by 8 percent, an historical development with potential to transform the United States into a net exporting country. After three years of declines due to strong domestic demand and a strengthening of the currency, exports from **Brazil,** still the world's largest exporter, will rise in response to demand from countries in the **Middle East** and **Southeast Asia**. **Canada** is also expected to expand deliveries following the reopening of the Chinese market to Canadian meat and increased access to a new EU quota for high quality hormone-free beef. Exports from **Australia,** the second largest exporter, are forecast to slip slightly, constrained by tight supplies. On the other hand, **Paraguay**, a non-traditional exporter in South America, is expected to benefit from a recent World Organisation for Animal Health (OIE) certification of the country as "FMD-free with vaccination". Exports from the country may even overtake those from **Argentina,** which continue a two-year slide. **India** is forecast to capitalize on its lower prices of frozen buffalo beef to expand exports as is **Pakistan,** despite lower output due to recent floods, as both countries respond to firm demand in Middle East markets. In Africa, FMD outbreaks in **Botswana** and **South Africa** in early 2011 resulted in bans on exports and animal culls, which will lower beef deliveries from the two countries in 2011 but also translate into higher prices in some traditional markets.

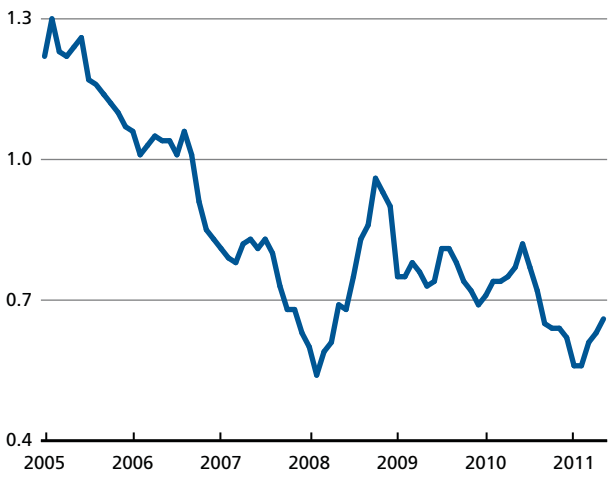
PIG MEAT

High feed prices and disease outbreaks in Asia limit global pig meat production prospects

Pig meat output in 2011 is forecast at 110 million tonnes, less than 1 percent more than last year. In **China** which holds nearly 50 percent of global pig inventories, an elimination of sow subsidies as well as outbreaks of FMD and swine blue ear disease (PRRS), are limiting output growth to 2 percent. Nearby in the region, the **Republic of Korea**, Asia's fourth largest economy, is expected to witness a severe output contraction after FMD outbreaks in late 2010 and in April 2011 led to the slaughter of nearly one-third of the national pig herd at an estimated cost of USD 2.7 billion. High feed prices are limiting expansion of production in the **Philippines.** In **Japan**, the five northeast provinces that were affected by the "triple disaster" hosted 40 percent of the country's pig population. Animal deaths and the slaughtering at lower weights are expected to depress pig meat production by 7 percent this year. In **Thailand**, high and rising pig prices prompted the Government to freeze both farmgate hog prices and retail prices, contributing to a 7 percent production fall.

Little change in pig meat output is currently forecast for the developed countries, as high feed prices continue eroding producer returns. In the **United States**, poor margins will limit production gains. In **Canada**, where a hog farm transition programme encourages producers to exit the industry, output is expected to decrease by 1.5 percent. In the **EU-27**, industry restructuring, prompted by high feed prices and the approaching 2013 implementation of new environmental and animal welfare requirements portends a 1 percent drop in production. Meanwhile, sliding EU pig prices, due to a late 2010 dioxin crisis in Germany, led to the short-term opening of a private storage aid in early 2011. Despite investments made in the **Russian Federation** sector, high feed prices and continuing outbreaks of Africa Swine in 2011 will limit production gains.

Figure 41. Evolution of pigmeat/feed index prices (2002-2004=1)



Reduced supplies in Asia to prompt record pig meat imports

Trade in pig meat is forecast to hover around 6.4 million tones in 2011, 5 percent above last year. Much of the increase is expected to be spurred by double digit growth in imports into Asia, which account for more than half of world trade. In the **Republic of Korea,** FMD-depleted supplies and the issuance of a new tariff rate quota (TRQ), which allows import of 130 000 tonnes of duty free product through mid-year, will push up imports to the country by close to 60 percent. **Japan** is also expected to step up its purchases to compensate for the anticipated production shortfall. In **China**, recent food scares, related to reported illegal use of chemicals in pig production, may also translate into higher imports. Pork deliveries to the **Russian Federation,** the second largest market, are expected to remain in the order of 800 000 tonnes, reflecting sluggish domestic consumption growth and rising production. In **Mexico**, pig meat imports for 2011 are forecast to grow moderately, but the expansion could be stronger if a recent agreement to solve a long standing dispute with the United States over the cross- border use of trucking services results in the lifting of import duties on certain pork cuts from NAFTA.

Strong import demand and limited export availability in competing countries is forecast to propel exports by the **United States** to a record. Sales from **Canada** are expected to benefit from a trucking dispute between Mexico and the United States in 2010. Rising import demand in traditional markets, in particular Hong Kong and Japan, is also expected to boost deliveries from **China**. With continuing high feed prices, pork exports by the **European Union** are forecast to increase only marginally from last year's record. Likewise, increasing internal demand and high domestic prices are limiting to 2 percent **Brazil's** recovery of exports from last year's double-digit fall. However, the recent opening of the Chinese market to Brazilian pork will offer an opportunity for further expansion of trade between the two countries.

POULTRY MEAT

A resurgence of avian influenza and high feed prices may halve poultry meat output growth

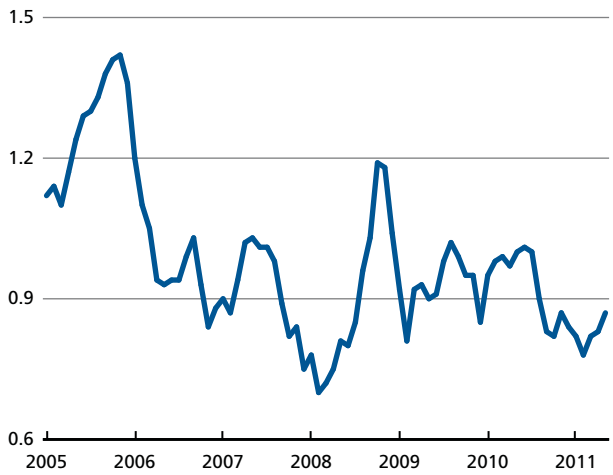
World poultry meat output is forecast to grow by 2 percent to 100 million tonnes in 2011, half the rate of the previous year, as high feed costs and diseases constrain the profitability of the sector. However, its growth remains much faster than that predicted for the other meat sectors.

High feed prices are currently challenging supply growth in **Brazil, China**, the **EU** and the **United States**, which, together, account for nearly two-thirds of global output. In **China**, although the sector is benefiting from increased availability of breeding stock, high prices of other meats and restrictions on imports, rising costs are expected to slow down production expansion from the 7 percent reported in 2010 to 3 percent in 2011. In the **EU**, only slight gains are anticipated, as the sector adjusts to the higher costs of production deriving from new EU broiler welfare rules implemented in 2011. Output gains in **Brazil** and the **United States** will be supported by strong consumer demand due to lower relative prices of poultry meat compared with other meats. In the **Russian Federation**, poultry investments estimated at nearly USD 2 billion in 2010, and policies focused on enhancing meat self-sufficiency, in particular through import barriers and the provision of subsidized feed, will keep production gains at near double-digit figures.

Meanwhile, there has been a near record resurgence of Avian Influenza outbreaks since early January in **Hong Kong, Japan, Myanmar, the Republic of Korea** and **Viet Nam**, with the virus still circulating in **Bangladesh, Egypt** and **Indonesia** and other countries. This has reminded the global community of the potential threat of H5N1 and other diseases to national and global health. Diseases are largely behind the expectation of a halving of production growth in Asia to 2 percent, notwithstanding expectations of output gains in **India, Turkey** and other smaller markets, such as **the Islamic Republic of Iran, Iraq, Kazakhstan, Nepal** and **Turkey,** where the number of poultry farms doubled last year.

Poultry meat exports in 2011 are expected to expand by 1.6 percent to 11.7 million tonnes, substantially slower

Figure 42. Evolution of poultry meat/feed index prices (2002-2004=1)



than the 4 percent growth recorded last year. In Asia, shipments to the **Republic of Korea** will be supported by the recent opening of a 50 000 tonne tariff-free quota and vigorous consumer demand. Imports to **Japan, the Hong Kong SAR** o**f the People's Republic of China** and **Viet Nam** as well as to Middle East countries are all forecast up**.** Purchases by **Japan** may for the first time surpass the 1 million tonne threshold, as additional supplies are needed not only to compensate for the declining production but also to respond to a possible shift of consumers away from fish, which may especially favour poultry. In **South Africa,** the 2011 expiration of ten-year-old anti-dumping tariffs against poultry from the United States may support additional imports. Those increases are likely to more than offset reduced purchases in several important markets. In the **EU,** lower imports are expected in response to the shifting definition of the use of frozen poultry and confusions about the EU-27 licensing system applied in 2010, a policy move that may prompt a WTO appeal by Brazil**.** Deliveries to the **Russian Federation**, previously the world's largest poultry market, are expected to contract for the fourth consecutive year, following the halving of the country's TRQ to 350 000 tonnes. Likewise, **China** may cut poultry imports**,** owed to the imposition of anti-dumping and countervailing duties against product from the United States, China's principal supplier.

Among exporters, the **United States** is expected to witness a contraction of sales in 2011, which may even lead to its relinquishing its position as the world's top poultry exporter. The fall would mainly reflect tight domestic supplies but would also be due to market restrictions in China and the Russian Federation. Consequently, **Brazil** is likely to turn into the world's largest poultry exporter in 2011, with deliveries to foreign markets expected to exceed 4 million tonnes, equivalent to over one-third of global trade prospects. Exports from **Thailand** are expected to expand, sustained by larger sales of cooked-poultry products to both the EU and Japan**.** Continued investments in poultry operations in **China** may result in increased poultry deliveries, especially to other Asian countries.

SHEEP MEAT

Lacklustre output growth despite record prices

For the fifth consecutive year, the global sheep meat market will witness only marginal growth to 13.1 million tonnes, as major exporters enter herd rebuilding phases. In **Australia**, despite some flood-related losses, good seasonal conditions and high farm-gate lamb prices are expected to reverse an ongoing decline in animal inventories, which have reportedly reached century-low levels. Nonetheless, the improved situation is not yet expected to translate into output growth but only dampen the contraction in meat output from 10 percent in 2010 to 2 percent this year. In **New Zealand**, production is expected to remain about unchanged, as severe weather led to the lowest national lambing percentage since the mid-1990s, a large drop in the lamb crop, and expectation of tight supplies in 2011. Record prices for sheep may, however, help recoup production losses from earlier in the season. Output in the **United States**, set to drop to its lowest level on record, is pushing 2011 prices up 72 percent over last year. In **Africa**, good forage and strong demand from the **Middle East** are prompting higher production in the **Sudan**, the region's second largest producer, after Nigeria. Meanwhile, in **Pakistan,** despite a loss of animals in the 2010 floods, soaring prices and strong export demand are inducing higher slaughter and exports.

Trade increases marginally despite record prices

Exports are expected to rise to 845 000 tonnes in 2011, as tight supplies are restricting sales from **Australia** and **New Zealand.** With ongoing herd rebuilding in the two countries, sheep prices remain under upward pressure in the short term as competition intensifies for slaughter, stock rebuilding, and the sheep export. Limited supplies from **Australia** and **New Zealand** may foster larger sales from South America, in particular from **Argentina** and **Uruguay**, and from Asia, in particular **India**. As for imports, high meat and live sheep prices are prompting a re-examination of meat import policies in the Near East countries, such as those in **Bahrain** which operate large import subsidy programmes for red meat. Declining production will sustain imports by the **EU** as well as the **United States** which has recently lifted a decade-long ban on imports from Uruguay due to FMD concerns.

MILK AND MILK PRODUCTS

PRICES

International dairy prices strong but still below 2007/08 peaks

The FAO price index of international dairy products strengthened during the first quarter of 2011, with some commodities surpassing the historical peaks seen in late 2007. In May 2011, the index stood at 231, up 4.5 percent from January and 10.5 percent above its May 2010 level. Since the beginning of the year, casein, Skim Milk Powder (SMP) and Whole Milk Powder (WMP) have had the sharpest

rises, all gaining 9 percent – to USD 8 672, USD 3 807 and USD 4 075 per tonne, respectively, followed by butter, which was up 3 percent to USD 4 750 per tonne, and cheese, up 3 percent to USD 4 500 per tonne.

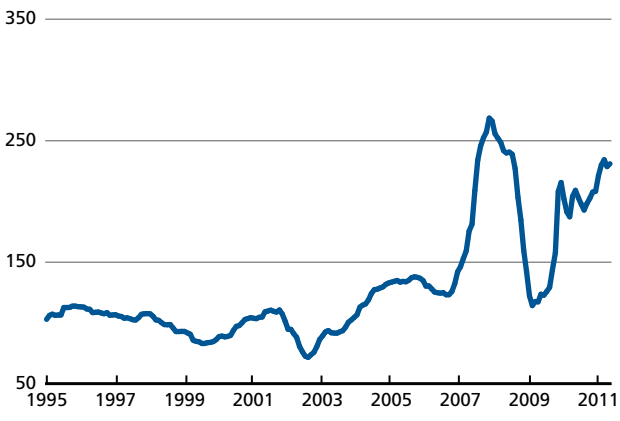
Lively import demand, especially in Asia, along with supply constraints are behind the upsurge in dairy prices that started in the last quarter of 2010. Production responses in exporting countries have been modest, amid unfavourable climatic conditions, reduced cattle herds in some countries and policies that limit output, as in the EU. Tight supplies and uncertainty over future output prior to the start of the dairy season in the northern hemisphere, combined with the virtual absence of private and public stocks, caused prices to jump in the first quarter. Since April, prices have stabilized, a reaction of markets to a normal unfolding of the season in the northern hemisphere. However, some countries in Northern Europe did experience unseasonally dry conditions in April and May. In the coming months, uncertainty over supplies and high feed prices are expected to provide support to prices, which should remain at or around current levels until the production trend for the 2011/2012 season in the southern hemisphere is clear.

PRODUCTION

Dairy production to rise by 2 percent in 2011, supported by large gains in Asia

World milk production in 2011 is forecast to expand by 2 percent to 724 million tonnes, which is in line with the average growth seen in the past decade. The largest increases are expected in Asia, particularly in **China,**

Figure 43. 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.

India and **Pakistan**, the leading producers in the region, but also in **Indonesia,** the **Islamic Republic of Iran** and **Saudi Arabia**. Elsewhere, the sector is anticipated to make significant headway in **Argentina, Brazil, EU, Mexico** and **Venezuela**. Production will also increase in the **EU** and the **United States** and favourable international prices will stimulate output in **Australia** and **New Zealand**. By contrast, milk output may contract in **Japan,** the **Republic of Korea,** the **Russian Federation** and **Ukraine**.

Asia continues to be the continent with the largest dairy output, with a share of 36 percent, and the one experiencing the fastest growth pace. In 2011, 265 million tonnes of milk are forecast to be produced in the region, 3.4 percent more than in 2010. **India** is forecast to collect 119.4 million tonnes of milk in 2011, up 5 million tonnes from 2010, as farmers respond to the dynamic domestic demand. In neighbouring **Pakistan**, the sector is anticipated to increase, but not enough to recover fully from the heavy livestock losses and fodder scarcity stemming from the 2010 floods. In **China**, the dairy industry is struggling to recover from the melamine scandal, which, along with low farm-level profitability, has depressed growth well below the double digit increases witnessed in recent years. Current prospects put 2011 production in the country at 45.3 million tonnes, implying only a 5 percent increase from 2010. In the **Republic of Korea**, the culling of cattle following outbreaks of FMD late last year is expected to have only a minor impact on the sector, as the cattle inventory was not affected much. Milk production is therefore foreseen to decline only marginally, in line with the prevailing trend. **Japan** is expected to endure a more pronounced output contraction of about 2 percent. The drop would result from the cattle losses incurred in the aftermath of the earthquake and Fukushima nuclear plant disaster in the five northeast coast prefectures which, according to authorities, accounted for 3 percent of the national dairy herd. The sector retrenchment also reflects the difficulties faced by producers and the transformation industry due to power cuts and, more generally, infrastructure damage. Furthermore, in May, concerns over consumer health prompted the Government to announce the culling of animals kept within a 20 km radius of the nuclear power central.

In Africa, output is expected to expand by 1 percent to 38.0 million tonnes, mainly reflecting gains in **Kenya** and **Mali**. In general, commercial milk producers in Africa have felt the effect of rising feed prices, which is limiting production growth.

In North America, milk production is expected to rise to 89 million tonnes in the **United States**, where the industry

is rebuilding its dairy herds in response to good national and international demand. In Europe, the EU is forecast to raise production by 1 percent to 156.4 million tones, as improved milk yields more than compensate for reduced cow numbers. The sector remains subject to production limits, under a system of quotas that is raised by 1 percent every year until the system is phased out in 2015. In the **Russian Federation**, last year's drought induced a sharp contraction in the dairy herd, as severe feed shortages prompted producers to cull animals. Consequently, a second year of below average output is anticipated, with milk production expected to drop by 2 percent to 31.0 million tonnes. In South America**,** pasture conditions have been good during the 2010/2011 season and milk output has grown in a number of countries, including **Argentina**, **Brazil** and **Chile**. However, this expansion has been tempered by competition for pasture land from commodity crops, which are enjoying favourable international prices, limiting the potential for dairy herd expansion.

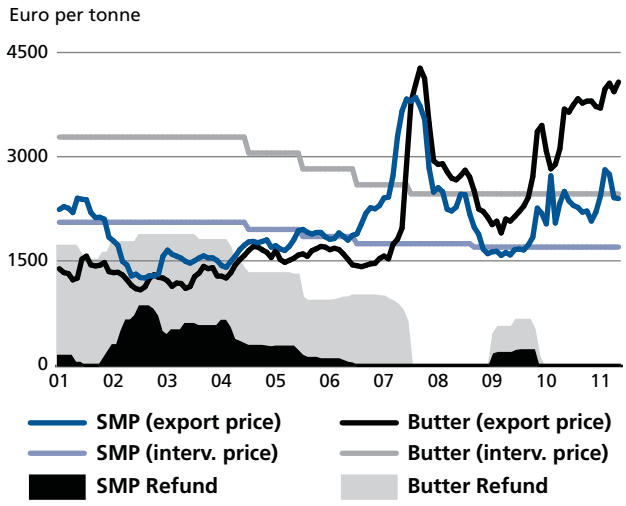
In Oceania, the strengthening of international dairy products prices has created a favourable environment for farmers to expand output in the coming 2011/12 season. For the current 2010/11 season, dry weather, followed by unusually wet conditions, has constrained milk production growth in **New Zealand**, where output is now estimated at 17.3 million tonnes, up 1.5 percent from 2009/10 (June/May). Assuming normal weather conditions, a substantial bounce in output is expected in 2011/12 to 18.5 million tonnes. An important element behind this prospect is a 3.5 percent increase in the herd size, which confirms farmers' faith in the future of the international market for dairy commodities. As part of this process, the relative profitability of dairying compared with sheep and beef production has led a number of farms to convert to milk production each year. In **Australia**, the end of the prolonged drought has encouraged farmers to begin rebuilding dairy herds, although it will take a few years before they return to pre-drought levels. Consequently, milk production is expected to register a small 1 percent increase in 2010/2011 (July/June), followed by a more substantial growth in the subsequent season.

TRADE

Brisk import demand to foster a 5 percent expansion of world trade in 2011

World trade of dairy products is expected to show further growth in 2011, increasing by 5 percent to 48.3 million tonnes of milk equivalent, fuelled by increased purchases by Asian countries, in particular **China, Indonesia,** the **Republic of Korea,** the **Philippines, Singapore** and **Thailand**. Imports by **Egypt** are also expected to grow substantially. Larger exports by **Argentina, Belarus, EU, New Zealand** and **Ukraine** are to cover the trade expansion.

Figure 44. EU intervention prices, price and export refund for butter and skim milk powder



Because of limited production growth in the previous year, a number of exporting countries have had to draw upon public and private inventories to respond to increasing import demand. As such inventories are now at minimal levels, the availability of supplies for trade this year will increasingly depend on current production. As a result, international dairy quotations over the rest of the year will be particularly sensitive to climatic conditions, both in relation to pasture growth and the availability and price of fodder and feed.

Exports of dairy products

WMP prices remained well above average, and rising, during the first part of 2011. In March, they hit their highest level since December 2007, at USD 4 592 per tonne, before falling back in April and May. World exports of WMP in 2011 are projected at 2 080 thousand tonnes. **China** continues to be an important WMP market and its mounting imports in the past two years have raised its share of world trade to 20 percent. This trend is expected to continue in 2011, with China's imports rising by 23 percent to 440 000 tonnes. In contrast, among other major importers and in the face of higher prices and efforts to encourage national production, purchases by **Algeria** are expected to stagnate around last year's level, while those by **Venezuela** may fall. Although the **EU** remains the second largest world supplier of WMP, well behind New Zealand, limited supplies are expected

Table 14. World dairy market at a glance

	2009	2010 estim.	2011 f'cast	Change: 2011 over 2010
	million tonnes milk equiv.			%
WORLD BALANCE				
Total milk production	**698.5**	**710.0**	**723.8**	**1.9**
Total trade	**44.0**	**46.0**	**48.3**	**4.5**
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World *(kg/year)*	101.3	101.8	102.6	0.8
Developed countries *(Kg/year)*	235.7	235.0	235.2	0.1
Developing countries *(Kg/year)*	65.7	66.9	68.2	1.9
Trade - share of prod. (%)	6.3	6.5	6.7	

FAO dairy price index (2002-2004=100)	2009	2010	2011 Jan-May	Change: Jan-May 2011 over Jan-May 2010 %
	142	200	229	15

to keep shipments at nearly the same level as last year. Instead, most of the expansion in trade is forecast to rely on increased deliveries from **Argentina** and **New Zealand**. Sales from **Belarus**, principal supplier of the Russian Federation, are also anticipated to expand.

SMP prices rose strongly during the first quarter of the year and stood at USD 3 807 per tonne in May 2011, an increase of 9 percent compared with both May 2010 and January 2011. World SMP exports are anticipated to continue rising for the fourth consecutive year and could reach 1 599 thousand tonnes in 2011, or 8.3 percent more than last year. The **EU, New Zealand** and the **United States** are the three major suppliers to the market. The **EU** is expected to ship 13 percent more, although exports would be largely dependent on product manufactured in the course of the year, as public stocks are low. **New Zealand** and the **United States** are expected to ship 7 and 5 percent more respectively, than the previous year. On the other hand, limited production growth and low stocks will restrain the increases in SMP sales from **Australia.** Import demand remains firm in **China, Indonesia, Malaysia, Mexico** and **the Philippines**, which together account for half of world trade. African countries' imports may fall in 2011, as a result of lower than average purchases by **Algeria**, the world's second largest importer, as a result of government efforts to increase national milk production. Strong imports by **Egypt** will, to an extent, provide a counterbalance.

In October 2010, international **butter** prices surpassed the historic highs seen in late 2007. Prices continued to progress steadily until March 2011, when they reached a new record of USD 4 883 per tonne. Prices dropped back somewhat in April and May, but remained at exceptionally high levels. Trade in butter is forecast to increase to 917 000 tonnes in 2011, up only 3.7 percent from the previous year, an indication of the relatively thin supplies available globally for trade. In the case of the **EU**, low intervention and private stocks are expected to limit any increase in exports to 3 percent, or 5 000 tonnes, to 155 000 tonnes. **New Zealand**, which now supplies close to 50 percent of the international butter market, is expected to step up deliveries by 10 000 tonnes. **Australia, Belarus and the United States** may also sell more butter this year. Overall, export availability is not expected to increase substantially in the short term, because of commitments to use milk for cheese production. Butter prices during the remainder of 2011 will depend on the extent to which local production can replace imports, especially in the **Russian Federation**. This year, the Russian Federation, which faced shortages following heavy cow losses last year, has been an important element behind the recent increase in world butter prices and trade. Growing demand from Southeast Asia and Middle East countries also contributed to these hikes.

Cheese prices gained 12 percent between May 2010 and May 2011, when they stood at USD 4 500 per tonne. Unlike the other dairy products, no price weakening was evident from April. Trade in cheese is forecast to grow by 6 percent in 2011, to 2 307 thousand tonnes. The main import demand for cheese is from relatively high income countries, such as **Japan**, **Mexico**, the **Republic of Korea** and the **Russian Federation**, where the market has been

Figure 45. FAO indices of dairy and feed prices (2002-2004=100)

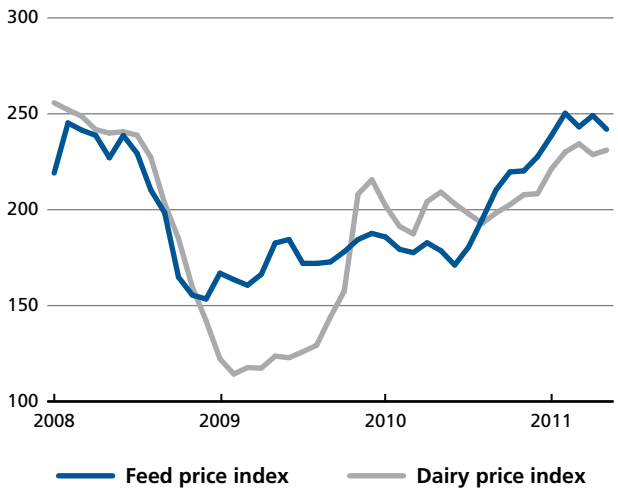


Table 15. Major exporters of dairy products

	2006-08 *Average*	2009 *prelim.*	2010 *f'cast*
	thousand tonnes		
WHOLE MILK POWDER			
World	**1 953**	**2 019**	**2 082**
New Zealand	701	860	885
EU*	434	440	440
Australia	130	115	120
Argentina	117	159	187
SKIM MILK POWDER			
World	**1 226**	**1 476**	**1 599**
EU*	203	378	428
New Zealand	310	355	380
United States	300	358	376
Australia	142	132	136
BUTTER			
World	**862**	**884**	**917**
New Zealand	399	437	447
EU*	167	150	155
Belarus	66	87	90
Australia	66	57	62
CHEESE			
World	**1 904**	**2 176**	**2 307**
EU*	575	666	720
New Zealand	282	285	290
Australia	179	160	159
Belarus	105	133	150

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

growing for a number of years. Also, imports from **China** are increasing, even though cheese has yet to gain the same wide acceptance that milk has with the Chinese consumer. Supplies to the world market come principally from the **EU**, followed by **New Zealand,** with **Australia**, the **United States** and **Saudi Arabia** also important sources. Exports from all the above-mentioned countries, with the exception of Australia, are expected to grow in 2011. The strong demand and profitability of cheese on the international market are likely to dampen the output of butter and SMP production for export.

FISH AND FISHERY PRODUCTS

PRICES

Firm demand and rising prices

In late 2010, farmed shrimp prices reached their highest level in a decade. Quotations for farmed salmon, tilapia, pangasius, Indian carp and other species also increased in both domestic and international markets. The high prices of farmed species are mostly due to supply factors, but with the expected growth in demand over the next decade and rising prices of inputs such as energy, fishmeal and labour, prices for both wild and farmed species can be expected to rise to even higher levels.

The FAO Fish Price Index shows current fish prices are higher on average than ever before, exceeding the levels reached before the 2008 economic crisis. Aquaculture products in particular have shown strong increases, with present levels 18 percent higher than in May 2010. Again, this is mostly explained by factors on the supply side, but it is also evident that the market is willing and able to accept these prices.

On the other hand, after a sharp drop in the aftermath of the crisis, capture prices have only recently regained pre-crisis price levels.

GLOBAL FISH ECONOMY: 2011 OUTLOOK

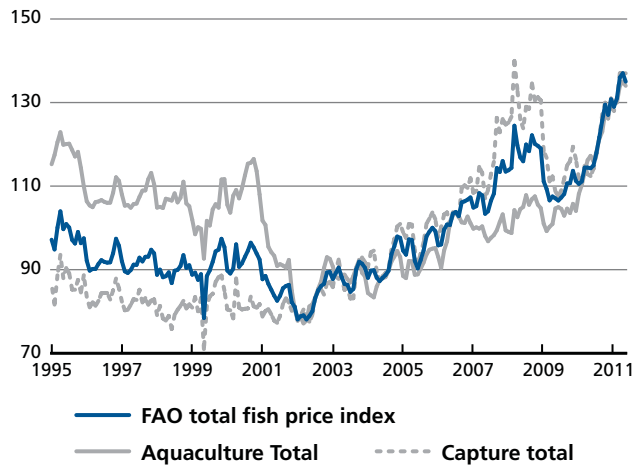
After a strong 2010, 2011 is expected to yield new records in international fish trade. Volumes are being sustained by firm demand in most markets, particularly in developing countries, and prices are rising for both capture and farmed species. The situation in Japan has added some uncertainty regarding Japanese consumer demand for imported fish products and the repercussions in world markets.

Shrimp prices at record levels

Despite an almost 35 percent rise in the international prices of shrimp in 2010, trade was up. Combined imports in the five large markets, Australia, Canada, EU, Japan and United States, totalled nearly 1.8 million tonnes, up 3 percent from 2009. However, the strongest growth was in the developing world.

Shrimp exports increased in 2010 with **China**, the leading producer, reporting a 12 percent rise to 275 000 tonnes. **Thailand** increased shipments by 10 percent to 428 000 tonnes and **Viet Nam** by 13 percent to 241 000 tonnes. **India**, **Indonesia** and **Malaysia** all reported strong export growth in 2010.

Figure 46. FAO Fish Price Index (2005=100)



Data source: Norwegian Seafood Export Council

JAPAN

The 11 March 2011 earthquake and tsunami that struck Japan continue to have an add-on effect in world markets for fish and fishery products. Japan is among the world's largest fish importers and the damage to its infrastructure and disruption in its transportation and electricity transmission has negatively impacted imports, distribution and consumption of chilled and frozen products. In addition, many of its fishing zones, aquaculture farms, fishing vessels and processing plants were damaged or destroyed.

The three most affected prefectures represent 11 percent of Japan's marine capture fisheries and 17 percent of marine aquaculture production. An 80 percent reduction in production is forecast for the affected areas. However, as Japan is heavily dependent on imports for most of its fish consumption, the contribution of the affected areas to total supply is actually far less.

The effect on Japanese consumer sentiment and consumption resulting from earthquake damage to its Fukushima nuclear power plant and subsequent nuclear fall-out remains unknown. However, consumer reaction to domestic fishery products could potentially be much more important than the direct damage caused to domestic production. If consumer preferences were to move towards imported products, the impact on world fish markets would be significant.

Table 16. World fish market at a glance

	2009	2010 estim.	2011 f'cast	Change 2011 over 2010
	million tonnes			%
WORLD BALANCE				
Production	**144.6**	**145.1**	**149.0**	**2.7**
Capture fisheries	88.9	87.0	88.5	1.8
Aquaculture	55.7	58.1	60.4	4.0
Trade value (exports USD billion)	94.9	104.9	108.4	3.4
Trade volume (live weight)	54.9	55.2	55.4	0.4
Total utilization				
Food	117.8	120.0	121.7	1.4
Feed	20.0	17.7	20.3	14.4
Other uses	6.8	7.3	7.0	-4.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/year)	17.2	17.3	17.4	0.3
From capture fisheries (kg/year)	9.1	8.9	8.8	-2.1
From aquaculture (kg/year)	8.2	8.4	8.6	2.8

FAO Fish price index (2005=100)	2009	2010	2011	Change 2011 over 2010 %
	128	117	127	8.5

Data source: Norwegian Seafood Export Council

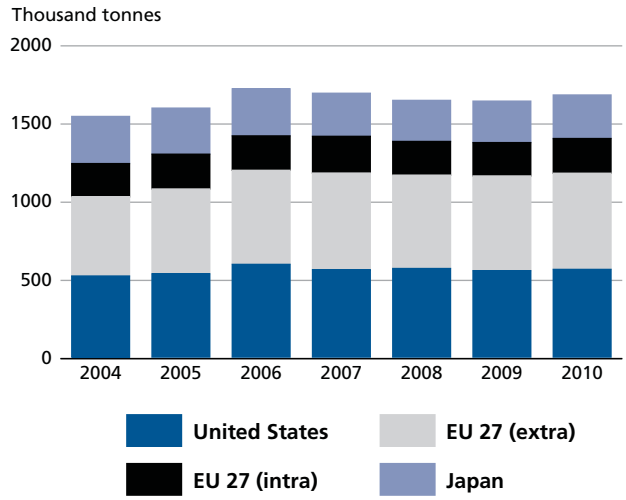
The first large harvests of farmed vannamei shrimp took place in India last year, amounting to about 20 000 tonnes. Indian vannamei production for 2011 is forecast to reach 35 000 tonnes.

In **Latin America**, farmed shrimp supplies are expected to improve from June, when the main harvest season starts. Demand is expanding for Latin American shrimp products, including from Chinese buyers.

United States domestic landings totalled 96 000 in 2010, a decrease of 27 percent. Landings in Texas, Alabama, Mississippi and Louisiana were markedly down because of the oil spill in the Gulf of Mexico.

The tsunami and earthquake in **Japan** have reduced consumption and imports, but there is not yet any real direction in the market. Despite record high shrimp prices, Japan imported 280 700 tonnes in 2010, up 6 percent. Supplies increased for both raw and processed shrimp. Thailand was the leading supplier with 77 600 tonnes, followed by Viet Nam (55 400 tonnes), Indonesia (38 500 tonnes) and India (28 500 tonnes). Of note is the rise in Japan's value-added imports with the share of processed shrimp increasing from 24 percent in 2009 to 34 percent in 2010.

Figure 47. Main shrimp importing markets



In the **United States**, the market has been strengthening in 2011. United States shrimp imports in 2010 were 560 800 tonnes, up 1.6 percent. In value, imports totalled USD 4 300 million, an increase of 13.7 percent. Thailand remained the largest supplier to the United States exporting 203 200 tonnes, up 5.4 percent from 2009, followed by Ecuador. Supplies from India increased significantly, especially of vannamei shrimp.

In March 2011, the **United States** International Trade Commission decided to maintain the anti-dumping duties on shrimp imports from **Brazil**, **China**, **India** and **Thailand**.

The EU shrimp market showed strong growth in 2010 with imports of 836 900 tonnes, an increase of 3 percent. It remained relatively strong during the first quarter of 2011.

In Asia, 2011 demand has been good for traditional shell-on black tiger, peeled shrimp and vannamei. Most East Asian markets showed strong demand growth in 2010. A total of 240 000 tonnes of shrimp were imported into China, Hong Kong, Malaysia, the Republic of Korea, Singapore and Thailand in 2010, 15 percent higher than 2009. More domestic supplies in China, Malaysia and Thailand were also marketed locally at good prices.

China's shrimp imports increased in 2010 to 57 500 tonnes, up from 42 800 tonnes in 2009. Growth was higher for live and fresh shrimp compared with frozen products. The **Republic of Korea** remains the leading import market in East Asia, with 67 000 tonnes imported in 2010 (5% more).

Effect of Japan's tsunami on tuna market uncertain

The northeast coastal areas that make up nearly one-fifth of Japan's large fishing industry, including the important Sanriku pole and line albacore and skipjack fisheries, were damaged beyond recognition and many fishers lost their lives.

Japan's coastal supplies will be lower than previous years. Although higher imports are forecast, austerity measures and deteriorated consumer sentiment could make for a negative market direction.

Following the trend of previous years, Japanese imports of high value bluefin and bigeye tuna declined in 2010 but the market bought more yellowfin (10 percent more), skipjack (16 percent more) and albacore (168 percent more). Consumer demand has gradually moved towards cheaper tuna and tuna products because of the downturn in the restaurant business, lower supplies worldwide and higher market prices.

Total tuna imports including loins and fillets into the Japanese market were 278 023 tonnes in 2010, up 5 percent from 2009. Canned tuna imports reached 43 551 tonnes.

In April, the frozen skipjack price softened for delivery to **Thai** canners at USD 1 500/tonne after reaching USD 1 600 in the previous month. However, the situation in Japan is causing concern in the canning industry. Albacore fishing off the northeast coast is the main ground for pole and line fishing in Japan, and undoubtedly has been badly affected. By mid-March, the price of frozen albacore had risen to USD 2 800/tonne for delivery to Thailand.

In other areas, captures in the Western Tropical Pacific were lower in the January–April period. However, demand is uncertain and vessel owners, affected by fuel price increases have reduced fishing efforts.

The internal turmoil in **Côte d'Ivoire** has affected raw material landings at local ports, and the supply of tuna of West African origin has fallen. This situation is significantly affecting the tuna market in Spain.

Supported by improved household demand, **United States** imports of non-canned tuna, 50 percent of which was frozen fillets and loins, increased 3.4 percent in 2010 reaching 48 823 tonnes. United States canned tuna imports posted strong growth in 2010, with Thailand being the largest supplier.

The Interim EPA between the EU and Papua New Guinea, which has created duty free status for canned tuna from **Papua New Guinea**, regardless of the origin of raw materials, has prompted protest from the EU canning industry and resulted in uncertainty in the EU market.

EU imports of canned, prepared and preserved tuna fell 5 percent to 442 545 tonnes in 2010. Import volumes from **Indonesia,** the **Philippines, Thailand** and **Viet Nam** showed declines of 9 , 21 , 20 and 15.9 percent, respectively.

Thai canned tuna exports increased in 2010 with good growth in new markets such as Argentina, Chile and Poland.

Dramatic comeback for Atlantic cod

Atlantic cod catches will exceed 1 million tonnes in 2011 for the first time in more than a decade. In total, the supply of

whitefish grew 4.5 percent in 2010 thanks to cod, Alaska pollock and hake. In 2010, total groundfish production around the world was estimated at 6.2 million tonnes, while approximately 30 percent, or 1.9 million tonnes, of the groundfish came from catch areas close to the EU. Of this, 50 percent is consumed in Europe.

In 2010, 740 000 tonnes of white fish were imported by the **EU** from **China**. The slowness of the economic recovery has led consumers to buy more whitefish products for cooking at home. Frozen products provide a versatile option for home use.

Norway exported a total of 393 660 tonnes of groundfish last year, for a value of USD 1.8 billion, the best year recorded since 1998. An upward trend in prices and increased quotas contributed to the good results.

The **Russian** Pacific Fisheries Research Centre confirms that most of the regional pollock stocks are in healthy condition. This will enable the 2012 pollock quota to be increased by 100 000 tonnes, compared with 2011. The quota for all Russian pollock stocks this year is 1 650 000 tonnes.

In **Argentina**, the most abundant groundfish species landed in 2010 were hake (277 506 tonnes) and hoki (81 019 tonnes). In 2010, Argentina exported 152 427 tonnes of hake worth USD 347 million, representing a 0.8 percent decrease in volume but a 1.7 percent increase in value. Argentina's 18 200 hoki exports had a USD 38 million value. The main destination for Argentine seafood exports was Spain. Argentina's catch quotas for the opening season of 2011 will be 193 000 tonnes for hake and 150 000 for hoki.

Chilean landings of hake in 2010 were slightly higher than in 2009 with southern hake landings at 23 800 tonnes and common hake at 46 900 tonnes.

In 2011 groundfish supplies of Alaska Pollock and Atlantic cod showed considerable increases. Haddock stocks in Norwegian and Russian waters have more than tripled over the past decade, as a result of responsible management of the fishery.

Overall, groundfish markets will benefit in 2011 from reduced pangasius exports from Viet Nam.

Octopus supply tight, squid improving

Tight supplies affected 2010 trade, especially for octopus. Imports into all the major markets declined and prices edged upwards. For squid, supplies were better, and the outlook for 2011 is good. The cuttlefish market is quiet, with stable volumes and slightly increasing prices.

Octopus

Japan's imports of octopus fell from 56 200 tonnes to 44 700 tonnes in 2010, mainly because of lower availability from Mauritania and Morocco. China exported 9 400 tonnes of octopus to the Japanese market, 70 percent more than in 2009. Tight supplies are expected to continue through 2011 with firming of prices.

Squid

Argentina's squid fishery was disappointing in 2010, with 84 400 tonnes landed, representing a big drop from the 225 000 tonnes caught two years earlier. The 2011 squid fishery is reported to be much better, with prices high and expected to remain firm.

In the **United States**, squid is becoming an important species. Once thrown overboard or used as bait, squid has steadily become the largest commercial fishery in the state of California, surpassing salmon and other more traditional fisheries. The total quota for 2011 has been set at 107 000 tonnes. In addition to its growing production of squid, the United States is also becoming an important squid market. In 2010, United States imports increased by 19 percent to 66 500 tonnes, half of which was imported from China. Other major suppliers include India, the Republic of Korea and Taiwan Province of China.

International trade in squid was mixed last year. Japan had stable import quantities, at 59 000 tonnes. China, Thailand and the United States all increased their exports to Japan, while Peru registered a drop.

Italy and **Spain**, the largest EU importers, registered significant increases in imports in 2010 to compensate for declining octopus imports. Italy increased total squid imports by 15.6 percent to 100 000 tonnes. Spain, increased imports by 47.3 percent to 167 500 tonnes.

Cuttlefish

Cuttlefish trade is stable with little change in the main markets: Italy, Japan and Spain. India remains the main supplier. Somewhat higher prices are forecast for the rest of 2011.

Tilapia demand continues to grow in both domestic and international markets but prices are increasing

China, by far the leading producer and exporter of tilapia, will have a somewhat higher production in 2011, reaching around 1.2 million tonnes. Fillets will continue to be the major contributor to trade growth. Chinese exports in 2010 grew 25 percent to 322 000 tonnes with nearly half going to the United States. **Mexico** is also an important destination, but imports also increased in Africa and the EU.

Brazilian output reached an impressive 200 000 tonnes in 2010, most of which for domestic consumption. The country has an enormous potential in freshwater aquaculture and is

actively encouraging the aquaculture industry. Other South American countries such as Paraguay are also showing good growth. **United States** imports reached 215 000 tonnes in 2010 compared with 183 000 tonnes in 2009, mainly frozen fillet. China supplied 74 percent (USD 843 million), followed by Taiwan Province of China, Indonesia and Ecuador. **Ecuador**, **Honduras** and **Costa Rica** contribute the largest supplies of fresh tilapia fillet. **United States** imports of fresh/chilled tilapia declined by 20 percent in 2010. Consumers prefer the less expensive frozen product. The combined value of **United States** tilapia and pangasius imports crossed the USD 1 billion mark in 2010, confirming the positive long-term trends for fillets from farmed freshwater species.

Tilapia's popularity is growing slowly but surely in the **EU**, with imports reaching 19 000 tonnes in 2010, 85 percent of which were from **China**. Poland is the single largest market (7 000 tonnes) followed by Spain, Germany and the Netherlands. Imports are likely to be higher in 2011. Tilapia remains a cheaper alternative to coldwater white fish varieties but is more expensive than pangasius.

Asian countries look to pangasius for domestic consumption as Viet Nam's exports decline sharply

Despite 2011 production cutbacks, **Viet Nam** will remain the main supplier of pangasius catfish to international markets. The cutback is partly a supply response to low prices in 2010 that forced many farmers out of business. Export prices are increasing as a result of current shortage of product.

EU is the main market for Vietnamese pangasius, but demand is declining somewhat after a period of strong growth to a level of around 200 000 tonnes per year.

Total United States catfish imports including pangasius and channel catfish (ictalurus) increased to 62 400 tonnes in 2010, up 6.3 percent, with **Viet Nam** accounting for 80 percent of the United States imports. **China's** exports to the United States increased by 25 percent in 2010 over 2009. Southeast Asian Nations (ASEAN) is the third largest import market for Vietnamese pangasius although it declined 4.7 percent in 2010. With the lower production expected in 2011 in Viet Nam, the market will remain tight with firmer prices. New producing countries in Asia target both domestic markets and exports, but the impact in the short term will be limited.

Seabass and seabream impress the Russian Federation

Lower output and rising prices are projected for 2011. This is a continuation of European producers scaling back operations in 2010 due to tight credit and uncertain demand

Seabass and seabream prices are rising with further increases expected over the next quarter until the new production reaches market size in early summer. Greece remains the dominant supplier, followed by **Turkey**.

Italy, the largest market in Europe, continues to grow with 2010 imports up 15 percent in volume and 24 percent in value thanks to higher prices. As the frozen food sector gains popularity, more frozen bass and bream products are likely to be introduced. **French** import volumes were stable in 2010 whereas values increased 13 percent, with higher prices dampening consumer enthusiasm. In response, the French processing industry successfully introduced frozen portion-size fillets.

Spain's import volumes rose slightly in 2010, as consumers sought cheaper alternatives to their domestic production.

Producers welcome the growing popularity of seabass and seabream in northern Europe markets. In **the Russian Federation**, the species have gained restaurant popularity. In the **United Kingdom**, bass import volumes grew 10 percent in 2010 whereas bream volumes were stable. The United Kingdom import volumes in 2011 are likely to remain at 2010 levels, close to 8 000 tonnes.

The **German** market is showing good growth with volumes reaching almost 2 500 tonnes in 2010 and a positive outlook for 2011.

The overall outlook for the rest of 2011 is uncertain. Difficult access to credit in both Spain and Greece will limit production increases in 2011. In Turkey, production will be boosted by strong domestic demand.

Salmon production growing in 2011 but prices remain high

The recovery of Chile and a positive outlook for United States domestic salmon fisheries will increase salmon supply to the United States market in 2011.

Japan remained **Chile's** main export market in 2010 with 144 000 tonnes (USD 909 million), followed by Latin America (50 600 tonnes) and the United States (45 200 tonnes). Latin American demand is driven by Brazil. Whereas Japan is focused on trout and coho salmon, Brazil demands Atlantic salmon.

The outlook for the 2011 wild salmon season in **Alaska** is positive, with a catch of 203 million fish forecast. Pink salmon captures are expected to increase by 25 and sockeye salmon captures by 11 percent. Atlantic salmon prices were high and stable during the first half of 2011 but prices are expected to soften and then drop during the autumn and winter.

The trout market remains undersupplied as Norwegian farmers give priority to salmon and Chile's production of trout and salmon is still much below historic levels.

Norway's salmon exports to the United States have fallen dramatically in 2011 because of a disagreement with the United States Food and Drug Administration (FDA) on allowable substances in the treatment against sea lice. Likewise, exports to China have almost ceased due to a change in inspection procedures for Norwegian salmon.

EU consumption is still growing, although the high price for Atlantic salmon is forcing processors to look for alternatives, including frozen salmon from China. During the first quarter of 2011, Norway's salmon exports to EU-27 increased 17 percent in value but fell by almost 4 percent in volume.

Japan's imports were flat in 2010. The outlook for the rest of 2011 is uncertain.

Chile's salmon production is increasing but it is unclear how much will come to market this year. Prices will remain high for most of the year and only weaken when additional supplies from Chile reach the market during the second half of 2011. Production goals for 2012 and 2013 remain ambitious.

Small pelagic

Supply of small pelagic fish tightened in 2011, mainly due to the poor supply of Norwegian spring spawning herring. Prices for herring have increased and are expected to strengthen further. Mackerel prices are also expected to rise.

Mackerel

As a result of the European countries failing to reach a multilateral agreement on mackerel quotas, the projected unilateral 2011 quota allocations amount to 947 000 tonnes, far above the 646 000 tonnes recommended by the International Council for the Exploration of the Sea (ICES).

The Russian Federation is re-emerging as a market for mackerel with a shift away from herring and capelin. Domestic landings have increased and imports have grown from 60 000 tonnes in 2008 to almost 108 000 tonnes in 2010. **Germany**, another major importer, increased its imports by 26 percent in 2010, to 13 400 tonnes. Catches of horse mackerel and jack mackerel in the **South Pacific** and the **North Atlantic** have been declining and will continue in 2011, leading to price increases.

Herring

The supply situation for herring will tighten in 2011 with lower catches of Atlantic herring expected.

While Norwegian herring exports fell in 2010, Dutch exports increased by 6.9 percent, from 86 000 tonnes to 91 900 tonnes. Dutch exports to **Nigeria** fell significantly, while exports to **Egypt** rose by 65 percent and exports to **China** doubled.

Japan remains an important market for fresh and frozen herring and herring roe, although it has decreased imports in recent years. However, 2010 saw a turn-around with imports up 14 percent to 36 500 tonnes. Practically all the increase came from the United States, Japan's leading supplier.

Canned sardines

Morocco and **Portugal** are key suppliers of canned sardines to the EU. Morocco aims to increase supplies of canned sardines relying on large resources of sardines in its southern waters.

Fishmeal production at lowest level in years keeps prices high

World production of fishmeal fell sharply in 2010 because of declining catches in South America. Fishmeal output fell 27 percent in South America while European production increased by 39 percent.

The current situation is uncertain with operators watching the development of catch levels in South America. Fishing in Peru's north and central fishing areas, which has a 3.7 million tonnes quota, opened in April but it is still too early to forecast how the season will develop.

On a global basis, fishmeal production in the major producing countries in the first quarter of 2011 was 27 percent higher than last year. With declining catch levels, exports from the major producers **Chile** and **Peru** and fell sharply in 2010, by 29 and 47 percent, respectively. **China** remains the principal destination.

China, the dominant market for fishmeal, reported a 21 percent drop in imports in 2010 as high prices forced operators to look for alternative meals and to increase the vegetable component in feeds. China's long-term growth in animal production, including aquaculture, underpins its demand, and its reliance on fishmeal imports will likely not decline.

EU imports dropped 24 percent in 2010 with supply from Chile and Peru both lower. **Germany** remains Europe's principal shipment destination for fishmeal with more than 225 000 tonnes imported. This is a drop of 27 percent from the previous year but in line with volumes reached in earlier years. Germany's large increase in imports from Morocco reaching 36 000 tonnes in 2010, or 16 percent of the total, is noteworthy.

The United Kingdom import volumes dropped almost 12 percent in 2010 and remain far below historic levels. Use of fishmeal in the United Kingdom salmon feed industry dropped by 5 percent because of the high price and availability of other protein products to use as substitutes. Similarly, pig and poultry producers reduced the fishmeal content in feed.

The United States imports were up 12 percent in 2010. Traditionally, Mexico has been the leading exporter with a market share of around 50 percent but this dropped markedly to less than 15 percent because of reduced catches. In the United States market, domestic consumption is down as high prices are forcing users to look for cheaper alternatives.

Sales volume of fishfeed in Chile is expected to grow about 11 percent in 2011. This follows a growth of 31 percent in 2010, indicating the resurgence of Chilean salmon and trout production.

Fish oil price continues to track crude oil price

Current prices are at record levels and despite increased oil production during early 2011, prices should remain high

Chile and **Peru**, the two leading fish oil producers, saw reduced catch levels in 2010 and a fall in oil production. The situation in the North Atlantic was more positive. Overall supply from the five top producers fell 22 percent in 2010.

Chile and **Peru** experienced drastic falls in shipments in 2010, down 18 percent and 38 percent, respectively. Chile had suffered damage to its industry infrastructure from the 2010 earthquake. In the United States, good catch levels of menhaden during 2010 allowed United States fish oil exports to increase by a significant 57 percent.

Diminishing supplies led to a tight market in 2010. In addition, a growing share of production is going into the valuable fish oil food supplement market. During the first quarter of 2011, oil production increased by 51 percent but it is too early to speculate on the final figures for the year.

Although there is uncertainty regarding the catch levels in South America, demand for aquaculture is bound to grow in 2011 because of the comeback of the Chilean salmon industry. Therefore, the market will remain tight in 2011.

New Challenges for Bivalve Molluscs

The bivalve mollusc sector faced a number of challenges in 2010, including reduction in the import of scallops to the European Union, oversupply of mussels that led to a drop in the average price in Chile, and an oyster disease in the French market. This resulted in a 40 percent price rise for oysters in France. Galician clam producers are concerned that they will not have enough seed available in 2011, as hatcheries prefer to produce oyster seeds for the French market.

The aftermath of the earthquake and tsunami in Japan is adding to uncertainty about supply, imports and exports of all fish and shellfish species, including bivalve molluscs. It is too soon to predict what the full impact will be in 2011, although scallops farms in particular were badly damaged.

Figure 48. Prices of fishmeal and soymeal

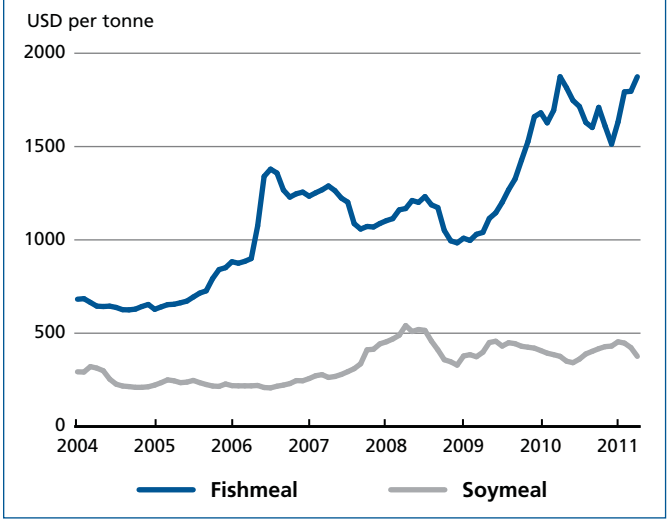


Figure 49. Prices of fish oil and soybean oil

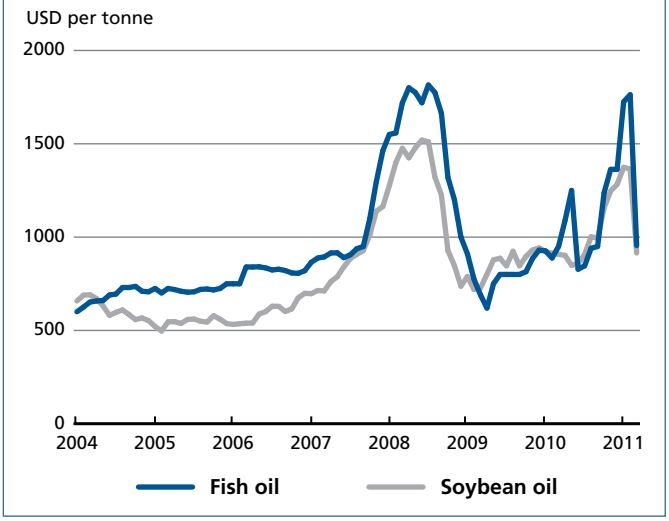
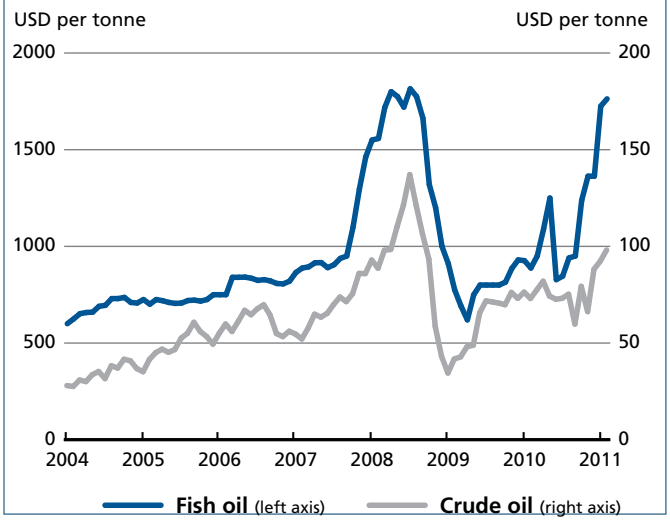


Figure 50. Prices of fish oil and crude oil



Oysters

In **France**, a disease has killed more than 80 percent of young oysters, leading to price rises of 40 percent. This will favour producers in **Brazil**, and **Mexico** and other countries that so far have focused on the American market.

Oysters in Asia have not been affected by the virus and scientists are bringing oyster species back from Japan in the hope of finding resistant species. This problem also affects oysters in Ireland, New Zealand and the United Kingdom.

Scallops

Demand for frozen scallop products from **Peru** increased markedly in 2010 with exports up 89 percent, reaching USD 117.8 million. Imports of frozen scallops by the United States increased by 34.5 percent.

The earthquake and tsunami in Japan caused severe damage to local scallop producers. The impact was also felt by scallop farms across the Pacific in northern Chile, where waves devastated many of the farming sites at Coquimbo bay. As a result, scallop prices will be markedly higher in 2011.

Mussels

In 2010, **EU** mussel imports reached 189 700 tonnes, headed by **France** (47 700 tonnes), Italy (38 500 tonnes) and **Belgium** (35 100 tonnes). Imports by **Spain** and the **United Kingdom** declined somewhat.

Chile, dealing with oversupply and low prices, had a difficult 2010. Its exports of mussels to the EU reached 80 600 tonnes (USD 36 million). Chile suffers from slow growth because of high water temperatures with the mussel taking twice the normal time to reach harvestable size. This will have a negative effect on 2011 volumes. The decline is most likely related to the La Niña phenomenon. Chile also suffered from the Japanese tsunami as waves damaged mussel farms.

Abalone

The first abalone marine farm and hatchery in Galicia, Spain, was approved in early 2011 with plans to produce 300 tonnes of abalone. This is the first aquaculture plant built in Galicia in the last five years and one of the biggest investments in molluscs.

Special features

NEW INSIGHTS FROM THE CFTC REPORTS

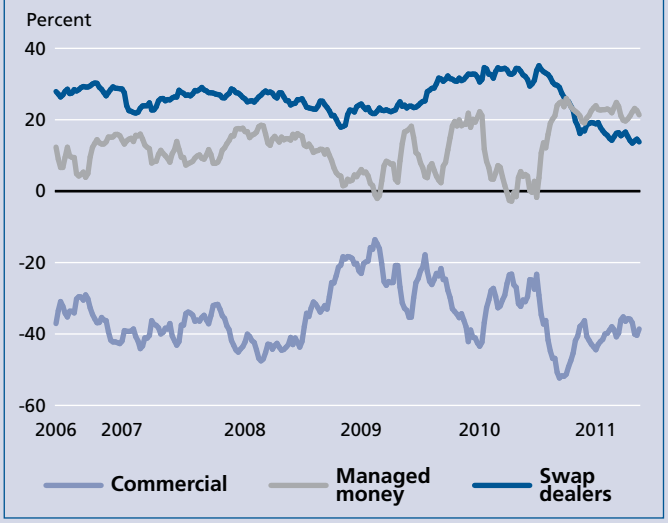
(Article by Ann Berg , Senior Commodity Analyst, FAO Consultant)

The Commodity Futures Trading Commission (CFTC) introduced new reporting categories to its weekly Commitment of Traders Report in 2009, meant to provide more accurate reflections of the current trading environment. Known as the disaggregated Commitment of Traders Report (disaggregated COT), it covers four categories:

1. Producers, merchants, processors, end users – generally called commercials.
2. Swap dealers – primarily banks that use futures to manage over-the-counter (OTC) risks associated with their swaps book or index fund offerings.
3. Managed money – registered commodity trading advisors or commodity pool operators that actively trade on behalf of clients, frequently hedge funds.
4. Other reportables – traders that do not fit in any of the other categories.

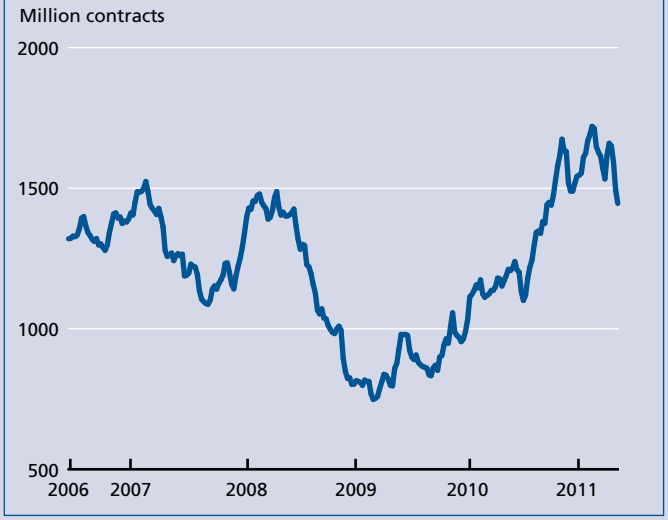
Significantly, the CFTC has now backcast data to 2006, giving a five-year picture of changes in open interest by trader category. During this period, the impact of increased flows of funds into commodity indices, represented under the swap dealers category (2), has been a primary focus of debate. These indices, which track a composite of commodity prices, have attracted about USD 400 billion in investment, according to the CFTC. However, the data represented in the disaggregated COT suggest that the managed money category (3) also deserves increased scrutiny. When trader categories are viewed as a percentage of long open interest, index fund positions appear relatively stable, whereas for most of the period, managed money positions are a mirror image of commercial positions. In other words, if commercials are selling, managed money traders are buying and vice versa. The following graphs show the net long open positions of swap dealers (dark blue line), managed money (grey line) and commercials (light blue line) as a percentage of open interest. For lines below the zero axis horizontal bars, the net positions, held mostly by commercials, are short positions.

CME maize net-length as a % of open interest

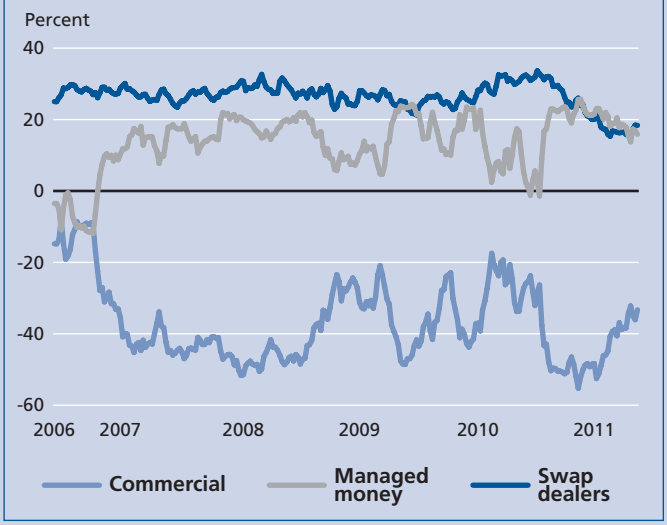


CME maize futures (June 2006-May 2011)

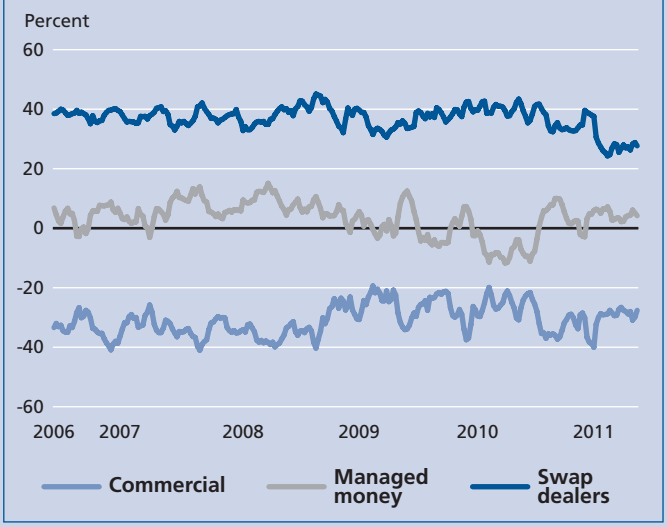
CME maize open interest (June 2006-May 2011)



CME soybean net-length as a % of open interest



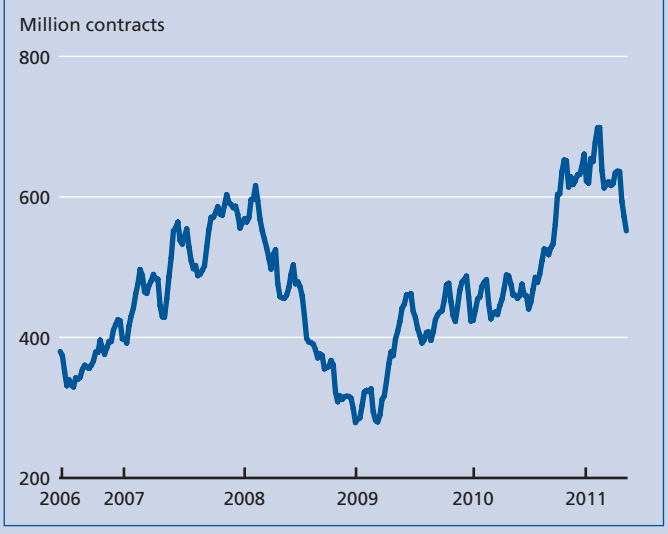
CME wheat net-length as a % of open interest



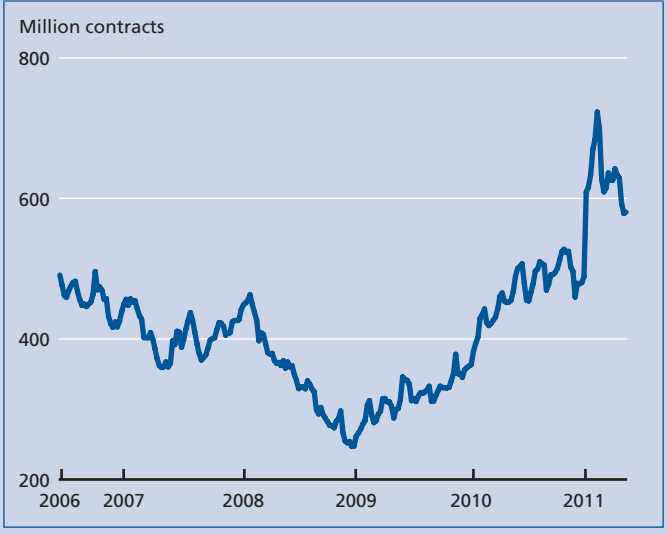
CME soybean futures (June 2006-May 2011)

CME wheat futures (June 2006-May 2011)

CME soybean open interest (June 2006-May 2011)



CME wheat open interest (June 2006-May 2011)



It is probably not surprising that commercials and managed money tend to exchange long and short positions with one another, however, these opposing trading patterns raise further questions on the issue of price discovery. How do commercials and managed money trade with each other? What types of orders do they enter? How have trading patterns changed from the past? Until trading became electronic, local speculators provided the liquidity to commercial hedgers which managed their trade execution through pit brokers accustomed to handling hundreds of buy and sell orders every trading session.

Orders: limit, market and stop

Although there are several types of orders a trader can enter into the system, the three most common orders are limit orders, market orders and stop orders.

Limit orders specify a maximum purchase price for any buy order and a minimum sales price for any sell order. For example, a futures order to buy 500 contracts of a specified commodity for a specified delivery period at USD 240/tonne (or lower) is a limit order. Limit orders often remain in the system's order book for days or weeks, "good 'til cancelled" or "good 'til date", and are sometimes referred to as "resting orders." By their nature, limit buy orders are entered below the prevailing market price and limit sell orders are entered above. These orders constitute the order book of exchange.

Market orders are the opposite of limit orders. A market order[1] to buy 2 000 contracts of the same commodity and same delivery, in the absence of a corresponding market order to sell an equivalent amount, will be matched with the lowest priced resting orders in the order book. For example, assume that the commodity futures indicates a trading price of USD 250/tonne during a point in the trading session (usually shown by the price flashing on the screen), and assume further that the resting sell orders are 500 contracts at USD 251, 500 contracts at USD 252, and 1 000 contracts at USD 254. If there are no further orders to sell at USD 250, the market order to buy 2 000 will cause the exchange's matching system to "take out" all 2 000 resting sell orders in the system and record futures price quotes at USD 251, USD 252 and finally USD 254 – all within an instant. If other traders find the USD 254 futures price attractive and enter market sell orders, they can drive the price back below USD 250 as there are no resting buy orders between USD 250 and USD 254. In other words, in the world of instantaneous trading and in the absence of speculators to take the other side of market orders, markets can become "spiky", either up or down.

Stop orders automatically become market orders once the price touches the stop level. Stop orders are entered to limit losses on long or short positions. For example, a trader with a long position in a commodity that is trading at USD 400/tonne can enter a stop at USD 395/tonne. The long position will be sold out if the market trades at that price but there is no guarantee that the position will be liquidated at the exact price of USD 395. In volatile markets, the liquidation price could be considerably lower. Traders often describe markets that decline precipitously as "going for the stops," meaning that if aggressive sellers can push a market down to a point at which they trigger stop orders, they stand to gain enormous profits from the price freefall when automatic sell orders inundate the system.

Recognizing this, it is apparent that transparency on order composition, limit, market, stop, and on the use of these orders by both managed money (3) and commercials (1), would be most informative and, in fact, could answer many questions pertinent to volatility. Logically, the volume increase experienced in global futures markets should be seen as adding much needed "liquidity." A liquid market is one in which any trader can enter and exit easily at the same price within a very short-time period. However, if market orders, including stop orders, begin to dominate futures trading, it could be viewed as destabilizing. Anecdotally, it is known that managed money traders use sophisticated technical programmes that generate buy or sell signals based on price patterns or other variables such as market sentiment, which also could account for large swings in markets, particularly if such programmes trigger simultaneously. For example, in United States equities markets, the Securities Exchange Commission determined that large orders to sell *at the market* had sent the Dow Jones Industrial Average[2] down by 1 000 points, about a 9 percent drop, in a matter of minutes during the trading session on 6 May 2010 before correcting.

Commodity futures markets frequently have moves, as a percentage of price, of this magnitude or greater. In April and May of this year, after the Chicago Market Exchange

[1] Buy and sell market orders and orders to buy or sell at the market are interchangeable terms within the trade.

[2] The large sell orders were entered in the CME mini S&P 500 and produced a spillover effect into the broader equities market, including the DJIA.

(CME) Group[3] called for several hikes in margins in crude oil and silver, those markets plummeted in what traders called a "wave" of market sell orders, remarking that "it wouldn't have been the same on the floor," explaining that, unlike former times, "when they [funds] decide to sell, they just hit it." [4]

Exchange algorithmic trade matching systems

Besides the question of order flow, a closely related issue worth examining is how algorithmic trading, the computerized matching system of the exchange itself, has altered price formation. Before the days of electronic trading, locals or brokers in the trading pits with opposing orders used to take the other side of commercial orders. The "pit" had a collective sense of price trends, and local traders or "scalpers" tried to profit from small moves. Indeed, traders bought memberships in exchanges precisely because of the advantages of the pit environment, such as timing, information and arbitrage possibilities. Every morning, once the pit brokers collected orders from floor runners who shuttled between the floor booths and the pits, they would begin to broadcast the opening price "call", e.g. "5 lower," "10 higher" or "limit bid." Most often, these opening calls proved reasonably accurate. Also, at any point during the trading session, brokers would have a fairly precise sense of the quantities they could buy or sell at a single price or within a small price band. Information, such as quantities bid or offered at particular prices, amounts traded, players involved, and arbitrage between contract months (spreads), constantly flowed from the pit back to the booth phone clerks, who in turn relayed it to off-the-floor traders and futures commission merchants. The system worked fairly efficiently, the "spikiness" observable in today's electronic markets usually occurred only when an unusual supply or demand shock occurred and commercials and some locals would try to buy or sell at the market. Otherwise, the pit system was mostly characterized by commercials placing limit orders to buy or sell and locals acting as price takers.

The demise of this system has been slow. In fact, many grain traders and brokers predicted that the agricultural pits would never switch to electronic matching because agricultural trading was somehow "different" from other futures instruments trading such as interest rate futures, e.g. treasury bonds and notes, or equity indices, e.g. the Standard & Poor (S&P) 500. However, many observers identify two main reasons for the migration from pit to electronic trading: the time lag in trade confirmations, which in a heavy volume market could be 30 minutes or more, and the preference of many new entrants to trade anonymously. Also, the exchanges themselves are now for-profit entities and, as such, they favour the electronic system for its greater efficiency, customer appeal and perfect audit trail of transactions.

Today, with only about 10 percent of trading still done in the pits, locals are gone. Spreaders, the locals and small grain firms that bet on the price differences between contract months such as the July and November soybean contracts, are also in decline, although managed money traders and more recently, the category of "other reportable"(4) often maintain large spread positions as reported in the COT. What is left then, besides the index funds, are the very large grain firms and deep pocketed managed money or hedge funds, engaged, it would seem, in a titanic contest involving billions of United States Dollars. Some early algorithmic matching systems, such as the Chicago Board of Trade's (CBOT) *Project A* which was created in the early 1990s, were designed to mimic pit behaviour and allowed some randomness of trade allocation, just as a broker would split up a large single buy or sell order among several locals and other brokers. However, today, virtually all matching systems base transactions on time of order entry. In other words, if there are several buy orders in wheat at the price of USD 7.00/bu, and a seller enters an order to sell a quantity of wheat at USD 7.00/bu, the order with the earliest time stamp will be filled first.

The exchanges' algorithmic matching systems certainly contain safeguards against extreme price gyrations. According to the CME Web site:

> "Market orders at CME Group are implemented using a "Market with Protection" approach. Unlike a conventional market order, where customers are at risk of having their orders filled at extreme prices, Market with Protection orders are filled within a predefined range of prices (the protected range). The protected range is typically the current best bid or offer, plus or minus 50 percent of the product's Non-Reviewable Range.[5] If any part of the order cannot be filled within the protected range, the unfilled quantity remains on the book as a Limit order at the limit of the protected range."

[3] The CME Group includes the Chicago Mercantile Exchange, the Chicago Board of Trade the New York Mercantile Exchange.

[4] http://www.reuters.com/article/2011/05/06/us-nymex-traders-crash-idUSTRE7456NH20110506

[5] According to the CME Rulebook, this range is USD 0.10/bu for maize, wheat and soybeans.

And CME utilizes Stop Spike Logic which prevents:

> "…the excessive price movements caused by cascading stop orders by introducing a momentary pause in matching (Reserved State) when triggered stops would cause the market to trade outside predefined values (typically the same as the Non-Reviewable Ranges). This momentary pause allows new orders to be entered and matched against the triggered stops in an algorithm similar to market opening."

However, despite these safeguards, volatility has certainly increased over the last few years.

Prices versus COT report

A review of the futures price in relation to the COT graphs (pp. 55-56) between June 2006 and May 2010 reveals a pattern observable in maize, soybeans and, to a lesser extent, wheat: as prices rise, commercials increase their shorts, and when prices decline, commercials reduce their shorts. Perhaps confirming the old adage that the market always "goes to the orders," the pattern would seem to suggest that commercials are placing scale-up limit orders when the market is rising and scale-down limit orders when the market is declining, and that managed money is placing opposite market orders to buy and sell.

The pattern in maize is significant because of the huge shift to ethanol production which now accounts for 40 percent of the maize crop. This theoretically should have added net length to the commercial category when the need to hedge future maize inventories against rising prices among domestic ethanol distilleries increased dramatically in the United States. But this did not happen. As the maize price began to rise in late 2007, commercials increased the percentage of their net short position and then reversed around the first week of July 2008 as the market plummeted. Similarly, during the July 2010 price run-up, commercials net percentage length hit a record negative number, over 50 percent, although it re-traced back to above 40 percent a few months later.

The price pattern in soybeans is similar. As prices rose gradually between September 2006 and March 2008, commercials increased their net negative percentage length from around 10 percent to over 50 percent.

Prices have risen again sharply in 2011, with patterns deviating from the overall pattern especially in maize and soybeans. In late December 2010, as prices were trending higher, maize and soybeans experienced dramatic increases[6] in open interest and sharp decreases in the commercial net percentage net negative length. Interestingly, both managed money and swaps dealers reduced their net length on a percentage and absolute basis over the same time period. In addition, other reportables increased their spread positions to record levels.[7] This suggests possibly some large hedging of export sales[8] or alternatively, the realization by commercials that the fundamental situation was worsening and that maize and soybeans would have to achieve price levels that would ration demand.

Going forward

Futures trading has undergone multiple changes over the last decade, and these changes now appear permanent. As volatility remains a concern, especially in agricultural futures, it is encouraging that the exchanges are reviewing the issues of order flow and algorithmic trading. Indeed the United States InterContinental Exchange has announced that it is working to improve its algorithmic trading system to help address volatility levels.

The CFTC has provided important information with regard to the trading patterns of commercials, managed money traders and swaps dealers. However, the disappearance of the constant flow of price and transaction information provided by pit trading has prompted increasing questions on "what" or "who" is driving prices. Indeed, the United States administration recently convened a task force, which included the CFTC, to look into possible "excess speculation" in the energy markets which have seen price declines after margins – the amount of money the exchange or clearinghouse requires as initial performance bonds – were raised sharply. Therefore, more information will be helpful on order composition to determine if large imbalances in market orders to buy or sell, or stop orders, might be contributing to short- or medium-term price aberrations or volatility. It is widely accepted that futures markets "always overshoot." Today the question is: "by how much?"

[6] Around 40 percent between June 2010 and March 2011.

[7] If options positions are also counted, the COT showed that spread positions held other reportables reached a level of nearly 7 million tonnes during the week of 2 November.

[8] Mexico announced late December 2010 that it had hedged its maize supplies for tortilla making (4.2 million tonnes) by buying CME call options and booking physical grain).

AN EXAMINATION OF THE MAIZE, WHEAT AND SOYBEAN PRICE PEAKS IN 2008 AND 2011 AND INVESTORS' PARTICIPATION IN FUTURES MARKETS

(Article by Frank S. Rose, College of Business, Lewis University, Romeoville, Illinois, United States)

Introduction

In 2008 and again in 2011, maize, wheat and soybean prices reached historically high levels, after long periods of uptrend. In the maize export markets[1] in the United States, price peaks of around US 7.90/bushel were observed in June 2008; in April 2011, peaks of USD 8.20/bushel were reached. Wheat prices hit USD 10.98/bushel in February 2008 and USD 9.50/bushel in February 2011. Soybean prices rose to approximately USD 16.60/bushel in June 2008, and USD 14.70/bushel in January 2011.[2] Figure 1 illustrates these peaks, the uptrends preceding them, and the subsequent downtrends. Certain other commodity markets, such as crude oil and copper, experienced similar patterns of price rises and falls during these periods.

A number of short- and long-term factors have been cited to explain these price run-ups, including weather and supply problems in key production areas, a weak United States Dollar, growing Chinese demand for commodities, quantitative easing by the United States Federal Reserve, use of maize in ethanol production, and investor activity in the futures markets. In this article, without attempting an explanation of cause and effect, the last factor is addressed. We ask, "How does investor participation in the futures markets before and after the 2008 price peaks in maize, wheat and soybeans compare with their participation before and after the 2011 peaks?"

The next section discusses how four groups of futures market users, three investor groups and one non-investor group, would be expected to behave during the price rises and declines before and after the 2008 and 2011 price peaks. Then, we explain our data and analysis, and conclude with a summary of our results.

Expected Market Positioning of Four User Groups When Futures Prices Rise and Fall

In this article, we examine the participation in futures markets by four user groups, traditional hedgers, swap dealers, money managers and index traders. Traditional hedgers are not investors in futures but we include them for comparison purposes. They use the futures markets to manage risk, taking long (buy) positions to offset risks of price rises and short (sell) positions to offset risks of price falls. When prices are going up, firms needing to purchase the underlying cash commodity in the future would be expected to take long positions. Firms wanting to sell the underlying cash commodity in the future would be expected to take short positions at various points during the uptrend to establish ultimate selling prices for their commodity at the high current levels.

In recent years, investors, defined as those having no commercial interest in the underlying cash commodity, have been increasingly drawn to futures markets for several reasons. First, access has become easier, investors understand these markets better, and they are more comfortable using them. Second, the returns from investing in commodities have often compared favourably with returns from stocks, bonds, real estate and other investments. Third, commodities have been increasingly added to portfolios as a separate asset class to reduce overall risk.

Swap dealers use the futures markets for risk management, but unlike hedgers, their participation reflects their provision of various investment products in the over-the-counter (OTC) markets. Typically, a swap dealer offers OTC investment products that commit the dealer to making a pay-out if commodity prices rise. For example, a dealer may sell a swap to an end-user, such as a wheat miller, that guarantees a wheat purchase price of USD 7.00/bushel for a set quantity over a specific time period. If the miller's purchase price rises above USD 7.00/bu, the dealer pays the customer the difference between the two prices in accordance with the terms of the swap. In this example, because it takes on a risk that commodity prices will rise, the dealer will hedge this risk with a long position in futures. Swap dealers also sell OTC products to financial investors which see or expect an upward trend in prices and similarly hedge these price risks with long positions in futures. Finally, because of the preference of some investors to maintain continuous price exposure to commodities for portfolio diversification purposes, provision of OTC products to these "long-only" investors requires the swap dealers to hold constant long positions in futures to manage their risk.

Money managers trade on behalf of customers and seek profit opportunities in futures relative to other investments. If commodities are outperforming other investments, they will increase the allocation of futures in their portfolios. They are not passive long-only investors. One would expect these participants to be long when price rises are anticipated and

[1] Prices reflect cash basis f.o.b. US Gulf

[2] One bushel of wheat or soybeans = .02721 tonnes; one bushel of maize = .02540 tonnes

price uptrends are established, and short when price declines are expected following price peaks.

Index traders are those whose investments in futures are based on commodity indexes, which are based on a defined composite of commodity futures contracts. Activity levels in this user category reflect transactions of those swap dealers who provide their customers with index-based OTC products. The category also includes money managers such as pension funds which may replicate or create commodity indexes as part of their trading activity. Index traders generally would be expected to be long in rising markets and short in falling markets. However, the category also includes the passive traders, such as those noted above, who continuously maintain long, index-based positions for portfolio diversification purposes.

Analysis and Data

Graphs on page 62 show the price rises, peaks and declines for the past five years in the United States maize, soybean and wheat export markets. We focused on the price peaks in 2008 and 2011, and took snapshots of market participation of the four user groups at the following points in time, i) the beginning of the price uptrend which led to the peak; ii) one month prior to the price peak; iii) the price peak; iv) one month after the price peak; and v) the end of the downtrend following the price peak. To illustrate, with respect to the maize price peak in 2008, we took five snapshots, i) mid-July 2007 when prices were at USD 3.76/bushel; ii) end of May 2008, prices at USD 6.23/bushel; iii) end of June 2008, prices peaked at USD 7.90/bushel; iv) end of July 2008, prices at USD 6.23/bushel; and v) early December 2008, prices at USD 3.35/bushel. No data points are reported for the end of the downtrend following the 2011 peak because we do not know if there will be an extended downtrend and, if there is one, when it will end.

For each of the snapshot points in time, we compiled data on "open interest" (i.e. existing positions) of the four user groups in the CBOT futures and options on futures markets. The source of the basic data was the Commitments of Traders databases, specifically the Disaggregated and Supplemental reports, released by the United States CFTC. These databases provide disaggregated open interest data which have been submitted, as required by CFTC regulations, by futures and options traders holding large market positions. We compiled the total long positions of each user group, the percentage of total long positions held by the group, and the net long (long minus short) positions of the group.

The results of this compilation are summarized in Tables 1-3 (pp 63-65). The open interest information for each user group is reported in contracts (5 000 bushels/contract). Note that the traditional hedger group is called "Producers/Merchants/Processors/Users" in the tables, following the category name used in the CFTC's databases.

Summary and Conclusions

Several observations may be drawn from a perusal of the tables. First, although our focus is not on the traditional hedgers, it is interesting to note that, as a group, their net short positions grew larger as prices rose and declined as prices fell. This suggests that a large segment of this group was creating short positions during the price run-ups to establish higher prices for eventual sale of their cash commodities.

Second, each of the three investor groups, swap dealers, money managers and index traders, increased their long and net long positions as prices rose and reduced them as prices fell. This is consistent with the expectations discussed in section II. This pattern is not as clear cut in 2011, particularly with regard to the net long maize positions of swap dealers, money managers and index traders (Table 1). Long maize positions peaked as the prices peaked in 2011, but net long maize positions of swap dealers and index traders, for example, actually declined steadily from the start of the uptrend in mid-June 2010 to the month after the price peak, mid-May 2011. This difference between 2008 and 2011 might be related, in part, to differences in other investment opportunities available during the two periods. In the run-up to the 2008 price peaks, the stock market was generally in decline, making commodity investments relatively more attractive. On the other hand, during the 2011 period, the S&P 500 was rising and perceived advantages of commodity investments during the price run-ups may not have been as clear.

It might also be noted that in each of the three futures markets, in each of the periods examined, total open interest (not reported on the tables) increased steadily as prices climbed to their peaks and then declined as prices dropped.

Third, during the periods at and around the 2011 price peaks, long and net long open interest levels of the investor groups were generally somewhat greater than observed around the 2008 price peaks. This was not universally true; for example, net long maize positions of swap dealers and index traders were lower in 2011 than in 2008 (Table 1).

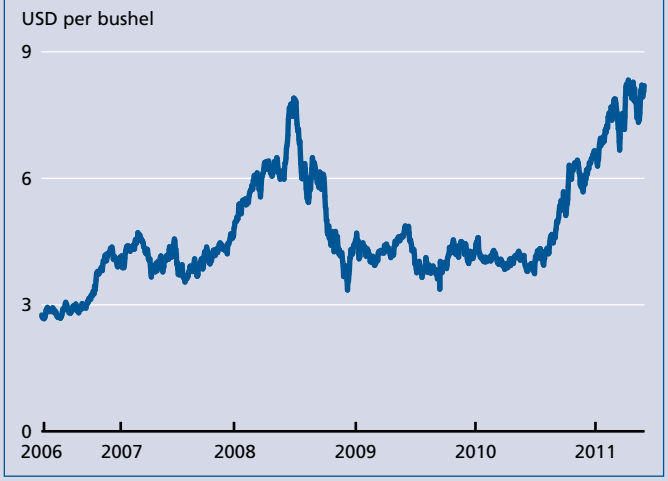
Fourth, there is some indication that long positions are reduced by investors more quickly following the price peaks than they are built up prior to the peaks. Note, for example, the pattern of open interest changes pre- and post-peaks among the investor groups in soybeans (Table 3). However, as with our other observations, a more rigorous analysis

would be necessary before definitive statements could be made concerning this behaviour.

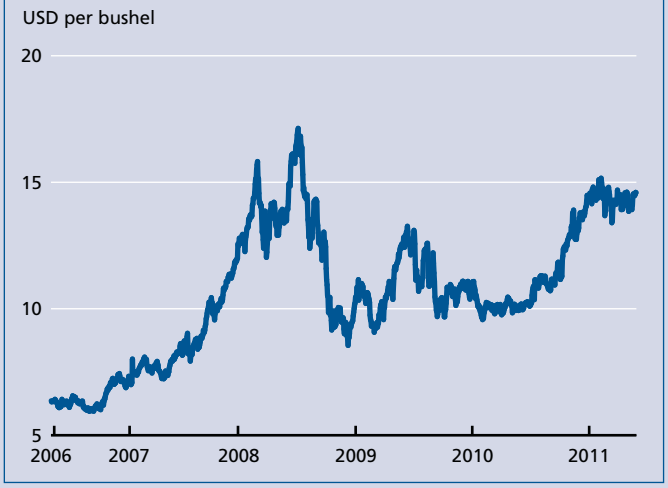
Fifth, the positions of the money manager group show a tendency to be somewhat more volatile than the other two investment categories. This might be expected as these traders, as a group, are more apt to shift their positions constantly in the pursuit of profits. Note, for example, the sharp increases in net long positions from the start of the uptrends in 2011 to the price peaks, 69 000 contracts to 322 000 contracts in maize, 12 000 contracts net short to 52 000 contracts in wheat, and 32 000 contracts to 169 000 contracts in soybeans.

The observation that swap dealers, money managers and index traders increased their long positions in the futures markets as prices rose during the periods examined and reduced their long positions as prices fell does not, of course, permit any statements regarding any cause and effect THE relationship between investor activity and price formation. However, the dialogue in the United States and elsewhere concerning this relationship has prompted the CFTC to re-examine its position limits; i.e. the regulations restricting the participation of non-hedgers in the United States futures markets. A brief summary of the CFTC's recent work on position limits is presented separately.

Maize cash prices (US No. 2 yellow, f.o.b. Gulf) May 2006-May 2011



Soybean cash prices (US No. 1 yellow, f.o.b. Gulf) May 2006-May 2011



Wheat cash prices (US No. 2 soft red, f.o.b. Gulf) May 2006-May 2011

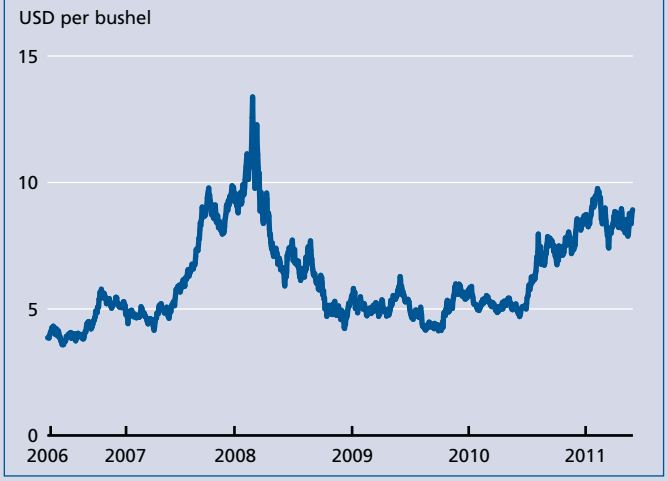


Table 1: Maize Price Peaks; 2008 versus 2011
Open Interest of Producers/Merchants/Processors/Users, Swap Dealers, Money Managers and Index Traders in Chicago Board of Trade Maize Futures and Options Markets
(Thousands of Contracts, with percent of Total Open Interest in Parentheses)

	2008		2011	
	Long	Net Long	Long	Net Long
Producers/Merchants/Processors/Users				
Start of Uptrend	389 (23%)	-374	255 (16%)	-330
Month Before Peak	436 (20%)	-508	450 (19%)	-616
Price Peak	362 (18%)	-530	459 (19%)	-538
Month After Peak	437 (22%)	-320	371 (17%)	-525
End of Downtrend	332 (27%)	-129	-	-
Swap Dealers				
Start of Uptrend	376 (22%)	338	471 (29%)	400
Month Before Peak	478 (22%)	370	463 (20%)	283
Price Peak	495 (24%)	377	502 (20%)	272
Month After Peak	422 (22%)	307	443 (21%)	253
End of Downtrend	255 (21%)	187	-	-
Money Managers				
Start of Uptrend	349 (20%)	117	357 (22%)	69
Month Before Peak	455 (21%)	231	635 (27%)	375
Price Peak	429 (21%)	238	629 (26%)	322
Month After Peak	321 (16%)	124	378 (18%)	302
End of Downtrend	187 (15%)	15	-	-
Index Traders				
Start of Uptrend	376 (22%)	365	513 (32%)	475
Month Before Peak	462 (22%)	416	497 (21%)	395
Price Peak	463 (23%)	417	531 (22%)	388
Month After Peak	402 (21%)	352	494 (23%)	388
End of Downtrend	271 (22%)	333	-	-

Sources of Data: Commodity Futures Trading Commission, Commitments of Traders Disaggregated and Supplemental Reports

Table 2: Wheat Price Peaks; 2008 versus2011
Open Interest of Producers/Merchants/Processors/Users, Swap Dealers, Money Managers and Index Traders in Chicago Board of Trade Wheat Futures and Options Markets
(Thousands of Contracts, with percent of Total Open Interest in Parentheses)

	2008		2011	
	Long	Net Long	Long	Net Long
Producers/Merchants/Processors/Users				
Start of Uptrend	69 (14%)	-122	40 (9%)	-77
Month Before Peak	49 (9%)	-163	70 (11%)	-197
Price Peak	53 (9%)	-161	86 (12%)	-208
Month After Peak	43 (8%)	-159	74 (12%)	-180
End of Downtrend	20 (7%)	-75	-	-
Swap Dealers				
Start of Uptrend	176 (36%)	152	165 (38%)	117
Month Before Peak	203 (36%)	167	237 (39%)	186
Price Peak	201 (33%)	162	247 (34%)	176
Month After Peak	204 (36%)	151	242 (39%)	173
End of Downtrend	132 (42%)	104	-	-
Money Managers				
Start of Uptrend	112 (23%)	-2	98 (23%)	-12
Month Before Peak	139 (25%)	25	141 (23%)	39
Price Peak	159 (26%)	40	169 (23%)	52
Month After Peak	150 (27%)	45	113 (18%)	21
End of Downtrend	73 (23%)	-1	-	-
Index Traders				
Start of Uptrend	197 (40%)	193	200 (46%)	175
Month Before Peak	217 (38%)	197	247 (41%)	214
Price Peak	215 (35%)	191	252 (35%)	208
Month After Peak	227 (41%)	187	254 (41%)	214
End of Downtrend	151 (48%)	131	-	-

Sources of Data: Commodity Futures Trading Commission, Commitments of Traders Disaggregated and Supplemental Reports

Table 3: Soybean Price Peaks; 2008 versus 2011
Open Interest of Producers/Merchants/Processors/Users, Swap Dealers, Money Managers and Index Traders in Chicago Board of Trade Soybean Futures and Options Markets
(Thousands of Contracts, with percent of Total Open Interest in Parentheses)

	2008		2011	
	Long	Net Long	Long	Net Long
Producers/Merchants/Processors/Users				
Start of Uptrend	88 (18%)	-155	105 (18%)	-117
Month Before Peak	84 (13%)	-215	131 (14%)	-302
Price Peak	79 (12%)	-235	132 (13%)	-302
Month After Peak	75 (14%)	-172	141 (17%)	-225
End of Downtrend	91 (21%)	-80	-	-
Swap Dealers				
Start of Uptrend	126 (25%)	120	167 (29%)	138
Month Before Peak	165 (25%)	141	212 (23%)	155
Price Peak	169 (26%)	141	210 (21%)	142
Month After Peak	145 (26%)	121	196 (23%)	123
End of Downtrend	99 (23%)	77	-	-
Money Managers				
Start of Uptrend	117 (23%)	57	143 (25%)	32
Month Before Peak	182 (28%)	110	249 (27%)	154
Price Peak	190 (29%)	119	283 (29%)	169
Month After Peak	139 (25%)	89	214 (25%)	115
End of Downtrend	88 (20%)	24	-	-
Index Traders				
Start of Uptrend	133 (27%)	130	193 (34%)	179
Month Before Peak	177 (27%)	166	229 (25%)	196
Price Peak	182 (28%)	169	224 (23%)	185
Month After Peak	162 (29%)	149	208 (24%)	161
End of Downtrend	109 (25%)	93	-	-

Sources of Data: Commodity Futures Trading Commission, Commitments of Traders Disaggregated and Supplemental Reports

A SUMMARY OF THE CURRENT REGULATORY DIALOGUE ON POSITION LIMITS; CHICAGO BOARD OF TRADE MAIZE, WHEAT AND SOYBEANS

(Article by Frank S. Rose, College of Business, Lewis University, Romeoville, Illinois, United States)

The United States Commodity Exchange Act of 1936 authorizes the Federal Government and since 1974, the Commodity Futures Trading Commission (CFTC), to set limits on the size of speculative positions in futures markets. The aim of this legislation is to protect the markets from any adverse effects on pricing caused by "excessive" speculation. The Act allows for exemptions from these limits for traders using the markets for hedging.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 requires the CFTC to modify, broaden and enhance its position limit regulations. Among the enhancements is a requirement that position limits be established for swaps that are economically equivalent to exchange-traded agricultural futures and options contracts.

On January 26, 2011, the CFTC released proposed regulations regarding position limits in 28 commodity futures markets, including maize, wheat and soybeans. The official public comment period ended on March 28, but a lively discussion of position limits continues, in part because of interest in i) the price run-ups in a number of commodity markets in 2008 and again in 2011, and ii) the role of speculators in the futures markets.

For the Chicago Board of Trade (CBOT) agricultural futures contracts, the CFTC-determined position limits have been changed on numerous occasions since 1936. The current levels for maize, wheat and soybeans, last updated in 2005, are shown in the table below. Limits are based on a trader's net long or short positions. They are set with reference to the delivery months specified in the futures contract. The limits are set at a lower level for the "spot" month, the month the contract matures and becomes deliverable, to minimize the possibility of abnormal pricing during the delivery process caused by excessively large positions. Limits are also set for other single delivery months specified by the contract, apart from the spot month, and for the total of all specified delivery months combined. As noted, traders using the markets for hedging, rather than investment, purposes can apply for exemptions from these limits. The application process requires a trader to submit detail on cash market operations and demonstrate exposure to price risk in the cash market.

In April 2010, the CME Group petitioned the CFTC for expanded limits for CBOT maize, wheat and soybeans, citing higher levels of open interest in the markets and relatively constant market shares of open interest held by large non-commercial traders. The higher proposed levels are shown in the table. The CFTC is considering this proposal in the context of its broader re-examination of position limit regulation.

The proposal released by the CFTC in January calls for a two phase implementation of new regulations across the 28 markets. In the initial transition phase, position limits for the CBOT maize, wheat and soybean contracts would remain at current levels. For the second phase, two alternatives have been put forth for public comment. Under the first alternative, the single month and all months combined limits would be set at the current ("legacy") all months combined level, thus raising the single month limit. Spot month limits would be set at 25 percent of CFTC-determined levels of spot month deliverable supply. Under the second alternative, spot month limits would also be set at the 25 percent of deliverable supply level, but the single month and all months combined limits would be set at a level based on an open interest formula: 10 percent of the first 25 000 contracts of open interest in the contract during a reference period, plus 2.5 percent of the remaining open interest. As an illustration, if 2010 is used as the reference period, the single month and all months combined limits would be at levels shown in the table.

For more details on position limit regulation in the United States and the CFTC's proposal, see the resources available on the CFTC Web site cited as a reference.

Position Limits: Chicago Board of Trade Maize, Wheat and Soybeans
(Number of Contracts with each contact = 5 000 bushels)

	Spot month	Single month apart from the spot month	All Months Combined
Current Limits			
Maize	600	13 500	22 000 (2.79 million tonnes)
Wheat	600	5 000	6 500 (8.90 million tonnes)
Soybeans	600	6 500	10 000 (1.37 million tonnes)
CBOT Proposed			
Maize	600	20 500	33 000 (4.19 million tonnes)
Wheat	600	9 000	12 000 (1.64 million tonnes)
Soybeans	600	10 000	15 000 (2.06 million tonnes)
CFTC Proposed - Initial transitional phase			
Maize	600	13 500	22 000 (2.79 million tonnes)
Wheat	600	5 000	6 500 (8.90 million tonnes)
Soybeans	600	6 500	10,000 (1.37 million tonnes)
Second Phase – Alternative A (Use of "legacy" limits):			
Maize	(25% of spot month deliverable supply)	22 000	22 000 (2.79 million tonnes)
Wheat		6 500	6 500 (8.90 million tonnes)
Soybeans		10 000	10 000 (1.37 million tonnes)
Second Phase – Alternative B, An Illustration (Use of an open interest formula):			
Maize	(25% of spot month deliverable supply)	46 500	46 500 (5.91 million tonnes)
Wheat		16 200	16 200 (2.22 million tonnes)
Soybeans		19 100	19 100 (2.62 million tonnes)

* All figures in this column give the contract quantities in millions of tonnes equivalents.

Reference

Commodity Futures Trading Commission; Position Limits;
http://cftc.gov/LawRegulation/DoddFrankAct/Rulemakings/DF_26_PosLimits/Index.htm

Statistical appendix tables

NOTES

General

- FAO estimates and forecasts are based on official and unofficial sources.
- Unless otherwise stated, all charts and tables refer to FAO data as source.
- Estimates of world imports and exports may not always match, mainly because shipments and deliveries do not necessarily occur in the same marketing year.
- Tonnes refer to metric tonnes.
- All totals are computed from unrounded data.
- Regional totals may include estimates for countries not listed. The countries shown in the tables were chosen based on their importance of either production or trade in each region. The totals shown for Central America include countries in the Caribbean.
- Estimates for China also include those for the Taiwan Province, Hong Kong SAR and Macao SAR, unless otherwise stated.
- Up to 2006 or 2006/07, the European Union includes 25 member states. From 2007 or 2007/08 onwards, the European Union includes 27 member states.
- '-' means nil or negligible.

Production

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

Utilization

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

Trade

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

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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		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**973.5**	**1 007.4**	**1 029.3**	**132.4**	**135.1**	**135.5**	**43.7**	**42.2**	**46.0**
Bangladesh	32.6	35.5	36.2	3.5	4.7	2.8	-	-	-
China	415.1	437.0	438.4	9.5	13.0	12.2	2.1	2.1	2.0
India	211.4	215.0	225.7	0.8	0.5	0.3	4.6	3.6	6.6
Indonesia	53.9	60.2	60.3	6.5	8.0	8.4	0.8	1.6	1.7
Iran, Islamic Republic of	17.9	19.8	20.1	9.5	5.5	5.7	0.9	0.5	0.2
Iraq	2.6	3.3	2.9	4.2	4.7	5.4	-	-	-
Japan	8.9	8.7	8.5	25.3	25.3	25.3	0.5	0.5	0.4
Kazakhstan	19.7	12.1	17.4	0.1	-	0.1	8.1	5.8	7.3
Korea, Republic of	5.0	4.7	4.8	12.2	12.6	12.9	0.1	0.1	0.1
Myanmar	21.0	20.8	21.0	0.1	0.2	0.2	0.8	0.4	0.6
Pakistan	33.3	32.9	34.5	1.6	0.3	0.2	4.3	3.9	4.1
Philippines	17.6	17.4	18.6	5.2	4.8	4.9	-	-	-
Saudi Arabia	2.0	1.7	1.5	11.2	11.8	12.2	-	-	-
Thailand	25.6	25.0	25.7	2.0	2.4	2.4	10.0	10.2	9.9
Turkey	30.4	32.4	32.9	4.0	3.5	3.2	2.8	3.2	3.2
Viet Nam	29.7	31.3	31.9	2.7	4.4	4.1	5.9	7.1	6.5
AFRICA	**141.6**	**159.6**	**157.7**	**62.0**	**63.2**	**62.8**	**6.2**	**7.4**	**7.4**
Algeria	3.9	4.7	4.7	7.8	7.8	7.8	-	-	-
Egypt	20.8	19.1	19.7	14.2	16.0	15.8	0.5	0.1	0.1
Ethiopia	15.0	16.8	15.8	1.6	0.8	1.2	0.3	0.5	0.4
Morocco	6.1	7.7	9.2	5.4	6.1	4.6	0.2	0.2	0.2
Nigeria	23.2	25.0	25.2	5.6	6.2	6.6	0.5	0.6	0.6
South Africa	13.3	15.4	13.7	2.6	2.7	2.7	1.8	2.3	2.0
Sudan	4.8	5.8	5.6	2.0	2.0	2.0	0.2	0.1	0.1
CENTRAL AMERICA	**39.9**	**40.0**	**38.9**	**24.9**	**25.6**	**25.4**	**1.5**	**1.2**	**1.1**
Mexico	33.9	34.0	32.7	14.7	15.3	15.1	1.3	1.0	1.0
SOUTH AMERICA	**128.9**	**142.6**	**141.9**	**24.4**	**24.7**	**24.8**	**36.6**	**43.9**	**41.3**
Argentina	35.3	45.6	42.1	-	-	-	23.2	24.5	25.9
Brazil	69.4	72.2	74.3	8.7	7.9	8.0	9.4	14.8	10.8
Chile	3.2	3.4	3.5	2.9	2.9	2.9	0.1	0.1	0.1
Colombia	3.3	3.3	3.4	4.8	5.2	5.4	0.1	0.1	0.1
Peru	3.8	3.9	3.8	3.2	3.6	3.4	-	-	-
Venezuela	3.7	3.5	3.7	3.0	3.5	3.5	0.1	-	-
NORTH AMERICA	**461.3**	**443.6**	**468.8**	**9.2**	**7.6**	**8.1**	**112.0**	**113.0**	**104.8**
Canada	51.2	45.3	50.5	2.8	1.7	1.8	21.7	21.8	22.4
United States of America	410.1	398.2	418.3	6.4	5.9	6.3	90.3	91.3	82.5
EUROPE	**449.1**	**403.5**	**440.3**	**21.7**	**17.2**	**17.9**	**60.7**	**45.5**	**55.1**
European Union	290.4	279.0	285.6	17.3	13.2	14.0	24.0	27.1	23.6
Russian Federation	94.0	59.6	83.2	0.8	0.8	0.7	19.1	4.9	11.1
Serbia	8.2	9.2	9.2	0.1	0.1	0.1	1.5	1.7	1.8
Ukraine	40.1	38.8	44.0	0.3	0.2	0.2	15.9	11.4	18.1
OCEANIA	**32.3**	**40.9**	**38.0**	**1.3**	**1.3**	**1.3**	**16.0**	**21.7**	**20.3**
Australia	31.4	40.0	37.1	0.2	0.1	0.1	16.0	21.6	20.2
WORLD	**2 226.7**	**2 237.6**	**2 314.9**	**276.0**	**274.8**	**276.0**	**276.8**	**274.8**	**276.0**
Developing countries	1 227.9	1 299.9	1 314.4	207.6	212.3	212.3	77.4	86.0	85.9
Developed countries	998.7	937.8	1 000.5	68.4	62.5	63.7	199.4	188.8	190.1
LIFDCs	512.4	543.0	553.2	78.7	79.1	81.6	15.5	16.0	19.9
LDCs	138.4	155.6	153.5	24.0	22.9	22.6	4.9	6.0	6.7

Table A1 (b). Cereal statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**1 045.8**	**1 094.4**	**1 112.5**	**293.2**	**320.3**	**327.2**	**160.6**	**161.7**	**162.2**
Bangladesh	35.4	38.0	38.8	6.5	9.7	9.9	169.8	174.4	175.1
China	414.4	436.9	444.4	170.4	193.7	198.2	150.4	150.6	150.2
India	203.8	211.4	216.8	40.9	40.7	43.2	153.8	154.9	156.2
Indonesia	58.7	64.8	66.7	7.4	10.6	11.1	208.1	211.2	215.1
Iran, Islamic Republic of	25.9	26.2	26.6	4.6	4.0	3.0	199.2	197.0	196.6
Iraq	7.6	8.3	8.3	1.6	1.8	2.1	195.2	196.5	195.9
Japan	33.9	33.5	33.3	4.7	4.9	4.9	130.5	129.3	129.1
Kazakhstan	10.2	9.8	9.9	5.4	3.8	4.0	163.3	166.1	165.8
Korea, Republic of	16.7	17.3	17.4	3.3	4.1	4.4	127.0	125.0	125.7
Myanmar	20.4	20.8	21.0	5.6	5.3	4.9	250.2	253.9	254.0
Pakistan	30.0	30.4	30.7	3.5	2.9	2.8	152.0	148.2	149.4
Philippines	22.2	23.0	23.5	4.0	3.8	3.8	161.8	162.2	162.9
Saudi Arabia	13.3	13.7	13.8	3.5	3.4	3.3	141.4	141.7	141.1
Thailand	17.1	17.8	17.9	5.5	5.7	6.2	143.8	147.8	148.3
Turkey	32.5	32.8	32.7	4.6	4.3	4.5	223.0	224.2	221.4
Viet Nam	26.9	28.5	29.0	5.6	5.2	5.8	206.3	209.6	210.5
AFRICA	**196.7**	**212.7**	**215.8**	**30.2**	**37.1**	**34.4**	**147.7**	**150.3**	**150.2**
Algeria	11.9	12.7	12.8	3.5	3.6	3.2	230.0	233.9	233.1
Egypt	33.6	35.4	35.8	5.4	6.7	6.3	266.8	266.5	265.0
Ethiopia	15.9	17.3	17.2	1.4	1.8	1.2	163.4	165.6	165.0
Morocco	11.7	13.2	13.4	2.2	3.4	3.7	242.6	246.3	248.3
Nigeria	28.4	30.6	31.1	1.4	1.6	1.6	140.8	143.6	143.3
South Africa	14.0	14.6	14.9	2.5	3.9	3.2	172.1	170.9	171.6
Sudan	6.9	7.4	7.5	2.0	1.8	1.9	140.3	141.4	141.5
CENTRAL AMERICA	**63.6**	**64.0**	**64.3**	**5.3**	**5.5**	**5.0**	**166.3**	**166.3**	**166.0**
Mexico	47.5	47.6	47.7	3.3	3.7	3.3	202.6	202.5	202.0
SOUTH AMERICA	**115.0**	**122.0**	**124.2**	**17.6**	**17.4**	**18.8**	**122.6**	**124.0**	**124.3**
Argentina	12.5	15.2	15.3	4.5	6.3	6.7	133.2	131.9	134.9
Brazil	66.5	69.4	71.0	6.9	5.3	6.2	117.3	118.4	118.5
Chile	6.1	6.2	6.4	0.7	0.6	0.6	151.6	151.6	151.6
Colombia	8.3	8.7	8.7	1.2	0.9	1.0	107.5	111.7	111.4
Peru	6.8	7.4	7.4	1.2	1.4	1.3	140.5	143.8	143.9
Venezuela	6.6	6.9	7.0	0.8	0.7	0.9	131.0	134.7	136.2
NORTH AMERICA	**347.0**	**371.5**	**373.0**	**77.1**	**56.1**	**55.5**	**110.3**	**109.0**	**108.7**
Canada	29.4	28.4	29.2	11.7	9.2	9.4	100.0	95.6	94.0
United States of America	317.6	343.1	343.8	65.4	46.9	46.1	111.4	110.5	110.2
EUROPE	**404.0**	**397.4**	**403.2**	**58.1**	**44.0**	**43.4**	**139.8**	**139.3**	**139.8**
European Union	280.6	276.6	278.8	37.0	31.3	28.0	133.3	133.5	134.0
Russian Federation	72.5	67.9	71.2	13.4	3.7	5.3	150.1	146.9	148.0
Serbia	6.8	7.8	7.8	1.0	1.1	0.8	164.5	164.0	163.7
Ukraine	24.7	25.5	25.4	3.9	5.5	6.2	176.8	176.5	176.1
OCEANIA	**17.0**	**17.0**	**18.3**	**6.1**	**9.7**	**9.7**	**91.4**	**92.2**	**95.5**
Australia	15.0	14.9	16.2	5.7	9.2	9.3	102.1	102.8	109.0
WORLD	**2 189.1**	**2 279.1**	**2 311.3**	**487.5**	**490.0**	**493.9**	**151.6**	**152.5**	**152.9**
Developing countries	1 341.1	1 413.3	1 436.7	329.6	363.6	369.1	156.2	157.5	157.9
Developed countries	848.0	865.8	874.6	157.9	126.4	124.9	133.1	132.4	132.6
LIFDCs	568.1	603.2	615.2	96.9	107.8	108.2	156.2	158.0	158.9
LDCs	155.7	168.6	171.2	29.2	35.6	34.0	145.6	149.4	149.6

Table A2 (a). Wheat statistics

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**287.0**	**289.3**	**297.2**	**57.0**	**54.8**	**56.0**	**14.7**	**13.0**	**15.6**
Bangladesh	0.8	0.9	1.0	2.7	3.4	2.0	-	-	-
China	112.3	115.1	114.5	2.3	3.1	3.3	0.6	1.1	0.9
of which Taiwan Prov.	-	-	-	1.2	1.2	1.2	-	-	-
India	78.4	80.8	84.3	0.7	0.3	0.1	0.1	0.3	1.9
Indonesia	-	-	-	5.3	5.5	5.5	-	-	-
Iran, Islamic Republic of	12.6	13.5	13.5	4.0	1.2	1.2	0.9	0.5	0.2
Iraq	1.6	1.9	1.7	3.1	3.4	4.1	-	-	-
Japan	0.8	0.8	0.8	5.2	5.2	5.1	0.3	0.3	0.2
Kazakhstan	16.5	10.0	14.5	-	-	-	7.5	5.5	7.0
Korea, Republic of	-	-	-	3.6	4.0	4.5	0.1	0.1	0.1
Pakistan	22.8	23.3	24.0	1.6	0.2	0.2	1.2	1.2	1.0
Philippines	-	-	-	2.8	3.1	3.1	-	-	-
Saudi Arabia	1.7	1.3	1.1	1.1	1.7	2.0	-	-	-
Thailand	-	-	-	1.3	1.4	1.4	0.1	0.1	0.2
Turkey	18.5	19.7	20.5	2.9	2.8	2.5	2.6	3.0	3.0
AFRICA	**21.8**	**21.9**	**24.1**	**36.1**	**37.2**	**36.3**	**1.0**	**0.9**	**0.8**
Algeria	2.3	3.1	3.1	5.5	5.4	5.4	-	-	-
Egypt	8.0	7.2	7.9	9.2	10.0	10.0	-	-	-
Ethiopia	2.8	3.0	2.7	1.3	0.8	1.2	-	-	-
Morocco	3.9	4.9	5.9	3.4	3.9	2.5	0.2	0.2	0.2
Nigeria	0.1	0.1	0.1	3.6	4.1	4.2	0.2	0.2	0.2
South Africa	2.0	1.4	1.7	1.3	1.6	1.6	0.2	0.3	0.2
Tunisia	1.3	0.8	1.3	1.9	2.0	1.6	0.2	0.1	0.1
CENTRAL AMERICA	**4.0**	**3.7**	**4.1**	**6.9**	**7.3**	**7.0**	**1.1**	**0.9**	**0.9**
Cuba	-	-	-	0.8	0.8	0.8	-	-	-
Mexico	3.9	3.7	4.0	3.2	3.5	3.2	1.0	0.8	0.9
SOUTH AMERICA	**20.3**	**25.6**	**23.6**	**12.9**	**13.0**	**12.8**	**9.4**	**11.4**	**10.2**
Argentina	11.2	14.7	14.0	-	-	-	7.6	7.5	8.0
Brazil	5.0	6.0	5.0	6.6	6.6	6.7	0.8	2.2	0.7
Chile	1.3	1.6	1.6	0.8	0.8	0.7	-	-	-
Colombia	-	-	-	1.4	1.4	1.4	-	-	-
Peru	0.2	0.2	0.2	1.5	1.7	1.5	-	-	-
Venezuela	-	-	-	1.5	1.7	1.7	-	-	-
NORTH AMERICA	**86.6**	**83.3**	**81.2**	**2.8**	**3.0**	**3.0**	**45.7**	**52.0**	**46.5**
Canada	25.2	23.2	26.2	0.1	-	-	17.4	17.0	17.5
United States of America	61.4	60.1	55.0	2.7	3.0	3.0	28.3	35.0	29.0
EUROPE	**221.3**	**202.2**	**218.9**	**8.9**	**7.0**	**9.1**	**43.4**	**28.8**	**35.9**
European Union	136.3	136.8	137.0	6.5	5.0	7.0	19.1	20.5	19.0
Russian Federation	58.3	41.5	55.0	0.2	-	0.1	16.1	4.2	8.5
Ukraine	19.6	17.2	20.2	0.1	0.1	0.1	7.6	3.6	8.0
OCEANIA	**19.3**	**26.6**	**24.6**	**0.6**	**0.7**	**0.7**	**11.6**	**16.0**	**15.0**
Australia	19.0	26.3	24.3	-	-	-	11.6	16.0	15.0
WORLD	**660.3**	**652.6**	**673.6**	**125.1**	**123.0**	**125.0**	**126.9**	**123.0**	**125.0**
Developing countries	302.4	316.9	320.5	99.9	99.2	99.1	18.0	20.1	19.9
Developed countries	357.8	335.7	353.1	25.2	23.7	25.9	108.9	102.9	105.1
LIFDCs	135.2	139.3	142.9	49.5	47.6	49.5	2.1	1.9	3.5
LDCs	10.4	11.3	10.6	14.9	13.6	13.8	0.2	0.1	0.1

Table A2 (b). Wheat statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**324.3**	**336.3**	**339.4**	**102.5**	**108.8**	**107.3**	**64.1**	**65.0**	**64.9**
Bangladesh	3.1	3.3	3.0	1.3	3.2	3.2	18.4	18.8	16.5
China	113.3	116.6	117.4	53.6	57.6	57.2	64.4	64.9	64.4
of which Taiwan Prov.	1.2	1.2	1.2	0.3	0.4	0.4	46.6	47.3	47.2
India	77.3	81.9	83.0	19.0	18.5	18.0	59.7	61.6	61.5
Indonesia	5.1	5.3	5.4	2.4	2.8	2.9	19.2	19.4	19.6
Iran, Islamic Republic of	15.3	15.4	15.5	3.4	3.0	2.0	165.5	165.2	164.5
Iraq	5.4	5.6	5.8	1.4	1.6	1.9	148.8	149.4	149.1
Japan	5.8	5.8	5.8	0.6	0.6	0.6	41.5	41.7	41.5
Kazakhstan	7.5	7.5	7.5	4.9	3.7	3.7	148.8	150.9	150.6
Korea, Republic of	3.5	4.1	4.3	0.4	0.7	0.9	48.5	48.5	49.3
Pakistan	22.9	23.0	23.2	1.7	1.4	1.4	126.8	123.0	124.7
Philippines	2.7	3.1	3.1	0.5	0.6	0.6	25.7	26.7	26.2
Saudi Arabia	2.7	2.8	2.9	1.4	1.9	2.2	98.2	98.7	98.2
Thailand	1.1	1.3	1.3	0.2	0.3	0.3	12.4	14.3	14.5
Turkey	19.0	19.5	19.8	2.2	2.5	2.7	197.5	198.1	195.7
AFRICA	**56.0**	**59.5**	**60.3**	**13.7**	**15.4**	**14.5**	**49.9**	**49.9**	**49.7**
Algeria	8.0	8.5	8.6	2.7	2.7	2.5	207.9	211.7	211.3
Egypt	16.4	17.3	17.6	3.2	4.7	5.0	181.6	181.9	181.8
Ethiopia	3.9	4.1	4.1	0.5	0.5	0.2	39.6	40.4	40.5
Morocco	7.5	8.2	8.2	1.4	2.0	2.0	189.3	191.5	192.2
Nigeria	3.3	4.0	4.1	0.5	0.7	0.7	18.7	20.6	20.7
South Africa	3.0	3.0	3.0	0.7	0.5	0.5	57.5	57.3	56.8
Tunisia	2.9	3.0	3.1	1.3	1.0	0.8	215.7	216.9	216.7
CENTRAL AMERICA	**10.0**	**10.0**	**10.1**	**1.0**	**1.1**	**1.1**	**45.6**	**45.4**	**45.3**
Cuba	0.8	0.8	0.8	-	-	-	57.6	57.3	57.3
Mexico	6.4	6.3	6.4	0.5	0.6	0.6	50.7	50.6	50.6
SOUTH AMERICA	**24.6**	**25.5**	**25.7**	**5.4**	**5.6**	**6.0**	**59.6**	**59.9**	**59.8**
Argentina	4.8	5.0	5.1	2.4	2.4	3.0	116.6	116.8	116.9
Brazil	10.7	11.0	11.0	1.1	0.9	1.0	52.0	52.5	52.0
Chile	2.2	2.3	2.3	0.2	0.3	0.2	121.2	121.3	121.3
Colombia	1.3	1.4	1.4	0.2	0.2	0.2	27.2	27.5	28.0
Peru	1.7	1.8	1.8	0.4	0.5	0.4	56.4	56.6	56.7
Venezuela	1.6	1.7	1.7	0.3	0.2	0.2	56.3	56.2	57.0
NORTH AMERICA	**38.5**	**40.2**	**42.0**	**23.8**	**28.5**	**24.3**	**81.5**	**79.7**	**79.6**
Canada	7.2	8.1	8.2	6.3	5.7	5.8	83.4	79.7	78.0
United States of America	31.3	32.1	33.7	17.6	22.8	18.5	81.3	79.7	79.8
EUROPE	**182.9**	**190.3**	**190.5**	**28.5**	**22.8**	**23.9**	**112.4**	**112.6**	**112.7**
European Union	122.3	123.1	124.5	15.3	15.5	15.5	110.3	110.6	110.8
Russian Federation	40.1	46.4	45.3	9.3	3.0	4.3	115.2	115.2	115.1
Ukraine	12.0	12.4	12.4	2.4	3.4	3.3	125.4	126.2	126.2
OCEANIA	**7.9**	**8.5**	**9.0**	**3.5**	**5.5**	**5.8**	**69.3**	**68.8**	**68.6**
Australia	7.0	7.5	8.0	3.2	5.2	5.5	82.7	82.7	82.8
WORLD	**644.2**	**670.3**	**677.0**	**178.5**	**187.8**	**182.9**	**67.4**	**67.7**	**67.5**
Developing countries	381.3	397.6	401.6	112.9	122.2	120.4	59.8	60.4	60.2
Developed countries	262.9	272.7	275.4	65.6	65.6	62.5	97.4	97.2	97.2
LIFDCs	178.9	188.3	190.3	41.4	45.1	44.2	53.2	54.0	53.9
LDCs	23.8	25.6	25.4	7.4	9.1	8.2	25.7	26.2	25.8

Table A3 (a). Coarse grain statistics

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**277.4**	**298.7**	**301.9**	**61.2**	**64.7**	**64.3**	**5.5**	**4.4**	**5.6**
China	170.9	186.7	187.4	6.2	8.7	7.8	0.6	0.2	0.1
of which Taiwan Prov.	0.1	0.1	0.1	4.5	4.8	4.9	-	-	-
India	38.1	40.1	41.4	-	0.1	0.1	1.9	1.0	2.0
Indonesia	15.7	18.4	17.9	0.7	1.6	2.0	0.8	1.6	1.6
Iran, Islamic Republic of	3.8	4.7	5.0	4.3	3.2	3.4	-	-	-
Japan	0.2	0.2	0.2	19.4	19.4	19.5	-	-	-
Korea, D.P.R.	1.7	1.8	1.8	0.3	0.8	0.5	-	-	-
Korea, Republic of	0.3	0.4	0.3	8.3	8.3	8.1	-	-	-
Malaysia	-	-	-	2.7	2.7	2.8	-	-	-
Pakistan	4.0	4.0	3.8	-	-	-	-	-	-
Philippines	6.9	6.4	7.3	0.3	0.4	0.3	-	-	-
Saudi Arabia	0.4	0.4	0.4	9.0	8.9	9.0	-	-	-
Thailand	4.4	4.1	4.4	0.4	0.6	0.6	0.7	0.4	0.7
Turkey	11.4	12.2	11.9	0.8	0.5	0.5	0.2	0.2	0.2
Viet Nam	4.4	4.7	4.8	1.0	1.6	1.7	-	-	-
AFRICA	**104.4**	**121.6**	**117.6**	**16.3**	**16.2**	**16.4**	**4.6**	**6.2**	**6.3**
Algeria	1.5	1.6	1.6	2.3	2.4	2.4	-	-	-
Egypt	8.3	8.9	8.8	5.0	5.9	5.7	-	-	-
Ethiopia	12.1	13.7	12.9	0.3	-	-	0.3	0.5	0.4
Kenya	2.8	3.1	2.7	1.0	0.6	1.3	-	-	-
Morocco	2.1	2.8	3.3	2.1	2.2	2.1	-	-	-
Nigeria	20.8	22.3	22.4	0.1	0.2	0.2	0.3	0.4	0.4
South Africa	11.3	13.9	12.0	0.4	0.2	0.2	1.6	2.0	1.8
Sudan	4.2	5.3	5.1	0.4	0.4	0.4	0.2	0.1	0.1
Tanzania, United Rep. of	4.5	4.7	4.3	0.1	0.1	0.1	0.1	0.1	-
CENTRAL AMERICA	**34.2**	**34.4**	**32.9**	**15.9**	**16.2**	**16.3**	**0.4**	**0.2**	**0.1**
Mexico	29.8	30.2	28.5	10.8	11.1	11.3	0.3	0.2	0.1
SOUTH AMERICA	**92.5**	**101.1**	**100.7**	**10.4**	**10.4**	**10.7**	**24.9**	**30.0**	**28.6**
Argentina	23.3	30.0	27.0	-	-	-	15.2	16.5	17.4
Brazil	56.4	58.4	60.2	1.4	0.7	0.6	8.1	12.0	9.5
Chile	1.8	1.8	1.8	1.9	2.0	2.2	0.1	0.1	0.1
Colombia	1.4	1.4	1.4	3.4	3.7	3.9	-	-	-
Peru	1.7	1.8	1.7	1.6	1.8	1.8	-	-	-
Venezuela	2.8	2.8	3.0	1.4	1.5	1.5	-	-	-
NORTH AMERICA	**368.1**	**352.7**	**380.8**	**5.4**	**3.6**	**4.1**	**62.9**	**57.7**	**54.9**
Canada	26.0	22.2	24.3	2.4	1.3	1.4	4.3	4.8	4.9
United States of America	342.1	330.6	356.5	3.0	2.4	2.6	58.6	52.9	50.0
EUROPE	**225.5**	**198.6**	**218.7**	**11.1**	**8.5**	**7.0**	**17.1**	**16.0**	**18.5**
European Union	152.4	140.3	146.7	9.5	7.0	5.7	4.8	6.2	4.3
Russian Federation	35.1	17.4	27.5	0.4	0.6	0.4	2.9	0.4	2.3
Serbia	6.1	7.6	7.6	-	-	-	1.1	1.4	1.6
Ukraine	20.3	21.5	23.7	-	-	-	8.2	7.8	10.1
OCEANIA	**13.0**	**14.1**	**12.9**	**0.2**	**0.2**	**0.2**	**4.3**	**5.4**	**4.9**
Australia	12.4	13.5	12.3	-	-	-	4.3	5.4	4.9
WORLD	**1 115.0**	**1 121.3**	**1 165.4**	**120.6**	**120.0**	**119.0**	**119.6**	**120.0**	**119.0**
Developing countries	491.4	537.7	536.0	82.1	86.0	86.1	33.1	38.6	38.5
Developed countries	623.6	583.5	629.4	38.5	34.0	32.9	86.6	81.4	80.5
LIFDCs	166.6	185.7	184.1	14.5	16.1	16.7	6.0	7.3	8.5
LDCs	59.9	71.0	68.7	2.8	2.4	2.4	2.9	3.9	4.1

Table A3 (b). Coarse grain statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**330.5**	**352.8**	**359.4**	**73.6**	**81.3**	**82.7**	**14.8**	**14.8**	**14.8**
China	173.7	189.3	195.0	52.6	60.9	61.2	9.0	8.8	9.1
of which Taiwan Prov.	4.8	4.9	4.9	0.5	0.3	0.3	7.0	7.0	7.0
India	36.2	37.8	38.3	2.8	3.1	4.2	21.3	21.9	21.3
Indonesia	15.5	17.6	18.4	1.4	2.4	2.4	31.8	30.0	31.5
Iran, Islamic Republic of	7.9	8.2	8.4	1.0	0.7	0.7	1.4	1.4	1.3
Japan	19.7	19.7	19.6	1.8	1.7	1.8	29.2	29.3	29.3
Korea, D.P.R.	2.1	2.5	2.3	-	0.1	0.1	70.0	86.2	78.6
Korea, Republic of	8.5	8.5	8.4	1.9	2.0	2.0	4.4	4.4	4.3
Malaysia	2.7	2.9	2.9	0.3	0.3	0.1	1.7	1.7	1.6
Pakistan	4.0	4.0	3.9	1.1	1.1	1.0	9.9	8.6	8.1
Philippines	7.1	7.3	7.5	0.9	0.5	0.6	16.2	14.8	15.4
Saudi Arabia	9.6	9.8	9.8	1.9	1.4	1.0	3.8	3.7	3.6
Thailand	4.2	4.3	4.3	0.2	0.2	0.2	2.8	2.7	2.7
Turkey	12.8	12.6	12.2	2.4	1.8	1.8	16.9	16.9	16.7
Viet Nam	5.4	6.1	6.2	1.1	1.2	1.5	7.1	7.1	7.4
AFRICA	**116.5**	**127.3**	**128.8**	**13.4**	**18.9**	**17.7**	**76.4**	**78.5**	**78.4**
Algeria	3.8	4.1	4.1	0.8	0.9	0.7	20.0	20.0	19.7
Egypt	13.3	14.5	14.7	0.8	1.2	1.0	46.8	46.6	45.8
Ethiopia	12.0	13.0	12.9	1.0	1.3	0.9	122.7	123.7	123.0
Kenya	3.9	4.1	4.1	1.3	0.9	0.8	88.6	89.1	89.1
Morocco	4.2	5.0	5.2	0.8	1.4	1.7	52.3	53.9	55.0
Nigeria	20.8	22.0	22.2	0.6	0.7	0.7	97.4	97.8	96.6
South Africa	10.1	10.8	11.0	1.8	3.4	2.7	97.7	97.8	97.7
Sudan	4.9	5.2	5.2	0.6	0.5	0.7	91.4	90.9	91.0
Tanzania, United Rep. of	4.4	4.6	4.6	0.6	0.6	0.4	89.3	87.6	87.4
CENTRAL AMERICA	**49.8**	**50.1**	**50.2**	**3.9**	**4.0**	**3.5**	**101.9**	**101.9**	**101.6**
Mexico	40.3	40.5	40.5	2.8	3.1	2.7	144.9	144.9	144.7
SOUTH AMERICA	**75.1**	**80.9**	**82.5**	**10.8**	**10.8**	**11.4**	**26.8**	**27.5**	**27.6**
Argentina	7.2	9.8	9.7	2.0	3.9	3.7	7.5	7.4	7.4
Brazil	47.4	50.1	51.4	5.6	4.2	4.7	24.0	25.1	25.4
Chile	3.7	3.8	3.9	0.4	0.3	0.3	18.9	18.9	18.9
Colombia	5.0	5.1	5.2	0.8	0.6	0.7	41.6	41.9	42.0
Peru	3.2	3.6	3.5	0.5	0.6	0.6	24.6	24.6	24.6
Venezuela	4.1	4.3	4.3	0.4	0.4	0.7	50.0	50.4	49.6
NORTH AMERICA	**304.2**	**326.7**	**326.6**	**52.2**	**25.8**	**29.6**	**18.1**	**18.3**	**18.2**
Canada	21.8	20.0	20.6	5.4	3.5	3.6	6.2	5.9	6.0
United States of America	282.4	306.7	306.0	46.8	22.3	26.1	19.4	19.7	19.5
EUROPE	**217.4**	**203.5**	**208.8**	**29.0**	**20.5**	**18.9**	**22.8**	**22.1**	**22.2**
European Union	155.6	150.7	151.4	21.2	15.3	12.0	18.0	17.9	17.9
Russian Federation	31.7	21.0	25.2	4.0	0.6	1.0	30.5	27.8	28.8
Serbia	5.0	6.2	6.2	0.7	0.9	0.7	20.9	20.9	20.8
Ukraine	12.5	12.9	12.8	1.5	2.1	3.0	47.8	46.1	45.6
OCEANIA	**8.6**	**8.0**	**8.6**	**2.6**	**4.1**	**3.8**	**8.2**	**8.1**	**8.1**
Australia	7.9	7.2	7.8	2.5	4.0	3.7	10.6	10.5	10.4
WORLD	**1 102.2**	**1 149.3**	**1 164.9**	**185.4**	**165.5**	**167.7**	**28.0**	**28.5**	**28.5**
Developing countries	535.2	574.3	584.1	97.1	109.8	110.3	29.1	29.8	29.8
Developed countries	567.0	575.0	580.8	88.3	55.8	57.4	23.6	23.2	23.2
LIFDCs	175.1	189.6	192.3	18.8	23.3	23.4	37.4	38.4	38.2
LDCs	59.6	66.1	67.0	7.8	11.4	11.3	54.2	56.8	57.0

Table A4 (a). Maize statistics

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**229.5**	**250.0**	**252.1**	**45.0**	**49.6**	**49.0**	**4.7**	**4.0**	**5.1**
China	160.8	177.3	178.0	4.5	6.7	5.8	0.6	0.2	0.1
of which Taiwan Prov.	-	-	-	4.4	4.6	4.7	-	-	-
India	18.5	20.2	20.6	-	0.1	0.1	1.9	1.0	2.0
Indonesia	15.7	18.4	17.9	0.7	1.5	2.0	0.8	1.6	1.6
Iran, Islamic Republic of	1.3	1.0	1.3	3.0	2.8	3.0	-	-	-
Japan	-	-	-	16.4	16.4	16.5	-	-	-
Korea, D.P.R.	1.6	1.7	1.7	0.3	0.8	0.5	-	-	-
Korea, Republic of	0.1	0.1	0.1	8.2	8.2	8.0	-	-	-
Malaysia	-	-	-	2.7	2.7	2.8	-	-	-
Pakistan	3.5	3.6	3.3	-	-	-	-	-	-
Philippines	6.9	6.4	7.3	0.3	0.4	0.3	-	-	-
Thailand	4.3	3.9	4.2	0.4	0.6	0.6	0.7	0.4	0.7
Turkey	4.0	4.3	4.0	0.6	0.3	0.3	0.1	0.1	0.1
Viet Nam	4.4	4.7	4.8	1.0	1.5	1.6	-	-	-
AFRICA	**56.0**	**66.6**	**63.9**	**13.7**	**14.1**	**14.6**	**3.4**	**4.8**	**4.7**
Algeria	-	-	-	2.1	2.3	2.3	-	-	-
Egypt	7.3	8.0	7.9	5.0	5.8	5.6	-	-	-
Ethiopia	4.4	4.8	4.6	0.1	-	-	0.1	0.1	0.1
Kenya	2.6	2.8	2.5	0.9	0.6	1.2	-	-	-
Morocco	0.1	0.2	0.2	1.7	2.0	2.0	-	-	-
Nigeria	7.9	9.3	9.3	0.1	0.2	0.2	0.2	0.3	0.3
South Africa	10.8	13.4	11.5	0.3	-	-	1.6	2.0	1.8
Tanzania, United Rep. of	3.4	3.6	3.3	0.1	0.1	0.1	0.1	0.1	-
CENTRAL AMERICA	**26.6**	**26.3**	**25.3**	**13.6**	**13.5**	**13.9**	**0.4**	**0.2**	**0.1**
Mexico	22.7	22.4	21.3	8.6	8.5	8.8	0.3	0.2	0.1
SOUTH AMERICA	**83.4**	**89.4**	**89.7**	**9.0**	**8.8**	**9.1**	**22.8**	**27.3**	**26.1**
Argentina	19.0	22.7	20.9	-	-	-	13.3	14.0	15.0
Brazil	54.0	56.1	57.7	1.0	0.3	0.3	8.0	12.0	9.5
Chile	1.4	1.4	1.4	1.5	1.3	1.5	0.1	-	-
Colombia	1.3	1.3	1.3	3.0	3.4	3.6	-	-	-
Peru	1.5	1.5	1.5	1.5	1.7	1.7	-	-	-
Venezuela	2.4	2.4	2.5	1.3	1.5	1.5	-	-	-
NORTH AMERICA	**334.4**	**327.9**	**354.4**	**2.7**	**1.8**	**1.9**	**53.5**	**50.7**	**48.0**
Canada	10.6	11.7	11.4	2.3	1.2	1.4	0.4	1.7	1.5
United States of America	323.8	316.2	343.0	0.4	0.6	0.6	53.0	49.0	46.5
EUROPE	**80.1**	**83.3**	**90.2**	**8.0**	**6.5**	**5.5**	**6.8**	**7.2**	**10.0**
European Union	56.6	56.4	59.9	7.1	5.8	5.0	1.6	1.2	1.5
Russian Federation	4.9	3.1	4.5	0.3	0.2	0.1	0.6	0.1	0.3
Serbia	5.7	7.2	7.2	-	-	-	1.1	1.4	1.6
Ukraine	8.2	11.3	13.0	-	-	-	3.6	4.5	6.5
OCEANIA	**0.5**	**0.5**	**0.6**	**-**	**-**	**-**	**-**	**-**	**-**
WORLD	**810.5**	**844.0**	**876.1**	**92.0**	**94.3**	**94.0**	**91.5**	**94.3**	**94.0**
Developing countries	383.0	417.5	417.9	63.3	68.2	68.8	29.6	34.4	34.2
Developed countries	427.5	426.5	458.2	28.7	26.1	25.3	61.9	60.0	59.8
LIFDCs	99.3	111.2	111.4	12.2	14.3	14.9	4.8	5.8	6.8
LDCs	30.1	34.9	35.0	1.8	1.8	1.8	1.8	2.6	2.7

Table A4 (b). Maize statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**266.6**	**288.1**	**294.9**	**64.0**	**72.7**	**73.9**	**8.4**	**8.7**	**8.7**
China	162.1	178.2	183.8	50.5	58.2	58.3	5.3	5.5	5.8
of which Taiwan Prov.	4.6	4.7	4.7	0.4	0.3	0.3	5.4	5.4	5.4
India	16.6	18.0	18.0	2.3	2.8	3.5	6.1	7.1	6.6
Indonesia	15.4	17.6	18.3	1.4	2.4	2.4	31.6	29.8	31.3
Iran, Islamic Republic of	4.2	3.8	4.3	0.4	0.4	0.4	1.0	1.0	1.0
Japan	16.6	16.3	16.4	1.1	1.0	1.1	26.7	26.8	26.8
Korea, D.P.R.	2.0	2.4	2.2	-	0.1	0.1	65.0	84.0	75.7
Korea, Republic of	8.2	8.2	8.1	1.8	2.0	2.0	1.9	1.9	1.8
Malaysia	2.7	2.9	2.9	0.3	0.3	0.1	1.7	1.7	1.6
Pakistan	3.4	3.5	3.4	1.1	1.1	1.0	7.9	7.3	6.7
Philippines	7.1	7.2	7.5	0.9	0.5	0.6	16.2	14.8	15.3
Thailand	4.0	4.1	4.1	0.2	0.2	0.2	1.3	1.2	1.2
Turkey	4.6	4.5	4.2	0.6	0.5	0.5	13.1	13.1	12.9
Viet Nam	5.4	6.0	6.1	1.1	1.2	1.5	7.1	7.1	7.3
AFRICA	**66.3**	**73.2**	**74.0**	**7.9**	**11.6**	**11.3**	**39.2**	**40.5**	**40.4**
Algeria	2.1	2.2	2.3	0.2	0.4	0.4	3.7	3.7	3.6
Egypt	12.3	13.6	13.7	0.8	1.2	1.0	43.3	43.2	42.5
Ethiopia	4.3	4.7	4.6	0.3	0.3	0.2	42.3	41.8	41.4
Kenya	3.6	3.8	3.8	1.2	0.8	0.7	82.9	83.0	83.0
Morocco	1.9	2.0	2.0	0.3	0.5	0.7	10.8	10.5	10.7
Nigeria	7.8	9.1	9.2	0.4	0.5	0.5	33.5	36.5	36.0
South Africa	9.5	10.1	10.3	1.6	3.2	2.6	93.0	93.2	93.1
Tanzania, United Rep. of	3.4	3.5	3.5	0.2	0.2	0.1	68.4	66.4	66.2
CENTRAL AMERICA	**40.0**	**39.4**	**39.6**	**3.2**	**3.1**	**2.8**	**100.8**	**100.8**	**100.4**
Mexico	31.0	30.3	30.4	2.2	2.2	2.0	144.6	144.6	144.1
SOUTH AMERICA	**66.8**	**71.2**	**72.6**	**9.6**	**8.9**	**9.6**	**25.4**	**26.0**	**26.2**
Argentina	4.8	6.2	6.1	1.4	2.5	2.3	7.3	7.3	7.2
Brazil	44.7	47.3	48.5	5.3	4.0	4.5	22.9	24.1	24.3
Chile	2.9	2.7	2.8	0.4	0.2	0.2	16.8	16.7	16.7
Colombia	4.6	4.7	4.8	0.8	0.6	0.7	40.0	40.4	40.5
Peru	2.9	3.2	3.1	0.5	0.6	0.6	18.6	18.6	18.6
Venezuela	3.6	3.8	3.8	0.4	0.4	0.6	49.4	49.9	49.1
NORTH AMERICA	**280.0**	**304.9**	**305.2**	**44.1**	**19.9**	**24.3**	**14.8**	**15.1**	**15.0**
Canada	12.4	11.5	11.7	1.7	1.4	1.4	3.4	3.3	3.3
United States of America	267.6	293.4	293.5	42.4	18.5	22.9	16.1	16.4	16.2
EUROPE	**82.6**	**81.8**	**84.2**	**8.6**	**9.0**	**10.5**	**7.2**	**7.3**	**7.3**
European Union	63.5	61.7	62.7	6.7	5.3	6.0	7.6	7.7	7.7
Russian Federation	4.6	3.2	4.2	0.2	0.2	0.3	2.9	2.7	2.7
Serbia	4.6	5.8	5.8	0.7	0.9	0.7	19.3	19.2	19.2
Ukraine	4.6	5.6	5.7	0.3	1.7	2.5	11.6	13.1	13.1
OCEANIA	**0.5**	**0.5**	**0.6**	**0.1**	**0.1**	**0.1**	**2.6**	**2.5**	**2.5**
WORLD	**802.8**	**859.2**	**871.2**	**137.4**	**125.3**	**132.4**	**16.7**	**17.2**	**17.2**
Developing countries	410.5	442.7	451.8	81.7	92.0	93.7	17.5	18.0	18.1
Developed countries	392.3	416.5	419.5	55.7	33.3	38.6	13.7	13.9	13.9
LIFDCs	106.4	117.1	118.8	13.3	16.0	16.5	18.9	19.7	19.5
LDCs	29.8	33.0	33.5	4.4	6.1	6.8	25.1	26.0	26.0

Table A5 (a). Barley statistics

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**19.8**	**20.4**	**20.9**	**13.9**	**13.0**	**13.1**	**0.7**	**0.3**	**0.4**
China	3.3	2.7	2.6	1.5	1.9	1.9	-	-	-
India	1.4	1.4	1.5	-	-	-	-	-	-
Iran, Islamic Republic of	2.6	3.7	3.7	1.3	0.4	0.4	-	-	-
Iraq	0.6	1.2	0.9	-	-	-	-	-	-
Japan	0.2	0.2	0.2	1.3	1.4	1.4	-	-	-
Kazakhstan	2.3	1.3	2.0	-	-	-	0.6	0.2	0.3
Saudi Arabia	-	-	-	7.1	6.7	6.8	-	-	-
Syria	0.6	0.8	0.7	0.9	0.8	0.8	-	-	-
Turkey	6.8	7.2	7.3	0.2	0.2	0.2	0.1	0.1	0.1
AFRICA	**6.2**	**6.6**	**7.5**	**1.4**	**1.2**	**0.9**	**-**	**-**	**-**
Algeria	1.4	1.5	1.5	0.2	-	-	-	-	-
Ethiopia	1.7	1.7	1.7	-	-	-	-	-	-
Libya	0.1	0.1	0.1	0.4	0.4	0.4	-	-	-
Morocco	2.0	2.6	3.1	0.3	0.2	0.1	-	-	-
Tunisia	0.5	0.2	0.7	0.5	0.5	0.3	-	-	-
CENTRAL AMERICA	**0.7**	**0.7**	**0.7**	**0.2**	**0.1**	**0.1**	**-**	**-**	**-**
Mexico	0.7	0.7	0.7	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	**2.5**	**3.8**	**3.2**	**0.8**	**0.7**	**0.6**	**0.9**	**1.3**	**1.3**
Argentina	1.5	3.0	2.2	-	-	-	0.8	1.2	1.2
NORTH AMERICA	**15.7**	**11.5**	**12.6**	**0.6**	**0.2**	**0.2**	**2.3**	**1.6**	**1.7**
Canada	10.8	7.6	8.8	-	-	-	1.9	1.4	1.5
United States of America	4.9	3.9	3.8	0.5	0.2	0.2	0.4	0.2	0.2
EUROPE	**94.1**	**73.5**	**80.2**	**0.6**	**0.7**	**0.5**	**9.7**	**8.4**	**8.1**
Belarus	2.0	2.0	2.0	-	-	-	-	-	-
European Union	61.7	53.1	54.6	0.2	0.2	0.1	2.9	4.7	2.5
Russian Federation	18.9	8.4	13.2	0.1	0.3	0.2	2.3	0.4	2.0
Ukraine	9.9	8.5	8.8	-	-	-	4.5	3.2	3.5
OCEANIA	**8.0**	**9.7**	**8.3**	**-**	**-**	**-**	**3.4**	**4.3**	**4.0**
Australia	7.7	9.3	8.0	-	-	-	3.4	4.3	4.0
WORLD	**147.0**	**126.1**	**133.4**	**17.5**	**15.9**	**15.5**	**17.0**	**15.9**	**15.5**
Developing countries	25.4	28.8	28.8	14.4	13.0	12.7	1.0	1.4	1.4
Developed countries	121.6	97.3	104.6	3.1	2.9	2.8	16.0	14.5	14.1
LIFDCs	5.8	6.5	6.3	1.1	0.9	0.9	-	-	-
LDCs	2.2	2.3	2.2	-	-	-	-	-	-

Table A5 (b). Barley statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**33.7**	**34.3**	**33.9**	**7.7**	**6.9**	**6.6**	**0.6**	**0.6**	**0.6**
China	4.7	4.4	4.4	1.2	1.9	2.1	0.1	0.1	0.1
India	1.4	1.4	1.5	-	-	-	1.0	0.9	1.0
Iran, Islamic Republic of	3.7	4.4	4.1	0.6	0.3	0.3	0.4	0.4	0.4
Iraq	0.6	1.1	0.9	-	0.1	0.1	4.0	4.0	4.0
Japan	1.6	1.6	1.6	0.5	0.5	0.5	2.4	2.4	2.4
Kazakhstan	1.8	1.6	1.6	0.5	0.1	0.3	1.3	1.2	1.2
Saudi Arabia	7.3	7.2	7.2	1.8	1.3	0.9	1.1	1.1	1.0
Syria	1.5	1.6	1.6	0.9	1.0	0.9	12.3	12.4	12.2
Turkey	7.6	7.4	7.4	1.7	1.2	1.2	1.1	1.1	1.1
AFRICA	**7.5**	**8.6**	**8.6**	**1.7**	**1.8**	**1.6**	**3.5**	**3.5**	**3.5**
Algeria	1.6	1.8	1.7	0.5	0.5	0.3	16.2	16.4	16.1
Ethiopia	1.6	1.7	1.8	0.1	0.2	0.1	16.4	16.3	16.4
Libya	0.4	0.5	0.5	-	-	-	13.1	12.6	12.3
Morocco	2.2	2.9	3.1	0.5	0.9	1.0	41.4	43.2	44.2
Tunisia	1.0	1.0	1.0	0.4	0.2	0.2	8.8	8.7	8.6
CENTRAL AMERICA	**0.8**	**0.7**	**0.7**	**0.2**	**0.1**	**0.1**	**-**	**-**	**-**
Mexico	0.8	0.7	0.7	0.2	0.1	0.1	-	-	-
SOUTH AMERICA	**2.4**	**2.6**	**2.6**	**0.3**	**0.8**	**0.7**	**0.5**	**0.5**	**0.5**
Argentina	0.7	1.1	1.1	0.2	0.7	0.7	-	-	-
NORTH AMERICA	**12.3**	**11.7**	**11.7**	**4.3**	**3.3**	**2.4**	**0.5**	**0.5**	**0.5**
Canada	7.6	7.3	7.4	2.3	1.3	0.9	0.4	0.3	0.3
United States of America	4.7	4.5	4.4	2.0	2.0	1.5	0.6	0.6	0.5
EUROPE	**83.1**	**75.4**	**76.5**	**13.9**	**7.6**	**3.7**	**1.6**	**1.6**	**1.5**
Belarus	2.0	2.0	2.0	0.2	0.2	0.2	-	-	-
European Union	57.3	55.9	55.9	10.3	6.7	3.0	0.8	0.8	0.8
Russian Federation	16.2	10.3	11.5	2.3	0.2	0.1	0.4	0.3	0.3
Ukraine	5.7	5.5	5.4	0.8	0.2	0.2	14.4	13.8	13.6
OCEANIA	**4.5**	**4.4**	**4.6**	**1.8**	**3.0**	**2.8**	**0.2**	**0.2**	**0.2**
Australia	4.2	4.0	4.2	1.8	3.0	2.8	0.3	0.3	0.3
WORLD	**144.3**	**137.7**	**138.7**	**30.0**	**23.4**	**18.0**	**1.1**	**1.1**	**1.1**
Developing countries	39.3	41.2	40.9	8.7	8.9	8.2	1.1	1.1	1.1
Developed countries	105.0	96.5	97.8	21.3	14.6	9.8	1.3	1.2	1.2
LIFDCs	6.9	7.4	7.4	1.3	1.5	1.2	1.1	1.0	1.1
LDCs	2.2	2.3	2.3	0.2	0.2	0.1	1.7	1.7	1.7

Table A6 (a). Sorghum statistics

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	**10.2**	**9.6**	**10.4**	**1.7**	**1.7**	**1.7**	**0.1**	**-**	**-**
China	2.0	1.9	1.9	0.1	0.1	0.1	-	-	-
India	7.3	6.8	7.5	-	-	-	-	-	-
Japan	-	-	-	1.4	1.4	1.4	-	-	-
AFRICA	**24.5**	**27.4**	**26.4**	**1.1**	**0.8**	**0.8**	**0.7**	**1.0**	**0.8**
Burkina Faso	1.6	2.0	1.8	-	-	-	0.1	0.2	0.2
Ethiopia	2.4	3.0	2.8	0.2	-	-	0.1	0.3	0.1
Nigeria	9.0	8.8	8.9	-	-	-	0.1	0.1	0.1
Sudan	3.6	4.6	4.4	0.3	0.3	0.3	0.2	0.1	0.1
CENTRAL AMERICA	**6.8**	**7.4**	**6.8**	**2.0**	**2.5**	**2.3**	**-**	**-**	**-**
Mexico	6.3	7.0	6.4	2.0	2.5	2.3	-	-	-
SOUTH AMERICA	**5.3**	**6.2**	**6.3**	**0.5**	**0.8**	**0.7**	**1.2**	**1.3**	**1.2**
Argentina	2.4	3.6	3.5	-	-	-	1.1	1.3	1.2
Brazil	1.7	1.5	1.7	-	-	-	0.1	-	-
Venezuela	0.4	0.4	0.5	-	-	-	-	-	-
NORTH AMERICA	**11.5**	**8.8**	**8.1**	**-**	**-**	**-**	**5.0**	**3.6**	**3.2**
United States of America	11.5	8.8	8.1	-	-	-	5.0	3.6	3.2
EUROPE	**0.6**	**0.6**	**0.6**	**2.2**	**0.9**	**0.4**	**0.1**	**-**	**-**
European Union	0.6	0.6	0.6	2.1	0.8	0.3	0.1	-	-
OCEANIA	**2.6**	**1.6**	**2.2**	**0.1**	**0.1**	**0.1**	**0.7**	**0.9**	**0.7**
Australia	2.6	1.6	2.2	-	-	-	0.7	0.9	0.7
WORLD	**61.3**	**61.6**	**60.9**	**7.7**	**6.8**	**6.0**	**7.8**	**6.8**	**6.0**
Developing countries	46.5	50.4	49.7	3.8	4.2	4.0	1.9	2.3	2.1
Developed countries	14.9	11.3	11.2	3.9	2.6	2.0	5.8	4.5	3.9
LIFDCs	32.3	34.8	34.4	1.1	0.8	0.8	0.7	1.0	0.9
LDCs	13.9	17.1	16.0	0.9	0.6	0.6	0.6	0.9	0.8

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

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)								
ASIA	17.9	18.7	18.6	0.5	0.5	0.5	-	0.1	0.1
AFRICA	17.7	21.0	19.8	0.1	0.1	0.1	0.5	0.4	0.7
CENTRAL AMERICA	0.1	0.1	0.2	0.1	0.1	0.1	-	-	-
SOUTH AMERICA	1.3	1.7	1.4	0.2	0.2	0.2	-	0.1	0.1
NORTH AMERICA	6.5	4.6	5.6	2.1	1.6	1.9	2.1	1.8	2.0
EUROPE	50.7	41.2	47.7	0.3	0.5	0.6	0.4	0.4	0.4
OCEANIA	1.8	2.3	1.7	0.1	0.1	0.1	0.3	0.2	0.2
WORLD	**96.1**	**89.5**	**95.0**	**3.4**	**2.9**	**3.5**	**3.3**	**2.9**	**3.5**

Table A6 (b). Sorghum statistics

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**11.8**	**11.3**	**11.6**	**1.0**	**1.0**	**1.3**	**1.9**	**1.6**	**1.6**
China	2.1	1.8	1.9	0.4	0.4	0.4	0.8	0.4	0.4
India	7.3	6.7	7.3	0.2	0.2	0.4	5.2	4.4	4.5
Japan	1.3	1.6	1.4	0.2	0.2	0.2	-	-	-
AFRICA	**25.2**	**26.4**	**26.7**	**2.2**	**2.7**	**2.3**	**19.8**	**19.9**	**19.8**
Burkina Faso	1.5	1.7	1.7	0.1	0.2	0.2	83.0	85.7	84.0
Ethiopia	2.6	2.8	2.8	0.2	0.3	0.2	26.9	27.6	27.2
Nigeria	9.1	8.8	8.8	0.1	0.1	0.1	45.3	42.6	41.9
Sudan	4.1	4.5	4.5	0.4	0.4	0.5	75.9	78.1	78.0
CENTRAL AMERICA	**8.8**	**9.7**	**9.6**	**0.5**	**0.8**	**0.6**	**0.9**	**0.9**	**0.9**
Mexico	8.3	9.3	9.1	0.5	0.8	0.6	-	-	-
SOUTH AMERICA	**4.6**	**5.3**	**5.7**	**0.8**	**1.0**	**1.0**	**0.1**	**0.1**	**0.1**
Argentina	1.3	1.7	2.1	0.3	0.7	0.7	-	-	-
Brazil	1.7	1.7	1.7	0.2	0.1	0.1	-	-	-
Venezuela	0.5	0.5	0.5	-	-	0.1	-	-	-
NORTH AMERICA	**6.4**	**5.5**	**4.7**	**1.3**	**0.8**	**0.9**	**-**	**-**	**-**
United States of America	6.4	5.5	4.7	1.3	0.8	0.9	-	-	-
EUROPE	**2.6**	**1.5**	**1.1**	**0.6**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**
European Union	2.5	1.3	1.0	0.6	0.4	0.3	0.4	0.4	0.4
OCEANIA	**1.9**	**1.2**	**1.8**	**0.5**	**0.5**	**0.5**	**0.2**	**0.2**	**0.2**
Australia	1.8	1.1	1.6	0.5	0.5	0.5	-	-	-
WORLD	**61.3**	**60.9**	**61.2**	**6.9**	**7.2**	**6.9**	**4.1**	**4.0**	**4.0**
Developing countries	48.7	50.8	52.0	4.3	5.3	4.9	5.1	4.9	5.0
Developed countries	12.6	10.0	9.3	2.6	1.9	1.9	0.3	0.3	0.3
LIFDCs	33.0	33.7	34.5	2.5	3.0	2.8	8.9	8.7	8.7
LDCs	14.3	15.9	16.1	2.0	2.5	2.1	14.0	14.8	14.9

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

	Total Utilization			Stocks ending in			Per caput food use		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2008-2010 average	2011 estim.	2012 f'cast	07/08-09/10 average	2010/11 estim.	2011/12 f'cast
	(. . . . . million tonnes . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	18.4	19.0	18.9	0.9	0.7	0.9	3.9	4.0	3.9
AFRICA	17.4	19.2	19.5	1.5	2.8	2.5	14.0	14.6	14.7
CENTRAL AMERICA	0.2	0.2	0.3	-	-	-	0.2	0.2	0.3
SOUTH AMERICA	1.4	1.8	1.6	0.1	0.1	0.1	0.9	0.8	0.8
NORTH AMERICA	5.4	4.7	4.9	2.5	1.8	2.1	2.8	2.7	2.7
EUROPE	49.1	44.8	46.9	6.0	3.6	4.5	13.7	12.9	13.1
OCEANIA	1.7	1.8	1.7	0.2	0.5	0.4	5.2	5.2	5.2
WORLD	**93.8**	**91.5**	**93.8**	**11.2**	**9.5**	**10.5**	**6.1**	**6.2**	**6.2**

Table A8 (a). Rice statistics

	Production			Imports			Exports		
	07/08-09/10 average	2010/11 estim.	2011/12 f'cast	2007-2009 average	2010 estim.	2011 f'cast	2007-2009 average	2010 estim.	2011 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)								
ASIA	**409.1**	**419.4**	**430.1**	**14.2**	**15.7**	**15.5**	**24.0**	**24.2**	**24.7**
Bangladesh	30.7	33.5	34.0	1.1	0.6	1.2	-	-	-
China	131.9	135.2	136.5	0.9	1.2	1.2	1.1	0.7	0.8
of which Taiwan Prov.	1.1	1.1	1.1	0.2	0.5	0.4	0.1	0.1	0.1
India	95.0	94.1	100.0	0.1	0.1	0.1	4.0	2.0	2.3
Indonesia	38.2	41.8	42.4	0.8	1.0	0.9	-	-	-
Iran, Islamic Republic of	1.5	1.6	1.6	1.1	1.2	1.1	-	-	-
Iraq	0.2	0.1	0.1	0.9	1.2	1.2	-	-	-
Japan	7.9	7.7	7.5	0.6	0.7	0.7	0.2	0.2	0.2
Korea, D.P.R.	1.4	1.6	1.6	0.2	0.1	0.2	-	-	-
Korea, Republic of	4.7	4.3	4.4	0.3	0.3	0.3	0.1	-	-
Malaysia	1.6	1.6	1.6	1.0	0.9	1.1	-	-	-
Myanmar	19.5	19.4	19.5	-	-	-	0.6	0.4	0.4
Pakistan	6.5	5.5	6.7	-	-	-	2.8	3.6	2.7
Philippines	10.7	11.0	11.3	2.0	2.2	1.3	-	-	-
Saudi Arabia	-	-	-	1.0	1.0	1.2	-	-	-
Sri Lanka	2.4	2.9	2.6	0.1	0.1	0.1	-	-	-
Thailand	21.2	20.9	21.4	0.3	0.3	0.4	9.4	9.0	9.7
Viet Nam	25.2	26.6	27.1	0.3	0.5	0.6	5.1	6.9	7.1
AFRICA	**15.3**	**16.1**	**16.1**	**9.9**	**9.3**	**9.8**	**0.9**	**0.5**	**0.3**
Cote d'Ívoire	0.4	0.5	0.4	0.8	0.9	0.9	-	-	-
Egypt	4.5	3.1	3.0	-	-	0.1	0.8	0.4	0.1
Madagascar	2.7	3.2	3.1	0.1	0.1	0.1	-	-	-
Nigeria	2.3	2.7	2.8	1.9	2.0	1.9	-	-	-
Senegal	0.3	0.4	0.4	0.9	0.7	0.7	-	-	-
South Africa	-	-	-	0.9	0.8	1.0	-	-	-
Tanzania, United Rep. of	0.9	0.9	0.9	0.1	0.1	0.1	-	-	-
CENTRAL AMERICA	**1.7**	**1.9**	**1.9**	**2.2**	**2.1**	**2.1**	**-**	**-**	**0.1**
Cuba	0.3	0.3	0.3	0.6	0.5	0.5	-	-	-
Mexico	0.2	0.2	0.2	0.6	0.6	0.6	-	-	-
SOUTH AMERICA	**16.2**	**15.9**	**17.6**	**1.0**	**1.4**	**1.3**	**2.2**	**2.3**	**2.5**
Argentina	0.8	0.8	1.0	-	-	-	0.4	0.5	0.5
Brazil	8.0	7.8	9.0	0.6	0.8	0.6	0.4	0.4	0.6
Peru	1.9	1.9	1.8	0.1	0.1	0.1	-	-	-
Uruguay	0.9	0.8	1.1	-	-	-	0.9	0.7	0.9
NORTH AMERICA	**6.7**	**7.6**	**6.8**	**1.0**	**0.9**	**1.0**	**3.1**	**3.9**	**3.4**
Canada	-	-	-	0.3	0.3	0.3	-	-	-
United States of America	6.7	7.6	6.8	0.7	0.6	0.6	3.1	3.9	3.4
EUROPE	**2.3**	**2.7**	**2.8**	**1.8**	**1.6**	**1.7**	**0.2**	**0.5**	**0.7**
European Union	1.7	1.9	1.9	1.2	1.1	1.2	0.1	0.3	0.4
Russian Federation	0.5	0.7	0.7	0.2	0.2	0.2	-	0.2	0.3
OCEANIA	**0.1**	**0.1**	**0.5**	**0.4**	**0.5**	**0.4**	**0.1**	**0.1**	**0.3**
Australia	0.1	0.1	0.5	0.2	0.2	0.1	0.1	0.1	0.3
WORLD	**451.4**	**463.8**	**475.8**	**30.5**	**31.4**	**31.8**	**30.5**	**31.4**	**31.8**
Developing countries	434.1	445.3	457.8	25.7	26.9	27.0	26.9	26.8	27.3
Developed countries	17.3	18.5	18.0	4.8	4.5	4.7	3.6	4.6	4.5
LIFDCs	210.6	217.9	226.2	15.5	15.3	15.3	8.5	7.5	6.8
LDCs	68.0	73.3	74.2	6.9	6.0	6.8	1.6	1.8	2.1

Table A8 (b). Rice statistics

	Total Utilization			Stocks ending in			Per caput food use		
	06/07-08/09 average	2009/10 estim.	2010/11 f'cast	2007-2009 average	2010 estim.	2011 f'cast	06/07-08/09 average	2009/10 estim.	2010/11 f'cast
	(. . . . . million tonnes, milled equivalent . . . . . .)						(. . . . . Kg/year . . . . . .)		
ASIA	**384.1**	**396.3**	**405.3**	**108.1**	**125.3**	**130.2**	**81.7**	**81.6**	**81.8**
Bangladesh	29.8	32.3	33.6	4.7	5.3	6.4	147.3	150.2	153.2
China	126.1	128.4	131.0	59.5	70.7	75.2	77.2	77.0	76.9
of which Taiwan Prov.	1.2	1.4	1.4	0.1	0.2	0.2	48.4	55.5	55.3
India	89.1	90.1	91.8	17.0	19.0	19.1	73.4	71.5	71.5
Indonesia	36.5	39.8	41.9	2.8	4.5	5.4	155.8	158.4	161.8
Iran, Islamic Republic of	2.8	2.6	2.6	0.3	0.3	0.3	33.3	31.6	30.4
Iraq	1.2	1.3	1.3	0.1	0.1	0.1	39.4	40.5	40.5
Japan	8.3	8.1	8.0	2.3	2.4	2.6	60.2	59.0	58.4
Korea, D.P.R.	1.6	1.6	1.7	-	-	0.1	64.3	60.1	63.5
Korea, Republic of	4.8	4.8	4.7	0.8	1.4	1.4	75.5	72.8	72.2
Malaysia	2.3	2.7	2.7	0.2	0.3	0.1	79.3	87.6	87.9
Myanmar	18.6	19.2	19.2	5.6	5.3	5.1	236.6	240.7	240.8
Pakistan	2.9	3.4	3.4	0.6	0.9	0.4	14.3	16.4	16.6
Philippines	12.5	12.1	12.6	2.2	3.1	2.7	118.0	120.4	120.7
Saudi Arabia	1.0	1.1	1.1	0.2	0.1	0.2	39.3	39.3	39.4
Sri Lanka	2.4	2.6	2.7	0.1	0.2	0.4	108.8	114.8	116.6
Thailand	11.6	12.0	12.1	4.6	5.7	5.2	127.7	129.7	130.9
Viet Nam	19.9	20.5	20.7	4.5	3.4	2.8	186.1	185.9	185.8
AFRICA	**23.5**	**25.1**	**25.8**	**2.8**	**3.3**	**2.8**	**21.2**	**21.6**	**21.8**
Cote d'Ívoire	1.3	1.3	1.4	-	-	-	59.9	59.7	60.1
Egypt	3.8	3.7	3.6	1.1	1.3	0.8	37.9	38.1	37.9
Madagascar	2.6	3.0	3.2	0.1	0.2	0.2	120.9	128.0	133.3
Nigeria	4.3	4.5	4.7	0.3	0.3	0.3	25.0	25.0	25.2
Senegal	1.1	1.1	1.1	0.2	-	-	79.9	78.7	78.3
South Africa	0.8	0.9	0.8	0.1	0.1	-	16.2	16.8	15.9
Tanzania, United Rep. of	0.9	0.9	1.0	0.1	-	-	18.7	17.5	17.5
CENTRAL AMERICA	**3.8**	**3.9**	**4.0**	**0.4**	**0.4**	**0.4**	**19.0**	**18.9**	**19.0**
Cuba	0.9	0.9	0.9	-	-	-	72.0	71.9	72.2
Mexico	0.8	0.8	0.8	-	-	-	7.1	7.0	6.9
SOUTH AMERICA	**15.1**	**15.5**	**15.6**	**1.5**	**1.5**	**1.0**	**36.4**	**36.3**	**36.6**
Argentina	0.4	0.5	0.4	0.1	0.1	-	8.4	10.1	7.7
Brazil	8.5	8.3	8.3	0.4	0.3	0.2	42.6	40.4	40.9
Peru	1.8	2.0	2.1	0.3	0.4	0.3	56.7	62.2	62.6
Uruguay	0.1	0.1	0.1	0.2	-	-	9.7	7.3	7.4
NORTH AMERICA	**4.4**	**4.0**	**4.6**	**1.1**	**1.2**	**1.8**	**11.1**	**10.0**	**11.0**
Canada	0.3	0.3	0.3	0.1	-	-	10.5	10.0	10.0
United States of America	4.1	3.6	4.3	1.1	1.2	1.7	11.2	10.0	11.1
EUROPE	**3.8**	**3.6**	**3.7**	**0.5**	**0.6**	**0.6**	**4.8**	**4.5**	**4.6**
European Union	2.7	2.7	2.7	0.4	0.5	0.5	5.1	4.8	5.0
Russian Federation	0.7	0.6	0.6	-	-	-	4.6	4.1	3.9
OCEANIA	**0.6**	**0.5**	**0.6**	**0.1**	**-**	**-**	**14.8**	**13.8**	**15.3**
Australia	0.2	0.2	0.2	0.1	-	-	9.9	8.5	9.6
WORLD	**435.2**	**448.9**	**459.6**	**114.6**	**132.3**	**136.7**	**56.2**	**56.0**	**56.3**
Developing countries	416.9	431.3	441.4	110.5	128.0	131.7	67.3	67.1	67.3
Developed countries	18.3	17.6	18.1	4.1	4.3	5.0	12.3	11.8	12.0
LIFDCs	208.8	218.2	225.3	32.4	38.2	39.4	65.6	65.2	65.6
LDCs	69.7	74.5	76.9	13.8	14.0	15.1	65.7	65.9	66.3

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

	Wheat[1]			Coarse Grains[2]			Rice (milled basis)		
	2009/10	2010/11 estim.	2011/12 f'cast	2009/10	2010/11 estim.	2011/12 f'cast	2009/10	2010/11 estim.	2011/12 f'cast
	UNITED STATES (June/May)			**UNITED STATES**			**UNITED STATES** (Aug./July)		
Opening stocks	17.9	26.6	22.8	47.1	48.1	22.3	1.0	1.2	1.7
Production	60.4	60.1	55.0	349.0	330.6	356.5	7.1	7.6	6.8
Imports	3.2	3.0	3.0	2.3	2.5	2.5	0.6	0.6	0.6
Total Supply	**81.5**	**89.6**	**80.8**	**398.4**	**381.1**	**381.4**	**8.7**	**9.3**	**9.1**
Domestic use	30.9	32.1	33.7	295.4	306.7	306.0	4.0	4.0	4.0
Exports	24.0	34.7	28.6	54.9	52.1	49.4	3.5	3.6	3.5
Closing stocks	26.6	22.8	18.5	48.1	22.3	26.1	1.2	1.7	1.6
	CANADA (August/July)			**CANADA**			**THAILAND** (Nov./Oct.)[3]		
Opening stocks	6.5	7.8	5.7	6.4	5.7	3.5	5.2	5.7	5.2
Production	26.8	23.2	26.2	22.6	22.2	24.3	21.3	20.9	21.4
Imports	0.1	0.1	0.0	2.2	1.2	1.4	0.3	0.4	0.4
Total Supply	**33.5**	**31.1**	**31.9**	**31.3**	**29.1**	**29.1**	**26.8**	**27.0**	**27.0**
Domestic use	7.2	8.1	8.2	21.0	20.0	20.6	12.0	12.1	12.3
Exports	18.5	17.3	17.9	4.6	5.6	5.0	9.0	9.7	9.0
Closing stocks	7.8	5.7	5.8	5.7	3.5	3.6	5.7	5.2	5.7
	ARGENTINA (Dec./Nov.)			**ARGENTINA**			**INDIA** (Oct./Sept.)[3]		
Opening stocks	1.9	0.7	2.4	2.2	0.9	3.9	21.9	19.0	19.1
Production	8.8	14.7	14.0	16.2	30.0	27.0	89.1	94.1	100.0
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Supply	**10.6**	**15.4**	**16.4**	**18.4**	**30.9**	**31.0**	**111.1**	**113.2**	**119.2**
Domestic use	4.9	5.0	5.1	5.9	9.8	9.7	90.1	91.8	95.5
Exports	5.1	8.0	8.3	11.7	17.2	17.6	2.0	2.3	2.7
Closing stocks	0.7	2.4	3.0	0.9	3.9	3.7	19.0	19.1	21.0
	AUSTRALIA (Oct./Sept.)			**AUSTRALIA**			**PAKISTAN** (Nov./Oct.)[3]		
Opening stocks	3.1	2.9	5.2	2.7	3.0	4.0	1.0	0.9	0.4
Production	21.9	26.3	24.3	12.8	13.5	12.3	6.9	5.5	6.7
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Supply	**25.1**	**29.2**	**29.5**	**15.5**	**16.5**	**16.3**	**7.9**	**6.5**	**7.1**
Domestic use	7.0	7.5	8.0	7.9	7.2	7.8	3.4	3.4	3.6
Exports	15.1	16.5	16.0	4.6	5.3	4.8	3.6	2.7	3.1
Closing stocks	2.9	5.2	5.5	3.0	4.0	3.7	0.9	0.4	0.4
	EU (July/June)			**EU**			**VIET NAM** (Nov./Oct.)[3]		
Opening stocks	18.5	18.0	15.5	23.0	25.0	15.3	4.3	3.4	2.8
Production	138.5	136.8	137.0	155.9	140.3	146.7	25.9	26.6	27.1
Imports	5.3	5.0	7.0	2.6	7.0	5.7	0.5	0.6	0.6
Total Supply	**162.3**	**159.8**	**159.5**	**181.5**	**172.2**	**167.7**	**30.7**	**30.6**	**30.5**
Domestic use	122.5	123.1	124.5	153.6	150.7	151.4	20.5	20.7	20.9
Exports	21.8	21.2	19.5	2.9	6.2	4.3	6.9	7.1	6.5
Closing stocks	18.0	15.5	15.5	25.0	15.3	12.0	3.4	2.8	3.1
	TOTAL OF ABOVE			**TOTAL OF ABOVE**			**TOTAL OF ABOVE**		
Opening stocks	47.9	55.9	51.6	81.3	82.6	49.0	33.4	30.1	29.2
Production	256.4	261.1	256.5	556.6	536.6	566.8	150.3	154.8	162.0
Imports	8.6	8.1	10.0	7.2	10.6	9.7	1.5	1.7	1.7
Total Supply	**313.0**	**325.1**	**318.1**	**645.1**	**629.8**	**625.5**	**185.3**	**186.6**	**192.9**
Domestic use	172.6	175.8	179.5	483.8	494.4	495.5	130.1	132.0	136.3
Exports	84.5	97.7	90.3	78.7	86.4	81.0	25.0	25.4	24.8
Closing stocks	55.9	51.6	48.3	82.6	49.0	48.9	30.1	29.2	31.8

[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		
	06/07-08/09 average	2009/10 estim.	2010/11 f'cast	06/07-08/09 average	2009/10 estim.	2010/11 f'cast	06/07-08/09 average	2009/10 estim.	2010/11 f'cast
ASIA	**124.1**	**125.4**	**129.4**	**58.8**	**76.9**	**79.4**	**2.6**	**2.1**	**2.1**
China	57.8	58.9	59.8	40.0	55.8	59.3	1.4	1.2	1.1
of which Taiwan Prov.	0.1	0.1	0.1	2.3	2.5	2.5	-	-	-
India	35.1	33.9	37.1	0.1	0.1	0.2	0.6	0.3	0.4
Indonesia	8.0	8.9	9.4	1.5	1.9	2.0	0.1	0.1	0.1
Iran, Islamic Republic of	0.7	0.7	0.7	0.8	0.8	0.8	-	-	-
Japan	0.3	0.3	0.3	6.4	6.1	6.1	-	-	-
Korea, Republic of	0.2	0.2	0.2	1.4	1.4	1.5	-	-	-
Malaysia	4.5	4.4	4.6	0.7	0.7	0.7	-	-	-
Pakistan	4.8	5.1	4.6	1.0	1.5	1.2	-	0.1	0.1
Thailand	0.7	0.7	0.7	1.7	1.8	1.9	-	-	-
Turkey	2.1	1.9	2.2	2.0	2.9	2.4	-	0.1	0.1
AFRICA	**16.3**	**16.6**	**17.0**	**2.6**	**3.1**	**3.2**	**0.8**	**0.9**	**0.9**
Nigeria	4.7	4.8	4.7	-	-	-	0.1	0.3	0.2
CENTRAL AMERICA	**1.1**	**1.2**	**1.3**	**5.9**	**6.1**	**5.9**	**0.1**	**0.2**	**0.2**
Mexico	0.7	0.7	0.8	5.3	5.3	5.3	-	-	-
SOUTH AMERICA	**118.8**	**141.9**	**145.2**	**3.4**	**1.5**	**1.1**	**42.1**	**48.6**	**50.7**
Argentina	46.9	57.9	54.5	2.3	0.1	0.1	10.3	13.2	10.4
Brazil	61.7	71.4	76.9	0.1	0.2	0.1	26.6	28.5	32.7
Paraguay	6.2	7.5	8.7	-	-	-	4.1	4.8	5.8
NORTH AMERICA	**104.8**	**116.6**	**118.4**	**2.0**	**2.0**	**2.0**	**42.6**	**52.3**	**53.4**
Canada	14.8	17.2	17.5	0.7	0.7	0.7	9.2	10.3	10.9
United States of America	90.0	99.4	100.9	1.3	1.3	1.2	33.4	42.0	42.5
EUROPE	**43.5**	**51.3**	**49.7**	**19.6**	**19.4**	**21.1**	**3.4**	**3.7**	**3.8**
European Union	25.6	30.3	29.2	18.5	17.7	19.1	0.9	0.9	0.9
Russian Federation	7.9	8.2	7.4	0.5	1.1	1.3	0.3	0.2	0.1
Ukraine	8.1	10.4	11.2	-	-	-	2.0	2.5	2.6
OCEANIA	**2.1**	**3.0**	**3.9**	**0.1**	**0.1**	**0.1**	**0.7**	**1.3**	**1.7**
Australia	1.7	2.6	3.5	0.1	0.1	0.1	0.7	1.3	1.7
WORLD	**410.7**	**456.0**	**464.7**	**92.5**	**109.1**	**112.8**	**92.4**	**109.1**	**112.7**
Developing countries	255.4	280.4	287.2	63.3	80.5	82.7	45.4	51.6	53.7
Developed countries	155.3	175.6	177.5	29.2	28.6	30.1	47.0	57.5	59.1
LIFDCs	128.0	130.1	133.1	43.8	60.8	63.9	3.2	2.8	2.7
LDCs	10.0	10.3	10.2	0.3	0.4	0.3	0.4	0.4	0.4

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

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

	Imports			Exports			Utilization		
	06/07-08/09 average	2009/10 *estim.*	2010/11 *f'cast*	06/07-08/09 average	2009/10 *estim.*	2010/11 *f'cast*	06/07-08/09 average	2009/10 *estim.*	2010/11 *f'cast*
ASIA	**32.8**	**35.7**	**36.9**	**37.3**	**41.7**	**42.7**	**76.8**	**83.6**	**87.0**
Bangladesh	1.2	1.3	1.3	-	-	-	1.4	1.5	1.5
China	10.6	10.5	11.1	0.6	0.8	0.9	29.0	31.8	34.0
of which Taiwan Prov.	0.4	0.5	0.5	-	-	-	0.9	0.9	0.9
India	6.8	9.2	8.7	0.5	0.5	0.4	16.2	18.4	18.6
Indonesia	0.1	0.1	0.1	16.5	18.9	20.6	5.2	6.2	6.4
Iran	1.2	1.1	1.5	0.2	0.1	0.2	1.6	1.6	1.7
Japan	1.1	1.1	1.1	-	-	-	3.1	3.1	3.1
Korea, Republic of	0.8	0.9	0.9	-	-	-	1.1	1.2	1.3
Malaysia	1.2	2.0	2.2	16.3	18.0	17.7	3.8	3.7	4.0
Pakistan	2.0	2.1	2.2	0.1	0.1	0.1	3.5	3.9	3.8
Philippines	0.4	0.5	0.5	0.9	1.4	1.0	1.1	1.1	1.1
Singapore	0.6	0.6	0.9	0.3	0.3	0.3	0.3	0.3	0.6
Turkey	1.2	1.0	1.1	0.3	0.2	0.2	2.3	2.4	2.4
AFRICA	**7.1**	**7.8**	**7.8**	**1.2**	**1.2**	**1.2**	**12.5**	**13.4**	**13.8**
Algeria	0.6	0.6	0.6	0.1	-	-	0.6	0.7	0.8
Egypt	1.5	1.8	1.7	0.1	0.1	-	1.8	2.1	2.2
Nigeria	0.6	0.9	1.0	0.1	0.2	0.1	2.3	2.5	2.7
South Africa	0.7	0.8	0.7	0.1	0.1	0.1	1.1	1.1	1.1
CENTRAL AMERICA	**2.3**	**2.3**	**2.4**	**0.6**	**0.6**	**0.7**	**4.5**	**4.5**	**4.6**
Mexico	1.1	1.2	1.2	0.1	0.1	0.1	2.9	2.9	3.0
SOUTH AMERICA	**2.2**	**2.3**	**2.6**	**10.7**	**8.4**	**9.1**	**10.9**	**13.5**	**14.4**
Argentina	0.1	-	0.1	6.9	5.4	6.1	1.4	2.8	3.0
Brazil	0.4	0.5	0.5	2.4	1.7	1.7	6.0	7.0	7.4
NORTH AMERICA	**3.7**	**4.3**	**4.1**	**5.6**	**6.5**	**6.8**	**17.2**	**17.8**	**17.9**
Canada	0.5	0.6	0.6	2.1	2.6	2.9	0.9	1.0	0.9
United States of America	3.2	3.7	3.5	3.6	3.9	3.9	16.4	16.9	17.0
EUROPE	**13.3**	**13.2**	**13.5**	**5.0**	**6.0**	**5.7**	**33.9**	**36.1**	**36.3**
European Union	10.8	10.7	10.7	1.9	2.2	2.2	28.4	30.3	30.1
Russian Federation	1.2	1.0	1.2	0.7	0.7	0.4	3.5	3.5	3.8
Ukraine	0.5	0.5	0.5	2.0	2.7	2.8	0.8	0.9	1.0
OCEANIA	**0.5**	**0.6**	**0.6**	**1.7**	**1.8**	**1.8**	**1.0**	**1.1**	**1.1**
Australia	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.7	0.8
WORLD	**61.9**	**66.2**	**67.9**	**62.0**	**66.2**	**67.9**	**156.8**	**170.1**	**175.1**
Developing countries	42.2	45.9	47.4	50.1	52.4	54.1	99.6	110.0	114.7
Developed countries	19.7	20.3	20.5	11.8	13.8	13.8	57.2	60.1	60.4
LIFDCs	28.4	31.7	31.9	20.2	23.5	24.8	69.6	76.9	79.6
LDCs	4.1	4.4	4.6	0.4	0.4	0.5	7.0	7.3	7.5

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

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

	Imports			Exports			Utilization		
	06/07-08/09 average	2009/10 estim.	2010/11 f'cast	06/07-08/09 average	2009/10 estim.	2010/11 f'cast	06/07-08/09 average	2009/10 estim.	2010/11 f'cast
ASIA	**24.2**	**27.5**	**30.0**	**13.6**	**13.1**	**14.8**	**100.5**	**116.1**	**129.1**
China	2.4	3.5	3.7	1.4	1.7	1.0	49.5	62.5	72.2
of which Taiwan Prov.	0.5	0.5	0.5	-	-	-	2.4	2.4	2.4
India	0.1	0.2	0.2	5.6	3.7	5.8	11.1	12.0	12.5
Indonesia	2.6	2.7	3.2	2.6	3.0	3.3	2.9	3.1	3.4
Japan	2.4	2.8	2.9	-	-	-	7.1	7.1	7.3
Korea, Republic of	3.4	3.4	3.5	-	-	-	4.5	4.5	4.6
Malaysia	0.9	1.2	1.2	2.3	2.3	2.4	1.7	1.9	2.0
Pakistan	0.4	0.5	0.6	0.1	0.2	0.2	2.8	3.0	3.1
Philippines	1.8	1.6	1.9	0.4	0.6	0.5	2.3	2.3	2.5
Saudi Arabia	0.6	0.5	0.6	-	-	-	0.6	0.5	0.7
Thailand	2.6	2.9	3.1	0.1	0.1	0.1	4.5	4.8	5.1
Turkey	0.9	0.9	1.0	0.1	-	0.1	3.1	3.4	3.5
Viet Nam	2.2	3.1	3.3	-	0.1	0.1	2.4	3.1	3.6
AFRICA	**3.5**	**4.0**	**4.1**	**0.9**	**0.9**	**0.9**	**9.1**	**10.0**	**10.6**
Egypt	0.5	0.7	0.6	-	-	-	1.7	2.1	2.2
South Africa	1.2	1.1	1.2	0.1	0.1	0.1	1.8	1.8	2.0
CENTRAL AMERICA	**3.5**	**3.2**	**3.4**	**0.2**	**0.2**	**0.2**	**8.2**	**7.9**	**8.1**
Mexico	1.9	1.7	1.9	0.1	0.1	0.1	6.2	5.8	6.0
SOUTH AMERICA	**4.2**	**4.5**	**5.1**	**43.2**	**41.4**	**47.0**	**23.1**	**22.6**	**24.1**
Argentina	-	-	-	26.5	25.2	29.5	3.4	2.7	2.7
Bolivia	-	-	-	1.0	1.1	1.2	0.2	0.2	0.2
Brazil	0.2	0.2	0.2	12.6	12.6	13.9	14.0	13.9	14.8
Chile	0.9	0.8	1.0	0.6	0.4	0.4	1.3	1.2	1.3
Paraguay	-	-	-	0.9	0.8	0.8	0.3	0.5	0.5
Peru	0.7	0.8	0.9	1.5	1.2	1.1	0.9	0.9	1.1
Venezuela	1.1	1.3	1.4	-	-	-	1.2	1.5	1.6
NORTH AMERICA	**3.5**	**2.6**	**3.2**	**11.0**	**13.3**	**12.5**	**36.2**	**32.2**	**33.4**
Canada	1.5	1.2	1.2	2.6	2.8	3.4	2.3	2.0	2.1
United States of America	2.0	1.5	2.0	8.4	10.4	9.1	33.9	30.2	31.2
EUROPE	**32.3**	**29.8**	**32.3**	**4.2**	**4.8**	**4.8**	**60.5**	**61.3**	**64.0**
European Union	29.7	27.5	29.7	1.1	1.1	1.0	55.2	55.0	57.4
Russian Federation	0.7	0.5	0.7	1.1	0.9	0.7	2.7	3.4	3.8
Ukraine	0.1	0.1	0.1	1.6	2.3	2.6	0.3	0.3	0.3
OCEANIA	**1.7**	**2.2**	**2.4**	**0.2**	**0.2**	**0.2**	**2.4**	**2.8**	**3.2**
Australia	0.8	0.8	0.8	-	-	-	1.4	1.4	1.6
WORLD	**72.9**	**73.8**	**80.4**	**73.2**	**73.9**	**80.4**	**240.0**	**253.0**	**272.4**
Developing countries	31.5	35.0	38.0	57.7	55.4	62.7	130.3	146.0	160.8
Developed countries	41.4	38.8	42.4	15.5	18.5	17.7	109.7	107.0	111.6
LIFDCs	10.0	11.7	12.8	11.2	10.3	11.9	76.5	91.6	102.5
LDCs	0.4	0.5	0.5	0.4	0.4	0.4	3.3	3.5	3.5

[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		Utilization		Imports		Exports	
	2009/10 *estim.*	2010/11 *f'cast*	2009/10 *estim.*	2010/11 *f'cast*	2009/10 *estim.*	2010/11 *f'cast*	2009/10 *estim.*	2010/11 *f'cast*
ASIA	**52.5**	**60.7**	**76.5**	**76.1**	**29.4**	**26.4**	**9.7**	**11.0**
China	12.8	12.8	17.0	16.2	1.9	2.4	0.1	0.1
India	17.6	24.7	24.6	24.2	6.0	1.0	0.1	1.1
Indonesia	3.1	2.6	5.3	5.4	2.2	2.9	-	-
Japan	0.9	0.6	2.3	2.3	1.5	1.7	-	-
Malaysia	-	-	1.3	1.4	1.6	1.7	0.2	0.2
Pakistan	3.3	3.6	4.3	4.5	0.8	0.6	0.1	0.1
Philippines	2.1	2.1	2.3	2.5	0.2	0.1	0.2	0.1
Thailand	7.3	9.3	2.7	2.7	-	-	5.1	6.3
Turkey	2.6	2.5	2.2	2.3	-	-	-	0.1
Viet Nam	1.1	1.0	1.5	1.5	0.4	0.5	-	-
AFRICA	**10.8**	**11.1**	**15.5**	**16.4**	**9.5**	**9.8**	**5.0**	**3.9**
Egypt	1.8	1.8	2.8	2.9	1.1	1.2	0.2	0.2
Ethiopia	0.3	0.3	0.4	0.5	0.2	0.2	0.1	-
Kenya	0.6	0.7	0.9	0.9	0.3	0.3	-	-
Mauritius	0.5	0.4	-	-	-	-	0.6	0.4
Mozambique	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.3
South Africa	2.3	2.4	1.6	1.7	0.1	0.3	1.0	1.0
Sudan	0.9	1.0	1.3	1.3	0.6	0.6	0.2	0.2
Swaziland	0.6	0.7	-	0.1	-	-	0.6	0.6
Tanzania, United Rep. of	0.3	0.3	0.5	0.5	0.2	0.2	-	0.1
CENTRAL AMERICA	**11.7**	**11.7**	**8.9**	**9.2**	**1.3**	**1.5**	**4.1**	**4.1**
Cuba	1.4	1.3	0.7	0.7	0.1	-	0.8	0.7
Dominican Republic	0.5	0.5	0.4	0.4	-	-	0.2	0.2
Guatemala	2.3	2.1	0.8	0.8	0.1	0.1	1.6	1.4
Mexico	4.9	5.4	5.3	5.4	0.7	1.0	0.3	0.5
SOUTH AMERICA	**45.4**	**47.2**	**20.9**	**21.7**	**1.4**	**1.3**	**27.4**	**26.3**
Argentina	2.4	2.5	1.9	2.0	-	-	0.8	0.4
Brazil	37.2	38.9	13.1	13.5	-	-	25.2	24.8
Colombia	2.5	2.5	1.6	1.7	0.1	-	0.9	0.8
Peru	1.1	1.1	1.2	1.2	0.2	0.2	0.1	-
Venezuela	0.6	0.7	1.2	1.2	0.4	0.4	-	-
NORTH AMERICA	**7.3**	**7.6**	**10.7**	**11.3**	**3.7**	**3.9**	**0.2**	**0.2**
United States of America	7.2	7.5	9.4	9.9	2.4	2.5	0.2	0.1
EUROPE	**24.0**	**22.8**	**28.8**	**28.9**	**7.6**	**7.4**	**3.0**	**2.0**
European Union	17.2	15.9	18.5	18.8	3.7	3.5	2.0	0.7
Russian Federation	3.6	3.3	6.1	5.8	2.3	2.5	0.1	0.1
Ukraine	1.5	1.9	2.1	2.1	0.4	0.4	-	0.1
OCEANIA	**4.9**	**4.6**	**1.3**	**1.5**	**0.4**	**0.3**	**3.8**	**3.7**
Australia	4.7	4.3	1.0	1.0	-	-	3.6	3.5
Fiji	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.2
WORLD	**156.7**	**165.7**	**162.6**	**165.1**	**53.1**	**50.8**	**53.2**	**51.3**
Developing countries	117.3	128.0	115.4	117.0	37.2	34.4	45.0	44.2
Developed countries	39.3	37.7	47.2	48.1	16.0	16.3	8.3	7.1
LIFDCs	49.3	56.2	72.6	72.6	24.4	20.7	5.2	5.1
LDCs	3.8	4.0	7.0	7.2	5.0	5.3	1.9	1.3

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

	Production		Imports		Exports		Utilization	
	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*
ASIA	**121 557**	**123 114**	**12 239**	**13 080**	**3 595**	**3 925**	**130 201**	**132 269**
China	80 638	82 135	3 125	3 300	1 633	1 793	82 130	83 643
of which Hong Kong, SAR	182	185	1 837	1 980	727	780	1 292	1 385
India	6 624	6 799	2	2	781	865	5 845	5 936
Indonesia	2 691	2 720	134	114	5	3	2 820	2 831
Iran, Islamic Republic of	2 659	2 721	312	357	29	31	2 943	3 048
Japan	3 209	3 022	2 867	2 998	16	17	6 060	6 002
Korea, Republic of	2 014	1 729	806	1 044	19	17	2 801	2 756
Malaysia	1 335	1 359	219	226	33	37	1 520	1 548
Pakistan	2 418	2 367	5	5	38	35	2 384	2 337
Philippines	2 877	2 887	279	301	11	13	3 145	3 175
Saudi Arabia	779	788	854	903	16	16	1 617	1 675
Singapore	111	117	285	289	23	23	373	382
Thailand	2 180	2 222	5	5	683	751	1 502	1 476
Turkey	1 933	2 025	98	108	122	132	1 908	2 001
Viet Nam	3 489	3 526	720	777	33	38	4 176	4 265
AFRICA	**14 065**	**14 129**	**1 972**	**2 009**	**182**	**168**	**15 855**	**15 969**
Algeria	609	609	88	93	-	-	696	702
Angola	143	142	350	364	-	-	493	506
Egypt	1 251	1 247	404	363	10	9	1 645	1 600
Nigeria	1 340	1 351	2	2	-	-	1 342	1 353
South Africa	2 273	2 266	312	330	48	50	2 537	2 546
CENTRAL AMERICA	**8 414**	**8 547**	**2 415**	**2 492**	**380**	**412**	**10 449**	**10 627**
Cuba	298	303	274	304	-	-	572	607
Mexico	5 775	5 869	1 599	1 624	195	222	7 179	7 271
SOUTH AMERICA	**37 899**	**38 917**	**850**	**955**	**7 566**	**7 856**	**31 182**	**32 017**
Argentina	4 446	4 470	46	49	564	583	3 927	3 936
Brazil	24 543	25 292	46	54	5 993	6 199	18 596	19 147
Chile	1 380	1 395	257	281	245	257	1 392	1 419
Colombia	2 179	2 206	59	63	115	135	2 123	2 134
Uruguay	742	758	16	16	366	375	391	399
Venezuela	1 341	1 337	361	421	-	-	1 702	1 758
NORTH AMERICA	**46 619**	**46 908**	**2 251**	**2 258**	**8 472**	**8 604**	**40 398**	**40 563**
Canada	4 460	4 458	641	676	1 741	1 773	3 360	3 362
United States of America	42 157	42 449	1 590	1 562	6 730	6 831	37 017	37 180
EUROPE	**56 236**	**56 492**	**4 897**	**4 628**	**3 517**	**3 447**	**57 615**	**57 673**
Belarus	932	948	71	73	186	182	817	839
European Union	44 521	44 280	1 654	1 667	3 189	3 121	42 986	42 826
Russian Federation	6 879	7 117	2 339	2 095	36	36	9 181	9 177
Ukraine	2 048	2 288	291	244	38	41	2 300	2 491
OCEANIA	**5 851**	**5 864**	**379**	**391**	**2 502**	**2 435**	**3 729**	**3 820**
Australia	3 970	4 031	190	199	1 625	1 610	2 535	2 620
New Zealand	1 395	1 345	51	51	874	822	572	574
WORLD	**290 639**	**293 970**	**25 003**	**25 813**	**26 214**	**26 846**	**289 428**	**292 937**
Developing countries	173 807	176 737	13 825	14 709	11 647	12 281	175 984	179 165
Developed countries	116 832	117 232	11 178	11 104	14 566	14 565	113 444	113 772
LIFDCs	110 320	112 094	4 073	4 139	2 087	2 273	112 306	113 960
LDCs	8 238	8 300	987	1 034	4	4	9 220	9 329

[1] Including "other meat".

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

	Production		Imports		Exports		Utilization	
	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*
ASIA	**15 279**	**15 316**	**3 086**	**3 251**	**930**	**1 024**	**17 422**	**17 510**
China	5 617	5 517	437	489	104	120	5 949	5 886
India	2 602	2 722	1	1	716	795	1 887	1 928
Indonesia	454	465	120	100	1	1	574	564
Iran, Islamic Republic of	380	385	265	300	-	-	645	685
Japan	514	488	714	728	6	7	1 212	1 209
Korea, Republic of	247	298	320	350	2	1	563	610
Malaysia	28	29	155	165	6	7	177	187
Pakistan	1 470	1 435	4	3	25	20	1 449	1 418
Philippines	287	290	120	130	2	2	405	418
AFRICA	**5 036**	**5 040**	**573**	**523**	**104**	**87**	**5 506**	**5 476**
Algeria	129	130	85	90	-	-	214	220
Angola	87	87	60	60	-	-	147	147
Egypt	330	330	277	210	5	5	602	535
South Africa	780	760	15	20	7	4	788	776
CENTRAL AMERICA	**2 472**	**2 514**	**406**	**396**	**241**	**263**	**2 638**	**2 647**
Mexico	1 751	1 775	300	290	100	117	1 951	1 948
SOUTH AMERICA	**15 245**	**15 442**	**343**	**379**	**2 455**	**2 514**	**13 133**	**13 307**
Argentina	2 667	2 560	3	3	270	245	2 400	2 318
Brazil	9 389	9 642	40	45	1 472	1 511	7 957	8 176
Chile	215	220	177	186	7	7	385	399
Colombia	940	950	2	2	110	129	832	823
Uruguay	580	585	1	1	321	324	260	262
Venezuela	418	420	108	130	-	-	526	550
NORTH AMERICA	**13 320**	**13 287**	**1 221**	**1 169**	**1 567**	**1 657**	**13 033**	**12 796**
Canada	1 272	1 275	235	232	488	495	1 019	1 010
United States of America	12 048	12 012	982	933	1 079	1 162	12 010	11 782
EUROPE	**10 739**	**10 625**	**1 401**	**1 440**	**499**	**449**	**11 641**	**11 616**
European Union	7 895	7 816	436	450	335	295	7 996	7 971
Russian Federation	1 710	1 670	832	854	5	5	2 537	2 519
Ukraine	450	447	12	12	21	23	441	436
OCEANIA	**2 796**	**2 792**	**52**	**55**	**1 742**	**1 688**	**1 106**	**1 159**
Australia	2 120	2 173	10	10	1 255	1 249	875	934
New Zealand	656	600	11	11	485	437	182	174
WORLD	**64 887**	**65 016**	**7 083**	**7 214**	**7 536**	**7 682**	**64 480**	**64 510**
Developing countries	35 238	35 556	3 525	3 644	3 716	3 876	35 045	35 290
Developed countries	29 649	29 460	3 558	3 570	3 820	3 806	29 435	29 220
LIFDCs	16 602	16 647	877	834	1 076	1 160	16 403	16 320
LDCs	3 060	3 101	106	108	2	2	3 164	3 206

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

	Production		Imports		Exports		Utilization	
	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*
ASIA	**7 785**	**7 842**	**324**	**331**	**95**	**109**	**8 014**	**8 065**
Bangladesh	225	230	-	-	-	-	225	230
China	3 984	4 004	98	98	19	25	4 064	4 078
India	720	721	-	-	60	65	660	656
Iran, Islamic Republic of	498	500	1	1	-	-	498	500
Pakistan	430	435	-	-	12	14	418	421
Saudi Arabia	105	106	45	45	2	2	148	148
Syria	200	205	-	-	-	-	200	205
Turkey	300	302	1	1	-	-	301	303
AFRICA	**2 450**	**2 469**	**40**	**39**	**22**	**23**	**2 467**	**2 485**
Algeria	202	202	1	1	-	-	203	203
Nigeria	418	419	-	-	-	-	418	419
South Africa	131	130	9	9	1	1	139	138
Sudan	345	347	-	-	1	1	344	346
CENTRAL AMERICA	**123**	**124**	**28**	**24**	**-**	**-**	**150**	**147**
Mexico	97	98	16	12	-	-	113	110
SOUTH AMERICA	**342**	**352**	**5**	**8**	**47**	**55**	**300**	**305**
Brazil	111	112	5	8	-	-	116	120
NORTH AMERICA	**113**	**108**	**97**	**99**	**9**	**9**	**201**	**198**
United States of America	98	93	75	78	9	9	164	162
EUROPE	**1 075**	**1 070**	**298**	**298**	**14**	**14**	**1 358**	**1 355**
European Union	768	760	280	280	8	8	1 040	1 032
Russian Federation	185	187	8	8	-	-	193	195
OCEANIA	**1 116**	**1 104**	**43**	**43**	**650**	**635**	**510**	**513**
Australia	607	595	1	2	295	285	314	312
New Zealand	508	508	4	5	355	350	157	163
WORLD	**13 004**	**13 069**	**835**	**843**	**838**	**845**	**13 000**	**13 068**
Developing countries	10 081	10 164	398	404	164	186	10 315	10 381
Developed countries	2 923	2 905	436	439	674	659	2 685	2 687
LIFDCs	8 416	8 475	118	120	86	96	8 448	8 499
LDCs	1 531	1 550	11	10	1	1	1 541	1 559

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

	Production		Imports		Exports		Utilization	
	2010 estim.	2011 f'cast	2010 estim.	2011 f'cast	2010 estim.	2011 f'cast	2010 estim.	2011 f'cast
ASIA	**61 926**	**62 572**	**2 665**	**2 993**	**504**	**563**	**64 131**	**65 000**
China	52 019	53 061	769	817	436	489	52 352	53 390
of which Hong Kong, SAR	122	124	513	532	150	150	485	506
India	485	490	1	1	2	2	484	489
Indonesia	670	680	3	2	1	-	672	682
Japan	1 291	1 200	1 141	1 200	-	-	2 429	2 402
Korea, D.P.R.	190	195	-	-	-	-	190	195
Korea, Republic of	1 110	760	358	562	-	-	1 515	1 322
Malaysia	205	208	12	10	5	5	212	213
Philippines	1 731	1 737	70	75	2	2	1 799	1 810
Thailand	700	650	1	-	17	18	684	633
Viet Nam	2 578	2 620	42	42	33	38	2 587	2 620
AFRICA	**1 173**	**1 187**	**197**	**204**	**9**	**9**	**1 362**	**1 382**
Madagascar	55	55	-	-	-	-	55	55
Nigeria	225	227	-	-	-	-	225	227
South Africa	320	325	35	35	4	4	351	356
Uganda	110	115	-	-	-	-	110	115
CENTRAL AMERICA	**1 671**	**1 709**	**721**	**739**	**97**	**105**	**2 295**	**2 344**
Cuba	182	185	30	30	-	-	212	215
Mexico	1 165	1 195	568	575	80	88	1 653	1 682
SOUTH AMERICA	**5 023**	**5 143**	**93**	**101**	**747**	**769**	**4 370**	**4 476**
Argentina	245	250	36	40	2	2	279	288
Brazil	3 226	3 307	1	1	625	636	2 602	2 672
Chile	518	522	10	10	120	130	408	402
Colombia	190	200	7	9	-	-	197	209
Venezuela	174	178	15	16	-	-	189	194
NORTH AMERICA	**12 115**	**12 167**	**624**	**673**	**2 839**	**3 047**	**9 900**	**9 788**
Canada	1 928	1 899	189	220	1 049	1 067	1 068	1 052
United States of America	10 187	10 268	430	448	1 790	1 980	8 827	8 731
EUROPE	**26 832**	**26 739**	**1 185**	**1 185**	**1 852**	**1 855**	**26 165**	**26 069**
Belarus	385	390	40	39	50	59	375	370
European Union	22 544	22 341	32	32	1 754	1 750	20 822	20 623
Russian Federation	2 260	2 298	785	786	23	23	3 022	3 061
Serbia	500	480	42	44	6	6	536	518
Ukraine	650	730	122	126	-	-	772	856
OCEANIA	**475**	**483**	**219**	**226**	**35**	**37**	**659**	**671**
Australia	335	342	170	177	35	37	470	482
Papua New Guinea	68	68	4	4	-	-	72	72
WORLD	**109 216**	**110 001**	**5 705**	**6 123**	**6 083**	**6 385**	**108 881**	**109 731**
Developing countries	67 983	68 886	2 420	2 718	1 352	1 441	69 099	70 159
Developed countries	41 233	41 115	3 285	3 404	4 731	4 944	39 783	39 572
LIFDCs	55 767	56 841	635	676	347	409	56 055	57 108
LDCs	1 191	1 217	138	145	-	-	1 329	1 362

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

	Production		Imports		Exports		Utilization	
	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*	2010 *estim.*	2011 *f'cast*
ASIA	**34 640**	**35 421**	**6 057**	**6 382**	**2 032**	**2 198**	**38 665**	**39 611**
China	17 601	18 102	1 815	1 890	1 056	1 143	18 360	18 849
of which Hong Kong, SAR	45	45	1 039	1 145	550	600	534	590
India	2 670	2 720	-	-	2	2	2 668	2 718
Indonesia	1 435	1 438	7	7	-	-	1 442	1 445
Iran, Islamic Republic of	1 765	1 820	45	55	28	30	1 782	1 845
Japan	1 392	1 322	973	1 030	10	10	2 355	2 342
Korea, Republic of	647	660	117	121	17	16	747	765
Kuwait	44	44	300	320	1	1	343	364
Malaysia	1 100	1 120	32	30	22	25	1 110	1 125
Saudi Arabia	590	600	684	726	3	3	1 271	1 323
Singapore	95	100	123	120	7	7	211	214
Thailand	1 208	1 305	1	1	659	725	550	587
Turkey	1 300	1 400	95	105	120	130	1 275	1 375
Yemen	145	147	110	115	-	-	255	262
AFRICA	**3 990**	**4 034**	**1 132**	**1 214**	**39**	**42**	**5 083**	**5 206**
Angola	8	8	185	195	-	-	193	203
South Africa	1 020	1 028	253	266	31	35	1 242	1 259
CENTRAL AMERICA	**4 028**	**4 081**	**1 239**	**1 316**	**40**	**42**	**5 227**	**5 355**
Cuba	34	34	240	270	-	-	274	304
Mexico	2 659	2 699	700	736	14	16	3 345	3 419
SOUTH AMERICA	**17 047**	**17 655**	**407**	**466**	**4 250**	**4 451**	**13 204**	**13 670**
Argentina	1 346	1 472	7	6	250	293	1 103	1 185
Brazil	11 787	12 200	1	1	3 873	4 028	7 915	8 173
Chile	620	625	70	85	107	108	583	602
Venezuela	740	730	237	275	-	-	977	1 005
NORTH AMERICA	**20 820**	**21 099**	**298**	**306**	**4 019**	**3 852**	**17 117**	**17 557**
Canada	1 223	1 247	192	200	186	191	1 229	1 257
United States of America	19 597	19 852	95	95	3 833	3 661	15 877	16 289
EUROPE	**16 398**	**16 863**	**1 853**	**1 540**	**1 068**	**1 045**	**17 182**	**17 359**
European Union	12 272	12 321	806	805	1 010	986	12 068	12 140
Russian Federation	2 635	2 872	672	403	8	8	3 300	3 268
Ukraine	900	1 063	156	105	17	18	1 040	1 151
OCEANIA	**1 049**	**1 067**	**61**	**64**	**33**	**33**	**1 076**	**1 096**
Australia	886	900	7	9	26	26	867	881
New Zealand	140	144	1	-	7	7	134	138
WORLD	**97 972**	**100 220**	**11 047**	**11 288**	**11 482**	**11 664**	**97 554**	**99 853**
Developing countries	56 579	58 107	7 400	7 859	6 311	6 677	57 669	59 295
Developed countries	41 393	42 113	3 646	3 429	5 171	4 986	39 886	40 558
LIFDCs	26 273	26 849	2 341	2 404	546	580	28 067	28 673
LDCs	1 821	1 807	707	749	-	-	2 528	2 556

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

	Production			Imports			Exports		
	2007-2009 average	2010 estim.	2011 f'cast	2007-2009 average	2010 estim.	2011 f'cast	2007-2009 average	2010 estim.	2011 f'cast
ASIA	**245.5**	**256.4**	**265.1**	**21.4**	**25.5**	**27.3**	**5.4**	**4.5**	**4.7**
China	39.8	43.4	45.6	2.4	4.6	5.4	0.5	0.1	0.1
India[1]	107.4	114.4	119.4	0.1	0.4	0.3	0.5	0.2	0.3
Indonesia	1.1	1.3	1.4	1.5	1.5	1.7	0.3	0.3	0.3
Iran, Islamic Republic of	7.7	8.0	8.1	0.5	0.6	0.6	-	0.1	0.1
Japan	8.0	7.8	7.7	1.4	1.3	1.3	-	-	-
Korea, Republic of	2.2	2.2	2.2	0.4	0.6	0.6	-	-	-
Malaysia	-	0.1	0.1	1.2	1.2	1.2	0.4	0.2	0.2
Pakistan	33.3	31.6	32.0	0.2	0.3	0.3	-	-	-
Philippines	-	-	-	1.2	1.3	1.4	0.3	0.2	0.2
Saudi Arabia	2.0	2.2	2.3	2.1	2.0	2.1	1.3	1.3	1.4
Singapore	-	-	-	1.3	1.4	1.5	0.7	0.6	0.5
Thailand	0.8	0.9	0.9	0.8	0.9	1.0	0.1	0.1	0.1
Turkey	12.4	12.2	12.2	0.2	0.3	0.4	0.1	0.1	0.2
AFRICA	**36.7**	**37.5**	**38.0**	**7.6**	**8.0**	**8.1**	**0.9**	**1.0**	**1.0**
Algeria	2.0	2.0	2.0	2.2	2.2	2.2	0.9	1.0	1.0
Egypt	5.9	6.0	6.0	0.8	1.2	1.3	0.5	0.6	0.6
Kenya	4.3	4.4	4.6	-	-	-	-	-	-
South Africa	3.1	3.2	3.2	0.1	0.1	0.1	0.1	0.1	0.1
Sudan	7.4	7.5	7.5	0.3	0.3	0.3	-	-	-
Tunisia	1.1	1.2	1.2	0.1	0.2	0.2	0.1	0.1	0.1
CENTRAL AMERICA	**15.7**	**16.3**	**16.6**	**4.1**	**3.6**	**3.7**	**0.5**	**0.5**	**0.5**
Costa Rica	0.9	0.9	0.9	-	-	-	0.1	0.1	0.1
Mexico	10.8	11.2	11.3	2.2	2.0	2.2	0.1	0.1	0.1
SOUTH AMERICA	**58.1**	**62.1**	**64.1**	**1.8**	**1.9**	**2.0**	**3.0**	**3.1**	**3.4**
Argentina	10.2	10.5	11.1	-	0.1	0.1	1.4	1.7	1.9
Brazil	27.6	29.8	30.7	0.4	0.6	0.6	0.5	0.2	0.2
Colombia	7.2	7.4	7.4	-	-	-	0.1	-	-
Uruguay	1.5	1.5	1.6	-	-	-	0.7	0.9	0.9
Venezuela	1.9	2.5	2.7	1.0	0.9	0.9	-	-	-
NORTH AMERICA	**93.7**	**95.8**	**97.0**	**2.2**	**1.3**	**1.4**	**3.7**	**4.3**	**4.5**
Canada	8.3	8.4	8.4	0.4	0.3	0.4	0.2	0.1	0.1
United States of America	85.4	87.5	88.6	1.7	1.0	1.0	3.5	4.1	4.3
EUROPE	**215.2**	**215.7**	**216.6**	**4.3**	**4.7**	**4.9**	**13.2**	**15.6**	**16.6**
Belarus	6.2	6.6	6.9	-	-	-	1.9	2.4	2.6
European Union	153.5	154.9	156.4	1.3	1.0	1.0	9.7	11.6	12.4
Russian Federation	32.4	31.7	31.1	2.2	2.7	2.8	0.2	0.2	0.2
Ukraine	11.9	11.3	10.9	0.1	0.1	0.1	0.8	0.6	0.7
OCEANIA	**25.6**	**26.1**	**26.4**	**0.8**	**0.9**	**0.9**	**15.7**	**17.0**	**17.5**
Australia[2]	9.4	9.0	9.1	0.5	0.6	0.6	3.5	3.1	3.2
New Zealand[3]	16.1	17.0	17.2	0.1	0.1	0.1	12.2	13.9	14.4
WORLD	**690.6**	**710.0**	**723.8**	**42.1**	**45.9**	**48.2**	**42.2**	**46.0**	**48.3**
Developing countries	327.2	342.3	353.1	32.7	36.7	38.7	9.5	9.0	9.5
Developed countries	363.4	367.7	370.7	9.5	9.2	9.5	32.7	37.0	38.8
LIFDCs	247.3	258.9	268.1	12.2	15.7	17.1	4.5	4.5	4.9
LDCs	24.8	25.4	25.8	2.8	3.1	3.2	0.1	0.1	0.1

[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		
	2008	2009	2008	2009	2008	2009 estim.	2010 f'cast.	2008	2009 estim.	2010 f'cast.
	Million tonnes (live weight equivalent)				USD billion			USD billion		
ASIA	**46.4**	**46.5**	**47.0**	**49.5**	**35.0**	**33.5**	**38.9**	**32.9**	**30.5**	**34.8**
China[2]	16.0	15.8	33.1	35.1	12.1	11.8	14.8	8.3	8.4	9.8
of which: Hong Kong SAR	0.2	0.2	-	-	0.5	0.4	0.4	2.4	2.5	2.6
Taiwan Prov.	1.0	0.8	0.3	0.3	1.6	1.2	1.4	0.7	0.8	0.9
India	4.1	4.1	3.9	3.8	1.6	2.0	2.1	0.1	0.1	0.1
Indonesia	5.0	5.1	1.7	1.7	2.5	2.2	2.6	0.2	0.2	0.3
Japan	4.3	3.8	0.7	0.8	1.7	1.6	1.9	14.9	13.3	14.9
Korea, Rep. of	1.9	1.9	0.5	0.5	1.3	1.3	1.6	2.9	2.7	3.2
Philippines	2.6	2.6	0.7	0.7	0.6	0.6	0.6	0.1	0.2	0.2
Thailand	1.9	1.7	1.3	1.4	6.5	6.2	7.1	2.4	1.9	2.1
Viet Nam	2.1	2.2	2.5	2.6	4.6	4.3	4.4	0.4	0.4	0.5
AFRICA	**7.3**	**7.2**	**0.9**	**1.0**	**4.8**	**4.5**	**4.2**	**3.0**	**3.2**	**3.5**
Ghana	0.4	0.3	-	-	-	-	-	0.1	0.1	0.1
Morocco	1.0	1.2	-	-	1.7	1.5	1.1	0.1	0.1	0.1
Namibia	0.4	0.4	-	-	0.6	0.5	0.5	-	-	-
Nigeria	0.6	0.6	0.1	0.2	0.1	0.3	0.3	0.6	0.8	1.0
Senegal	0.4	0.5	-	-	0.2	0.2	0.2	-	-	-
South Africa	0.6	0.5	-	-	0.5	0.4	0.6	0.2	0.3	0.2
CENTRAL AMERICA	**2.1**	**2.1**	**0.3**	**0.3**	**2.2**	**1.9**	**1.8**	**1.2**	**1.0**	**1.2**
Mexico	1.6	1.6	0.2	0.2	0.8	0.8	0.8	0.6	0.4	0.6
Panama	0.2	0.2	-	-	0.4	0.4	0.2	-	-	-
SOUTH AMERICA	**13.9**	**13.2**	**1.5**	**1.6**	**10.4**	**9.4**	**9.2**	**1.9**	**2.0**	**2.5**
Argentina	1.0	0.9	-	-	1.3	1.1	1.3	0.1	0.1	0.1
Brazil	0.8	0.8	0.4	0.4	0.3	0.2	0.2	0.7	0.7	1.0
Chile	3.6	3.5	0.8	0.8	3.9	3.6	3.0	0.3	0.1	0.2
Ecuador	0.5	0.5	0.2	0.2	1.8	1.6	1.6	0.2	0.2	0.2
Peru	7.4	6.9	-	-	2.4	2.2	2.5	0.1	0.1	0.2
NORTH AMERICA	**5.5**	**5.4**	**0.7**	**0.6**	**8.5**	**7.6**	**9.2**	**17.0**	**15.9**	**17.8**
Canada	0.9	0.9	0.2	0.2	3.7	3.2	4.0	2.0	2.0	2.3
United States of America	4.3	4.2	0.5	0.5	4.5	4.1	4.9	15.0	13.9	15.5
EUROPE	**13.0**	**13.3**	**2.3**	**2.5**	**38.9**	**35.8**	**39.3**	**50.5**	**45.4**	**48.4**
European Union[2]	5.1	5.2	1.2	1.3	26.2	23.6	25.3	44.7	40.4	43.0
of which Extra -EU					4.4	3.8	4.3	23.9	21.3	22.8
Iceland	1.3	1.1	-	-	2.1	1.7	1.8	0.1	0.1	0.1
Norway	2.4	2.5	0.8	1.0	6.9	7.1	8.8	1.2	1.2	1.1
Russian Federation	3.4	3.8	0.1	0.1	2.6	2.3	2.3	2.4	2.0	2.3
OCEANIA	**1.2**	**1.2**	**0.2**	**0.2**	**2.3**	**2.1**	**2.4**	**1.3**	**1.3**	**1.5**
Australia	0.2	0.2	0.1	0.1	0.9	0.8	0.9	1.1	1.1	1.2
New Zealand	0.5	0.4	0.1	0.1	0.9	0.9	1.1	0.1	0.1	0.1
WORLD[3]	**89.6**	**88.9**	**52.9**	**55.7**	**102.0**	**94.9**	**104.9**	**108.0**	**99.3**	**109.7**
Excl. Intra-EU					80.2	75.0	83.9	87.1	80.2	89.5
Developing countries	66.0	65.7	49.1	51.6	51.1	48.2	52.5	24.2	23.6	27.3
Developed countries	23.5	23.1	3.9	4.1	50.9	46.7	52.4	83.7	75.7	82.4
LIFDCs	20.0	20.4	8.7	8.7	7.9	7.9	8.4	2.8	3.2	3.6
LDCs	8.1	8.5	1.9	2.1	1.8	1.5	1.6	0.4	0.4	0.4

[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 65 495 tonnes in 2008 and 60 162 in 2009 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)								
2004/05	154	138	123	97	90	132	123	99
2005/06	175	138	138	104	101	133	128	109
2006/07	212	176	188	150	145	185	185	155
2007/08	361	311	322	200	192	319	300	206
2008/09	270	201	234	188	180	178	179	170
2009/10	209	185	224	160	168	146	154	165
2010 – May	196	190	243	163	170	136	159	164
2010 – June	181	183	206	152	163	131	159	156
2010 – July	212	218	212	160	171	173	180	168
2010 – August	272	257	277	174	198	261	253	185
2010 – September	303	276	299	206	229	255	259	215
2010 – October	291	266	294	236	248	264	263	231
2010 – November	291	276	295	236	246	295	238	234
2010 – December	327	310	300	252	260	336	233	251
2011 – January	340	317	317	263	272	306	251	262
2011 – February	362	336	347	287	288	294	273	276
2011 – March	334	302	348	291	287	272	254	279
2011 – April	364	318	352	321	314	276	250	302
2011 – May	362	307	351	305	300	277	247	272

[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)*

	July		September		December		March	
	July 2011	July 2010	Sept. 2011	Sept. 2010	Dec. 2011	Dec. 2010	March 2011	March 2010
Wheat								
April 17	298	185	311	191	322	201	331	211
April 24	316	186	332	192	344	201	353	211
May 2	291	184	307	190	323	200	334	210
May 9	290	181	306	187	323	198	337	208
May 16	281	172	288	179	309	190	323	201
May 23	295	172	312	178	330	190	340	201
Maize								
April 17	299	147	280	151	263	155	266	160
April 24	303	142	285	145	268	149	272	154
May 2	289	146	277	150	260	153	265	158
May 9	279	146	270	149	259	152	264	157
May 16	274	140	264	143	250	147	254	152
May 23	297	146	283	150	264	153	269	158

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)									
2005	291	219	319	473	125	124	128	127	108
2006	311	217	394	516	137	135	129	153	117
2007	335	275	436	677	161	156	159	168	157
2008	695	506	782	1077	295	296	289	314	251
2009	587	329	545	937	253	229	197	341	232
2010	518	386	510	881	229	211	213	264	231
Monthly									
2010 – May	475	322	485	760	200	192	181	221	221
2010 – June	474	327	467	760	210	193	187	250	214
2010 – July	466	345	452	752	214	189	191	261	214
2010 – August	472	373	441	750	217	192	197	263	216
2010 – September	499	414	449	750	232	205	227	266	224
2010 - October	509	431	496	1 020	249	217	235	296	250
2010 – November	541	430	573	1 200	257	233	243	294	261
2010 – December	564	423	600	1 150	256	240	243	288	251
2011 – January	542	412	601	1 150	253	237	240	288	240
2011 – February	554	433	582	1 150	255	235	238	299	237
2011 – March	524	429	562	1 150	248	227	238	284	237
2011 – April	507	423	528	1 150	245	218	235	284	235
2011 – May	500	419	518	1 025	245	218	239	284	225

[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)								
2004/05	275	545	419	212	130	105	105	104
2005/06	259	572	451	202	130	100	125	107
2006/07	335	772	684	264	184	129	153	148
2007/08	549	1325	1050	445	296	217	202	243
2008/09	422	826	627	385	196	156	144	180
2009/10	429	924	806	388	220	162	173	215
Monthly								
2009 - October	427	891	676	413	187	158	152	207
2009 - November	442	939	728	422	196	164	162	216
2009 - December	448	931	791	425	219	167	169	224
2010 - January	435	919	793	407	243	163	169	221
2010 - February	406	915	804	393	230	154	169	214
2010 - March	410	920	832	381	200	156	175	213
2010 - April	412	900	826	378	205	157	174	224
2010 - May	406	864	813	353	226	153	170	214
2010 - June	408	860	794	342	194	154	168	206
2010 - July	426	911	811	361	225	162	174	211
2010 - August	457	1002	901	389	245	175	192	213
2010 - September	468	1036	910	398	277	180	198	218
2010 - October	496	1165	998	415	285	193	220	227
2010 - November	526	1248	1117	430	292	205	243	225
2010 - December	550	1321	1229	437	289	216	263	222
2011 - January	572	1384	1279	454	313	225	278	234
2011 - February	569	1366	1286	447	290	224	279	241
2011 - March	552	1305	1172	423	264	217	260	234
2011 - April	553	1310	1148	406	277	219	259	227
2011 - May	556	1291	1155	403	280	218	259	220

[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 1998-2000 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)
		USD c/lb	
Annual (Jan/Dec)	**Raw Sugar**	**White**	
2005	9.89	13.18	140.3
2006	14.77	18.97	209.6
2007	10.08	13.96	143.0
2008	12.80	16.07	181.6
2009	18.15	22.16	257.3
2010	21.29	27.25	302.0
Monthly			
May 2010	15.20	20.59	215.7
June 2010	15.88	21.89	224.9
July 2010	17.46	24.59	247.4
August 2010	18.51	24.23	262.7
September 2010	22.51	27.28	318.1
October 2010	24.61	30.98	349.3
November 2010	26.35	32.63	373.4
December 2010	27.98	33.91	398.4
January 2011	29.61	36.36	420.2
February 2011	29.47	33.85	418.2
March 2011	26.24	31.84	372.3
April 2011	24.36	29.74	345.6
May 2011	22.00	27.21	310.7

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)					
2005	2 128	2 223	2 261	2 838	135
2006	1 774	2 218	2 193	2 681	128
2007	2 959	4 291	4 185	4 055	212
2008	3 607	3 278	3 846	4 633	220
2009	2 335	2 255	2 400	2 957	142
2010	4 043	3 127	3 464	4 010	200
Monthly					
2010 - May	4 075	3 500	3 963	4 025	209
2010 - June	4 050	3 225	3 850	3 950	203
2010 - July	4 000	3 138	3 375	3 950	198
2010 - August	4 000	2 982	3 150	3 900	193
2010 - September	4 100	3 138	3 357	3 950	198
2010 - October	4 275	3 175	3 463	4 013	203
2010 - November	4 500	3 050	3 513	4 175	208
2010 - December	4 500	3 075	3 550	4 175	208
2011 - January	4 625	3 500	3 801	4 375	221
2011 - February	4 825	3 850	4 169	4 400	230
2011 - March	4 883	3 833	4 592	4 417	234
2011 - April	4 750	3 769	4 088	4 425	229
2011 - May	4 750	3 807	4 075	4 500	231

[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

	Pigmeat prices *(USD per tonne)*			Bovine meat prices *(USD per tonne)*			
Period	**United States**	**Brazil**	**Japan**	**United States**	**Argentina**	**Japan**	**Australia**
Annual (Jan/Dec)							
2005	2 161	2 094	5 093	3 919	1 673	5 764	2 617
2006	1 986	2 134	4 540	3 803	2 270	5 685	2 547
2007	2 117	2 200	4 500	4 023	2 385	5 925	2 603
2008	2 270	3 000	5 117	4 325	3 615	6 275	3 138
2009	2 202	2 223	5 617	3 897	2 526	5 409	2 636
2010	2 454	2 747	5 993	4 378	4 008	6 060	3 351
Monthly							
2010 - March	2 286	2 660	5 786	4 337	3 264	5 963	3 349
2010 - April	2 533	2 860	5 619	4 426	4 490	5 961	3 596
2010 - May	2 557	2 823	5 705	4 428	4 562	6 172	3 478
2010 - June	2 624	2 778	5 780	4 577	4 437	6 000	3 197
2010 - July	2 574	2 699	6 010	4 514	3 391	6 147	3 210
2010 - August	2 576	2 680	6 152	4 653	3 771	5 988	3 365
2010 - September	2 460	2 708	6 220	4 424	4 022	5 960	3 351
2010 - October	2 528	2 761	6 423	4 372	4 163	6 252	3 412
2010 - November	2 455	2 952	6 358	4 272	5 007	6 200	3 439
2010 - December	2 397	2 926	6 291	4 468	4 829	6 387	3 744
2011 - January	2 404	3 002	6 337	4 334	4 952	6 422	4 100
2011 - February	2 493	2 820	6 346	4 528	5 000	6 758	4 050
2011 - March	2 561	2 927	6 417	4 594	n.a.	6 772	4 140

Pig Meat Prices

UNITED STATES Export unit value for frozen product - Foreign Trade Statistics of the United States Census Bureau
BRAZIL Export unit value for frozen product – ALICEWEB
JAPAN Pork Import Price (cif) : Frozen Boneless Cuts – A.L.I.C.

Bovine Meat Prices

UNITED STATES Frozen beef, export unit value (Foreign Trade Statistics of the United States Census Bureau)
ARGENTINA Export unit value of frozen beef cuts S.A.G.P.yA.
JAPAN Beef Import Price (c.i.f.) : Boneless Cuts, fresh or chilled – A.L.I.C.
AUSTRALIA Up to Oct 02: cow forequarters frozen boneless, 85 percent chemical lean, cif the United States port (East Coast) exdock
From Nov 02: chucks and cow forequarters ¬ World Bank.

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

	Poultry meat prices *(USD per tonne)*			FAO indices *(2002-2004=100)*[1]			
Period	**USA**	**Japan**	**Brazil**	**Total meat**	**Bovine meat**	**Pig meat**	**Poultry meat**
Annual (Jan/Dec)							
2005	847	2 062	1 228	120	118	122	132
2006	734	1 852	1 180	119	1119	123	122
2007	935	1 964	1 443	125	125	125	151
2008	997	3 064	1 896	153	157	152	184
2009	989	2 541	1 552	133	134	131	162
2010	1 032	2 653	1 781	152	163	138	177
Monthly							
2010 - March	1 034	2 392	1 716	145	156	131	175
2010 - April	1 043	2 430	1 740	151	164	138	177
2010 - May	1 055	2 662	1 747	152	164	137	178
2010 - June	1 011	2 675	1 706	152	161	141	173
2010 - July	1 038	2 742	1 789	151	162	140	180
2010 - August	996	2 836	1 769	156	167	141	176
2010 - September	993	2 867	1 750	153	165	137	175
2010 - October	1 017	2 948	1 813	158	170	141	180
2010 - November	1 069	2 809	1 940	161	172	142	192
2010 - December	1 031	2 941	1 966	166	181	141	191
2011 - January	1 067	3 060	1 992	167	185	134	195
2011 - February	1 066	3 100	1 983	171	188	141	194
2011 - March	1 102	3 319	2 023	175	190	148	199

Poultry Meat Prices

UNITED STATES - Broiler cuts, export unit value - Foreign Trade Statistics of the United States Census Bureau
JAPAN - Broiler Import Price, cif; Frozen, other than leg quarters - A.L.I.C.
BRAZIL Export unit value for poultry - ALICEWEB

[1] The FAO Meat Price Indices are 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.

Table A29. Fish price indices (2005-100)

Period	Total	Aquaculture	Capture	White fish	Salmon	Shrimp	Pelagic e/tuna	Tuna	Other fish
Annual (Jan/Dec)									
2005	96	92	99	98	91	97	118	94	89
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									
2010 -May	114	117	112	119	144	94	107	124	108
2010 - June	115	116	114	119	141	98	129	125	109
2010-July	118	118	118	121	144	100	133	130	114
2010-August	122	121	122	119	146	107	137	135	118
2010-September	126	123	127	122	143	111	137	155	110
2010-October	129	128	130	129	148	124	152	133	113
2010-November	127	126	127	128	145	126	156	119	109
2010-December	131	131	129	127	152	127	156	130	114
2011-January	129	130	128	125	152	120	142	130	117
2011-February	131	130	131	124	155	120	145	137	124
2011-March	136	134	137	129	161	120	156	148	130
2011-April	137	135	137	128	163	120	162	149	132
2011-May	135	134	137	127	161	120	162	150	135

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 2006-2010
Sugar (ISA daily price)	US cents per lb	31-05-11	23.11	22.76	14.84	15.41
Coffee (ICO daily price)	US cents per lb	25-05-11	222.17	241.28	128.10	118.12
Cocoa (ICCO daily price)	US cents per lb	25-05-11	136.26	142.17	144.17	136.98
Tea (FAO Tea Composite Price)	USD per kg	30-04-11	2.94	2.96	2.73	2.33
Cotton (NYBOT) [1]	US cents per lb	20-05-11	159.86	186.12	83.28	66.48
Jute "BTD" (Fob Bangladesh Port)	USD per tonne	20-05-11	670.00	740.00	1075.00	522.50

[1] Quotation is from NYBOT (New York Board of Trade) as of July 2007

OCEAN FREIGHT RATES

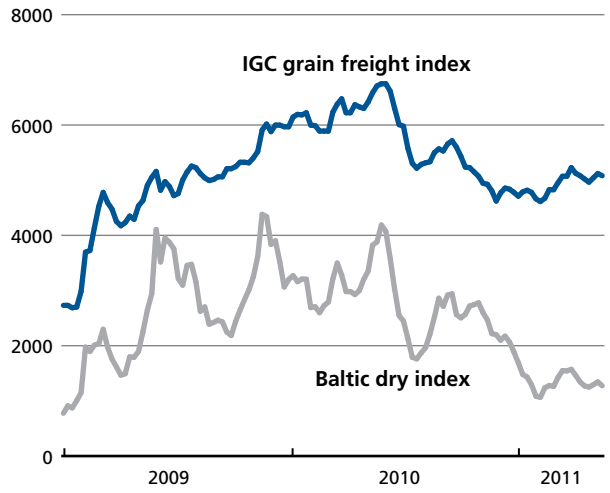
Contributed by the International Grains Council (www.igc.org.uk)

OCEAN FREIGHT MARKET (May 2010 - May 2011)

Between November 2010 and May 2011, dry bulk ocean freight rates, while quite variable at times, registered an overall decline. This was attributed to weaker demand for commodities and a continuing build-up of tonnage. The reduction in rates was more pronounced in the Pacific, where a combination of surplus tonnage and flood-related disruptions of coal and wheat shipments from Australia applied additional pressure. In the early part of 2011, medium and smaller-sized vessels from the Pacific sailed in ballast into the Atlantic basin, further undermining rates. In March, however, they moved higher due to an upturn in demand for minerals, both in Asia and in Europe, as well as a tightening tonnage supply in the Pacific. Rising bunker fuel prices and the re-opening of ship-breaking yards in Bangladesh were also bullish. Following a sharp drop in grain exports from the Black Sea region, additional volumes were shipped from the US and the EU. Rates retreated again in April as a result of a continuing build-up of surplus tonnage, notably in the larger-size categories. The Baltic Dry Index (BDI), having dipped to a 26-month low at the beginning of February, mostly reflecting a slump in Capesize rates, rebounded in April but still showed a net loss of over 50% over the six-month period. **The IGC Grain Freight Index (GFI)**, however, was almost unchanged, reflecting the relative firmness of fixtures for medium-sized vessels, including the major US Gulf to Japan rate, and for shorter journeys.

Rates in the **Panamax** sector did not follow a uniform pattern in the period since November: they fell in both basins in January/ February due to an oversupply of tonnage and reducing mineral demand. Ballasters from the weaker Pacific basin continued to move to the US Gulf in search of cargoes. By March, however, a renewed tightening of tonnage supply and increasing grain shipping volumes from the US Gulf and South America boosted rates in the Atlantic. In the following month, rates eased on surplus tonnage, notably from South America. Severe flooding along the Mississippi in May caused significant problems with barge movement, also temporarily disrupting loadings at the Gulf.

Ocean freight indices
January 2009 - May 2011 (May 2005=6000)



Like other dry bulk sectors, the **Handysize/Supramax** market fell sharply in January/February 2011, mainly attributed to tonnage overcapacity and weak demand. By April/May, however, the market recouped most losses due to improved demand in the Atlantic for cargoes from the US Gulf and South America and, in the Pacific, because of more iron ore cargoes from India. Grains fixtures in May included a cargo from the EU (Northern France) to Algeria at USD 15 000 daily and a. trip from Argentina to Algeria at USD 42.25/t. A North Pacific roundtrip was reported at USD 12 500 daily.

Capesize rates plummeted between November 2010 and February 2011 and remained at relatively low levels due to a persistent oversupply of tonnage. The sharpest falls were in the Pacific where, following disruptions of coal shipments from Australia, vessels struggled to find cargoes. A number of ships were laid up as earnings dropped below costs. Japan's lower imports of raw materials and disruptions in its ports following the earthquake and tsunami disaster also weighed.

[1] The GFI distinguishes grain routes from mineral and other dry bulk routes also included in more general dry bulk indices such as the Baltic Dry Index (BDI). The GFI is composed of 15 major grain routes, representing the main grain trade flows, with five rates from the United States, and two each from Argentina, Australia, Canada, the European Union and the Black Sea. Vessel sizes are adequately represented, with ten Panamax rates and five in the Handysize sector. The GFI is calculated weekly, with the average for the four weeks to 18 May 2005 taken as its base of 6000.

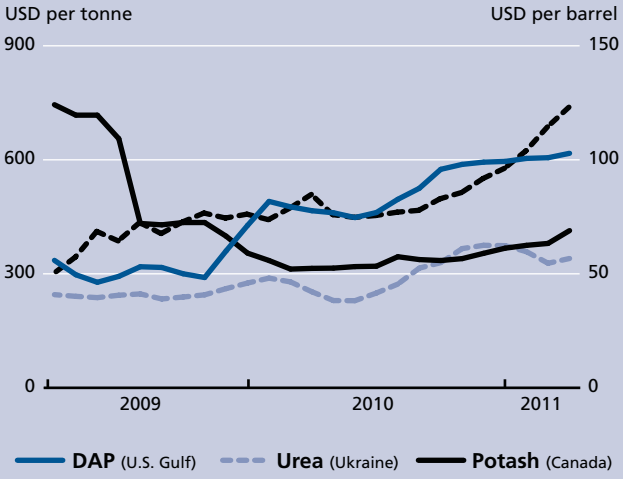
Market indicators

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
May 2010	50	40	73	75
June 2010	49	37	70	72
July 2010	42	31	55	57
August 2010	45	32	57	59
September 2010	44	32	62	64
October 2010	41	28	59	61
November 2010	37	26	55	56
December 2010	37	27	55	56
January 2011	41	27	54	55
February 2011	40	26	52	53
March 2011	41	28	56	57
April 20100	44	26	57	58
May 20100	44	26	56	58

FOOD IMPORT BILLS

Monthly fertilizers and crude oil prices: April 2009 to April 2011

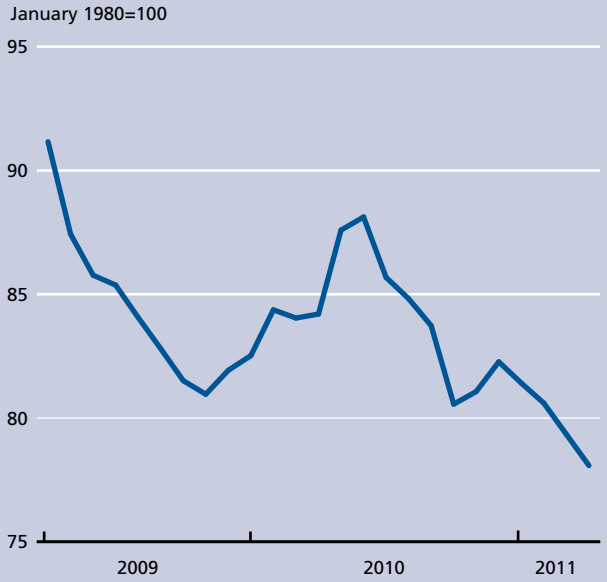
International fertilizer quotations are on the rise, especially those for urea, diammonium phosphate (DAP) and potash. Rising crop prices have translated into higher demand for fertilizers since the beginning of 2011. Large purchases by major importing countries such as Brazil, India and Thailand, have contributed to the price firmness, which is expected to continue as demand in Europe and the United States gathers pace. Rising petroleum and natural gas prices were also a factor underpinning fertilizer prices. There is some uncertainty in global fertilizer supply, owing to the status of China's export tax, currently at 7 percent. With substantial pressure for increased global crop production this year, fertilizer usage could further intensify, resulting in even higher quotations. In addition, the prospect of additional gains in crude oil prices could push the cost of derived nitrate products, which would also shore up fertilizer prices for the remainder of 2011.



Sources: IMF, World Bank

Price-adjusted major currencies US Dollar Index: April 2009 to April 2011

Since June 2010 the US Dollar has fallen almost interruptedly against major currencies, losing around 12 percent of its value in real terms. The decline in the dollar has given significant support to commodity prices in world markets over this period.



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

Global food import bill to reach new heights in 2011

The aggregate cost of imported foodstuffs at the world level could reach a record USD 1.29 trillion in 2011, some 21 percent more than in 2010, and surpassing the trillion dollar mark for the third time in the past four years.

Global food import bills this year are anticipated to be strongly characterized by sharply rising expenditures on grain based products and vegetable oils. Purchases of food commodities falling within these two categories alone are expected to account for 40 percent of the year-on increase of USD 228 billion.

With the exception of rice, which is expected to rise moderately only, import costs of all other foodstuffs are also expected to rise markedly at the aggregate level. Individual product bills are forecast to register double-digit percentage growth from 2010, reaching record levels this year. For instance, livestock products could rise on average by 17 percent, sugar and beverages by around 26 percent and vegetables and fruits by 13 percent. Expenditures on the latter group could climb to USD 223 billion, firmly establishing vegetables and fruits as the most expensive in the globally traded food basket.

Increased import volumes and soaring world prices, in the context of a falling US Dollar (the standard denomination of international quotations) and sustained economic growth in key global destinations, are, in most instances, the principal factors behind these prospects. The expected increases in bills would have been much higher, if it were not for a protracted fall in international freight costs, a tendency which began last year and has continued in the first half of 2011.

Market indicators

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

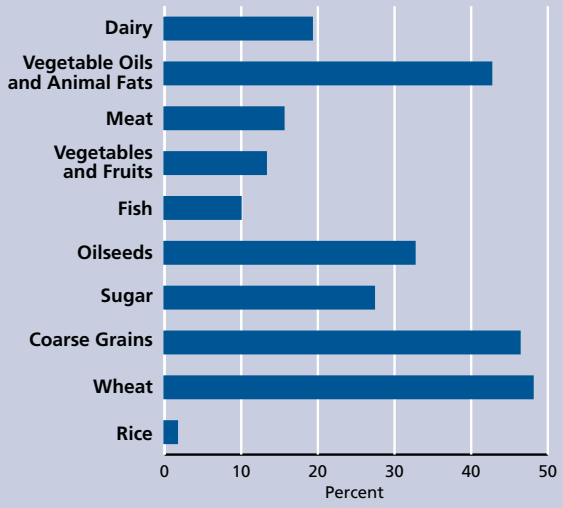
	World		Developed		Developing		LDC		LIFDC		Sub-Saharan Africa	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
TOTAL FOOD	**1 060.1**	**1 287.9**	**693.9**	**831.9**	**366.2**	**456.0**	**25.7**	**33.5**	**165.5**	**209.6**	**28.2**	**36.8**
Vegetable and Fruits	197.1	223.1	155.5	176.0	41.6	47.1	2.4	2.7	16.5	18.7	2.1	2.4
Cereals	134.8	189.2	64.4	90.6	70.5	98.6	8.0	11.2	29.4	41.9	9.6	14.4
Meat	113.7	134.9	84.4	98.7	29.3	36.2	1.4	1.7	6.9	8.4	1.7	2.0
Fish	103.3	113.6	79.6	90.1	23.7	23.4	0.5	0.5	7.9	7.9	2.5	2.5
Dairy	85.9	102.4	58.9	70.1	27.0	32.2	1.9	2.3	10.8	13.3	2.3	2.6
Vegetable, Oils and Animal Fats	86.9	123.9	41.0	58.0	45.9	66.0	4.8	6.9	28.5	40.1	3.3	4.9
Oilseeds	62.1	82.4	21.5	28.6	40.6	53.8	0.7	0.6	30.5	41.3	0.2	0.2
Sugar	50.2	63.9	26.9	36.1	23.3	27.8	2.9	4.0	13.1	14.3	2.9	3.6

The cost of purchasing food on the international market place for the most economically vulnerable groups is set to soar in 2011. Low-Income Food Deficit Countries (LIFDCs) expenditures could register a 27 percent jump, but, of all economic groups, it is the bill of the Least Developed Countries (LDCs) that is expected to climb the most, at 30 percent, far exceeding the increase at the global level and, approaching the record increases of the 2007-2008 episode. Indeed, the sheer encumbrance facing some of the world's poorest countries in importing food can be contrasted against that of developed nations, whose food import bills are likely to rise by only 20 percent from 2010. Putting this in a broader perspective, expenditures on imported foodstuffs for vulnerable countries could account for roughly 18 percent of all their expenditures on imports, compared to a world average of around 7 percent .

Worryingly, escalated bills for these groups do not necessarily imply greater food availability, as in numerous LDCs and LIFDCs increased procurement of basic foodstuffs, especially staples from international markets will only compensate for falling domestic supply. For others, however, the composition of the imported food basket by and large mirrors sustained economic growth.

Forecast changes in global food import bills by type: 2011 over 2010 (%)

Global import bills by product are expected to reach record levels in 2011. Increased import volumes and soaring world prices, in the context of a falling US Dollar (the standard denomination of international quotations) and sustained economic growth in key global destinations, are, in most instances, the principal factors behind these prospects.



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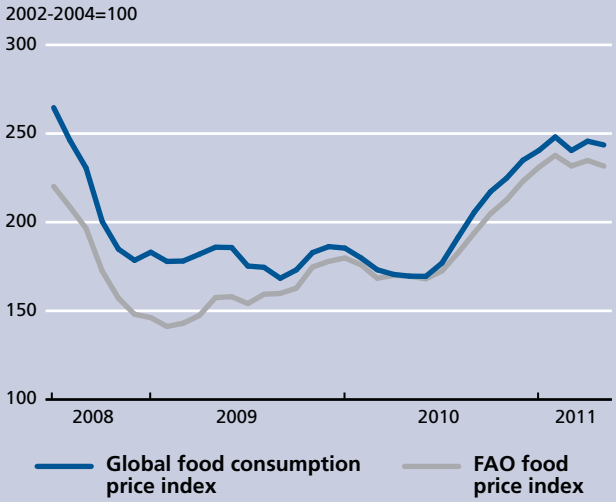
THE FAO PRICE INDICES

FAO Global Food Consumption Price Index

The FAO Global Food Consumption Price Index tracks changes in the cost of the global food basket as depicted by the latest FAO world food balance sheet (see http://faostat.fao.org/). After falling to almost a three-year low in June 2010, the index rose uninterruptedly, reaching a 31 month high of 248 points in February 2011, before falling slightly to 244 points in May. Over the past twelve months, the cost of the typical food basket around the world has risen by 48 percent in real terms. Sustained rises in the price of grains, which carry a higher weight in food consumption, are responsible for a large part, but across the board increases in quotations of most other commodities, especially livestock products in recent months and vegetable oils in the latter half of last year, also contributed.

The FAO global food consumption price index and FAO food price index: July 2008 to May 2011



FAO Food Price Index *

The **FAO Food Price Index** (FFPI) averaged 232 points in May 2011, down 1 percent from the revised estimate of 235 points in April and 37 percent higher than in May 2010. Declines in international prices of cereals and sugar were responsible for the slight decrease in the May average value of the index; more than offsetting increases in meat and dairy prices with oils largely unchanged. The FFPI has been hovering above 231 points since the start of the year and hit its all time high of 238 points in February.

The **FAO Cereal Price Index** averaged 262 points in May, down 1 percent from April but 69 percent higher than in May 2010. In spite of unfavourable weather negatively influencing crop prospects in Europe and North America, grain prices averaged lower in May. Expectation of large exportable supplies in the Russian Federation and Ukraine coupled with stronger US Dollar and weaker oil prices also put downward pressure on prices.

The **FAO Oils/Fats Price Index** remained unchanged in May, at 259 points. While international soybean oil prices decreased slightly thanks to larger than expected soy supplies in Latin America, palm oil prices stayed firm despite rising production in Southeast Asia. Overall, the index remains historically high and up 52 percent from May 2010, reflecting the current tightness of supply and demand, which the market does not expect will end soon.

The **FAO Meat Price Index** averaged 183 points in May, slightly above the revised April value of 181, but 10 percent more than in January. Since February, the index has been hitting new highs every month, sustained by record beef and sheep prices, but also firming poultry and pigmeat quotations.

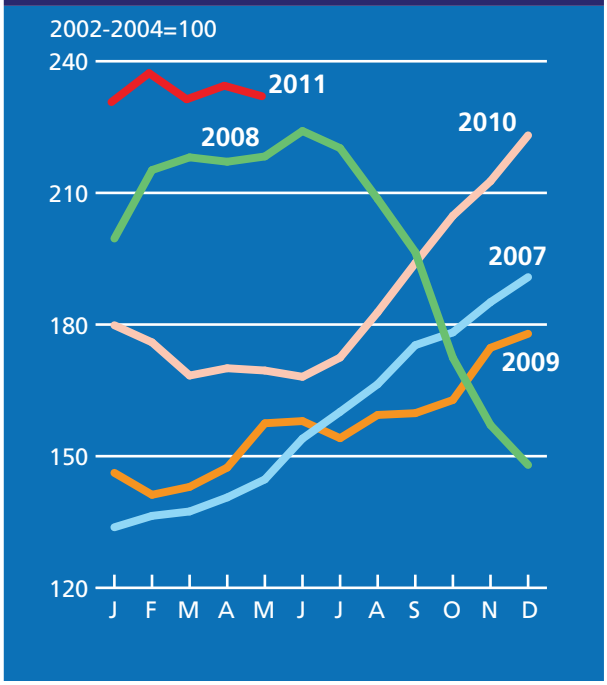
The **FAO Dairy Price Index** averaged 231 points in May, up slightly from April. Dairy prices rose very fast from September 2010 to March 2011, reflecting supply constraints and rebounding import demand. Prices of the major dairy products changed little compared with April, with the exception of cheese which gained 2 percent.

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

Market indicators

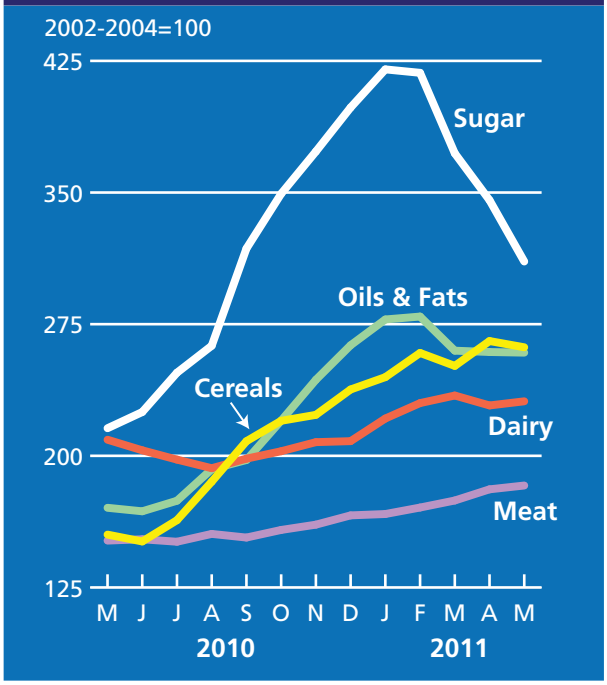
The **FAO Sugar Price Index** averaged nearly 311 points, down 10 percent from April and 26 percent below its January record. The recent decline was prompted by prospects of increased market availability, as the new crushing season begins in Brazil, and larger than anticipated production in Thailand. However, strong short-term demand led international sugar prices to level off somewhat in the last week of May.

FAO Food Price Index



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

Food Commodity Price Indices



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	86	68	123
2002		90	90	82	95	87	98
2003		98	97	95	98	101	101
2004		112	114	123	107	112	102
2005		117	120	135	103	104	140
2006		127	119	128	121	112	210
2007		159	125	212	167	169	143
2008		200	153	220	238	225	182
2009		157	133	142	174	150	257
2010		185	152	200	183	193	302
2010	May	170	152	209	155	170	216
	June	168	152	203	151	168	225
	July	172	151	198	163	174	247
	August	183	156	193	185	192	263
	September	194	153	198	208	198	318
	October	205	158	203	220	220	349
	November	213	161	208	223	243	373
	December	223	166	208	238	263	398
2011	January	231	167	221	245	278	420
	February	238	171	230	259	279	418
	March	232	175	234	251	260	372
	April	235	181	229	265	259	346
	May	232	183	231	262	259	311

[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.

The report is printed on ecological paper

Trade and Markets Division

Information, Analyses and Forecasts

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 (June and November) 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, French, Spanish and Chinese.

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 early May 2011.

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