F P P P

Food Outlook Global Market Analysis

FOCUS

In spite of strong gains in recent weeks, international prices of most agricultural commodities have fallen in 2009 from their 2008 heights, an indication that many markets are slowly returning into balance, in sharp contrast to what was witnessed this time last year. The apparent easing of market conditions is reflected in the benchmark FAO Food Price Index, which has fallen by one-third from last June's peak.

 \mathbf{S} o far, the improvement has largely concerned cereals, the critical sector for food security, after production in 2008 overshot prior expectations, yielding even larger crops than originally forecast. The increased global production was sufficient to meet demand for food and other uses but also facilitated a replenishment of global reserves to pre-crisis levels. With the new 2009/10 marketing seasons commencing, prospects continue to be positive, as world cereal production is expected to be the second largest ever, after last year's record.

By contrast, for oilseed products and sugar, production setbacks in major producing countries together with expanding consumption are stirring up prices on world markets. And the surge in soybean quotations in recent weeks, on the back of shrinking world reserves, is emerging as a cause for concern given its strong bearing on food and feed prices.

On the other hand, expansions in fish, meat and milk production have coincided with faltering demands, in the wake of slowing or contracting economies and recurring animal diseases. Prices have tumbled, seriously eroding the profitability of the sectors.

T he impact of sudden and sharp corrections to high prices of last year in several markets will have major repercussions for many producers. That markets can swiftly swing from shortages into surpluses, especially when trade is thin, is being illustrated by recent developments in the dairy economy, which, following sharp recovery in outputs, has seen prices plummet. The return to the use of export subsidies, following three years of extensive use of export restrictions bears evidence of such extremes.

Lower international prices are largely behind the latest forecast drop in the global food import bills in 2009, by as much as USD 226 billion, with lower expenditures on cereals accounting for over half of the reduction. Despite these welcome declines, the deteriorating economic environment in which the falls are taking place could offset much of the benefit. Eroding purchasing power through a combination of falling incomes and real exchange rates over much of the past twelve months afflicts the affordability of food however cheap it has become on the international market place.

Indeed, concerns over the economic downturn and its potential negative impact on the demand for higher value food, especially livestock and fish products, superseded fears associated with surging prices that prevailed last year. But the growing linkages between the agricultural sector and the energy, financial and currency markets make them increasingly vulnerable to external shocks. In this connection, a continuation of the weakening of the US Dollar and of the sharp rebound in energy prices, witnessed in recent weeks, could exert renewed upward pressure on international prices. However, barring major crop setbacks, with world staple food stocks at more comfortable levels than in 2008, the food economy looks less vulnerable to those external developments than was the case last year.

TABLE OF CONTENTS

Market summaries	2-10
Market assessments	11-51
Cereals	12
Wheat	13
Coarse grains	18
Rice	22
Oilseeds, Oils and Oilmeals	26
Sugar	33
Meat and meat products	37
Milk and milk products	41
Fish and fishery products	45
Ocean freight rates	50
Special features Investment in United States	52-57
Discussion of the Possible Impact	
on Commodity Prices	
Appendix tables	58-85
Market indicators food import	

Market indicators, food import bills and FAO Price Indices 86-91

FAO food price indices (2002-2004=100)



Cereals market summary

While world cereal production is heading towards a modest decline in 2009, it will still be the second highest after last year's record. Total cereal utilization will expand in the new season (2009/10), albeit at a slower rate than in 2008/09. Feed utilization is expected to be most hit by the current economic slow down, and register only a modest increase, but growth in industrial use of cereals may also lose steam in the new season. Food cereal consumption is expected to keep up with population growth, at the global and even national levels in most countries. Overall, the anticipated decline in world cereal production is likely to be offset by a draw down from stocks carried-over from the current season, and as such, supply is foreseen to be sufficient to meet the expected demand. However, in the current economic environment, there is much uncertainty, especially with regard to its effects on demand. In addition, given the close linkages between cereal markets and other agricultural commodities as well as energy markets, extra caution is needed in interpreting the current supply and demand forecasts and price developments during the new season.

World cereal market at a glance ¹

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	n	nillion tonne	s	%
WORLD BALANCE				
Production	2 131.8	2 287.2	2 218.8	-3.0
Trade	272.6	266.3	256.6	-3.6
Total utilization	2 120.2	2 201.7	2 230.4	1.3
Food	1 013.0	1 028.5	1 042.5	1.4
Feed	748.3	772.5	777.1	0.6
Other uses	358.9	400.7	410.8	2.5
Ending stocks	444.6	528.4	520.9	-1.4
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	152.7	153.2	153.3	0.1
LIFDC (Kg/year)	135.4	135.7	136.0	0.3
World stock-to-use ratio (%)	20.2	23.7	23.4	
Major exporters' stock-to- disappearance ratio (%)	13.9	17.4	16.7	
FAO cereal price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	167	238	181*	-31

* Jan-May 2009

¹ Rice in milled equivalent



Cereal production, utilization and stocks

Contact person:

Abdolreza Abbassian Phone: +39-06-57053264 E.mail: Abdolreza.Abbassian@fao.org

Wheat market summary

nternational wheat prices increased considerably in recent weeks. While a weakening United States Dollar has been a factor, changes in outside markets, including the recent recovery in oil prices and sharp gains in many other agricultural commodity markets, have also been supportive to wheat. In this context, the possibility for international wheat prices to strengthen further cannot be ruled out but, based on the current supply and demand indications, such a gain would be limited. Indications suggest that 2009 will witness another large global wheat harvest, second only to last year's record, which is a positive development from the world supply and global food security perspectives. In fact, stocks in the new season are likely to remain unchanged from their opening level with world production closely matching demand. While the global economic slow down may have little direct implications for wheat consumption, international trade in wheat is expected to contract significantly. This decline would primarily reflect the expected increase in production in several wheat importing countries which could lessen their imports.

World wheat market at a glance

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	т	illion tonn	es	%
WORLD BALANCE				
Production	610.3	684.6	655.8	-4.2
Trade	112.6	123.8	114.0	-7.9
Total utilization	618.2	644.7	655.0	1.6
Food	447.0	451.8	456.4	1.0
Feed	102.1	120.3	126.5	5.1
Other uses	69.1	72.7	72.1	-0.8
Ending stocks	151.6	191.3	192.4	0.5
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	67.4	67.3	67.1	-0.2
LIFDC (Kg/year)	54.7	54.7	54.8	0.1
World stock-to-use ratio (%)	23.5	29.2	29.8	
Major exporters' stock-to-	10.7	17.6	17.1	
disappearance ratio (%)				
Wheat price index * (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	179	236	161**	-45

* Derived from International Grains Council (IGC) Wheat Index

** Jan-May 2009

Wheat stocks and ratios



Contact persons:

Abdolreza Abbassian Phone: +39-06-57053264 E.mail: Abdolreza.Abbassian@fao.org

Paul Racionzer Phone: +39-06-57052853 E.mail: Paul.Racionzer@fao.org

Coarse grains market summary

nternational prices rose sharply in recent weeks, supported by production shortfalls in South America and outside factors, in particular the surge in soybeans and renewed strength in crude oil prices. Tightening export supplies of coarse grains and reduced feed wheat availability are likely to sustain prices in the new season, but markets remain vulnerable to unfavourable macroeconomic developments and factors influencing demand negatively. The global economic downturn is expected to depress feed demand while the growth in the industrial use of coarse grains for biofuels may also be less pronounced than in the previous two or three seasons. The forecast drop in production in 2009, coupled with an anticipated increase in utilization, albeit much smaller than in recent years, is expected to result in a decline in inventories. World trade in 2009/10 is forecast to change little compared with 2008/09, remaining well below the record in 2007/08.

World coarse grains market at a glance

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	т	illion tonn	es	%
WORLD BALANCE				
Production	1 080.4	1 142.3	1 098.5	-3.8
Trade	129.8	111.6	112.0	0.3
Total utilization	1 064.1	1 107.1	1 117.8	1.0
Food	187.2	191.6	194.2	1.3
Feed	634.4	640.3	638.7	-0.2
Other uses	242.5	275.3	284.9	3.5
Ending stocks	183.8	216.9	201.4	-7.2
SUPPLY AND DEMAND INDIC	CATORS			
Per caput food consumption:				
World (kg/year)	28.2	28.5	28.6	0.1
LIFDC (Kg/year)	50.5	50.9	50.8	-0.3
World stock-to-use ratio (%)	16.6	19.4	17.8	
Major exporters' stock-to-	14.1	16.0	13.5	
disappearance ratio (%)				
FAO coarse grains price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	154	211	161*	-26

* Jan-May 2009



Coarse grains stocks and ratios

Contact persons:

Abdolreza Abbassian Phone: +39-06-57053264 E.mail: Abdolreza.Abbassian@fao.org

Paul Racionzer Phone: +39-06-57052853 E.mail: Paul.Racionzer@fao.org

Rice market summary

nternational rice prices have followed contrasting movements since November 2008, with the widely traded Indica rice varieties incurring steep falls, while Japonica rice prices continued to be supported by prospects of tight supplies. In general, rice prices have yet to fall back to 2007 levels, despite relatively large market availabilities arising from bumper crops in 2008. Much of the price rigidity reflects policies of major exporting countries, either in the form of producer price support or export curbs, which are reducing the volumes of rice flowing to world markets. International trade in rice may recover somewhat in 2009, as less prohibitive prices are expected to stimulate imports, especially in Asia, Europe, North America and South America. The increase would also be facilitated by a continuing easing of export restrictions. The bumper crops harvested in 2008 and favourable production prospects in 2009 are expected to allow for an increase in overall rice consumption in 2009, but also for a build up of 2009 global rice inventories, which may reach their highest level since 2002.

World rice market at a glance

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	r	nillion tonn	es	%
WORLD BALANCE (milled basi	is)			
Production	441.1	460.3	464.5	0.9
Trade ¹	30.2	30.9	30.6	-0.8
Total utilization	437.9	449.8	457.6	1.7
Food	378.7	385.2	391.9	1.8
Ending stocks	109.2	120.1	127.2	5.9
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
World (kg/year)	56.8	57.1	57.3	0.4
LIFDC (Kg/year)	69.4	69.6	69.7	0.1
World stock-to-use ratio (%)	24.3	26.3	27.2	3.6
Major exporters' stock-to-	17.0	18.7	19.6	4.8
disappearance ratio (%) ²				
FAO rice price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	161	295	270*	-0.1

¹ Calendar year exports (second year shown)

² Major exporters include India, Pakistan, Thailand, the United States of America 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/es/esc/en/15/70/highlight_71.html

* Jan-May 2009



Global rice closing stocks and stock-to-use ratio

Contact person:

Concepción Calpe Phone: +39-06-57054136 E.mail: Concepcion.Calpe@fao.org

Oilseeds market summary

ver the last two months, international prices in the oilseeds complex have firmed again, reflecting concerns about a progressive tightening of global 2008/09 supplies, in particular of soybeans and derived products, following unprecedented crop shortfalls in South America and sustained import demand, in particular from China and India. The production shortfalls have led to a reduction in export availabilities, causing additional strain on inventories and increasing the dependence of the market on a limited number of suppliers. These circumstances suggest that world prices for oilseeds and products could remain firm and possibly strengthen further during the remainder of the current season. The current market tightness and price firmness could also spread into the next season, considering that, irrespective of a likely revival in global oilseed production, 2009/10 supplies of oils and meals will be conditioned by low carry-in stocks.

World oilseeds and products markets at a glance

	2006/07	2007/08 estim.	2008/09 f'cast	Change 2008/09 over 2007/08
	п	nillion tonn	es	%
TOTAL OILSEEDS				
Production	418.7	403.1	405.9	0.7
OILS AND FATS				
Production	152.7	155.5	160.4	3.2
Supply	173.8	177.9	181.7	2.1
Utilization	151.5	156.7	161.6	3.1
Trade	76.6	80.5	83.6	3.8
Stock-to-utilization ratio (%)	14.7	13.6	13.2	
MEALS AND CAKES				
Production	106.3	101.7	100.1	-1.6
Supply	121.8	119.6	114.4	-4.3
Utilization	102.5	104.9	103.2	-1.5
Trade	58.6	62.9	60.4	-4.0
Stock-to-utilization ratio (%)	17.5	13.6	12.6	
FAO price indices (Jan-Dec) (2002-2004=100)	2007	2008	2009*	Change: Jan-May 2009 over Jan-May 2008 %
Oilseeds	149	205	152	-33
Oilmeals/cakes	163	195	175	-15
Oils/fats	169	225	142	-46

Source: FAO

Note: Refer to Table 8 for further explanations regarding definitions and coverage * Jan-May 2009



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

Contact person:

Peter Thoenes Phone: +39-06-57053498 E.mail: Peter.Thoenes@fao.org

Sugar market summary

Cince November 2008 world sugar prices have risen steadily, reaching a threeyear high in May 2009. The price strength was prompted by the prospects of a much reduced crop in India, the world's second largest sugar producer, which is likely to convert the country from a net exporter in 2007/08 to a net importer in 2008/09. World sugar production is forecast to decline by 5 percent in 2008/09 from the record 2007/08 level, in part driven by the contraction in India but also in Australia, the European Union, Pakistan and the United States. By contrast, world sugar consumption is set to expand, albeit at a slower rate than in the past two years, propelled by sustained demand in the developing countries. As a result, consumption is expected to outstrip production for the first time since 2005/06, bringing global carry-over inventories down. Larger sugar exports are foreseen from Brazil, as high world sugar prices relative to the domestic ethanol prices, encourage the country to shift more supplies to the international sugar market. These exports should help boost the volume of sugar trade by 6 percent in 2008/09. International quotations are expected to remain firm, at least for 2008/09, sustained by prospects of large imports by India.



World production and consumption of sugar

	2006/07	2007/08 estim.	2008/09 f'cast	Change: 2008/09 over 2007/08
	m	nillion tonne	es	%
WORLD BALANCE				
Production	166.1	167.6	158.5	-5.4
Trade	46.7	47.3	50.2	6.0
Utilization	154.0	158.4	162.2	2.4
Ending stocks	73.3	80.9	76.3	-5.7
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
World (kg/year)	22.5	23.1	23.4	1.3
LIFDC (Kg/year)	12.9	13.4	13.7	1.8
World stock-to-use ratio (%)	47.6	51.1	47.0	
ISA Daily Price Average (US cents/lb)	2007	2008	2009*	Change: Jan-May 2009 over Jan-May 2008 %
	10.08	12.80	13.78	8.8

* Jan-May 2009

International Sugar Agreement (ISA)

Contact person:

El Mamoun Amrouk Phone: +39-06-57056891 E.mail: ElMamoun.Amrouk@fao.org

Meat and meat products market summary

nternational meat prices have dropped steadily since reaching peak levels in October 2008, but have not yet returned to the levels observed in the first months in 2007. The decline in prices was most pronounced for bovine, ovine and poultry meat, while pig meat prices remained relatively stable. The fall of meat prices largely reflects the weakening of demand, as a worsening of the global economic environment and the recurrence of animal diseases are dampening consumption growth, especially in the developed countries. Global meat production in 2009 is set to reach 286 million tonnes, in carcass weight equivalent (CWE), up 1.2 percent from 2008. This represents a downward revision from previous estimates, due to protracted dry conditions in South America, signs of a slowing down of poultry production growth in Brazil and China, and the recurrence of animal diseases. Pigmeat is expected to account for much of the increase, with some gains also anticipated for poultry. Little growth in bovine and ovine meat production is currently anticipated. World meat trade is expected to contract by 4 to 5 percent in 2009, with exports set to hover around 23.4 million tonnes. The drop is anticipated to result mainly from reduced shipments of pig and poultry meat, while little change is now foreseen for beef and sheep meat.

(2002 - 2004 = 100)200 Poultry 175 Bovine 150 125 Piameat 100 Total meat 75 00 01 02 03 04 05 06 07 J F M A M J J A S O N D I F 2008 2009

Contact person:

Pedro Arias Phone: +39-06-57054098 E.mail: PedroMarcelo.Arias@fao.org

World meat markets at a glance

	2007	2008 estim.	2009 f'cast	Change: 2009 over
				2008
	т	illion tonne	25	%
WORLD BALANCE				
Production	274.4	282.1	285.6	1.2
Bovine meat	65.1	64.9	65.1	0.3
Poultry meat	90.1	93.7	94.7	1.1
Pigmeat	99.8	103.9	106.1	2.1
Ovine meat	14.0	14.2	14.2	0.5
Trade	23.1	24.6	23.4	-4.8
Bovine meat	6.9	6.8	6.8	0.4
Poultry	9.8	10.5	10.2	-3.1
Pigmeat	5.2	6.1	5.4	-11.3
Ovine meat	0.9	0.9	0.9	0.7
SUPPLY AND DEMAND INDIC	CATORS			
Per caput food consumption	:			
World (kg/year)	41.5	42.2	42.3	0.3
Developed (Kg/year)	82.4	81.9	81.7	-0.2
Developing (kg/year)	30.4	31.5	31.8	1.0
FAO meat price index (2002-2004=100)	2007	2008	2009*	Change: Jan-May 2009 over Jan-May 2008 %
	112	128	115.7	-6

Jan-May 2009

Price indices of selected meat products

Dairy market summary

emand weakness stemming from the financial crisis and economic recession that started in late 2008, particularly in certain major importing countries such as the Russian Federation, has accentuated the 2008 cyclical downturn in international dairy markets. International prices have dropped to a five-year low. There has been a resumption of export subsidies and, in key exporting countries, stocks are rising. As a result, production is growing more slowly in most countries and even declining in certain major exporting states where lower prices and relatively high feed costs have lowered profitability. Global milk production has been revised down to 699 million tonnes in 2009, which is still 1.7 percent above last year. Prospects for trade in dairy products remain highly uncertain and will depend on how import demand evolves.

World dairy markets at a glance

	2007	2008 estim.	2009 f′cast	Change: 2009 over 2008
	million	tonnes milk	equiv.	%
WORLD BALANCE				
Total milk production	676.1	687.7	699.0	1.6
Skim Milk Powder (SMP)	24.1	24.6	25.0	1.6
Whole Milk Powder (WMP)	30.8	31.6	32.1	1.6
Butter	60.3	62.3	64.0	2.7
Cheese	85.9	87.9	89.8	2.2
Other products	475.1	481.3	488.0	1.4
Total trade	39.4	39.7	39.4	-0.8
SUPPLY AND DEMAND INDICAT	ORS			
Per caput food consumption:				
World (kg/year)	102.4	103.1	103.6	0.5
Developed countries (Kg/year)	245.4	246.9	249.6	1.1
Developing countries (Kglyear)	64.0	65.5	66.9	2.1
Trade - share of prod. (%)	5.8	5.8	5.6	
FAO dairy price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	212	220	119*	-52

* Jan-May 2009



Monthly index of international prices of selected dairy products (2002-2004=100)

Contact person:

Pedro Arias Phone: +39-06-57054098 E.mail: PedroMarcelo.Arias@fao.org

Fish and fishery products market summary

orld production of fish products rose modestly in 2008, owing to an expansion in aquaculture, albeit much slower than in previous years, while capture fisheries remained stable. Production prospects for 2009 are more subdued with growth foreseen to be less than 1 percent, as falling prices for a number of the most important traded farmed species and disease problems are prompting a contraction of the sector in several countries. Although trade in fish reached a record value in 2008, surpassing USD 100 billion for the first time, the outlook for 2009 is dominated by overriding concerns over the impacts of the economic crisis on demand and prices. Sales are sluggish in all major markets and prices and margins are under pressure for most seafood products. The only exception is for species facing tight supply situations, due to lower catching guotas or production problems in aquaculture. In this respect, the implosion of the Chilean salmon industry in 2009, following a virus attack, is a warning sign for many countries targeting high growth in the aquaculture sector.

World fish markets at a glance

	2007	2008	2009 estim.	Change 2009 over
				2008
	n	nillion tonnes		%
WORLD BALANCE				
Production	140.4	141.6	142.0	0.3
Capture fisheries	90.1	90.0	90.0	0.0
Aquaculture	50.3	51.6	52.0	0.8
Trade value (exports USD billion)	92.8	99.5	98.0	-1.5
Trade volume (live weight)	52.9	52.6	52.0	-1.1
Total utilization				
Food	112.8	113.9	114.4	0.4
Feed	20.8	20.6	20.4	-1.0
Other uses	6.8	7.1	7.2	1.4
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
Food fish (kg/year)	16.9	16.9	16.8	-0.3
From capture fisheries (kg/year)	9.4	9.3	9.2	-1.3
From aquaculture (kg/year)	7.5	7.6	7.6	1.0

Fish price index (2005 = 100)



Contact persons:

Audun Lem Phone: +39-06-57052692 E.mail: Audun.Lem@fao.org

Helga Josupeit Phone: +39-06-57056313 E.mail: Helga.Josupeit@fao.org

10

MARKET ASSESSMENTS

MARKET ASSESSMENTS

CEREALS

World cereal production set to decrease in 2009

World cereal production in 2009 is forecast to reach 2 219 million tonnes (including rice on a milled basis), 3 percent down from last year's record high but nonetheless the second largest crop ever gathered. Reductions are forecast for wheat and coarse grains while the global rice crop may register another marginal increase. Early indications point to smaller grain crops, partly as a result of a return to trend yields after strong productivity gains last year, but also a reduction in overall plantings (mostly wheat) again after last year's exceptional level. In several major producing countries, farmers have been discouraged by poor expected returns: sharply lower grain prices and relatively high input costs.

FAO's first forecast for world cereal utilization in 2009/10 suggests a relatively weak growth of around 1.3 percent from the estimated 2008/09 level, to 2 230 million tonnes. This compares with nearly 4 percent growth in the previous season. World food consumption of cereals is likely to rise by roughly 1.4 percent to 1 042 million tonnes in 2009/10, allowing average global per caput consumption of cereals to remain stable at around 153 kg per person. Total feed usage is forecast to increase by less than 1 percent, driven by much slower growth in the Commonwealth of Independent State (CIS) countries, sharp contractions in the United States and in several countries in South America. On balance, feed utilization is expected to stagnate or even fall in developed countries as a whole, but to rise in developing countries, though well below the estimated 3.4 percent expansion



Figure 1. Cereal production, utilization and stocks

Table 1. World cereal market at a glance ¹

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	n	%		
WORLD BALANCE	2 4 2 4 0	2 207 2	2 240 0	2.0
Production	2 131.8	2 287.2	2 218.8	-3.0
Trade	272.6	266.3	256.6	-3.6
Total utilization	2 120.2	2 201.7	2 230.4	1.3
Food	1 013.0	1 028.5	1 042.5	1.4
Feed	748.3	772.5	777.1	0.6
Other uses	358.9	400.7	410.8	2.5
Ending stocks	444.6	528.4	520.9	-1.4
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	152.7	153.2	153.3	0.1
LIFDC (Kg/year)	135.4	135.7	136.0	0.3
World stock-to-use ratio (%)	20.2	23.7	23.4	
Major exporters' stock-to- disappearance ratio (%)	13.9	17.4	16.7	
FAO cereal price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over
. ,				Jan-May 2008 %
	167	238	181*	-31

* Jan-May 2009

¹ Rice in milled equivalent

last year. Continued strong growth in feed demand in Asia would account for much of the overall increase in developing countries' feed utilization. Industrial applications of cereals is another usage category that is expected to experience slower growth in the new season. This would mostly stem from slowing demand for cereals as a feedstock in the production of biofuels, which is forecast to reach 125 million tonnes, up 9 percent from 2007/08. This still represents a strong increase but much less so than the estimated expansion of 25 percent between 2008/07 and 2008/09. The deceleration in global cereal feedstock demand, where maize accounts for more than 90 percent, mostly reflects events in the United States.

Based on the aforementioned production and utilization prospects in 2009/10, world end-of-season cereal stocks for crop years closing in 2010 could decline slightly to 521 million tonnes. At this level, world reserves would be roughly 7 million tonnes, or 1.4 percent, smaller than their opening levels. This is not expected to result in any significant variation in the global stock-to-use ratio which is forecast to remain stable at roughly 23 percent, considerably up from the lows observed in the 2006/07 and 2007/08 seasons. Among the major cereals, world wheat inventories are forecast to remain unchanged, rice to increase, but coarse grains could decline.

FAO's first forecast for world cereal trade in 2009/10 is 257 million tonnes, down by nearly 4 percent from the estimated trade volume of 2008/09. This contraction mostly concerns wheat imports, which could fall by as much as 10 million tonnes in the new season, reflecting a strong anticipated recovery in wheat production in several major wheat importing countries, especially those situated in North Africa and in Asia. By contrast, aggregate trade in coarse grains is forecast to remain unchanged. An increase in maize imports would compensate for declines in nearly all other coarse grains, in particular barley. International trade in rice is forecast to increase marginally in 2009.

The FAO Cereal Price Index averaged 183 points in May 2009, up 4 percent from April but down 32 percent from April 2008 when the index peaked to its all time high of 274 points. The record 2008 cereal crop and the recovery in export supplies helped international prices to ease considerably during the 2008/09 season. Prospects for another good crop this year, bringing with it stable supplies, have kept prices under pressure but in recent months grain quotations have rallied helped by a weakening United States Dollar and external developments, including the recent surge in oil prices.

WHEAT

PRICES

International prices have increased sharply in recent weeks

Against the backdrop of a decline in world wheat production in 2009 and somewhat tighter supply prospects for the new season, wheat price increases have gathered momentum in recent weeks. International wheat quotations began rising consistently at the beginning of March 2009, gaining at least 15 percent overall. In May, the price of **United States' wheat (No.2 Hard Red Winter, f.o.b. Gulf)** averaged USD 266 per tonne, the highest since September 2008 but as much as 43 percent down from March 2008, the month when prices averaged USD 480 per tonne, an all time high (in nominal terms).

Wheat prices have also moved up in the futures markets. Less than favourable growing conditions in the United States and the sharp drop in production in Argentina continued to provide support to futures in recent weeks. The weakening United States Dollar and developments in

Table 2. World wheat market at a glance

	2007/08	2008/09	2009/10	Change
		estim.	f'cast	2009/10
				2008/09
	т	%		
WORLD BALANCE				
Production	610.3	684.6	655.8	-4.2
Trade	112.6	123.8	114.0	-7.9
Total utilization	618.2	644.7	655.0	1.6
Food	447.0	451.8	456.4	1.0
Feed	102.1	120.3	126.5	5.1
Other uses	69.1	72.7	72.1	-0.8
Ending stocks	151.6	191.3	192.4	0.5
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
World (kg/year)	67.4	67.3	67.1	-0.2
LIFDC (Kg/year)	54.7	54.7	54.8	0.1
World stock-to-use ratio (%)	23.5	29.2	29.8	
Major exporters' stock-to-	10.7	17.6	17.1	
disappearance ratio (%)				
Wheat price index *	2007	2008	2009	Change:
(2002-2004=100)				over Jan-May 2008 %
	179	236	161**	-45

* Derived from International Grains Council (IGC) Wheat Index ** Jan-May 2009

the macroeconomy, including oil price hikes and cautious optimism about the economic recovery, contributed to firmer wheat values. By the fourth week of May, wheat futures prices for September delivery on the Chicago Board of Trade (CBOT) rose to USD 229 per tonne, up 14 percent from the beginning of the month.

PRODUCTION

Smaller wheat harvest expected in 2009

FAO's latest forecast of global wheat production in 2009 stands at 656 million tonnes, some 4 percent down from last year's record but still well above the average of the past five years. The bulk of the decrease is expected among the world's top producing countries, in particular, the European Union, the Russian Federation and the United States. Recoveries are forecast elsewhere, such as in the Islamic Republic of Iran, Argentina and Syria, but while important at national/regional level, they will not be sufficient to offset the decline at the global level.

In **North America**, as of late May, the winter wheat crop in the United States is nearing harvest in the southern



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

Table 3. Wheat production: leading producers (2008 & 2009)

Country *	2008 estim.	2009 f″cast	2009 over 2008		
	million tonnes				
European Union	150.0	138.6	-8		
China (Mainland)	112.5	111.0	-1		
India	78.4	77.6	-1		
United States of America	68.0	55.1	-19		
Russian Federation	63.8	55.0	-14		
Canada	28.6	25.9	-9		
Pakistan	21.8	23.8	9		
Ukraine	25.9	19.1	-26		
Australia	21.4	22.0	3		
Turkey	17.8	20.0	12		
Kazakhstan	12.5	14.0	12		
Iran, Islamic Rep. of	9.8	13.5	38		
Argentina	8.3	9.6	16		
Egypt	8.0	7.8	-2		
Syria	2.1	4.0	92		
Other countries	55.8	58.8	5		
World	684.6	655.8	-4		

* Countries listed according to their position in global production (average 2007-2009)

states but planting of spring crops, which has been severely delayed by adverse weather, is still underway in the northern parts of the country. Assuming on one hand a 7 percent decrease in winter plantings combined with an expected decline in the spring wheat area, and on the other hand, a return to average yields after bumper levels last year, overall

Figure 3. CBOT wheat futures for September



output in 2009 is forecast to decrease by almost 19 percent to some 55 million tonnes. In Canada, with planting underway in May, current indications point to a wheat area similar to that of the previous year. Given a return to average yields after last year's high levels, the country's aggregate wheat production in 2009 is forecast to decrease by almost 10 percent to about 26 million tonnes.

In Europe, wheat area is down in several major producing countries, particularly in the east of the region. In the European Union, wheat production is tentatively forecast at about 139 million tonnes, almost 8 percent lower than 2008's record output. The decline is expected partly due to a 3 percent drop in plantings, with land being shifted back to oilseeds or voluntary set-aside after last year's exceptionally high area, and also due to a return to normal yields after high levels in 2009. In the CIS countries of Europe, output is forecast to decline from last year's bumper level. In the Russian Federation, despite an estimated increase in the winter wheat area, reduced spring plantings are reported to have led to a smaller overall wheat area. Assuming average yields, the crop is forecast at 55 million tonnes, almost 14 percent down from 2008. In Ukraine adverse spring weather has deteriorated crop prospects and output looks set to fall sharply from last year.

In Asia, prospects for the winter wheat crop in the Far East countries have improved as the season has progressed, due to the arrival of rains in many of the earlier droughtstricken areas of China. Output in that country is now forecast at 111 million tonnes, just slightly below last year's level. In India, where the harvest is already underway, the wheat crop is expected to be similar to the 2008 level at about 78 million tonnes. Pakistan is one of the few major

14

wheat producing countries where output is forecast to register a significant increase this year, with production there rising by some 9 percent to almost 24 million tonnes. In the **Near East**, wheat crop prospects are also favourable and levels are expected to recover from last year's droughthit crop, especially in the Islamic Republic of Iran, where an almost 40 percent rise in production could be witnessed. Similarly, in the Asian CIS, better conditions in Kazakhstan, the subregion's main producer, should lead to a recovery in the wheat crop there after drought last year.

In the southern hemisphere, sowing of the 2009 winter wheat crops generally takes place from April through June. Below-average level of plantings is expected in South America, a response to expectations of poor wheat returns coupled with the impact of prolonged dry weather. In Argentina for instance, at the onset of the season, lower producer price prospects, high input prices and reduced access to credit already pointed to another below-average wheat area in 2009, but on top of that, a lack of rainfall could limit plantings even further. However, assuming a return to seasonal weather conditions for the remainder of the season, some improvement in yields from last year's drought-afflicted levels could lead to a crop of about 10 million tonnes in the country.

In **Oceania**, early indications suggest farmers in Australia will aim to produce an output close to, if not larger than, last year's good level. Although international grain prices have fallen sharply compared with a year ago, a significant weakening of its exchange rate against the United States Dollar means that prices for Australian producers denominated in their local currency remain relatively attractive. However, the final outcome will depend on rainfall in the main growing areas. As of late May, prospects were favourable in eastern parts where good rains fell during planting, but the situation was less certain in Western Australia. At this stage, based on the current planting intentions and assuming a normal weather pattern for the remainder of the season, the country's wheat output in 2009 is tentatively forecast to increase by about 3 percent from last year's level, to about 22 million tonnes, close to the record crop of 2003.

TRADE

Wheat trade expected to decline sharply in 2009/10

As the current 2008/09 (July/June) season for wheat is drawing to a close, attention is now being shifted towards prospects for 2009/10. FAO's first forecast for wheat trade in 2009/10 stands at 114 million tonnes, down as much as



8 percent, or 10 million tonnes from the estimated 2008/09 record volume. Almost all of the anticipated decline would be concentrated in developing countries, especially those located in Asia and North Africa. At almost 90 million tonnes, aggregate wheat imports by developing countries in 2009/10 would be the second highest on record, although more than 9 million tonnes below the 2008/09 high. While world wheat production is forecast to decline in 2009, the anticipated reduction is not expected to give rise to a larger volume of imports. This is mainly because most of the decrease in world wheat production in 2009 is expected in wheat exporting countries, whereas many wheat importing countries are forecast to collect bigger crops and therefore likely to rely less on the international marketplace to meet their domestic needs. In addition, even in countries where production is forecast to decline, carry-over stocks are in many cases more than adequate to compensate for smaller crops.

Total wheat imports in Asia are expected to fall by nearly 8 million tonnes, or 13 percent. The bulk of the decline is expected in the Islamic Republic of Iran where, following timely spring rains, this year's wheat production is forecast to rebound sharply from last year's drought-reduced level helping the country to lower its imports to 3 million tonnes. Higher production is also likely to cut imports significantly in Pakistan and Turkey. Moreover, China (Mainland) and India are likely to remain net wheat exporters given the prospect for near-record production in both countries in addition to large carry-over stocks from the current season. In Africa, where total imports are forecast to decline, most of the anticipated decrease reflects smaller import demand in Algeria and Morocco in response to an anticipated recovery

Figure 4. Wheat imports by region

in domestic production. However, deliveries to **Egypt**, the world's largest wheat importer, are forecast to increase further, to 8 million tonnes, because of rising demand and a slight decline in production. Imports by most countries in Sub-Saharan Africa are forecast to remain unchanged, totalling just over 12 million tonnes.

In other regions, wheat imports by numerous countries in Latin America and the Caribbean are forecast to either match or be slightly above 2008/09 levels. Higher imports by **Chile**, **Peru** and **Venezuela** are likely to be offset by a small decline in purchases by **Mexico**. Inflows to **Brazil**, the region's largest importer, are likely to remain unchanged at 2008/09 levels of around 6 million tonnes. Given the continuing export problems in Argentina, Brazil's main supplier, and more limited surpluses from **Paraguay** and **Uruguay**, Brazil may source substantial volumes from outside the **Mercosur** bloc. Elsewhere, in Europe, large carry-overs from the current season are envisaged to more than compensate for the anticipated reduction in production in the **European Union**, leading to some decline in regional imports.

Given the prospects for much smaller world trade in the 2009/10 season, competition among exporters for international market share is set to intensify. Aggregate supplies of wheat in major exporting countries are forecast to reach over 307 million tonnes, only 5 million tonnes less than in last year. Among the major exporters, only **Australia** and **Canada** are forecast to export more wheat into world markets, while shipments from **Argentina**, the **European Union** and the **United States** are likely to decline. Dry weather remains a major issue in the two major southern hemisphere exporting countries of Argentina and



Australia. Another factor with an important bearing on the final outcome for production and hence exports in the two countries is policy. In **Argentina**, the export tax policy is discouraging wheat plantings. In Australia, last year's abolishment of the single-desk export system resulted in deregulation for exports and that has given way to transport bottlenecks and delays in shipments in the latter half of the 2008/09 season. Among the CIS countries, shipments from the Russian Federation and Ukraine are forecast to decrease sharply after record sales in 2008/09, but still would stand as the second highest volume ever shipped. Both countries have large carry-overs and are expecting good harvests. Nonetheless, developments in exchange rates and freight will also be critical in determining the size of exports from the Black Sea countries to traditional, large wheat-importing destinations in North Africa and the Middle East. Exports from the landlocked **Kazakhstan** are forecast to increase significantly because of higher production. To expand its share in the lucrative markets of the Middle East, Kazakhstan is also building large terminals in the Islamic Republic of Iran.

UTILIZATION

World wheat utilization to increase in 2009/10

FAO's first forecast for global wheat **utilization** in 2009/10 is put at 655 million tonnes, up 1.6 percent from 2008/09 and over 2 percent above the long-term (ten-year) trend. High wheat prices resulted in a contraction in world wheat utilization in 2007/08 but improvements in world supplies, a return to more normal price levels stimulated higher wheat utilization in 2008/09 and this trend is likely to continue in 2009/10. While food consumption of wheat is expected to largely keep pace with world population growth, the increase in total utilization since 2007/08 is further driven by a rebound in its utilization for animal feed and industrial use (ethanol production), especially in the European Union.

World **feed use** of wheat is forecast to increase for the second consecutive season, reaching 127 million tonnes in 2009/10, up 5 percent from 2008/09 and as much as 24 percent higher than the season before that. Prospects for higher feed use in spite of the prevailing global economic slowdown primarily stem from an improvement in the wheat availabilities in the European Union. As much as 40 percent of its Member States' domestic production could be used for feed reaching 60 million tonnes in 2009/10, up 7 percent from 2008/09, buoyed by large supplies and high prices of soy meal. The increase in feed use in the European Union contrasts with the expectation of small contractions in feed

16

utilization in most other developed countries, particularly in the United States.

Wheat used for direct **human consumption** is forecast to reach 456 million tonnes in 2009/10. This represents an increase of roughly 1 percent over that estimated for 2008/09. At this level, per global average caput food consumption of wheat would remain stable at 67 kg. In the developing countries, total wheat used for food is forecast to reach 323 million tonnes prompting a slight decline, from 59.7 kg in 2008/09 to 59.4 kg in 2009/10, in average per caput intake. While figures vary considerably between individual countries, the small decline reflects marginal reductions in a few countries situated in Africa, but elsewhere, overall per caput food consumption levels are expected to remain similar to those in 2008/09.

STOCKS

World wheat inventories to remain stable

World wheat inventories by the close of the crop seasons in 2010 are forecast to reach 192 million tonnes, up marginally from their opening level and 27 percent above the 30-year low of 152 million tonnes in 2008. In spite of an anticipated 4 percent decline in world wheat production, world inventories may show an increase, as overall supplies are forecast to slightly exceed expected demand in 2009/10. Reflecting this development, the world **wheat stocks-touse ratio** is forecast to reach 29.8 percent, slightly higher than in both the 2008/09 season and the five-year average (2002/03-2007/08). This ratio would also be well over the 23.5 percent in the season before last when a tight world wheat balance pushed up world prices. Total wheat stocks held by the major exporters are forecast to reach 45 million tonnes, down marginally from their opening level. Notwithstanding their lower production prospects, smaller wheat exports from them in response to the expected slowdown in world import demand in 2009/10 stands as the main reason for fairly stable prospects for major exporters' ending stocks. In fact, **the ratio of stocks held by the major exporters as a group to their total disappearance** (i.e. domestic consumption plus exports) is forecast to reach 17.1 percent, compared with 17.6 percent in 2007/08 and only 10.7 percent in 2007/08.

The largest absolute increase in wheat stocks is forecast in **China** where ending inventories could reach 79 million tonnes, 6 million tonnes more than their opening level and the highest since 2002. Successive increases in wheat production levels in the country since 2006, amid a falling trend in per caput food consumption are among the main reasons for this sharp increase in its inventories. While China may export more wheat in the forthcoming season, the Government may be reluctant to release too much wheat into the domestic market as this could lower domestic prices and hence adversely affecting farmers' income. Inventories in India, another major producer and stockholder, is forecast to remain unchanged at a fiveyear high of 17.8 million tonnes. The country's inventories would remain large given the expectation of another bumper crop this year and limited export opportunities. In the Russian Federation, usually the largest wheat stockholder among the CIS countries, inventories may decline by 1 million tonnes, to 7 million tonnes, in spite of a much sharper decline in production. In contrast to record export sales in 2007/08, more limited export



Figure 6. Wheat stocks and ratios



Figure 7. Wheat stocks in China (Mainland) and India

opportunities in 2009/10 may prevent stocks to decline even more. A similar situation faces **Ukraine** where despite an anticipated massive production cut this year, stocks may decline by only 1 million tonnes, to 3 million tonnes, because of a likely reduction in exports instead.

COARSE GRAINS

PRICES

International prices becoming firmer

Deteriorating prospects for this year's production have been supportive to prices of coarse grains in recent weeks. Although demand, particularly for feed, is expected to remain subdued mostly as a result of the global economic slow down, international prices of coarse grains received some uplift from tightening supplies of feed wheat and a surge in soybean and meal prices. In May, the price of **United States' maize (No. 2 Yellow, Gulf)** averaged USD 180 per tonne, the highest since October 2008 but still some 36 percent below the peak reached in June 2008. Prices in the futures market have also increased sharply in recent weeks, helped by a sharp rise in

Table 4. World coarse grains market at a glance

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	m	illion tonn	es	%
WORLD BALANCE				
Production	1 080.4	1 142.3	1 098.5	-3.8
Trade	129.8	111.6	112.0	0.3
Total utilization	1 064.1	1 107.1	1 117.8	1.0
Food	187.2	191.6	194.2	1.3
Feed	634.4	640.3	638.7	-0.2
Other uses	242.5	275.3	284.9	3.5
Ending stocks	183.8	216.9	201.4	-7.2
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	28.2	28.5	28.6	0.1
LIFDC (Kg/year)	50.5	50.9	50.8	-0.3
World stock-to-use ratio (%)	16.6	19.4	17.8	
Major exporters' stock-to-	14.1	16.0	13.5	
disappearance ratio (%)				
FAO coarse grains price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	154	211	161*	-26

* Jan-May 2009

Figure 8. Maize export price (US no. 2 yellow, Gulf)





Figure 9. CBOT maize futures for December

energy markets and prices of soybeans. By the fourth week of May, the December 2009 contract at the CBOT hovered around USD 177 per tonne, the highest in six months. Tighter export supplies in South America are expected to boost sales from the United States and result in a significant decline in stocks in that country. This prospect is providing support to international prices while a weakening United States Dollar is also seen as sustaining high prices.

PRODUCTION

Drought sharply reduces South America's main 2009 maize crops but prospects remain satisfactory elsewhere

With the first of the major 2009 coarse grain crops already gathered or currently being harvested in several countries

Table 5. Coarse grain production: leadingproducers (2008 & 2009)

Country *	2008 estim.	2009 f″cast	2009 over 2008
		million tonnes	
United States of America	326.5	323.5	-1
China (Mainland)	175.4	172.2	-2
European Union	162.8	153.8	-6
Brazil	61.6	53.6	-13
India	38.0	37.8	0
Russian Federation	41.7	36.0	-14
Mexico	31.9	30.1	-6
Canada	27.4	25.4	-7
Nigeria	26.0	26.0	0
Argentina	27.0	17.4	-36
Ukraine	26.4	19.8	-25
Indonesia	16.3	17.0	4
Ethiopia	12.9	12.9	0
Turkey	10.8	11.7	9
South Africa	13.7	12.3	-10
Other countries	143.9	149.0	4
World	1 142.3	1 098.5	-4

* Countries listed according to their position in global production (average 2007-2009)

around the world, FAO forecasts world output of coarse grains in 2009 at 1 098 million tonnes, 3.8 percent down from last year's record level but still the second largest crop in history. Africa is the only region where output is foreseen to increase in 2009, and most of that in drought recovering North Africa. Aggregate output in Asia should remain virtually unchanged from last year's satisfactory level but throughout the other regions, smaller crops are expected on account of drought or lower planted area after exceptional high levels last year.

In **South America**, harvesting of 2009 main season **maize** crops started at the end of February and preliminary estimates indicate an aggregate production of some 75 million tonnes, about 18 percent below the 2008 record level. The sharp contraction is a consequence of reduced plantings and the prolonged drought that affected yields in several key producing areas. In Argentina for instance, maize production is forecast to fall by some 40 percent below the excellent harvests of 2008 and 2007 and 28 percent below the five-year average. A substantial decrease in maize production is also expected in Brazil where its first season's output is estimated at 33.7 million tonnes, some 16 percent below the previous year's record. In **Southern Africa**, the 2009 maize harvest is underway and preliminary estimates point to a record high production. A reduction of 11 percent in South Africa from the previous year will be more than compensated by improved harvests underway in other countries, mainly Malawi, Zambia and Zimbabwe.

In the northern hemisphere, planting of the major 2009 coarse grain crops is advancing. In North America, according to the United States Department of Agriculture's (USDA) Prospective Plantings Report, farmers in the country are expected to further reduce the area of **maize** in 2009, but only slightly to 34.4 million hectares, after planting 34.8 million hectares in 2008. Moreover, as was the case last year, the area removed from maize is expected to be mostly marginal land, where better returns are expected from soybean crops - a surer option for farmers. In the ten key maize producing states, where the highest yields are generally achieved, aggregate maize area is actually forecast to increase slightly compared with last year. Based on these early planting indications, and assuming normal weather for the remainder of the season, maize output in the United States is forecast at 307 million tonnes in 2009, virtually unchanged from last year's crop, which stood as the second highest on record.

In **Europe**, maize output is also forecast to fall from last year's high level when a particularly large area was



Figure 10. Soybean to maize ratio: Nearby* CBOT contracts during critical planting months

From a historical perspective, whenever the ratio exceeds two, the general bias favours soybean over maize, resulting in a shift of planting area from maize to soybeans sown, but would still equate to the five-year average level. Production is seen to ease back among main producers in the European Union after large crops last year, and adverse spring weather in Ukraine looks set to limit output there quite considerably compared with 2008.

This year's maize crop in **Asia** is forecast just marginally below last year's bumper level at 230 million tonnes. Production in China, by far the biggest producer in the region, is expected to remain well above the average of the past five years at 163 million tonnes.

Regarding **barley**, the second most important coarse grain, global output is forecast to decrease in 2009 by almost 5 percent to about 147 million tonnes. In **Europe**, output is seen to fall by over 9 percent. Similar to the case of wheat, aggregate plantings are seen to ease back after last year's exceptional level with land put back to oilseeds or voluntary set-aside, while yields are assumed to return to average levels. In North America, barley production in Canada and the United States is also expected to be scaled down somewhat. By contrast, a sharp recovery is in prospect in **North Africa**, where output in Morocco is forecast at more than double last year's drought-reduced level.

World **sorghum** output in 2009 is forecast at about 61 million tonnes, down 6.7 percent from the previous year's crop. A forecast reduction of about 19 percent in the United States, by far the world's largest producer, accounts for most of the decrease. An average crop thereabouts has already been gathered in Australia, although down from the previous year's bumper level.

TRADE

World trade in coarse grains in 2009/10 to remain flat

Forecasting coarse grain activity for the new season is subject to significant uncertainties at this time as key harvests in the northern hemisphere producing countries are still months away and final results will depend largely on weather developments, especially during the critical summer period. Nevertheless, world trade in coarse grains in 2009/10 is expected to reach 112 million tonnes, nearly unchanged from the 2008/09 estimate. Among the major coarse grains, world **maize** trade in 2009/10 is forecast to reach 85 million tonnes, up 4 percent from 2008/09 but this anticipated increase is likely to be offset by a 13 percent decline in **barley** transactions to 18 million tonnes. For other coarse grains, trade in **sorghum**, **oats** and **rye** is forecast to decline marginally, to 5.5 million tonnes, 2.5 million tonnes and 500 000 tonnes, respectively.



The current economic slow down is likely to impinge significantly on world trade in coarse grains. This is because demand for coarse grains is largely driven by developments in the livestock sector which, in turn, is very sensitive to economic conditions. In addition, the financial crisis, particularly the difficulties in obtaining letters of credit and financing, will contribute to slowing or even stagnating demand by traders and feed manufactures. On the positive side, the prospects for lower supplies of feed wheat as an alternative to maize, coupled with a tightening meal market, increase the attractiveness of major coarse grains. This is especially the case in Asia, the leading market, accounting for nearly one-half of world trade in coarse grains. In this region, total imports are forecast to increase, albeit slightly, to an all time high of 60 million tonnes in 2009/10. Higher maize imports in the **Republic of Korea** and barley purchases by Saudi Arabia are likely to more than offset declines in maize and barely inflows to the Islamic Republic of Iran.

In Africa, total imports could be smaller in the new season compared with 2008/09. Aside from small reductions in purchases by several countries in northern Africa on account of higher anticipated production, the bulk of the expected decrease is foreseen to occur in the Sub-Saharan region, mostly in response to good output prospects, especially in **Kenya**, **Mozambique**, and **Zimbabwe**. Total imports by countries in Latin America and the Caribbean are forecast to remain unchanged from the previous season's level. **Mexico**, the region's largest importer, is seen to buy more maize due to a likely reduction in its domestic production but **Venezuela** is forecast to cut its procurement sharply because of the country's record maize output this year.





Elsewhere, in Europe, total imports could be slightly higher in the **European Union** compared with 2008/09 because of reduced supplies of feed wheat and anticipated reductions in barley and maize crops.

Based on current import prospects for 2009/10, export supplies are expected to be sufficient in spite of the anticipated sharp reductions in maize availabilities in **Argentina** as well as lower supplies of barley in the **Russian Federation** and **Ukraine**. However, maize shipments from the **United States** are forecast to increase, making up for most of the decline in Argentina and anticipated smaller shipments from the **Republic of South Africa**. Despite lower production, **Brazil** is likely to export as much maize in 2009/10 which could match the 2008/09 record and solidify its position as the world's third largest maize exporter after the United States and Argentina. Maize exports from



China (Mainland) could increase slightly while **India** is likely to ship at least as much maize as it did in 2008/09. In the shrinking global barley market, small increases in exports from **Australia** and **Canada** are likely to offset a possible reduction in sales from the **European Union**.

UTILIZATION

Feed use stagnates but some growth is expected in food and industrial utilization

Based on the preliminary forecast for world production of coarse grains in 2009, total utilization of coarse grains in 2009/10 is forecast at 1 118 million tonnes, up only 1 percent, or roughly 11 million tonnes, from the estimate for 2008/09 and around 1 percent above the ten-year trend. In contrast to the sharp year-on increase in feed utilization witnessed in 2008/09, early indications for 2009/10 do not point to any expansion in feed utilization of coarse grains and is accordingly forecast to remain close to 640 million tonnes. The economic recession in the United States and several other industrial countries is expected to impact the consumption of meat and other animal products with direct negative effects on the demand for feed grains. As a result, total feed utilization in developed countries is set to shrink, led by the United States where the contraction may approach as much as 3 percent. By contrast, feed utilization in the developing countries could expand by a modest 1.6 percent, mainly driven by continued demand growth in China.

Global **food consumption** of coarse grains is forecast to increase to 194 million tonnes, up 1.3 percent from 2007/08. This growth is most evident in Africa, particularly in the Sub-Sahara region where production is set to rise and



where maize in particular has become more accessible in a number of countries.

The expanding use of maize for **ethanol production**, particularly in the United States, remains the principle driving factor behind growth in the **industrial usage** of coarse grains. Total utilization of coarse grains for the production of ethanol was some 110 million tonnes in 2007/08 and this is likely to increase to 119 million tonnes in 2009/10. This represents an increase of nearly 8 percent which, although significant, would be below the annual growth rate of well over 30 percent in previous years. Based on an official report from the United States, maize used as feedstock for production of ethanol in the United States is expected to approach 94 million tonnes in 2007/08, up 22 percent from the previous season, and increase to 104 million tonnes in 2009/10, up another 11 percent supported by the rising federal renewable fuels mandate.

STOCKS

World stocks could decline sharply amid falling production and higher utilization

Based on the preliminary forecasts for production in 2009 and utilization in 2009/10, world coarse grain stocks by the close of seasons in 2010 are forecast to reach 201 million tonnes, down 7 percent, or 16 million tonnes, from their opening level. At this level, the **world stocks-to-use ratio** for coarse grains is expected to reach 17.8 percent, slightly below the 2008/09 level but significantly above the low of 15 to 16 percent in the previous seasons which triggered the sharp increases in international maize prices as well as the prices of other coarse grains.

Figure 16. Coarse grain stocks and ratios



The reduction in total world inventories in 2009/10 and the resulting lower stocks-to-use ratio mostly reflects prospects in the United States. Production in the country is expected to remain close to 2008 while exports and utilization are rising, the latter driven by higher industrial demand. Total coarse grains stocks in the United States are forecast to reach 33 million tonnes, down 27 percent from their opening level and the smallest level since 2004 when they stood at 29 million tonnes. While ending stocks in the European Union are expected to remain unchanged from the season's beginning, smaller levels are anticipated in Argentina and Canada mostly due to falling output. On balance, the major exporter's stocks-to-disappearance ratio (i.e. domestic consumption plus exports) is forecast to drop from 16 percent in 2008/09 to a three-year low of 13.5 percent in the new season. Elsewhere, higher stocks are anticipated in a number of countries, most notably China, Malawi and Morocco, driven largely by favourable crop prospects. By contrast, reduced harvests and rising domestic consumption could result in large stock declines in Brazil, Mexico and the Russian Federation.

RICE

INTERNATIONAL PRICES

World prices decline

In line with earlier expectations, international prices of the major traded rice varieties have been weakening in the past several months. The slide was particularly pronounced for the Indica rice with a high percentage of brokens, which

22











Figure 19. FAO rice price indices (2002-2004=100)

was priced 36 percent less in January-May 2009 than in the first five months last year. Over the same time periods, the prices of the higher quality Indica and of aromatic rice varieties dropped by 17 percent and 9 percent respectively. On the other hand, the Japonica, medium grain, rice, followed a diverging trend, with prices up by 75 percent, largely reflecting concerns over global export availability, amidst poor production prospects in Australia, the retention of export curbs in Egypt, and pressure for water allocations in the State of California, which constitute the main sources of Japonica rice trade. The strengthening of Japonica prices sustained the FAO All Rice Price Index (2002-2004=100), which averaged 270 in January-May 2009, marginally below its corresponding value in 2008. The slide of international Indica and Aromatic rice prices is consistent with the excellent crops gathered by most exporting countries in late 2008 and early 2009 and a relatively sluggish world import demand. However, given the excellent crops gathered in virtually all regions the decline appears relatively contained. For instance, the benchmark Thai 100% B rice was guoted USD 556 in May 2009, 42 percent less than the record USD 963 per tonne posted in May 2008, but still well above its 2007 average value of USD 335 per tonne and still high relative to wheat. Indeed, although declining, rice export prices continued to be underpinned by export restrictions and producer price support in major exporting countries, which had the effect of withholding supplies away from world markets.

PRODUCTION

Modest gains in production expected in 2009 after two years of fast growth

The 2008 paddy season has just been completed with the harvesting of secondary crops in Asia. Boosted by excellent results of these crops, global paddy production is now estimated at 689 million tonnes, equivalent to 460 million tonnes of milled rice, well above earlier expectations and 4.3 percent more than in 2007. But the sector's attention is now turning to the 2009 season, which is already well advanced in all but the critically important south-eastern Asian region, where farmers are awaiting the imminent arrival of the monsoon rains to plant their crops. Preliminary information on plantings and crop development over the 2009 season has been favourable. As a result and assuming a normal rainfall pattern in Asia in the coming months, world production in 2009 could gain a further 1 percent and reach 696 million tonnes (465 million tonnes, milled equivalent). The relatively moderate increase expected in 2009 reflects less attractive prospects for producer returns.



However, in spite of financial constraints, many governments have maintained their support to the sector through input subsidies, investment programmes and direct price incentives, which, barring any major setback, is likely to sustain production growth.

Only part of the increase in world output in 2009 is expected to originate in Asia, where some 626 million tonnes are expected to be harvested, up from 624 million tonnes in 2008. Indeed, several countries are reporting lower plantings by farmers, as expectations over prices deteriorate. Output may recover in those countries that suffered severe setbacks last season, in particular Afghanistan, the Islamic Republic of Iran and Iraq, which suffered from drought problems, the Democratic Republic of Korea, where a lack of fertilizers hindered crop development, and Myanmar which was hit by cyclone Nargis, prior to the start of the 2008 season. On the other hand, sizeable increases are expected in **Cambodia**, India, Indonesia, the Philippines, Sri Lanka and Viet Nam, spurred by continued public support to the sector. On the other hand, Bangladesh, Japan, the Republic of Korea, Pakistan and Thailand may experience a contraction, as less attractive market conditions depress plantings. In **Africa**, the launching of numerous investment programmes across the region and still attractive prices, may help lift the continent's paddy output by 6 percent to close to 28 million tonnes this year, often at the expense of cash crops, such as cotton. Production in Madagascar, which harvested its 2009 main crop, is already reported to have risen by 33 percent to a record 6.5 million tonnes. In Latin America and the Caribbean (LAC), production is now set to rise by 3 percent, largely on account of increases in Brazil, Bolivia and Venezuela, which would help compensate for a droughtinduced contraction in Argentina and Uruguay. In the rest

of the world, Australia just harvested a much larger crop than last season, although water allocations would only allow for a fraction of normal output to be grown. The official outlook for production in the **United States** points to a 10 percent expansion, prompted by expectation of high returns. Likewise, production is set to recover in the EU, sustained by area expansions in Italy and Spain.

RICE INTERNATIONAL TRADE

Trade in rice set to recover in 2009 to the second highest volume on record

World trade in rice in 2009 is expected to recover by 2 percent to 30.9 million tonnes, the second largest volume on record. The increase would be facilitated by less prohibitive







world prices, which would boost import demand. To a large extent, the expectation of a recovery hinges on a further easing of the export curbs that constrained trade in 2008.

In Asia, lower international prices and/or attempts to build up reserves are expected to sustain imports by Mainland China, Saudi Arabia and the United Arab Emirates, while both Japan and the Republic of Korea are likely to buy more to fulfil their WTO minimum quotas. The Islamic Republic of Iran, Irag and the Democratic **Republic of Korea** may also need to step up imports to compensate for the 2008 crop shortfalls. Shipments to the Philippines, which stood out as the leading rice importer in 2008, are officially forecast at 2.4 million tonnes, almost 100 000 tonnes more than last year, and one of the highest level on record. On the other hand, several countries, among which Bangladesh, but also Indonesia, Malaysia and Sri Lanka might find themselves in an enviable position to cut purchases after harvesting excellent crops. Shipments to African countries, where the 2008 paddy seasons were, generally positive, are set to remain around the 2008 level of 9.5 million tonnes as increases expected in Senegal, South Africa and Tanzania are offset by declines in Nigeria, following the re-imposition of import duties, but also Liberia, Madagascar and Mali. In Latin America and the Caribbean, imports could rise by 4 percent, principally on account of larger purchases by Brazil, while in the other regions, Australia, the United States and the EU are all expected to step purchases compared with last year.

Part of the anticipated rise in world exports in 2009 would be on account of **India**, which is expected to ship 4 million tonnes, up from 3.7 million tonnes in 2008. Although the government has kept its control over non-basmati rice



Figure 23. Rice exports by the major exporters

exports, it has allowed larger volumes to be channelled through state-controlled entities. However, given the large availabilities held in public stocks, the country could step its exports even further, should restrictions on private sector trade be eliminated. Competitive prices are also expected to boost sales from **Argentina**, **China**, **Myanmar**, **Pakistan** and **Viet Nam**. On the other hand, shipments from **Thailand**, the world leading rice exporter, are now forecast at 8.3 million tonnes, 17 percent less than in 2008, reflecting the impacts of the government intervention programme in keeping domestic prices high, which has eroded Thai's rice competitiveness vis a vis other origins. Exports from **Cambodia**, the **United States** and **Brazil** are also foreseen to decline, amidst sluggish import demand and falling world prices.

RICE UTILIZATION

Per caput rice consumption stable in 2009

Table 6. World rice market at a glance

At the aggregate level, total utilization of rice is forecast in the order of 450 million tonnes, on a milled basis, 2.7 percent

	2007/08	2008/09 estim.	2009/10 f'cast	Change 2009/10 over 2008/09
	m	illion tonn	es	%
WORLD BALANCE (milled bas	is)			
Production	441.1	460.3	464.5	0.9
Trade ¹	30.2	30.9	30.6	-0.8
Total utilization	437.9	449.8	457.6	1.7
Food	378.7	385.2	391.9	1.8
Ending stocks	109.2	120.1	127.2	5.9
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	56.8	57.1	57.3	0.4
LIFDC (Kg/year)	69.4	69.6	69.7	0.1
World stock-to-use ratio (%)	24.3	26.3	27.2	3.6
Major exporters' stock-to-	17.0	18.7	19.6	4.8
disappearance ratio (%) ²				
FAO rice price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	161	295	270*	-0.1

¹ Calendar year exports (second year shown)

² Major exporters include India, Pakistan, Thailand, the United States of America 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/es/esc/en/15/70/highlight_71.html

* Jan-May 2009

more than in 2008. Of these, world consumption as food is to account for 85 percent, or 385 million tonnes, the remainder corresponding to seed, feed and other uses, including postharvest losses. Prices in domestic markets have been reported falling in recent months, but rice remains substantially more expensive to consumers than it was in 2007, prior to the price surge. On the other hand, international rice guotations, while falling, remain high relative to previous years, which together with rising freight rates, is also keeping the local prices of imported rice firm. Consumers in many countries have been affected this year by the erosion of their purchasing power as economies slowed down or contracted. A worsening of incomes, however, usually tends to give support to consumer demand for rice, at the expense of higher-priced products such as dairy or meat. As a result, per caput rice consumption is set to remain around to 57 kg.

RICE STOCKS

Good crops to boost world rice inventories in 2009 to their highest level since 2001

The buoyant 2008 production results are estimated to have boosted **world rice inventories** at the close of the marketing season in 2009 by 10 percent to a seven-year high of 120 million tonnes. All of the accumulation is set to take place among developing countries, while stocks in the developed are estimated to end lower. Under the current positive prospects for crops over the on-going paddy season, global production in 2009 would again exceed utilization, which would boost the 2010 ending stocks by a further 7 million tonnes, to 127 million tonnes. The bulk of the increase is forecast to be concentrated among exporting



Figure 24. Global rice closing stocks and stockto-use ratio

countries, in particular China, India, Thailand, the United States and Viet Nam, although Myanmar may have to draw from its reserves, especially if it increases exports in the course of the year. Good crops in traditional importing countries, may also allow them to raise rice reserves slightly above the 2008 level, which was relatively high compared to previous years. However, Bangladesh and the Philippines, two of the most important rice importers, look set to end their season with smaller carry-overs. The increase in global inventories in 2009 would help raise the world stocks-to-use ratio, which give an indication of world food security, from 26.3 in 2008 to 27.2 in 2009, the highest level since 2003.

OILSEEDS, OILS AND MEALS¹

PRICES²

Renewed strengthening of prices likely

The 2008/09 season (October/September) started with low prices. After the extraordinary rise of 2007/08, by October 2008, the FAO price indices for oilseed, oils and meals had fallen back to the level recorded prior to the surge. The price decline was triggered by the prospect of improved crop output, combined with weak demand for oilseed products. In the case of oils/fats, the downturn in energy prices also contributed to the fall in prices.

After a period of instability, in April 2009 prices in the oilseed complex started moving upward. Oil and fat prices took the lead, increasing as much as 14 percent over March 2009 (based on FAO's monthly price index). Meanwhile, the indices for oilmeals and oilseeds grew by, respectively, 6 and 7 percent. In May, the upward trend in prices continued and all three indices rose well above the corresponding levels of 2007 (i.e. before the 2007/08 price rally started).

The recent price firming mainly reflects concerns regarding the progressive tightening of global supplies, in particular in the soybean complex. The supply problem is caused primarily by deteriorating crop prospects in South America, where soybean production estimates had to be lowered several times because of persisting, severe weather problems. The

¹ 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.

² For details on prices and corresponding indices, see appendix Table A24.

200

150

100

50 **–** 2002

2003

2004



Oilmeals/cakes

Oilseeds

2008

2009

2007



2005

2006



consequent rise in soybean prices has spilled over to the entire oilseeds complex. In the case of oils/fats, this year's slow-down in palm oil production is adding to the price pull.

Concerns about the tightness of supplies and the resulting sharp fall in export availabilities, are fostered by sustained buying interests, for example by China and India. Overall trade is affected by a further drawdown in exporting countries' inventories and by increased reliance on a very limited number of suppliers. With regard to consumption, it appears that, so far, the global economic recession has affected primarily meal demand and much less oil consumption.

Current market fundamentals suggest that prices for oilseeds and products should remain firm and possibly

Figure 26. CBOT soybean futures for September







strengthen further during the remainder of the current season. The comparison of the latest 2008/09 production and stock estimates with anticipated consumption levels suggests continued market tightness until the arrival of the new season's crops. Current market sentiments confirm this assessment: since last March, soybean futures trended upward and, in early May, CBOT's September contract was traded at around USD 370 per tonne compared with USD 300 at the beginning of March. Market tightness and thus firmness in prices could also spread into next season considering that irrespective of a probable revival in global oilseed production, 2009/10 supplies of oils and meals will be conditioned by a very low level of carry-in stocks.

Table 7. World production of major oilseeds

	2006/07	2007/08 estim.	2008/09 f'cast		
	million tonnes				
Soybeans	236.2	219.9	211.9		
Cottonseed	44.9	43.7	40.6		
Rapeseed	47.6	48.5	57.7		
Groundnuts (unshelled)	34.0	35.4	35.1		
Sunflower seeds	30.4	28.9	32.8		
Palm Kernels	10.1	11.2	11.7		
Copra	5.2	5.1	5.3		
Total	408.4	392.7	395.1		

Source: FAO

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

Table 8. World oilseeds and products markets ata glance

	2006/07	2007/08 estim.	2008/09 f'cast	Change 2008/09 over 2007/08
	п	nillion tonne	es	%
TOTAL OILSEEDS				
Production	418.7	403.1	405.9	0.7
OILS AND FATS 1				
Production	152.7	155.5	160.4	3.2
Supply ²	173.8	177.9	181.7	2.1
Utilization ³	151.5	156.7	161.6	3.1
Trade ⁴	76.6	80.5	83.6	3.8
Stock-to-utilization ratio (%)	14.7	13.6	13.2	
MEALS AND CAKES 5				
Production	106.3	101.7	100.1	-1.6
Supply ²	121.8	119.6	114.4	-4.3
Utilization ³	102.5	104.9	103.2	-1.5
Trade ⁴	58.6	62.9	60.4	-4.0
Stock-to-utilization ratio (%)	17.5	13.6	12.6	
FAO price indices (2002-2004=100)	2006/07	2007/08	2008/09*	Change: Oct-May 2008/09 over Oct-May 2007/08 %
Oilseeds	129	217	149	-30
Oilmeals/cakes	153	202	168	-15
Oils/fats	148	243	140	-43

¹ Includes oils and fats of vegetable and animal 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.

* October-May

OILSEEDS

Global production forecast for 2008/09 revised downward sharply

In spite of record global oilcrop plantings, the recovery in production from last season's exceptionally low level will be less than one percent. Following further downward revisions for crops in South America, global output is now forecast at 406 million tonnes, which is about 13 million tonnes below the record crop of 2006/07.

As to key producers in the northern hemisphere, their aggregate output has fully recovered from last season's drop thanks to higher plantings (encouraged by high prices) and favourable weather conditions in some regions. Record sunseed and rapeseed crops were harvested in Canada, the European Union, the Russian Federation and Ukraine. However, an only partial recovery in output has been achieved in China and the United States. India reported a drop in its summer oilcrops, which, however, should be offset in part by an increase in winter crops. In the southern hemisphere, the outcome of the current harvests is expected to fall well short of initial expectations, mainly on account of strongly adverse weather conditions affecting soybean crops in South America. In Argentina, where the season started with record soybean plantings, the crop suffered from severe and prolonged drought, causing yields to shoot down. Output is currently estimated at 34 million tonnes, a five-year low and 26 percent down from last season. Paraguay's output could even drop by 40 percent, also due to drought. In **Brazil**, the soybean crop has been less affected by dry weather, but output is nonetheless expected to fall (to 58 million tonnes or by 3 percent) as farmers were confronted with reduced access to credit, higher production costs and lower profit margins. In Australia, an above average rapeseed output is expected this season.

OILS AND FATS ³

Weak growth in global oil/fat supplies for the second consecutive season

The latest crop forecasts for 2008/09 translate into a record <u>global oil/fat production</u> of over 160 million tonnes. The about average increase of 3 percent *vis-à-vis* last season is expected on account of record sun and rape oil production that should offset the fall in soy oil output and the slow-

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

down in palm oil production. Unlike in recent years, the production increase will be largely on account of developed countries, mainly in Europe and North America. By contrast, aggregate developing country output is expected to decrease, mainly reflecting South America's poor soybean crop and weak growth of palm oil in Malaysia. Global supplies of oils/fats (i.e. 2007/08 ending stocks plus 2008/09 production) are forecast to grow by only 2 percent, or well below average, for the second consecutive season. Low opening stocks explain why global supply is anticipated to grow less than production. While healthy supply growth is forecast for rape, sun and palm oil, supplies of soybean oil are again expected to fall: after falling 3 percent last season, soybean supplies may decline by 7 percent. Such reduction will be concentrated in Argentina and the United States, where supplies could fall to, respectively, seven-year and four-year lows. Also **Brazil** should be affected, although less strongly.

Further growth expected in global oil/fat consumption

Global oil/fat consumption is estimated to expand by about 3 percent, and thus somewhat less than average. This season, consumption growth is influenced by the global economic crisis. But the slow-down in demand is less pronounced than originally expected, also because the relaxation of prices vis-à-vis last season seems to have encouraged consumption. As to individual oils, steady growth in palm oil consumption as well as revived rape and sun oil use is required to offset the steep decline in soy oil supplies. As a result, the share of palm oil in total consumption should exceed 27 percent, while that of soy oil should drop to 23 percent. As in previous years, consumption growth in developing countries is expected to be almost double that in developed countries. In 2008/09, developing Asia alone should account for exactly half of global oil/fat consumption, with utilization climbing to new records in China and India. Among developed countries, significant consumption growth is only expected for the European Union.

<u>Food uses</u> should account for about half the expansion in global consumption, with the other half directed to <u>non-food uses</u>, notably biofuel. Demand for biofuel production is estimated to expand by about 15 percent in 2008/09, less than originally expected and in line with the gradual slowdown observed in recent years. Over the last few months, the price relationship between crude oil and vegetable oils has been such to reduce the profitability of edible oil-based fuel production. Also, in some countries, political support for biofuels has shown signs of wavering. Overall demand for vegetable oil-based fuel should nonetheless continue to grow, driven by rising national blending requirements and continued support to producers. Countries where the use of vegetable oils for biodiesel is estimated to grow further include Argentina, Brazil and the European Union. In the European Union, no less than 60 percent of overall rape oil utilization should be for biodiesel and also the importation of palm oils as fuel feedstock should continue. Also in Argentina and Brazil industrial demand for vegetable oils should rise further, thereby contributing to the fall in export availabilities. By contrast, in the **United States**, biodiesel demand is estimated to account for only 11 percent of domestic soy oil consumption (as opposed to 16 percent last year), as the industry is responding to lower profitability and reduced biodiesel export opportunities following the introduction of countervailing duties by the European Union.

World oil/fat inventories not likely to recover

After last season's extraordinary drop, global oil/fat inventories (measured as oil/fat inventories *per se*, plus the oil contained in stored seeds) are anticipated to remain unchanged. With weak supply growth and further expansion in demand, a recovery in the stock levels will not be feasible. Individual oils are expected to fare differently: a partial recovery for sun oil and record levels for rape oil contrast with a further drop in palm oil and, in particular, soy oil inventories. With consumption by far exceeding production, the latter are estimated to settle at a five-year low. An accumulation of stocks is anticipated for **Canada, China**



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

and the **European Union**, while inventory reductions are expected mainly in **Argentina**, **Brazil**, **India**, **Indonesia**, **Malaysia** and the **United States**. The anticipated stagnation in global stock levels should also prevent a recovery in the global oils/fats stock-to-use ratio, which, in fact, is estimated to fall below last season's less than average level, thus underpinning the expectation of gradually strengthening international prices.

Below average growth expected in global trade of oils/fats

At over 83 million tonnes, world trade in oils/fats (which comprises the oil contained in traded seeds) is forecast to expand further, albeit at a below average rate. As to individual oils, global shipments in soy oil are anticipated to decline: the unprecedented 2.2 million tonnes (or 9 percent) decline in exports would be primarily on account of Argentina. Due to the country's production shortfall (and rising demand from biodiesel producers), combined exports are set to drop by 21 percent, reaching a five-year low. Shipments from **Brazil** and **Paraguay** will also fall. The decline in soy oil is expected to be made up for by other oils, in particular palm oil. Indonesia and Malaysia are forecast to expand their palm oil sales by, respectively, 6 and 13 percent. Together, the two countries should export 2.7 million tonnes more than last season, allowing the share of palm oil in total trade to climb to 42 percent. At 15.9 million tonnes, Indonesia's exports are estimated, for the first time, to match those of Malaysia. Thanks to their top production and attractive prices, rape and sun oil trade is expected to climb to a record level. The Ukraine should account for much of the increase in both markets. Thanks to competitive pricing

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



and the national currency's devaluation against the United States Dollar, the country's share in global sun and rape oil trade should rise to 15 and 38 percent respectively. Regarding rape oil, also **Canada** is heading towards record shipments.

As to oil/fat imports (including the oil contained in imported seeds), purchases by China are estimated to grow considerably less than in previous years, due to improved oil output from domestic sources and slower growth in consumption. By contrast, a marked rise in imports is taking place in India, where the suspension of import tariffs on edible oils coincided with the fall in world market prices (as well as a drop in domestic oil output) thus spurring import demand. In general, developing countries are preferably buying low-priced palm oil. In the European Union, a rise in imports is required to satisfy internal demand for food and, in particular, non-food (biofuel) purposes. In the United **States**, a net exporter of oils/fats, but for a few years, also the world's fourth largest importer, foreign purchases are expected to expand further as the food industry continues to require vegetable oils other than soybean oil to reduce the presence of trans fatty acids in food products.

MEALS AND CAKES⁴

Global supplies of meals/cakes forecast to decline for the second consecutive year

In spite of the projected small rise in total oilseed production, the sensitive drop in soybean output - by far the most

⁴ This section refers to meals from all origins, which, in addition to products derived from the oil crops discussed under the section on oilseeds, include fish meal as well as meals of animal origin.



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

important source of meal - is expected to lead to a slight fall in world meal/cake output (expressed in protein equivalent). This would be the second consecutive decrease, with 2008/09 output falling to a four-year low. Record rape and sun meal output will not change the overall picture. The drop is mainly on account of **South America**, where aggregate meal output is estimated to fall by over 15 percent. In the two other main producing areas, China and the United **States**, meal output is likely to recover, although remaining below the average level achieved in recent years. The general shortfall is even more pronounced in terms of global meal/ cake supplies (i.e. 2007/08 ending stocks, plus 2008/09 production). Due to last season's unprecedented drawdown in stocks, in 2008/09, global supplies are anticipated to decline by almost 4 percent, after already falling 2 percent last season.

Unprecedented contraction in world utilization of meals/cakes

After last season's slowdown, in 2008/09, global meal utilization (expressed in protein equivalent) is expected to shrink by 1-2 percent. While the past slowdown was triggered by the 2007-08 surge in prices, this season, consumption is affected by the negative impact of the global economic recession on meat demand. In some regions, for example the European Union, increased availability of feedgrains is adding to the demand pressure. The European Union, North and South America, which together account for about half of global consumption, should see an unprecedented decline in meal demand. By contrast, in Asia, led by China, meal use is forecast to grow further, although by a below average rate of 2 percent. As to individual meals, soybean meal will be most affected. The healthy expansion expected in sunflower and rapeseed meal will not be sufficient to offset the decline in soymeal consumption.

Decline in global meals/cakes inventories anticipated to continue

After last season's extraordinary decline in world meal/ cake inventories (measured as meal/cake inventories *per se*, plus the meal contained in stored seeds), global inventories are expected to drop further in 2008/09. With global meal consumption forecast to exceed production by 3 million tonnes (in protein equivalent), a marked reduction in inventories will be inevitable. Dropping by 9 percent over last season, global meal stocks would be more than onequarter below their 2006/07 level. The decline in stocks will be primarily on account of soybean meal. **Brazil** and the **United States** opted for a run down of their stocks in order Figure 32. World closing stocks and stock-to-use ratio of meals/cakes (in protein equivalent and including the meal contained in seeds stored)



to raise exports, whereas **Argentina's** reduction in stocks is meant to contain the fall in shipments. By contrast, higher inventories are expected in **China**, based on better domestic crops and a revival of public purchases for state reserves. A comparison of global supplies with global consumption and the global stock-to-use ratio indicates that world meal markets are tightening further in 2008/09. With a stockto-use ratio estimated between 12 and 13 (compared with 14 and 17, one and two seasons ago) a firming up in international meal prices appears likely.

Global trade in meal/cake forecast to decline

After four consecutive seasons of healthy growth, trade in meals/cakes (including the meal equivalent contained in oilseeds traded and expressed in protein equivalent) is forecast to fall by an unprecedented 4 percent. With soymeal trade anticipated to decline by over 3 million tonnes or 6 percent, the rise expected for other oilmeals will have an only limited impact. The decline in soymeal shipments will be almost exclusively on account of Argentina and, less strongly, India and Paraguay, all due to domestic crop shortfalls. In Argentina, where shipments are anticipated to drop almost 20 percent vis-à-vis last season, conflicts between farmers and the Government regarding export taxation have aggravated the export situation. With an only modest increase in shipments expected from Brazil, the market depends heavily on supplies from the United States. The country is expected to raise soymeal shipments to an all-time record, but to do so a steep reduction in inventories will be necessary. As to other meals, record shipments are

Figure 33. Total meal/cake imports by region or major country (including the meal contained in seed imports)



Figure 34. Meal/cake exports by major exporters (including the meal contained in seed exports)



expected for both, rapeseed meal (from **Canada** and the **Ukraine**) and sunseed meal (**Ukraine**).

With respect to meal <u>imports</u> (including the meal equivalent contained in oilseeds traded), several key buyers are expected to reduce their purchases, be it on account of internal supply and demand factors or because of this season's reduced export availabilities. In the **European Union**, the world's top buyer, an unprecedented 7 percent drop in imports appears likely, considering improved domestic supplies of both oilcrops and feedgrain. In **China**, a slight decrease in imports is expected, based on ample domestic supplies and a slow down in consumption. Also other countries in Asia should import less as domestic consumption is exposed to the effects of the economic recession.

PROSPECTS FOR 2009/10

Current supply tightness possibly stretching into next season

Increasing market tightness and the recent improvements in world prices for oilcrops, oils and meals should encourage farmers to maintain and possibly raise the area sown to oilcrops for marketing in 2009/10. The main support to 2009/10 production should, however, stem from a return to average yield levels in soybean cultivation. Assuming average weather conditions and thus a return to long-term yield trends, as well as a repeat of this season's oilcrop area, global oilseed production could expand significantly in 2009/10.

Spring plantings of 2009/10 oilcrops will soon come into full swing in the northern hemisphere, whereas, in the southern hemisphere, new season sowings will only begin towards the end of this year. Soybean plantings are estimated to remain at, or slightly exceed, last year's record level in the United States, as soybeans appear to compete favourably with maize in terms of price and production costs (see Figure 9 in coarse grains section). With yields following the long-term trend, production could expand by 8 percent, reaching a near-record level. In South America, a modest expansion in sowings and a return to average yields would allow aggregate production of Argentina, Brazil and Paraguay to rise by one-quarter. At the world level, soybean production is tentatively forecast to grow by 13 percent, slightly exceeding the 2006/07 record. However, the rise in soybeans could be partly offset by declines in rapeseed, sunflowerseed and possibly also cottonseed and groundnuts. Lower output estimates for these crops are based on the assumption of normal weather conditions (and thus yield level) as opposed to the ideal conditions met in some regions during 2008/09.

In spite of the prospected significant increase in total oilcrop production, growth in 2009/10 supplies of oilseeds and products is going to be constrained by the exceptionally low level of 2008/09 carry-out stocks. Supposing an average expansion in oil and meal demand, and considering that there will be an urgent need to replenish stocks in key exporting countries, the recent tightness in the market for oilseeds and products is unlikely to disappear, at least during the first half of next season.

32

Consequently, world prices for oilseeds and products should remain firm but also volatile, depending on weather developments and other sources of uncertainty, such as the further course of the financial and economic crisis, the development of energy prices and changes in national trade, production and biofuel policies.

SUGAR

PRICES

Strong global demand underpins world sugar prices

Since the last issue of the Food Outlook in November 2008, international sugar prices⁵ have followed a steady upward trend, moving from US 12.10 cents per pound⁶ in November 2008 to US 13.65 cents per pound in April 2009 and reaching a three-year high of US 16.06 cents per pound in May 2009. This price pattern mainly reflected a reduction in global export availability, following a sharp decline in India's sugar output in 2008/09. Prices could have moved higher, had it not been for the world economic downturn, which curtailed demand, and the weakening of national currencies relative to the United States Dollar, which sustained exports from countries such as Brazil, the world's largest sugar exporting country. Sugar prices may well display increased volatility given the uncertainty related to the extent to which India will make use of the world market to make up for the deficit in production.

PRODUCTION

World sugar production to decline by 9 million tonnes in 2008/09

FAO has revised its estimates for world sugar production to 158.5 million tonnes in 2008/09, which is 2.5 million below the first estimate released in November 2008, and 9 million tonnes, or 5.4 percent less than in 2007/08. The revision was largely caused by a deterioration of production prospects in **India**, where sugar output is now estimated to have fallen by a drastic 45 percent. The drop would ensue from a decline in planted area, as many producers allocated land to alternative, more remunerative, crops, such as maize and

Table 9. World production and consumptionof sugar

	2006/07	2007/08 estim.	2008/09 f'cast	Change: 2008/09 over 2007/08
	т	illion tonne	s	%
WORLD BALANCE				
Production	166.1	167.6	158.5	-5.4
Trade	46.7	47.3	50.2	6.0
Utilization	154.0	158.4	162.2	2.4
Ending stocks	73.3	80.9	76.3	-5.7
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
World (kg/year)	22.5	23.1	23.4	1.3
LIFDC (Kg/year)	12.9	13.4	13.7	1.8
World stock-to-use ratio (%)	47.6	51.1	47.0	
ISA Daily Price Average (US cents/lb)	2007	2008	2009*	Change: Jan-May 2009 over Jan-May 2008 %
	10.08	12.80	13.78	8.8

* Jan-May 2009

Figure 35. International Sugar Agreement (ISA)



soybeans. In addition to **India**, sugar production contracted in **Australia**, the **European Union**, **Pakistan** and the **United States**, with relatively small decreases foreseen in **Thailand**. However, in the *Latin America and Caribbean* region, sugar production in **Brazil** (October/September) is expected to rise to 39.6 million tonnes in 2008/09, about 29 percent more than in 2007/08, despite heavy rains at harvest time, which reduced yields. Sugar-cane production is set to reach 566 million tonnes, which corresponds

⁵ International sugar prices are based on the International Sugar Agreement (ISA), produced by the International Sugar Organization (ISO), and computed as a simple average of the close quotes for the first three future positions of the Intercontinental Exchange Sugar Contract No. 11.

⁶ USD 266.7 per tonne

to a 15 percent increase from last year, on account of a 12 percent expansion in cane planted area. It is estimated that about 60 percent of Brazil's 2008/09 sugar-cane harvest will be processed into cane-based ethanol, buoyed by higher returns from domestic ethanol relative to export markets. However, if international sugar prices continue to augment, providing no upsurge in crude oil prices, the share of cane directed to sugar should be expected to increase. Elsewhere in the region, sugar production in **Colombia** is expected to increase by 3 percent in 2008/09, while it should remain relatively unchanged in **Argentina** and decline slightly in **Peru**.

In **Mexico**, sugar production should reach 5.8 million tonnes, relatively unchanged from last season. Poor crop husbandry practices and insufficient fertilizer applications tended to offset the production incentives offered under the North American Free Trade Agreement (NAFTA), which gives Mexico's sugar free access to both the Canadian and the United States markets. Sugar output is to expand also in **Guatemala**, the second largest sugar producer in the region, as a result of increased planted cane area, driven by higher administered sugar-cane prices. In **Cuba**, sugar output is now foreseen to decline in 2008/09 as a consequence of the damages caused by hurricanes Ike and Gustave, which hit the country in September 2008.

Aggregate sugar production in *Africa* is forecast to rise by 8.3 percent to 11 million tonnes in 2008/09, outpacing the 3 percent annual growth experienced for the past three years. Expansion is largely attributed to increases in planted sugar-cane areas and new processing capacity. These investments take place mostly in anticipation of greater exports to the higher priced European Union sugar market under the Everything-But Arms initiative (EBA), which will allow least developed countries in Africa duty and quotafree access to the European Union market as of October 2009. In South Africa, the largest sugar producer of the continent, sugar production is set to reach 2.3 million tonnes in 2008/09, up 6.6 percent from 2007/08, on account of good weather in the main growing areas and notwithstanding a rise in fertilizer costs of 100 percent since 2007/08. At the same time, the devaluation of the Rand against the United States Dollar since 2007/08 has provided some relief to sugar exporters. Sugar production in **Egypt** is forecast at 1.9 million tonnes, only 1.4 percent more than in 2007/08, as attractive cereal prices, especially for wheat, have contained the expansion in beet areas. Production in the **Sudan** is estimated to gain 3.6 percent from 2007/08, due to favourable weather conditions and conducive public support. Production is set to expand significantly in the years ahead, particularly with the completion of the Nile Sugar Project, which provides irrigation infrastructure to boost cane area. Gains in the order of 8 percent are also foreseen in Kenya although the country's sugar subsector faces strong competition from more efficient producers in the other members of the Common Market for Eastern and Southern Africa (COMESA). Increases in sugar output are also expected in 2008/09 for Mauritius, Mozambigue, Swaziland and the United Republic of Tanzania.

SUGAR AND THE EBA INITIATIVE, HOW MUCH WILL BE SUPPLIED TO THE EUROPEAN MARKET?

The Everything But Arms (EBA) programme is an European Union initiative that grants 50 least developed countries (LDCs) unlimited and duty free access to the European Union market. The EBA came into effect in 2001 for all products, except for fresh bananas, rice and sugar. Imports of these commodities from LDCs were made subject to quotas attracting preferential duties that were gradually phased out by 2009. In the case of sugar, no tariffs or quantitative restrictions will be applied on imports from LDCs as of October 2009. So far, large investments have been made by LDCs, particularly those in Africa, to expand sugar production and processing capacity at the farm and mill levels in anticipation of improved market access to the European Union. In 2008, LDCs' sugar exports to the European Union totalled 400 000 tonnes, a 33.6 percent increase from 2007. Yet, despite the fact that sugar duties were about 100 percent lower for the LDCs than for the other MFN suppliers, about 66 percent of the European Union increase in imports in 2008 was met by shipments from Brazil. Supply constraints, including lack of sugar storage capacity, continue to hinder LDCs' ability to expand exports. Available research shows conflicting results on the possible effects of the EBA on European Unions's imports from the LDCs after full market access will be granted to them in October 2009. Some studies estimate they would not surpass 1 million tonnes, citing large trade costs, while others project them to exceed 2 million tonnes. Aside from existing gaps in physical infrastructure, the convergence of the European Union internal price and the world sugar price in recent years has substantially reduced the attractiveness of the European Union market, which may lead LDCs to redirect some or all of their European Union destined sugar to other regional and/or international markets.



The outlook for sugar production in Asia indicates a sharp decline from the levels attained in 2007/08, due to a substantial reduction in India and Pakistan. Sugar output in the former country is now expected to reach 15.8 million tonnes, a 45 percent drop from last year, following irregular rainfall and a shift of land allocation in favour of grains and oilseeds. As a result, India's production is anticipated to fall short of consumption for the first time since 2004/05. Domestic prices have increased since the beginning of the year, forcing the Government to recommend changes to the statutory minimum price (SMP) for sugar cane, which may lead to a 54 percent price increase for the 2009/10 season. Similarly, sugar production in Pakistan is anticipated to decrease by as much as 23 percent, largely because the administered price did not provide sufficient incentives to producers, while reduced access to credit made it difficult for several mills to purchase and process sugar cane at the prevailing official prices. Although sugar production is forecast to contract by 2 percent in **Thailand**, the decline is much less than an earlier prospected fall of 5 percent following unfavourable weather and reduced sugar-cane areas. Sugar industry officials have blamed the tight credit situation for the fall in mills utilization capacity and hence sugar output. In the rest of the region, an expansion is foreseen in Indonesia and Turkey, while production in China may suffer a decline because of a sudden cold spell that hit the southern sugar growing regions at a critical time of crop development.

In *Europe*, sugar output in the European Union is expected to contract to 14.4 million tonnes, in line with production target, after reaching 17.4 million tonnes in 2007/08. The reduction in output is consistent with the Figure 37. Sugar production in India



implementation of the reform programme of the European Union sugar regime, which began in 2006/07, under which European Union's sugar production is to be cut by 6 million tonnes over four years. So far, total renunciation has totalled 5.8 million tonnes. Sugar production is now concentrated in 18 Member States as opposed to 23 prior to the inception of the reform. On the other hand, production is anticipated to rise in the **Russian Federation** despite a fall in planted beet area, sustained by record yields, both at the farm and mill levels. Sugar output is expected to fall in Ukraine, where farmers cut the area sown to beet in favour of more profitable grains and sunflower seeds. In the *rest of the* world, sugar production in the United States is forecast below the 2007/08 level, following a 13 percent drop in sugar beet production, reflecting a shift to other crops. Preliminary estimates for 2009/10 indicated that area sown to beet could recover by 28 percent, under higher return prospects. In Australia, unfavourable weather conditions in the form of floods could depress output by 6.4 percent to 4.7 million tonnes.

UTILIZATION

Global consumption to continue expanding but at a slower rate than the long-term trend

World sugar consumption in 2008/09 is forecast to rise to 162 million tonnes, 2.4 percent more than in 2007/08, but a slow pace of increase if compared with the 3.4 percent and 4.7 percent rates of expansion recorded in 2007/08 and 2006/07, respectively. On average, per caput sugar availability is estimated to increase from 23.1 kg in

2007/08 to 23.4 kg in 2008/09. Rising domestic sugar prices and poorer economic prospects explain much of the anticipated slowdown in world sugar off-take growth. The economic downturn, in particular, may depress industrial sugar usage by the manufacturing and food preparations sectors, including the beverages industries, which is especially sensitive to variations in income. Growth in sugar consumption is therefore likely to subside faster in countries with large shares of industrial consumption in total sugar utilization⁷. Sugar consumption in developing countries is foreseen to grow by 3.2 percent to 113.2 million tonnes, underpinned by per caput income and population growth. Sugar consumption in **India**, the largest consuming country, may reach 25.3 million tonnes, up from 24.6 million in 2007/08, a low increase if compared with the previous years, as relatively high domestic sugar prices depressed per caput demand. Although remaining positive, offtake growth is also anticipated to slow down in Brazil, China and Indonesia. On the other hand, little change in consumption is forecast for the developed countries, notably Australia, Japan and the European Union, given already high per caput usage, and slowing population growth. Consumption in the United States is set to grow, but much uncertainty remains relatively to the size of the expansion given the current economic downturn.

TRADE

World import demand to rise

World sugar trade is forecast to reach 50.2 million tonnes in 2008/09 (October/September), 6 percent more than the 2007/08 estimate, driven by a strong import demand by countries likely to face a production shortfall, in particular the European Union, India and Pakistan. Among the various areas of uncertainty, the size of sugar imports by India to cover the sharp 2008/09 production shortfall will determine, to a large extent, the final size of world trade over this marketing year. Based on current information, FAO expects India's imports to hover around 3 million tonnes, after it had imported no quantities in 2007/08, following the recent decision by the Government to allow duty-free imports of white sugar. The second most important feature of the trade outlook is the European Union turning into a net-sugar importer, as production declines in line with the reform of the domestic sugar industry. Official imports are now set at 4.9 million tonnes, 53.6 percent, or 1.7

Figure 38. Sugar closing stocks and stock-to-use ratio



million tonnes, more than last season, much of which will be sourced from countries having preferential access to the European Union, given prohibitively high MFN tariffs. Elsewhere in Europe, imports by the Russian Federation, the largest sugar importer in 2007/08, are anticipated to decline by 14 percent to 2.8 million tonnes, on account of an expansion in output. Imports by the country have been less than in the previous years, owing to an exceptionally high import duty of USD 220 per tonne, which now will span for five months instead of six months as was previously applied. In Asia, purchases by India, Malaysia and Pakistan are foreseen to increase, mainly on account of either strong domestic demand or a drop in production. In the rest of the world, deliveries to the United States are forecast at 2.7 million tonnes, which corresponds to 800 000 tonnes more than in 2007/08, largely to cater for the prospect of a tight domestic sugar market. Additional imports may be required in the course of the season to rebuild reserves, given the relatively low stock-to-use ratio. Imports by countries in Africa are foreseen to expand by around 4.3 percent to 9.2 million tonnes, much lower than previously envisaged, as locally produced supplies could substitute for imports.

The shortages in production in 2008/09, mainly in India, have induced a tighter supply/demand situation on the world market. Nonetheless, relatively comfortable stock availability in **Thailand** and good crops in **Brazil** and **Guatemala** would help sustain a 6.2 percent expansion in world export. **Brazil**, the world's largest exporter, could be among those to benefit most from rising international sugar quotations. Indeed, the country could boost its shipments by 28 percent to 24.1 million tonnes, following a contraction in 2007/08, especially

⁷ Among the major sugar consuming countries, industrial demand accounts for 68 percent of use in the European Union, about 60 percent in India and the United States and 48 percent in Brazil
since falling freight costs may enable the country to regain market share, particularly in Asia. Overall exports from *Asia* are expected to fall by 8 percent to 10.7 million tonnes in 2008/09, mainly reflecting smaller shipments in India and Pakistan. Driven by high international sugar prices, shipments from **Thailand** are set to increase by 41 percent to 5 million tonnes, mostly routed to neighbouring importing countries. Elsewhere, exports by **Mexico** are forecast at 600 000 tonnes, a 20 percent increase over 2007/08, but shipments could even reach 1 million tonnes, underpinned by duty and guota free access to the North American market.

MEAT AND MEAT PRODUCTS

PRICES

International meat prices fall along with weakening demand

The 2008 increases in meat prices provided some breathing space to producers who witnessed a consistent deterioration

Table 10. World meat markets at a glance

	2007	2008 estim.	2009 f'cast	Change: 2009 over 2008
	m	illion tonne	es	%
WORLD BALANCE				
Production	274.4	282.1	285.6	1.2
Bovine meat	65.1	64.9	65.1	0.3
Poultry meat	90.1	93.7	94.7	1.1
Pigmeat	99.8	103.9	106.1	2.1
Ovine meat	14.0	14.2	14.2	0.5
Trade	23.1	24.6	23.4	-4.8
Bovine meat	6.9	6.8	6.8	0.4
Poultry	9.8	10.5	10.2	-3.1
Pigmeat	5.2	6.1	5.4	-11.3
Ovine meat	0.9	0.9	0.9	0.7
SUPPLY AND DEMAND INDIC	ATORS			
Per caput food consumption:				
World (kg/year)	41.5	42.2	42.3	0.3
Developed (Kg/year)	82.4	81.9	81.7	-0.2
Developing (kg/year)	30.4	31.5	31.8	1.0
FAO meat price index (2002-2004=100)	2007	2008	2009*	Change: Jan-May 2009 over Jan-May 2008 %
	112	128	115.7	-6

* Jan-May 2009

Figure 39. Evolution of meat/feed index prices



of profit margins over the last few years. However, new data for 2009 suggests that profitability is once again decreasing, following a steady drop of international meat prices since their peak levels in October 2008. International prices have not yet returned to the levels observed in the first months in 2007, and they appear to show signs of stabilization. The decline was most pronounced for bovine, ovine and poultry meat, while pig meat prices remained relatively stable. The fall of meat prices largely reflects the weakening of demand, as a worsening of the global economic environment is dampening consumption growth, especially in the developed countries.

BOVINE MEAT

Prolonged drought in Mercosur constrains supply

World bovine meat **production** is expected to remain virtually unchanged in 2009 around 65 million tonnes. Reduced opening cattle inventories in Oceania, Europe, North and South America are likely to limit the number of animals slaughtered and depress output in those regions. However, globally, these shortfalls are anticipated to be compensated by increases in Asia and Africa.

In **North America**, where animals are intensively reared and finished in feed lots, bovine meat production in 2009 is forecast to rise by 3 percent in **Canada**, while it may decline in the **United States**, where cattle numbers have steadily decreased since 2005, in line with the deterioration of the beef/feed price ratio. The price relation improved somewhat over 2008 but did not prevent a further herd downsizing in 2009. In **South America**, where cattle are raised under extensive pastoral systems, **Argentina, Brazil**,



Paraguay and Uruguay endured a prolonged drought from mid-2008 to April 2009. However, abundant rains in May helped pasture conditions to recover in some countries. The sector was also constrained by high input prices and more difficult access to credit. As a result, beef production is forecast to decline in Brazil for the second year in a row as well as in Argentina. Uruguay's production prospects were also downgraded, but still point to a small increase from last year. In Oceania, uncertainties remain for Australian beef production in 2009, as the final outcome will depend on the extent to which improved pasture conditions following recent abundant rains can mitigate the impact of expensive feed on the sector's profitability. On the other hand, low producer prices, which are strongly linked to international prices, because more than half of Australia's production is shipped abroad, are not encouraging farmers to slaughter, which may result in a 3 percent decline in production in 2009. Little change in beef output is expected in New Zealand, where farms are recovering from drought. In *Europe*, aggregate beef production in the European Union is anticipated to increase somewhat, as low meat and dairy prices, combined with high feed costs encourage culling. Profitability continues to be poor and cattle numbers are down in various countries, including the United Kingdom where the national herd may reach a historical low this year. The restrictions on animal movements following outbreaks of bluetongue disease have also disrupted the sector. Production is expected to decline in the Russian Federation and Ukraine by a further 2 percent, in line with recent trends. In Asia, China's beef production is anticipated to contract due to the combined effect of low profitability, limited government support and strong competition from

meat products (2002-2004=100) 200 175 Poultry

Figure 41. FAO international price index for



pork and poultry meats. By contrast, output it is set to increase in **Pakistan** and the **Republic of Korea**, as well as in India, mainly consisting of buffalo meat.

World exports in bovine meat are expected to remain unchanged at some 6.8 million tonnes in 2009, as increased shipments from North America are forecast to compensate for some declines in the rest of the world. Exports from Brazil, the world's largest bovine meat exporter, could decrease to some 1.6 million tonnes, because of lower export availability. Import restrictions, which were imposed on Brazil in 2008 by the Russian Federation on Sanitary and Phytosanitary (SPS) grounds (foot-and-mouth disease [FMD]) and the implementation of labelling regulations (Sistema Brasilero de Identificación Bovina y Bubalina (SISBOV) standards) may also slow the pace of Brazil's beef exports to the European Union. Australian shipments were up in the first guarter but news in April of a 10 percent fall in the number of cattle in feedlots suggest that shipments from the country may decline in 2009. However, the weakening of the Australian Dollar could offset the price decline, and therefore the possibility of an expansion of exports in the second half of 2009 should not be excluded. In the United States, exports are anticipated to increase by 12 percent to 900 000 tonnes, following the reopening of the Republic of Korea's market to United States' beef, which had been closed since 2004 following the discovery of Bovine Spongiform Encephalopathy (BSE). At that level, exports would still be 200 000 tonnes below the pre-BSE levels in 2003. World bovine meat imports are forecast to rise slightly above last year, sustained by moderate increases in purchases by developed countries, in particular the European Union, Japan and the United States. However, beef deliveries are

anticipated to fall in the Russian Federation, where the economic downturn is depressing consumer demand, and in the Republic of Korea following an expansion in production.

Bovine meat prices in the next few months are expected to remain stable, as the depressing effect of the slowdown of the economies and import restrictions on demand could be dampened by reduced supply for export in South American countries.

SHEEP AND GOAT MEAT

New Zealand weather improves, and so does production

Global sheep meat production is expected to expand slightly in 2009 to some 14.2 million tonnes, or less than one percent, reflecting a modest increase in Asia. In Oceania, where most of the trade is sourced, production is anticipated to stagnate, as increases in Australia fully offset a contraction in New Zealand. The increase in Australia is expected to stem partly from culling of the breeding flock, as farmers move away from wool production, and partly from a recovery of lamb supply during the second half of the year. Conversely, the decline anticipated in New Zealand would reflect a tendency for farmers to rebuild their flock following two years of drought, which is limiting the number of sheep available for slaughtering. The production outlook in South America remains uncertain and will depend on the effect of the current rains on the ongoing drought on producer decisions to retain their animals or downscale their flocks.

Current prospects for trade in ovine meat in 2009 points to little change in the volume of world exports, which should remain around 860 000 tonnes. In New Zealand, reduced production in the country along with a strong currency, are anticipated to constrain the country's exports over 2009, with the gap expected to be filled by Australia and the European Union.

PIGMEAT

Concerns about possible animal diseases as well as poor economic prospects affect consumer confidence and imports of pigmeat

World pig meat in 2009 is forecast to increase by 2 percent to 106 million tonnes, sustained by sizeable increases in , which accounts for half of world pigmeat production, but also in , and . Those increases are expected to more than offset a contraction in the and the . In , the sector is set to recover from the disruption caused by outbreaks of the Porcine Reproductive and Respiratory Syndrome (or PRRS)

Figure 42. Major pigmeat exporters



in 2007 and the resulting culling of animals, sustained by falling feed costs, government support and strong domestic demand, which are resulting in relatively high returns. By contrast, prospects for lower pig meat production in the and the reflect the combined effect of stagnating profit margins, high feed costs, and concerns over the effects of Influenza type A/H1N1 on consumer demand for pigmeat. In the United States, the decline in output would also be caused by an expected reduction of imports of live animals from Canada, following United States implementation of the Country of Origin Labelling Legislation (COOL). On the other hand, the reduced number of live pigs exported by could well boost pig meat production in the country.

FAO's forecast for world pig meat points to a 7 percent contraction to 5.4 million tonnes in 2009, as consumer concerns related to a possible link between Influenza type A/H1N1 and swine flu are expected to depress import demand. On the supply side, the fall would be a direct consequence of lower exports from the (27 percent) and the (14 percent). After soaring to unprecedented high levels in 2008, imports are forecast to fall in to the 2007 level, or some 70 000 tonnes. Imports will also decrease in by 18 percent on account of both the higher availability of domestic produce and a slowing down of the economy. The pigmeat market is expected to show resilience to the world crisis and imports are estimated to fall by only by 3 percent, while a more pronounced decline of 5 percent is anticipated in the . In the the depreciation of the Rouble, the country's import substitution strategy, and SPS import restrictions for non-heat treated pigmeat are anticipated to depress pigmeat deliveries to the country by 7 percent to 800 000 tonnes.

International pig meat prices, which were relatively strong by the end of 2008, are expected to decline in 2009, largely reflecting a faltering global import demand. Apart from the recent outbreaks of diseases, the economic downturns, the imposition of non-tariff measures and a weakening of currencies in major import markets are all expected to drive international prices lower in 2009.

POULTRY MEAT

Sanitary and phytosanitary measures affect world trade flows

The outlook for world poultry meat production growth has been revised downwards since November 2008, total production 94.7 million tonnes, largely on account of the Avian Influenza epidemic in Asia, where numerous outbreaks have been reported since the end of last year. At the forecast level, global poultry meat production would increase by a mere 1 percent compared with 2008, the slower pace of growth this decade. Although the price of feeds, a key component of costs, fell relative to that of poultry meat in the last quarter of 2008, the relation reversed in early 2009, when consumer demand started to falter, portending another year of low profits or even losses.

In Asia, poultry production is anticipated to increase in most countries. China's growth is expected to slow down to 3 percent, amidst sluggish domestic demand. In the past, China's poultry consumption was fuelled by rising purchasing power, especially among the urban population, but this engine of growth is now under pressure from the current international financial crisis. The outlook for growth in India, Indonesia, the Islamic Republic of



Figure 43. Major poultry exporters

Iran and Thailand is positive, despite accumulated debts from high feed costs last year. No cases of Avian Influenza were reported in **Thailand**, where output is anticipated to grow by 6 percent. In **Indonesia**, two fatalities from avian influenza were reported in December 2008 and the government banned small-scale poultry production in Jakarta to combat the disease. However, compliance may prove difficult because of the significant contribution of poultry rearing to most rural household economies, and national poultry production is expected to increase by 5 percent. In North America, wholesale broiler prices in the United States tended to increase in early 2009 due to a sustained demand coupled with a tight supply constrained by expensive feed costs. Early indications of a contraction of poultry production in the first half of 2009 suggest output may fall by 3 percent to 19.3 million tonnes compared with 2008. In *Europe*, production growth in the Russian Federation may slow down to 9 percent, weaker than the growth witnessed in the past two years of 16 percent average. Little change in **European Union's** poultry meat production is currently anticipated. In South America, Brazil's output is forecast to grow by only 2 percent in 2009, as farmers were called by the Brazilian Association of Poultry Exporters (ABEF) to reduce production for export to counter the difficult world market situation. In Africa, Kenya, Nigeria and Uganda farmers struggle as the bag of poultry feed increased significantly in recent months and loans are not forthcoming. Concerns have also been raised about the perceived shortage of eggs in local markets. Conversely, South African industry shows signs of recovery in early 2009 from a difficult 2008 and growth is anticipated to reach 5 percent.

World poultry trade has been revised downward and is expected to decline 3 percent in 2009, to just over 10 million tonnes despite the relatively low price of poultry meat vis-à-vis other meats. The decline is expected to reflect a contraction of exports by the United States to volumes similar to those shipped in 2007, following reduced profit margins and lower import quotas by the Russian Federation. Exports from the European Union are likely to be also compromised by the Russian Federation's cut of access and face the additional difficulty of poultry plants being de-listed on SPS grounds. The expansion of poultry exports from Brazil is anticipated to slow down because of reduced credit availability and voluntary export restrictions. In addition, Brazilian exports to China were suspended in early 2008, when doubts were raised about the origin of the produce in a registered firm. Part of the deficit, some 150 000 tonnes, was covered by larger imports from the United States. Discussions are underway between Brazil and China

to set up inspection and guarantee procedures that could contribute to lifting these restrictions. Should the ban be suspended this year, United States poultry exports would once again face competition from Brazil in the Chinese market. On the import side, the anticipated decline in trade would be mainly on account of lower shipments to **China**, the **Russian Federation** and **Ukraine**. In the latter, this would reflect a return to more normal imports from the exceptionally 2008 high level.

MILK AND MILK PRODUCTS

PRICES

Have prices hit bottom?

The FAO Dairy Price Index of international dairy product prices (100 in 2002-2004) fell by 58 percent from its peak in November 2007, to a value of 114 in February, 2009. Since then, prices appear to have bottomed out in the first quarter of 2009 and have recovered to124 by May 2009. While much uncertainty exists, there is evidence to suggest that, based on fundamental indicators, such as stagnant milk production in major exporters, prices may rise in the next few months. Product prices in the Oceania region were USD 1 900 per tonne for butter, USD 2 000 per tonne for skim milk powder, USD 2 200 per tonne for whole milk powder in April 2009 and USD 2 575 per tonne for Cheddar cheese in May 2009. These prices are about half their year earlier levels.

In the context of the rapid fall in international prices, private and public stocks of dairy products have increased.



Figure 44. FAO price index of dairy products in international trade (2002-2004=100)

Figure 45. EU intervention prices, price and export refund for butter and skim milk powder



This was the case in New Zealand in recent months. The United States Commodity Credit Corporation has also bought butter, skimmed milk powder (SMP) and cheese into inventory, but so far the Government has refrained from using its Dairy Export Incentive Programme (DEIP) to subsidize the US exports of products. However, one of the most controversial developments has been the resumption of dairy export subsidies from the European Union. During the dairy price spike, such subsidies were not applied, as international prices rose considerably above intervention support prices. As Figure 45 indicates, export refunds had vanished for skim milk powder from July 2006 to January 2009, and on butter from June 2007 to January 2009. Relatively small refunds have been applied during the first few months of 2009. These refunds, paid on a per tonne basis, may be short lived if international prices increase, or they may remain quantitatively small if European Union milk production continues to decline, and surplus production diminishes.

PRODUCTION

Global output growth remains slow

Recent milk 2009 production estimates have been revised down to 699 million tonnes, 1.6 percent more than last year. This growth is below the global trend rate of 2.0 percent annually, which prevailed in the previous decade. Output in developing countries may reach 337 million tonnes, virtually counting for all the additional global output, as milk production in developed countries is anticipated to remain largely unchanged. As a result, the developing country's share of global output is set to rise to over 48 percent, up from a 40 percent share ten years ago.



Production prospects for the world's top five major exporters have deteriorated since the last Outlook. For 2009, their milk output is now set to total 273 million tonnes, which is the same level as it was in 2008 (Figure 46). While recovery in production is confirmed in Oceania, production may shrink in North America and Europe, due to relatively high feed prices (see Figure 47) Growth in South America is expected to slow due to poorer pasture conditions at the start of the year.

Milk production is now expected to rise by 3.5 percent in *Asia*, to 256 million tonnes. In **China**, damage control over the melamine crisis of 2008 has given rise to an improved inspection and regulatory framework. As the effects of the melamine crisis dissipate, milk output may rise 6 percent in 2009.

Milk production in **India** is expected to expand by 2.8 percent this year. Reports suggest that the expansion of demand for milk products has been somewhat weaker, as economic growth has cooled. **Pakistan** looks set to increase production again by 6 percent in 2009, as high internal prices have stimulated investments in the sector.

In **South America**, milk production is forecast to record a robust growth of 3.4 percent, to 58 million tonnes in 2009. **Argentina's** output is expected to increase to 10.6 million tonnes, or by 2.9 percent in 2009, which is lower than the previous year, due to a drought, which has affected production during its summer period, but also to the imposition of large export taxes on milk products, which have dented producer returns. Milk production in **Brazil** may increase by 5 percent to 29.5 million tonnes (production estimates have been revised down). In milk equivalent terms Brazil will be the second largest exporter in the region this





year. **Colombia**, the region's fourth largest milk producer, will again post limited gains. Milk production in **Uruguay is** expected to increase marginally in 2009, as its sector has been most heavily affected by poor pasture conditions. Growth in **Paraguay**, a relatively small milk producer in the region, is expected to remain in the order of 6 percent from 2008, at around 6 percent per year; production may reach 467 thousand tonnes in 2009, up 5.7 percent from 2008. In **Mexico**, one of the world's largest importers of milk powders, milk production may expand by 2.0. percent.

Milk production in *Africa* is anticipated to advance only 1.0 percent in 2009, about half the rate of its population growth, to 36 million tonnes. Reflecting continued high maize prices and lower milk prices, output growth in **South** *Africa* will slow to 1.5 percent, down from almost 4 percent last year. Production in *Algeria*, which is by far Africa's most significant importer of milk products, is also expected to expand by 2.2 percent, as a result of programmes to boost the sector. In *Kenya*, the dairy sector continues to struggle and production remains stagnant. *Egpyt*, the continent's largest milk producer, may continue on its trend growth path of 1.0 percent per annum.

The **United States'** dairy sector, which experienced seven consecutive years of robust growth, is now expected to contract in 2009, as low profitability and farm exit programmes have encouraged herd liquidation. Milk production is now expected to fall to 85.5 million tonnes in 2009. During its growth period, encouraged by a depreciated United States Dollar, and by high international prices, the United States sector had gained increasing market share on world markets. Weaker domestic demand

42

in 2008-2009 has also led to lower domestic prices and increasing intervention purchases by the Commodity Credit Corporation. In **Canada**, production may remain in the 8.3 million tonne range, perhaps falling slightly from the previous year, under weak demand conditions.

In , the **European Union's** (EU-27) milk production started to contract in late 2008, under unprofitable conditions, ending the year down from 2007. For 2009, milk production is anticipated to fall slightly to 150.9 million tonnes, despite quota expansion offered in the previous year. Milk prices in the European Union have fallen considerably, and have been subject to much variation and uncertainty. Producers in a number of European Union members have called for supplementary subsidies. The fall in European Union milk production will help contain its net exportable surplus of milk products, which is expected to fall by almost 1 million tonnes in 2009 compared with 2008.

Milk production in **Ukraine** is expected to decline again in 2009, down 6 percent from last year and over 20 percent below its 2002 peak. The contraction reflects problems that have plagued the industry in supplying exports to the **Russian Federation**, its largest external market. **Belarus**, which is emerging as the region's largest exporter, will expand its production by another 5 percent on the previous year. Milk production in the **Russian Federation** may increase 1 percent, which, given weak demand conditions associated with its sizable economic contraction, may depress markets further.

In Oceania, milk production in the marketing 2007-08 fell 3.2 percent. In 2008-09, output is foreseen to recover in both **Australia** and **New Zealand**, by 1.9 and 6 percent, respectively. **Australia's** milk output will reach 9.4 million tonnes in marketing year 2008-09 (ending June), the first yearly increase in four years, and almost 20 percent below its peak level of 2001-02. In **New Zealand** milk production could reach a record 16.2 million tonnes in 2008-09, which may help it to further consolidate its position as the world's largest exporter of milk products. However, as exportable supplies have improved significantly, international prices have correspondingly fallen, and stocks are reported to be mounting in these countries. Producer returns are likely to plummet from the historical highs of the previous two years.

TRADE

Export supplies contract in 2009

Global exports of key milk products, in milk equivalent terms, are forecast to decline to 39.4 million tonnes in 2009, down marginally by 0.3 million tonnes from the estimate for 2008.

Figure 48. Changing export shares in milk equivalent for 2000 and 2009



This decline is due to significant reductions in both **United States** and the **European Union**, in the order of 0.8 million tonnes less each. In the case of the European Union, it would bring its export share to a record low of 22 percent, which is less than one half its share in 2000. Lower exports by the European Union and the United States are expected to be offset by increased deliveries from Oceania of 1.2 million tonnes. *South America*, led by **Brazil**, may also increase shipments while exports from Asian countries, which are largely targeted to other Asian countries, are expected to be stagnant. Much depends on how **China's** trade evolves in its post melamine crisis period.

....but import demand is weak

An important issue facing world dairy trade is the impact of the financial crisis and recession. A key factor in the financial crisis is the access to credit which is increasingly difficult. An important driving force in the changing shape of the global dairy market has been international investments, and while it is too early to comment on the impact of adverse credit conditions, it is foreseen that global investments in dairy processing will diminish.

In the context of declining export supplies, an important factor impacting on international dairy markets is the slowdown in economic growth of key importing regions, as demand for dairy products is very much influenced by changes in purchasing power, particularly for higher cost items such as cheese. For example, in the Russian Federation, which is the world's largest importer of dairy products, gross domestic product is now anticipated by the World Bank to fall by up to 6 percent in 2009. As a result, imports in 2009 into the Russian Federation could be much lower than currently forecast. In Asia where economic growth is expected to decline but still remain positive, the growth in imports is also expected to slow. Overall, against this macroeconomic backdrop, prices are likely to weaken, especially as milk production largely results from a long biological process and cannot be quickly adjusted downwards. Thus, unless stocks are held off the market, product prices could well fall.

Recession may affect trade composition

Global exports of <u>butter</u> may drop to 798 thousand tonnes in 2009, down 1.4 percent from the previous year. Butter exports from the **European Union** are expected to remain around 150 thousand tonnes, its lowest level in decades. By contrast, **New Zealand**'s shipments should increase to around 338 thousand tonnes, depending on how stocks are managed given current low prices and uncertainty concerning their future evolution. Larger exports from **Belarus** are also forecast, taking a higher market share in the Russian market. However, the size of the import market in the **Russian Federation**, the world's largest dairy product importer, appears uncertain given economic conditions in the country.

Table 11. World dairy markets at a glance

	2007	2008 estim.	2009 f'cast	Change: 2009 over 2008
	million	tonnes mill	k equiv.	%
WORLD BALANCE				
Total milk production	676.1	687.7	699.0	1.6
Skim Milk Powder (SMP)	24.1	24.6	25.0	1.6
Whole Milk Powder (WMP)	30.8	31.6	32.1	1.6
Butter	60.3	62.3	64.0	2.7
Cheese	85.9	87.9	89.8	2.2
Other products	475.1	481.3	488.0	1.4
Total trade	39.4	39.7	39.4	-0.8
SUPPLY AND DEMAND INDICAT	ORS			
Per caput food consumption:				
World (kg/year)	102.4	103.1	103.6	0.5
Developed countries (Kg/year)	245.4	246.9	249.6	1.1
Developing countries (Kglyear)	64.0	65.5	66.9	2.1
Trade - share of prod. (%)	5.8	5.8	5.6	
FAO dairy price index (2002-2004=100)	2007	2008	2009	Change: Jan-May 2009 over Jan-May 2008 %
	212	220	119*	-52

* Jan-May 2009

Table 12. Major exporters of dairy products

	2007	2008	2009
		prelim.	f'cast
	Т	housand tonnes	5
WHOLE MILK POWDER			
World	1 757	1 849	1 826
New Zealand	680	607	686
European Union *	366	484	386
Argentina	115	120	107
Australia	116	107	109
SKIM MILK POWDER			
World	1 145	1 201	1 186
USA	255	400	350
New Zealand	281	242	278
European Union *	201	179	180
Australia	134	112	115
BUTTER			
World	852	809	798
New Zealand	361	325	338
European Union *	210	150	150
Australia	66	56	58
Belarus	50	55	60
CHEESE			
World	1 818	1 751	1 776
European Union *	594	546	536
New Zealand	309	247	284
Australia	218	211	215
Belarus	92	101	110

* Excluding trade between the EU member states

Skim milk powder exports are now expected to fall marginally to 1 186 thousand tonnes in 2009, down 2 percent from the previous year, largely due to a significant decline in exports from the United States to around the 350 thousand tonne level, as its excess supplies of milk have dropped. This will be the first fall in United States skim milk powder exports in six years. This decline should be almost offset by increased exports from Australia and New Zealand. Exports from the European Union are anticipated to hold steady around 180 thousand tonnes. Imports to Asian countries are expected to increase, stimulated by much lower prices. Imports by **Mexico**, supplied largely by the United States, are expected to continue at a recent historically high, given the importance of and support for its social feeding programmes. Imports of skim milk powder into Africa are expected to decrease again in 2009.

Global exports of <u>whole milk powder</u> are expected in the order of 1 826 thousand tonnes in 2009, 1.2 percent lower than in 2008, largely due to a sizeable forecast decline from the **European Union** of 100 thousand tonnes. Whole milk powder remains the key milk product exported by surplus milk producing regions, such as the European Union, to growing developing country markets. **New Zealand**, the largest whole milk powder exporter with a market share of some 38 percent, is set to increase exports in 2009 to a record 686 thousand tonnes. Deliveries by **Australia** are expected to remain near 2008 volumes, while those of **Argentina**, the third largest supplier, could decline. Imports by **Algeria** and **Venezuela**, the two largest buyers of whole milk powder, should remain near 2008 levels. Milk production in these two countries has been increasing, under efforts to replace imports.

International <u>cheese</u> trade continues to grow, albeit slowly. It is by far the highest value market for milk product trade; exports are expected to reach 1 766 thousand tonnes in 2009, up modestly from 2008 levels. Exports from the **European Union**, the world's largest cheese producer and exporter, may rise marginally despite tight milk supplies, to 536 thousand tonnes. Exports from the **United States**, which has doubled its exports in the past six years, will fall as its supplies returns on international markets shrink. On the import side, most of the growth in trade has occurred in emerging Asian countries and in the **Russian Federation**, and the growth of these markets will depend on how these countries fare in the current economic conditions.

FISH AND FISHERY PRODUCTS

GLOBAL FISH ECONOMY

In 2008, global production of fish products increased slightly, while trade reached a record. Prospects for 2009 are less buoyant, as low prices is encouraging a downsizing of the sector

World production of fish products (excluding seaweed and marine mammals) is estimated to have reached 141.6 million tonnes in 2008, a slight increase over 2007, driven by a 2.5 percent expansion in aquaculture to 51.6 million tonnes, while capture fisheries remained stable around 90 million tonnes. Based on current estimates, aquaculture products contributed 45 percent of total food fish supply. However, lower prices in 2008 and 2009 for a number of the most important traded farmed species, such as Pangasius (Vietnamese catfish), are also causing a supply response and lower volumes are now forecast to reach the market in 2009.

Figure 49. FAO Globefish-UiS¹ price index



Table 13. World fish markets at a glance

	2007	2008	2009 estim.	Change 2009 over 2008
	п	%		
WORLD BALANCE				
Production	140.4	141.6	142.0	0.3
Capture fisheries	90.1	90.0	90.0	0.0
Aquaculture	50.3	51.6	52.0	0.8
Trade value (exports USD billion)	92.8	99.5	98.0	-1.5
Trade volume (live weight)	52.9	52.9 52.6		-1.1
Total utilization				
Food	112.8	113.9	114.4	0.4
Feed	20.8	20.6	20.4	-1.0
Other uses	6.8	7.1	7.2	1.4
SUPPLY AND DEMAND INDICA	TORS			
Per caput food consumption:				
Food fish (kg/year)	16.9	16.9	16.8	-0.3
From capture fisheries (kg/year)	9.4	9.3	9.2	-1.3
From aquaculture (kg/year)	7.5	7.6	7.6	1.0

2008 was a record year for global fish trade with imports topping USD 100 billion for the first time; China confirmed its position as the dominant exporter whereas Japan regained its top position among fish importers, helped by a stronger yen. Prospects for 2009 are dominated by overriding concerns over the impacts of the economic crisis on demand and prices. Sales are sluggish in all major markets and prices and margins are under pressure for most seafood products. The only exception is for species facing tight supply situations due to lower catching quotas or production problems in aquaculture. In this respect, the implosion of the Chilean salmon industry in 2009, following a virus attack, is a warning sign for many countries targeting high growth in the aquaculture sector.

Per caput food fish consumption in 2008 is estimated at 16.9 kilo in 2008, unchanged from the previous year, of which 8.5 kg came from capture fisheries and the remainder from aquaculture. Lower prices for most fish species have helped sustain consumption, although falling purchasing power are leading consumers in many countries to cut purchases and shop for the cheaper alternatives.

According to the FAO GLOBEFISH Price Index⁸, fish prices reached an all time high in September 2008, but have been dropping ever since, and much more than normal for the season. As a result, in February 2009, prices were 3.4 percent lower than 12 months earlier, and 10.2 percent below their September peak. Although supply is expected to be downsized as a result, the adjustment may take time, so further price weakness is expected for most species over the next six months.

INDIVIDUAL FISH MARKETS BRIEF OVERVIEW

Most of the fish product markets are being depressed by a slowing demand, amidst falling income growth, while others have been affected by diseases

Shrimp

The shrimp sector has been suffering from a weakening of demand, which is tightly linked to demand for food services,

⁸ University of Stavanger



including restaurants. This demand has been much affected by the economic woes, as consumers cut down on awayfrom-home meals and turned to less expensive seafood products. As demand faltered, producer prices remained depressed, leading many farmers to convert to alternative production such as tilapia. Poor consumer demand also affected imports in 2008, which decreased by 5 percent in Japan, 7 percent in Spain, 2 percent in France and 8 percent in the UK, whereas they recovered by 1 percent in the United States. Prospects for trade in 2009 remain downbeat, given the current state of the economies, which may result in a further contraction of world imports and prices.

Tuna

Demand for fresh and frozen tuna for direct consumption has been falling, whereas the canned tuna market (and the related raw material needs) has been boosted by stronger demand from price sensitive consumers. In 2008, prices followed a downward trend despite declining tuna supplies. Frozen skipjack was selling for USD 1 100/tonne in Bangkok in March 2009, about USD 500/tonnes below the March 2008 price. Similarly, the price of frozen yellowfin fell to USD 1 600/tonne compared to USD 2 200/tonne in March 2008. On the positive side, after years of weak consumption arising from concerns over mercury presence in tuna, the United States' canned and fresh tuna markets both seem to have stabilized.

Captures of tuna fish in the western Indian Ocean, which had been constrained by tension over access to the water, are expected to improve, after the EU agreed to pay an access fee of Euro 9 million per year for fishing in Seychelles' Exclusive Economic Zone. Spanish and French purse seine



Figure 51. Prices of canned tuna: USA and Europe

boats operating in the Indian Ocean haul approximately 350 000 tonnes annually through Seychellian ports. While the agreement is expected to boost tuna captures, the fishing activity is likely to be negatively affected by the intensification piracy activity off the coast of Somalia, which contributed to depress Indian Ocean tuna catches by 30 percent in 2008. Elsewhere, in Japan, the Ministry of Fisheries recently announced further cuts in the tuna fleet, with compensation offered to fishermen. However, the impact of the measure on actual fishing activity is uncertain as the remaining ships are expected to increase the scale of their operations.

As for trade, Japan's imports of tuna have declined every year since 2005. In 2008, they shrank by a further 17 percent in quantity and 2.4 percent in value. Deliveries of canned tuna to Europe were also lower, as purchases by Germany, France and Italy fell. Only the UK, the main European market, increased its imports by 10 percent. Imports of canned and pouch tuna by the United States totalled 171 300 tonnes in 2008, virtually unchanged from the previous year, but rose strongly in value, USD 661 million, or 26 percent more than in 2007. Thailand, the main canned tuna producer, saw exports recover in 2008 from the 2007 low, increasing by 8 percent to 506 000 tonnes.

Groundfish

The groundfish market is getting increasingly complex; a number of species from traditional sources (some of which are now also farmed) compete with new species from Southern hemisphere aquaculture, such as tilapia and pangasius, especially in the fillet market. Overall, global groundfish supply appears more than adequate, especially



Figure 52. Groundfish prices in the United States

as cod production in Canada is finally recovering after two decades of virtual disappearance from markets. Higher availability of Alaska pollack from Russia is further exerting downward pressure on prices. The market weakness has also affected farmed cod and turbot prices negatively, amidst increasing availability from both farmed and wild sources.

The United States pollock fishing guota in Alaska has been reduced by 18.5 percent in 2008 to 815 000 tonnes, its lowest level in ten years. This is forcing Europe's buyers to turn to other whitefish alternatives, such as cod and farmed pangasius and tilapia, or buy double-frozen pollock from Russia and China. Within the sector, farmed cod producers are suffering from falling prices and high costs and many companies are reported leaving production altogether. This is disappointing given the high expectations that cod aquaculture was raising only a few years ago.

In 2008, the United States imports of fillets and blocks decreased by 8 percent (to 90 000 tonnes) and 15 percent to (42 000 tonnes) respectively. In Europe, German and French imports of Alaska pollock fillet grew 7.5 percent (to 176 800 tonnes) and by 9 percent (to 41 500 tonnes) respectively thanks to larger shipments from China. Frozen cod imports by the UK and Germany were both weaker in 2008, falling 8 percent and 11 percent. A weaker hake market in Europe caused German imports of frozen hake fillets to drop by 6 percent in 2008. Hake prices, on the other hand, are now firming, with fillets increasing from USD 1.80/lb in December 2008 to USD 2.20/lb in March 2009. Italian hake imports were stable in 2008 at 30 000 tonnes.

Cephalopods

2008 was for the most part positive for cephalopods; octopus, in particular, was traded at high prices. By contrast, prices of squids moved downwards, notwithstanding lower catches, which is encouraging many producing countries to reduce them further this year. In fact the first indications for the 2009 Southwest Atlantic fisheries show a significant reduction in volumes, bringing some relief to the market. However, prospects continue to be bleak, especially in the light of faltering demand in Spain, the main importer of Argentine squid.

Total squid catches in the South West Atlantic reached 400 000 tonnes in 2008, 30 000 tonnes below the 2007 record. Catches off the Falklands/Malvinas fell to 158 000 tonnes, 45 000 tonnes less than in 2007. Loligo catches were up by 25 percent in 2008 to 52 300 tonnes, but the much larger Illex catches in the area declined sharply by 33 percent to 106 600 tonnes. Mainland Argentina reported 255 000 tonnes of Illex catches in 2008, a 22 000 tonne increase over 2007, and Loligo catches stable at 18 000 tonnes







Figure 55. Prices of Tilapia fillets in the USÀ

Japan's octopus imports fell to 44 700 tonnes and USD 330 million in 2008, down 4 percent in volume and 1 percent in value. EU's imports of octopus grew in 2008, led by Italy, followed by Spain. A major development in squid markets in 2008 was China becoming the main importer from Argentina with 66 400 tonnes, almost double the 2007 figure.

Fishmeal

World demand for fishmeal has also been affected negatively by the slowing economic growth, especially in China. As a result, prices have fallen below the USD 1 000 per tonne mark after two years of high levels. However, quotations are now moving upward again because of limited availability and downward expectations for fishmeal production.

In 2008, the fishmeal production in the five world's major exporting countries declined somewhat. A total of 2.6 million tonnes were recorded, about 100 000 tonnes less than in 2007. It is unlikely that 2009 will see a reverse of this downward trend. Despite lower production, Peru managed to export more fishmeal in 2008, drawing from the inventories accumulated in 2007. Total Peruvian fishmeal exports reached 1.6 million tonnes last year, up 24 percent. The main import market remains China with a 53 percent share of Peruvian exports. Germany is a distant second with 190 000 tonnes imported.

Fish oil

Although the opening months of the calendar year are always a slow period, this year's production was lower than normal. The contraction is a response to a weakening of demand and falling prices, but also reflects the effects of falling salmon production in Chile. Fish oil production in 2009 is likely to be in line with 2008, as the anchovy fishery is well managed and subject to stringent fishing quotas.

Tilapia

The global economic downturn is depressing demand for tilapia and other Chinese export species, causing their domestic market prices to fall. However, demand both in the United States and Europe is picking up again as lower prices make tilapia more attractive among other fishes. Chinese production, which experienced a drop in 2008 due to cold winter temperatures, is likely to recover rapidly in 2009. Tilapia imports by the United States rose y 3.3 percent to 179 500 tonnes in 2008 with values up sharply, to USD 734 million.

Pangasius (Vietnamese catfish)

Vietnamese farmers are suffering from lower prices with pangasius fetching around USD 0.92/ kilo in the Mekong

48

Delta region, making production uneconomic. As a reaction, farmers are refraining from harvesting while others are not restocking. 2009 output could therefore be lower than last year's despite official forecasts of further increases in production to almost 1.5 million tonnes in 2009.

Imports by the EU, the main market for pangasius from Viet Nam with about one third of export volumes and 40 percent of value, rose in 2008. The increase was mainly on account of Spain, is the single biggest EU market, having grown by almost 30 percent. However, Viet Nam has been successful in opening new markets, with Russian imports doubling in 2008 to 118 000 tonnes. Ukraine and Egypt showed even higher growth, trebling their 2008 imports from Viet Nam. The United States market is also expanding. In 2008, exports of Pangasius from Viet Nam rose by 48 percent in value and 66 percent in quantity to 640 000 tonnes and USD 1.5 billion. Also, China reported a strong increase in catfish deliveries to the United States.

European seabass and bream

Production of European seabass and bream rose in 2008 to new record levels, not only in the largest producer countries, namely Greece and Turkey, but also in Spain. However, prospects for 2009 production are negative, as tight liquidity is forcing many producers to reduce output.

In 2008, Italian imports of bream increased due to attractive prices whereas relatively high bass prices led to a decline in consumption and imports. Total Italian bass and bream imports were down 6 percent. Spain is also suffering whereas the French market has held up surprisingly well with imports rising in 2008. Strong sales in supermarkets are making the UK a valuable outlet for Mediterranean bass and bream producers.

The large rise in supply of European seabream in 2008 in Greece and Turkey, the two major producing countries, had a significant downward effect on prices, whereas seabass prices held up well. The outlook for the rest of 2009 is not positive. Bream prices, in particular, were low in the initial months of 2009 and the strong upward movement currently at play mainly reflect seasonal shortages before the summer production reaches the market.

Small pelagics

Global herring and mackerel markets experienced mixed fortunes during 2008, affected by fluctuating currencies, reduced quotas, and one major market, Russia, imposing a temporary ban on imports. As a result, Norway's mackerel exports in 2008 were basically flat at 335 000 tonnes, with Japan accounting for about one third of total exports. China is also an important market for mackerel, mainly for reprocessing, with the final product ending up in the Japanese market. Herring exports from Norway were strong, reaching new a new height of 492 000 tonnes, with Russia, Nigeria and the Ukraine as the main destinations.

Atlantic salmon

Total production (and exports) of farmed Atlantic salmon reached record heights in 2008, but a major reason behind the increase was the decision by Chilean producers to harvest early a large part of the production planned for harvesting in 2009. The decision was connected with a virus attack, starting in 2007 and spreading in 2008, which prompted producers to anticipate the harvest. Therefore, this year and next, Chile's production will be drastically reduced also because producers are reluctant to restock their cages until an effective vaccine has been found. Despite some increases in Norway, total production will be much lower than last year.

Chile's salmon and trout exports in 2008 grew 6.8 percent to USD 2.4 billion, boosted by the early harvesting, a decision expected to have strong repercussions on 2009 sales from the country. Norway also increased 2008 exports by 3 percent to a record 722 500 tonnes. Much

Table 14. World production of farmed salmon

	2005	05 2006 2007 2008 estim.		2009 f'cast.	
	tho				
ATLANTIC SALMON					
Norway	573	600	725	790	880
Chile	379	370	355	360	220
UK	119	125	140	145	150
Canada	103	115	110	110	120
Faeroe Is.	16	16	20	20	
Australia	16	20			
Ireland	12	15	15	15	15
USA	10	10	12	12	15
Others	3	3	3	3	5
Total	1 231	1 267	1 400	1 480	1 455
PACIFIC SALMON					
Japan	12	10	10	10	10
Chile	115	115	120	113	120
Canada	21	10	8	7	7
New Zealand	9	10	10	10	10
Total	157	145	148	140	147
Grand Total	1 388	1 412	1 548	1 620	1 602

Source: GLOBEFISH AN 12201

of this growth has beebn driven by strong imports by EU, in particular France but also Poland thanks to a growing processing industry. Japan's salmon imports finally showed a small rebound in 2008, after years of decline. However, import volumes fell by 3.4 percent in the United States. Russia, and Eastern European and South American countres are emerting as new important destinations for farmed salmon.

The virtual implosion in 2009 of the Chilean salmon industry, due to a virus attacking the Atlantic salmon species, is having a tremendous impact on total Salmon supply, with prices skyrocketing in all markets. Norwegian companies are the main beneficiaries, although those operating in Chile have been hurt as well. The situation is not expected to improve until 2011 at the earliest. In the meantime prices will remain high.

The Chilean experience is also raising wider questions about the long-term sustainability of the aquaculture sector and whether it can grow as fast as previously expected to cover future demand increases for fish and fishery products. Although most analysts expect the Chilean industry to be back in force in a few years, the case underlines the necessity of combining growth with sustainable management practices, institutional strengthening and an improvement of the regulatory framework in many producing countries.

OCEAN FREIGHT RATES

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

Ocean freight market (November 2008 – May 2009)

Following the collapse of the ocean freight market between June and October 2008, dry bulk rates touched their lowest levels in more than two decades. Rates remained extremely weak during the final months of the year and into January 2009, attributable to the shrinking volume of seaborne trade, particularly China's sharply reduced mineral imports as its steel mills focused more on domestic raw materials. Due to the global financial and economic crisis, the shipping industry experienced the worst conditions since the mid-1980s, with many operators facing bankruptcy due to credit problems. Owners struggled to cover running costs, with an estimated 20 percent of the fleet, mostly larger vessels, laid up. More than 10 percent of the new building orders were cancelled. In February 2009, the market began to recover, particularly in the Atlantic. This was triggered by growing mineral demand in China, after its adoption of a substantial infrastructure stimulus package and falling steel mill inventories. As demolition of old ships for scrap accelerated and several new building contracts were cancelled, the resultant tightening in tonnage supply lifted rates in both the Atlantic and Pacific basins. Between January and mid-March 2009 the Baltic Dry Index (BDI) climbed by 170 percent, mainly reflecting sharp increases in the (largevessel) Capesize sector. Over the same period, the IGC Grain Freight Index (GFI),⁹ which does not include Capesize vessels, advanced by 25 percent. Rates subsequently faltered but in May Atlantic rates found renewed support from increased grain interest out of South America and the United States Gulf, as well as from the growing mineral trade.

In the **Panamax** sector, the rise in rates from end-January 2009 was underpinned by grains and soybeans chartering activity from the United States Gulf and South America. The most commonly quoted transatlantic round voyages rose from USD 9 000 to about USD 20 000 daily in March, before falling back to USD 11 000. The key United States Gulf to Japan rate, having reached a record of USD 130 per tonne in June 2008, and subsequently plummeted to only USD 24 per tonne in December, recovered to USD 44 per tonne by May 2009. On routes from the Black Sea to Asia, owners commanded a significant premium to sail through the Gulf of Aden due to high Suez Canal fees and piracy insurance premiums. Examples of Atlantic fixtures in May included a cargo of soybeans from Brazil to Europe at USD 18.00 per tonne, while rates to Far East Asia from the United States Gulf and South America were quoted at around USD 15 000 and USD 22 000 daily, respectively. Pacific rates were generally weaker than in the Atlantic due to an oversupply of tonnage and limited cargo availability. Nevertheless, since the lows set at the end of 2008, North Pacific roundtrips doubled, to around USD 13 000 daily. In the Pacific, timecharters for four-to-six months were reported at USD 13 500 daily, up by only USD 1 000 from six months earlier.

Having previously fallen the most, **Capesize** rates registered the steepest upturn between January and March

⁹ 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 new 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 6 000.

due to China's increased iron ore imports as domestic prices climbed. With many vessels still laid up, the market also responded to a shortage of early vessels in the Atlantic. Over the six months to mid–May 2009, the Baltic Exchange's average of four timecharter rates rose by 120 percent, to USD 21 925 (USD 9 848) daily. The benchmark iron ore rate from Brazil to China climbed by 44 percent, to USD 18.45 per tonne, but substantially larger increases were reported on key coal routes from Australia and India.

In the Handysize/Supramax sector, poor returns led to an increasing number of ships being laid up at the end of 2008, mostly in the Mediterranean. In February 2009, the market saw renewed strength, with rates in the South Atlantic supported by tighter tonnage availability and a good volume of business, including grains. Rates out of the eastern Mediterranean and the Black Sea were also much firmer. For example, a wheat cargo from the European Union (Germany) to the Egyptian Mediterranean was quoted in mid-May at USD 20.00 per tonne, up by 20 percent since the beginning of the year and a trip from Argentina (River Plate) to Algeria at USD 39.00/tonne, 40 percent higher. Pacific rates were underpinned by increased chartering activity, mainly coal trading, with round voyages guoted at about USD 10 000-11 000 daily, up from USD 7 000-USD 7 500 six months earlier. In the period market, a one-year charter in the Atlantic was quoted at about USD 11 000 daily, up by 40 percent from similar quotations in December 2008.

Table 15. Ocean freight rates

USD per tonne (heavy grains)	12 May 2009	November 2008	May 2008
US Gulf to EU (B) ⁽¹⁾	30.000	20.00	83.00
US Gulf to Japan (B) (1) (2)	44.00	28.00	125.00
US Gulf to Korea, Rep. (B) $^{(1)}$	46.00	29.00	127.00
US Gulf to Algeria (A) $^{\scriptscriptstyle (3)}$	31.00	26.00	94.00
Brazil to EU (A) (3)	40.00	34.00	96.00

(1) Over 50 000 tonnes (Panamax)

(2) Heavy grain

(3) 10-15 000 tonnes (Handysize)

Figure 56. IGC grain freight index and baltic dry index (May 2005=6000)



SPECIAL FEATURES

INVESTMENT IN UNITED STATES FUTURES AND OPTIONS MARKETS: A DISCUSSION OF THE POSSIBLE IMPACT ON COMMODITY PRICES

(This special feature is courtesy of Frank S. Rose, College of Business, Lewis University, United States. Mr Rose can be reached at RoseFr@lewisu.edu) The views expressed herein do not necessarily reflect the official opinion of the Food and Agriculture Organization of the United Nations.

INTRODUCTION

An important trend in the global financial markets in recent years has been the rapid growth of futures and options markets. The trading volume at the world's futures and options exchanges has grown more than seven-fold in the past ten years, from 2.4 billion contracts in 1999 to 17.7 billion contracts in 2008. This growth in exchange-traded derivatives has paralleled the growing need for risk management and investment alternatives in the underlying financial and commodity cash markets.

As the futures and options markets have grown in liquidity and scope, the opportunities for investment (or, as some prefer, "speculation") in commodities have changed dramatically. Investors wanting to position themselves to profit from the changes in the values of the cash commodities can do so easily and cost effectively using the futures and options contracts based on those commodities. There are three reasons for this: i) there is a close correlation between the prices of cash commodities (e.g. maize), and the futures and options contracts based on these commodities (e.g. maize futures, and options on maize futures); ii) there are low transactions costs in the futures and options markets relative to the cash commodities markets; and iii) futures and options positions can be initiated, removed and changed readily.

For many years, there has been an ongoing discussion of the pros and cons of investment in futures and options markets, particularly by investors not active in the underlying cash markets. The recent increase in commodity prices has raised questions, once again, about the role of these investors in the markets and their impact on prices. In this article, possible cause and effect relationships between the activities of these investors and price movements are not rigorously analysed, although two such analyses are cited later. Instead, the change in the investment activities in the exchange-traded derivatives markets in the past five or ten years is described, while noting how prices have moved concurrently. To illustrate some of the patterns discussed, futures and options markets in six commodities traded at two United States exchanges, maize, wheat, soybeans at the CBOT; and sugar, cocoa and coffee at the Intercontinental Exchange (ICE) are examined.

INVESTMENT IN THE FUTURES AND OPTIONS MARKETS

Investment has always been an integral component of futures and options markets. These markets exist in large part for risk management, or "hedging", purposes. Hedgers come to the markets to transfer their risk to other participants who are willing to take it, hoping to make a profit. Therefore, the risk capital provided by investors is essential to the proper functioning of these markets.

In recent years, as the financial markets have become more sophisticated, more and more investors are looking to add an asset class to their portfolios which is not correlated with stocks, bonds, real estate or other investment classes. They seek to decrease the overall risk of their portfolios by adding assets which are uncorrelated with its existing components. Investors having a portfolio of, say, stocks and bonds can reduce their risk by adding commodity futures and options contracts.

Two commodity indexes are often used as references by these investors, the Standard and Poor's Goldman Sachs Commodity Index (S&P GSCI) and the Dow Jones, AIG Index (DJ-AIG). The compositions of the two indexes differ. The S&P GSCI comprises 24 commodity futures contracts and has a 65 percent weighting in energy products. It includes all six of the futures contracts considered in this article. The DJ-AIG comprises 19 commodity futures contracts, with a maximum weighting of 33 percent for any product category. This index does not include cocoa. Correlations between these two indexes and the United States stock and bond markets are extremely low.

Passive investors, i.e. those who do not frequently modify their market positions, will replicate these indexes by purchasing, or "going long," the component futures contracts in proportions mirroring the structure of the indexes and adding these contracts to their portfolios to achieve their diversification objectives. They are only interested in having long positions in the markets and are sometimes called "long-only" investors. Futures contracts mature or "expire", according to a specified schedule. For example, the maize futures contract at the CBOT has scheduled expirations in March, May, July, September and December. In June, for example, the long-only investors would normally achieve their desired position in the maize market by buying a quantity of the next maize futures contract to expire, i.e. July, which matches their weighting objectives. Then, sometime before the July contract expires, they would move, or "roll", their positions into the September maize futures contract. Thus, they would maintain their long position, but it is now shifted to the next expiration month.

With regard to possible price effects of this activity, there are three points to highlight. First, this investment strategy can create significant buying activity which might be expected to have a positive price effect. Second, the roll process can be anticipated by other market participants who position themselves to profit from it. In the example above, if it is anticipated that the price of the September contract will rise as a result of the buying pressure associated with the July-to-September roll, other traders might buy that contract in advance, creating additional upward price movement. Third, the investment capital that is placed for portfolio diversification is not particularly price sensitive. Certainly the long-only investor's hope is that prices will rise, but portfolio diversification is an important motivation.

Not all investors in the futures markets engage in this type of passive investment activity, motivated primarily by portfolio diversification objectives. Some seek profits from buying low and selling high. Their pattern of activity in the futures markets is quite different. First, the level of their investment in the futures markets will depend on profit opportunities in futures relative to other investment alternatives. If the stock market is not performing well during a certain period and there are profit opportunities in futures, investment capital will flow from one market to the other. Second, these investors will not hold strictly long positions. They will go long or "short" (i.e. sell) according to the results of their analyses of supply and demand or profit opportunities. They look for trends, and if prices are trending upward, they will buy; if prices are trending downward, they will sell. For example, there have been fairly strong upward trends in maize, wheat and soybeans prices at times because of ethanol production, China's demand for commodities and other reasons, and these trends are attracting investment capital into the futures and options markets. Third, they will take positions in any contract expiration month, not limiting themselves to positions in the contracts which are the next to expire. Thus, if they see a profit opportunity in a contract that expires many months in the future, they will channel their investment capital into that month.

Finally, these investors may take positions based on their knowledge and expectations of the activities of the longonly investors. As noted, it may be possible to predict when the long-only investors will roll their positions and other, opportunistic investors may seek to position themselves in the market to profit from the roll activity.

To fully understand the changing role of investmentrelated activity in the markets, it is important to note that, in recent years, banks have become increasingly active in commodity futures and options markets. Much of this activity comes from swap dealers who are not actually investing, but rather hedging their price exposure in the over-the-counter swap market. For example, a bank swap dealer may enter into a transaction with a pension fund agreeing to exchange cash flows based on movements of one of the commodity indexes discussed above. If the S&P GSCI Index rises, the swap dealer may be obliged to pay the pension fund an amount equal to the value of the price rise. To hedge this exposure, the dealer will take a long position in a number of futures markets, replicating his over-the-counter exposure. If the S&P GSCI Index goes up, the swap dealer pays the pension fund but realizes an equivalent gain in the futures position. This swap hedging is another new, non-traditional investment-related activity in the markets and can be another source of increased positioning on the long side.

RECENT PATTERNS OF INVESTMENT IN SELECTED FUTURES AND OPTIONS MARKETS, WITH REFERENCE TO PRICE TRENDS

The government regulator of the United States futures and options exchanges, the Commodity Futures Trading Commission (CFTC), provides data which are helpful in understanding the activity levels of these investors in the markets. Since 1962, the CFTC has published Commitments of Traders (COT) Reports showing the "open interest", or the number of futures and options contracts which remain open (i.e. contractual obligations are not yet fulfilled) at any given time, of various categories of market participants. In the COT reports, "commercial traders" in a given futures or options market are those who are hedging, or managing the price risk of, a cash market position. "Non-commercial traders" are those holding significant positions in the futures market for other reasons, usually investing.

The data are aggregated from reports that market participants with large open futures and options positions must file with the CFTC every day. It is important to note that many traders who are very active in the markets are not counted in these statistics. For example, market makers trading large quantities of futures and options contracts during the day, providing significant market liquidity but having few or no open positions when the market closes, are not included.

Table 1 presents open interest data for six commodity futures and options markets (combined) for the month of April in each year, 2005-2009 – CBOT maize, wheat and soybeans; and ICE sugar, cocoa and coffee. Open interest in April 2000 is included to provide a sense of longer-term open interest changes. Cash prices for these commodities in April 2000 and 2005-2009 are also given to illustrate concurrent price tendencies over the period.

In all six commodity futures and options markets, total open interest has shown a fairly consistent upward trend between 2005 and 2008, with a significant increase from 2000, and a decline in 2009. This increase in open interest is evidence of rapid growth of these markets, noted at the beginning of this article.

Drawing on the COT data, the patterns of activity of various categories of investors in the six United States commodity futures and options markets in the last five years are examined. Their activity is on the long, or buy side of the market, as it is this activity that would be of particular interest to those concerned with rising prices are focussed upon. The patterns of investment on the long side to general price movements are related, but, as noted previously, it is not sought to measure any cause and effect relationship.

Non-commercial traders' share of open interest; 2005-2009

Over the past five years, have the non-commercial traders, i.e. market participants using the markets for investment purposes, been increasing their long positions as prices increased? Table 1 shows that in the maize, wheat and soybeans markets between 2005 and 2008, there was a steady upward trend in non-commercial long open interest which peaked in 2008, before declining in 2009. However, the same can be said about the long positions of the <u>commercial</u> traders. It is interesting to note that a non-commercial <u>share</u> of the total long positions held by all market participants increases from 2005 to 2008, before falling in 2009. Cash prices for maize, wheat and soybeans exhibited a similar pattern, trending up from 2005 to 2008, and declining in 2009.

In the sugar, cocoa and coffee markets, identifying any clear parallels between long open interest held by non-commercial traders and cash price movements is more difficult. However, their shares of the total market long open interest were relatively high during certain periods of relatively high cash prices; e.g. in 2006 for sugar and 2008 for coffee. In considering the data, it is worth remembering that cocoa is not included in the DJ-AIG index. This limits passive investors' demand for long futures and options positions in that commodity.

Non-commercial traders' market positioning – net long or net short; 2005-2009

Have the non-commercial traders clearly been increasing their net long position in the markets (net long position = their total long position minus their total short position) as prices went up? Table 1 shows different patterns in the six different markets. In maize, net long positions of non-commercials increased steadily between 2005 and the price peak in 2008, before falling in 2009 as prices fell. In wheat, these investors are sometimes net long and sometimes net short, as prices trended upward. In soybeans, they were net short in 2006 when prices fell, but were net long in other years. In sugar, the investors increased their net long positions as prices rose in 2006 and 2008, but they have reduced their net long positions during the price increase in 2009. Likewise, in coffee, the non-commercials had larger net long positions in 2005 and 2008 as prices increased but during the sharp price rise in 2009, they reduced these positions. In cocoa, the investors have remained net long over the period but there appears to be no clear relationship between these levels and cash price movements.

The role of "index traders"

In January 2007, in response to market interest in having more detailed information on investment in the United States futures and options markets, the CFTC introduced a new, supplemental COT report showing the positions of so-called "index traders" in selected markets. These are the traders whose market positions are tied to the commodity indexes discussed previously. The new report draws managed funds, pension funds and other passive investors from the non-commercial trader category, and the swap dealers and other non-traditional hedgers from the commercial trader category to create the new index trader category.

Table 2 provides data on the six commodity futures and options markets (combined) from the supplemental reports released in April of 2007-2009. Note that, first, the index traders are consistently net long, as might be expected given their reasons for being in the market, explained previously. Second, when the data are reworked by the CFTC to remove those not engaging in traditional hedging activities from the commercial category, that category accounts for a rather small share of total long open interest; approximately 20-30 percent of the total, and less in the cases of wheat and soybeans. Of course, much of the traditional commercial use of the markets involves positions on the short side of the market to protect against price declines. Nevertheless, this emphasizes the major role of the investors and non-traditional hedgers in these markets.

CONCLUSIONS

It is clear that there is more investment capital in the commodity futures and options markets now and new, non-traditional strategies have been devised which tend to increase long side positioning. There is no reason to think that this trend will change. The financial markets are more sophisticated and more investors understand how futures and options markets can be used to improve their investment outcomes. The exchanges have greater market-making capacity to accommodate large flows of investment capital and the advent of electronic trading has made market access easier. The removal of credit risk at the exchanges by the clearing houses makes the exchange markets very attractive to investors relative to the over-the-counter markets. The cost of placing and lifting an investment position in the futures and options markets is low compared with the cost of positioning in other investment markets. Finally, there have been a number of price trends in recent years and global investors, for whom "the trend is your friend,"

have responded with larger futures and options market positions.

In this article, the cursory examination of the data presented does not reveal any clear, uniform connection between price movements and investment in the futures and options markets. Other, more rigorous studies have been done recently on this issue, examining the investment and price patterns discussed in this article, with conflicting results. For example, Robles, Torero and von Braun (2009) conclude that speculative activities might have contributed to increasing agricultural commodity prices in 2007-2008. Irwin, Sanders and Merrin (2009) conclude that assertions that speculation caused the recent commodity price rises do not hold up to close scrutiny. Thus, the debate continues. As always, in evaluating empirical studies, cautious readers will continue to ask: Are we certain that statistical correlation between two events is not being confused with causality? Have all market complexities been adequately factored into the analysis?

As the ebb and flow of investment capital between the cash markets and the futures and options markets grow, occasionally there may be interest in regulating and restricting these flows. One would hope that any such regulation is very carefully considered, given the growing importance of futures and options in the world's financial markets, the advantages which increasing numbers of global investors are discovering in cash-futures/options market strategies, and the benefits which these investors provide hedgers of commodity price risk in terms of market depth and liquidity.

REFERENCES

Barchart.com; www.barchart.com.

Commodity Futures Trading Commission. Commitments of Traders Reports; 2000, 2005-2009.

Commodity Futures Trading Commission. Commitments of Traders Supplemental Report; 2007-2009.

Dow Jones Indexes. Dow Jones - AIG Commodity Index; <u>www.djindexes.com</u>; 2009.

Irwin, S.H., Sanders, D.R. & Merrin, R.P. Devil or Angel? The Role of Speculation in the Recent Commodity Price Boom (and Bust); University of Illinois. February 2009.

Robles, M., Torero, M. & von Braun, J. When Speculation Matters; International Food Policy Research Institute; Issue Brief 57; February 2009.

Standard & Poor's. S&P GSCI Index Methodology. <u>www2.standardandpoors.com</u>; 2009.

Table 1. Open interest of commercial and non-commercial traders: Selected futures and options on futuresmarkets; with cash prices; 2000, and 2005-2009 (April each year); open interestData listed in thousands of contracts, with percent shares of total open interest listed in parentheses

	CBOT MAIZE	CBOT WHEAT	CBOT SOYBEANS	ICE SUGAR	ICE COCOA	ICE COFFEE
Total open interest						
2000	682.4	163.0	259.6	234.8	115.4	64.9
2005	825.2	281.9	396.5	489.5	145.6	158.5
2006	1 375.5	444.1	459.2	769.4	140.4	142.5
2007	2 073.8	495.5	648.4	827.5	185.7	199.1
2008	2 144.4	534.6	770.4	1 330.4	166.3	248.2
2009	1 252.0	417.5	476.9	937.3	120.3	180.5
Commercial - Long						
2000	308.7 (45.2%)	67.3 (41.3%)	71.8 (27.7%)	134.9 (57.4%)	68.8 (59.6%)	36.4 (56.0%)
2005	462.8 (56.1%)	139.7 (49.6%)	185.9 (46.9%)	241.5 (49.3%)	85.0 (58.4%)	52.3 (33.0%)
2006	610.9 (44.4%)	236.8 (53.3%)	234.3 (51.0%)	341.0 (44.3%)	82.6 (58.9%)	61.7 (43.3%)
2007	877.7 (42.3%)	251.2 (50.7%)	271.3 (41.8%)	471.0 (56.9%)	78.0 (42.0%)	92.4 (46.4%)
2008	945.9 (44.1%)	234.8 (43.9%)	301.4 (39.1%)	704.3 (52.9%)	79.5 (47.8%)	111.0 (44.7%)
2009	554.6 (44.3%)	185.5 (44.4%)	174.8 (36.7%)	510.7 (54.5%)	57.6 (47.9%)	88.7 (49.2%)
Non-Commercial - Long						
2000	219.0 (32.1%)	50.8 (31.2%)	110.1 (42.4%)	53.4 (22.8%)	19.8 (17.2%)	19.4 (29.9%)
2005	220.3 (26.7%)	106.8 (37.9%)	142.4 (35.9%)	165.8 (33.9%)	47.7 (32.8%)	91.6 (57.8%)
2006	564.6 (41.1%)	165.4 (37.2%)	154.2 (33.6%)	326.3 (42.4%)	45.8 (32.6%)	68.2 (47.9%)
2007	952.1 (45.9%)	209.6 (42.3%)	292.0 (45.0%)	272.0 (32.9%)	93.2 (50.2%)	90.0 (45.2%)
2008	985.5 (46.0%)	263.9 (49.4%)	404.8 (52.6%)	525.7 (39.5%)	73.0 (43.9%)	130.8 (52.7%)
2009	562.0 (44.9%)	200.6 (48.1%)	252.7 (53.0%)	352.6 (37.6%)	54.7 (45.4%)	81.4 (45.1%)
Non-Commercial - Net Long						
2000	47.9	-9.4	38.4	-1.0	-10.6	-0.7
2005	4.9	19.9	29.0	26.7	28.2	37.1
2006	139.3	-4.1	-51.9	95.4	9.6	7.3
2007	191.0	-12.1	88.1	4.1	48.5	1.7
2008	211.5	33.1	86.0	157.8	30.7	29.3
2009	85.7	-1.1	75.3	108.9	26.3	11.6
Cash prices						
2000	USD 2.25/bu.	USD 2.31/bu.	USD 5.09/bu.	6.87 c/lb.	USD 941/tonne	107.00c/lb.
2005	2.13	3.39	6.08	10.40	1 754	136.75
2006	2.38	3.47	5.68	18.19	1 794	115.84
2007	3.67	4.67	6.96	10.53	2 086	113.11
2008	5.97	6.30	12.66	12.98	3 076	143.04
2009	4.05	4.62	10.47	15.67	2 693	189.16

Table 2. Open interest of commercial and Index Traders: Selected Futures and Options on Futures Markets;2007-2009 (April each year); open interest Data listed in thousands of contracts, with percent shares of totalopen interest listed in parentheses

	CBOT MAIZE	CBOT WHEAT	CBOT SOYBEANS	ICE SUGAR	ICE COCOA	ICE COFFEE
Commercial - Long						
2007	554.7 (26.8%)	80.3 (16.2%)	147.2 (22.7%)	271.5 (32.8%)	65.7 (35.4%)	55.5 (27.9%)
2008	533.6 (24.9%)	57.3 (10.7%)	144.0 (18.7%)	336.9 (25.3%)	55.5 (33.4%)	57.0 (22.9%)
2009	325.0 (26.0%)	55.6 (13.3%)	75.5 (15.8%)	324.0 (34.6%)	44.7 (37.2%)	53.8 (29.8%)
Non-Commercial - Long						
2007	913.0 (44.0%)	209.6 (42.3%)	292.0 (45.0%)	272.0 (32.9%)	93.2 (50.2%)	90.0 (45.2%)
2008	916.0 (42.7%)	263.9 (49.4%)	404.8 (52.6%)	525.7 (39.5%)	73.0 (43.9%)	130.8 (52.7%)
2009	497.6 (39.7%)	200.6 (48.1%)	252.7 (53.0%)	352.6 (37.6%)	54.7 (45.4%)	81.4 (45.1%)
Index Traders - Long						
2007	362.1 (17.5%)	197.4 (39.8%)	138.1 (21.3%)	230.2 (27.8%)	16.4 (8.8%)	41.8 (21.0%)
2008	481.8 (22.5%)	209.4 (39.2%)	181.5 (23.6%)	442.4 (33.3%)	29.4 (17.7%)	60.2 (24.3%)
2009	294.0 (23.5%)	163.6 (39.2%)	128.5 (26.9%)	249.8 (26.7%)	16.3 (13.6%)	38.5 (21.3%)
Index Traders - Net Long						
2007	346.6	192.7	136.8	202.6	16.2	40.2
2008	439.0	178.2	171.2	374.4	28.1	58.9
2009	251.3	136.3	111.2	189.8	15.7	33.0

Sources of data: Open Interest Data - Commodity Futures Trading Commission Commitments of Traders Reports; Price Data - www.barchart.com

Explanatory Note: In the Commitments of Traders Report (Table 1), "Commercial Traders" are defined as those who are hedging a cash market position; "Non-Commercial Traders" are defined as those holding positions for other reasons, usually investing. In the Commitments of Traders Supplemental Report (Table 2), managed funds, pension funds and other passive investors from the "Non-Commercial Traders" category, and swap dealers and other non-traditional hedgers from the "Commercial Traders" category, are placed in the "Index Traders" category.

Statistical appendix

Table A1	Cereal Statistics	60
Table A2	Wheat Statistics	61
Table A3	Coarse Grains Statistics	62
Table A4	Maize Statistics	63
Table A5	Barley Statistics	64
Table A6	Sorghum Statistics	65
Table A7	Other Coarse Grains Statistics	65
Table A8	Rice Statistics	66
Table A9	Cereal Supply and Utilization in Main Exporting Countries	67
Table A10	Total Oilcrops Statistics	68
Table A11	Total Oils and Fats Statistics	69
Table A12	Total Meals and Cakes Statistics	70
Table A13	Total Meat Statistics	71
Table A14	Bovine Meat Statistics	72
Table A15	Ovine Meat Statistics	73
Table A16	Pigmeat Statistics	74
Table A17	Poultry Meat Statistics	75
Table A18	Milk and Milk Products Statistics	76
Table A19	Sugar Statistics	77
Table A20	Fish and fishery products statistics	78
Table A21	Selected International Prices of Wheat and Coarse Grains	79
Table A22	Wheat and Maize Futures Prices	79
Table A23	Selected International Prices of Rice and Price Indices	80
Table A24	Selected International Prices for Oilcrop Products and Price Indices	81
Table A25	Selected International Prices for Milk Products and Dairy Price Indices	82
Table A26	Selected International Meat Prices	83
Table A27	Selected International Meat Prices and FAO Meat Price Index	84
Table A28	Selected International Commodity Prices	85

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. In the case of the oilseeds complex, the European Union includes 25 member states up to 2005/06 and 27 member states from 2006/07.
- '-' means nil or negligible.

Production

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

Utilization

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

Trade

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

Stocks

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

COUNTRY CLASSIFICATION

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)** and **Least Developed Countries (LDCs)**. The LIFDCs include 77 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 1 735 in 2006). The LDCs list includes 50 countries with low income as well as weak human resources and low level of economic diversification. The list is reviewed regularly 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. Cereal statistics (million tonnes)

	Prod	uction	Imp	orts	Ехр	orts	To Utiliz	tal ation	Sto endi	ocks ing in
	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
	esum.		422.4		27.0	1 (3)	4 000 0	4 050 0	220.6	
AJIA	969.1	980.8	133.4	126.4	37.9	42.1	1 030.2	1 050.3	320.6	335.6
Bangladesh	33.7	33.0	2.8	2.6	-	-	35.3	35.9	6.6	6.3
China	421.3	416.6	8.6	8.9	1.7	3.1	399.5	409.2	207.9	221.3
India	215.3	214.9	0.6	0.6	4.9	5.7	207.1	208.8	39.4	40.4
Indonesia	54.3	55.4	5.9	5.9	0.6	1.5	57.6	58.7	8.9	10.2
Iran, Islamic Republic of	14.3	18.7	12.7	8.2	-	-	26.2	26.9	3.7	3.7
Iraq	2.3	3.4	5.0	5.1	-	-	7.7	8.4	2.4	2.5
Japan	9.1	8.9	25.4	25.7	0.6	0.6	34.3	34.3	3.9	3.9
Kazakhstan	15.0	16.7	0.1	0.1	5.5	6.5	9.2	10.3	3.9	3.9
Korea, Republic of	5.2	5.1	11.4	12.1	0.2	0.2	17.0	16.8	2.6	2.5
Myanmar	20.7	21.3	0.1	0.1	1.1	0.8	20.9	21.2	3.9	3.4
Pakistan	32.0	33.8	2.5	1.0	5.1	4.7	29.4	30.0	2.8	3.0
Philippines	18.0	18.0	5.2	5.0	-	-	22.9	23.4	3.8	3.5
Saudi Arabia	2.0	1.6	11.1	11.9	-	-	13.3	13.7	3.1	2.9
Thailand	25.3	25.1	1.8	1.8	9.1	9.2	17.2	17.4	5.1	5.3
Turkey	29.0	32.2	3.5	1.7	1.5	1.9	32.0	32.1	4.2	4.1
Viet Nam	29.5	29.7	1.9	1.9	5.0	5.1	25.9	26.3	6.1	6.3
AFRICA	149.0	155.4	57.3	54.2	6.9	6.4	200.1	204.1	27.0	26.2
Algeria	2.2	3.9	8.2	7.3	-	-	11.1	11.3	4.6	4.5
Egypt	20.6	20.9	11.8	12.2	0.7	0.8	32.1	32.5	3.9	3.8
Ethiopia	16.1	16.1	0.7	0.6	0.2	0.1	17.0	17.0	0.7	0.4
Morocco	5.2	8.1	5.5	4.0	0.2	0.2	10.9	11.6	1.7	2.0
Nigeria	28.5	28.6	5.1	5.3	0.5	0.4	32.9	33.5	1.3	1.3
South Africa	15.8	14.1	2.4	2.4	2.6	2.2	13.9	14.3	3.5	3.7
Sudan	5.6	6.0	1.4	1.4	0.3	0.3	7.2	7.3	1.5	1.4
CENTRAL AMERICA	41.8	40.4	25.6	25.6	1.3	1.2	65.5	65.4	4.7	4.5
Mexico	36.1	34.4	15.2	15.3	1.1	1.1	49.6	49.3	3.0	2.7
SOUTH AMERICA	135.5	119.6	22.8	22.8	31.8	26.8	120.0	119.1	17.2	14.2
Argentina	36.2	27.9	_	_	19.5	14.7	16.0	14.3	3.6	2.6
Brazil	75.6	67.9	7.6	7.4	8.6	8.8	68.6	68.8	8.6	6.9
Chile	3.2	3 1	3 1	33	-	-	6.4	6.4	0.5	0.4
Colombia	3.6	3.6	4.6	4.8	0.1	0.1	8.0	8.4	1.2	1 1
Peru	3.8	3.0	3.0	3 3	-	-	7.0	7.0	1.0	0.9
Venezuela	3.8	4.5	2.7	2.4	0.1	0.1	6.5	6.8	0.7	0.7
NORTH AMERICA	457.0	437.1	9.1	9.3	98.8	105.2	355.2	356.3	72.6	59.5
Canada	56.0	51.3	2.5	2.8	21.3	22.6	35.6	32.0	8.3	7.7
United States of America	401.0	385.8	6.6	6.5	77.5	82.6	319.6	324.3	64.2	51.8
EUROPE	500.5	451.5	16.7	16.9	73.1	55.9	414.3	418.8	78.4	72.1
European Union	314.6	294.3	12.5	12.6	27.8	22.5	283.0	286.6	53.3	51.1
Russian Federation	106.0	91.5	0.9	0.9	21.2	17.1	77.3	78.2	13.8	10.8
Serbia	8.4	9.1	-	-	1.7	1.9	6.4	6.7	1.0	1.6
Ukraine	52.4	39.0	0.2	0.3	21.6	13.5	27.1	27.0	7.2	6.0
OCEANIA	34.4	34.1	1.4	1.4	16.5	19.0	16.4	16.3	7.9	8.8
Australia	33.5	33.3	0.2	0.2	16.5	19.0	14.3	14.1	7.6	8.5
WORLD	2 287.2	2 218.8	266.2	256.6	266.3	256.6	2 201.7	2 230.4	528.4	520.9
Developing countries	1 241.7	1 242.6	204.4	193.6	69.2	67.2	1 337.5	1 358.9	354.8	365.9
Developed countries	1 045.5	976.2	61.9	63.0	197.1	189.5	864.1	871.4	173.6	155.0
LIFDCs	949.9	957.8	85.3	81.0	18.5	21.1	982.5	1 002.8	298.9	314.0
LDCs	140.6	142.9	21.8	20.7	5.2	4.5	157.6	160.1	23.4	22.3

Table A2. Wheat statistics (million tonnes)

	Prod	uction	Imp	orts	Exp	orts	To Utiliz	tal ation	Sto endi	ocks ing in
-	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast
ASIA	276.0	286.0	59.7	52.2	10.2	13.1	312.8	318.6	115.3	121.5
Bangladesh	0.9	1.0	2.3	2.1	-	-	3.2	3.1	0.6	0.5
China	112.5	111.0	1.8	1.7	0.2	1.0	103.6	105.6	72.8	79.0
of which Taiwan Prov.	-	-	1.1	1.1	-	-	1.2	1.1	0.3	0.3
India	78.4	77.6	0.5	0.5	0.3	1.0	77.4	77.1	17.8	17.8
Indonesia	-	-	5.5	5.5	-	-	5.3	5.5	2.5	2.5
Iran, Islamic Republic of	9.8	13.5	7.0	3.0	-	-	15.7	16.5	3.0	3.0
Iraq	1.5	2.0	3.8	3.8	-	-	5.8	5.8	2.3	2.3
Japan	0.9	0.8	5.4	5.5	0.4	0.4	5.9	5.9	0.7	0.7
Kazakhstan	12.5	14.0	-	-	5.0	6.0	7.0	8.0	3.5	3.5
Korea, Republic of	-	-	4.0	4.1	0.1	0.1	3.7	3.9	0.5	0.5
Pakistan	21.8	23.8	2.5	1.0	1.6	1.6	22.7	23.1	1.7	1.8
Philippines	-	-	2.5	2.7	-	-	2.5	2.6	0.4	0.5
Saudi Arabia	1.7	1.2	0.8	1.3	-	-	2.6	2.7	1.0	0.8
Thailand	-	-	1.1	1.2	0.1	-	1.1	1.1	0.2	0.2
Turkey	17.8	20.0	2.5	0.5	1.5	1.8	18.7	18.9	2.1	1.9
AFRICA	21.2	23.8	32.1	30.0	0.8	0.8	54.0	54.6	12.7	11.3
Algeria	1.6	2.9	5.7	4.8	-	-	7.7	7.8	4.0	3.9
Equpt	8.0	7.8	7.7	8.0	-	-	15.9	16.0	2.2	2.0
Ethiopia	3.2	3.2	0.5	0.5	-	-	3.9	3.7	0.1	-
Morocco	3.7	5.2	3.4	2.0	0.2	0.2	7.0	7.1	1.4	1.3
Nigeria	0.1	0.1	3.2	3.4	0.1	0.1	3.2	3.4	0.3	0.3
South Africa	2.1	1.8	1.3	1.2	0.2	0.2	3.0	3.1	0.7	0.6
Tunisia	0.9	1.2	1.8	1.5	0.1	0.1	2.7	3.0	1.4	1.0
CENTRAL AMERICA	4.0	4.1	7.3	7.1	1.1	1.1	10.0	10.2	0.8	0.9
Cuba	-	-	0.8	0.8	-	-	0.8	0.8	-	-
Mexico	4.0	4.1	3.6	3.4	1.0	1.0	6.4	6.5	0.4	0.5
SOUTH AMERICA	17.8	18.6	12.2	12.6	6.2	5.1	24.9	25.3	2.5	2.8
Argentina	8.3	9.6	-	-	5.0	4.0	5.0	5.1	0.3	0.5
Brazil	5.9	5.7	6.0	6.0	0.3	0.3	10.9	11.1	1.2	1.3
Chile	1.2	1.3	0.8	1.1	_	_	2.2	2.3	0.1	0.2
Colombia	-	-	1.3	1.3	-	-	1.3	1.3	0.1	0.1
Peru	0.2	0.2	1.5	1.6	-	-	1.7	1.8	0.1	0.2
Venezuela	-	-	1.6	1.7	-	-	1.7	1.7	0.1	0.1
NORTH AMERICA	96.6	81.0	2.9	2.6	43.5	42.0	45.7	43.3	21.9	20.7
Canada	28.6	25.9	-	-	17.0	17.5	11.7	8.7	3.7	3.4
United States of America	68.0	55.1	2.9	2.6	26.5	24.5	34.0	34.6	18.2	17.3
EUROPE	247.3	219.9	9.0	8.8	50.0	37.9	189.5	194.6	32.0	28.3
European Union	150.0	138.6	6.8	6.5	21.0	16.0	126.3	130.6	18.5	17.0
Russian Federation	63.8	55.0	0.2	0.2	17.5	14.0	41.5	42.2	8.0	7.0
Ukraine	25.9	19.1	0.1	0.2	10.5	7.0	13.4	13.4	4.1	3.0
OCEANIA	21.7	22.3	0.6	0.6	12.0	14.0	7.8	8.3	6.3	6.9
Australia	21.4	22.0	-	-	12.0	14.0	6.8	7.4	6.1	6.7
WORLD	684.6	655.8	123.8	114.0	123.8	114.0	644.7	655.0	191.3	192.4
Developing countries	292.3	304.5	99.1	89.7	12.6	13.5	369.1	374.7	123.3	128.9
Developed countries	392.3	351.3	24.7	24.3	111.1	100.5	275.6	280.3	68.0	63.5
LIFDCs	250.7	254.9	51.6	48.5	3.0	4.7	289.4	293.1	110.0	115.7
LDCs	9.8	10.6	12.7	12.2	0.1	0.1	22.9	23.1	3.9	3.4

Table A3. Coarse grain statistics (million tonnes)

	Prod	luction	Imp	orts	Ехр	orts	To Utiliz	tal ation	Sto end	ocks ing in
	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
٨٢١٨	276.9	276.7	EO 3	60.0	22	1 cust	221.2	220.9	01.0	04.5
China	2/0.0 175 5	2/0./	59.5	60.0	3.2	4.0	321.3 169.6	329.8 175.9	91.9 71.1	94.5
of which Taiwan Prov	0.1	0.1	0.0	0.2	0.5	0.7	100.0	1/5.6	/1.1	/5.1
India	28.0	27 0	4.5	4.5	0.6	0.6	4.0 27.1	4.0	0.5	0.5
Indonesia	16.2	37.0 17.0	0.1	0.1	0.0	0.0	1/17	15.0	2.0	3.1
Indonesia Iran Islamic Popublic of	20	17.0	0.2	0.2	0.5	1.2	14.7	15.0	5.0	4.0
	2.9	5.4 0.2	4.5	4.0 10 E	-	-	20.0	7.4	0.4	0.4
	0.2	0.2	19.5	19.5	-	-	20.0	20.0	1.0	1.0
Korea, D.P.K.	1.0	2.2	0.5	0.5	-	-	2.1	2.7	1 2	- 1 1
Malaysia	0.4	0.4	7.1	7.0	-	-	0.5 7 C	0.1	0.2	1.1
IVIdidysid	0.1	0.1	2.0	2.0	-	-	2.7	2.7	0.5	0.3
Pakistan	3.7	5.7	-	-	-	-	3.7	3.7	0.7	0.7
Philippines	6.9	6.7	0.3	0.3	-	-	7.0	7.0	1.3	1.3
	0.3	0.4	9.0	9.3	-	-	9.4	9.7	1.9	1.9
	4.5	4.5	0.5	0.4	0.7	0.8	4.2	4.1	0.2	0.2
lurkey	10.8	11.7	0.9	1.0	-	0.1	12.7	12.6	2.1	2.2
Viet Nam	3.7	3.7	0.7	0.7	-	-	4.4	4.4	1.0	1.0
AFRICA	110.6	113.3	15.8	14.7	5.2	4.8	120.8	123.1	10.9	11.2
Algeria	0.6	1.0	2.4	2.4	-	-	3.3	3.4	0.6	0.6
Egypt	7.7	8.0	4.1	4.2	-	-	12.2	12.2	0.3	0.3
Ethiopia	12.9	12.9	0.2	0.1	0.2	0.1	13.1	13.2	0.7	0.4
Kenya	2.5	3.2	0.8	0.7	-	-	3.6	3.8	-	-
Morocco	1.5	2.8	2.1	2.0	-	-	3.8	4.5	0.3	0.7
Nigeria	26.0	26.0	0.1	0.1	0.4	0.3	25.5	25.8	0.8	0.8
South Africa	13.7	12.3	0.2	0.3	2.3	2.0	10.1	10.5	2.9	3.1
Sudan	4.9	5.3	0.4	0.4	0.3	0.3	5.3	5.3	0.5	0.5
Tanzania	4.6	4.4	0.1	0.1	0.2	0.2	4.4	4.5	0.6	0.5
CENTRAL AMERICA	36.1	34.5	15.9	16.1	0.1	0.1	51.4	51.2	3.5	3.1
Mexico	31.9	30.1	11.1	11.4	0.1	0.1	42.5	42.1	2.6	2.2
SOUTH AMERICA	101.5	84.3	9.4	9.3	23.5	19.6	80.2	78.2	13.4	9.9
Argentina	27.0	17.4	-	-	14.0	10.2	10.5	8.7	3.2	2.0
Brazil	61.6	53.6	1.0	1.0	8.0	8.1	49.6	49.0	7.2	5.2
Chile	1.8	1.7	2.2	2.1	-	-	4.0	3.9	0.4	0.3
Colombia	1.8	1.8	3.1	3.3	0.1	-	4.8	5.1	0.9	0.8
Peru	1.7	1.7	1.5	1.6	-	-	3.3	3.3	0.5	0.5
Venezuela	2.8	3.5	1.0	0.6	-	-	3.9	4.1	0.3	0.3
NORTH AMERICA	353.8	348 9	52	5.6	52.2	60 1	304.9	308 3	49 9	37 4
Canada	27.4	25.4	2.2	2.4	43	5 1	23.6	22.9	46	4.2
United States of America	326.5	323.5	3.0	3.2	47.9	55.0	281.2	285.4	45.3	33.2
FUROPE	250.8	229 1	57	6.0	23.0	17 9	220.4	219 7	45.8	43.3
European Union	162.8	153.8	4.2	4 5	6.7	6.4	153 5	152.6	34 3	33.5
Russian Federation	/117	36.0	0.4	0.4	3.7	3.4	35.2	35.3	5.8	3.8
Serbia	63	6.9	0.4	0.4	1.7	1.6	17	/ 9	0.8	13
Ukraine	26.4	10.9	-	-	1.2	6.5	4.7	4.5	0.0 2.1	1.5
Okidille	20.4	15.0			11.1	0.5	15.5	15.4	J.1	5.0
OCEANIA	12.7	11.8	0.2	0.3	4.4	4.9	8.1	7.4	1.6	1.9
Australia	12.1	11.2	-	-	4.4	4.9	7.3	6.6	1.5	1.8
WORLD	1 142.3	1 098.5	111.6	112.0	111.6	112.0	1 107.1	1 117.8	216.9	201.4
Developing countries	506.4	491.5	79.6	78.6	29.2	26.6	537.6	545.9	114.5	113.4
Developed countries	635.9	607.0	31.9	33.3	82.4	85.4	569.5	571.9	102.4	88.0
LIFDCs	348.9	350.3	17.8	16.8	4.4	5.5	348.0	358.7	89.2	92.2
LDCs	60.3	60.6	2.8	2.3	2.8	2.7	60.2	60.6	6.6	6.1

Table A4. Maize statistics (million tonnes)

	Prod	uction	Imp	orts	Exp	orts	Total Utilization		Stocks ending in	
-	2008 estim.	2009 f'cast	2008/09 estim.	2009/10 f'cast	2008/09 estim.	2009/10 f'cast	2008/09 estim.	2009/10 f'cast	2009 estim.	2010 f'cast
ΔςιΔ	222.8	220.2	12.1	12.5	27	20	250 5	267.0	84.0	87.0
China	165.5	163.0	42.4	43.5	0.3	0.7	157.0	164.5	69.6	72.0
of which Taiwan Prov	- 105.5	- 105.0	4.5	43	- 0.5	- 0.7	4.4	4.5	05.0	0.5
India	19 5	18 5	0.1	0.1	0.6	0.6	18.7	18.0	2.8	2.8
Indonesia	16.3	17.0	0.1	0.1	0.5	1.2	14.7	15.0	3.0	4.0
Iran Islamic Republic of	10.5	12	3.0	2.8	-	-	4 1	4.0	0.2	0.2
lapan	-		16.4	16.5	-	-	16.6	16.6	1.0	1.0
Korea, D.P.R.	1.4	2.0	0.5	0.5	-	-	2.0	2.5	-	-
Korea, Republic of	0.1	0.1	6.9	7.5	-	-	8.0	7.7	1.2	1.0
Malavsia	0.1	0.1	2.6	2.6	-	-	2.7	2.7	0.3	0.3
Pakistan	3.2	3.2	-	-	-	-	3.2	3.2	0.7	0.7
Philippines	6.9	6.7	0.3	0.3	-	-	6.9	7.0	1.3	1.3
Thailand	4.2	4.3	0.5	0.4	0.7	0.8	3.9	3.9	0.2	0.2
Turkey	4.3	3.7	0.4	0.8	-	-	4.6	4.5	0.7	0.6
Viet Nam	3.7	3.7	0.7	0.7	-	-	4.4	4.4	1.0	1.0
AFRICA	56.7	57.9	12.9	12.7	4.0	3.8	64.9	66.4	6.3	6.9
Algeria	-	-	2.0	2.2	-	-	2.1	2.2	0.3	0.3
Egypt	6.7	7.0	4.1	4.2	-	-	11.2	11.2	0.3	0.3
Ethiopia	5.2	5.2	0.1	-	0.1	0.1	5.2	5.2	0.1	0.1
Kenya	2.3	3.0	0.8	0.7	-	-	3.4	3.6	-	-
Morocco	0.2	0.2	1.6	1.8	-	-	1.9	1.9	0.2	0.3
Nigeria	7.5	7.5	0.1	0.1	0.2	0.2	7.3	7.4	0.4	0.4
South Africa	13.2	11.7	0.1	0.2	2.3	2.0	9.4	9.9	2.7	2.9
Tanzania	3.6	3.5	0.1	0.1	0.2	0.2	3.4	3.5	0.3	0.3
CENTRAL AMERICA	28.0	26.9	13.6	13.9	0.1	0.1	41.5	41.0	2.8	2.6
Mexico	24.3	23.0	8.8	9.2	0.1	0.1	33.0	32.4	2.0	1.8
SOUTH AMERICA	91.6	75.1	8.0	7.8	21.8	18.1	71.2	69.3	11.7	8.2
Argentina	22.0	13.0	-	-	12.5	9.0	7.5	5.7	2.0	0.8
Brazil	59.0	51.3	0.5	0.5	8.0	8.0	46.6	46.3	7.0	5.0
Chile	1.4	1.3	1.8	1.7	-	-	3.2	3.1	0.4	0.2
Colombia	1.6	1.7	2.8	3.0	0.1	-	4.4	4.7	0.9	0.8
Peru	1.4	1.4	1.4	1.5	-	-	2.9	2.9	0.5	0.5
Venezuela	2.4	3.0	1.0	0.6	-	-	3.5	3.6	0.3	0.3
NORTH AMERICA	318.0	317.5	2.4	2.7	44.3	51.4	276.5	282.4	41.7	30.3
Canada	10.6	10.5	2.1	2.4	0.3	0.4	12.5	12.5	1.1	1.2
United States of America	307.4	307.0	0.3	0.4	44.0	51.0	263.9	269.9	40.6	29.1
EUROPE	92.1	83.5	4.0	4.3	8.5	7.6	80.6	80.9	20.2	19.4
European Union	62.5	58.6	3.2	3.5	1.8	2.0	60.1	60.3	15.3	15.1
Russian Federation	6.7	5.5	0.2	0.2	1.0	1.0	5.1	5.2	1.5	1.0
Serbia	5.9	6.5	-	-	1.2	1.6	4.3	4.5	0.8	1.3
Ukraine	11.4	8.0	-	-	4.5	3.0	5.3	5.4	1.7	1.3
OCEANIA	0.6	0.6	0.1	0.1	-	-	0.6	0.6	0.1	0.1
WORLD	819.8	791.8	83.3	85.0	81.5	85.0	794.7	807.6	166.8	154.6
Developing countries	394.4	376.9	59.6	60.1	26.3	24.0	408.2	414.4	100.9	100.7
Developed countries	425.4	414.9	23.8	24.9	55.2	61.0	386.5	393.2	65.9	53.9
LIFDCs	263.7	264.1	13.5	13.0	3.0	4.3	260.2	269.2	82.2	85.9
LDCs	28.4	29.6	2.1	1.7	1.8	1.9	28.7	29.3	3.0	3.1

Table A5. Barley statistics (million tonnes)

	Prod	uction	Imp	orts	Exports		Total Utilization		Stocks ending in	
-	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast
ASIA	16.8	18.8	14 7	14 4	0.4	0.6	32.4	33.0	61	59
China	3.3	2.6	1.3	1.6	-	-	4.7	4.4	0.7	0.5
India	1.2	1.5	-	-	-	-	1.2	1.5	-	-
Iran, Islamic Republic of	1.9	2.2	1.5	1.2	-	-	3.5	3.4	0.2	0.2
Iraq	0.5	0.9	0.1	0.1	-	-	0.6	1.0	-	-
Japan	0.2	0.2	1.4	1.5	-	-	1.7	1.7	0.4	0.4
Kazakhstan	1.6	1.8	0.1	0.1	0.4	0.5	1.4	1.4	0.4	0.4
Saudi Arabia	_	-	7.1	7.3	-	_	7.2	7.3	1.8	1.8
Svria	0.2	0.3	1.3	1.1	-	-	1.2	1.5	0.9	0.8
Turkey	5.9	7.5	0.4	0.2	-	0.1	7.5	7.4	1.3	1.5
AFRICA	4.2	6.3	2.0	1.3	-	-	6.6	7.4	1.0	1.1
Algeria	0.6	1.0	0.4	0.2	-	-	1.2	1.2	0.3	0.3
Ethiopia	1.6	1.6	-	-	-	-	1.6	1.7	0.2	0.1
Libva	0.1	0.1	0.4	0.4	-	-	0.4	0.4	-	-
Morocco	1.3	2.6	0.5	0.2	-	-	1.9	2.5	0.1	0.4
Tunisia	0.3	0.6	0.6	0.4	-	-	1.0	1.1	0.2	0.2
CENTRAL AMERICA	0.0	0.0	0.2	0.2			10	1 1	0.1	0.1
Mayica	0.0	0.8	0.3	0.3	-	-	1.0	1.1	0.1	0.1
WEXICO	0.0	0.0	0.5	0.5	-	-	1.0	1.1	0.1	0.1
SOUTH AMERICA	2.7	2.7	0.8	0.7	0.8	0.8	2.4	2.7	0.7	0.7
Argentina	1.7	1.7	-	-	0.7	0.7	0.7	1.0	0.6	0.6
NORTH AMERICA	17.0	15.7	0.6	0.6	2.3	2.9	14.1	13.7	4.0	3.7
Canada	11.8	10.8	-	-	1.8	2.4	9.0	8.5	2.1	2.0
United States of America	5.2	4.9	0.5	0.6	0.5	0.5	5.1	5.2	1.9	1.7
EUROPE	105.6	95 7	07	0.6	13.8	9.8	88 5	88 3	19 1	17 4
Belarus	2.1	2.0	-	-	-	-	2.0	2.0	0.3	0.3
Furopean Union	65.7	62.1	0.3	0.2	4.5	4.0	59.7	59.3	14.5	13.5
Russian Federation	23.1	20.0	0.2	0.2	2.5	2.0	18.8	19.2	3.0	2.0
Ukraine	12.6	9.8	-	-	6.5	3.5	6.0	6.0	1.0	1.3
OCEANIA	7.2	7.3	-	-	3.5	4.0	3.5	3.6	1.2	1.5
Australia	6.8	7.0	-	-	3.5	4.0	3.2	3.2	1.2	1.5
WORLD	154.3	147.3	19.1	18.0	20.7	18.0	148.6	149.7	32.3	30.5
Developing countries	21.5	25.5	15.9	14.8	0.8	0.9	37.7	39.5	6.9	6.8
Developed countries	132.8	121.8	3.1	3.1	19.9	17.1	110.9	110.2	25.4	23.7
LIFDCs	10.3	11.5	3.2	3.0	0.2	0.2	13.1	14.4	2.1	2.0
LDCs	2.0	2.0	-	-	-	-	2.1	2.1	0.2	0.1

Table A6. Sorghum statistics (million tonnes)

	Produ	Production		Imports		Exports		Total Utilization		cks ng in
-	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast
ASIA	10.3	10.3	1.6	1.5	0.1	0.1	11.8	12.1	1.0	0.9
China	1.8	1.7	0.1	0.1	-	-	2.0	1.9	0.3	0.1
India	7.2	7.5	-	-	-	-	7.2	7.5	0.2	0.2
Japan	-	-	1.3	1.3	-	-	1.3	1.4	0.2	0.2
AFRICA	26.3	26.3	0.9	0.7	0.8	0.7	26.7	26.4	1.7	1.7
Burkina Faso	2.0	1.7	-	-	0.1	0.1	1.8	1.7	0.2	0.1
Ethiopia	2.6	2.6	0.1	0.1	-	-	2.9	2.8	-	-
Nigeria	9.3	9.3	-	-	0.1	0.1	9.3	9.3	0.1	0.1
Sudan	4.2	4.5	0.3	0.3	0.3	0.3	4.5	4.5	0.3	0.4
CENTRAL AMERICA	7.1	6.7	2.0	1.8	-	-	8.7	8.9	0.6	0.4
Mexico	6.6	6.2	2.0	1.8	-	-	8.2	8.4	0.5	0.3
SOUTH AMERICA	5.9	5.2	0.4	0.5	0.8	0.7	5.2	4.8	0.9	1.0
Argentina	2.9	2.3	-	-	0.8	0.5	1.9	1.6	0.6	0.6
Brazil	2.0	1.7	-	-	-	0.1	1.9	1.7	0.2	0.2
Venezuela	0.4	0.5	-	-	-	-	0.4	0.5	-	-
NORTH AMERICA	12.0	9.7	-	-	3.4	3.5	8.3	6.4	1.7	1.4
United States of America	12.0	9.7	-	-	3.4	3.5	8.3	6.4	1.7	1.4
EUROPE	0.6	0.6	0.6	0.8	-	-	1.3	1.4	0.6	0.5
European Union	0.6	0.6	0.4	0.6	-	-	1.2	1.3	0.6	0.5
OCEANIA	3.1	2.1	0.2	0.2	0.7	0.6	2.4	1.8	0.1	-
Australia	3.1	2.1	-	-	0.7	0.6	2.2	1.6	0.1	-
WORLD	65.2	60.9	5.6	5.5	5.7	5.5	64.4	61.7	6.6	5.8
Developing countries	49.3	48.2	3.5	3.1	1.6	1.3	50.7	50.4	4.1	3.6
Developed countries	15.9	12.7	2.1	2.4	4.1	4.2	13.7	11.2	2.6	2.2
LIFDCs	36.1	36.0	1.0	0.7	0.8	0.7	36.5	36.4	2.5	2.2
LDCs	15.5	15.2	0.7	0.6	0.7	0.6	15.6	15.3	1.8	1.7

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

	Produ	Production		Imports		Exports		Total Utilization		cks ng in
	2008	2009	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10	2009	2010
	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast	estim.	f'cast
ASIA	16.9	17.2	0.6	0.6	-	-	17.5	17.8	0.7	0.7
AFRICA	23.4	22.8	0.1	0.1	0.4	0.3	22.6	22.8	1.9	1.6
CENTRAL AMERICA	0.1	0.1	0.1	0.1	-	-	0.2	0.2	-	-
SOUTH AMERICA	1.3	1.3	0.2	0.2	-	-	1.5	1.5	0.1	0.1
NORTH AMERICA	6.9	6.0	2.2	2.3	2.3	2.4	5.9	5.8	2.4	2.0
EUROPE	52.5	49.3	0.4	0.3	0.7	0.6	50.0	49.1	6.0	5.9
OCEANIA	1.9	1.8	-	-	0.2	0.3	1.7	1.5	0.2	0.2
WORLD	103.0	98.5	3.5	3.5	3.7	3.5	99.5	98.8	11.2	10.5

Table A8. Rice statistics (million tonnes, milled equivalent)

	Prod	uction	Imp	orts	Ехр	orts	Total Utilization		Stocks ending in	
	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2007/08 estim.	2008/09 f'cast	2008 estim.	2009 f'cast
Δ	116 3	/18 1	1/1 2	14.4	24.2	24.5	386 /	306.2	103 1	112.5
Bangladesh	32.3	31.5	17	0.4			29.8	31.6	49	6.0
China	133.3	133.4	0.8	0.4	1.0	12	126.3	127.2	58.3	64.0
of which Taiwan Prov.	1 1	11	0.0	0.5	-	-	1.2	127.2	0.1	0.1
India	98.9	99.5	0.1	0.1	37	40	89.1	92.6	16.2	18 5
Indonesia	38.0	38.4	0.1	0.2	-	0.1	37.0	37.7	2.8	3.4
Iran Islamic Republic of	16	18	1.0	1.2	_	-	3.0	29	0.5	0.4
Irag	0.2	0.2	0.7	1.0	_	-	1.0	11	-	0.1
lapan	8.0	7.8	0.6	0.7	0.2	0.2	8.3	8.4	1.5	1.6
Korea D PR	11	12	0.7	0.9	-		2.0	2.0	-	-
Korea Republic of	4.8	47	0.3	0.3	_	0.1	47	4 9	07	0.9
Malaysia	1.5	1.6	1.0	0.9	_	-	2.4	2.4	0.7	0.5
Myanmar	19.2	19.8	1.0	0.5	0.2	07	19.8	19.8	5.0	3.8
Pakistan	65	63	_	0.1	2.9	35	2.8	3.0	0.4	0.4
Philippines	11 1	11 2	23	2.4	2.5	J.J	12.0	12.5	0.4	0.4
Saudi Arabia		11.5	2.5	13			12.7	1.5	0.2	0.3
Sri Lanka	- 26	- 20	0.1	1.5	-	-	1.1	1.2	0.2	0.3
Thailand	2.0	2.0	0.1	0.2	10.0	0 0	2.5	12.0	4.0	0.5
Viet Nam	25.8	26.0	0.2	0.2	4.7	5.0	19.9	20.5	4.0	4.7
AFRICA	17.2	18.4	9.5	9.5	0.5	1.0	23.7	25.3	2.9	3.4
Cote d'Ívoire	0.4	0.4	0.9	0.9	-	-	13	13	-	-
Favot	5.0	5.0	-	-	0.5	07	3.8	4.0	11	14
Madagascar	33	44	0.1	_	-	0.7	2.8	3 3	0.2	0.3
Nigeria	2.5	2.6	2.0	18	_	-	4.0	43	0.2	0.2
Senegal	0.3	0.2	0.9	0.9	_	-	11	11	0.2	0.2
South Africa	-	-	0.8	0.9	_	-	0.9	0.9	0.1	-
Tanzania	0.9	0.9	0.1	0.2	-	-	1.0	1.0	0.1	0.1
CENTRAL AMERICA	1.7	1.7	2.3	2.3	-	-	3.9	4.0	0.5	0.5
Cuba	03	0.3	0.7	0.7	_	-	1.0	1.0	-	-
Mexico	0.2	0.2	0.5	0.5	-	-	0.7	0.7	-	-
SOUTH AMERICA	16.1	16.6	1.0	1.1	2.0	2.1	14.8	14.9	1.1	1.3
Argentina	0.8	0.8	-	-	0.3	0.5	0.3	0.5	0.1	0.1
Brazil	8.1	8.6	0.4	0.7	0.5	0.3	8.6	8.0	0.2	0.2
Peru	1.9	1.8	0.1	-	-	-	1.7	2.0	0.3	0.3
Uruguay	0.9	0.9	-	-	0.8	0.8	0.1	0.1	0.1	0.1
NORTH AMERICA	6.5	7.2	1.0	1.0	3.3	3.1	4.3	4.6	1.0	0.8
Canada	-	-	0.3	0.3	-	-	0.3	0.3	-	0.1
United States of America	6.5	7.2	0.7	0.7	3.3	3.1	4.0	4.3	0.9	0.7
EUROPE	2.4	2.5	1.8	2.0	0.1	0.2	4.2	4.3	0.6	0.6
European Union	1.8	1.9	1.3	1.5	0.1	0.1	3.1	3.2	0.5	0.5
Russian Federation	0.5	0.5	0.3	0.3	-	-	0.7	0.7	-	-
0.000										
OCEANIA	-	0.1	0.4	0.5	0.1	0.1	0.5	0.5	0.1	-
Australia	-	-	0.2	0.2	0.1	0.1	0.2	0.2	0.1	-
WORLD	460.3	464.5	30.2	30.9	30.2	30.9	437.9	449.8	109.2	120.1
Developing countries	442.9	446.5	25.6	25.7	26.5	27.4	419.2	430.8	106.0	117.0
Developed countries	17.4	18.0	4.6	5.2	3.7	3.5	18.7	19.1	3 3	3 1
LIEDCs	350.3	352.6	16.4	16.0	95	11 1	334.8	345.1	89.1	99.7
LDCs	70.5	71.8	7.3	6.3	1.7	2.3	71.4	74.5	12.8	13.0

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

		Wheat ¹		с	oarse Grain	s ²	Rice (milled basis)			
	2007/08	2008/09 estim.	2009/10 f'cast	2007/08	2008/09 estim.	2009/10 f'cast	2007/08	2008/09 estim.	2009/10 f'cast	
	UNITED	STATES (J	une/Mav)	U	NITED STAT	ES	UNITED	STATES (A	ua./Julv)	
Opening stocks	12.4	8.3	18.2	36.2	45.1	45.3	1.3	0.9	0.7	
Production	55.8	68.0	55.1	350.9	326.5	323.5	6.3	6.5	7.2	
Imports	2.5	2.9	2.6	3.5	3.2	3.0	0.8	0.6	0.7	
Total Supply	70.7	79.2	76.0	390.6	374.7	371.7	8.4	8.0	8.6	
Domestic use	28.3	34.0	34.6	275.6	281.2	285.4	4.1	4.3	4.2	
Exports	34.1	27.0	24.0	69.9	48.2	53.1	3.4	3.0	3.1	
Closing stocks	8.3	18.2	17.3	45.1	45.3	33.2	0.9	0.7	1.3	
-	CANA		ct/luby)				тнаш		$(Oct)^3$	
Opening stocks	6.8	16	27	37	/ 1	16		4.0	47	
Production	20.1	78.6	25.0	28.0	4.1 27 /	4.0 25 /l	21.7	4.0 20.8	20.6	
Imports	20.1	20.0	23.5	20.0	27.4	23.4	0.2	20.0	20.0	
Total Supply	26.0	22.2	20.6	24.0	2.0	2.4	25.7	25.0	25.5	
Domostic uso	20.9	11 7	29.0	27.9	33.5	3 2.4	11 0	12.0	12.2	
Exports	15.0	17.9	0.7	22.9	23.0	5 2	10.0	9.2	9.4	
Closing stocks	15.9	17.0	17.5	0.U / 1	5.5	2.5	10.0	0.5	0.4	
closing stocks	4.0	5.7	5.4	4.1	4.0	4.2	4.0	4./	4.5	
	ARGE	NTINA (De	c./Nov.)	, A	ARGENTIN	4	IND	A (Oct./Sep	ot.) ³	
Opening stocks	0.2	0.8	0.3	1.3	1.6	3.2	12.3	16.2	18.5	
Production	16.3	8.3	9.6	26.6	27.0	17.4	96.7	98.9	99.5	
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	
Total Supply	16.6	9.1	9.9	28.0	28.6	20.7	109.0	115.1	118.1	
Domestic use	5.1	5.0	5.1	9.6	10.5	8.7	89.1	92.6	94.5	
Exports	10.6	3.8	4.3	16.8	14.9	9.9	3.7	4.0	4.1	
Closing stocks	0.8	0.3	0.5	1.6	3.2	2.0	16.2	18.5	19.5	
	AUST	RALIA (Oct	/Sept.)		AUSTRALIA	4	PAKIS	TAN (Nov./	Oct.) ³	
Opening stocks	4.1	3.2	6.1	2.0	1.6	1.5	0.4	0.4	0.4	
Production	13.0	21.4	22.0	8.8	12.1	11.2	5.6	6.5	6.3	
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Supply	17.1	24.6	28.1	10.8	13.7	12.7	6.0	6.9	6.7	
Domestic use	6.5	6.8	7.4	5.5	7.3	6.6	2.8	3.0	3.2	
Exports	7.4	11.7	14.0	3.7	4.9	4.4	2.9	3.5	3.1	
Closing stocks	3.2	6.1	6.7	1.6	1.5	1.8	0.4	0.4	0.4	
	E	U (July/Jur	ne)		EU			IAM (Nov./	′Oct.)³	
Opening stocks	15.0	9.5	18.5	20.3	27.5	34.3	4.8	4.4	4.8	
Production	120.2	150.0	138.6	138.0	162.8	153.8	24.0	25.8	26.0	
Imports	6.7	6.8	6.5	21.4	4.2	4.5	0.2	0.2	0.2	
Total Supply	141.9	166.3	163.6	179.6	194.4	192.5	29.0	30.3	31.0	
Domestic use	120.5	126.3	130.6	146.3	153.5	152.6	19.9	20.5	20.9	
Exports	11.9	21.5	16.0	5.8	6.7	6.4	4.7	5.0	5.1	
Closing stocks	9.5	18.5	17.0	27.5	34.3	33.5	4.4	4.8	5.0	
	ΤΟΤΑ	L OF ABO	VE	ΤΟΤΑ	L OF ABO\	/E	ΤΟΤΑΙ	. OF ABOV	'E	
Opening stocks	38.5	26.4	46.8	63.5	79.8	88.8	23.1	25.8	29.1	
Production	225.4	276.3	251.2	552.3	555.7	531.3	153.8	158.5	159.6	
Imports	9.3	9.7	9.1	28.2	9.4	9.9	1.2	1.0	1.1	
Total Supply	273.2	312.4	307.1	644.0	644.9	630.0	178.1	185.4	189.9	
Domestic use	166.9	183.8	186.4	460.0	476.2	476.3	127.6	132.5	135.0	
Exports	79.9	81.8	75.8	104.2	79.9	79.0	24.6	23.7	23.8	
Closing stocks	26.4	46.8	44.9	79.8	88.8	74.7	25.8	29.1	31.1	

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			
	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast	
ASIA	124.1	121.3	124.6	51.6	60.3	60.3	2.9	2.6	2.2	
of which Taiwan Broy	60.0	55.8	56.I	32.0	41.2	41.9	1.5	1.4	1.5	
India	22.2	36.7	24.4	2.4	2.2	2.1	0.7	0.7	- 0.4	
Indonesia	77	79	24.4 8.5	15	1.4	13	0.7	0.7	0.4	
Iran Islamic Republic of	0.7	0.7	0.5	0.9	0.9	0.8	0.1	-	-	
lanan	0.7	0.7	0.7	6.7	6.7	6.2	_	-	-	
Korea Republic of	0.2	0.2	0.2	15	15	14	_	-	-	
Malaysia	4.2	4.7	4.8	0.8	0.7	0.7	0.1	-	-	
Pakistan	5.1	4.6	4.8	1.3	0.9	1.1	-	-	-	
Thailand	0.7	0.8	0.8	1.7	1.7	1.6	-	-	-	
Turkey	2.3	2.0	2.2	2.1	2.2	1.8	-	-	-	
AFRICA	15.8	16.4	16.8	2.7	2.4	2.2	0.7	0.7	0.8	
Nigeria	4.6	4.6	4.8	-	-	-	0.1	0.1	0.1	
CENTRAL AMERICA Mexico	1.1 0.7	1.1 0.7	1.1 0.7	6.1 5.5	6.0 5.4	5.7 5.0	0.1	0.1	0.1	
SOUTH AMERICA	124.0	126.9	105.0	20	20	12	28.0	16.2	20.0	
Argentina	52.2	52.0	37.6	2.5	3.9	4.2	10.2	40.5	30.0 8.0	
Brazil	61.7	63.5	60.6	0.2	0.1	0.1	23.8	25.7	26.5	
Paraguay	6.5	7.6	4.6	-	-	-	4.1	5.1	3.6	
NORTH AMERICA	111.0	96.2	106.8	17	23	21	39.4	41 4	45 7	
Canada	13.7	13.3	17.3	0.7	0.7	0.6	8.1	8.7	10.0	
United States of America	97.3	83.0	89.5	1.0	1.6	1.5	31.3	32.7	35.7	
EUROPE	41.1	39.4	47.7	19.3	19.0	19.3	3.0	2.5	4.8	
European Union	24.6	24.9	27.4	18.5	18.2	18.5	1.2	0.9	0.9	
Russian Federation	8.0	6.8	8.5	0.2	0.2	0.2	0.3	0.1	0.4	
Ukraine	6.8	6.3	10.2	-	-	-	1.4	1.4	3.5	
OCEANIA	1.5	1.8	2.9	0.2	0.1	0.1	0.4	0.6	1.3	
Australia	1.2	1.4	2.5	0.2	0.1	-	0.3	0.6	1.2	
WORLD	418.7	403.1	405.9	85.3	94.0	93.8	85.4	94.2	93.6	
Developing countries	260.7	260.5	243.3	56.3	64.9	65.2	42.4	49.6	41.7	
Developed countries	158.0	142.6	162.6	29.0	29.1	28.6	42.9	44.6	51.9	
LIFDCs	128.0	124.7	128.1	35.8	44.7	45.6	3.3	3.0	2.7	
LDCs	9.9	9.8	10.0	0.3	0.4	0.4	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 (million tonnes)¹

		Imports			Exports			Utilization	
	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast
ASIA	30.7	32.6	33.8	34.5	36.8	39.8	73.9	76.7	79.9
Bangladesh	1.3	1.2	1.2	-	-	-	1.5	1.4	1.4
China	10.0	10.3	10.3	0.5	0.5	0.6	28.5	29.2	30.0
of which Taiwan Prov.	0.4	0.4	0.4	-	-	-	0.9	0.8	0.8
India	5.5	6.3	7.5	0.5	0.5	0.4	15.0	15.7	17.3
Indonesia	0.1	0.1	0.1	14.6	16.3	18.2	4.9	5.3	5.5
Iran	1.3	1.3	1.3	0.2	0.1	0.2	1.5	1.7	1.6
Japan	1.1	1.1	1.1		-		3.1	3.1	3.1
Korea, Republic of	0.8	0.8	0.8	-	-	-	1.1	1.1	1.1
Malavsia	0.9	1.2	1.2	15.1	16.3	17.4	3.5	4.0	4.3
Pakistan	2.0	1.9	2.2	0.1	0.1	0.1	3.4	3.4	3.6
Philippines	0.4	0.5	0.5	0.9	1.0	0.9	0.8	0.8	0.9
Singapore	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3
Turkey	1.0	1.2	1.2	0.2	0.2	0.3	2.4	2.4	2.3
AFRICA	6.8	6.7	6.7	1.2	1.0	1.0	11.8	12.1	12.3
Algeria	0.7	0.6	0.6	-	-	-	0.7	0.7	0.7
Egypt	1.6	1.4	1.4	0.2	0.1	0.1	1.7	1.7	1.7
Nigeria	0.3	0.3	0.3	-	-	-	1.9	2.0	2.1
South Africa	0.8	0.7	0.7	0.1	0.1	0.1	1.1	1.1	1.2
CENTRAL AMERICA	2.2	2.4	2.3	0.5	0.6	0.6	4.5	4.5	4.4
Mexico	1.1	1.2	1.2	0.1	0.1	0.1	2.9	2.9	2.9
SOUTH AMERICA	2.1	2.4	2.3	11.2	11.1	10.2	10.0	11.1	11.6
Argentina	-	0.2	0.1	7.3	7.3	6.6	1.1	1.5	1.7
Brazil	0.3	0.4	0.4	2.5	2.5	2.2	5.6	5.9	6.4
NORTH AMERICA	3.4	3.8	4.3	5.2	5.8	5.3	17.5	17.6	17.7
Canada	0.6	0.4	0.5	1.9	2.0	2.1	0.9	0.9	0.9
United States of America	2.8	3.4	3.8	3.2	3.7	3.2	16.6	16.7	16.9
EUROPE	13.1	13.2	13.3	4.8	4.2	4.9	32.9	33.6	34.7
European Union	10.7	10.5	10.6	1.8	1.9	1.8	27.7	28.1	29.1
Russian Federation	1.1	1.3	1.2	0.7	0.4	0.7	3.3	3.6	3.6
Ukraine	0.4	0.5	0.5	2.0	1.6	2.0	0.6	0.7	0.7
OCEANIA	0.5	0.5	0.6	1.6	1.6	1.7	1.0	1.0	1.0
Australia	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.7	0.7
WORLD	58.9	61.4	63.2	59.0	61.2	63.4	151.5	156.7	161.6
Developing countries	39.7	41.8	42.8	47.8	50.0	52.0	95.1	99.3	103.1
Developed countries	19.2	19.6	20.3	11.2	11.2	11.4	56.4	57.4	58.5
LIFDCs	26.1	27.3	28.8	18.1	19.8	21.5	66.3	68.6	71.8
LDCs	4.3	4.2	4.2	0.4	0.4	0.4	7.0	7.0	7.0

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

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

		Imports			Exports			Utilization	
	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast	2006/07	2007/08 estim.	2008/09 f'cast
ASIA	22.8	23.5	22.6	13.0	14.6	12.7	99.4	101.6	103.4
China	1.9	2.5	2.3	1.4	1.0	0.9	49.3	51.6	52.7
of which Taiwan Prov.	0.5	0.5	0.6	-	-	-	2.4	2.3	2.3
India	0.2	0.1	0.1	5.2	6.8	5.1	11.0	10.5	11.5
Indonesia	2.5	2.6	2.5	2.4	2.6	2.7	2.8	3.1	3.0
Japan	2.3	2.3	2.2	-	-	-	7.2	7.2	6.9
Korea, Republic of	3.3	3.4	3.4	-	-	-	4.3	4.6	4.5
Malaysia	0.9	0.9	0.9	2.2	2.3	2.4	1.8	1.8	1.7
Pakistan	0.3	0.4	0.4	0.1	0.1	0.1	3.0	2.8	2.9
Philippines	1.9	1.9	1.6	0.4	0.5	0.4	2.3	2.4	2.2
Saudi Arabia	0.7	0.8	0.8	-	-	-	0.7	0.8	0.8
Thailand	2.8	2.4	2.5	0.1	0.2	0.1	4.7	4.4	4.4
Turkey	1.1	0.7	0.9	0.1	0.1	-	3.3	3.0	3.2
Viet Nam	1.3	1.3	1.2	0.1	-	-	1.6	1.5	1.5
AFRICA	3.8	4.0	4.0	0.8	0.9	0.8	9.2	9.6	9.7
Egypt	0.8	0.9	0.9	-	-	-	2.0	2.0	2.1
South Africa	1.1	1.1	1.1	-	-	0.1	1.8	1.9	1.9
CENTRAL AMERICA	3.7	3.6	3.6	0.1	0.1	0.1	8.5	8.4	8.1
Mexico	2.0	1.9	1.9	-	-	-	6.4	6.2	5.8
SOUTH AMERICA	4.3	4.5	4.5	43.0	44.2	42.1	22.8	24.3	23.0
Argentina	0.3	0.2	0.4	26.4	27.8	25.4	3.4	4.4	4.0
Bolivia	-	-	-	1.0	1.0	0.9	0.2	0.3	0.3
Brazil	0.2	0.3	0.2	12.7	12.1	12.4	13.9	14.2	13.6
Chile	0.9	0.9	0.8	0.6	0.6	0.6	1.4	1.4	1.3
Paraguay	-	-	-	0.9	0.9	0.9	0.1	0.2	0.1
Peru	0.7	0.7	0.7	1.3	1.7	1.7	0.9	0.9	0.9
Venezuela	1.0	1.1	1.0	-	-	-	1.1	1.1	1.2
NORTH AMERICA	3.4	3.8	3.6	10.6	11.5	11.0	37.9	36.9	34.8
Canada	1.5	1.6	1.4	2.2	2.7	2.8	2.4	2.4	2.1
United States of America	1.9	2.2	2.2	8.4	8.8	8.2	35.5	34.5	32.8
EUROPE	32.1	33.5	31.0	4.1	3.6	4.3	58.7	61.1	60.0
European Union	29.6	30.8	28.3	1.2	0.9	1.0	54.0	56.1	54.7
Russian Federation	0.8	0.9	0.8	1.0	1.0	1.2	2.5	2.5	2.6
Ukraine	0.1	0.1	0.1	1.4	1.3	1.7	0.2	0.2	0.2
OCEANIA	1.5	2.1	2.0	0.2	0.2	0.2	2.1	2.7	2.7
Australia	0.9	0.9	0.8	-	-	-	1.5	1.4	1.4
WORLD	71.6	75.0	71.2	71.7	75.1	71.2	238.6	244.6	241.7
Developing countries	30.9	31.9	31.0	56.7	59.7	55.6	129.3	133.1	133.8
Developed countries	40.8	43.1	40.2	15.0	15.4	15.7	109.3	111.5	107.9
LIFDCs	9.7	10.8	10.0	10.6	12.1	10.2	76.2	78.7	80.9
LDCs	0.4	0.4	0.5	0.4	0.4	0.4	3.2	3.2	3.4

¹ Includes meals and cakes derived from oilcrops as well as fish meal and other meals from animal origin.

Table A13. Total meat statistics¹ (thousand tonnes, carcass weight equivalent)

	Produ	iction	Imj	ports	Exp	ports	Utilization		
	2008 estim.	2009 f'cast	2008 estim.	2009 f′cast	2008 estim.	2009 f'cast	2008 estim.	2009 f′cast	
ASIA	117 264	121 132	10 854	10 613	2 790	2 764	125 328	128 981	
China	78 641	81 501	3 355	3 143	1 298	1 202	80 698	83 442	
of which Hong Kong, SAR	245	242	1 381	1 415	561	575	1 065	1 081	
India	6 672	7 022	1	2	534	561	6 140	6 462	
Indonesia	2 670	2 762	109	109	7	7	2 772	2 864	
Iran, Islamic Republic of	2 427	2 546	146	147	25	27	2 548	2 667	
Japan	3 134	3 132	2 721	2 710	7	7	5 849	5 836	
Korea, Republic of	1 771	1 773	748	694	19	22	2 500	2 445	
Malavsia	1 299	1 299	158	155	15	15	1 442	1 439	
Pakistan	2 235	2 300	31	29	18	19	2 247	2 310	
Philippines	2 422	2 4 2 6	267	266	15	15	2 675	2 678	
Saudi Arabia	747	757	718	753	54	56	1 412	1 454	
Singapore	97	98	280	285	13	13	365	370	
Thailand	2 203	2 289	200	205	535	556	1 672	1 737	
Turkey	1 7/13	1 791	73	68	83	88	1 733	1 7 7 1	
Viet Nam	2 2/2	3 280	332	330	10	10	3 56/	3 609	
Viet Nam	J 242	5 205	552	220	10	10	5 504	5 005	
AFRICA	12 959	13 171	1 777	1 719	99	99	14 638	14 790	
Algeria	583	585	79	75	-	-	662	660	
Angola	140	140	335	322	-	-	474	462	
Favot	1 368	1 405	271	262	2	2	1 637	1 665	
Nigeria	1 1 1 8	1 131	- 1	1	-	-	1 1 1 9	1 132	
South Africa	2 159	2 207	336	326	17	17	2 478	2 516	
	2 135	2 207	550	520	17		24/0	2 510	
CENTRAL AMERICA	8 039	8 128	2 199	2 214	267	288	9 972	10 054	
Cuba	202	204	174	165	-	-	376	369	
Mexico	5 721	5 763	1 570	1 611	137	144	7 154	7 230	
SOUTH AMERICA	35 503	35 736	755	737	7 408	7 424	28 851	29 049	
Argentina	4 875	4 869	46	44	581	575	4 341	4 339	
Brazil	22 396	22 505	31	39	5 961	5 999	16 466	16 545	
Chile	1 379	1 400	172	160	231	219	1 320	1 341	
Colombia	2 142	2 173	46	42	90	96	2 098	2 119	
Uruquay	631	645	18	20	361	357	288	308	
Venezuela	1 298	1 328	392	381	-	-	1 689	1 709	
	A7 A7A	46 601	2 200	2 402	0 776	7 7 7 7	41 507	A1 AC7	
Canada	4/4/4	40 091	2 309	2 403	1 (50	1 605	41 507	41407	
Canada	4 480	4 597	635	057	1 659	1 695	3 456	3 559	
United States of America	42 993	42 093	1 657	1729	6617	6 032	38 033	37 890	
EUROPE	54 915	54 829	5 697	5 235	3 065	2 572	57 546	57 492	
Belarus	852	884	29	26	117	115	764	795	
European Union	44 116	43 803	1 739	1 779	2 822	2 338	43 033	43 244	
Russian Federation	5 891	6 199	3 038	2 755	36	36	8 893	8 9 1 8	
Ukraine	1 966	1 830	429	213	26	16	2 370	2 027	
ΟζΕΛΝΙΑ	E 062	E 022	224	220	2 660	2 6 1 1	2 6 2 7	2 641	
	5 903	5 922	334	330	2 009	2011	3 627	3 641	
Australia New Zealand	4 063	4 032	152	143	052	1 080	2 500	2 490	
	1 420	1407	50		552	525	550		
WORLD	282 117	285 608	23 925	23 252	24 574	23 485	281 468	285 474	
Developing countries	165 851	170 129	12 226	11 963	10 513	10 523	167 564	171 568	
Developed countries	116 266	115 479	11 700	11 289	14 061	12 962	113 905	113 906	
LIFDCs	106 157	109 804	4 237	3 916	1 531	1 460	108 863	112 259	
LDCs	7 416	7 539	878	848	4	4	8 290	8 383	

¹ Including "other meat".

Table A14. Bovine meat statistics (thousand tonnes, carcass weight equivalent)

	Produc	ction	Impo	orts	Exp	orts	Utilization		
	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	
ΔΙΔ	16 102	16 252	2 210	2 2 2 7	673	696	17 721	17 092	
China	6 5 1 0	6 406	256	2 327	86	80	6 6 7 9	6 588	
India	2 85/	2 997	2.50	202	523	550	2 2 2 2 2	2 448	
Indonosia	2 0 0 4	2 997	90	90	525	550	2 332	2 440	
Iran Islamic Popublic of	272	378	96	97			469	/75	
	575	570	612	642	- 1	- 1	1 1 2 0	1 166	
Karaa Ropublic of	320	306	296	261	1	1	561	566	
Malaysia	200	200	290	201	ו כ	ו כ	110	110	
Pakistan	1 1 6 9	1 226	60 1 E	04		ے 11	1 1 7 2	1 2 2 0	
Pakistan	1 108	1 220	140	13	10	11	1 1/3	1 229	
Philippines	250	255	140	140	-	-	390	395	
AFRICA	4 774	4 833	611	562	59	57	5 327	5 338	
Algeria	120	121	70	66	-	-	190	187	
Angola	85	85	99	90	-	-	184	175	
Egypt	417	436	260	250	1	1	676	685	
South Africa	803	800	16	10	3	2	816	808	
CENTRAL AMERICA	2 298	2 330	491	482	127	143	2 662	2 670	
Mexico	1 672	1 690	398	400	36	39	2 034	2 051	
SOUTH AMERICA	14 665	14 584	367	369	2 593	2 569	12 439	12 385	
Argentina	3 113	3 100	307	202	377	376	2 739	2 726	
Brazil	8 623	8 537	22	30	1 602	1 586	7 043	6 981	
Chilo	245	250	125	130	1002	10	368	370	
Colombia	245	017	7	150	90	95	916	877	
Uruguay	515	575	2	5	225	330	192	200	
Venezuela	370	360	185	185			555	5/15	
	570	500	105	105	_	_	555	545	
NORTH AMERICA	13 379	13 335	1 271	1 335	1 246	1 358	13 409	13 432	
Canada	1 285	1 325	204	208	445	458	1 054	1 075	
United States of America	12 094	12 010	1 063	1 123	801	900	12 351	12 353	
EUROPE	10 875	10 909	1 455	1 458	317	283	12 013	12 084	
European Union	7 985	8 081	465	500	205	180	8 245	8 401	
Russian Federation	1 586	1 540	889	850	8	8	2 467	2 382	
Ukraine	499	459	15	20	17	7	497	472	
	2 707	2 740	E 1	E 4	1 700	1 7 2 0	1 0 2 7	1 0 2 2	
Australia	2 /8/	2719	51	51	1 799	1 7 3 8	1 037	1 0 3 3	
Australia New Zealand	2 155	2 097	8 12	/	1 293	1 240	868	864 119	
	015	005	12	12	504		121	115	
WORLD	64 880	65 063	6 555	6 586	6 814	6 843	64 618	64 925	
Developing countries	35 017	35 226	3 015	2 962	3 445	3 459	34 592	34 729	
Developed countries	29 863	29 837	3 540	3 624	3 368	3 384	30 025	30 196	
LIFDCs	17 180	17 422	847	806	742	772	17 285	17 456	
LDCs	2 757	2 790	152	136	2	2	2 906	2 924	
Table A15. Ovine meat statistics (thousand tonnes, carcass weight equivalent)

	Prod	uction	Imp	oorts	Ехр	orts	Utiliz	ation
	2008	2009	2008	2009	2008	2009	2008	2009
ASIA	8 810	8 867	316	320	49	55	9 077	9 132
Bangladesh	210	220	-	-	-	-	210	220
China	4 953	4 963	99	100	27	32	5 025	5 031
India	775	780	-	-	8	8	768	772
Iran, Islamic Republic of	498	500	-	-	-	_	498	500
Pakistan	530	535	1	1	7	8	524	528
Saudi Arabia	100	98	65	60	5	5	160	153
Syria	210	215	-	-	-	-	210	215
Turkey	318	318	-	-	-	-	318	318
AFRICA	2 151	2 167	60	61	14	15	2 198	2 213
Algeria	193	191	8	8	-	-	201	199
Nigeria	256	258	-	-	-	-	256	258
South Africa	156	157	20	20	-	-	176	177
Sudan	335	330	-	-	1	1	334	329
CENTRAL AMERICA	122	126	50	52	-	-	172	178
Mexico	97	100	36	38	-	-	133	138
SOUTH AMERICA	352	359	8	8	27	26	333	341
Brazil	127	128	7	8	-	-	134	136
NORTH AMERICA	118	118	109	109	5	3	222	223
United States of America	100	100	87	86	5	3	182	183
EUROPE	1 380	1 370	300	302	9	18	1 671	1 653
European Union	1 098	1 080	274	274	5	14	1 367	1 340
Russian Federation	165	170	12	13	-	-	177	183
OCEANIA	1 221	1 221	49	50	748	740	522	531
Australia	650	660	-	1	333	340	317	320
New Zealand	570	560	4	4	415	400	159	164
WORLD	14 154	14 229	892	902	852	858	14 195	14 272
Developing countries	10 817	10 890	434	443	89	96	11 162	11 237
Developed countries	3 338	3 339	458	459	763	762	3 032	3 036
LIFDCs	9 159	9 227	107	108	42	48	9 225	9 287
LDCs	1 394	1 411	8	8	1	1	1 400	1 418

Table A16. Pigmeat statistics (thousand tonnes, carcass weight equivalent)

	Prod	uction	Imp	oorts	Exp	ports	Utiliz	zation
	2008 estim.	2009 f′cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f′cast
ASIA	57 160	59 786	2 977	2 731	403	415	59 794	62 157
China	47 811	50 407	1 011	823	358	365	48 464	50 865
of which Hong Kong, SAR	180	176	453	480	130	150	503	506
India	500	500	-	-	1	1	500	500
Indonesia	610	620	4	4	3	3	611	621
Japan	1 249	1 240	1 160	1 120	-	-	2 424	2 360
Korea, D.P.R.	170	172	100	100	-	-	270	272
Korea, Republic of	926	877	352	334	11	15	1 311	1 251
Malaysia	230	230	13	12	3	3	240	239
Philippines	1 477	1 480	64	66	-	-	1 541	1 546
Thailand	720	730	-	-	12	13	708	717
Viet Nam	2 510	2 540	35	33	10	10	2 535	2 563
AFRICA	843	855	174	177	8	9	1 010	1 024
Madagascar	78	80	-	-	-	-	78	80
Nigeria	215	218	-	-	-	-	215	218
South Africa	148	149	30	31	2	2	176	177
Uganda	65	65	-	-	-	-	65	65
CENTRAL AMERICA	1 512	1 545	596	600	114	119	1 994	2 026
Cuba	100	100	25	22	-	-	125	122
Mexico	1 142	1 170	470	475	97	101	1 515	1 544
SOUTH AMERICA	4 879	4 898	77	78	779	765	4 177	4 211
Argentina	235	240	35	36	1	1	269	275
Brazil	3 316	3 310	-	-	636	620	2 680	2 690
Chile	480	490	5	5	140	142	345	353
Colombia	199	201	9	9	-	-	207	210
Venezuela	139	139	6	6	-	-	145	145
NORTH AMERICA	12 510	12 391	603	617	3 010	2 751	10 058	10 258
Canada	1 920	1 960	195	205	1 018	1 038	1 097	1 127
United States of America	10 590	10 431	403	407	1 992	1 713	8 956	9 126
EUROPE	26 489	26 082	1 251	1 063	1 754	1 308	25 986	25 837
Belarus	370	372	10	9	45	46	335	335
European Union	22 500	22 100	55	55	1 660	1 2 1 1	20 895	20 944
Russian Federation	1 850	2 000	860	800	25	25	2 685	2 775
Serbia	620	620	12	11	10	10	622	621
Ukraine	618	451	177	48	-	-	795	499
OCEANIA	515	522	193	186	43	51	665	658
Australia	377	384	141	133	42	50	476	467
Papua New Guinea	68	68	4	4	-	-	72	72
WORLD	103 909	106 080	5 872	5 453	6 111	5 418	103 683	106 170
Developing countries	62 764	65 456	2 566	2 369	1 301	1 305	64 073	66 574
Developed countries	41 145	40 623	3 305	3 084	4 810	4 113	39 610	39 596
LIFDCs	50 935	53 544	960	751	288	276	51 607	54 018
LDCs	1 035	1 067	107	109	-	-	1 141	1 176

Table A17. Poultry meat statistics (thousand tonnes, carcass weight equivalent)

	Produ	uction	Imj	ports	Exp	ports	Utiliz	ation
	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast	2008 estim.	2009 f'cast
ASIA	33 300	34 217	5 209	5 193	1 632	1 564	36 890	37 845
China	17 971	18 318	1 984	1 952	809	707	19 146	19 563
of which Hong Kong, SAR	43	44	770	770	407	400	406	414
India	2 400	2 600	-	-	2	2	2 398	2 598
Indonesia	1 423	1 490	11	10	-	-	1 434	1 500
Iran, Islamic Republic of	1 540	1 652	50	50	24	26	1 566	1 676
Japan	1 353	1 355	910	910	5	5	2 261	2 260
Korea, Republic of	567	578	88	88	6	6	649	660
Kuwait	46	47	165	150	69	71	142	126
Malaysia	1 040	1 040	42	40	10	10	1 072	1 070
Saudi Arabia	570	580	520	550	39	40	1 051	1 090
Singapore	77	78	135	137	5	5	207	210
Thailand	1 222	1 298	1	1	520	540	713	759
Turkey	1 060	1 100	70	65	80	85	1 050	1 080
Yemen	125	128	110	100	-	-	235	228
AFRICA	3 831	3 929	903	889	10	10	4 724	4 807
Angola	9	9	160	155	-	-	169	164
South Africa	1 030	1 080	270	265	6	7	1 294	1 339
CENTRAL AMERICA	3 989	4 009	1 042	1 060	24	25	5 008	5 043
Cuba	33	34	140	135	-	-	173	169
Mexico	2 710	2 702	651	683	3	3	3 358	3 382
SOUTH AMERICA	15 372	15 656	302	280	3 943	3 997	11 731	11 939
Argentina	1 344	1 344	8	6	165	160	1 187	1 190
Brazil	10 300	10 500	1	1	3 700	3 770	6 601	6 731
Chile	625	630	32	25	70	58	587	597
Venezuela	777	815	200	190	-	-	977	1 005
NORTH AMERICA	21 222	20 599	315	332	3 978	3 680	17 491	17 418
Canada	1 236	1 272	211	219	178	180	1 266	1 311
United States of America	19 986	19 327	97	105	3 800	3 500	16 218	16 100
EUROPE	14 976	15 275	2 520	2 253	905	879	16 593	16 648
European Union	11 491	11 500	835	850	875	851	11 451	11 499
Russian Federation	2 200	2 400	1 235	1 050	2	2	3 434	3 448
Ukraine	804	875	236	144	8	8	1 032	1 011
OCEANIA	1 038	1 050	38	39	39	41	1 037	1 048
Australia	860	870	2	2	33	35	829	837
New Zealand	152	153	-	-	6	6	147	148
WORLD	93 729	94 734	10 330	10 045	10 531	10 196	93 474	94 748
Developing countries	53 438	54 686	6 132	6 110	5 575	5 559	54 005	55 236
Developed countries	40 291	40 047	4 198	3 934	4 956	4 637	39 469	39 512
LIFDCs	25 713	26 395	2 287	2 213	428	332	27 572	28 276
LDCs	1 627	1 651	588	571	1	1	2 215	2 222

Table A18. Milk and milk products statistics (million tonnes, milk equivalent)

	Production Import		Imports			Exports			
	2007	2008 estim.	2009 f'cast	2007	2008 estim.	2009 f'cast	2007	2008 estim.	2009 f'cast
ASIA	238.6	246 7	255.6	19 3	19.4	19 3	49	48	48
China	39.9	41.9	44.4	1.9	1.8	1.7	0.7	0.4	0.5
India ¹	102.9	105.8	108.8	-	-	-	0.4	0.4	0.4
Indonesia	1.0	1.0	1.0	1.5	1.8	1.8	0.2	0.2	0.2
Iran. Islamic Republic of	7.6	7.7	7.8	0.3	0.4	0.4		-	
Japan	8.0	8.0	8.0	1.5	1.4	1.5	-	-	-
Korea, Republic of	2.2	2.2	2.2	0.5	0.5	0.5	-	-	-
Malavsia				1.4	1.4	1.5	0.4	0.4	0.2
Pakistan	33.2	35.2	37 3	0.1	0.2	0.2	-	-	-
Philippines	-	-	-	14	1.4	15	0.2	03	03
Saudi Arabia	12	13	13	2.0	19	1.5	13	13	13
Singapore	-	-	-	1 1	1.0	0.9	0.7	0.6	0.6
Thailand	0.7	07	0.7	1.1	0.9	0.9	0.7	0.0	0.0
Turkey	12.1	12.2	12.3	0.1	0.1	0.1	-	-	-
AFRICA	25.4	25.0	26.2	6.4	6 5	6.2	0.5	0.5	0.6
Almaria	35.4	33.9	30.2	0.4	0.5	2.0	0.5	0.5	0.6
Algeria	2.2	2.3	2.3	1.9	2.0	2.0	0.5	0.5	0.6
Едурт	4.6	4.7	4.7	0.9	0.8	0.8	0.1	0.1	0.1
Kenya	3.7	3./	3.7	-	-	-	-	-	-
South Africa	3.0	3.1	3.2	0.2	0.2	0.2	0.1	0.1	0.1
Sudan	7.3	7.4	7.4	0.2	0.2	0.2	-	-	-
Tunisia	1.0	1.0	1.1	0.1	0.1	0.1	0.1	0.1	0.1
CENTRAL AMERICA	16.9	17.1	17.3	3.9	4.3	4.3	0.3	0.3	0.3
Costa Rica	0.8	0.8	0.8	-	-	-	0.1	0.1	0.1
Mexico	10.9	11.0	11.2	2.1	2.5	2.6	0.1	0.1	0.1
SOUTH AMERICA	54.0	55.8	57.7	1.7	1.8	1.8	2.8	3.2	3.4
Argentina	9.8	10.3	10.6	-	-	-	1.3	1.4	1.2
Brazil	27.1	28.1	29.5	0.2	0.2	0.2	0.5	0.7	1.0
Colombia	6.8	6.9	6.9	-	-	-	0.1	0.1	0.1
Uruguay	1.7	1.7	1.7	-	-	-	0.6	0.6	0.6
Venezuela	1.4	1.4	1.4	1.1	1.2	1.1	-	-	-
NORTH AMERICA	07.4	04 5	02.8	24	10	10	2.2	18	4.0
Canada	9 2. -	83	83	2.-	0.4	0.4	0.3	0.2	0.2
United States of America	84.2	86.2	85.5	2.0	1.5	1.5	3.0	4.7	3.8
FUROPE	212 4	212.2	212 7	4.0	5.0	5.2	17.0	12.0	12.0
Delement	213.4	213.3	212.7	4.0	5.0	5.2	12.0	12.9	12.0
Belarus	5.9	0.2	0.5	-	-	-	1.0	1.7	1.8
European Union	151.8	151.5	150.9	1.4	1.3	1.3	9.5	9.5	8.7
Russian Federation	32.2	32.5	32.8	2.7	3.0	3.1	0.2	0.3	0.3
Ukraine	12.3	11.8	11.1	0.1	0.1	0.1	0.9	0.9	0.7
OCEANIA	25.4	24.6	25.7	0.7	0.8	0.8	15.0	13.2	14.4
Australia ²	9.6	9.2	9.4	0.5	0.6	0.5	3.5	3.2	3.2
New Zealand ³	15.8	15.3	16.2	0.1	0.1	0.1	11.5	10.0	11.2
WORLD	676.1	687.7	699.0	39.2	39.8	39.5	39.4	39.7	39.4
Developing countries	316.1	325.9	336.6	29.1	29.9	30.0	8.3	8.5	8.8
Developed countries	360.0	361.8	362.3	10.1	9.9	10.1	31.1	31.2	30.7
LIFDCs	238.7	246.9	255.8	10.3	10.7	11.0	3.6	3.4	3.7
LDCs	25.4	25.8	26.1	2.1	2.2	2.3	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 (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 A19. Sugar statistics (million tonnes, raw value)

	Produ	uction	Utiliz	ation	Imp	orts	Ехр	orts
-	2007/08 estim.	2008/09 f'cast	2007/08 estim.	2008/09 f'cast	2007/08 estim.	2008/09 f'cast	2007/08 estim.	2008/09 f'cast
ASIA	69.8	54.2	73.4	75.9	22.7	24.8	11.7	10.7
China	16.2	15.7	15.7	16.6	1.8	1.7	0.1	0.2
India	28.8	15.8	24.0	25.5	- 10	3.0	2.7	0.2
lapan	2.9	5.1	4.0	4.0	1.9	1.4	-	-
Malaysia	0.9	0.9	2.4	2.5	1.5	1.5	0.2	0.2
Pakistan	5 2	4.0	1.2	1.5	0.3	0.7	0.2	0.2
Philippings	J.2 2 5	4.0	4.0	4.0	0.5	0.7	0.4	0.5
Thailand	2.5	2.5	2.1	2.1	-	-	0.2	5.0
Turkov	2.0	2.0	2.5	2.0	0.2	0 1	0.1	5.0
Viet Nam	2.0	2.0	2.1	2.2	0.2	0.1	0.1	-
	1.5	1.2	1.5	1.0	0.5	0.4	-	-
AFRICA	10.1	10.9	14.6	15.0	8.8	9.2	4.6	5.0
Egypt	1.8	1.9	2.8	2.8	1.1	1.2	0.2	0.2
Ethiopia	0.3	0.4	0.4	0.4	0.1	0.1	0.1	0.1
Kenya	0.6	0.6	0.9	0.9	0.2	0.3	-	-
Mauritius	0.4	0.6	-	-	-	-	0.5	0.6
Mozambique	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3
South Africa	2.2	2.3	1.6	1.6	0.2	0.1	0.9	0.8
Sudan	0.8	0.8	1.0	1.0	0.3	0.4	0.1	0.2
Swaziland	0.6	0.7	-	-	-	-	0.6	0.6
Tanzania	0.3	0.3	0.4	0.5	0.2	0.2	-	-
CENTRAL AMERICA	12.3	12.4	8.8	9.0	0.9	1.0	4.1	4.5
Cuba	1.5	1.3	0.7	0.7	0.2	0.2	0.9	0.7
Dominican Republic	0.5	0.5	0.3	0.4	-	-	0.2	0.2
Guatemala	2.2	2.3	0.7	0.8	-	-	1.3	1.5
Mexico	5.8	5.8	5.6	5.6	0.3	0.3	0.5	0.6
SOUTH AMERICA	38.3	47.4	19.1	19.7	1.6	1.1	20.3	25.7
Argentina	2.3	2.3	1.9	1.9	-	-	0.3	0.5
Brazil	30.8	39.6	11.9	12.3	-	-	18.9	24.1
Colombia	2.2	2.2	1.6	1.6	0.1	0.2	0.6	0.6
Peru	0.9	0.9	1.1	1.1	0.3	0.2	-	0.1
Venezuela	0.7	0.7	0.9	1.0	0.3	0.2	-	-
NORTH AMERICA	78	71	10.9	11 1	33	4 1	0.2	0.1
United States of America	7.7	7.0	9.5	9.6	1.9	2.7	0.2	0.1
FUROPE	24.0	21.6	20.0	20.0	<u>ه م</u>	11 2	20	0.6
European Union	17.4	21.0	19.0	29.9 19.0	3.0	/ 9	2.9	0.0
Pussion Endoration	2.2	20	15.0	15.0	2.2	4.5	0.1	0.2
Ukraine	2.0	5.8 1 7	23	23	0.1	0.4	-	-
	2.0	,	2.5	2.5	0.1	0.1		
OCEANIA	5.3	4.9	1.6	1.6	0.3	0.3	3.5	3.5
Australia	5.0	4.7	1.2	1.2	-	-	3.3	3.3
Fiji	0.2	0.2	0.1	0.1	-	0.1	0.2	0.2
WORLD	167.6	158.5	158.4	162.2	47.3	50.2	47.3	50.2
Developing countries	127.6	121.7	109.6	113.2	29.5	31.7	39.5	44.9
Developed countries	40.0	36.8	48.8	49.0	16.1	20.1	7.8	5.4
LIFDCs	65.0	51.0	69.3	71.7	17.4	20.2	8.2	6.0
LDCs	3.3	3.6	6.2	6.4	4.9	4.7	2.0	1.9

Table A20. Fish and fishery products statistics ¹

	Capture prod	fisheries uction	Aquacultu produ	re fisheries uction		Exports			Imports	
	2006	2007	2006	2007	2006	2007	2008 estim.	2006	2007	2008 estim.
	Million	tonnes (liv	e weight eq	uivalent)			USD	billion		
ASIA	45 7	46 5	41 9	44.6	29.0	30.9	34.0	28.5	29.5	32.6
China ²	15.8	16.0	30.2	31.7	10.8	10.9	12.2	6.7	7.4	8.4
of which: Hong Kong SAR	0.2	0.2	-	-	0.4	0.4	0.5	2.0	2.2	2.4
Taiwan Prov.	1.0	1.2	0.3	0.3	1.4	1.2	1.5	0.5	0.6	0.7
India	3.8	4.0	3.2	3.4	1.8	1.7	1.7	-	-	-
Indonesia	4.8	4.9	1.3	1.4	2.0	2.1	2.5	0.1	0.1	0.2
Japan	4.3	4.2	0.7	0.8	1.4	1.7	1.6	14.0	13.2	14.5
Korea, Rep. of	1.8	1.9	0.5	0.6	0.9	1.1	1.3	2.8	3.1	2.9
Philippines	2.3	2.5	0.6	0.7	0.4	0.5	0.5	0.1	0.1	0.1
Thailand	2.7	2.5	1.4	1.4	5.2	5.7	6.5	1.5	1.7	2.4
Viet Nam	2.0	2.1	1.7	2.2	3.4	3.8	4.0	0.3	0.4	0.4
AFRICA	7.0	7.1	0.8	0.8	4.1	4.5	4.8	2.0	2.4	2.8
Ghana	0.4	0.3	-	-	0.1	0.1	-	0.1	0.2	0.1
Morocco	0.9	0.9	-	-	1.2	1.4	1.7	0.1	0.1	0.1
Namibia	0.5	0.4	-	-	0.5	0.5	0.5	-	-	-
Nigeria	0.6	0.5	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5
Senegal	0.4	0.4	-	-	0.3	0.3	0.2	-	-	-
South Africa	0.6	0.7	-	-	0.4	0.5	0.5	0.2	0.2	0.2
CENTRAL AMERICA	1.9	1.8	0.3	0.3	1.8	2.1	2.2	0.9	1.1	1.2
Mexico	1.4	1.3	0.2	0.2	0.7	0.8	0.9	0.4	0.5	0.6
Panama	0.2	0.2	-	-	0.4	0.4	0.4	-	-	-
SOUTH AMERICA	14.5	14.0	1.4	1.4	8.8	9.0	9.7	1.0	1.4	1.7
Argentina	1.2	1.0	-	-	1.3	1.1	1.0	0.1	0.1	0.1
Brazil	0.8	0.8	0.3	0.3	0.4	0.3	0.3	0.5	0.6	0.7
Chile	4.2	3.8	0.8	0.8	3.6	3.7	3.9	0.2	0.2	0.2
Ecuador	0.4	0.4	0.2	0.2	1.3	1.4	1.8	-	0.1	0.2
Peru	7.0	7.2	-	-	1.8	2.0	2.1	-	-	-
NORTH AMERICA	6.2	6.0	0.7	0.7	8.2	8.4	8.5	15.1	15.6	16.2
Canada	1.1	1.0	0.2	0.2	3.7	3.7	3.8	1.8	2.0	2.0
United States of America	4.9	4.8	0.5	0.5	4.1	4.4	4.5	13.3	13.6	14.1
EUROPE	13.4	13.3	2.2	2.3	31.9	35.7	38.0	41.3	46.7	49.0
European Union ²	5.6	5.2	1.3	1.3	21.6	24.2	25.5	37.4	41.8	43.2
Iceland	1.3	1.4	-	-	1.8	2.0	1.7	0.1	0.1	0.1
Norway	2.3	2.4	0.7	0.8	5.5	6.2	7.4	0.8	1.1	1.3
Russian Federation	3.3	3.5	0.1	0.1	2.1	2.4	2.5	1.4	2.0	2.3
OCEANIA	1.2	1.2	0.2	0.2	2.1	2.2	2.3	1.1	1.3	1.3
Australia	0.2	0.2	-	0.1	0.9	0.9	0.9	0.9	1.1	1.1
New Zealand	0.5	0.5	0.1	0.1	0.9	0.9	1.0	0.1	0.1	0.1
WORLD ³	89.9	90.1	47.3	50.3	85.9	92.8	99.5	89.9	98.0	104.7
Developing countries	65.2	65.8	43.6	46.4	42.6	45.1	49.5	18.6	21.3	23.9
Developed countries	24.6	24.2	3.7	4.0	43.3	47.6	50.0	71.3	76.7	80.9
LIFDCs	34.8	35.4	37.0	39.1	17.1	18.0	19.8	6.2	6.9	7.9
LDCs	7.4	7.9	1.7	1.8	2.3	2.5	2.4	0.6	0.9	1.0

 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 72 094 tonnes in 2006 and 64 801 in 2007 of not identified countries, data not included in any other aggregates.

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

	Wheat			Mai	ze	Sorghum
Period	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	US No. 2 Yellow ²
Annual (July/June)						
2003/2004	161	149	154	115	109	118
2004/2005	154	138	123	97	90	99
2005/2006	175	138	138	104	101	109
2006/2007	212	176	188	150	145	155
2007/2008	361	311	322	200	192	206
Monthly						
2008 - May	349	258	-	242	207	240
2008 - June	358	249	363	281	258	268
2008 - July	341	245	329	267	252	232
2008 - August	343	253	307	232	217	209
2008 - September	308	222	280	229	203	208
2008 - October	252	183	235	181	169	158
2008 - November	247	182	189	166	156	146
2008 - December	240	182	177	160	152	151
2009 - January	256	193	213	172	159	148
2009 - February	241	183	218	163	158	145
2009 - March	244	186	214	165	163	153
2009 - April	242	180	211	168	166	149
2009 - May	266	201	210	180	186	167

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)

		tulu.	Com	to we have	De			1 a wala
		July	Sep	tember	De	temper		
	July 2009	July 2008	Sept 2009	Sept 2008	Dec. 2009	Dec. 2008	Mar. 2010	Mar 2009
Wheat								
17 Apr	196	341	207	346	215	352	221	356
24 Apr	200	303	210	308	218	315	223	320
1 May	209	290	219	296	227	302	233	309
8 May	217	302	27	307	235	315	240	321
15 May	212	283	222	289	230	296	236	302
22 May	216	274	226	279	234	287	240	294
Maize								
17 Apr	152	243	156	246	160	246	165	250
24 Apr	152	232	156	236	160	237	165	241
1 May	163	243	166	247	171	249	175	252
8 May	166	248	169	252	173	254	177	259
15 May	164	236	168	241	173	245	177	250
22 May	168	240	171	245	176	250	180	254

Source: Chicago Board of Trade (CBOT)

Table A23. Selected international prices for rice and price indices

	Inter	national price	s (USD per to	nne)		FAO indices (2002-2004=100)				
						Ind	ica			
Period	Thai 100% B ¹	Thai broken ²	US long grain ³	Pakisan Basmati⁴	Total	High quanlity	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	1 077	295	296	289	314	251	
Monthly										
2008 - May	963	772	978	1 100	372	411	437	296	289	
2008 - June	870	645	985	1 100	370	386	395	358	278	
2008 - July	835	583	985	1 100	352	369	359	357	269	
2008 - August	787	525	853	1 100	329	335	293	381	260	
2008 - September	764	487	826	1 100	313	302	269	389	252	
2008 - October	683	385	770	1 100	291	275	225	388	242	
2008 - November	591	320	698	1 100	269	239	188	391	237	
2008 - December	582	310	683	1 100	265	237	178	388	237	
2009 - January	611	332	625	1 100	270	240	192	389	239	
2009 - February	624	333	586	900	270	240	200	388	218	
2009 - March	637	335	529	900	269	238	201	388	214	
2009 - April	607	341	540	900	271	232	204	394	218	
2009 - May *	556	316	544	1 050	268	223	193	400	234	

* Four weeks only

¹ White rice, 100% second grade, f.o.b. Bangkok, indicative traded prices

² Al super, f.o.b. Bangkok, indicative traded prices

³ US No 2, 4% broken 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 broken. 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

	h	nternational prices	s (USD per tonn		FAO	indices (2002-20	04=100)	
Period	Soybeans ¹	Soybean oil ²	Palm oil ³	Soybean cake ⁴	Rapesed meal⁵	Oilseeds	Edible/soap fats/oils	Oilcakes/meals
Annual (Oct/Sept)								
2003/04	322	632	488	257	178	121	116	114
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	1 325	1 050	445	296	217	202	243
Monthly								
2007 - October	445	1 007	875	384	272	177	196	180
2007 - November	489	1 133	955	397	260	193	214	183
2007 - December	516	1 158	943	425	268	203	218	193
2008 - January	536	1 270	1 061	434	308	212	242	197
2008 - February	579	1 426	1 178	452	346	230	265	204
2008 - March	576	1 467	1 248	445	359	234	277	205
2008 - April	556	1 430	1 175	476	328	226	268	213
2008 - May	570	1 430	1 200	464	348	227	272	211
2008 - June	625	1 531	1 206	515	329	244	283	225
2008 - July	634	1 506	1 121	506	292	245	265	224
2008 - August	557	1 323	884	435	247	213	222	201
2008 - September	508	1 227	760	406	199	194	200	191
2008 - October	394	928	545	338	156	151	153	162
2008 - November	378	824	488	323	155	143	133	154
2008 - December	366	737	508	307	172	137	126	154
2009 - January	411	788	553	369	202	152	134	169
2009 - February	386	744	571	378	215	144	131	172
2009 - March	380	728	590	346	208	141	129	165
2009 - April	410	802	699	383	220	151	147	175
2009 - May	472	893	799	441	230	174	168	196

¹ Soybeans (US, No. 2 yellow, cif Rotterdam)

² Soybean oil (Dutch, f.o.b. ex-mill)

³ Palm oil (Crude, cif Northwest Europe)

⁴ Soybean cake (Pellets, 44/45 percent, Argentina, cif Rotterdam)

⁵ Rapeseed meal (34 percent, Hamburg, fob, ex-mill)

Note: The FAO indices are calculated using the Laspeyres formula; the weights used are the average export values of each commodity for the 2002-2004 period. The indices are based on the international prices of five selected seeds, ten selected oils and fats and seven selected cakes and meals. *Sources*: FAO and Oil World

Table A25. Selected international prices for milk products and dairy price index

			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	145
2006	1 774	2 218	2 193	2 681	138
2007	2 959	4 291	4 185	4 055	247
2008	3 607	3 278	3 846	4 633	212
Monthly					
2008 - April	3 950	3 500	4 550	5 050	242
2008 - May	3 925	3 475	4 550	5 000	240
2008 - June	4 013	3 475	4 400	5 050	241
2008 - July	4 050	3 600	4 175	5 000	239
2008 - August	3 775	3 438	3 875	4 800	227
2008 - September	3 375	3 025	3 262	4 375	203
2008 - October	3 025	2 600	2 925	4 063	185
2008 - November	2 775	2 200	2 550	3 475	160
2008 - December	2 300	2 000	2 163	3 150	142
2009 - January	1 925	1 825	1 900	2 675	122
2009 - February	1 850	1 750	1 850	2 450	114
2009 - March	1 850	1 813	1 925	2 525	118
2009 - April	1 800	1 975	2 063	2 425	117
2009 - May	1 900	2 000	2 200	2 575	124

¹ Butter, 82% butterfat, f.o.b. Oceania; indicative traded prices

 $^{\rm 2}~$ Skim Milk Powder; 1.25% butterfat, f.o.b. Oceania, indicative traded prices

³ Whole Milk Powder, 26% butterfat, f.o.b. Oceania, indicative traded prices

⁴ Cheddar Cheese, 39% 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 A26. Selected international meat prices

	Pigme	eat prices (USD per	tonne)		Bovine meat prices (USD per tonne)			
Period	USA	Brazil	Japan	USA	Argentina	Japan	Australia	
Annual (Jan/Dec)								
2005	2 161	1 868	5 093	3 919	1 673	5 764	2 617	
2006	1 986	1 964	4 540	3 803	2 270	5 685	2 547	
2007	2 117	2 034	4 500	4 023	2 385	5 925	2 603	
2008	2 270	2 834	5 117	4 325	3 615	6 275	3 138	
Monthly								
2008 - March	2 059	2 509	5 226	4 108	3 322	6 515	2 940	
2008 - April	2 060	2 682	5 122	4 252	2 878	6 135	3 023	
2008 - May	2 130	2 826	5 052	4 360	5 603	6 269	3 389	
2008 - June	2 204	2 851	4 948	4 654	4 931	6 257	3 569	
2008 - July	2 337	3 009	4 939	4 024	3 410	6 380	3 872	
2008 - August	2 468	3 086	4 834	4 388	4 189	6 287	3 734	
2008 - September	2 561	3 362	4 973	4 773	3 701	6 465	3 566	
2008- October	2 538	3 079	5 277	4 940	3 643	6 477	3 029	
2008 - November	2 485	2 848	5 460	4 571	3 149	5 780	2 535	
2008 - December	2 296	2 414	5 760	4 103	2 792	5 640	2 477	
2009 - January	2 195	2 004	5 821	3 938	2 530	5 522	2 516	
2009 - February	2 197	2 133	5 653	3 794	2 520	5 104	2 362	

Pig Meat Prices

USA - Export unit value for frozen product - Foreign Trade Statistics of United States Census Bureau

BRAZIL - Export unit value for pig meat, fob - A.B.I.P.E.C.

JAPAN - Pork Import Price (cif): Frozen Boneless Cuts - A.L.I.C.

Bovine Meat Prices

USA - Frozen beef, export unit value - Foreign Trade Statistics of 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 United States port (East Coast) ex-dock. From Nov 02: chucks and cow forequarters - World Bank

Table A27. International meat prices and FAO meat price indices (1998-2000=100)

	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	1 233	113	117	104	125
2006	734	8 852	1 181	107	117	95	114
2007	935	1 964	1 447	112	121	98	135
2008	997	3 064	1 906	128	139	108	175
Monthly							
2008 - March	953	2 568	1 773	124	135	103	159
2008 - April	971	2 532	1 842	123	133	102	161
2008 - May	1 001	2 655	1 894	132	151	103	167
2008 - June	1 037	2 890	1 974	134	153	104	176
2008 - July	1 046	3 134	2 030	134	147	108	183
2008 - August	1 027	3 217	2 131	136	151	110	187
2008 - September	1 070	3 406	2 139	137	151	114	194
2008 - October	1 058	3 748	2 021	135	144	116	196
2008 - November	1 016	3 788	1 853	127	127	117	190
2008 - December	898	3 997	1 602	122	120	114	180
2009 - January	904	3 770	1 507	119	117	112	173
2009 - February	960	3 489	1 124	114	111	111	158

Poultry Meat Prices

USA - Broiler cuts, export unit value - Foreign Trade Statistics of United States Census Bureau. JAPAN - Broiler Import Price, cif; frozen, other than leg quarters - A.L.I.C.

BRAZIL - Export unit value for chicken, fob - A.B.E.F.

FAO Meat Price Indices

Consist of three poultry meat product quotations (the average weighted by assumed fixed trade weights), four bovine meat product quotations (average weighted by assumed fixed trade weights), two pig meat product quotations (average weighted by assumed fixed trade weights), one ovine meat product quotation (average weighted by assumed fixed trade weights); the four meat group average prices are weighted by world average export trade shares for 1998-2000.

Table A28. Selected international commodity prices

	Currency and unit	Effective date	Latest quotation	One month ago	One year ago	Average 2003-2007
Sugar (ISA daily price)	US cents per lb	21-05-09	16.34	13.54	12.10	9.80
Coffee (ICO daily price)	US cents per lb	21-05-09	127.72	109.98	126.76	81.37
Cocoa (ICCO daily price)	US cents per lb	21-05-09	110.94	110.34	120.20	76.06
Tea (FAO Tea Composite Price)	USD per kg	30-04-09	2.45	2.29	2.46	1.71
Cotton (NYBOT) ¹	US cents per lb	22-05-09	57.15	53.25	68.33	59.69
Jute "BWD"f.o.b.	USD per tonne	30-03-09	490.00	480.00	410.00	325.39
Mongla at sight						
Wool (64's, London) ²	Pence per kg					

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

 $^{\scriptscriptstyle 2}$ Quotation discontinued as of July 2007

Sharp fall in the global cost of imported food anticipated in 2009

After reaching an unparalleled high in 2008, the global food import bill is expected to retreat from over USD 1 trillion to USD 790 billion by the end of the year. The prediction is conditioned on pervasive and sustained annual declines across international prices of foodstuffs as well as freight rates.

Of the estimated USD 226 billion global contraction from 2008, grain-based foodstuffs will account for over half of the decline, followed by a combined USD 115 billion fall in vegetable oil and dairy product bills. The exception to the trend is sugar, which is set to register a 22 percent rise to a record USD 39 billion.

Global import volumes remarkably firm

Declining import costs do not imply smaller volumes of food shipments. Physical deliveries held extremely firm last year, despite unprecedented surges in international quotations for food and freight, and are likely to do so this year, in spite of the economic downturn: record deliveries for wheat, vegetable oils, dairy products and meat were witnessed in 2008; as for this year, cereal import volumes are likely to remain robust while traded volumes of other commodities are expected to soar to new heights. Such resilience to price movements and to economic recession underscores the critical role of international trade to assure food consumption around the world.

Cost of importing food for the world's poorest countries to fall

The cost of purchasing food on the international market place for the most economically vulnerable groups, LDCs and LIFDCs is set to fall by less than one-quarter for each from last year. Much of the respite comes by way of a one-third drop in their cereal import bills and an equally pronounced drop in vegetable oil purchases, in response to improved domestic supply prospects. Prospects in Sub-Saharan Africa are less optimistic. The subregion endured the largest rise in food import costs, when measured from the run-up to the peak of the high price event in 2008, but the expected decline in the overall bill this year, from USD 28.4 billion to USD 21.3 billion, is among the smallest of any geographic or economic group.

The encumbrance facing some of the world's poorest countries in importing food can be contrasted against that falling on richer nations, whose food import bills peaked far less in 2008 and are expected to drop disproportionately more in 2009.

...but the burden remains heavy

Despite the welcome declines in food import bills, the deteriorating economic environment in which the falls are taking place is likely to offset much of the benefit. Eroding purchasing power in most LIFDCs through a combination of falling incomes and falling real exchange rates over much of the past 12 months afflicts the affordability of food however cheap it has become on the international market place.

Forecast changes in global food import bills by type: 2009 over 2008 (%)

S ubstantially lower international price prospects twinned with an easing of shipping costs could pave the way for much cheaper cereal, vegetable oil and livestock product import bills. However, rising import demand and higher prices could lead to a sharp rise in the global sugar import bill.



Forecast import bills of total food and major foodstuffs (USD million)										
	World		Developed		Developing		LDC		LIFDC	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
TOTAL FOOD	1014 617	789 110	667 468	533 496	347 149	255 613	26 012	19 105	121 313	93 339
Cereals	375 387	263 254	222 236	153 167	153 151	110 087	11 028	7 549	40 191	27 068
Vegetable Oils	172 791	99 122	86 677	49 574	86 113	49 548	6 319	3 592	33 842	19 977
Dairy	86 513	44 803	60 562	31 839	25 951	12 964	1 666	662	7 541	3 543
Meat	104 567	86 134	78 261	64 317	26 306	21 817	895	733	3 992	3 127
Sugar	31 836	38 743	17 502	21 523	14 333	17 220	2 026	2 182	5 527	7 173

FAO monthly price indices for selected commodities (2002-2004=100)

nternational prices of several agricultural commodities have risen sharply in 2009. Nevertheless, they remain well above trend.



Annual food bill indices (2000=100)

On the back of falling international quotations and freight rates, import bills look set to decline sharply in 2009. While good news for vulnerable countries, their burden, however, of purchasing food commodities on the international market place remains higher than that on the world at large and indeed on developed countries.



Monthly fertilizers and oil prices (January 2007-April 2009)

With the exception of Muriate of Potash (MOP), international fertilizer quotations began their retreat in the third quarter of 2008. Declines accelerated when farmers began postponing purchases in the expectation of further price reductions, also reacting to a volatile crop price outlook and financial concerns. The beginning of 2009 saw a return to some stability, especially in the quotations of fertilizers derived from fossil fuels. At the same time, MOP prices appear to have peaked. Activity in this market, though, has been very limited as manufacturers appear reluctant to relinquish the price gains of the previous year. Uncertainty still dominates global fertilizer markets, which, given short-term supply constraints, could react to a sudden resurgence of demand prompting yet another surge in prices.



Source: Compiled from the Fertilizer Week and Fertilizer Market Bulletin

Price-adjusted major currencies US Dollar index: May 2007 to May 2009

The US Dollar has experienced a fair degree of volatility in recent months, but over the past year, it has risen by roughly 15 percent against major currencies. The sharp decrease in the value of the US Dollar since March 2009, if continued, could transalte in to higher commodity prices in world markets.



Forecast changes in food import bills of selected LIFDCs: 2009 over 2008 (%)

On the back of much lower international food quotations and freight costs, almost all of the economically vulnerable countries could face substantially lower import bills in 2009 compared with last year.



Annual change in exchange rates of selected LIFDCs against the USD as of April 2009 (%)

Numerous LIFDCs have seen their currency decline over the past twelve months against the US Dollar resulting in lower international purchasing power, especially currencies of countries tied to the Euro through the CFA in West and Central Africa.



Selected annual consumer price indices as of April 2009 (%)

Consumer prices continue to rise strongly in many of the LIFDCs, compounding the economic hardships that their inhabitants already face.



Estimated current foreign exchange reserves in selected LIFDCs as of April 2009 (USD million)

ow foreign currency reserves to meet import costs continue to be a cause for concern for many of the LIFDCs.



THE FAO PRICE INDICES

In this edition of Food Outlook, a new food price index is introduced: 'The Global Food Consumption Price Index'. The index tracks changes in the cost of the global food basket as portrayed by the latest FAO world food balance sheet (see http://faostat.fao.org/). Representative international prices for each of the commodities or commodity groups are weighted by their contribution to total calorie intake in the food basket. This departs from the methodology used to draw the benchmark FAO Food Price Index, where the different food components are weighted by their shares in the value of global food trade. On comparing the two, we may ask: why did the calorie-based price index peak more sharply? and why does it today stand significantly higher than the traditional, trade based, index? The answer lies in the different weights applied, as the trade-based index tends to overstate the influence of high-value products, such as meat or dairy, and to underplay that of lower priced staples, such as cereals. While the total value of livestock product trade is typically almost twice that of cereals, there are few consumers in the world whose average intake of meat and dairy is double that of rice, bread, pasta, noodles, etc. put together. Therefore, last year's surge in international cereal prices relative to the modest rise in livestock product quotations yields a much higher index value when it is weighted by consumption, than a trade based index.

The FAO Food Price Index (FFPI) averaged 152 points in May 2009, up 6 percent from April. At this level, the FFPI



stands at its highest level since October 2008 but still down almost 30 percent from its peak in June 2008. The increase in May reflected the renewed surge in international prices of several major agricultural commodities composing the FFPI, with the exception of rice and meat. After falling to nearly two-year low of 139 points in February 2009, the FFPI moved up slowly before jumping in May; the largest one-month increase in 15 months.





The FAO Cereal Price Index averaged 188 points in May 2009, up 4 percent from April but down 32 percent from April 2008, when the index peaked to its all time high of 274 points. Record 2008 cereal crop and the subsequent recovery in stocks and export supplies helped international cereal prices to ease considerably during the 2008/09 season. International grain prices rose sharply in recent weeks, on the back of drought-reduced supplies in South America, prolonged wet weather conditions causing planting delays in the United States, a sliding dollar and spillovers from surging crude oil and soybean markets.

The FAO Oils/Fats Price Index climbed to 168 points in May 2009, up 14 percent from April, but still nearly 40 percent below the peak registered in May 2008. The renewed price strength reflects concerns about the unforeseen tightening of global oilseed supplies in 2008/09 and the possibility of a slowdown in 2009 palm oil production, which would coincide with sustained demand growth for vegetable oils for both food and non-food purposes.

The FAO Meat Price Index averaged 115 points in May 2009, nearly unchanged from April but 19 percent below its peak in September 2008. The decline was most pronounced for bovine, ovine and poultry meat, while pig meat prices remained relatively stable. The lower prices reflect weak demand, as a worsening global economic environment and the recurrence of animal diseases are dampening consumption growth, especially in the developed countries.

The FAO Dairy Price Index, which had fallen to a 20 month low in November 2008, continued to slide in the first quarter of 2009, reaching 117 points in April. The index rose to 124 in May, supported by fall in the US Dollar. Dairy product prices are about half their levels of one year ago.

The FAO Sugar Price Index reached a 3 year high of 228 points in May 2009, up 18 percent from April. For the first five months (January-May) of 2009, international sugar prices averaged 195 points, 8.7 percent higher than the corresponding period in 2008. The strength in prices was prompted by the prospects of a much reduced crop in India, the world's second largest sugar producer, which is likely to turn the country from a net exporter to a net importer.

FAO Food Price Index

		Food Price					
		Index ¹	Meat ²	Dairy ³	Cereals ⁴	Oils and Fats⁵	Sugar ⁶
2000		90	94	95	85	68	116
2001		92	94	107	86	68	123
2002		90	90	82	95	87	98
2003		98	99	95	98	101	101
2004		111	111	123	107	112	102
2005		115	113	135	103	104	140
2006		122	107	128	121	112	210
2007		154	112	212	167	169	143
2008		191	128	220	238	225	182
2008	May	209	132	240	267	272	171
	June	214	134	241	274	283	172
	July	208	134	239	257	265	202
	August	197	136	227	239	222	207
	September	185	137	203	226	200	192
	October	163	135	185	190	153	169
	November	150	127	160	178	133	172
	December	143	122	142	174	126	167
2009	January	144	119	122	185	134	178
	February	139	114	114	177	131	188
	March	140	114	118	179	129	190
	April	143	115	117	179	147	194
	May	152	116	124	188	168	228

Note: The FAO Price Indices have been revised with a change of the base year period from 1998-2000=100 to 2002-2004=100. The weight of each commodity group has been accordingly modified and now reflects their respective contribution to the value of world food trade in 2002-2004. The revision results in little change in movements and levels from what was reported previously.

¹ Food Price Index: Consists of the average of six commodity group price indices mentioned above weighted with the average export shares of each of the groups for 1998-2000: 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**: Consists of three poultry meat product quotations (the average weighted by assumed fixed trade weights), four bovine meat product quotations (average weighted by assumed fixed trade weights), one ovine meat product quotation (average weighted by assumed fixed trade weights), one ovine meat product quotation (average weighted by assumed fixed trade weights): the four meat group average prices are weighted by world average export trade shares for 1998-2000.

³ Dairy Price Index: Consists of butter, SMP, WMP, cheese, casein price quotations; the average is weighted by world average export trade shares for 1998-2000.

⁴ **Cereals Price Index**: This index is compiled using the grains and rice price indices weighted by their average trade share for 1998-2000. 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 1998-2000. 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 trade shares of each oil product for 1998-2000.

⁶ Sugar Price Index: Index form of the International Sugar Agreement prices.

NOTE: Food Outlook is issued under the Global Information and Early Warning System on Food and Agriculture, by collaboration among Services of the Trade and Markets Division and other FAO units. The International Grain Council contributes the Ocean Freight Rates section. Food Outlook provides information on latest developments in agricultural markets and sets the global and regional commodity production, utilization, trade and price context for food security, and will be published twice a year in **June** and **November**. This issue is based on information available up to May 2009.

Food Outlook and other GIEWS reports are available on the internet as part of the FAO World Wide Web (www.fao.org) at the following URL address: http://www.fao.org/giews/. In addition, some of the GIEWS regular reports can be received by e-mail through automatic mailing lists: subscription information is available at http://www.fao.org/giews/english/listserv. htm. Other relevant commodity studies, technical documents and featured publications on a wide range of topical issues are available on the FAO TradeDivision web site at: http://www.fao.org/es/esc/en/index.html

GIEWS

The Global Information and Early Warning System on Food and Agriculture

GIEWS continuously monitors crop prospects and food security situation at global, regional, national and sub-national levels and warns of impending food difficulties and emergencies. Established in the wake of the world food crisis of the early 1970's GIEWS maintains a unique database on all aspects of food supply and demand for every country of the world. The System regularly provides policy makers and the international community with up-to-date and accurate information so that timely interventions can be planned and suffering avoided.

Enquiries may be directed to:

C. Calpe, Senior Economist Trade and Markets Division, FAO, Rome Direct Facsimile: 0039-06-5705-4495, E-mail: giews1@fao.org Or find us on the FAO World Wide Web site (www.fao.org) at: http://www.fao.org/giews/.

Disclaimer

The designations employed and the presentation of material in this report 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.