Agricultural commodities

September quarter 2011

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On 1 July 2011, responsibility for resources and energy data and research was transferred from ABARES to the Bureau of Resources and Energy Economics (BREE).

Please visit **www.bree.gov.au** for access to BREE publications and information.

Foreword

This first edition of *Agricultural commodities* replaces *Australian commodities*. This new report focuses exclusively on Australian agriculture, fisheries and forestry commodities and will be a valuable information source for anyone associated with Australia's rural industries.

Agricultural commodities contains the latest national and international macroeconomic outlook from ABARES, as well as notes covering the short-term (2011–12) outlook for Australia's agriculture, fisheries and forestry sectors.

Agricultural commodities provides forecasts for prices, production, and the value and volume of exports for Australia's major agricultural and natural resource-based commodities. Commodities covered include wheat, coarse grains, oilseeds, beef and veal, sheep meat, wool, cotton, sugar, dairy, winegrapes, horticultural products, seafood and forestry products.

Agricultural commodities is complemented by the ABARES annual commodity statistics publication (the next issue of which will be published in December 2011). The latter publication contains longer term historical macroeconomic and agricultural sector performance information including key statistics on supply of and demand for each rural commodity. Both publications form a base for the ABARES National Outlook conference, held in Canberra in March each year, at which medium-term outlook assessments are presented for major agricultural and natural resource based industries.

*M*inerals and energy commodity forecasts are now produced by the new Bureau of Resources and Energy Economics (BREE), in the Department of Resources, Energy and Tourism.

Philip Glyde
Executive Director
September 2011

Key

a ABARES macro assumption s ABARES estimate f ABARES forecast z ABARES projection

Economic overview

Patrick Hamshere, Neil Thompson and David Mobsby

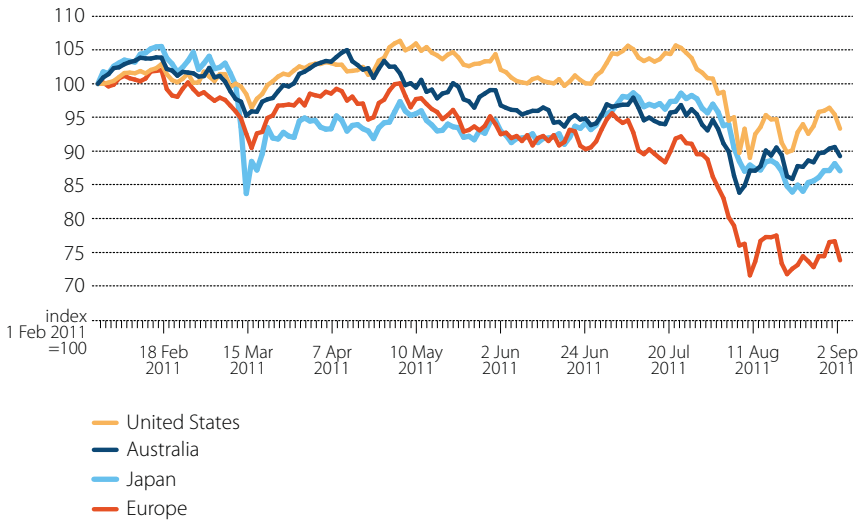
- Following a strong growth rate of 5 per cent in 2010, world economic growth is assumed to slow to 3.8 per cent in 2011, before rising modestly to 4 per cent in 2012.
- Emerging economies, particularly China and India, are expected to remain the main drivers of world economic growth, although growth rates in these economies are assumed to moderate over the outlook period.
- In contrast, continued concerns over high public debt are expected to slow economic growth in major OECD economies, which has increased uncertainty surrounding the outlook for global economic growth.

Global economy

After strong activity in 2010, the pace of global economic growth moderated over the first half of 2011. Emerging economies, particularly in Asia, continued to underpin world economic growth, while weak private demand and renewed concerns over public debt levels weakened activity in major OECD economies.

The re-emergence of concerns over public debt in major OECD economies, in combination with weakening private sector demand, has increased uncertainty surrounding the outlook for global economic growth. As a result, financial market volatility has increased significantly in recent months. Increased financial market volatility has the potential to further weaken consumer and business confidence, leading to adverse effects on consumer spending and business investment expenditure.

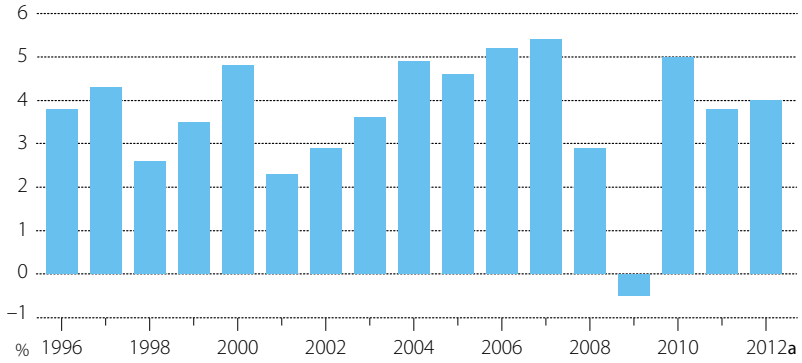
Recent movements in OECD equity markets



In preparing this set of agricultural commodity forecasts, growth in major OECD economies is assumed to weaken in the short term. While public debt levels will remain a significant concern for OECD countries, it is expected that consumer and business spending will gradually pick up, especially during 2012. For the OECD as a whole, economic growth is assumed to average around 1.4 per cent in 2011, before rising to 2 per cent in 2012.

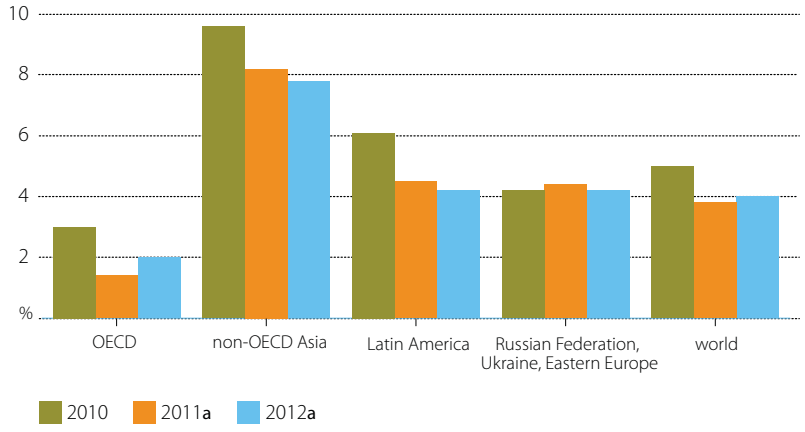
For emerging economies, particularly China and India, the short-term outlook remains positive. Despite the weak outlook for developed economies, any adverse effects on the export performance of emerging economies are likely to be more than offset by increases in domestic demand and intraregional trade. For developing economies as a whole, economic growth is assumed to average 6.8 per cent in 2011 and 6.5 per cent in 2012.

World economic growth



Against this backdrop, the world economy is assumed to grow by around 3.8 per cent in 2011, before the growth rate improves modestly to 4 per cent in 2012.

Regional economic growth



Key macroeconomic assumptions

World		2009	2010	2011 a	2012 a
Economic growth					
OECD	%	– 3.4	3.0	1.4	2.0
United States	%	– 3.5	3.0	1.6	2.0
Japan	%	– 6.3	4.0	– 0.5	2.0
Western Europe	%	– 4.1	1.8	1.7	1.6
– Germany	%	– 5.1	3.7	3.0	2.2
– France	%	– 2.7	1.5	1.8	1.8
– United Kingdom	%	– 4.9	1.4	1.3	2.1
– Italy	%	– 5.2	1.3	0.8	0.8
Korea, Rep. of	%	0.3	6.2	4.0	4.6
New Zealand	%	– 2.1	1.7	1.1	3.9
Developing countries	%	4.2	7.8	6.8	6.5
– non-OECD Asia	%	6.9	9.6	8.2	7.8
South-East Asia **b**	%	1.7	6.9	5.2	5.4
China **c**	%	9.2	10.3	9.5	8.5
Chinese Taipei	%	– 1.9	10.9	5.0	5.0
Singapore	%	– 0.8	14.5	5.0	5.4
India	%	7.0	9.0	8.0	8.0
– Latin America	%	– 1.7	6.1	4.5	4.2
Russian Federation	%	– 7.8	4.0	4.4	4.5
Ukraine	%	– 14.8	4.2	4.5	4.7
Eastern Europe	%	– 3.6	4.2	4.3	3.5
World **d**	%	– 0.5	5.0	3.8	4.0
Industrial production					
OECD	%	– 14.1	7.5	3.3	4.7
Inflation					
United States	%	– 0.4	1.6	3.0	1.9
Interest rates					
US prime rate **e**	%	3.3	3.3	3.3	3.3
Australia		2008 –09	2009 –10	2010 –11 a	2011 –12 a
Economic growth	%	1.4	2.3	1.8	4.0
Inflation	%	3.1	2.3	3.1	3.1
Interest rates **g**	%	6.3	6.0	6.6	6.9
Australian exchange rates					
US$/A$		0.75	0.88	0.99	1.03
TWI for A$ **h**		60	69	74	76

a ABARES assumption. **b** Indonesia, Malaysia, the Philippines, Thailand and Vietnam. **c** Excludes Hong Kong. **d** Weighted using 2010 purchasing-power-parity (PPP) valuation of country GDPs by the IMF. **e** Commercial bank prime lending rates in the United States. **g** Large business weighted average variable rate on credit outstanding. **h** Base: May 1970 = 100.
Sources: ABARES; Australian Bureau of Statistics; International Monetary Fund; OECD; Reserve Bank of Australia

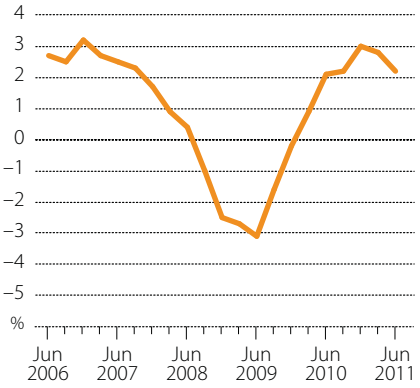
Economic prospects in Australia's major export markets

United States

In the first half of 2011, economic growth in the United States proceeded at a slow pace. Real gross domestic product rose at a year-on-year rate of 1.5 per cent in the June quarter 2011, following growth of 2.2 per cent in the March quarter. This easing of economic growth over the first half of the year reflected a weakening in private sector demand, in addition to the withdrawal of fiscal stimulus by the public sector.

US consumer spending growth

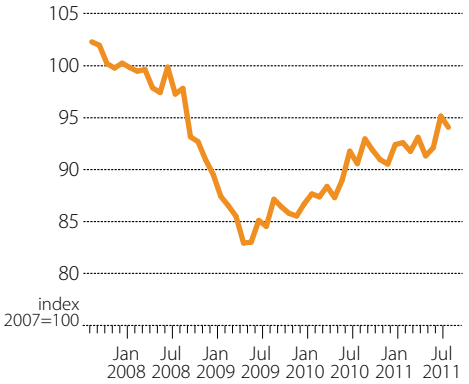
quarterly



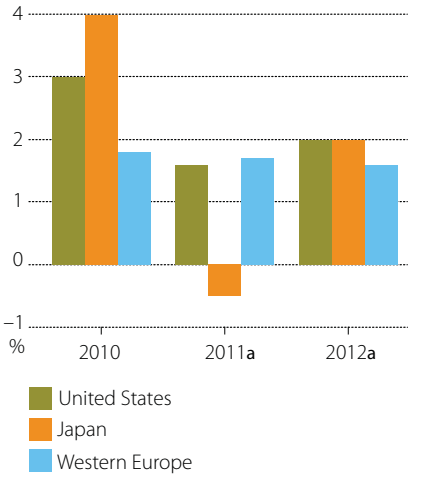
Consumer spending, which accounts for around 70 per cent of real gross domestic product, was weak in the first half of 2011, largely reflecting the effects of high unemployment and a weak housing market on consumer spending. In recent months, consumer confidence has been further affected by increased volatility in financial markets and political uncertainty surrounding the US Government's borrowing requirements. Growth in consumer spending slowed to a year-on-year rate of 2.2 per cent in the June quarter 2011, compared with growth of 2.8 per cent in the March quarter.

Despite the positive effect of a significantly weaker US dollar on exports, activity in the manufacturing sector has also eased. Growth in industrial production has slowed since the beginning of the year, from around 5.6 per cent in January to 3.9 per cent in July 2011.

US industrial production



OECD economic growth

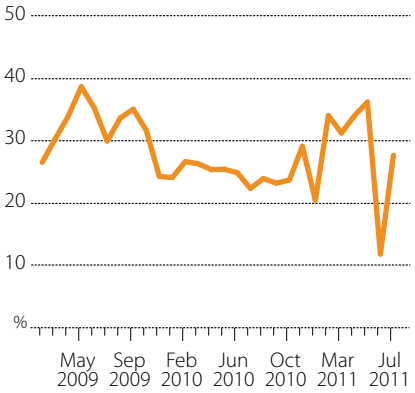


Looking forward, there is a strong prospect that consumer spending will only recover gradually in response to an expected slow improvement in the labour market. While manufacturing activity is likely to continue to strengthen, its impact on general economic activity will not be sufficient to return US economic growth to levels close to its longer term potential (around 3 to 3.5 per cent). Economic growth in the United States is assumed to average around 1.6 per cent in 2011 and 2 per cent in 2012.

China

Economic growth in China remained strong in the first half of 2011, with real gross domestic product expanding at a year-on-year rate of 9.5 per cent in the June quarter, following growth of 9.7 per cent in the March quarter. Domestic demand continued to be the main driver of economic activity, despite the offsetting effect from the Chinese Government's attempts to ease inflationary pressures.

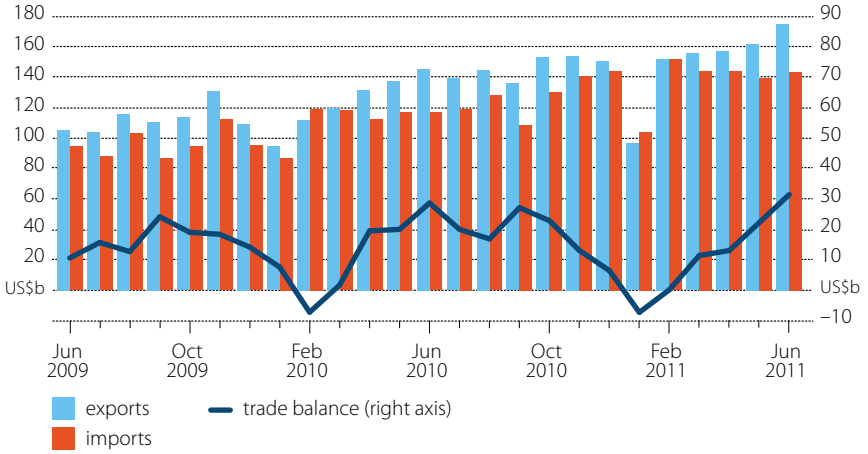
Investment growth in fixed assets



Growth in consumer and business spending has been solid in the first eight months of 2011. Retail sales grew at a year-on-year rate of 17.2 per cent in July and 17.7 per cent in June 2011. Investment in fixed assets continued to be high, with a year-on-year increase of 25.4 per cent in the first seven months of 2011. In particular, investment in real estate rose by 33.4 per cent year-on-year, over the same period.

The strong growth in domestic demand is continuing despite the tight monetary conditions implemented by the Chinese Government to ease inflationary pressures. Consumer prices have risen markedly in recent months, with a year-on-year rise of 6.5 per cent in July 2011, driven largely by higher food prices, which increased by 14.8 per cent in the same period.

Recent trade indicators



In response to rising inflationary pressures, the Chinese Government has implemented a number of monetary tightening measures since late 2010. However, these measures have yet to have a significant effect in slowing price rises.

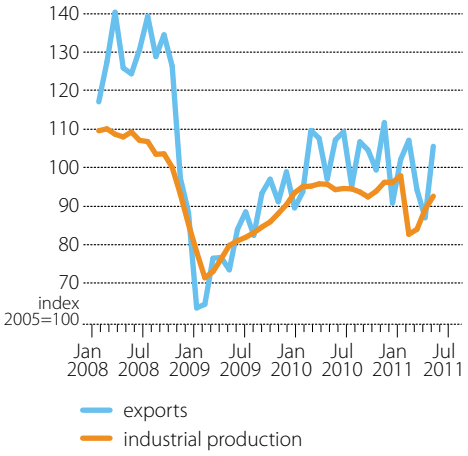
Despite recent uncertainty in major OECD economies, China's export performance has been strong. Exports increased at a year-on-year rate of 20.4 per cent in July 2011, following rises of 17.9 per cent in June and 19.4 per cent in May.

In the short term, economic growth in China is expected to be underpinned by domestic demand. Nonetheless, a gradual easing of strong economic growth is expected. Economic growth in China is assumed to be around 9.5 per cent in 2011 and 8.5 per cent in 2012.

Japan

Economic activity in Japan contracted in the first half of 2011, largely reflecting the devastating effects of the earthquakes and tsunami. In the first half of 2011, real gross domestic product declined at a year-on-year rate of around 1 per cent.

Japan industrial production and exports



Partial indicators released recently suggest economic activity in Japan may have strengthened in the September quarter. Industrial production has expanded for the four months to July 2011, following a decline of 15.5 per cent in March. The rebound of industrial production reflects the reopening of production facilities and transport networks following the natural disasters, while factories have increased production in response to order backlogs. While the recovery of industrial production appears to be gaining momentum, power shortages and rolling blackouts continue to pose a downside risk to broader economic recovery in the short term.

Export growth has recovered following a decline of 12 per cent in April 2011. The recent strong appreciation of the Japanese yen against currencies of its major trading partners, particularly the US dollar, poses a downside risk to factory production by reducing the competitiveness of Japan's exports.

In coming quarters, economic growth is expected to gain further momentum as reconstruction from natural disasters continues. Economic growth in Japan is assumed to be around 2 per cent in 2012, following a –0.5 per cent decline in 2011.

Western Europe

In Western Europe, economic performance varies significantly among the regional economies. While real gross domestic product in Germany grew year-on-year by 2.8 per cent in the June

quarter 2011, economic activity contracted in Greece at a year-on-year rate of 7.3 per cent over the same period. For the United Kingdom and France, economic growth expanded at a year-on-year rate of 0.7 per cent and 1.6 per cent, respectively, in the June quarter.

Economic performance is likely to continue to vary between countries in Western Europe. In Germany, economic growth is assumed to remain relatively strong, supported by growth in external demand and manufacturing activity. In contrast, economic growth in the United Kingdom is unlikely to strengthen significantly as fiscal tightening continues and consumer spending remains subdued.

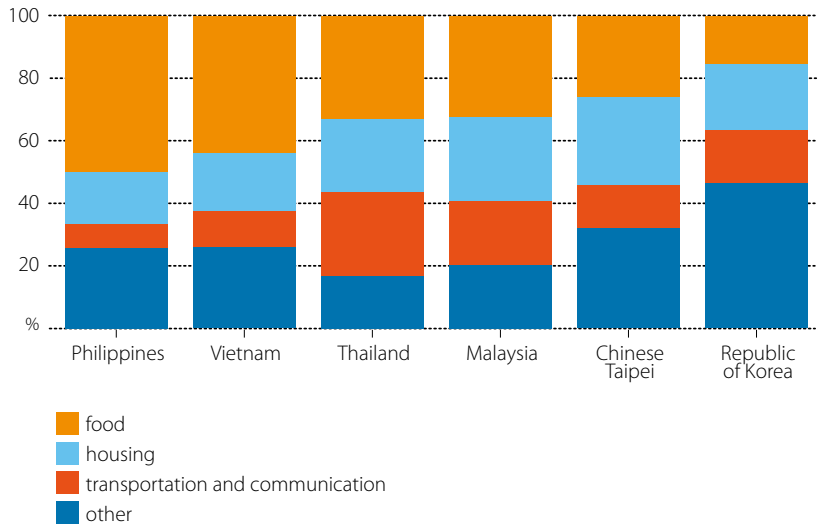
For countries affected by large public sector debts, including Italy, Greece, Ireland, Portugal and Spain, increased uncertainty and ongoing financial market concerns have led to further reform and debt restructuring. There is a significant risk that economic activity in these economies could stall or slow, which could have spillover effects on other regional economies.

In preparing this set of agricultural commodity forecasts, economic growth in Western Europe as a whole is assumed to be around 1.7 per cent in 2011 and 1.6 per cent in 2012.

Non-OECD Asia

Economic activity across non-OECD Asia has been mixed in recent months, following strong growth in 2010 and early 2011. Growth in some export oriented economies has been affected by weakening demand from major OECD economies and supply chain disruptions as a result of the earthquakes and tsunami in Japan. In Thailand, growth in real gross domestic product slowed to a year-on-year rate of 2.6 per cent in the June quarter 2011, from 3.2 per cent in the March quarter. In contrast, growth remains strong in regional economies where domestic demand is the main driver of economic activity. In Indonesia, the economy grew year-on-year by around 6.5 per cent in the first half of 2011.

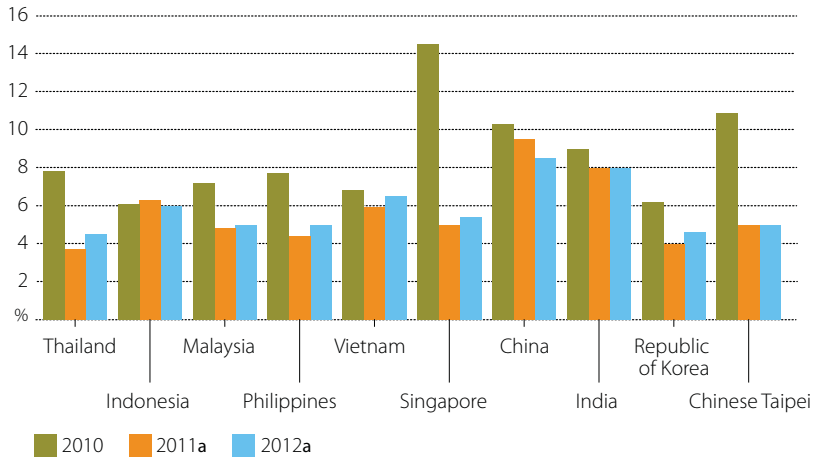
Consumer price components for selected Asian economies



Inflationary pressures have been a concern in the region. A key driver of these pressures is food prices, which account for over 30 per cent of consumer spending in some regional economies. In Vietnam, for example, a 34 per cent year-on-year rise in food prices pushed up consumer prices by an annual rate of 23 per cent in August 2011. However, food price inflation has not been uniform among regional economies. In Malaysia, food prices rose by only 4.9 per cent in July 2011, contributing to a modest 3.4 per cent year-on-year increase in consumer prices.

Regional economic growth is assumed to remain strong, despite the expectation that relatively high inflationary pressures will continue in the short term. A pick-up in intraregional trade, as the effects of Japanese supply disruptions ease, is expected to support general economic activity in export-oriented economies. For non-OECD Asia as a whole, economic growth is assumed to average 8.2 per cent in 2011, before easing to 7.8 per cent in 2012.

Economic growth in Asia



Economic prospects in Australia

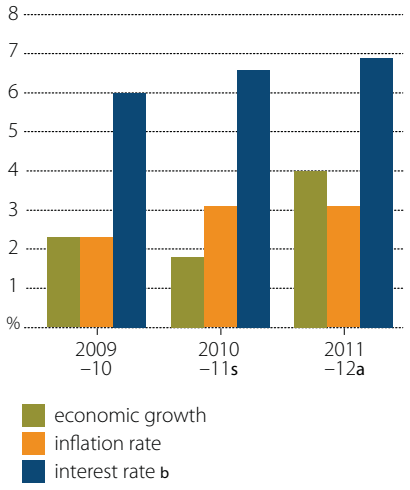
In Australia, real gross domestic product rose at a year-on-year rate of 1.4 per cent in the June quarter 2011, following growth of 1 per cent in the March quarter 2011. For 2010–11 as a whole, the Australian economy expanded by 1.8 per cent.

Growth in domestic demand is expected to strengthen in 2011–12 as consumer spending improves gradually and investment growth remains strong. Demand for Australia's commodity exports is also expected to support growth in general economic activity. As a result, economic growth in Australia is assumed to average around 4 per cent in 2011–12.

Inflation

Inflationary pressures in Australia have increased. The consumer price index rose year-on-year by 3.6 per cent in the June quarter 2011, following an increase of 3.3 per cent in the March quarter.

Australian economic indicators



b Large business weighted average variable rate on credit outstanding.

Contributing most to the price rises in the June quarter were fruit, automotive fuel, hospital and medical services, furniture, deposit and loan facilities, and rents. Partially offsetting these rises were price falls for vegetables, audio, visual and computing equipment, electricity, domestic holiday travel and accommodation, milk, and toiletries and personal care products.

Inflationary pressures are expected to ease in the near term as prices for fruit and vegetables return to more normal levels following the disruptions of natural disasters in early 2011. For 2011–12 as a whole, the inflation rate is assumed to remain around an average of 3.1 per cent.

Australian exchange rate

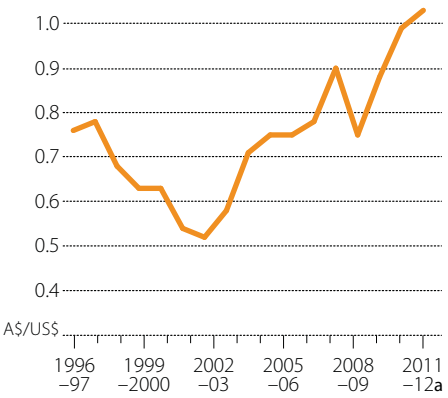
Over the past several months, there has been increased volatility in the value of the Australian dollar, especially against the US dollar. The Australian dollar appreciated significantly from around parity against the US dollar in early March 2011 to a post-float (1983) high of US110c in late July, before depreciating to around US103c in mid-September. The Australian dollar is estimated to average around US106c in the first three months of 2011–12, compared with an average of US99c in 2010–11.

To a large extent, the recent volatility of the Australian exchange rate reflects financial market concerns over high public debt in the United States and Europe, and its possible impact on global economic activity. As a result of these concerns investors moved funds to 'safe haven' assets, particularly US Treasury bonds, which led to a modest increase in the value of the US dollar. Against major international floating currencies, the US dollar appreciated by around 1 per cent in August 2011, partially reversing a 4 per cent fall in the first half of 2011.

In the next 12 months, the value of the Australian dollar is assumed to remain strong against the US dollar. At this stage, there are few indications that a sharp slowdown in global economic growth will eventuate. Given the expected economic strength in the Asian region, especially in China and India, there is a strong prospect that commodity demand, especially for mineral resources, will remain strong in the short term. This is expected to provide continued support for Australia's terms of trade and commodity export earnings.

Given the current economic outlook, monetary policy in the United States is expected to remain positive for economic growth, with interest rates staying at historical lows in 2011–12. In Australia, prime business lending rates are assumed to remain at their current levels for most of the current financial year. As a result, the interest rate differential between Australia and the United States is expected to provide continued support for a strong Australian currency against the US dollar.

Australian exchange rate



In preparing this set of agricultural commodity forecasts, the Australian dollar is assumed to average around US1.03c and TWI 76 for 2011–12 as a whole. While the Australian dollar is assumed to remain strong in the short term, significant volatility is likely to continue. It is therefore important for primary producers and exporters to manage the risks associated with fluctuations in the Australian exchange rate.

Outlook for Australian agricultural, fisheries and forestry exports

The total volume of farm production is forecast to increase by 2.5 per cent for 2011–12 as a whole, following an increase of 6 per cent in 2010–11.

The index of crop production is forecast to rise by 3.8 per cent in 2011–12, mainly reflecting forecast larger production of summer crops and horticultural products.

Generally favourable growing conditions are expected to lead to a large 2011–12 national winter crop. Australian winter crop production is forecast to be 41 million tonnes in 2011–12, a decline of 2 per cent from the large harvest of last year. Of the major winter grains, wheat production is forecast to fall slightly to 26.2 million tonnes. While barley production is forecast to decline by 11 per cent to around 8.3 million tonnes, canola production is forecast to rise by 7 per cent to 2.3 million tonnes.

For summer crops, production is forecast to increase by 2 per cent to a total of 4.8 million tonnes in 2011–12.

The volume of livestock production is forecast to increase by around 1 per cent in 2011–12, reflecting higher lamb and sheep turn-off rates and increased wool and milk production.

The index of unit export returns for Australian farm commodities, in aggregate, is forecast to remain largely unchanged in 2011–12, following an increase of 11.5 per cent in 2010–11. Lower export prices for wheat, sugar, cotton, beef and veal and some dairy products are expected to offset forecast price increases for rice, soybeans and wool.

Export earnings for farm commodities are forecast to be around $34.6 billion in 2011–12, a rise of 6.5 per cent from $32.5 billion in 2010–11. Farm commodities for which export earnings are forecast to be higher in 2011–12 include wheat (up by 16 per cent), wool (1 per cent), rice (377 per cent), canola (8 per cent), raw cotton (63 per cent) and sheep meat (6 per cent).

Export earnings for crops are forecast to be around $20 billion in 2011–12, compared with $17.6 billion in 2010–11. The export value of livestock and livestock products is forecast to decline by 1.6 per cent to $14.6 billion in 2011–12.

For fisheries products, export earnings are forecast to be around $1.4 billion in 2011–12, rising from $1.2 billion in 2010–11. Export earnings for forest products are forecast to increase by 5.9 per cent to around $2.6 billion in 2011–12.

In total, the value of Australian agricultural, fisheries and forestry exports is forecast to be around $38.6 billion in 2011–12, an increase of 6.6 per cent from $36.2 billion in 2010–11.

Major indicators of Australia's agriculture and natural resources based sectors

		2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f	change from previous year 2010–11 %	change from previous year 2011–12 %
Exchange rate	US$/A$	0.78	0.90	0.75	0.88	0.99	1.03	*12.5*	*4.0*
Unit returns b									
Farm	index	100.0	111.1	111.6	98.5	109.8	109.3	*11.5*	*– 0.5*
Value of exports	A$m	31 754	31 345	35 908	32 078	36 196	38 580	*12.8*	*6.6*
Farm	A$m	27 905	27 532	32 036	28 570	32 467	34 593	*13.6*	*6.5*
– crops	A$m	13 091	13 032	16 889	15 251	17 644	20 012	*15.7*	*13.4*
– livestock	A$m	14 814	14 500	15 147	13 319	14 823	14 581	*11.3*	*– 1.6*
Forest and fisheries products	A$m	3 849	3 813	3 872	3 508	3 729	3 987	*6.3*	*6.9*
– forestry	A$m	2 355	2 471	2 343	2 261	2 480	2 627	*9.7*	*5.9*
– fisheries	A$m	1 494	1 342	1 529	1 247	1 249	1 360	*0.2*	*8.9*
Gross value of production c									
Farm	A$m	36 663	43 752	42 124	39 636	49 250	50 002	*24.3*	*1.5*
– crops	A$m	18 411	24 237	22 815	21 185	27 577	28 266	*30.2*	*2.5*
– livestock	A$m	18 252	19 515	19 309	18 450	21 674	21 736	*17.5*	*0.3*
Forestry and fisheries	A$m	3 929	4 043	3 946	3 931	3 909	3 997	*– 0.6*	*2.3*
– forestry	A$m	1 713	1 836	1 732	1 746	1 734	1 828	*– 0.7*	*5.4*
– fisheries	A$m	2 217	2 207	2 214	2 185	2 175	2 169	*– 0.5*	*– 0.2*
Volume of production									
Farm	index	94.8	103.9	108.2	107.5	114.0	116.9	*6.0*	*2.5*
– crops	index	84.0	103.9	113.4	114.4	127.5	132.4	*11.5*	*3.8*
– livestock	index	105.2	102.3	100.8	98.7	99.2	100.1	*0.5*	*0.9*
Forestry	index	128.4	133.3	119.5	117.8	118.8	122.7	*0.8*	*3.3*
Production area and livestock numbers									
Crop area (grains and oilseeds)	'000 ha	21 191	23 237	24 084	23 793	23 574	24 118	*– 0.9*	*2.3*
Forestry plantation area	'000 ha	1 903	1 973	2 020	2 009	na	na	*na*	*na*
Sheep	million	85.7	76.9	72.7	68.0	70.0	71.2	*2.9*	*1.7*
Cattle	million	28.0	27.3	27.9	26.6	27.4	28.0	*3.0*	*2.2*
Farm costs	A$m	31 443	37 137	36 631	34 354	36 576	37 965	*6.5*	*3.8*
Net cash income d	A$m	10 367	10 834	6 060	10 076	17 619	17 139	*74.9*	*– 2.7*
Net value of farm production e	A$m	5 220	6 615	5 493	5 282	12 674	12 037	*140.0*	*– 5.0*
Farmers' terms of trade	index	96.0	91.4	88.9	88.8	101.3	97.1	*14.1*	*– 4.1*
Employment									
Agriculture, forestry and fishing	'000	350	354	362	369	351	na	*– 4.8*	*na*
Australia	'000	10 374	10 684	10 892	11 027	11 355	na	*3.0*	*na*

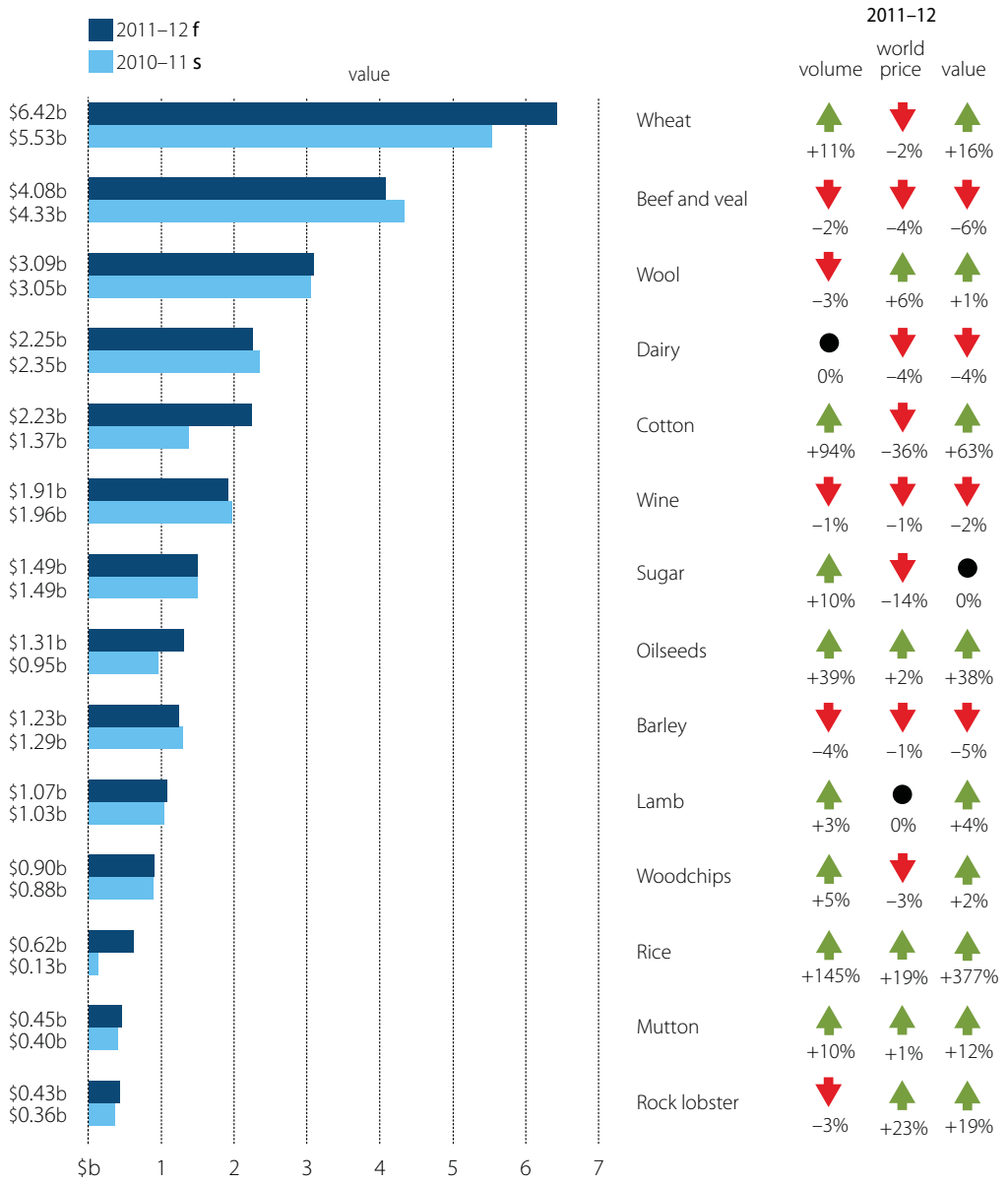
b Base: 2006–07 = 100. **c** For a definition of the gross value of farm production see table 14. **d** Gross value of farm production less increase in assets held by marketing authorities and less total cash costs. **e** Gross value of farm production less total farm costs. **s** ABARES estimate. **f** ABARES forecast. **na** Not available.

Note: ABARE revised the method for calculating farm price and production indexes in October 1999. The indexes for the different groups of commodities are calculated on a chain weight basis using Fishers' ideal index with a reference year of 1997–98 = 100

Sources: ABARES; Australian Bureau of Statistics

Major Australian agricultural, fisheries and forestry commodity exports

Wheat, cotton, sugar, rice and oilseeds are world indicator prices in US$. All other commodities are export unit returns or domestic prices in A$. For export value, annual forecasts are the sum of quarterly forecasts. As a result, annual export values do not necessarily reflect variations in export volumes, world prices and exchange rates.

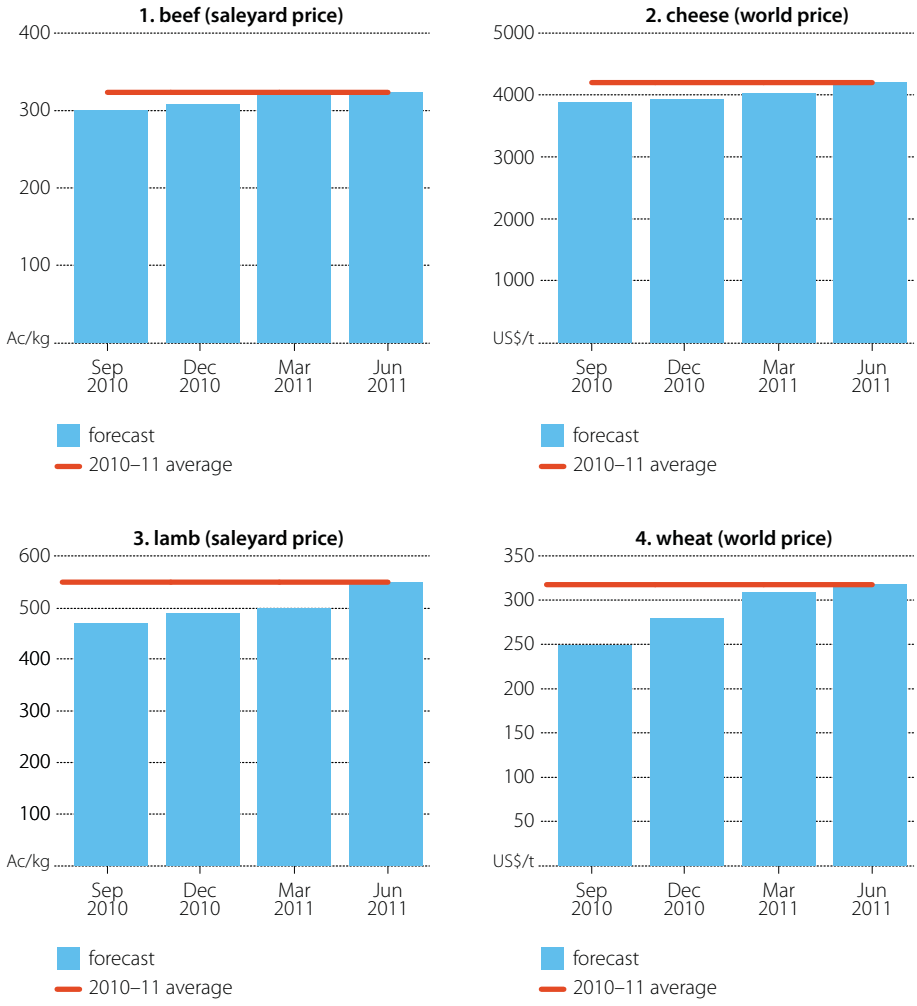


Understanding the nature of ABARES agricultural forecasts

Patrick Hamshere and Neil Thompson

ABARES presents its forecasts of production, consumption, prices and exports of specific agricultural commodities as point forecasts. These point forecasts are based on an economic assessment of data and information from a variety of sources available at the time the forecasts are made, supported by discussions with industry experts, use of quantitative analytical tools and professional judgement. Because they are significantly dependant on information available at the time they are made, forecasts made by ABARES can be expected to sometimes differ from actual outcomes. Some examples are in figures a1 to a4.

a Price forecasts and actual outcomes of selected agricultural commodities in 2010–11



Note: The bars indicate ABARES forecasts made in each quarter during 2010–11, while the line shows the actual average price for that commodity in 2010–11 as a whole.

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Understanding the nature of ABARES agricultural forecasts continued

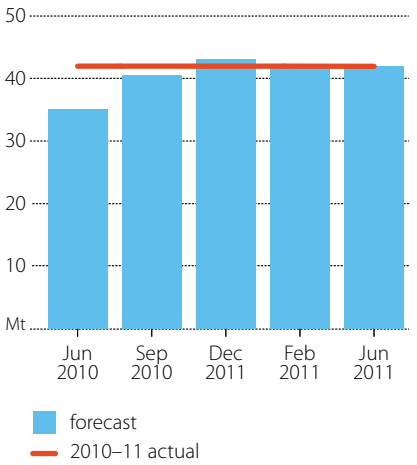
A key reason for the difference between forecasts and actual outcomes is that ABARES is often required to make assumptions about factors that have the potential to affect outcomes. As more information becomes available over time, earlier assumptions are updated and forecasts revised. ABARES forecasts are therefore conditional on the information available at the time they were made.

Differences between forecasts and actual outcomes also reflect the effects of factors that are unforeseeable. These can include unanticipated policy changes, unpredictable macroeconomic developments, changing climatic or seasonal conditions and unplanned supply disruptions.

Using the world indicator price for wheat (US hard red winter, fob, Gulf) as an example, the actual outcome for 2010–11 was significantly affected by adverse weather conditions in major producing countries, especially those in the Black Sea region, as well as increased demand for wheat as an alternative feed to corn. When ABARES prepared its forecast of the 2010–11 world wheat indicator price in the September quarter 2010 (see figure a4), the harvest of northern hemisphere wheat crops was not complete. The initial assumption used by ABARES put world wheat production in 2010–11 at 648 million tonnes, the third highest on record. Based on this, ABARES formulated its forecast of the world wheat indicator price of US$250 a tonne for 2010–11 as a whole.

However, adverse seasonal conditions, especially in the United States and the Black Sea region, resulted in a significant downgrades to expected world wheat supplies during the course of 2010–11. The adverse conditions also affected supplies of other cereals, particularly corn, leading intensive livestock producers to use more wheat for feed, which put further upward pressure on world wheat prices. In response to shortfalls in domestic production, the Russian Federation and Ukraine imposed restrictions on their wheat exports, leading to a further increase in world wheat prices. Taking these developments into account, ABARES revised its forecast of the average wheat price to US$280 a tonne in the December 2010 issue of *Australian commodities*, before a further upward revision of US$310 a tonne in the March 2011 issue.

b Forecasts and actual outcome of winter crop production in 2010–11



In forecasting the production of major non-irrigated crops in Australia, ABARES takes into account information on the seasonal outlook released by the Australian Government Bureau of Meteorology and yield forecasts provided by the Agricultural Production Systems Research Unit of the Queensland Department of Employment, Economic Development and Innovation. Variations in these seasonal and yield forecasts will affect the ABARES forecasts of domestic agricultural production. Forecasts and actual outcome for Australia's winter crop production in 2010–11 are presented in figure b.

Exchange rate movements can have a significant effect on of agricultural prices and export earnings. Because most agricultural prices are denominated in US dollars on world markets, a significant decline or increase in the value of the US dollar against other floating international currencies (including the Australian dollar) can influence

continued...

Understanding the nature of ABARES agricultural forecasts continued

movements in world agricultural prices (Penm et al. 2002). Movement in the Australian dollar against the US dollar is also an important factor. A significant appreciation of the Australian dollar against the US dollar has the potential to markedly reduce earnings for exporters and producers.

Considerable uncertainty surrounds any exchange rate outlook. This is because exchange rate movements can be significantly affected by changes in financial market sentiment, leading to strong volatility. For example, the Australian dollar was trading at around a high of US110c in late July 2011, compared with a low of US82c in early June 2010.

The occurrence and effect of events such as extreme seasonal conditions, supply disruptions and sharp exchange rate fluctuations cannot be predicted and incorporated into agricultural forecasts before the event. While ABARES forecasts attempt to balance a range of upside and downside risks, some of the key judgements relating to forecasts will inevitably be different from the actual outcomes.

Despite being largely unpredictable, information about the potential risks that some of these factors pose to the point forecasts will be useful for decision makers in the agricultural sector. For this reason, ABARES incorporates discussions on the risk factors in the associated notes presented in *Agricultural commodities*. Decision makers are encouraged to read the notes in full to gain a comprehensive understanding of the context of ABARES agricultural commodity forecasts.

Reference

Penm, J, Maurer, A, Fairhead, L & Tran, QT 2002, 'US dollar—impacts of a depreciation of the US$ on Australian commodities', *Australian commodities,* vol. 9, no. 3, pp. 485–94, ABARE, Canberra.

The FAO food price index and the ABARES index of agricultural unit export returns

Patrick Hamshere and Neil Thompson

Overview of the FAO food price index

The food price index produced by the United Nations Food and Agriculture Organization (FAO) is a weighted average of five commodity group price indices. It consists of 55 international prices, as measured by unit export values and export price quotations, all denominated in US dollars. The five sub-indices are weighted by their share of world trade in the period 2002 to 2004 (fixed weights). Data used to construct the index are obtained from a variety of sources, including the United States Department of Agriculture, the International Grains Council and the International Sugar Organization.

Meat

Of the five sub-indices that make up the FAO food price index, the meat price index is the largest, having a weight of around 35 per cent in the overall food price index. It consists of United States, Brazilian, Australian and New Zealand unit export values and market prices of four meat categories: beef, pig, poultry and sheep. Beef is the largest contributor to the meat price index, with a weight of around 45 per cent, followed by pig meat (32 per cent), sheep meat (13 per cent) and poultry (11 per cent).

In each meat category except sheep meat, selected unit values and prices from major export markets are used to create an average world traded price. For example, the beef component of the index uses export unit values for selected beef products from the United States and Brazil, and an export price quotation from Australia, all weighted by their relative trade shares. The price quotation for Australian beef contributes 39 per cent to the beef price index, while the unit export values for the United States and Brazil contribute 28 per cent and 33 per cent respectively to the beef price index.

Cereals

Cereals have the second largest weight in the food price index, accounting for around 27 per cent. The cereals price index is the weighted average of a grains price component and a rice price component. The grains price component uses the International Grains Council wheat price index (an arithmetic average of nine wheat export price quotes from markets in Australia, the United States, Canada and France) as well as one maize export price quotation from the United States. Grain prices account for 81 per cent of the cereals index, and rice accounts for the remainder. The rice price component uses 16 export price quotes from major exporters, including Thailand, Vietnam and the United States, trade weighted by 3 major types, indica (60 per cent), japonica (30 per cent) and aromatic (10 per cent).

Oils and fats

The oils and fats index has a weight of around 14 per cent in the food price index. It consists of a trade weighted average of export prices for 11 different oils and fats. Palm oil, with a weight of around 42 per cent, is the largest component followed by soybean oil (24 per cent), sunflower oil (10 per cent), canola oil (7 per cent) and copra oil (5 per cent). The remainder of the index includes tallow, palm kernel oil, fish oil, groundnut oil, linseed oil and cottonseed oil.

Dairy

The dairy price index has a weight of about 17 per cent in the food price index. It consists of Australian and New Zealand indicative export prices for cheese (a weight of around

continued...

The FAO food price index and the ABARES index of agricultural unit export returns

continued

54 per cent), whole milk powder (17 per cent), butter (13 per cent), skim milk powder (12 per cent) and an FAO price estimate for casein (3 per cent). Export prices for New Zealand dairy products have a larger influence over the dairy index than Australian prices.

Sugar

The smallest component of the food price index is sugar, with a weight of 7 per cent. It is derived from the International Sugar Organization's international sugar agreement price, which is an average of quotes for the New York Board of Trade Sugar Contract number 11.

ABARES agricultural unit export returns index

ABARES also tracks movements in world prices through its index of agricultural unit export returns, a measure of the prices received for export of Australian agricultural commodities. A weighted average of 30 commodities is used in the ABARES index, including meat, dairy, cereals, industrial crops (wine and cotton) and wool. The ABARES index of agricultural unit export returns is 'chain-weighted' (variable weights), based on the Fisher Ideal Index methodology, with a reference year of 1989–90.

The ABARES index is highly correlated with the FAO food price index. A regression analysis indicates that between 1990–91 and 2010–11 at least 60 per cent of the fluctuations in the ABARES index could be explained by movements in the FAO index. The remaining differences between these two indices can be largely explained by the effect of exchange rate movements, the different commodities included in each index and differences in the method of calculation.

Exchange rate effect

While the FAO index is based on world traded prices denominated in US dollars, the ABARES index is in Australian dollar terms. This means the ABARES index can remain relatively unchanged compared with the FAO index, if movements of the Australian dollar against the US dollar largely offset changes in world prices. For example, between 2009–10 and 2010–11, the world wheat indicator price (US hard red winter wheat, fob, Gulf) increased by 52 per cent in US dollar terms while the unit export value for Australian wheat increased by only 11 per cent, reflecting partly the effect of a 12 per cent appreciation of the Australian dollar (and quality differences in Australian wheat exports especially in 2010–11). After adjusting for movements in the US–Australian exchange rate, the ABARES index increases its correlation with the FAO food price index to 97 per cent (see figure).

Commodity coverage effect

Food commodities included in the ABARES index that are not used in the FAO index include live cattle and sheep, barley, oats, grain sorghum and legumes, while other commodities, such as palm and fish oil and tallow, are exclusive to the FAO index. Significant price movements for any of the above commodities could lead to an increased divergence between the two indices. In addition, some food commodities that are included in both indices have different levels of transformation. For example, unprocessed oilseeds, such as canola, are used in the ABARES index, while processed oils are used in the FAO index. This suggests that changes in processing costs could lead to greater price changes for processed products, and hence the FAO index, than those for raw or unprocessed commodities, mostly used in the ABARES index.

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The FAO food price index and the ABARES index of agricultural unit export returns

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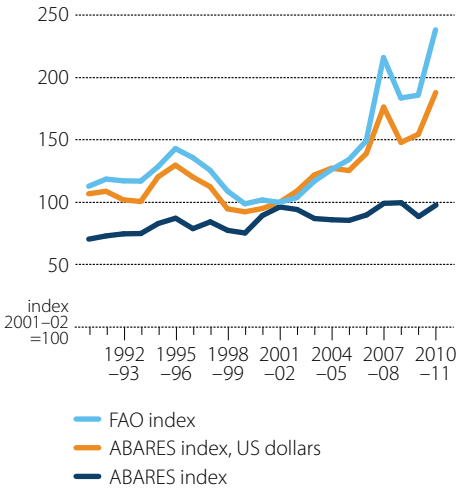
FAO food price index and ABARES agricultural unit export returns index



The ABARES index also contains non-food commodities such as wool, wine and cotton, which accounted for around 25 per cent of the total weight of the index in 2010–11. Their inclusion means fluctuations in the ABARES index have the potential to be different from those in the FAO index. For example, between 2009–10 and 2010–11, Australian export unit values for wine declined by 7 per cent, which partially offset a 28 per cent increase in food prices in aggregate, as measured by the FAO index, over the same period.

Aggregation effect

On the issue of aggregation, the FAO index bases weights on the value of world food trade, while the ABARES index depends on Australian agricultural trade. As a result, the weights for different commodity groups can vary significantly between the two indices. For example, in 2010–11, dairy products had a weight of around 8 per cent in the ABARES index. This compared with 17 per cent in the FAO index.

Another difference in the method of calculating these two indices is that the ABARES index is chained while the FAO index uses fixed weights. By chaining, weights are updated each year to reflect changes in the relative importance of different commodities to the total value of Australian agricultural exports. For example, the weight for meat in the FAO food price index has been fixed at the 2002 to 2004 average of 35 per cent, compared with a trade share of around 31 per cent for 2008. In contrast, the ABARES index has adjusted to changes in Australian trade patterns. The weight of meat (including beef and veal, poultry, pig meat and sheep meat) in the ABARES index increased from around 24 per cent in 2003–04 to 27 per cent in 2007–08 before declining to around 25 per cent in 2011–12.

Agriculture

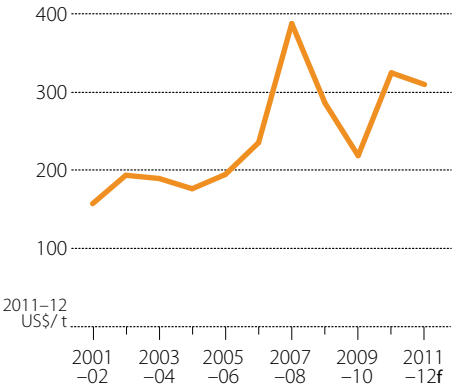
Crops

Wheat

James Fell

The world wheat indicator price (US hard red winter, fob Gulf) is forecast to fall slightly in 2011–12 to average around US$310 a tonne. The decline reflects an expected increase in world export supplies stemming primarily from the Black Sea region. This price forecast is a continuation of the high prices of 2010–11 which averaged 51 per cent higher than 2009–10, at US$317 a tonne.

US hard red winter wheat, fob Gulf



Sources: ABARES; International Grains Council

Despite the forecast decline in the average world indicator price for 2011–12, world wheat prices are expected to remain relatively high in the short term. This is because of low world stocks of coarse grains, such as corn and barley, which are substitutes for wheat in feed. Relatively low world stocks of coarse grains combined with increased demand for wheat has put significant upward pressure on world wheat prices.

Production to increase in 2011–12

World wheat production is forecast to increase by 4 per cent in 2011–12 to around 679 million tonnes as a result of improved seasonal conditions in the Black Sea region. The total world wheat area to be harvested is forecast to increase by 2 per cent to 223 million hectares. Harvesting of winter wheat is largely complete in the European Union, the United States, the Russian Federation and Ukraine. Yields in these countries were generally higher than previously forecast which has provided a boost to world production. The remainder of the major exporters' wheat is harvested between August and October in the northern hemisphere (for spring wheat) and between October and January in Argentina and Australia.

In the United States, wheat production is forecast to fall by 5 per cent in 2011–12 to around 57 million tonnes. This is a result of the dry conditions in southern winter wheat areas that adversely affected yields, and excessively wet conditions in many spring wheat areas that led to a reduction in the area planted. Total area planted to durum and spring wheat fell by around 13 per cent to 6 million hectares largely as a result of poor sowing conditions.

In Canada, wheat production is forecast to fall by 1 per cent in 2011–12 to around 23 million tonnes. Despite a higher area planted to wheat compared with the previous year, late planting and poorer growing conditions are likely to result in lower yields and lower production.

In the European Union, wheat production is estimated to be largely unchanged in 2011–12 to around 137 million tonnes. While dry growing conditions prevailed in the major producing countries of France, Germany and the United Kingdom, conditions in many southern EU countries were generally more favourable than in 2010–11.

In 2011–12, a turnaround is expected in wheat production in the three major Black Sea exporting countries (the Russian Federation, Ukraine and Kazakhstan) as a result of improved seasonal conditions. Wheat production in the region is forecast to increase by 40 per cent to around 95 million tonnes. In the Russian Federation, the region's largest exporter, production is forecast to increase by 37 per cent to around 57 million tonnes. The harvest is largely complete in Ukraine but the spring growing areas of Kazakhstan and the Russian Federation are yet to complete harvest.

In Argentina, wheat production increased by 71 per cent in 2010–11 to around 15 million tonnes. A large increase in the area planted to wheat and excellent seasonal conditions in 2010–11 resulted in record yields. The wheat area to be harvested in 2011–12 is forecast to rise by 4 per cent to around 5 million hectares. However, production is forecast to decline by 11 per cent to around 13 million tonnes, assuming a return to average yields.

While China and India are not major exporters of wheat, they are major wheat producers and consumers. In 2011–12, Chinese wheat production is forecast to be relatively unchanged at around 115 million tonnes. In India, the 2011–12 wheat harvest has been completed and wheat production is estimated to have increased by 6 per cent to around 86 million tonnes.

Corn prices to push feed wheat consumption higher

World wheat consumption is forecast to increase by 2 per cent in 2011–12 to around 673 million tonnes. World food use is forecast to increase by 1 per cent to around 460 million tonnes in line with population growth. Human consumption of wheat for food accounts for just below 70 per cent of world wheat consumption.

World use of wheat for feed is forecast to increase by 9 per cent in 2011–12 to around 122 million tonnes. This increase is the result of a higher corn-to-wheat price ratio, which will encourage substitution of wheat for corn. Even though feed consumption accounts for only around 18 per cent of world wheat consumption, it is the major driver of fluctuations in world wheat consumption because human and industrial consumption of wheat are relatively stable in the short term.

Higher production leading to higher trade

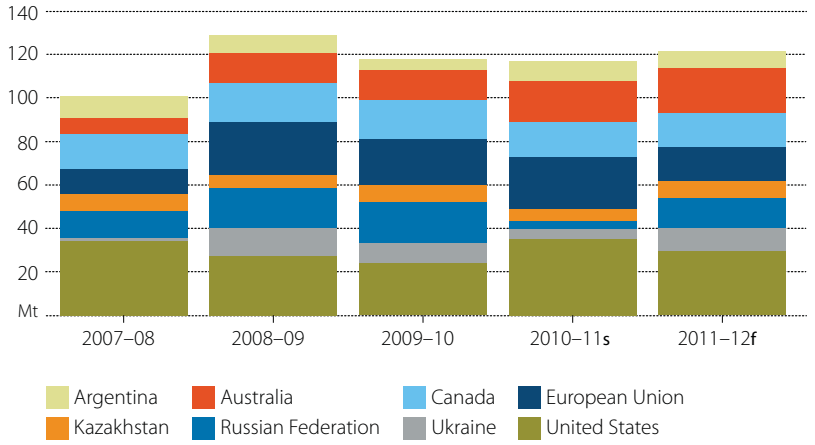
World trade in wheat is forecast to increase by 4 per cent in 2011–12 to around 131 million tonnes. This increase will be driven by a forecast recovery in production and a relaxation of export bans in the Black Sea region. Combined exports from the Russian Federation, Ukraine and Kazakhstan are forecast to more than double to around 32 million tonnes.

Exports from other major exporting countries in the northern hemisphere are forecast to decline in 2011–12. Exports from Canada are forecast to fall by 6 per cent to around 16 million tonnes, reflecting lower wheat production and lower opening stocks. Exports from the European Union are forecast to fall by 32 per cent to 16 million tonnes as a result of greater competition with the Black Sea countries in export markets and lower availability of wheat for export after relatively low closing stocks in 2010–11. After historically high exports in 2010–11, US exports are forecast to fall by around 16 per cent in response to lower production and lower opening stocks but will remain above the five-year average.

In India, the government has indicated an intention to allow wheat exports of 2 million tonnes. This follows a ban on non-government traded wheat exports since February 2007.

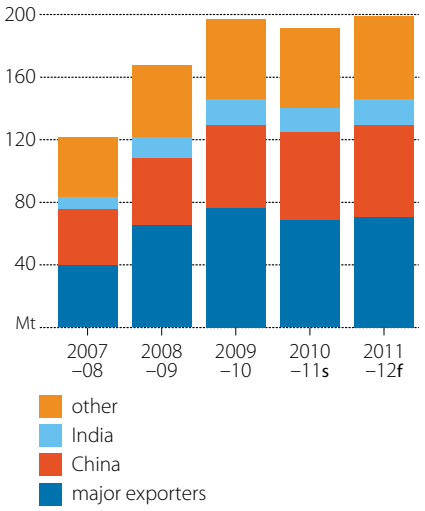
World wheat imports are forecast to rise in 2011–12, led by an increase in demand for feed wheat in East Asia where livestock production continues to expand. The increase in world imports is in line with an increase in world trade and substitution away from corn, given the relatively high corn-to-wheat price ratio. It also reflects a continuation of the trend observed in 2010–11 where, for example, imports of wheat by countries such as the Philippines, Thailand and Vietnam are estimated to have risen by over 20 per cent. Excluding China, which is a major corn importer, imports of wheat in East Asia rose by an estimated 15 per cent, while imports of corn are estimated to have fallen marginally.

Wheat exports, major exporters



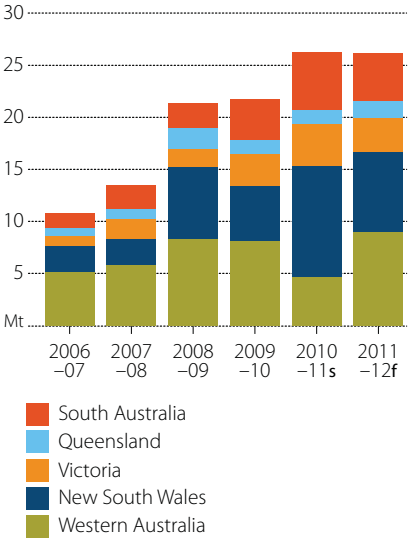
Sources: ABARES; International Grains Council

World wheat closing stocks



Sources: ABARES; International Grains Council

Australian wheat production



Stocks to rise

World closing stocks of wheat are forecast to increase by 3 per cent in 2011–12 to around 198 million tonnes. However the increase in world consumption will leave the wheat stocks-to-use ratio almost unchanged at around 29 per cent. Stocks in the major exporting countries are forecast to rise by around 3 per cent. In particular, closing stocks are forecast to increase in the Black Sea region, following the rebound in wheat production. In the United States, the forecast fall in production and an expected continuation of high export volumes are forecast to result in a 10 per cent decline in closing stocks. In Argentina, Australia, Canada and the European Union stocks are forecast to be largely unchanged compared with 2010–11.

Australia

Good prospects for a large harvest

Australian wheat production is forecast to be near record at around 26.2 million tonnes in 2011–12, following the significant rise of 21 per cent to 26.3 million tonnes (a record high) in 2010–11. The forecast large production in 2011–12 reflects an estimated record area sown to wheat and an expectation of a return to above average yields in Western Australia, following the drought affected production of last year. In South Australia, Victoria and New South Wales, yields are expected to be above average, but lower than the highs of last season. Higher production in Western Australia is expected to largely offset lower production in the other states.

Production in Western Australia is forecast to almost double in 2011–12 to around 9 million tonnes, reflecting much more favourable seasonal conditions and an estimated 3 per cent rise in the area sown to wheat. Timely winter rainfall over Western Australia's wheat growing regions has provided a boost to prospective yields in most regions, except the south-east of the wheat belt. The area sown to wheat is estimated to have increased by 5 per cent to 5.1 million hectares, reflecting favourable planting conditions and favourable world prices. The Western Australian Department of Agriculture and Food estimates the sheep flock to have fallen year-on-year by 14 per cent in 2010–11. This encouraged producers to plant more winter crops, including wheat.

Production in eastern Australia (including South Australia) is forecast to fall by 21 per cent in 2011–12 to around 17 million tonnes. Despite the generally favourable growing conditions, yields are expected to be below the exceptional highs achieved in 2010–11.

Large harvest to boost exports

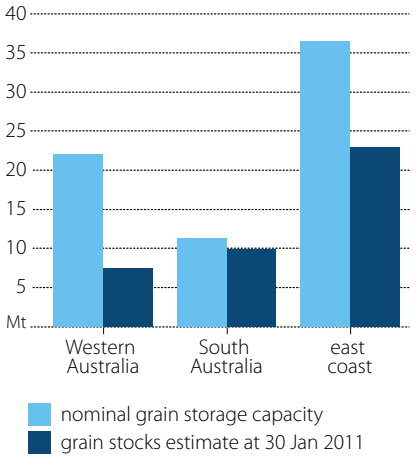
Australian wheat exports are forecast to increase by 11 per cent in 2011–12 to around 20.5 million tonnes, driven by a forecast 30 per cent increase in exports from Western Australia. In the eastern states (including South Australia), export volumes are forecast to be largely unchanged in 2011–12.

The value of Australian wheat exports is forecast to rise by 16 per cent in 2011–12 to $6.4 billion as a result of the combined effects of an expected increase in export shipments and an assumed increase in the proportion of exports of milling grade wheat. This increase in export earnings is forecast to occur in 2011–12 despite expected marginally lower world prices for milling grade wheat.

Transport logistics and storage capacity

Between January and July 2011, eastern Australian exporters demonstrated their capacity to export a large volume of wheat. Over this period, exports from the eastern states exceeded 1.1 million tonnes a month. Before the drought of last year, Western Australian exporters achieved average monthly export volumes of more than 600 000 tonnes a month in both 2005–06 and 2008–09.

Australian grain stocks and capacity



The Australian grain storage system also appears to have sufficient capacity (measured in tonnes) to store the forecast wheat and other winter crops in 2011–12. Australian grain storage capacity, as reported by the Australian Bureau of Statistics, the Productivity Commission and bulk handlers, is around 14.4 million tonnes of on-farm storage capacity and 56 million tonnes of up-country bulk storage. On-farm storage capacity can be significantly increased through use of temporary storage options, such as on-farm silo bags. However, capacity will be affected by the composition of grains in storage. Wheat, for example, requires a smaller volume of storage for any given tonnage than grains such as barley or oats.

Given the nominal grain storage capacity in Western Australia of more than 20 million tonnes, the forecast harvest this year is not expected to encounter storage problems, particularly given the run-down of stocks through 2010–11. In Queensland, New South Wales and Victoria, there is expected to be sufficient storage capacity, although the prospective large production in South Australia again this year could require some use of temporary storage options.

Wheat outlook

		2009–10	2010–11 s	2011–12 f	% change
World					
Production	Mt	679	651	679	*4.3*
– China	Mt	115	115	115	*– 0.2*
– European Union 27	Mt	138	137	137	*0.1*
– India	Mt	81	81	86	*6.3*
– Russian Federation	Mt	62	42	57	*37.3*
– United States	Mt	60	60	57	*– 5.2*
Consumption	Mt	652	657	673	*2.5*
– human	Mt	453	457	460	*0.7*
– feed	Mt	115	114	122	*7.0*
Closing stocks	Mt	197	192	198	*3.1*
Stocks-to-use ratio	%	30	29	29	*0.7*
Trade	Mt	128	126	131	*3.9*
Exports					
– Argentina	Mt	5	9	8	*– 11.1*
– Australia	Mt	14	18	20	*10.9*
– Canada	Mt	19	17	16	*– 6.1*
– European Union 27	Mt	22	24	16	*– 32.5*
– Kazakhstan	Mt	8	6	8	*35.7*
– Russian Federation	Mt	19	4	14	*250.0*
– Ukraine	Mt	9	4	11	*148.8*
– United States	Mt	24	35	29	*– 16.2*
Price **b**	US$/t	209	317	310	*– 2.1*
Australia					
Area	'000 ha	13 881	13 374	14 108	*5.5*
Production	kt	21 834	26 325	26 196	*– 0.5*
Exports **c**	kt	13 725	18 453	20 455	*10.9*
– value	A$m	3 692	5 526	6 420	*16.2*
APW 10 net pool return	A$/t	249	346	299	*– 13.5*

b US hard red winter wheat fob Gulf, July–June. **c** July–June years. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; International Grains Council

Carbon Farming Initiative

The Australian Parliament recently passed Carbon Farming Initiative (CFI) legislation, which sets out the broad framework of the scheme.

The CFI is expected to provide certain benefits to landholders, regional communities and the environment. Uptake of the CFI will result in greenhouse gas abatement in the land-based sector, while providing landholders with an additional and diversified source of income.

On 19 August 2011, the Australian Government released an exposure draft of the CFI regulations that spells out details of the initiative.

The draft regulations help identify activities that would be considered eligible to participate in the CFI as well as activities that would be ineligible.

The CFI is expected to encourage farmers to generate carbon credits from a range of activities including permanent environmental plantings, re-establishment of native vegetation, savanna burning controls, capture and combustion of methane from livestock manure and urea inhibitors to fertiliser.

An ABARES analysis, 'The economics of Australian agriculture's participation in carbon offset markets', was presented at the March 2011 Outlook Conference. This paper considers a number of key issues associated with generation of offset credits under the CFI. Importantly it concludes that the initiative would be most effective if:

- it were linked with a domestic carbon pricing scheme—in the absence of which there is likely to be insufficient demand for CFI offset credits
- landholders could see a clear economic benefit from participation—noting that landholder participation is voluntary.

Recently, ABARES also undertook an analysis, *Abatement potential from reforestation under selected carbon price paths*, as input into the Treasury modelling of a carbon pricing scheme, which informed the basis for the Australian Government's Securing a Clean Energy Future climate change plan.

The ABARES analysis suggests the area of agricultural land that is economically viable for reforestation and eligible for carbon credits under the CFI, between 2012–13 and 2049–50, is about 0.35 million hectares or 0.1 per cent of agricultural land. The modelled carbon price path starts at $23 a tonne of carbon dioxide equivalent and grows at around 5 per cent a year.

The Department of Climate Change and Energy Efficiency (DCCEE) analysed the potential abatement under the CFI for agriculture, for the same Treasury modelling. DCCEE estimated agricultural abatement under the CFI to be around 2 million tonnes of carbon dioxide equivalent a year from 2012–13 to 2019–20.

Abatement from land use change was estimated to be around 4 million tonnes of carbon dioxide equivalent a year from 2012–13 to 2019–20.

According to DCCEE, land use change mitigation has two parts:

- avoiding deforestation (direct human induced conversion of forest land to non-forest land)
- managing regrowth on deforestation lands (avoided re-clearing) which means promoting regrowth through fencing off or other actions.

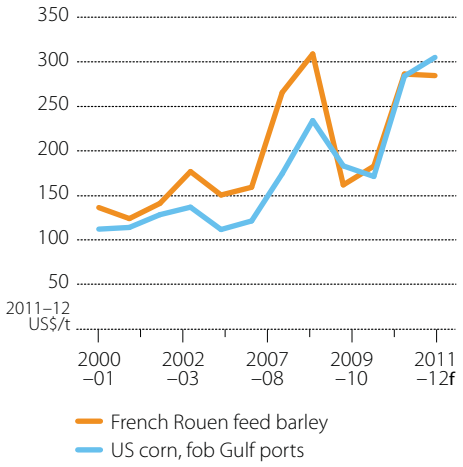
ABARES current research is focused on further assessing agricultural abatement technologies and abatement potentials under the CFI.

Coarse grains

Henry To

In 2011–12, the world coarse grains indicator price (US corn, fob Gulf ports) is forecast to increase to US$306 a tonne, 10 per cent higher than last season. Driving the increase is the continued decline in world stocks as a result of rising consumption. The world barley price (French Rouen feed) is also forecast to remain high at US$285 a tonne, 2 per cent higher than in 2010–11.

World coarse grains prices



The domestic feed barley price is forecast to fall by 10 per cent in 2011–12 to $195 a tonne because of high feed grain stocks from last season's harvest. In contrast, the malting barley price is forecast to rise by 3 per cent to $267 a tonne. The combined effects of a forecast second consecutive year of low global malting barley production and rising demand are behind this forecast price rise. In particular, unfavourable growing conditions in the European Union, which is a major producer of malting barley, have reduced production in that region, while rising beer consumption in China and Brazil is forecast to result in higher global demand for malting barley.

Record production in 2011–12

After declining last season, world coarse grains production is forecast to rebound by 4 per cent in 2011–12 to a record 1.13 billion tonnes. The increase is driven by a modest recovery in world barley production and record corn production.

Barley

World barley production is forecast to increase by 6 per cent to 132 million tonnes in 2011–12, after falling 17 per cent last season. Higher production in both Canada and the Black Sea region is expected to more than offset the forecast decline in the European Union.

In 2011–12, barley production in the Black Sea region is expected to recover following last year's severe drought, increasing by 42 per cent to 24 million tonnes. Production in the Russian Federation is forecast to rise by 85 per cent to 15 million tonnes. In Ukraine, production is forecast to be largely unchanged at 9 million tonnes despite a smaller planted area. Many producers in Ukraine switched into other crops this season because of a change in relative prices which made barley less attractive.

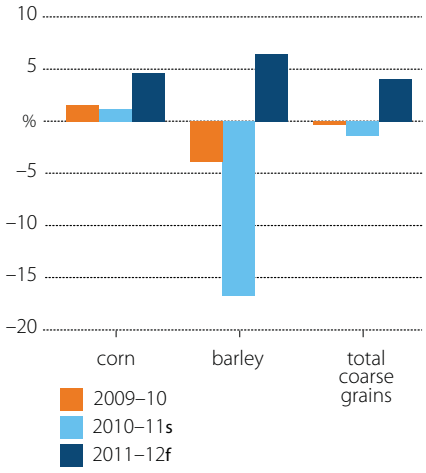
Canadian barley production is forecast to increase by 8 per cent to around 8 million tonnes. With yields expected to be relatively unchanged from last season, this forecast is driven almost entirely by the 9 per cent increase in planted area.

Barley production in the European Union is forecast to be 51 million tonnes, 3 per cent lower than last season despite an increase in planted area. In France and Spain, two of the major barley producing countries, production has been adversely affected by above average temperatures and below average rainfall for the second consecutive year.

Corn

World corn production is forecast to increase by 4 per cent in 2011–12 to a record 855 million tonnes. Higher production is expected in the United States, China, Argentina and Brazil.

Changes in coarse grains production



In the United States, production is forecast to increase by 2 per cent to 321 million tonnes. This increase is less than what was forecast in June on account of an unfavourably warm and dry summer across most of the Corn Belt which reduced yields for much of the crop.

In China, production is forecast to increase by 3 per cent to a record 178 million tonnes. High domestic corn prices provided an incentive for many producers to increase the area planted to corn which is estimated to have achieved a new record. Production will be further assisted by favourable seasonal conditions which have been reported across most growing regions.

The area planted is forecast to rise by 6 per cent to 3.4 million hectares in Argentina and by 2 per cent to 14 million hectares in Brazil. Production is forecast to increase by 27 per cent to a record 26 million tonnes in Argentina, assuming a recovery in yields following the drought-affected crop in 2010–11. In Brazil, production is forecast to be 60 million tonnes, 8 per cent higher than last year.

Consumption continues to grow

World consumption of coarse grains is forecast to rise by around 2 per cent in 2011–12 to a record 1.15 billion tonnes. Higher feed consumption in developing countries, and continued growth in industrial use in the United States and major developing countries are the principal factors behind this increase.

Feed use

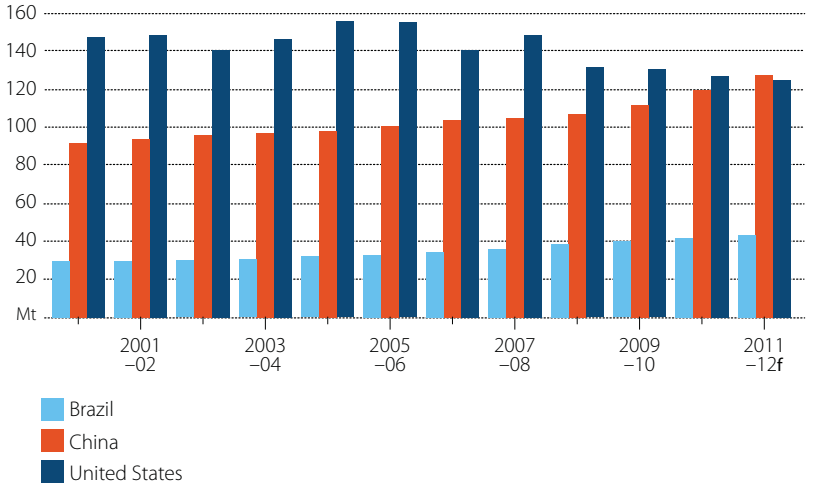
World feed demand for coarse grains is forecast to increase by 2 per cent to 662 million tonnes in 2011–12 because of rising demand in East Asia and Latin America.

Feed corn consumption in China is forecast to reach a record 127 million tonnes, 6 per cent higher than in 2010–11. This increase is being driven by the requirements of the domestic intensive livestock (mainly pig) sector which has grown significantly over the past decade.

Feed corn consumption in Brazil is forecast to increase by 4 per cent to 43 million tonnes. The increase is consistent with the continued expansion of the Brazilian cattle herd over the past few decades, which is currently estimated to be 191 million head.

Feed corn consumption in the United States is forecast to decline for the fourth consecutive year to 125 million tonnes, 2 per cent lower than in 2010–11. Over the past decade feed corn consumption by cattle has been declining in line with contraction of the US cattle herd. This year, despite the number of cattle on feed being marginally higher in the first half of 2011 compared with the same period in 2010, high corn prices have led to a further substitution into alternative feed grains, especially feed wheat.

Feed corn consumption



Industrial and food use

Industrial and food consumption of coarse grains is forecast to rise by 2 per cent to 486 million tonnes because of higher ethanol production in the United States and greater food use in the developing world.

The volume of corn used for ethanol production in the United States is forecast to increase by at least 2 per cent to 130 million tonnes to meet the 2011 and 2012 mandates for ethanol production of 53 and 57 billion litres, respectively. This forecast is a lower bound for US industrial use of corn given that the volume of ethanol produced has exceeded mandated production over the past few years in response to positive margins. This is likely to continue in 2011–12.

Consumption of barley in food related uses will be driven by rapid growth in beer consumption and use of malt (processed from barley) in developing countries. In particular, beer consumption in Brazil grew by 11 per cent in 2010 and in China it is estimated to have grown between 7 and 10 per cent. With beer consumption expected to continue to rise in

these countries, use of barley in Brazil and China is forecast to increase by 4 per cent and 7 per cent to 1 million tonnes and 4 million tonnes, respectively. In contrast, beer consumption in the developed world remains largely unchanged.

Stocks to decline

World closing stocks of coarse grains are forecast to decline by 11 per cent to 142 million tonnes in 2011–12. This will be the second consecutive season of declining stocks and could potentially result in the lowest closing stocks since 2006–07. As a result, the world stocks-to-use ratio is forecast to fall to a record low of 12.4 per cent.

World barley stocks are forecast to decline for the second consecutive year to 22 million tonnes in 2011–12, 14 per cent lower than 2010–11. Despite a modest recovery in world production, greater industrial use in the developing world and a recovery in feed consumption in the Black Sea region are forecast to drive down stocks.

World corn stocks are forecast to decline by 10 per cent to 110 million tonnes in 2011–12, the lowest since 2003–04. Increased consumption in the United States, China and Brazil will be the strongest factors in this decline.

Corn stocks in the United States, the world's largest corn exporter, are forecast to fall by 27 per cent to 17 million tonnes in 2011–12, the second consecutive year of decline. This would leave the US stocks-to-use ratio at just 6 per cent, the lowest in more than 50 years. A low stocks-to-use ratio combined with modest production growth will serve to keep upward pressure on world prices.

In an attempt to contain the demand-driven increase in prices, China is forecast to increase supply of corn in the domestic market by running down its corn stocks by 5 per cent to 51 million tonnes. In addition, it is expected to import significant volumes of corn from the world market.

US corn stocks and stocks-to-use ratio

World trade to increase

World trade in coarse grains is forecast to increase by 2 per cent to 117 million tonnes in 2011–12 because of greater exportable supplies.

World trade in barley is forecast to recover by 6 per cent to 16 million tonnes in 2011–12 following production increases in Canada and the Black Sea region. Barley exports from the Black Sea region will be further aided by removal of the export restrictions the Russian Federation and Ukraine announced in mid-2011.

World trade in corn is expected to increase by 2 per cent to 92 million tonnes in 2011–12 because of record production and exportable supplies in both Argentina and Ukraine. Exports from Argentina are forecast to rise by 28 per cent to 19 million tonnes and Ukraine exports are forecast to rise by 42 per cent to 9 million tonnes. In contrast, exportable supplies in the United States are forecast to decline as a result of greater domestic consumption.

China is expected to continue to be an important player in the world corn market with imports estimated between 2 million tonnes and 5 million tonnes in 2011–12. China imported between 1.5 and 2 million tonnes in the past two years compared with almost nothing in the previous decade.

Australia

Production to fall in 2011–12

Barley production in Australia is forecast to fall by 11 per cent in 2011–12 to 8.3 million tonnes. In the main producing regions in the eastern states, yields are expected to be lower than last season's records, especially in regions in northern New South Wales where below average winter rainfall affected crop establishment and development. Barley production in New South Wales is forecast to be around 1.8 million tonnes, nearly 30 per cent less than the record achieved in 2010–11, reflecting a decrease in the area planted and expected lower yields. In the other eastern states (including South Australia), barley production is forecast to fall by 25 per cent in Victoria to 1.8 million tonnes, 17 per cent in South Australia to 2.4 million tonnes and 6 per cent in Queensland to 150 000 tonnes. In contrast, yields in Western Australia are expected to recover from last season's drought-affected yields and production is forecast to rise by 65 per cent to 2.1 million tonnes.

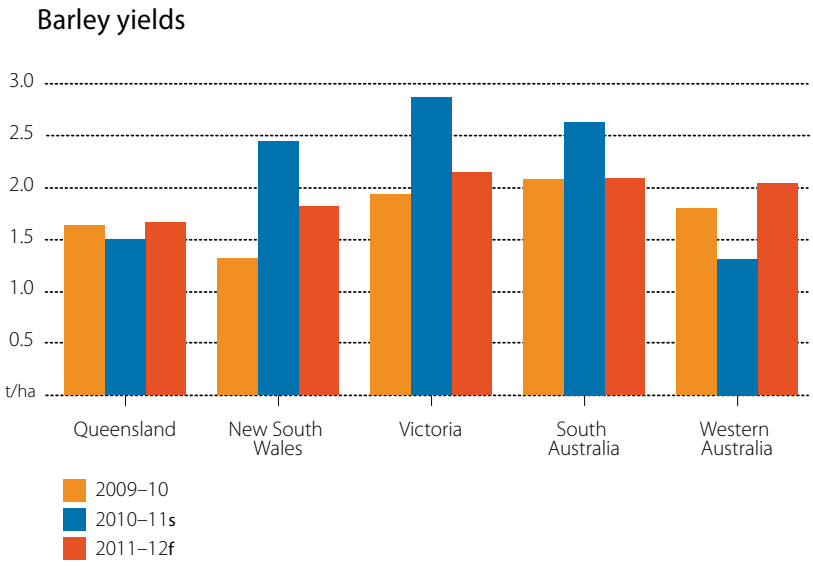
Despite the overall decline in production, the quality of this season's barley crop is expected to be significantly higher than last year when wet conditions in the eastern states caused widespread quality downgrades.

The total area planted to grain sorghum is forecast to fall by 3 per cent in 2011–12 to 617 000 hectares, owing to below average winter rainfall in the key growing regions of northern New South Wales and southern Queensland, less than ideal subsoil moisture in those regions and high stocks of feed quality grain from last season's large winter crop harvest. Assuming average yields, grain sorghum production is forecast to fall by 13 per cent to 1.9 million tonnes.

Exports to decline with production

The volume of coarse grains exports is forecast to fall by 3 per cent in 2011–12 to around 5.2 million tonnes. The value of coarse grains exports is forecast to fall by 6 per cent to $1.4 billion.

The volume of barley exports is forecast to fall by 4 per cent in 2011–12 to 4.4 million tonnes, because of a forecast 9 per cent fall in feed barley exports to 2.6 million tonnes. However, malting barley exports are forecast to rise by 6 per cent to 1.1 million tonnes. The total value of barley exports is forecast to fall by 5 per cent to $1.2 billion.



Coarse grains outlook

		2009–10	2010–11 s	2011–12 f	% change
World					
Production	Mt	1 107	1 091	1 131	*3.7*
– barley	Mt	149	124	132	*6.5*
– corn	Mt	812	821	855	*4.1*
Consumption	Mt	1 099	1 127	1 148	*1.9*
Trade	Mt	123	115	117	*1.7*
Closing stocks	Mt	196	159	142	*– 10.7*
Stocks-to-use ratio	%	18	14	12	*– 14.3*
US corn price (fob Gulf, Sep–Aug)	US$/t	163	277	306	*10.5*
Australia					
Area	'000 ha	6 179	6 022	6 122	*1.7*
– barley	'000 ha	4 422	4 077	4 118	*1.0*
– grain sorghum	'000 ha	498	637	617	*– 3.1*
Production	kt	11 408	14 043	12 620	*– 10.1*
– barley	kt	7 865	9 334	8 312	*– 10.9*
– grain sorghum	kt	1 508	2 137	1 867	*– 12.6*
Exports **b**	kt	4 974	5 337	5 181	*– 2.9*
– value	A$m	1 280	1 493	1 397	*– 6.4*
Feed barley price	A$/t	155	217	195	*– 10.1*
Malting barley price	A$/t	202	259	267	*3.1*

b July to June years. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; US Department of Agriculture; Australian Bureau of Statistics

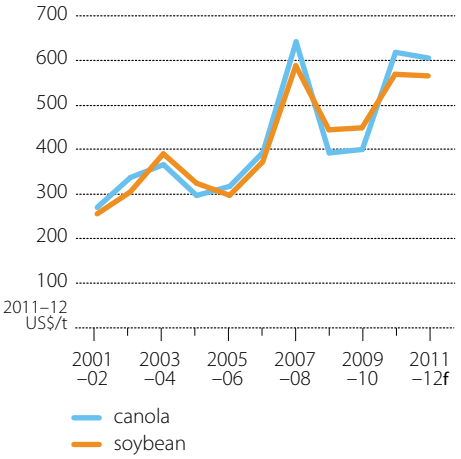
Oilseeds

Fiona Crawford

The world oilseeds indicator price (soybeans, cif Rotterdam) is forecast to average 2 per cent higher (in nominal terms) in 2011–12 at around US$566 a tonne. World soybean consumption is forecast to exceed production and lower closing stocks, which is expected to place upward pressure on prices. Additionally, China, which accounts for 59 per cent of world soybean trade, is forecast to significantly increase its soybean imports, also contributing to the upward pressure on the world soybean price.

The world canola indicator price (cif Hamburg) is forecast to increase marginally in 2011–12 to US$650 a tonne, reflecting continued high demand and lower production in the European Union and reduced exports from Canada.

World oilseed indicator price



World oilseed production to remain largely unchanged

World oilseed production is forecast to remain largely unchanged in 2011–12 at around 450 million tonnes. However, unfavourable seasonal conditions in the United States and the European Union had an adverse effect on yields of soybeans, canola and copra in those producing regions.

Canola

World canola production is forecast to decrease by 1 per cent in 2011–12 to 59 million tonnes, driven mainly by a fall in production by the European Union.

In the European Union, canola/rapeseed production is forecast to decline by 6 per cent in 2011–12 to around 19 million tonnes. Germany, historically the largest canola producing country in the European Union, suffered heavy weed infestation and winter kill. This resulted in below average yields and a forecast decrease in production of 21 per cent to 4.5 million tonnes. However, canola/rapeseed production in France is forecast to increase by 1 per cent to 4.8 million tonnes.

Canola production in Canada is forecast to increase by 10 per cent in 2011–12 to a record 13.1 million tonnes. Despite the wet conditions that led to a 12 per cent reduction in the area planted to 7.3 million hectares, the favourable seasonal conditions that followed have resulted in above average yields and thus higher production.

Soybeans

World soybean production is forecast to decrease by 3 per cent in 2011–12 to 256 million tonnes. Expected lower production in the United States, Brazil and China is driving this forecast decline.

In the United States, soybean production is forecast to decrease by 8 per cent in 2011–12 to 83 million tonnes. Wet weather severely delayed soybean plantings, which led to a 4 per cent fall in the area planted to 30 million hectares. Additionally, above average temperatures throughout the growing season in key soybean producing states adversely affected yields.

In Brazil, soybean production is forecast to fall by 2 per cent in 2011–12 to 73 million tonnes. With yields expected to return to average in 2011–12 after being above average in 2010–11, the impact on production is expected to more than offset a 3 per cent increase in area planted to 25 million hectares.

In China, soybean production is forecast to decrease by 8 per cent in 2011–12 to 14 million tonnes. This forecast is a result of drought conditions in some major growing areas, as well as a smaller area planted.

In contrast to other major producing regions, soybean production in Argentina is forecast to rise by 9 per cent to around 53 million tonnes. This forecast reflects an expected recovery from the dry conditions that prevailed in 2010–11, combined with a 5 per cent increase in the area planted to around 19 million hectares.

Sunflower

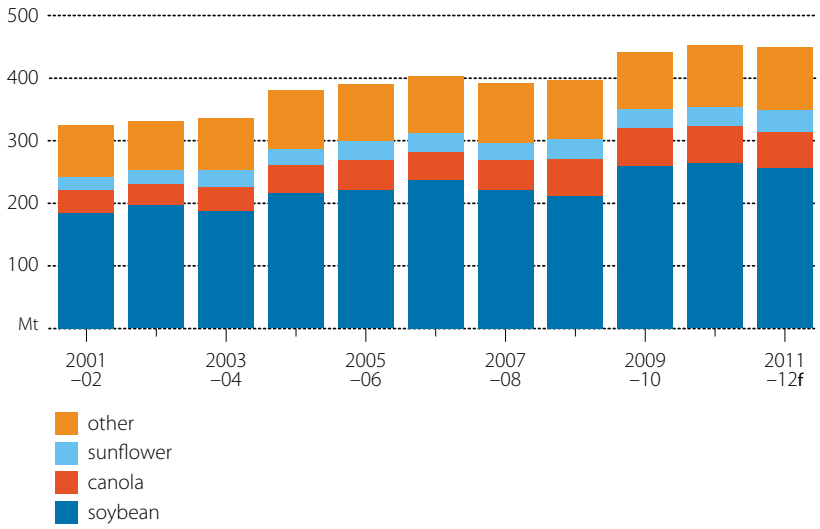
World production of sunflower seed is forecast to increase by 12 per cent in 2011–12 to 35 million tonnes. This is driven by the forecast strong recovery of production in the Black Sea region and sustained high production in the European Union.

In the Black Sea region, production of sunflower seed in the Russian Federation and Ukraine is forecast to increase by 51 per cent and 12 per cent in 2011–12 to 8.3 million tonnes and 7.6 million tonnes, respectively. The forecast increase is driven by an improvement in seasonal conditions, compared with 2010–11, that have positively affected yields. Additionally, high prices for sunflowers encouraged farmers to expand sunflower plantings in the Black Sea region, particularly in the Russian Federation, where the area planted to sunflowers increased by 32 per cent to 7.3 million hectares.

In the European Union, production of sunflower seed is forecast to increase by 9 per cent to 7.4 million tonnes in 2011–12. This forecast is driven by above average yields and favourable seasonal conditions in major growing areas.

In Argentina, sunflower production is forecast to fall by 3 per cent in 2011–12 to 3.4 million tonnes. Although favourable seasonal conditions enabled early sunflower plantings and a 5 per cent increase in the area planted to 1.8 million hectares, the lower production is a reflection of an expected return to average yields following record yields in 2010–11.

World oilseed production



High vegetable oil prices support higher crush

With high vegetable oil prices continuing to support crush margins, the world oilseed crush is forecast to increase by 2 per cent in 2011–12 to around 385 million tonnes. The forecast increase is expected to be supported by expansion of world crushing capacity, particularly in Canada and the Black Sea region, where higher crush margins have led to construction of new crushing facilities. China and Latin America continue to benefit from ongoing investment in crushing facilities.

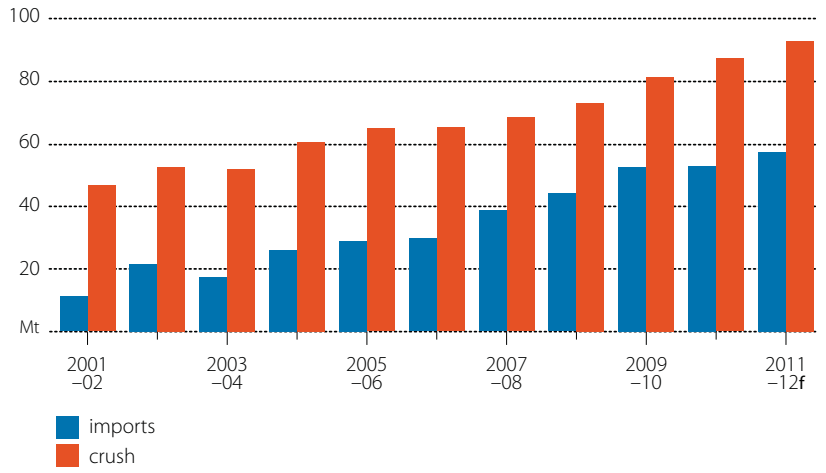
In Canada, total oilseed crush is forecast to increase by 3 per cent to around 7.5 million tonnes in 2011–12. The Canadian canola crush increased by 4 million tonnes over the past decade to around 6.2 million tonnes in 2010–11.

In the Black Sea region, sunflower crush in the Russian Federation and Ukraine is forecast to increase by 42 per cent and 3 per cent in 2011–12 to around 7.1 million tonnes and 6.4 million tonnes, respectively. This forecast reflects expected record production following the drought affected crop of 2010–11 in the Russian Federation.

In China, total oilseed crush in 2011–12 is forecast to increase by 6 per cent to 93 million tonnes, despite a 1 per cent decrease in total Chinese oilseed production. Offsetting the forecast fall in soybean production, Chinese imports of soybeans are forecast to increase by 9 per cent to 56.5 million tonnes.

In contrast to other producing regions, the total oilseed crush in the European Union is forecast to decline by 2 per cent in 2011–12 to 41 million tonnes. The forecast decline is driven by a 6 per cent decrease in the canola/rapeseed crush to 21 million tonnes, which is in line with the forecast fall in production of canola/rapeseed.

Chinese oilseed crush and imports



Intensive livestock industries driving the rise in consumption

World oilseed consumption is forecast to rise by 2.5 per cent in 2011–12 to a record 453 million tonnes. World vegetable oil consumption is forecast to increase by 3 per cent to 155 million tonnes. Population growth and rising incomes in developing countries (especially India and China), as well as sustained growth in industrial demand, are driving this increase.

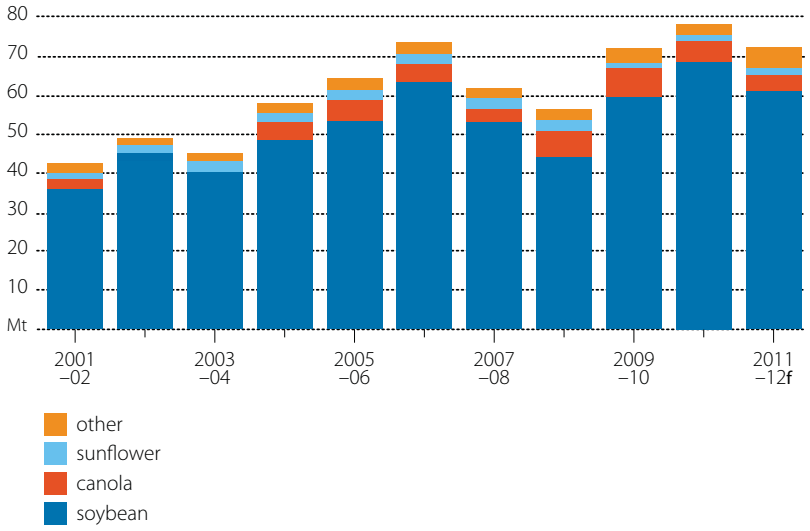
World industrial use of vegetable oil is forecast to rise by 6 per cent in 2011–12 to 34 million tonnes. The European Union, the largest consumer of vegetable oil, is forecast to increase industrial consumption of vegetable oils by 2 per cent to 11.6 million tonnes because of higher mandates for biofuels. Because of the forecast fall in the domestic production of vegetable oil, imports are expected to increase.

World consumption of protein meal is forecast to increase by 8 per cent in 2011–12 to 270 million tonnes. Growth in intensive livestock production, especially in developing countries, is driving this demand. China, the world's largest consumer of protein meal, is forecast to increase its consumption by 7 per cent to 65 million tonnes. In particular, China's consumption of soybean meal is forecast to increase by 10 per cent to 47 million tonnes. Similarly, India's consumption of protein meal is forecast to increase by 7 per cent to 12 million tonnes.

Lower production pushes down closing stocks

Closing world oilseed stocks are forecast to fall by 8 per cent in 2011–12 to around 72 million tonnes. The forecast decline reflects lower soybean production in the United States and lower canola/rapeseed production in the European Union. World soybean stocks are forecast to decrease by 11 per cent to 61 million tonnes, while closing canola stocks are forecast to decrease by 26 per cent to 3.9 million tonnes. In contrast, closing world sunflower stocks are forecast to increase by around 27 per cent to 1.9 million tonnes, following record sunflower production in the Black Sea region.

Oilseeds closing stocks



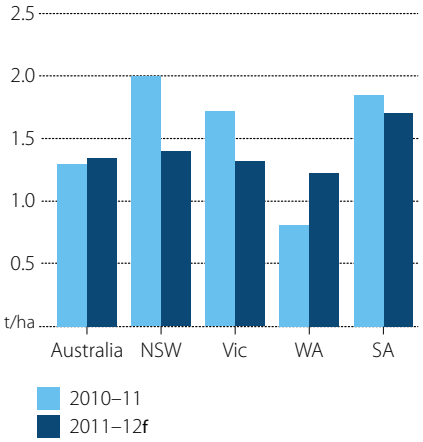
International trade supported by soybeans

World trade in oilseeds is forecast to rise by around 7 per cent in 2011–12 to 113 million tonnes. World soybean and canola/rapeseed trade are forecast to increase by 7 per cent and 0.5 per cent to 98 million tonnes and 10 million tonnes, respectively. Lower soybean production in the United States is forecast to reduce US exports by 6 per cent to 38 million tonnes. However, the effect on world trade will be offset by a 26 per cent increase in soybean exports from Latin America to 48 million tonnes. In the European Union, the forecast fall in canola/rapeseed production is expected to result in an 18 per cent decline in exports. In Canada, high domestic demand is forecast to result in exports of canola declining by 5 per cent, despite the rise in production. In the Black Sea region, a return to favourable seasonal conditions is expected to increase international sunflower trade, with exports forecast to increase by 35 per cent to 2 million tonnes.

Australian canola production to rise

Australian canola production is forecast to increase by 7 per cent in 2011–12 to around 2.3 million tonnes. The total area planted to canola in Australia is estimated to have increased by 4 per cent to 1.7 million hectares and good subsoil moisture during planting has assisted crop development across all states. Winter rainfall was mixed across the eastern states but Western Australia received significantly more rainfall than last season. Canola production is forecast to increase by 30 per cent to 920 000 tonnes in Western Australia and by 2 per cent to 460 000 tonnes in Victoria, but to decrease marginally in South Australia to around 360 000 tonnes. Lower yields are forecast in New South Wales, compared with last year's records. Canola production in New South Wales is forecast to decline by 11 per cent to 553 000 tonnes, despite an estimated 27 per cent increase in the area planted.

Australian canola yields



The total area sown to sunflower in Australia is forecast to decrease by 10 per cent in 2011–12 to around 26 000 hectares. The forecast decline comes as a result of the increased price of cotton and improved availability of irrigation water which are expected to lead to a larger area planted to cotton instead of sunflower. In New South Wales and Queensland, Australia's principal growing regions for sunflower, the area planted to sunflower is forecast to fall by 5.5 per cent to 17 000 hectares and by 18 per cent to 9000 hectares, respectively.

Record Australian canola exports in sight

The volume of Australian canola seed exports are forecast to increase by around 5 per cent in 2011–12 to 1.5 million tonnes, the highest in 10 years. Australian canola seed exports are forecast to account for 17 per cent of world canola trade, which is expected to result in Australia becoming the second largest canola seed exporter after Canada in 2011–12. The value of Australian canola seed exports is forecast to increase by 8 per cent to around $923 million on account of the forecast rise in export volume.

Australia's net exports of canola oil have quadrupled over the past decade. In the first nine months of the 2010–11 marketing year, Australia exported 83 000 tonnes of canola oil, 5 per cent more than the same period a year earlier. Australia's main export destinations for canola oil include the Republic of Korea, New Zealand, Chinese Taipei and Malaysia.

Australian canola oil exports, by destination, November to July ('000 tonnes)

	2007–08	2008–09	2009–10	2010–11s
Republic of Korea	8.5	21.1	31.5	25.6
New Zealand	13.5	12.1	15.6	12.4
Chinese Taipei	8.0	1.0	5.9	11.3
Malaysia	1.0	10.8	12.4	11.3
Singapore	3.7	4.1	6.3	7.6
Japan	1.5	3.4	1.3	6.1

Oilseeds outlook

		2009–10	2010–11 s	2011–12 f	% change
World					
Production	Mt	442	452	450	*– 0.4*
Consumption	Mt	423	442	453	*2.5*
– oilseed meal	Mt	235	249	270	*8.4*
– vegetable oil	Mt	138	151	155	*2.6*
Closing stocks	Mt	73	78	72	*– 7.7*
Stocks-to-use ratio	%	17	18	16	*– 11.1*
Soybeans indicator price	US$/t	429	555	566	*2.0*
Australia					
Total production	kt	2 609	3 536	4 021	*13.7*
– winter	kt	1 933	2 151	2 306	*7.2*
– summer	kt	676	1 385	1 714	*23.8*
Canola					
Production	kt	1 920	2 136	2 293	*7.4*
Exports	kt	1 238	1 453	1 527	*5.1*
– value	$m	583	856	923	*7.8*
Price (Nov–Oct) (delivered Melbourne)	A$/t	440	572	543	*– 5.1*

s ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; United States Department of Agriculture

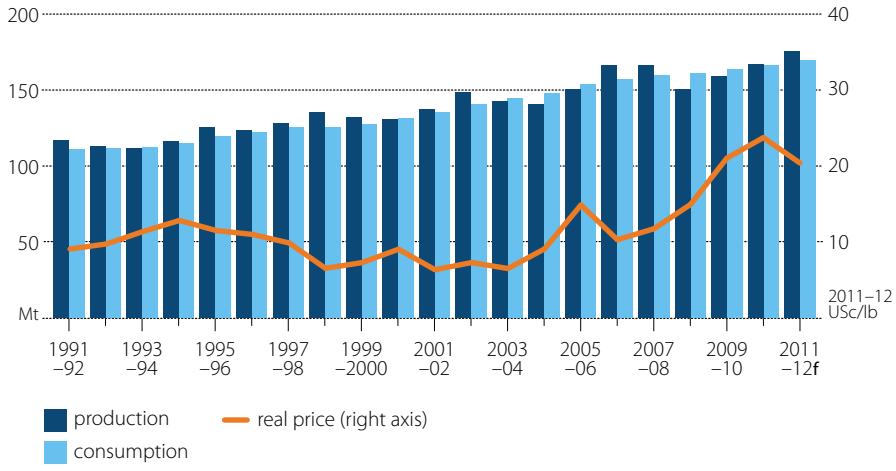
Sugar

Max Foster

Lower sugar prices in 2011–12

The world indicator price for raw sugar (Intercontinental Exchange, nearby futures, no. 11 contract—see box) is forecast to decline by around 14 per cent in 2011–12 to average US20.4c a pound (October to September). The forecast decline reflects the expectation that record world sugar production will outweigh a forecast increase in consumption, increasing world sugar stocks for the second successive year and placing downward pressure on prices.

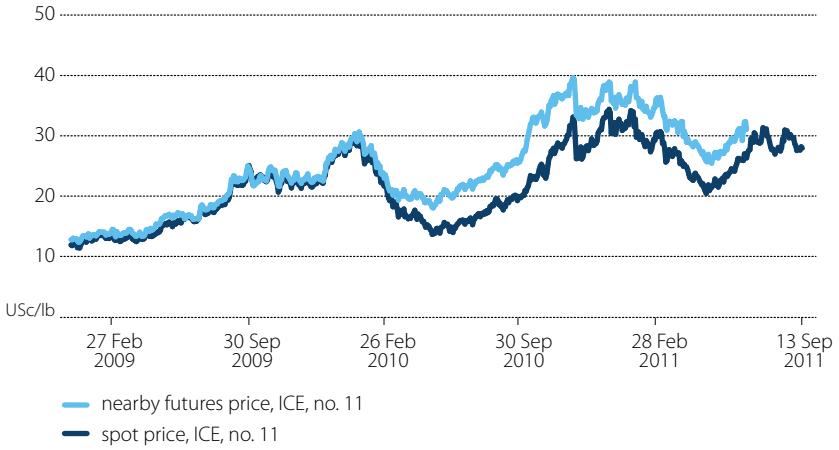
World sugar indicators



At 13 September 2011, the price of the Intercontinental Exchange (ICE) futures contract for October 2011 delivery was US29.4c a pound. World sugar prices have been buoyed in recent months by a weakening in production prospects for the 2010–11 Brazilian sugar cane harvest. Despite this weaker production outlook for Brazil, record world sugar production in 2011–12 is forecast to put downward pressure on world sugar prices over the coming year. The price of the ICE futures contract for October 2012 delivery was around US24.7c a pound on 13 September 2011.

Spot and nearby futures prices

daily, ended 13 September 2011

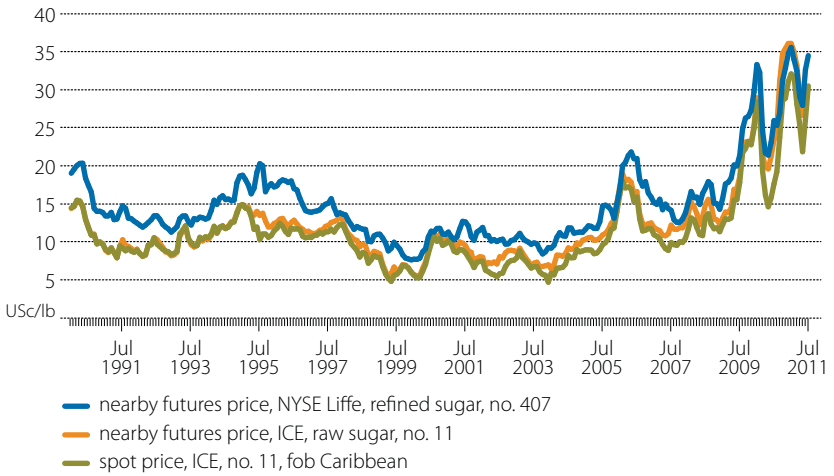


Change to a new world sugar indicator price

ABARES has been using the spot price—no. 11 sugar, fob Caribbean—as its world indicator price for sugar. However, the Intercontinental Exchange ceased calculating and publishing this price on 1 July 2011. ABARES will therefore now use the price of the nearby futures contract for the ICE no. 11 sugar contract as the world indicator price for raw sugar. The nearby contract is defined as the contract with the closest settlement date. The spot and nearby futures prices are closely correlated.

Various sugar indicator prices

monthly



continued...

Change to a new world sugar indicator price continued

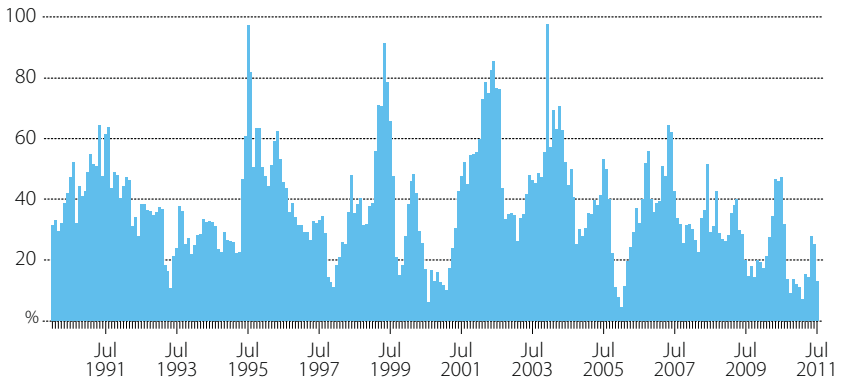
The sugar no. 11 futures contract on the Intercontinental Exchange is usually taken as the world benchmark contract for sugar. The contract is based on raw centrifugal sugar from cane, 96 degrees average of polarisation. The listed months of this contract are March, May, July and October. Contracts can be settled by cash, but it is also possible to physically deliver sugar against the contract at ports in a wide range of sugar cane producing countries including Argentina, Australia, Brazil, Dominican Republic, Jamaica, South Africa, Thailand and the United States. It is not possible to deliver beet sugar against this contract, so there are no delivery points in Europe.

In theory, being able to physically deliver sugar against a futures position at a wide range of ports means there will be convergence between the cash (spot) price and the futures price as the delivery date of the futures contract is reached. However, the time gap between the spot price and the nearby futures price can be as much as three months. This means that the nearby futures price is often different from the spot price. For example, when world sugar supply and demand are putting upward pressure on prices but this is expected to be eased by an increase in supplies from the next world harvest of sugar, the futures price can be lower than the spot price, as occurred throughout 2010. Similarly, when there are abundant world supplies of sugar, the nearby futures price can be higher than the spot price, reflecting the need for holders of sugar for future consumption to be compensated for the cost of carrying the sugar (insurance, storage costs and interest).

A refined sugar contract—white sugar futures, no. 407—is provided by NYSE Liffe in London. The main quality specifications of this contract are white beet sugar, cane crystal sugar or refined sugar of the current crop, with minimum polarisation of 99.8 degrees and meeting specified colour requirements. The delivery months are March, May, August, October and December. Contracts can be settled by cash, but physical delivery is also possible at a wide range of export ports, located in most of the main cane sugar exporting countries and in European countries, including the Russian Federation and Ukraine.

The price of the London contract is not considered a good indicator of movements in raw sugar prices because it includes sugar refining costs that can vary from period to period according to supply and demand for refined sugar. The difference between the prices of the London refined sugar contract and the ICE no. 11 raw sugar contract is referred to as the white sugar premium.

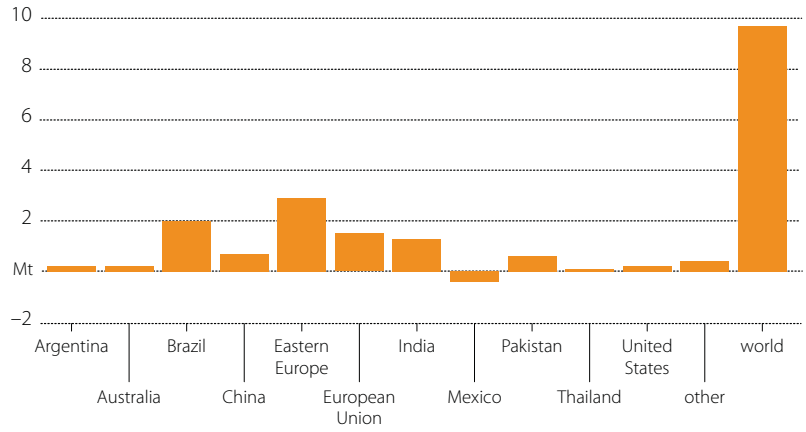
White sugar premium
monthly



Record world sugar production in 2011–12

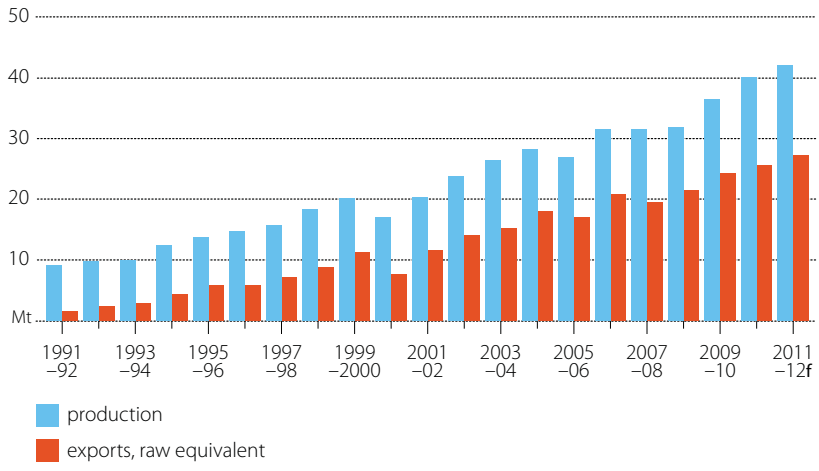
World sugar production is forecast to increase by 8.6 million tonnes in 2011–12 to a record 175.6 million tonnes. Production increases are forecast for all major sugar producing countries, with the exception of Mexico, as sugar cane and beet growers respond to high world sugar prices.

Forecast change in world sugar production, 2011–12



Brazilian sugar production is forecast to increase by 6 per cent in 2011–12 (October to September) to 41 million tonnes. A forecast 4.6 per cent increase in sugar cane production and a higher sugar yield are expected to be partially offset by a 1.5 per cent increase in the proportion of sugar cane allocated to ethanol production. The combination of higher world oil prices and lower world sugar prices is expected to increase the incentive to divert sugar cane to ethanol production.

Brazilian sugar production and exports



Indian sugar production is forecast to increase by 1.3 million tonnes in 2011–12 to 27.3 million tonnes, assuming average yields. The area currently planted to cane is estimated to have increased by 4.3 per cent in response to high sugar prices in 2010–11 and a record guaranteed minimum price. The Indian (or south-west) monsoon, which is the main driver of yields in India, started on time in early June 2011 and delivered around average rainfall.

Sugar production in the European Union is forecast to increase sharply to 17.3 million tonnes in 2011–12, the highest production since 2004–05 and an increase of 2.1 million tonnes on the weather-affected harvest of 2010–11. There has been an estimated 5 per cent increase in plantings in response to favourable prices, and bumper yields are forecast despite a drier than usual start to the season.

Sugar production in the Russian Federation is forecast to increase by 81 per cent in 2011–12 to 5.3 million tonnes. The forecast increase reflects an increase in plantings and a return to average yields after dry conditions last season. Ukrainian sugar production is forecast to increase by 600 000 tonnes in 2011–12 to 2.2 million tonnes.

After the surprisingly large harvest of 2010–11, Thailand's sugar production is forecast to increase by 5 per cent in 2011–12 to 10.5 million tonnes. High sugar prices are encouraging Thai farmers to switch from cassava to sugar cane production.

US sugar production is forecast to increase by 3 per cent in 2011–12 to 7.4 million tonnes. Most of the forecast increase is expected to be sourced from higher beet production, which should account for nearly 59 per cent of total US sugar production in 2011–12. Sugar production in Mexico is forecast to decline by 0.3 million tonnes in 2011–12 to around 5 million tonnes, due to drought.

Sugar production in China is forecast to increase by 1.1 million tonnes in 2011–12 to 12.6 million tonnes, despite drought continuing to affect production in some key producing regions. At this forecast level, sugar production in China will be well below the record 15.9 million tonnes produced in 2008–09.

Steady growth in world sugar consumption in 2011–12

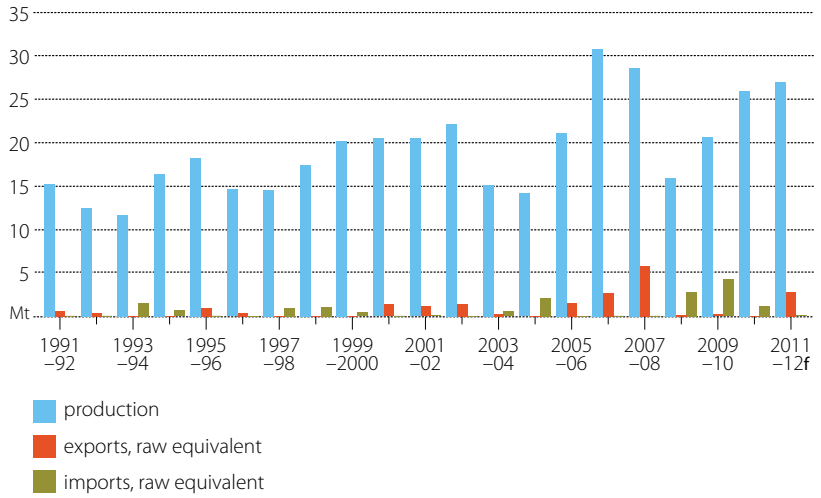
World sugar consumption is forecast to grow by 1.9 per cent in 2011–12 to 169.3 million tonnes. The forecast growth mainly reflects world population growth and steadily rising consumer incomes, particularly in developing countries such as China and India. Forecast lower world sugar prices in 2011–12 and higher prices for high fructose corn syrup are also expected to encourage increased sugar consumption.

Slightly lower world sugar trade in 2011–12

World sugar exports are forecast to decline by 1.8 million tonnes in 2011–12 to around 50 million tonnes. The forecast decrease is expected to be driven by lower import demand in Eastern Europe and India. Supplies available for export are forecast to increase in Brazil, Thailand, India and Australia.

India is forecast to export around 3 million tonnes of sugar in 2011–12, based on current stocks and the forecast of new crop sugar production, after being a large net importer of sugar in 2009–10 and 2010–11. India reimposed an import tariff of 60 per cent on raw sugar in April 2011, after having lowered the tariff to zero in early 2009 to contain increases in domestic sugar prices.

Indian sugar production, import and exports



US sugar imports are forecast to decline by 0.2 million tonnes in 2011–12 to 3.1 million tonnes, including imports from Mexico that are not subject to the US import quota on sugar. Sugar production forecasts for the US and Mexico suggest that the United States Government will again increase its tariff-free sugar import quota in 2011–12 (October to September) above the minimum 1.2 million tonnes specified under its World Trade Organization obligations.

A bumper harvest in the Russian Federation in 2011–12 means Russian sugar imports are forecast to decline by 1.6 million tonnes in 2011–12 to around 1.1 million tonnes. This is well below the annual average of 2.4 million tonnes in the five years to 2009–10.

European Union imports of sugar are forecast to decrease slightly in 2011–12 from the 3.2 million tonnes imported in 2010–11, due to an expected bumper harvest. In 2010–11, the European Union released 500 000 tonnes of over-quota sugar into its domestic market in March 2011 to ease upward pressure on prices. It has since opened an additional zero duty import quota totalling 500 000 tonnes of sugar to be filled before the end of September 2011.

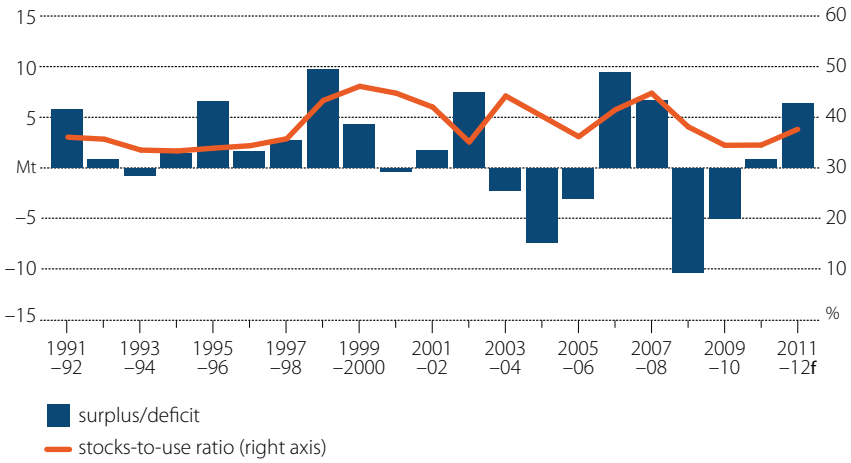
With strong growth in sugar consumption in China, imports are forecast to increase by around 0.7 million tonnes in 2011–12, despite a forecast modest increase in domestic sugar production and recent releases from government stocks.

Reduced production in Mexico has led to the Mexican Government announcing a tariff-free import quota of 150 000 tonnes for 2011–12 to keep domestic sugar prices low.

Recovery in world sugar stocks to continue in 2011–12

A substantial surplus in world sugar production in 2011–12 is forecast to increase world closing stocks of sugar by 7 million tonnes to 63.6 million tonnes. If realised, this would increase the stocks-to-use ratio from 34.5 per cent to 37.6 per cent.

Indicators of the world sugar balance



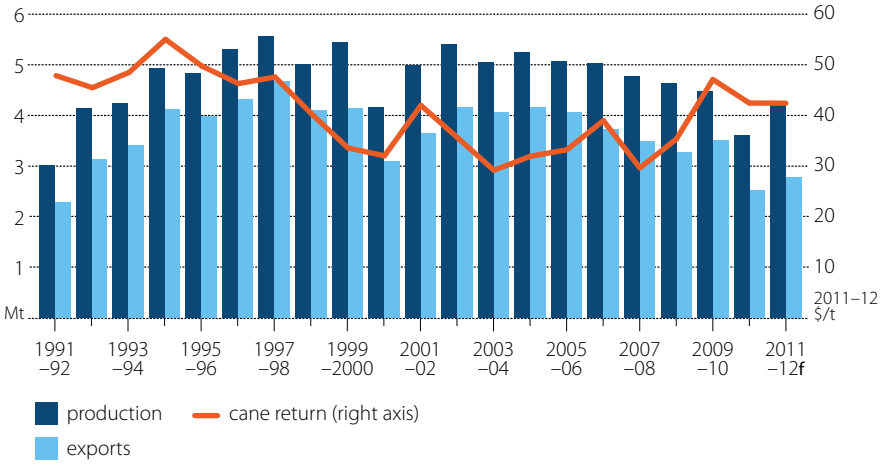
Higher Australian production and cane returns in 2011–12

Australian mill-gate returns to cane growers are forecast to decline by $1.35 a tonne in 2011–12 to $42.35 a tonne. Queensland Sugar Limited (QSL) is forecasting its 2011–12 seasonal pool return to be in the range of $505 to $565 a tonne, International Polarity Scale. More than 90 per cent of Australian sugar exports are marketed through QSL.

Australian sugar production is forecast to recover to 4.2 million tonnes in 2011–12, despite damage from cyclone Yasi in February 2011, compared with 3.6 million tonnes in 2010–11. The harvest started nearly a month earlier than usual on the extensive areas of cane stood over from 2010–11 because of unusually wet weather in late 2010.

Australian sugar exports are forecast to increase by 10.4 per cent in 2011–12 to 2.78 million tonnes, in line with an expected increase in sugar production. With lower world sugar prices and an assumed strengthening in the value of the Australian dollar, the value of Australian sugar exports is forecast to fall slightly in 2011–12 to around $1.49 billion.

Australian sugar production, exports and returns



Sugar outlook

		2009–10	2010–11 s	2011–12 f	% change
World b					
Production	Mt	158.8	167.0	175.6	*5.1*
– Brazil	Mt	40.9	38.7	41.0	*5.9*
Consumption	Mt	163.8	166.1	169.3	*1.9*
Exports	Mt	52.9	51.8	50.0	*– 3.5*
Closing stocks	Mt	56.4	57.3	63.6	*11.0*
Change in stocks	Mt	– 4.9	0.9	6.3	
Stocks-to-use ratio	%	34	35	38	*9.1*
Price	USc/lb	21.0	23.7	20.4	*– 13.9*
Australia c					
Area	'000 ha	389	334	376	*12.6*
Production d	kt	4 472	3 610	4 201	*16.4*
Exports	kt	3 506	2 514	2 776	*10.4*
– value	A$m	1 887	1 492	1 491	*– 0.1*

b October–September years. **c** July–June years. **d** Raw tonnes actual. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; International Sugar Organization

Cotton

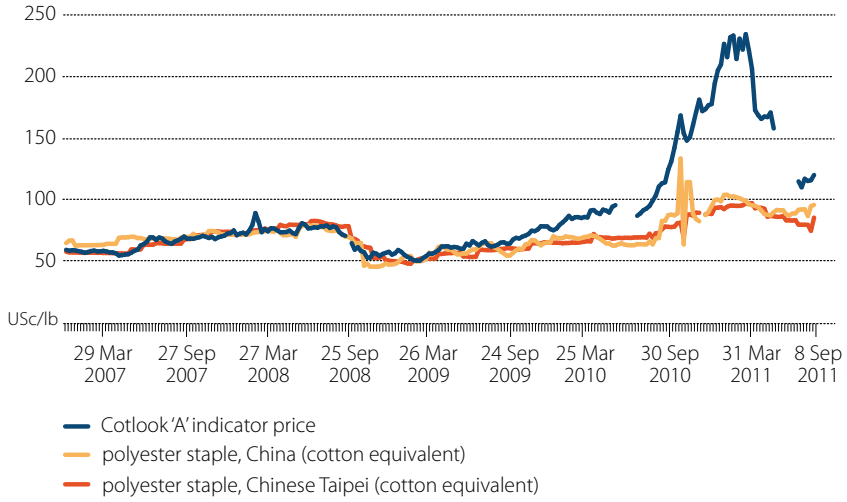
Benjamin Agbenyegah

Falling world cotton prices in 2011–12

The world indicator price for cotton (the Cotlook 'A' index) is forecast to decrease by 36.4 per cent in 2011–12 (August to July) and average around US103c a pound. The forecast fall in world cotton indicator price reflects expected record world cotton production that is forecast to exceed world cotton consumption for the first time in six years. This is forecast to lead to a rise in the stocks-to-consumption ratio of 44.8 per cent by the end of 2011–12.

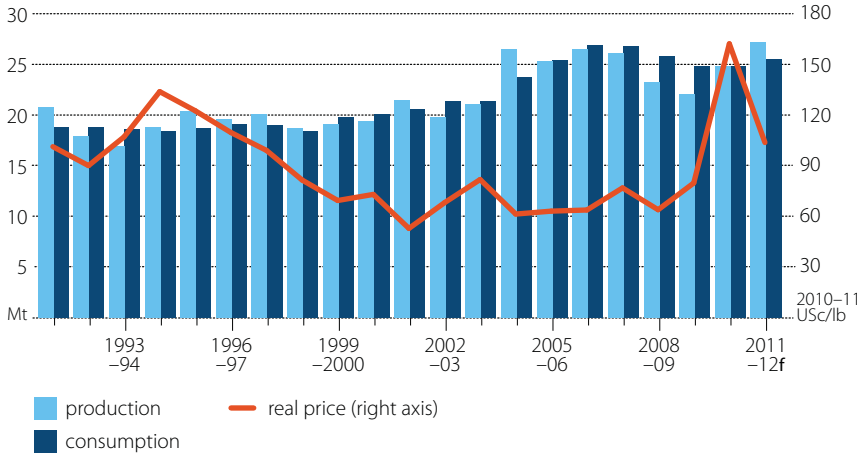
World production of natural and synthetic fibres increased by a total of 8.6 per cent in 2010, the strongest in 25 years. The rate of growth in production was higher for synthetic fibres than for cotton, and this resulted in the gap between world polyester and cotton prices widening in 2010–11. As world supplies of cotton are forecast to increase in the current season, this price gap between synthetic fibres and cotton is expected to narrow in the short term.

World apparel fibre prices
weekly, ended 8 September 2011



The forecast fall in world cotton prices is broadly consistent with the pattern of Intercontinental Exchange futures prices recorded on 1 September 2011. The October 2011 contract closed at US105.9c a pound, compared with US100.5c a pound for the July 2012 contract forecast. The Cotlook 'A' index was trading around US114c a pound in late August 2011, compared with an average of US162c for 2010–11 as a whole.

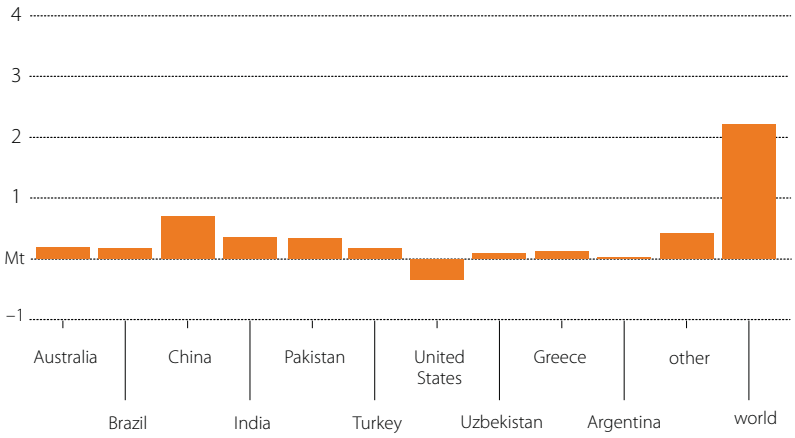
World cotton indicators



Record world cotton production in 2011–12

World cotton production is forecast to increase by 9.2 per cent in 2011–12 to a record 27.2 million tonnes. All major cotton producing countries, with the exception of the United States, are expected to increase cotton production. The forecast increase in world cotton production is expected to occur in response to higher cotton prices and favourable returns to cotton production in relation to alternatives such as soybeans and corn. The world cotton area harvested is forecast to rise by 5.6 per cent in 2011–12 to 35.4 million hectares, the largest harvested area in 17 years.

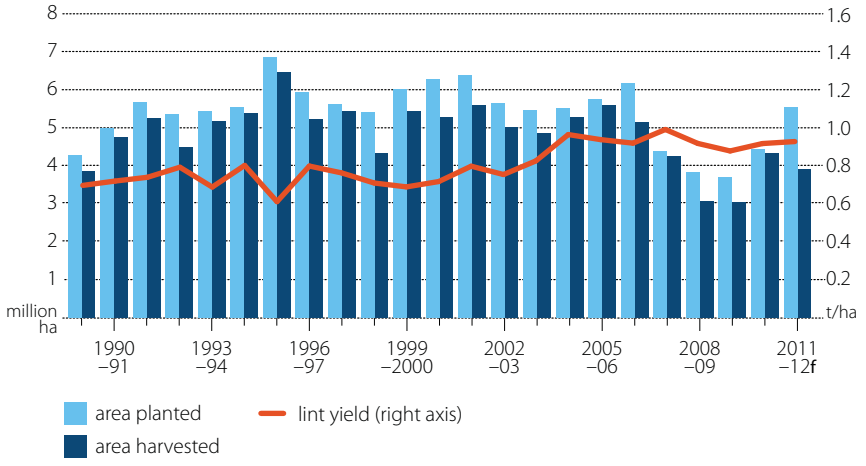
Change in cotton production, 2010–11, by country



Sources: United States Department of Agriculture; ABARES

US cotton production is forecast to decrease by 8.6 per cent in 2011–12 to 3.6 million tonnes, despite an estimated 25 per cent increase in planted area. Adverse seasonal conditions in Texas and poor crop conditions in the south-west and south-east regions are expected to lead to a record US cotton abandonment rate of 30 per cent. This is much higher than the average of about 10 per cent over the 10 years to 2010–11.

Cotton area and yield in the United States



Source: United States Department of Agriculture

Cotton production in India is forecast to increase by 6.3 per cent in 2011–12 to a record 5.9 million tonnes. This is expected to be driven by a 12 per cent increase in planted area in response to the record prices for seed cotton in 2010–11.

Cotton production in China is forecast to increase to 7.3 million tonnes in 2011–12, an increase of nearly 10.5 per cent over the flood-affected crops of 2010–11. This forecast reflects favourable returns to cotton compared with competing crops and assumed better yields.

Cotton production in Pakistan is forecast to increase to 2.2 million tonnes in 2011–12, a 17 per cent increase from the flood-affected crops of 2010–11. Harvested area is forecast to increase by 14 per cent in 2011–12 to 3.3 million hectares.

Cotton production in Turkey is forecast to increase by 38 per cent in 2011–12 to 600 000 tonnes, which is based on an expected 41 per cent increase in area harvested. If it is realised, this will be the largest cotton harvest in Turkey since 2004–05.

Cotton production in Uzbekistan, the third largest cotton exporting country, is forecast to increase by 9.8 per cent in 2011–12 to 1 million tonnes. Higher cotton prices and improved water availability favour better returns from growing cotton than from alternative crops such as wheat, corn and soybeans.

Cotton industry in Uzbekistan

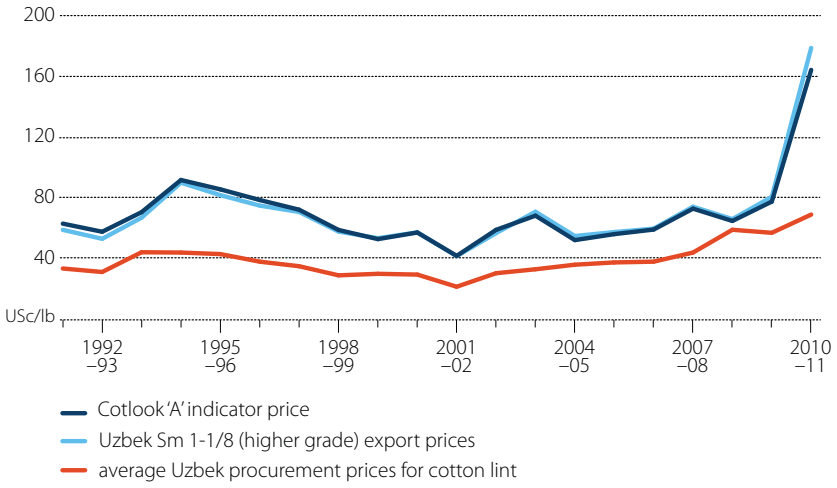
Uzbekistan is the world's sixth largest cotton producer and third largest exporter of cotton. Uzbekistan produces high quality cotton that is sought after by Asian spinners. In 2008–09, cotton accounted for around 3.5 per cent of gross domestic product in Uzbekistan. Together, the central Asian republics (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) accounted for around 6 per cent of world cotton production in 2010–11.

The importance of cotton in Uzbekistan has declined significantly since the end of the Soviet era, with some shift toward grain production. Uzbekistan cotton production is forecast to be only 1 million tonnes in 2011–12, compared with well over one million tonnes in the mid-2000s and a peak of 1.7 million tonnes in the late 1980s.

The Uzbekistan Government maintains tight control over all aspects of domestic cotton production, including area planted and inputs. For example, the government provides subsidised fertilisers and seed as well as almost free irrigation to support cotton producers.

The Uzbekistan Government sets domestic procurement prices well below world cotton prices and markets nearly all the cotton produced. Domestic supplies are allocated according to the government's quota or plan, mainly to State Joint-Stock Company 'Ozengilsanoat', which then distributes cotton to domestic millers according to sales contracts.

Domestic prices for cotton in nominal US dollars, Uzbekistan



Sources: United States Department of Agriculture; Cotlook; Center for Economic Research, Tashkent

The Uzbekistan Government encourages its domestic textile industry through exemptions from tax on property, exemptions from customs duties for import purchases of supplies, zero-rated value-added tax charges on purchases made in the local market in hard currency for supplies of locally produced textiles, and giving price discounts to local mills on purchases of raw cotton.

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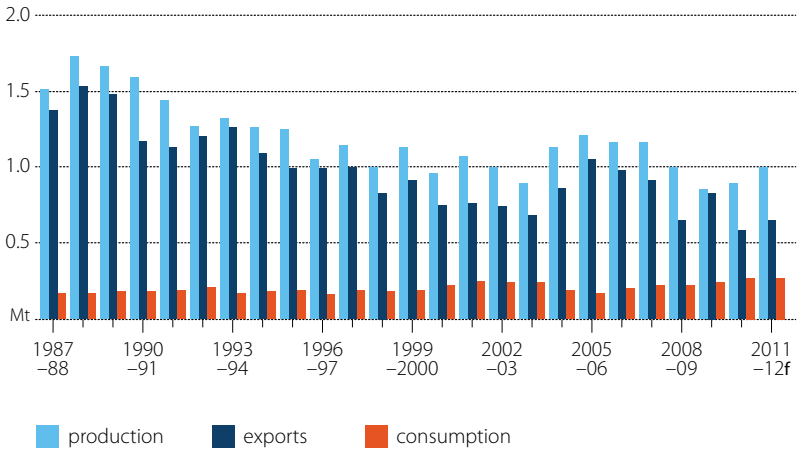
Cotton industry in Uzbekistan continued

Uzbekistan cotton indicators



World cotton consumption growing in 2011–12

World cotton consumption is forecast to increase by 2.8 per cent in 2011–12 to 25.5 million tonnes. The forecast increase is driven by lower world cotton prices and growth in consumer incomes. However, forecast lower prices for competing fibres in 2011–12, especially for polyester fibres, are expected to constrain growth in cotton consumption. The largest increases in mill use of cotton are forecast to take place in India, Brazil, Pakistan, Thailand, China and Turkey.

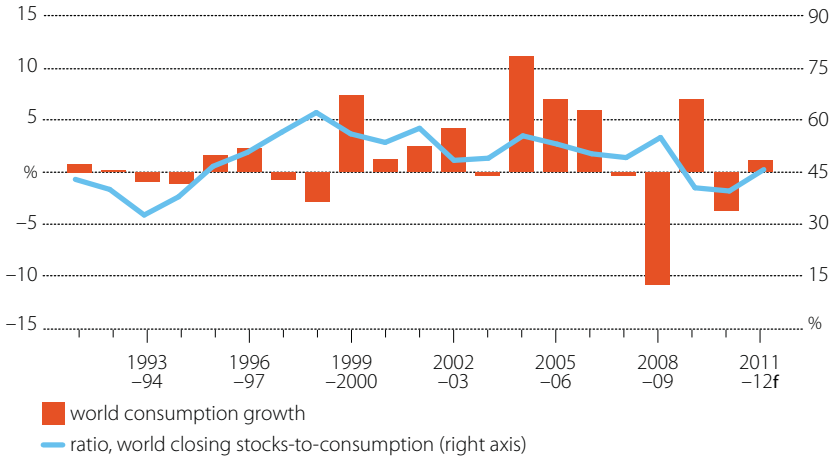
World cotton trade growing

World cotton exports are forecast to increase by about 7 per cent in 2011–12 to 8.2 million tonnes, driven by strong growth in cotton import demand in China, Bangladesh and Turkey and record world production. Larger exports are forecast for Australia, Brazil and Uzbekistan. US cotton exports are forecast to decrease by 15 per cent in 2011–12 to 2.7 million tonnes, reflecting lower US production. India has implemented controls on raw cotton exports to advantage its domestic textile industry and, at this stage, exports in 2011–12 are forecast to be around the same as in 2010–11.

Recovery in world cotton stocks

World cotton production is forecast to exceed world consumption in 2011–12 for the first time since 2004–05. As a result, world cotton stocks are forecast to increase by 16 per cent to 11.4 million tonnes. The world cotton stocks-to-use ratio is forecast to increase to 13.4 per cent in 2011–12, up from 5.6 per cent in 2010–11.

Stocks-to-consumption ratio for cotton



Source: United States Department of Agriculture

Falling Australian cotton prices in 2011–12

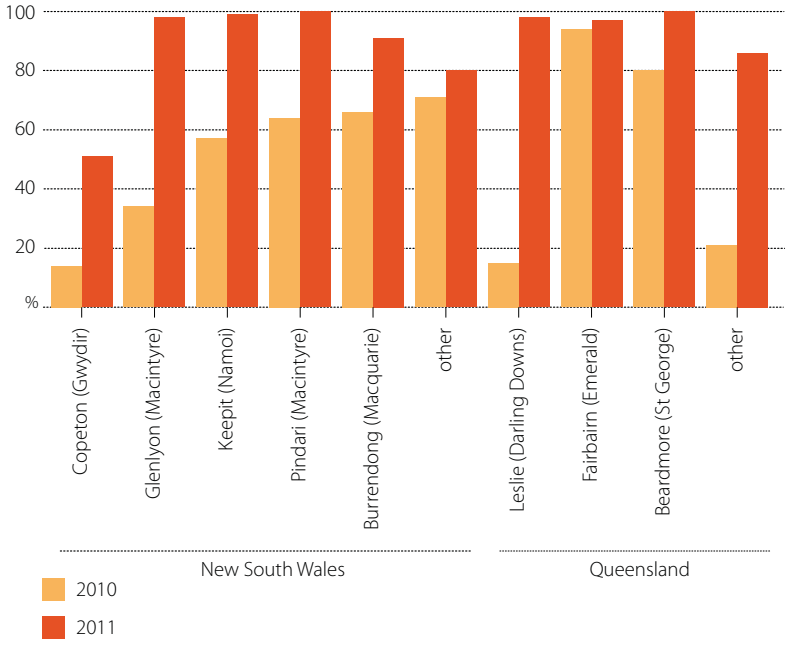
Returns at the gin gate to Australian cotton growers are forecast to decrease by 17 per cent in 2011–12 to around $545 a bale of lint (including the value of cottonseed and ginning costs), which is still a favourable return. The forecast decline reflects expected lower world cotton prices and the assumption of a strong Australian dollar.

Forward cash prices for lint on offer to Australian cotton growers at 13 September 2011 were around $525 a bale for 2012 (2011–12 crop season) delivery and $495 a bale for 2013 delivery. However, it is estimated that around 25 per cent of expected Australian cotton production in 2011–12 has been sold forward at an average price of around $600 a bale.

Record Australian cotton production in 2011–12

Australian cotton production is forecast to increase by around 27 per cent in 2011–12 to a record 1.1 million tonnes. This forecast increase is in response to favourable cotton prices, relatively low prices for production alternatives and abundant supplies of irrigation water in almost all Australian cotton producing regions. At 1 September 2011, the public irrigation dams were at around 92 per cent of capacity, compared with 48 per cent at the same time in 2010. Additionally, favourable soil moisture profiles in most of the summer cropping regions of New South Wales and Queensland are forecast to enable dryland cotton plantings of around 151 000 hectares, which is expected to amount to around 25 per cent of total Australian cotton plantings.

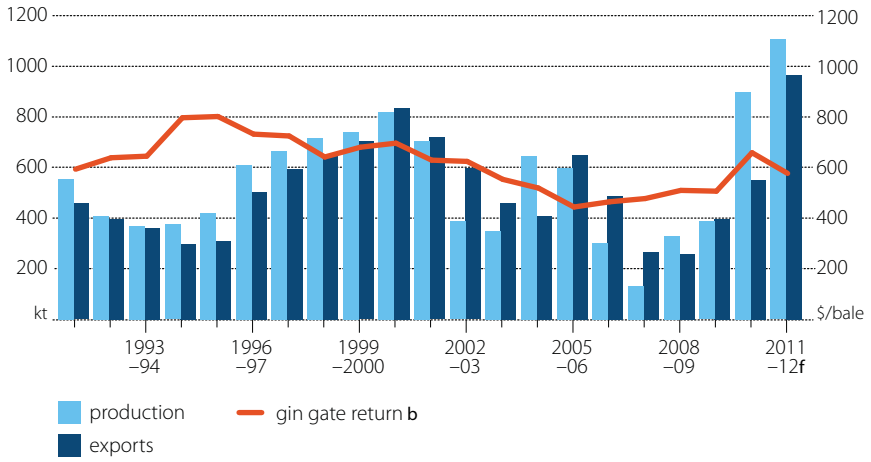
Storage utilisation, major irrigation dams for cotton in Australia
as at 1 September 2011



Sources: Office of Water, New South Wales Government; Sunwater

Australian cotton exports are forecast to increase by 94 per cent in 2011–12 to a record 978 000 tonnes. This forecast increase is driven by the expected increase in production and continued strong export demand. Higher exports are expected to move Australia to third place in the ranking of world cotton exporters, behind the United States and India.

Australian production, exports and gin gate return



b Value of lint and cottonseed, less gining cost.

Cotton outlook

		2009–10	2010–11 s	2011–12 f	% change
World b					
Production	Mt	22.1	24.9	27.2	*9.2*
Consumption	Mt	25.8	24.8	25.5	*2.8*
Closing stocks	Mt	9.6	9.8	11.4	*16.3*
Stocks-to-use ratio	%	37.4	39.5	44.8	*13.4*
Cotlook 'A' index	USc/lb	77.5	162.0	103.0	*– 36.4*
Australia c					
Area harvested	'000 ha	208	590	600	*1.7*
Lint production	kt	387	898	1 144	*27.4*
Exports	kt	395	505	978	*93.7*
– value	A$m	755	1 367	2 233	*63.4*

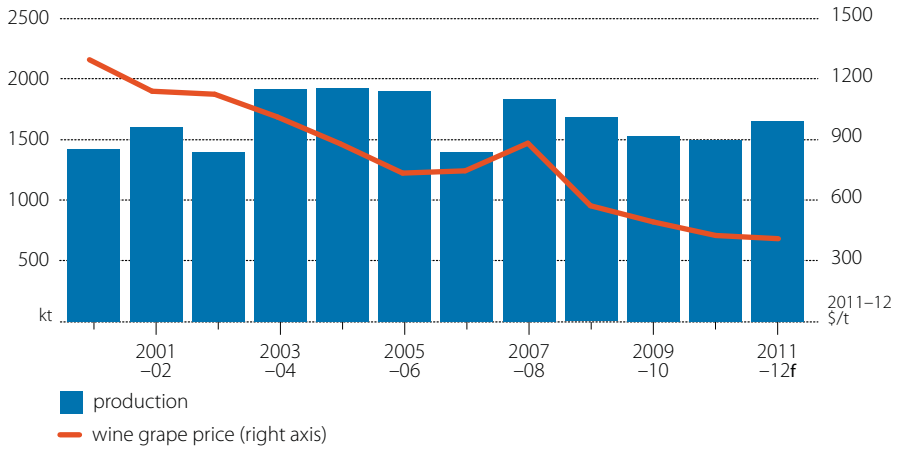
b August–July years. **c** July–June years. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; United States Department of Agriculture

Wine and wine grapes

Caroline Gunning-Trant

Australian wine grape prices are forecast to fall by almost 1 per cent in 2011–12 to $410 a tonne. World demand for Australian wine has been adversely affected by the abundant supply of wine on the world market, the global economic slowdown and a strong Australian dollar relative to the currencies of Australia's major wine export destinations. This has decreased the price competitiveness of Australian wine. Additionally, Australian wine grape production is forecast to rise by 10 per cent to 1.65 million tonnes, increasing the supply of grapes available to wineries.

Australian wine grape production and prices



Wine grape prices reflect global demand

In recent years the growth in demand for Australian wine has slowed considerably as competition in export markets has increased. This has placed downward pressure on wine and wine grape prices. Following a 12 per cent reduction in wine grape prices in 2009–10, the weighted average price offered for the 2010–11 vintage declined further in most regions to $413 a tonne, an 11 per cent decline from a year earlier. In warm climate regions, prices fell by 4 per cent to average $285 a tonne, while in the cool climate regions prices fell by 9 per cent to average $874 a tonne, the lowest price in more than a decade.

The weighted average wine grape price is forecast to fall by almost 1 per cent to $410 a tonne in 2011–12. Downward pressure on wine grape prices is expected to stem from international economic conditions, which are expected to be unfavourable for wine demand, and the changing composition of Australian wine exports.

The Australian wine industry is expected to continue facing strong competition in the domestic and export markets. On average, about two-thirds of Australia's wine production is

exported, making the Australian wine industry vulnerable to changes in economic conditions in its export markets. With only modest economic growth forecast for Australia's two largest export markets—the United Kingdom and the United States—the continued strength of the Australian dollar and the ample supply of wine on the world market, international demand for Australian wine is unlikely to strengthen in the short term.

The growing proportion of lower value bulk wine exports is also contributing to the downward pressure on wine and wine grape prices. In 2010–11, Australia shipped 47 per cent of its total wine exports (by volume) in bulk, compared with 13 per cent a decade earlier. Bulk wine accounted for 17 per cent of the total value of wine exports in 2010–11, compared with just 4 per cent in 2000–01.

Water supplies to support production in 2011–12

Australian wine grape production is estimated to have decreased by around 2 per cent in 2010–11 to 1.5 million tonnes. Although the bearing area of wine grape varieties (which excludes multipurpose vines for drying and table use) is estimated to have increased by almost 1 per cent to around 153 000 hectares, disease pressure and losses arising from the wet climatic conditions constrained production in many areas. The expected increase in the bearing area, particularly in the cool regions, is attributed to the vines planted over the past three years coming into full bearing.

The 2010–11 season was characterised by wet and humid conditions which, while favourable for vine growth and berry size, also promoted diseases such as downy mildew and powdery mildew. Additionally, as a result of continued rain events throughout March 2011, there were incidents of botrytis in some cool climate regions that arose after harvest had begun. Flooding in a number of regions, particularly Victoria, also adversely affected wine grape production. For those wine grape areas able to control the disease pressure, the harvest outcome was similar to that of 2009–10.

Production of wine grapes in Australia

	2009–10	2010–11s
	kt	kt
Premium white		
Chardonnay	298	308
Semillon	77	82
Sauvignon blanc	72	69
Other	149	154
Total	596	613
Non-premium white	3	3
Premium red		
Cabernet sauvignon	214	206
Merlot	105	98
Shiraz	403	368
Other	79	76
Total	801	747
Non-premium red	17	21
Total	1 533	1 497

Note: Total includes other varieties not reported separately above.

The decline in grape production in 2010–11 is estimated to have been most significant in the warm inland zones, which include the Lower Murray zone, the Murray-Darling – Swan Hill zone and the Big Rivers zone. These zones are characterised by greater reliance on irrigation, higher yields and generally lower wine grape prices than the cool climate zones. In several cool climate zones, wine grape production in 2010–11 is estimated to have increased.

Production of most major wine grape varieties is expected to have fallen in 2010–11 (shiraz by 9 per cent, cabernet sauvignon by 4 per cent and sauvignon blanc by 4 per cent), whereas, production of chardonnay, the second largest grape variety produced, is estimated to have increased slightly.

Assuming favourable seasonal conditions, wine grape production is forecast to increase by 10 per cent to 1.65 million tonnes in 2011–12. This forecast primarily reflects a return to average yields (that is, yields not affected by the disease pressure of the preceding year) and a slight increase in bearing area as young vines in the cool regions come into bearing. Additionally, the exceptionally wet 2010–11 season in eastern Australia replenished irrigation dams which should provide more certainty for the availability of water for the coming seasons in most wine producing areas.

Exports slowed due to a high Australian dollar

The United States, the United Kingdom and Canada have traditionally been Australia's largest markets for wine, accounting for almost three-quarters of Australia's exports by volume over the past decade. In recent years China has emerged as Australia's fourth largest market with its export share in 2010–11 (in volume terms) roughly equivalent to Canada's at 7 per cent.

In 2010–11, Australian wine exports fell by 6 per cent to 728 million litres. World demand for Australian wine has been adversely affected by an abundant supply of wine on the world market, the global economic slowdown and a strong Australian dollar relative to the currencies of Australia's major wine export destinations. In particular, exports to the major markets of the United States and the United Kingdom have been most significantly affected.

In addition to the decline in the volume of wine exports, the composition of exports has shifted in favour of lower value bulk wine. Exports of bottled wine fell by 18 per cent in 2010–11 to 360 million litres. Bottled wine accounted for 50 per cent of total wine exports in 2010–11, compared with 82 per cent a decade ago. In contrast, exports of bulk wines increased by over 9 per cent in 2010–11 to 341 million litres. Bulk wine accounted for 47 per cent of total wine exports in 2010–11 compared with only 13 per cent a decade ago. The move to bulk exports reflects a shift toward offshore packaging to minimise transportation costs in an attempt to increase the price competitiveness of Australian wine.

The combined effects of the decline in export volumes, and the increase in lower priced bulk wine exports, have put downward pressure on export returns. In 2010–11, export earnings fell by 9.5 per cent to $1.96 billion.

Exports of wine to the United States fell by 20 per cent in 2010–11 to 176 million litres. Bottled and bulk exports fell by 17 per cent and 27 per cent to 128 million litres and 49 million litres, respectively. Export returns fell by 21 per cent to $478 million.

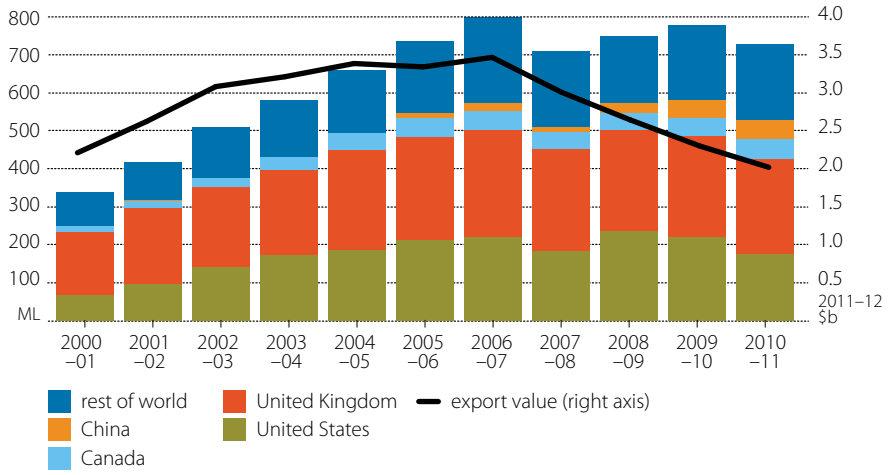
Exports of wine to the United Kingdom fell by 6 per cent in 2010–11 to 248 million litres. Sales of bottled wine fell significantly in 2010–11, by 37 per cent to 80 million litres. In contrast, exports of bulk wine increased by 24 per cent to 168 million litres, reflecting the trend to offshore packaging. In 2010–11, almost half of Australia's bulk exports were shipped to the United Kingdom. The increase in lower priced bulk exports led to a 19 per cent fall in export returns to $447 million.

Exports of wine to Canada and China increased in 2010–11 to 53 million litres and 50 million litres, an increase of 6 per cent and 13 per cent, respectively. Export sales of bottled wine to

Canada were virtually unchanged at 35 million litres while bulk wine exports increased by 24 per cent to 18 million litres. The increase in total wine shipments to Canada translated into a 3 per cent increase in export returns in 2010–11 to $198 million. Exports of both bottled and bulk wine to China increased in 2010–11, driven entirely by a 20 per cent increase in total red wine exports. Bottled wine exports increased by 9 per cent to 26 million litres, while bulk wine exports increased by 5 per cent to 24 million litres. The strong growth in higher-valued bottled exports to China supported the 30 per cent increase in export returns at $181 million.

In 2011–12 total Australian wine exports are forecast to fall by 1 per cent to 720 million litres. An assumed strong Australian dollar is expected to continue to put downward pressure on the demand for Australian wine in major export markets. Demand will also be adversely affected by the economic outlook for these markets, which does not support any expectation of strengthening wine demand in the short term, particularly for bottled wine. Providing some upside risk to this forecast is the potential for lower valued bulk exports to stimulate some additional foreign demand. However, with the proportion of lower valued bulk exports expected to remain close to 50 per cent, export returns in 2011–12 are forecast to fall by 2.5 per cent to $1.9 billion.

Australian exports by country



Imports encroaching on domestic market share

Total sales of wine (table, sparkling, carbonated and fortified) in Australia fell by 3 per cent in 2010–11 to 522 million litres as a result of a 3 per cent fall in domestic sales of Australian wine to 455 million litres. While sales of Australian bottled wine remained virtually unchanged in 2010–11, domestic sales of wine in soft packs and in bulk fell by 7 per cent to 179 million litres. Sales of sparkling wine fell by 12 per cent to 35 million litres.

In 2010–11, the volume of wine imports increased by 2 per cent to 67 million litres. Following a period of double digit growth, which could be attributed largely to the popularity of New Zealand sauvignon blanc, growth in Australian wine imports has slowed over the past two years. While New Zealand wine continued to account for the largest share of total wine imports, appreciation of the Australian dollar against the euro in 2010–11 led to a change in relative prices that favoured greater demand for European wines from countries such as France, Portugal and Spain. The relatively stronger appreciation in the value of the Australian dollar relative to the euro, as compared to the New Zealand dollar, is reflected in the greater decrease in unit import values for European wines. While the unit import value of New Zealand wine fell by 1.2 per cent in 2010–11, the unit import value of French, Portuguese and Spanish wines fell by an average of 15 per cent.

The total value of Australian wine imports increased by almost 3 per cent in 2010–11 to $471 million, which reflects the strong influence of French wine imports that command a relatively higher unit price compared with other countries.

In 2011–12, total domestic wine sales are forecast to increase by 2 per cent to 534 million litres. This increase is expected to occur as a result of the abundance of low-priced wine available on the domestic market following several years of high wine grape production. Imports are also forecast to increase by 2 per cent to 68 million litres. This forecast reflects the ongoing strength of the Australian dollar combined with the favourable economic outlook for Australia which will sustain consumer demand for imported wine.

Wine and wine grapes outlook

		2009–10	2010–11 s	2011–12 f	% change
Bearing area	'000 ha	152	153	154	*0.9*
Wine grape production s					
Red wine	kt	842	794	869	*9.4*
White wine	kt	686	703	785	*11.7*
Total b	kt	1 528	1 497	1 654	*10.5*
Wine exports					
Volume	ML	777	728	720	*– 1.1*
Value	A$m	2 164	1 958	1 910	*– 2.5*
Australian wine grape price	A$/t	464	413	410	*– 0.7*

b From 2008–09, total production excludes multipurpose grapes. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Wine Export Council; Australian Wine and Brandy Corporation, *Approved Wine Shipments,* Adelaide; Australian Bureau of Statistics, *Australian Wine and Grape Industry,* cat. no. 1329.0

Horticulture

Max Foster

Overview: Production growth in 2011–12

The gross value of the Australian horticulture industry (excluding wine grapes) is forecast to increase to $9.25 billion in 2011–12, 6.3 per cent higher than in 2010–11. This growth largely reflects improved availability of irrigation water and a return to more favourable seasonal conditions following heavy rains, cyclones and floods in late 2010 and early 2011. Water storage in the Murray–Darling Basin was at 87 per cent of capacity at 14 September 2011, compared with a low of 25 per cent around at the same time in 2010. The increase in gross value is forecast to occur in 2011–12 despite the strength of the Australian dollar that is reducing the competitiveness of Australia's horticulture exports and increasing the competitiveness of horticulture imports.

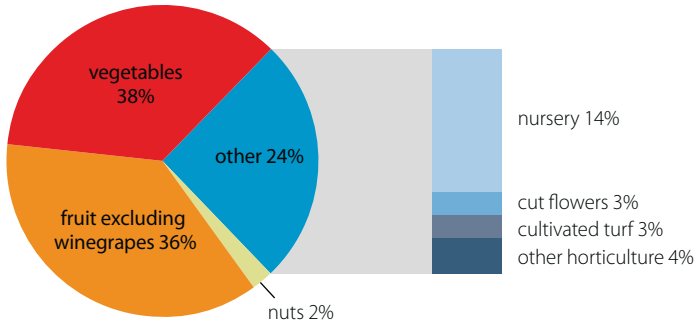
Gross value of Australian horticulture, by sector

The Australian horticulture industry, excluding wine grapes, is forecast to account for 17 per cent of the gross value of Australian farm production in 2011–12. Vegetables are forecast to make up 38 per cent of the total gross value and fruit and nuts a further 38 per cent. Other horticulture—largely made up of nursery, cut flowers, cultivated turf and specialty crops like oilseed poppy and pyrethrum daisy—is forecast to account for the remaining 24 per cent.

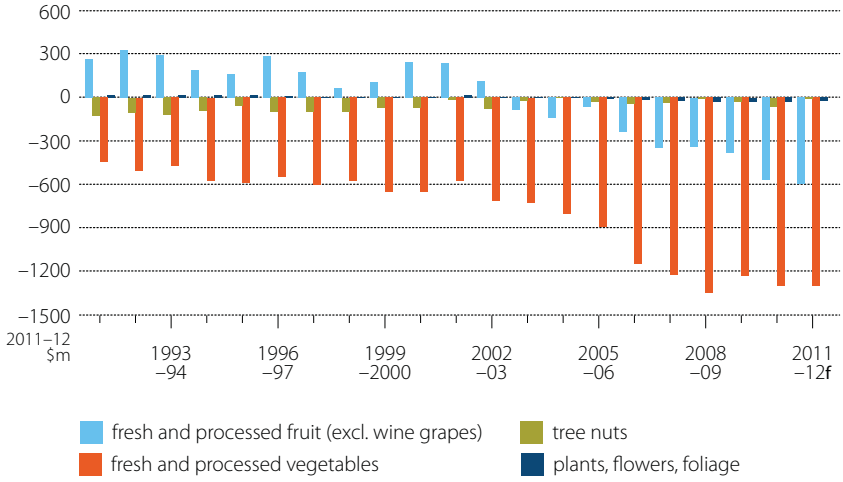
A return to more favourable seasonal conditions in 2011–12 will boost exports and reduce import demand, but the assumed strong Australian dollar in year-average terms is expected to continue to dampen export earnings.

Although most fruit and vegetables consumed in Australia are produced domestically, on the trade front, total imports of these products exceed exports. Australia shifted to being a net importer of fruit and vegetable products around 2003–04, largely due to increasing imports and decreasing exports of processed fruit and vegetables, but net exports of fresh fruit and vegetables also declined. Drought was a major contributory factor for this change. Its impact was particularly significant in the Murray–Darling Basin which accounts for around one-third of the gross value of Australian horticultural production. Another factor was the higher labour costs in Australia, relative to other horticulture producing and exporting countries such as Thailand, Brazil, Chile, South Africa and Peru.

Forecast composition of gross value of horticulture, 2011–12



Australian net trade in fruit, tree nuts and vegetables

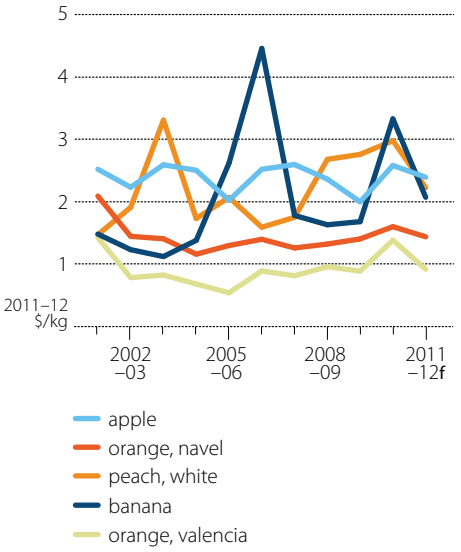


Outlook for fruit

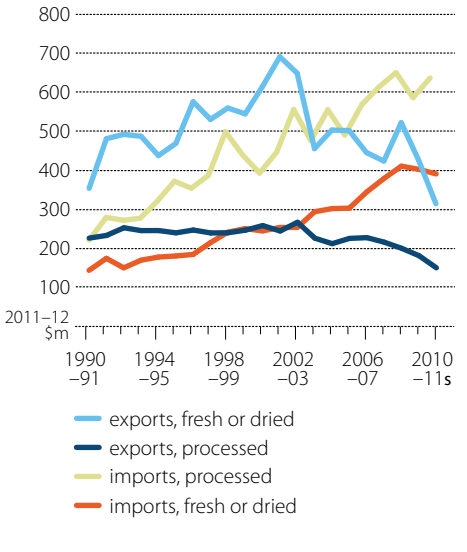
The gross value of Australian fruit production is forecast to increase to $3.49 billion in 2011–12, 6.1 per cent higher than in 2010–11. This forecast increase reflects expected larger harvests of apples, bananas, citrus and mangoes. However, the effect of larger harvests on the gross value of production will be partially offset by forecast lower prices for most fruit.

The value of Australian exports of fresh and processed fruit is forecast to decline to $435 million in 2011–12, 6 per cent lower than in 2010–11. Reflecting the effect of the strong Australian dollar, Australia's net trade (exports less imports) of fresh fruit for the first time recorded a deficit of $77 million in 2010–11.

Fruit prices, Sydney wholesale market



Australian imports and exports of fresh and processed fruit

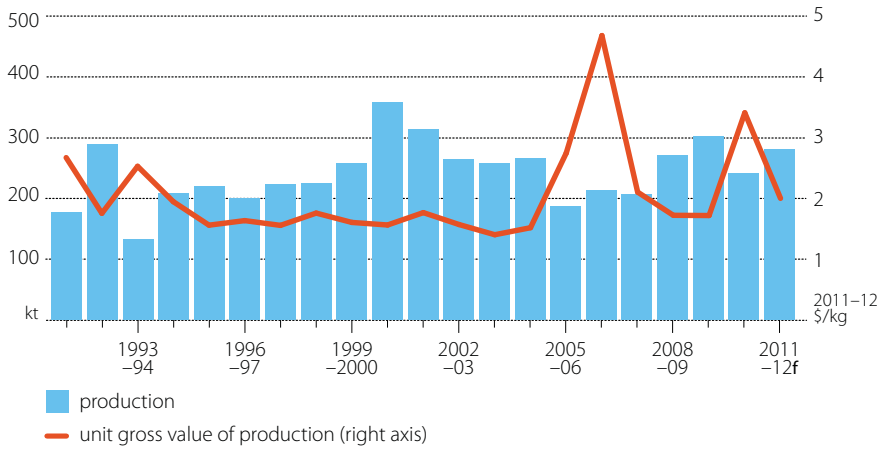


Bananas

Australian banana production is forecast to recover to 280 000 tonnes in 2011–12, 16 per cent higher than the 2010–11 crop, which was severely damaged by cyclone Yasi in February 2011.

The wholesale price of bananas is forecast to average around $2 a kilogram in 2011–12; down sharply from the 2010–11 average of $3.41 a kilogram. This price forecast assumes that banana prices will remain relatively high in the first four months of 2011–12 as production gradually recovers. Later in the year, however, a significant price decline is expected as production returns to capacity. Strict Australian quarantine requirements prevent bananas being imported.

Banana production and prices, Australia



Citrus

The market indicator for oranges (Intercontinental Exchange, nearby futures price, US grade A frozen concentrated orange juice) is forecast to average US157c a pound solids in 2011–12, down from US163c a pound solids in 2010–11, as world stocks of citrus products increase, particularly in Brazil and the United States. This price decline reflects a forecast 9.3 per cent increase in world production of oranges in 2011, to 53.8 million tonnes.

Brazilian exports and export prices of orange products b

b In frozen concentrated orange juice–equivalent terms.

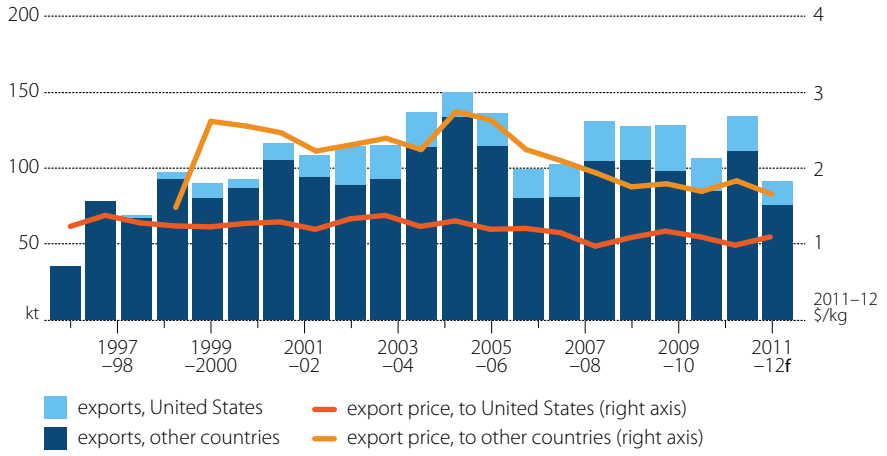
The price of Brazilian frozen concentrated orange juice is forecast to fall by 3 per cent to US$1750 a tonne in 2011–12, as Brazilian orange production recovers from last year's adverse seasonal conditions. Brazil accounts for around 80 per cent of world exports of orange juice but less than 1 per cent of world exports of fresh oranges.

Australian citrus production is forecast to increase significantly in 2011–12. Navel orange production is forecast to rise 50 per cent, mandarins 32 per cent and valencia oranges 160 per cent. The forecast significant rise in the Australian citrus crop in 2011–12 results mainly from improved water availability in major producing regions in south-eastern Australia.

The Riverland, Sunraysia and Riverina regions are the only regions in Australia from which fresh citrus fruit can be exported to the United States. US market access was enabled in the early 1990s through meeting US marketing orders and quarantine requirements (mainly fruit-fly free status). The export control powers of Horticulture Australia Limited support the arrangement for export of fresh oranges to the United States.

The United States is a premium market for Australian fresh oranges; sometimes paying more than 50 per cent more than the rest of the world. The high US prices are supported by strict US sanitary and phytosanitary barriers that have restricted potential orange imports. However, increased competition from South Africa and other exporting countries in the US market has led to a reduction in the price premium for Australian oranges exported to the United States over other export destinations. In 2010, Chile gained US market access and immediately gained a 30 per cent share, leading to a reduction in Australia's share from 25 per cent in 2009 to 15 per cent in 2010.

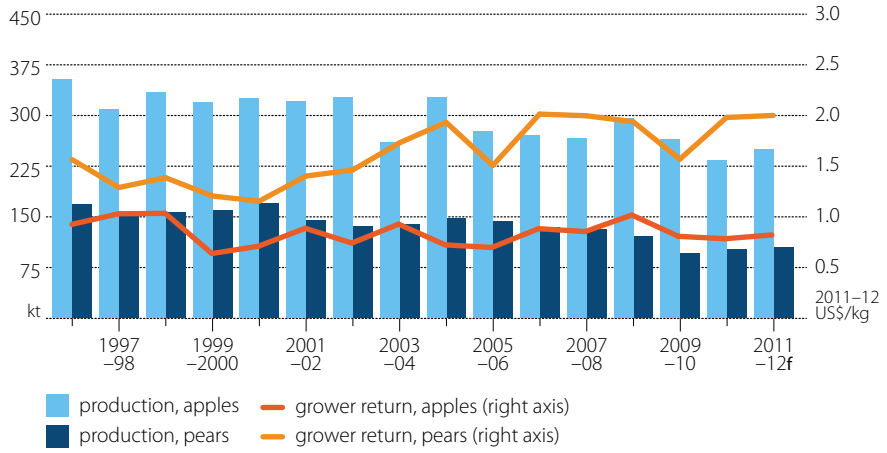
Australian exports and export prices for fresh oranges



Apples

Australian apple production is forecast to increase to 250 000 tonnes in 2011–12, following the poor harvest of 233 000 tonnes in 2010–11. However, returns to Australian apple growers are likely to be maintained at relatively favourable levels in 2011–12, supported by higher world apple prices.

Australian apple and pear production and returns



World prices for fresh apples and apple juice have been increasing, in real terms, since the early 2000s, due largely to strong growth in demand in developing countries, such as China and India. World apple production is forecast to increase in 2011 but strong demand growth is expected to provide support for world apple prices.

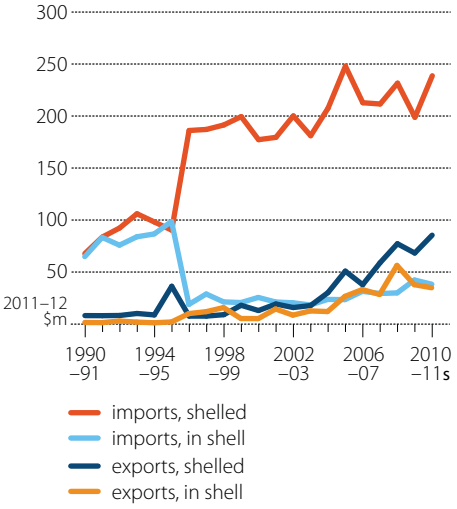
World apple exports and prices b

b Excludes intra-European Union trade.

Mangos

Australian mango production is forecast to be a record 63 000 tonnes in 2011–12, 84 per cent higher than in 2010–11, the result of recently planted trees maturing and favourable seasonal conditions in the crucial flowering period in winter 2011. If realised, the higher production will weigh on domestic prices for fresh mangoes in the marketing period from late August 2011 through to April 2012, with returns to Australian mango growers forecast to decline by around 20 per cent in 2011–12.

Australian exports and imports of tree nuts



Outlook for tree nuts

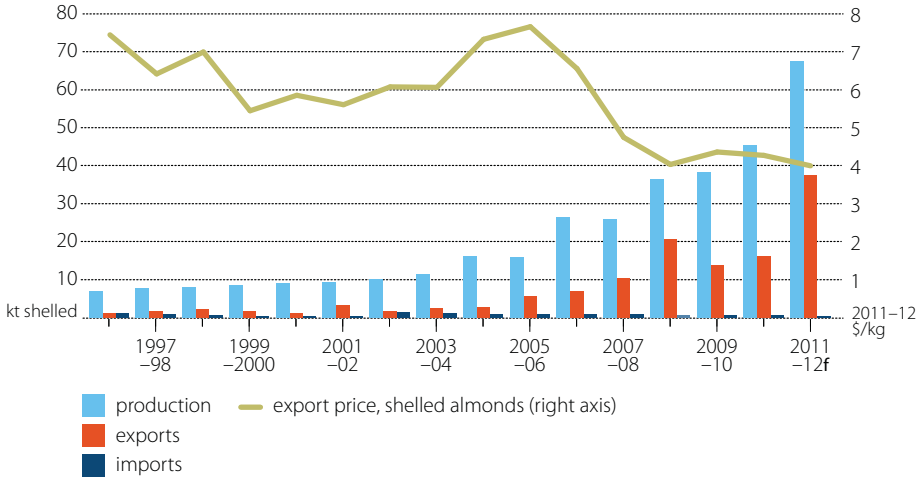
World nut prices are forecast to be lower in 2011–12 under the weight of larger world harvests of almonds, pistachios and walnuts. Prices are forecast to be lower in 2011–12 despite expected continued growth in demand.

Australian nut production is forecast to increase strongly in 2011–12, primarily reflecting a 47 per cent increase in almond production and higher output for walnuts and chestnuts. The gross value of Australian tree nut production in 2011–12 is forecast to be $225 million, 50 per cent higher than in 2010–11. The export value of Australian tree nuts (fresh and processed) is forecast to be $252 million in 2011–12, up from $207 million in 2010–11.

Almonds

World almond prices are forecast to average around 7 per cent lower in 2011–12, in response to a forecast 21 per cent increase in world almond production. Californian almond production, makes up more than 80 per cent of world production and is forecast to be a record 885 000 tonnes in 2011–12, 19 per cent above last year's harvest.

Australia almond production, trade and export price



The decline in almond prices is forecast to occur despite strongly growing global demand that is partly driven by consumer perceptions of the healthiness of almonds. In Australia, almond consumption has grown at around 11 per cent a year over the last 20 years.

Australian almond production (shelled) is forecast to increase to 67 400 tonnes in 2011–12, nearly 50 per cent higher than in 2010–11, as more recently planted almond trees approach maturity and yields rise.

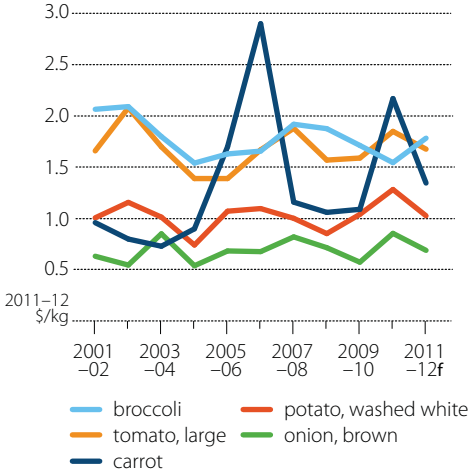
World almond imports grew at an average of nearly 8 per cent a year for the 20-year period to 2010–11. Australia is forecast to account for 5 per cent of world exports of almonds in 2011, behind only the United States (79 per cent) and Spain (8 per cent).

Outlook for vegetables

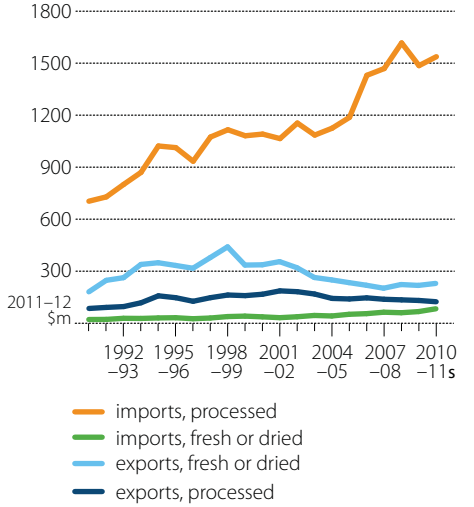
Vegetable prices were relatively high in Australia in 2010–11, particularly in the second half of the growing season, mainly reflecting heavy rain and flood damage in eastern Australia, northern Tasmania and the Gascoyne region of Western Australia. However, a return to more normal seasonal conditions and improved irrigation water availabilities are expected to exert downward pressure on vegetable prices in 2011–12.

The value of Australian exports of fresh and processed vegetables is forecast to decline by 24 per cent in 2011–12 to $423 million, despite increased domestic production. The assumed appreciation of the Australian dollar, especially against the US dollar, is reducing the competitiveness of Australian exports of vegetables.

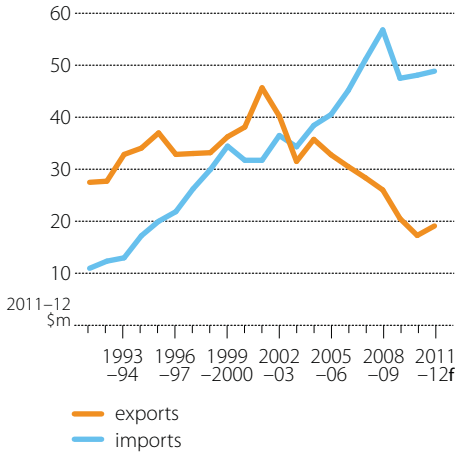
Vegetable prices, Sydney wholesale market



Australian exports and imports of fresh and processed vegetables



Australian exports of plants, flowers and foliage



Outlook for nursery products

The gross value of nursery production (plants, cut flowers and cultivated turf) in Australia is forecast to increase by around 4 per cent in 2011–12, to $1.95 billion, largely reflecting the effect of easing household water use restrictions in eastern Australia. The value of exports of plants, cut flowers and foliage is forecast to increase by less than 1 per cent to around $49 million in 2011–12.

Horticulture outlook

		2009 –10	2010 –11 s	2011 –12 f	% change
Gross value	A$m	7 895	8 705	9 253	*6.3*
Fruit and tree nuts	A$m	3 223	3 453	3 715	*7.6*
Vegetables	A$m	3 023	3 370	3 588	*6.5*
Other horticulture	A$m	1 649	1 882	1 950	*3.7*
Exports	A$m	1 309	1 247	1 130	*– 9.4*
Fruits	A$m	593	463	435	*– 6.1*
Vegetables	A$m	497	560	423	*– 24.5*
Tree nuts	A$m	198	207	252	*21.9*
Nursery	A$m	20	17	20	*16.4*

s ABARES estimate. **f** ABARES forecast.
Sources: Australian Bureau of Statistics; ABARES

Livestock

Beef and veal

Clay Mifsud

The Australian weighted average saleyard price for beef cattle is forecast to fall by 4 per cent in 2011–12 to 310 cents a kilogram (dressed weight). Continuing restocker demand in most cattle-producing regions is expected to maintain upward pressure on young cattle prices. However, prices for other categories of cattle are expected to average lower as a consequence of subdued demand from major beef export markets.

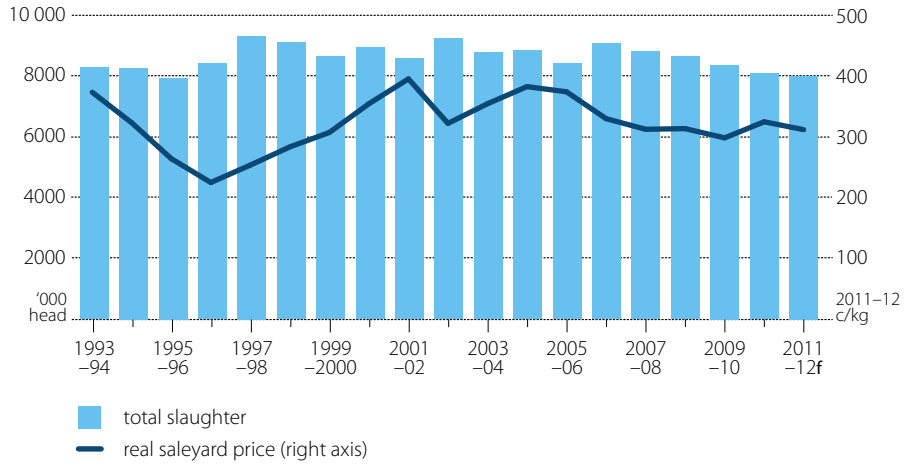
Cattle numbers to continue increasing

A continuation of good pasture conditions is expected to support restocker demand and the national cattle herd is forecast to increase by 2 per cent in 2011–12 to around 28.0 million head. This follows a 3 per cent increase in 2010–11 to 27.4 million head when high rainfall over northern and eastern Australia during the first quarter of 2011 resulted in good pasture growth and increased water availability. Additionally, the prolonged wet season in northern Australia delayed the mustering and transport of cattle to market.

The combination of restocking, subdued export demand and lower prices is forecast to result in slaughter falling by 1 per cent in 2011–12 to around 8.0 million head. This follows a 3 per cent fall in 2010–11 to 8.1 million head, which was the lowest slaughter since 1995–96. In 2011–12, favourable pasture conditions are expected to give cattle producers a greater capacity to hold stock.

As well as the total slaughter falling, the composition of the slaughter has changed as producers seek to increase herd sizes. During the June quarter of 2011, Australian female cattle slaughter was 15 per cent lower than for the same period last year. By comparison, male cattle slaughter increased by 5 per cent over the same period, but not by enough to offset the decline in female cattle slaughter.

Australian slaughter and saleyard price



Despite the expected decrease in slaughter, beef and veal production is forecast to remain steady at around 2.1 million tonnes. This is expected to be supported by a 2 per cent rise in average slaughter weights, due to continuation of favourable pasture conditions.

Australian exports to fall

Australian beef and veal exports are forecast to fall by 2 per cent in 2011–12 to around 920 000 tonnes (shipped weight). The forecast decline reflects lower exports to Japan and historically low exports to the United States. The high Australian exchange rate and increased competition from US beef in the north Asian markets are expected to lead to weaker demand for Australian beef in export markets.

Reflecting the current export market situation, the total share of exports to the three largest destinations—Japan, the United States and the Republic of Korea—is expected to be close to 68 per cent in 2011–12, compared with the high of 92 per cent in 2004–05. Other markets, such as the Russian Federation, have increased their importance to Australian beef trade.

Exports to the United States to remain low

Beef exports to the United States are forecast to remain largely unchanged in 2011–12 at 160 000 tonnes (shipped weight). However, the volumes of exports to the United States are expected to fall in the near term before increasing later in the financial year. Consumer demand is expected to remain weak in the United States and the Australian exchange rate is assumed to remain high, reducing the price competiveness of Australian beef. Additionally, US beef production is expected to remain high in the first half of 2011–12. However, growth in US beef production could slow in the second half of 2011–12, under the assumption of more favourable seasonal conditions. The fall in domestic production is expected to lead to increased demand for imported beef, including Australian beef.

During 2010–11 exports of Australian beef to the United States fell by 24 per cent to 160 000 tonnes, the lowest since 1965–66. This fall resulted from weaker consumer demand, a higher Australian dollar and prolonged drought in key US cattle-producing regions. The unfavourable seasonal conditions resulted in increased US domestic production, which reduced the demand for imports.

Increasing competition from US beef in Japan

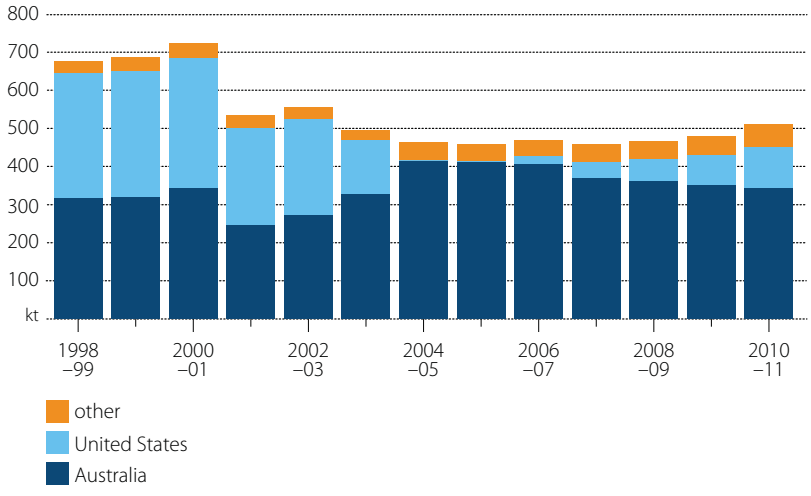
Australian beef exports to Japan are forecast to fall by 7 per cent in 2011–12 to 325 000 tonnes (shipped weight). This forecast fall is largely the result of subdued demand in Japan, increased competition in that market from US beef and the Australian dollar remaining high.

The Japanese economy is expected to exhibit only slow growth over the coming year and average personal incomes are expected to remain relatively flat. This is expected to lead to Japanese demand for beef remaining static.

Australian beef is continuing to lose market share to US beef in the Japanese market as US exporters slowly but steadily regain market share lost in the early 2000s. In the five years prior to 2003–04, Japan imported on average around 300 000 tonnes of beef a year from each of Australia and the United States. The United States was one of Japan's two largest suppliers of

imported beef, partly due to consumer preferences for higher marbling—a feature of US beef where cattle are predominantly finished in feedlots. Additionally, the US beef industry is well placed to supply specific cuts that the Japanese prefer. The *bovine spongiform encephalopathy* (BSE) related ban on importing US beef in 2003–04 led to Japanese imports of Australian beef rising to 416 000 tonnes. However, demand for Australian beef has fallen in recent years as health concerns about US beef have eased and trade restrictions relaxed. Japanese imports of US beef in 2010–11 were still less than half that of 2002–03, but have grown steadily and are expected to continue growing in 2011–12. The drive by the United States to regain market share is expected to be aided by a weak US currency.

Japanese beef imports, by country



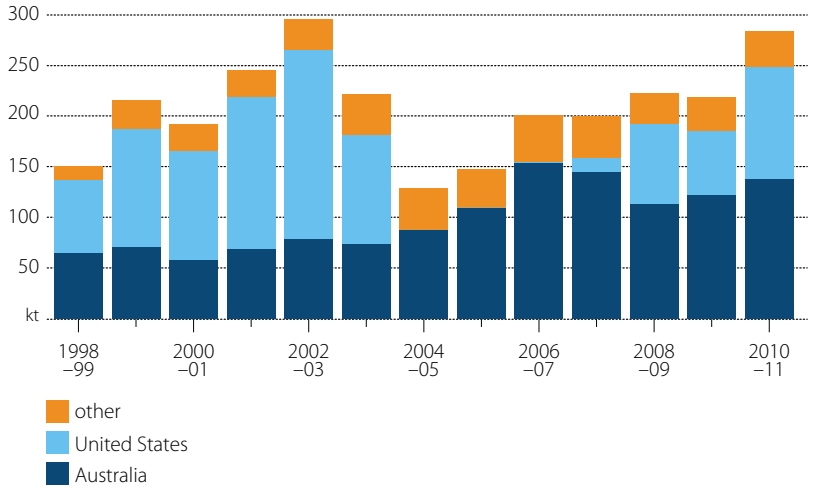
Source: Japan Ministry of Finance

The damage to the Fukushima nuclear power plant as a result of the earthquakes and tsunami in March 2011 has also adversely affected the beef industry in Japan. In mid July, cattle shipments from four prefectures—Fukushima, Miyagi, Iwate and Tochigi—were banned, as many cattle were identified as having eaten contaminated rice straw. The four prefectures account for 14 per cent of the Japanese cattle herd. In late August 2011 the ban on shipments was lifted, however all beef from farms known to have possessed contaminated rice straw will be subject to scientific testing. Remaining farms in the four prefectures will need to submit samples in every shipment for testing before it can be sold.

Exports to the Republic of Korea to rise

Australian beef exports to the Republic of Korea are forecast to increase by 4 per cent in 2011–12 to 145 000 tonnes (shipped weight). Korean demand for imported beef is expected to remain strong over the coming year due to continued substitution of imported beef for local product due to ongoing concerns around foot and mouth disease. However, the low US dollar against the Australian dollar and a gradual acceptance of US beef in the Korean market could lead to increased competition from US beef.

Korean beef imports, by country



Source: Korea Meat Trade Association

Australian beef exports to the Republic of Korea increased by 12 per cent in 2010–11 to 139 000 tonnes. This can be partially attributed to the outbreak of foot and mouth disease in late 2010 in the Republic of Korea, which resulted in removal from the supply chain of some of the domestic herd and replacement by US and Australian beef imports.

Other markets

With demand for Australian beef forecast to be generally subdued in the major markets of Japan, the United States and the Republic of Korea, beef exports to other markets are forecast to grow by 1 per cent in 2011–12 to 290 000 tonnes (shipped weight). This follows a 34 per cent increase in 2010–11 to 287 000 tonnes. The largest increase was to the Russian Federation (up 200 per cent to 71 000 tonnes), which was assisted by reduced volumes of beef imports from Latin America.

Live exports to fall

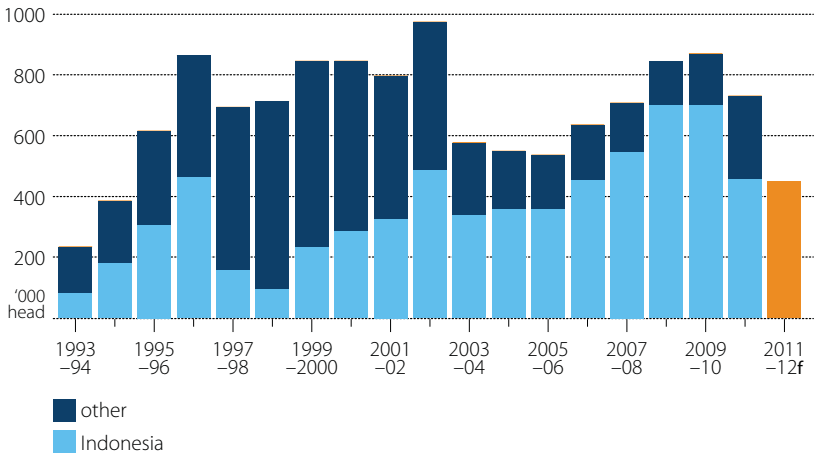
In early June 2011, the Australian Government suspended live cattle exports to Indonesia for the purpose of slaughter. On 6 July, the Minister for Agriculture, Fisheries and Forestry signed the Export Control Repeal Order 2011 to lift the suspension of trade in live exports to Indonesia provided that supply chain assurance principles are in place to achieve internationally agreed animal welfare outcomes.

Total live cattle exports in 2011–12 are forecast to fall to around 450 000 head. However, there is considerable uncertainty as to how quickly live exports to Indonesia will increase over the remainder of 2011–12.

In 2010–11, exports of live cattle for slaughter from Australia fell by 16 per cent to 728 000 head. The largest decline was in cattle to Indonesia, which fell by 35 per cent to 456 000 head. This

decline mainly resulted from Indonesia enforcing a 350 kilogram live weight limit and issuing fewer import permits. The proportion of cattle shipped to markets other than Indonesia increased from 7 per cent to 37 per cent of total volume in 2010–11, the highest in five years. This was driven mainly by a rise of 100 000 head of cattle exported to Turkey.

Live export volumes



Indonesian live exports

On 6 July 2011, 29 days after imposition of the suspension on live cattle exports to Indonesia, the Minister for Agriculture, Fisheries and Forestry, Senator the Hon. Joe Ludwig signed the Export Control Repeal Order 2011, lifting the suspension provided that supply chain assurance principles were in place to achieve internationally agreed animal welfare outcomes. The first shipment of live cattle bound for Indonesia left Australia on 10 August 2011.

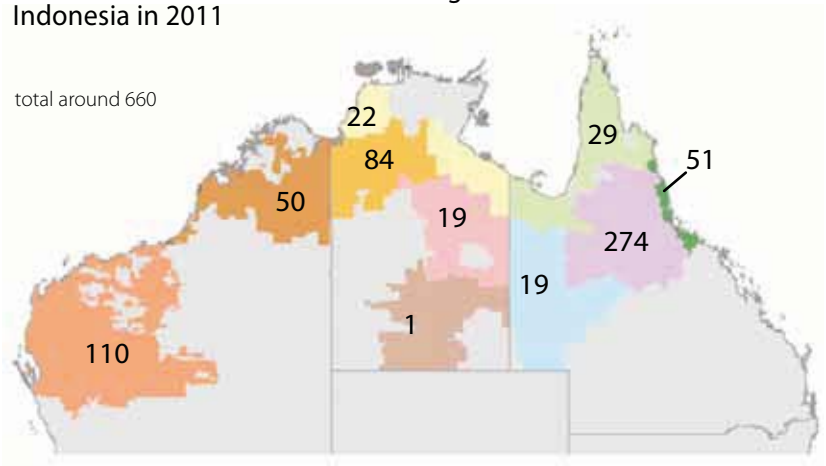
Effect of suspension

To assist an assessment of the effects of the suspension of trade, ABARES conducted a survey of farm businesses in northern Australia in late June and early July 2011 (prior to the suspension being lifted). The survey revealed that around 660 (of the 1459 with more than 100 head of cattle) farm businesses in northern Australia intended selling cattle for export to Indonesia in 2011. Of these, around 300 intended exporting more than 50 per cent of their total cattle turn-off to Indonesia.

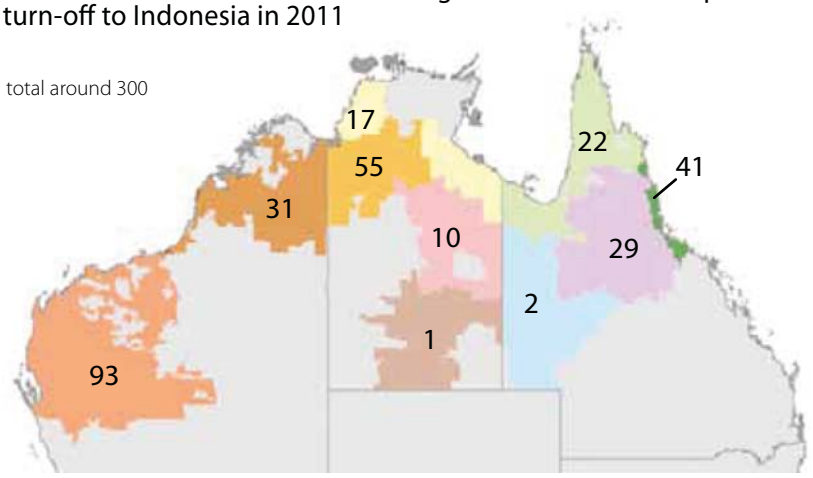
continued...

Indonesian live exports continued

Number of farm businesses intending to sell cattle to Indonesia in 2011



Number of farm businesses intending to sell more than 50 per cent turn-off to Indonesia in 2011



At the time of the survey, around 278 000 head were still available to be exported to Indonesia over the reminder of 2011. Farm businesses in northern Australia intended to export 597 000 head of cattle to Indonesia in 2011, of which 375 000 remained unsold at the time of the survey. Of the 375 000 unsold, 274 000 were ready to be shipped to Indonesia.

The suspension of live exports to Indonesia placed financial stress on many farm businesses in northern Australia. In response to reduced revenue, around 46 per cent of farm businesses intended to temporarily lower costs by reducing non-essential spending on capital and repairs, adjusting herd management, delaying loan repayments, and reducing staff numbers. Of the farms intending to export cattle to Indonesia, 68 per cent were not actively seeking alternative markets, either foreign or domestic. Around 5 per cent of farm businesses indicated that if the suspension lasted more than a few months, they would cease operations.

continued...

Indonesian live exports continued

Current situation

As at 14 September 2011, the Australian Government had received requests for the export of 81 699 head of cattle; of these, more than 33 000 had been shipped.

During the four weeks the suspension was in place, prices of trade steers, heavy steers and medium cows fell in all states by an average of 3 per cent, before recovering 1 per cent in the four weeks after the suspension ended.

Beef and veal outlook

		2009–10	2010–11 s	2011–12 f	% change
Cattle numbers b	million	26.6	27.4	28.0	*2.2*
– beef	million	24.0	24.9	25.5	*2.4*
Slaughterings	'000	8 364	8 097	8 009	*– 1.1*
Production	kt	2 109	2 133	2 124	*– 0.4*
Exports (shipped weight)					
– to United States	kt	211	160	160	*0.0*
– to Japan	kt	350	351	325	*– 7.4*
– to Korea, Rep. of	kt	124	139	145	*4.3*
– total	kt	899	937	920	*– 1.8*
– value	A$m	3 953	4 327	4 079	*– 5.7*
Live cattle	'000	871	728	450	*– 38.2*
Price					
– saleyard	Ac/kg	288	323	310	*– 4.0*
– US import	USc/kg	319	391	379	*– 3.1*
– Japan import	USc/kg	511	575	547	*– 4.9*

b At 30 June. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Department of Agriculture, Fisheries and Forestry; Australian Bureau of Statistics

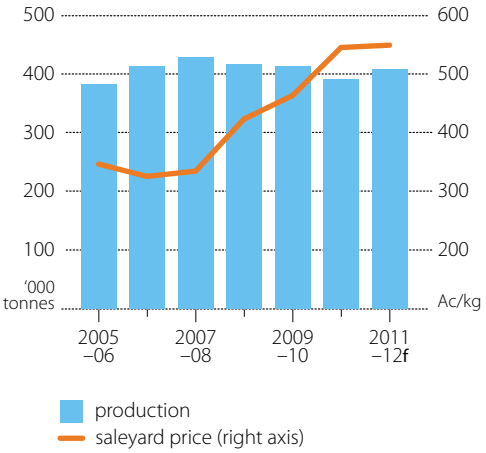
Sheep meat

Gwendolen Rees

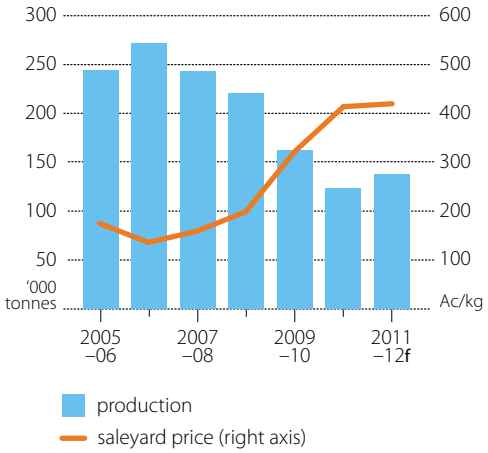
The Australian weighted saleyard price of lambs in 2011–12 is forecast to remain similar to 2010–11 in year-average terms at around 550 cents a kilogram (carcass weight). Increased lamb production after a season of strong restocking activity in 2010–11 is expected to be matched by increased demand in key developing markets, such as China, as well as some recovery in domestic lamb consumption. Demand for ewe lambs for restocking is expected to remain strong, exerting upward pressure on prices.

Saleyard sheep prices are forecast to average slightly higher in 2011–12 compared with 2010–11, at around 420 cents a kilogram (carcass weight). Demand for sheep by processors and live exporters is expected to be strong, as final demand in both domestic and overseas markets is forecast to increase. Retention of older ewes for restocking by prime lamb producers is expected to increase in certain regions, especially in Western Australia where seasonal conditions have improved and are assumed to be favourable. In other areas, restocker demand for ewes may ease as the rebuilding of flock numbers in 2010–11 has provided a base for increased sheep meat production in 2011–12. Given the favourable outlook for wool prices, retention of merino wethers by wool producers is also expected to increase.

Australian lamb



Australian mutton

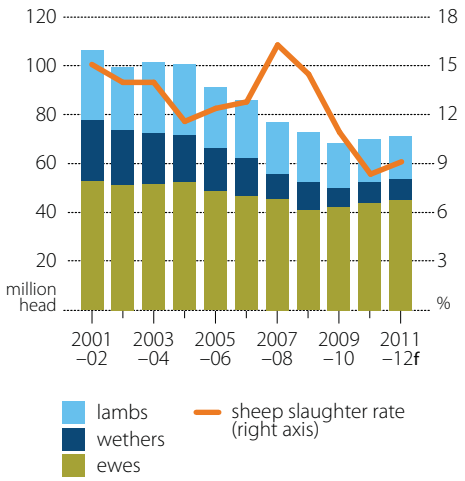


Restocking increases Australian sheep numbers

The Australian sheep flock is forecast to increase by 2 per cent in 2011–12 to just over 71 million head, following an estimated rise of 3 per cent in 2010–11. Favourable seasonal conditions combined with producer confidence in the price outlook for sheep products have resulted in strong restocking activity that is expected to continue for the remainder of the current season. In 2010–11, sheep and lamb slaughter decreased by 27 per cent and 8 per cent, respectively, despite strong prices offered by processors and live exporters.

Lamb slaughter is forecast to increase by 6 per cent in 2011–12 to 19 million head, reflecting the improved availability of lambs. Joining rates are expected to remain high, and industry information on scanning results indicate that the incidence of multiple births could be relatively high this season. However, the effect on flock numbers will depend partly on seasonal conditions, which are a key factor in lamb death rates.

Australian sheep flock

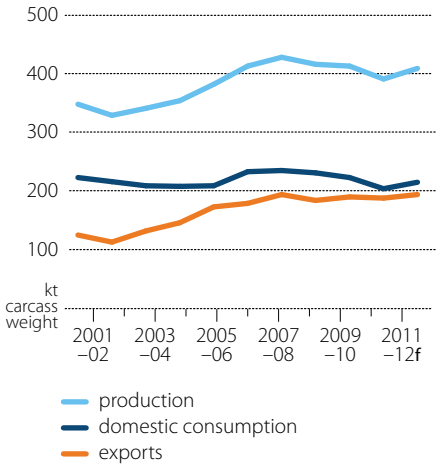


Lamb production is forecast to increase as a result of increased slaughterings to around 409 000 tonnes. Lamb carcass weights are assumed to decline back toward historical averages after increasing to a high of 21.6 kilograms in 2010–11.

Sheep slaughter is forecast to rise by 12 per cent in 2011–12 to 6 million head. Significant flock rebuilding activity in 2010–11 is expected to increase the number of sheep available for slaughter. An assumed return to average type seasonal conditions, combined with ongoing strong demand from meat processors, is expected to result in increased sheep slaughter.

Mutton production is forecast to increase to 138 000 tonnes in 2011–12, a 12 per cent increase from the previous season. This follows the expected increase in sheep slaughter, as carcass weights are assumed to remain relatively high, as in the previous season, at around an average of 23 kilograms.

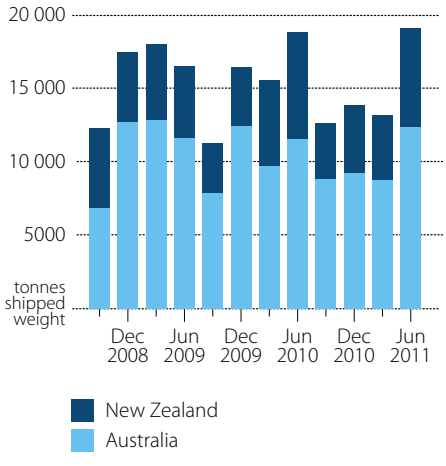
Australian lamb exports and domestic consumption



Australian lamb exports to increase

Australian lamb export volumes are forecast to increase in 2011–12 by 3 per cent, to 162 000 tonnes shipped weight (or around 195 000 tonnes in carcass weight equivalent). Although domestic lamb consumption is expected to increase this year, the proportion of lamb production exported is expected to remain near historical highs. Unit export lamb prices are forecast to remain high, reflecting continued strong demand in overseas markets. The value of Australian lamb exports is forecast to increase in 2011–12 by 4 per cent to $1.07 billion.

US lamb imports
quarterly, ended June 2011



Source: United States Department of Agriculture

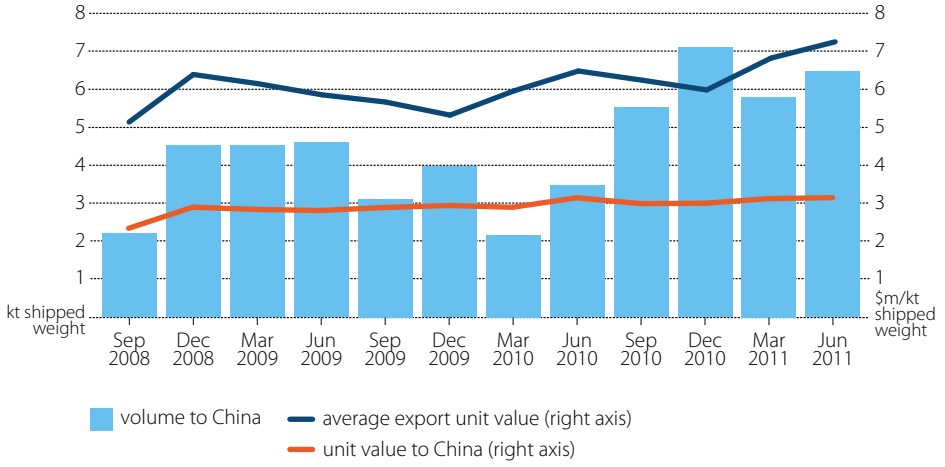
United States and China to import more Australian lamb

Lamb exports to the United States are forecast to increase by 4 per cent in 2011–12 to 35 000 tonnes shipped weight. Import demand for lamb is expected to increase, which will support higher shipments of Australian lamb to that market.

Lamb is considered a niche product in the United States, and as such is less likely to be affected by poor performance of the US economy than more widely consumed meats such as beef. According to the US Department of Agriculture, per person lamb consumption in the United States in 2012 is expected to remain largely unchanged at around 0.4 kilograms. In contrast, US lamb production is expected to remain fairly constant, resulting in increased lamb imports in 2011–12. This increased import demand is expected to be shared between Australia and New Zealand.

The importance of China as an export destination for Australian lamb is expected to continue to increase in 2011–12. Although China is a rapidly-growing market for Australian sheep meat, export unit prices in the Chinese market remain considerably below those of more established OECD markets for both mutton and lamb because of the type of cuts exported to that market.

Australian lamb exports to China
quarterly volume and unit value



Export competition from New Zealand to increase

New Zealand is Australia's only major export competitor in overseas sheep meat markets. In 2010–11, the New Zealand sheep flock declined by 2 per cent, as a poor lambing season in spring 2010 combined with strong mutton prices inhibited efforts to build flock numbers.

According to Beef and Lamb New Zealand, favourable seasonal conditions in New Zealand are expected to result in the number of lambs marked this season increasing by around 5 per cent. This, if it occurs, will increase total lamb availability and, through this, production and exports. As a result, increased competition with Australian lamb is likely in some overseas markets.

Export demand for mutton remains strong

Australian exports of mutton are forecast to increase by 10 per cent in 2011–12 to 95 000 tonnes shipped weight. This increase is less than the forecast increase in mutton production, as more production is expected to be directed into the domestic market. Last season, the proportion of mutton production exported rose to an estimated 90 per cent, considerably higher than the average of 81 per cent for the five years ending 2009–10. While total export volumes are forecast to increase, stronger competition from New Zealand in export markets is expected to result in the share of production exported declining slightly.

The total value of mutton exports is forecast to increase by 17 per cent, to around $450 million. Continued strong demand in the Middle East and developing countries in Asia, particularly China, are expected to maintain export unit returns despite the increased volumes shipped.

Australian live sheep exports
quarterly, ended June 2011

Live sheep exports

Demand for live sheep by consumers in the Middle East is expected to remain strong, and increases in Australian sheep numbers should help facilitate an increase in live sheep exports relative to the low that occurred in 2010–11 of 2.9 million head.

Under the assumption of no changes to current export arrangements for live sheep, export numbers are forecast to increase by 6 per cent in 2011–12, to around 3.1 million head. Live sheep export prices are forecast to ease by around 4 per cent from the exceptionally high average of around $120 per head in 2010–11.

Live sheep trade with the Middle East

In recent years the largest market for live sheep exports has been the Middle East, a trade that developed during the 1970s. Of the 2.9 million sheep Australia exported live in 2010–11, over a million (40 per cent) were destined for Kuwait, 15 per cent for Bahrain and 14 per cent for Turkey. Other major destinations included Qatar (11 per cent) and Jordan (7 per cent).

Middle Eastern demand for live sheep is principally met through live imports from Australia and North Africa (Sudan). Sheep from North Africa are cheaper than those from Australia and have therefore been more attractive to Middle Eastern buyers in the past few years given the increasing price of Australian sheep. However, one of the disadvantages of sheep from Africa is that they are less likely to be free of disease than Australian sheep. In the past this has led to bans on livestock imports from the Horn of Africa because of trans-boundary disease risks. Thus, while the recent lower price for sheep from Africa has shifted demand away from Australian livestock, the consistent quality of Australia's product, along with its low disease status, has helped maintain Australia's strong presence in Middle East markets.

Patterns of trade in sheep in the Middle East show a significant amount of intra-regional trade. In particular, Saudi Arabia imports significant numbers of sheep from neighbouring countries, many of which are likely to ultimately be sourced from outside the region (Australia and Sudan).

Multi-destination voyages

Market interdependence is a significant feature of the Australian live sheep export industry. A large proportion of voyages unload animals at multiple ports, particularly in the gulf area of the Middle East. In 2010–11, 61 per cent of live sheep shipments unloaded at ports in more than one country (table 1). In 2009–10, this proportion was 90 per cent.

1 Australian live sheep consignments (excluding breeding sheep) transported by sea, 2010–11

	2008–09	2009–10	2010–11
No. of voyages	86	58	67
No. shipped, annual	3 866 779	3 173 286	2 793 592
Average no. loaded per voyage	47 573	45 052	43 036
No. multi-destination voyages	51	52	41
Voyages that are multi-destination	59%	90%	61%

Note: Multi-destination voyages are those unloading in two or more destination countries.
Source: Australian Quarantine and Inspection Service

In recent years, live sheep exports have been delivered via around 20 different routes (table 2). The relative importance of particular routes varies from year to year, but voyages unloading at a combination of Gulf States constitute a significant proportion of voyages each year. In 2010–11, the most important routes for feeder/slaughter consignments were Kuwait (single destination), Bahrain→Kuwait→United Arab Emirates and Bahrain→Kuwait→Qatar. These routes accounted respectively for 16 per cent, 15 per cent and 12 per cent of total voyages made by sea in that year. These routes collectively accounted for 37 per cent of the total number of sheep shipped in 2010–11.

continued...

Live sheep trade with the Middle East continued

Exporters use multi-destination voyages to balance operational requirements with the preferences of importing countries. Information from Australian exporters suggests importing countries have a preference for smaller consignments at greater frequency compared to larger consignments at lower frequency. However, in many instances, exporters require a minimum number of sheep per consignment in order to make shipments cost-effective.

2 Multiple-destination voyages for Australian live sheep exports (excluding breeding sheep), 2010–11

Voyage	No. of voyages
Kuwait	11
Bahrain→Kuwait→United Arab Emirates	10
Bahrain→Kuwait→Qatar	8
Bahrain→Kuwait	6
Saudi Arabia	6
Turkey	6
Other	20
Total 2010–11	67
No. multi-port voyages	41
Voyages that are multi-destination	61%

Note: Multi-destination voyages are those unloading in two or more destination countries.
Source: Australian Quarantine and Inspection Service

Sheep meat outlook

		2009–10	2010–11	2011–12 f	% change
Slaughterings					
Sheep	'000	7 333	5 341	6 000	*12.3*
Lamb	'000	19 478	17 880	19 000	*6.3*
Production b					
Mutton	kt	162	123	138	*12.2*
Lamb	kt	413	391	409	*4.6*
Exports (shipped weight)					
Mutton	kt	111	86	95	*10.5*
Lamb	kt	157	157	162	*3.2*
– to United States	kt	35	33	35	*6.1*
Total sheep meat	kt	268	243	257	*5.8*
– value	$m	1 348	1 430	1 517	*6.1*
Live sheep	'000	3 055	2 909	3 100	*6.6*
– value	$m	297	346	356	*2.9*
Saleyard prices					
Mutton	Ac/kg	322	414	420	*1.4*
Lamb	Ac/kg	464	546	550	*0.7*

b Carcass weight. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; Department of Agriculture, Fisheries and Forestry

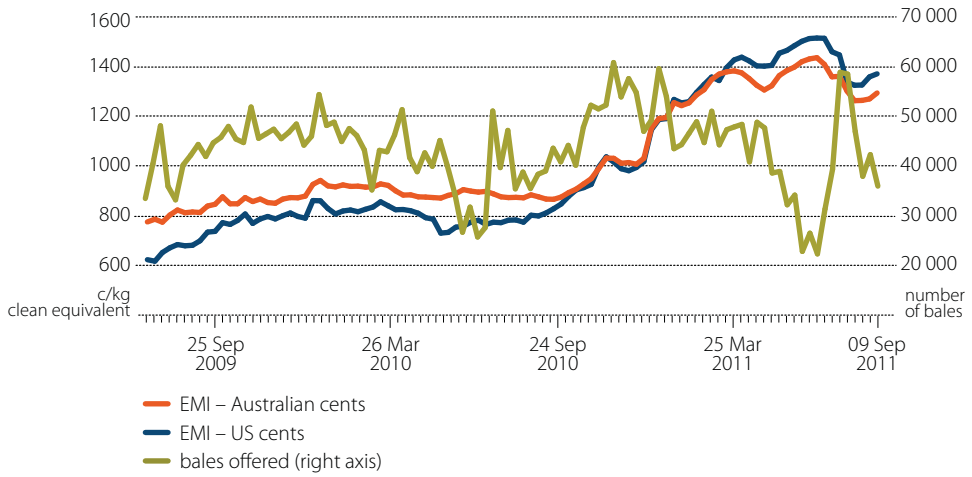
Wool

Gwendolen Rees

The Australian Eastern Market Indicator (EMI) price for wool is forecast to increase by 6 per cent in 2011–12 and average 1200 cents a kilogram clean. Supplies of Australian wool are expected to remain largely unchanged from 2010–11 while demand is expected to be marginally stronger, despite the current uncertainty surrounding the global economic outlook.

Prices are expected to fall from the highs of more than 1400 cents that occurred near the end of the 2010–11 wool selling season. Because of lower prices in the first half of 2010–11, the EMI averaged around 1132 cents a kilogram for 2010–11 as a whole. For the first eight weeks of the 2011–12 wool selling season, prices averaged 49 per cent higher in Australian dollar terms compared with the same period last season, despite a 12 per cent increase in the number of bales offered at auction.

Australian eastern market indicator wool price
weekly, ended 9 September 2011



The possibility of surplus retail stocks of wool products building up in the United States and the European Union over the remainder of the current season and ultimately lowering demand for raw wool is a key consideration underlying the current price forecast.

Slow growth in demand expected

Demand for wool products is forecast to remain relatively firm over the next 12 to 18 months. Economic growth in OECD countries is assumed to be weak in the short term, particularly in the United Kingdom, the United States and Japan—all key consumers of wool products. There may be short-term declines in consumption of wool products in these OECD countries, but, for

the year as a whole, global demand for raw wool is forecast to grow, albeit at a slow rate. In China, demand growth is expected to continue and will be supported by growth in domestic consumption.

Chinese import demand driven by domestic market

Chinese demand for Australian raw wool in 2011–12 is expected to grow compared with the previous season, notwithstanding the potential for short-term declines in wool consumption in the major OECD countries.

The outlook for the Chinese domestic market, which now consumes up to 50 per cent of Australian wool exported to China, remains positive. In China, economic growth is expected to moderate in 2012. However, as the Chinese Government is continuing to support development of that country's textile industry, concentrated marketing of wool products to Chinese consumers is expected to increase per person wool consumption in key cities like Shanghai and Beijing.

There is evidence to suggest wool demand from the Chinese textile industry is likely to remain strong. In May 2011, results from a survey of the Chinese wool textile industry, conducted by the International Wool Textile Organisation, indicated that favourable business conditions were expected to continue for the remainder of 2011 and into 2012. This is in sharp contrast to wool demand in some OECD countries, such as the United States and the European Union.

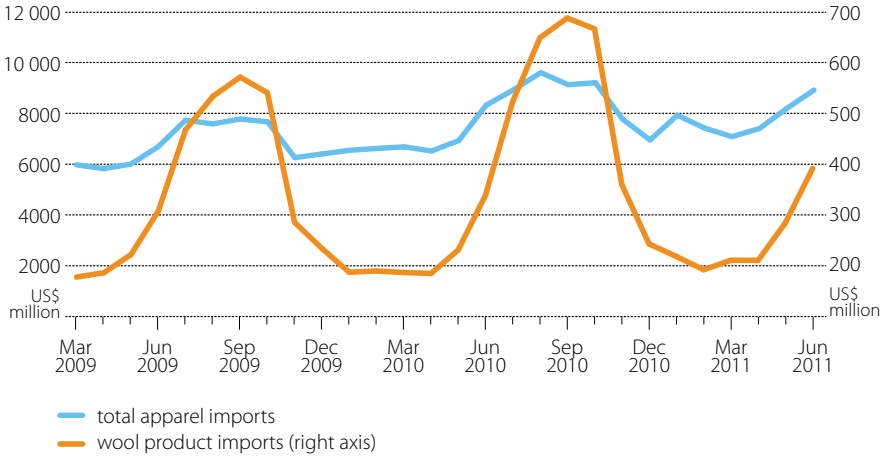
The Chinese wool processing industry made significant investments in processing capacity and technical innovation in 2010, and investment has continued in 2011. Industry information indicates that several larger Chinese wool processors have upgraded machinery and expanded productive capacity. According to the International Textile Manufacturers Federation, global shipments of long staple spindles (used in wool processing) increased by 163 per cent in 2010 to 84 000 spindles. In comparison, shipments of short staple spindles (used for other fibres such as cotton) increased by 75 per cent to 12.5 million spindles over the same period. Shipments to Asia accounted for the majority of the increases in both categories.

Slower demand growth in some apparel-importing countries

In the United States, total consumption of wool products is expected to rise in 2011–12, although at a slow rate due to economic uncertainty. Imports of wool products have been rising in the past few months, in line with usual seasonal trends. However, there remains a distinct possibility that consumption of wool products could weaken significantly during the remainder of 2011–12. The US economy is assumed to grow at a very moderate pace, with improvement from the current economic weakness not expected until well into 2012.

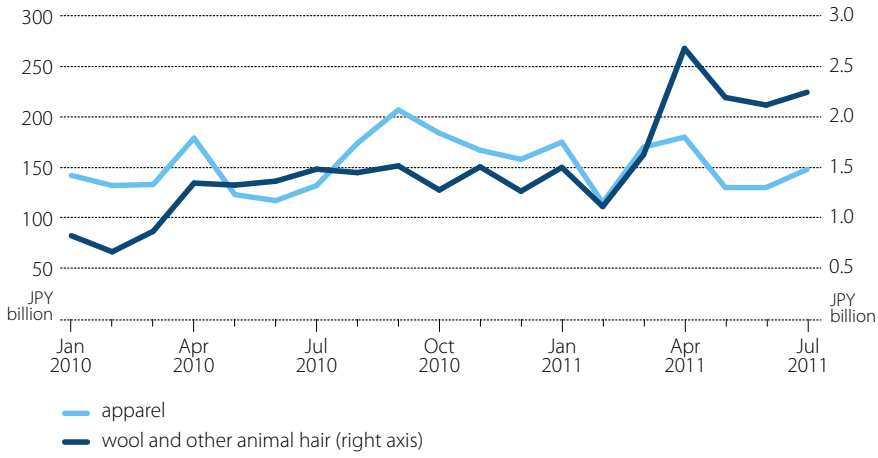
In 2010–11, US imports of wool products rose by 18 per cent, compared with a 16 per cent rise in total textile and apparel imports.

US monthly apparel imports
monthly, ended June 2011



Considerable uncertainty surrounds the economic outlook for the European Union and consumers are expected to reduce spending on discretionary and luxury items, including wool apparel products, for the remainder of 2011 and into 2012. Weaker economic growth in the United States and the European Union could reduce purchases of wool products, leading to a build-up of retail stocks. If such a build-up eventuates, it could depress new orders by retailers and reduce the demand for raw wool in the latter half of 2011–12. This would exert downward pressure on prices, particularly for superfine wools used to manufacture luxury products. However, stocks throughout the wool pipeline are currently low and this has the potential to mitigate some adverse impacts of a decrease in consumer demand for wool products.

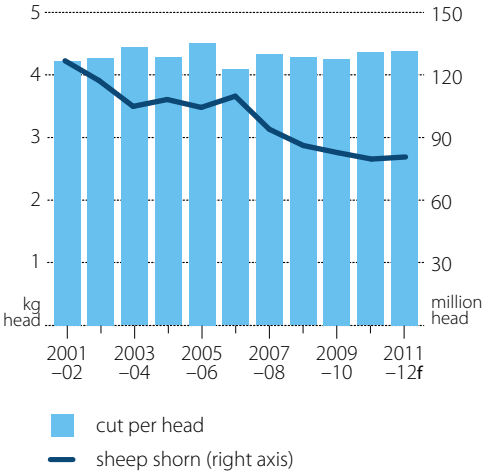
Japan textile imports from China
monthly, ended July 2011



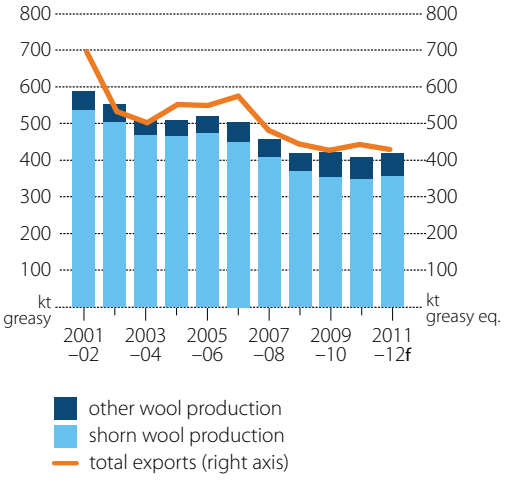
Source: Japan Ministry of Finance, *Trade statistics of Japan*

In Japan, the natural disasters that occurred in March 2011 and associated economic effects are expected to slow growth in import demand for wool apparel in the short term. For the June quarter 2011, the value of apparel imports was largely unchanged from the previous quarter and the same quarter a year earlier. As rebuilding activity boosts economic growth and consumer confidence improves, growth in wool product imports is expected to recover, but this is expected to occur toward the end of 2011–12 and into the following year.

Sheep shorn and cut per head



Australian wool



Australian wool supplies largely unchanged

Wool supplies (production plus stocks) are expected to remain relatively stable in 2011–12. Although shorn wool production is forecast to increase modestly, opening stocks were low after being drawn down significantly in the second half of 2010–11.

Australian shorn wool production is forecast to increase by almost 1 per cent in 2011–12 to around 355 000 tonnes. Flock rebuilding is estimated to have increased sheep numbers to around 70 million head at 30 June 2011, and numbers are expected to increase further in 2011–12 as rebuilding continues. This is forecast to result in the number of sheep shorn increasing by 2 per cent in 2011–12 to around 81 million head. Reflecting the assumption of favourable seasonal conditions in 2011, wool cut per head is assumed to remain relatively high at around 4.4 kilograms.

Production of 'other' wool (including slipe and fellmongered wool and wool on skins) is expected to increase by 7 per cent in 2011–12 to around 65 000 tonnes in line with the forecast increases in the slaughter of sheep and lambs.

The combined increases in shorn and 'other' wool production mean that total wool production is forecast to increase by around 3 per cent in 2011–12 to around 420 000 tonnes.

Australian wool exports to fall

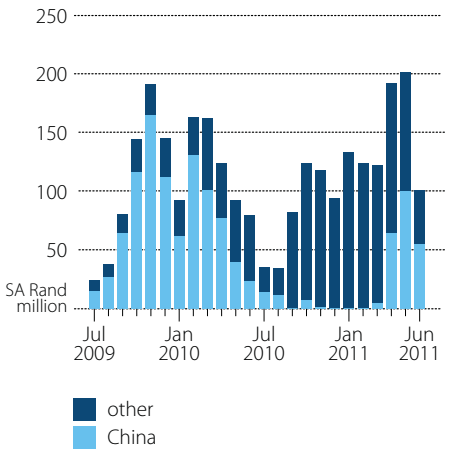
The volume of Australian wool exports is forecast to fall by 3 per cent in 2011–12 to around 430 000 tonnes greasy equivalent, despite the expected increase in production. In 2010–11, exports totalled 444 000 tonnes, or around 108 per cent of annual production. Even after accounting for lags between production and export, these data indicate significant export volumes being drawn from wool stores in 2010–11.

The total value of wool exports in 2011–12 is forecast to be largely unchanged at around $3.1 billion. Although export volumes are forecast to fall, export prices are expected to be higher. Last season, the average export price of greasy wool increased by 22 per cent, compared with a rise in the average EMI of 30 per cent.

Wool production decreasing in competitor countries

Wool production is expected to decline in 2011–12 in major wool-producing countries other than Australia. This lower production from competing countries is expected to increase demand for Australian wool. However, increased competition for Australian wool is expected in the Chinese market with the re-entry of South African exports.

South African greasy wool exports
monthly



Source: Capewools South Africa

In South Africa, wool production is forecast to remain relatively low this season. Disease, particularly the outbreak of Rift Valley Fever in 2010, and predation are expected to hamper restocking.

Despite the forecast of lower production, South African wool exports to China are expected to increase in 2011–12. In August 2010, China placed a ban on raw wool imports from South Africa as a result of the outbreak of Rift Valley Fever. Subsequently, after an outbreak of foot and mouth disease, exports to all destinations were halted for all raw wool not treated to inactivate the foot and mouth virus.

Exports of South African wool to China have resumed since April 2011. China is the destination for more than 30 per cent of total South African wool exports by value.

A small decline is forecast for New Zealand wool production in the current season. According to Beef and Lamb New Zealand, the national sheep flock is expected to increase by around 1 to 2 per cent in 2011–12, after a decrease of more than 2 per cent in 2010–11 to 31.9 million head. However, the majority of this increase is expected to focus on meat production.

Information from the Uruguayan Wool Secretariat indicates wool production in Uruguay is also expected to fall this season. Production in Argentina is assumed to remain stable.

Wool outlook

		2009–10	2010–11 s	2011–12 f	% change
Sheep numbers **b**	million	68	70	71	*1.4*
Sheep shorn	million	83	80	81	*1.3*
Wool production (greasy)					
– shorn	kt	353	349	355	*1.7*
– other **c**	kt	70	61	65	*6.6*
– total	kt	423	409	420	*2.7*
Wool exports					
– volume (gr. equiv.)	kt	428	444	430	*– 3.2*
– to China	kt	331	326	323	*– 0.9*
– value **d**	$m	2 307	3 053	3 086	*1.1*
Market indicator (clean)					
– eastern	Ac/kg	872	1 132	1 200	*6.0*
– western	Ac/kg	863	1 092	1 164	*6.6*
Auction price (greasy)	Ac/kg	551	734	782	*6.5*

b At 30 June. **c** Includes wool on sheepskins, fellmongered and slipe wool. **d** Balance of payments basis. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; Australian Wool Exchange

Dairy

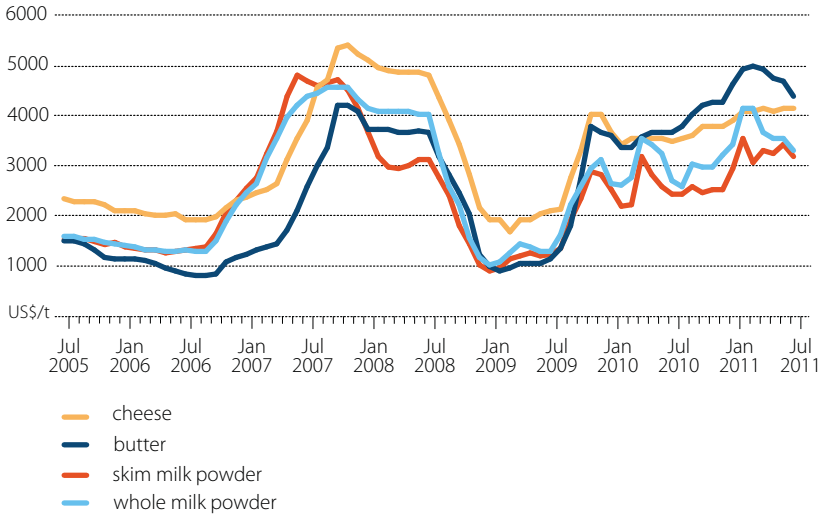
David Barrett

World prices for most dairy products are forecast to remain relatively high in 2011–12, supported by continuing, but slower, growth in global dairy demand. World dairy trade was strong in the first half of 2011 driven by higher imports by China, the Russian Federation, South-East Asia and Northern Africa.

World prices of cheese are forecast to increase by 1 per cent in 2011–12 while world prices of whole milk powder and skim milk powder are forecast to remain largely unchanged compared with the averages of 2010–11. World butter prices are forecast to average around 10 per cent lower in 2011–12.

A key risk to this price outlook is lower than assumed economic growth in the main consuming and importing countries, such as the European Union and South-East Asia. Such an outcome would reduce global demand for dairy products and place downward pressure on world prices.

World dairy prices



Source: Dairy Australia

Global supplies to increase

While forecast higher feed grain prices are expected to constrain growth in milk production in the European Union and the United States in 2011–12, favourable seasonal conditions are expected to lead to higher production in New Zealand, Australia and Argentina.

European Union

Following a 2.6 per cent increase in EU milk production in the 2010–11 marketing year (April to March) milk output is forecast to rise by around 2 per cent in 2011–12. While milk prices are expected to remain relatively high, forecast higher feed grain prices are likely to limit the growth in milk production in many EU member countries during the remainder of 2011–12. Milk production is expected to increase in Germany, France, the Netherlands and Ireland in 2011–12.

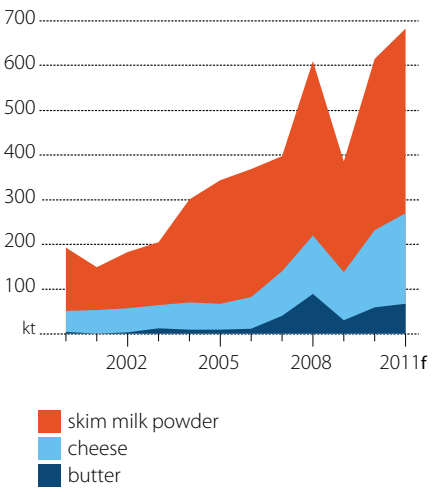
Part of the forecast higher EU milk production in 2011–12 is expected to be diverted to output of butter and skim milk powder reflecting favourable relative returns. EU cheese production is expected to increase in 2011–12 in response to both higher domestic and export demand, particularly from the Russian Federation.

United States

US milk production is forecast to increase by 1.6 per cent in 2012 to 90.2 million tonnes. Forecast higher grain prices in the United States are expected to reduce profitability in the dairy sector leading to increased culling of dairy cows over the remainder of 2011 and into 2012. Overall, the US dairy cow herd is forecast to contract in 2012. However, continued gains in milk yield per cow are expected to more than offset the effects on output of a smaller dairy cow herd.

US production of butter is forecast to rise in the second half of 2011 and in 2012, leading to some re-building of commercial inventories. US cheese production is also forecast to rise in 2011–12 in response to firm export demand.

US dairy exports

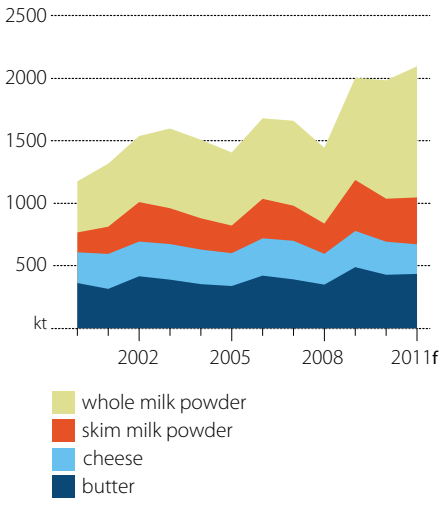


Source: USDA

Except in 2009, when global dairy trade contracted sharply, US dairy exports have increased continuously since 2001. The United States is now the third largest dairy exporter behind New Zealand and the European Union. Depreciation of the US dollar supported the price competitiveness of US dairy exports in recent years.

US exports of skim milk powder and cheese are forecast to rise in 2012 in response to forecast higher domestic dairy production and strong global demand for dairy imports. In 2011, US exports of skim milk powder are forecast to rise by 8 per cent to 414 000 tonnes, representing around one-third of global trade. US cheese exports are forecast to rise by 17 per cent to 203 000 tonnes in 2011 with the main markets being Mexico, Egypt, Saudi Arabia and the Republic of Korea.

New Zealand dairy exports



Source: USDA

New Zealand

New Zealand milk production is forecast to rise by around 5 per cent in 2011–12 (marketing year June to May) to 18.8 million tonnes as producers respond to historically high milk prices and favourable seasonal conditions. The forecast increase in milk production is expected to be directed largely to manufacture of whole milk powder driven by continuing Chinese import demand.

In 2010–11, New Zealand milk production increased by 5.2 per cent following favourable seasonal conditions in autumn.

Argentina

Assuming favourable seasonal conditions, Argentine milk production is forecast to rise by around 4 per cent in 2011 to 11.1 million tonnes. Following drought in 2010 in the main dairying regions, milk production increased by around 16 per cent in the second half of 2010–11. Capacity constraints in the processing sector are likely to limit the prospect of higher whole milk powder production in Argentina in 2011–12. Consequently, excess milk is likely to be used to manufacture cheese.

World trade to rise

Despite an assumed slowing in economic activity in many developing countries through the remainder of 2011–12, global trade in dairy products is expected to remain firm.

Chinese imports of milk powders are forecast to remain strong in 2011–12 following large increases in imports over the past two years. Chinese imports of whole milk powder are forecast to increase by one-third to reach around 440 000 tonnes in 2011, accounting for around 25 per cent of world trade. Despite a slowing of economic growth in China, further growth in consumer incomes, particularly in urban areas, is expected to lead to increased consumption of dairy products in 2012 and this is expected to lead to higher imports of milk powders.

While milk production in the Russian Federation has partially recovered from the drought-induced decline in 2010, continued growth in consumer incomes is expected to lead to increased consumption of dairy products, particularly cheese. Consequently, cheese imports by the Russian Federation are forecast to rise by around 10 per cent in 2011 to 335 000 tonnes. However, forecast higher production of butter in the Russian Federation is likely to moderate demand for imports in 2011–12.

Despite a slowdown in economic activity in Japan in 2011, imports of cheese are forecast to be similar to the previous year at around 200 000 tonnes.

Imports of cheese by the Republic of Korea are expected to increase by around 15 per cent in 2011 to 67 000 tonnes reflecting increased per person consumption and forecast lower milk production. Milk production fell in the first half of 2011 as farmers culled their herds due to an outbreak of foot and mouth disease in early 2011. Furthermore, in May 2011 the government of the Republic of Korea announced a temporary reduction in tariffs for some dairy products in order to stabilise increases in domestic prices of dairy products. It was announced that these tariff reductions would be in place until the end of 2011.

Global trade in skim milk powder in 2011–12 is expected to be supported by continuing import demand from South-East Asia, the Russian Federation, Algeria and Mexico. In the past two years Indonesia has emerged as a significant buyer of skim milk powder with imports forecast to rise by 15 per cent to around 230 000 tonnes in 2011. Algerian imports of skim milk powder are forecast to rise by around 30 per cent in 2011 to 130 000 tonnes, with the European Union being the major supplier.

Australian milk production

Australian farm-gate milk prices are forecast to decline by 2.1 per cent in 2011–12 to 42.5 cents a litre, reflecting the effect of lower Australian dollar export returns. Nevertheless, such a price outcome would still be around 14 per cent higher than the average received in 2009–10.

Opening prices for manufacturing milk for 2011–12 were set slightly higher by dairy processors in Victoria at around 35 cents per litre. Contract milk prices in northern New South Wales and southern Queensland are expected to remain close to the prices prevailing in 2010–11.

Australian milk production is forecast to increase by 2.2 per cent in 2011–12 to 9.3 billion litres, reflecting an expected small rise in the national dairy herd and favourable seasonal conditions in the main dairying regions. Favourable winter conditions in most dairying regions of south-eastern Australia are expected to ensure good supplies of pasture and fodder during spring 2011. For irrigation-dependent farms in the Murray–Darling Basin, water levels in the main storage dams have improved considerably over the past year. Water storages in Murray–Darling Basin dams were 87 per cent of capacity at the beginning of September 2011, compared with 52 per cent at the same time in 2010.

In 2010–11, national milk production rose by 0.9 per cent with output gains in Victoria, Tasmania and Western Australia.

Australian production of cheese and whole milk powder is forecast to rise by around 2 per cent in 2011–12 to 345 000 tonnes and 154 000 tonnes, respectively, reflecting higher returns relative to other dairy products.

Australian consumption

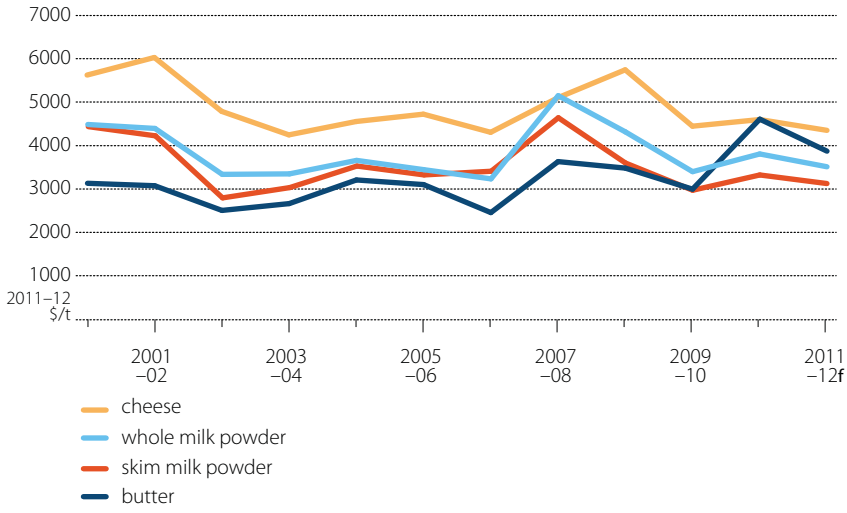
Australian consumption of market milk is forecast to rise by 1.6 per cent in 2011–12 to around 2354 million litres.

In 2010–11, milk consumption increased by 2.1 per cent to 2316 million litres. The price discounting of home brand milk by major supermarket chains since late January 2011 appears to have had some effect on total milk sales. Sales of fresh milk increased by 3.6 per cent for the five months ending June 2011 compared with the same period in 2010. By comparison, fresh milk sales increased year-on-year by 1.6 per cent in the first half of 2010–11. Between the end of January and June 2011, the share of home brand milk sold through supermarkets increased by 5 percentage points to 54 per cent while branded milk sales declined to 46 per cent. Overall, supermarkets increased their share of milk sales by around 2 percentage points to 53 per cent over the same period.

Australian dairy export earnings to fall

The value of Australian dairy exports is forecast to fall by 4 per cent in 2011–12 to around $2.25 billion following a 12.4 per cent increase in 2010–11. The forecast decline mainly reflects a lower world price for butter and the effects of an assumed appreciation of the Australian dollar.

Australian dairy export unit returns (fob)



Source: Australian Bureau of Statistics

Dairy outlook

		2009–10	2010–11 s	2011–12 f	% change
Cow numbers **b**	'000	1 596	1 610	1 620	*0.6*
Milk yields	L/cow	5 653	5 654	5 741	*1.5*
Production					
Total milk	ML	9 023	9 102	9 300	*2.2*
– market sales	ML	2 269	2 316	2 354	*1.6*
– manufacturing	ML	6 754	6 787	6 946	*2.3*
Butter **c**	kt	128	122	124	*1.6*
Cheese	kt	349	338	345	*2.1*
Whole milk powder	kt	126	151	154	*2.0*
Skim milk powder	kt	190	222	217	*– 2.3*
Farmgate milk price	Ac/L	37.3	43.4	42.5	*– 2.1*
Value of exports	A$m	2 088	2 346	2 254	*– 3.9*
World prices					
Butter	US$/t	3 477	4 683	4 200	*– 10.3*
Cheese	US$/t	3 748	4 221	4 250	*0.7*
Skim milk powder	US$/t	2 948	3 392	3 390	*– 0.1*
Whole milk powder	US$/t	3 221	3 771	3 770	*– 0.0*

b At 30 June. **c** Includes the butter equivalent of butteroil, butter concentrate, ghee and dry butterfat. **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; Dairy Australia

Fisheries

Robert New

Global demand for fisheries products as a source of protein remained strong over the past decade, providing impetus for increasing seafood production. Meeting increases in demand has been strong growth in world aquaculture (farm) production, which increased at an average rate of 6 per cent a year between 2000 and 2008. This led to a trend toward an increasing share of aquaculture production and is consistent with the United Nations Food and Agriculture Organization (FAO) assessment that, globally, wild-catch fisheries have reached their potential. Over the forecast period, global demand is expected to remain strong, supported by continued growth in aquaculture production.

The value of Australian fisheries production has declined over the past decade, attributable to a decrease in the value of production of some higher value species groups, such as rock lobster, prawns, abalone and tuna. Over the past five years, the pace of decline has slowed, primarily reflecting growth in farmed salmonids production, which partly offset continued declines in the wild-catch sector.

In 2010–11, the value of Australia's fisheries production is estimated to have remained largely unchanged at around $2.2 billion, as the negative effect on export prices of the appreciation of the Australian dollar was offset by higher production volumes. In 2011–12, a further assumed appreciation of the Australian dollar is likely to continue to affect exports, particularly for the major production species, resulting in the gross value of production remaining roughly unchanged at $2.2 billion.

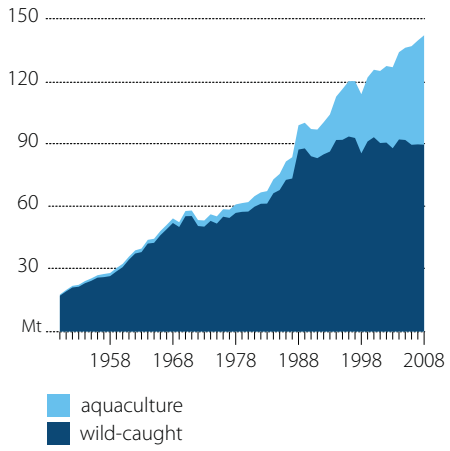
World demand: seafood consumption

The FAO estimates fisheries products account for around 15 per cent of total human protein intake. Significant variations in the contribution of fisheries products to diets is evident between developed and developing countries. Factors contributing to the variation in seafood consumption include income levels, eating habits and traditions, availability of fish and substitutes, prices, socioeconomic status and seasonality. Generally, seafood consumption is higher in developed regions (24.1 kilograms per person per year) than in developing regions (14.9 kilograms). With rising incomes and population growth, particularly in developing Asia, demand for seafood is expected to continue to grow over the foreseeable future.

World fisheries resources and production

World fisheries production increased in 2008, by 1.8 per cent to a record 142 million tonnes. Most of this growth is attributed to strong growth in aquaculture production, which increased by 5 per cent in 2008. In that year, aquaculture production accounted for around 37 per cent of the volume of world fisheries production, representing a significant increase from its 26 per cent share in 2000. In contrast to the strong growth in global aquaculture production since the late 1980s, wild-catch production has been relatively stable.

Production from wild-catch and aquaculture

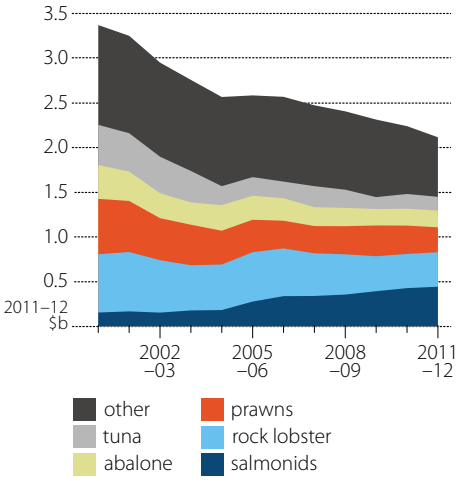


The Asian region is the largest aquaculture producer. In 2008 Asia accounted for 88 per cent of world aquaculture production in volume terms and 77 per cent in value terms. China is the largest producer in the region, accounting for around 67 per cent of the regional value of production. The main products in the region include carp, oysters, clams and prawns. Production in the Asian region is expected to continue to increase strongly over the short to medium term.

Australia's fisheries resources and production

Top five, by volume in 2009–10		Top five, by value in 2009–10	
Australian sardine	40 737 tonnes	Salmonids	$369.1 million
Salmonids	31 915 tonnes	Rock lobster	$368.8 million
Prawns	27 034 tonnes	Prawns	$324.1 million
Oysters	14 807 tonnes	Abalone	$173.6 million
Tuna	10 957 tonnes	Tuna	$125.3 million

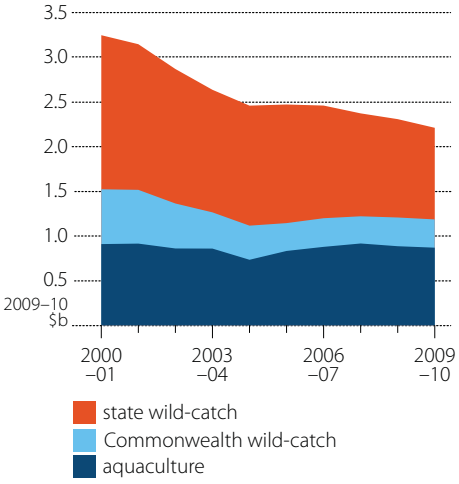
Real value of Australian fisheries production, by key species group



Historically, the vast majority of fisheries products have been wild-caught from Australia's state and Commonwealth fisheries. However, in recent years, lower volumes from wild-catch fisheries and the increasing efficiency and quality of aquaculture production has led to a significant increase in farmed seafood products.

In 2009–10, Australia's gross value of fisheries production was $2.2 billion, 4 per cent lower than in the previous year. This is the lowest gross value of production in more than a decade, having fallen by 31 per cent ($996.6 million) in real terms since 2000–01. The decline was particularly significant in the first half of the past decade. Between 2000–01 and 2004–05, gross value of production fell on average by 7 per cent a year, and between 2004–05 and 2009–10 the value fell on average by 2 per cent a year.

Real value of Australian fisheries production, by sector



The composition of the production of Australian fisheries has not changed substantially over the past few years. The top five species groups (by value) comprise salmonids, rock lobster, prawns, abalone and tuna. Rock lobster has frequently ranked as Australia's most valuable species group over the past decade. However, salmonids surpassed rock lobster to be Australia's most valuable species group in 2009–10 at $369.1 million, representing 17 per cent of the gross value of fisheries production. This was followed by rock lobster ($368.8 million, 17 per cent), prawns ($324.1 million, 15 per cent), abalone ($173.6 million, 8 per cent) and tuna ($125.3 million, 6 per cent).

The wild-catch sector

In 2000–01, the wild-catch sector accounted for around 74 per cent of Australia's gross value of fisheries production. Of this, state fisheries—generally classified as fisheries adjacent to each state and territory within three nautical miles of the coastline—accounted for 74 per cent. The remaining 26 per cent was produced in Commonwealth fisheries, which generally include areas between three and 200 nautical miles from the coastline, to where the Australian Exclusive Economic Zone extends. In 2009–10, the wild-catch share of Australia's fisheries gross value of production declined to 62 per cent, reflecting a decline in the value of catches from both state and Commonwealth fisheries.

In value terms, the largest jurisdiction in the wild-catch sector in 2009–10 was Western Australia, accounting for 26 per cent ($271.9 million) of the total value of wild-catch from state fisheries. This represented a 7 per cent decline in the gross value of production, which mainly reflected decreases in the volumes of rock lobster, abalone and scallops, as these species groups accounted for 74 per cent of the total value of the state's wild-catch production in 2009–10.

Aquaculture sector

Despite a significant decline in the early 2000s, Australia's aquaculture sector has grown by 18 per cent since 2004–05, reaching around $870 million in 2009–10. As a result, the share of aquaculture production increased from 26 per cent of total fisheries value in 2000–01 to 38 per cent in 2009–10.

The largest contributor to Australian aquaculture production is salmonids, making up 43 per cent and 42 per cent of the total aquaculture production volume and value, respectively. Between 2004–05 and 2009–10, the real value of Australian farmed salmonids production increased by 117 per cent (to $369.1 million), supported by rapid growth in Tasmanian aquaculture production.

Farmed tuna production consisting solely of farmed southern bluefin tuna from South Australia, accounted for 12 per cent ($102.2 million) of the total value of Australian aquaculture production in 2009–10. The farming of southern bluefin tuna involves transferring juvenile fish caught in the Commonwealth Southern Bluefin Tuna Fishery to farms in South Australia for maturation and fattening.

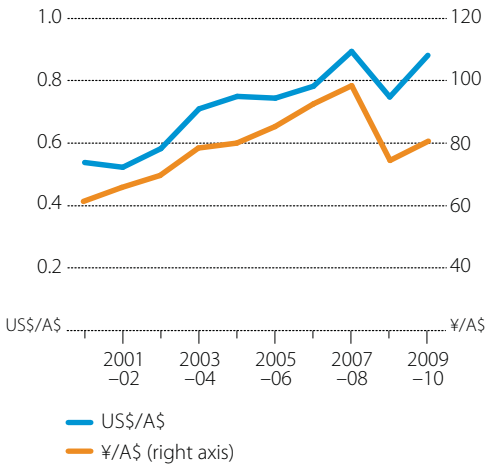
Australia's trade in fisheries products

Top five exports, by value in 2009–10		Top five export destinations in 2009–10	
Rock lobster	$400 million	Hong Kong, China	$629 million
Pearls	$244 million	Japan	$265 million
Abalone	$216 million	United States	$64 million
Tuna	$118 million	China	$44 million
Prawns	$61 million	Singapore	$39 million

box 1 Exchange rates and unit value

As a small producer and exporter of fisheries products, prices received by Australian producers are generally set on world markets in foreign currencies. Leaving aside the potential effect of other factors, a depreciating Australian dollar results in producers receiving a higher export price in Australian dollar terms, while an appreciating Australian dollar results in a lower export price.

US dollar – Australian dollar and Japanese yen – Australian dollar exchange rate



The strong appreciation of the Australian dollar between 2001 and 2008 simultaneously made exports less competitive and imports more attractive to domestic consumers. From 2001–02 to 2007–08, the Australian dollar appreciated by 71 per cent against the US dollar and 50 per cent against the Japanese yen. However, a depreciation of the Australian dollar against these currencies in 2008–09 (24 per cent against the Japanese yen and 16 per cent against the US dollar) increased Australian export unit values in 2008–09.
In 2009–10, the Australian dollar appreciated again, by 18 per cent and 8 per cent against the US dollar and the Japanese yen, respectively.

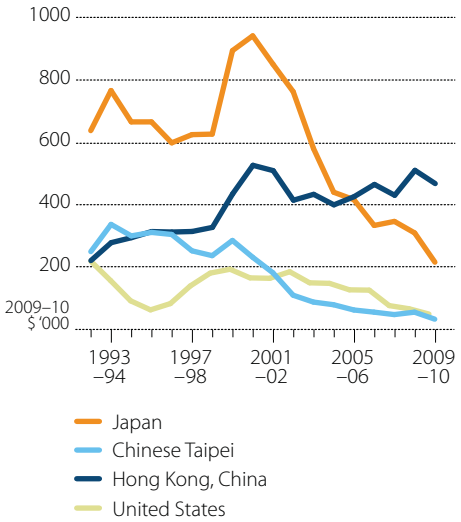
In 2009–10, the improvement in economic conditions in many of the world's major economies underpinned increased demand for fisheries products, resulting in upward pressure on prices. This more than offset the negative effect of the exchange rate appreciation, resulting in the Australian export unit value increasing slightly by 1 per cent.

Aquaculture prawn production was valued at $77.4 million in 2009–10, representing around 9 per cent of the total value of aquaculture production in the year, and a 36 per cent (or around $20.6 million) increase compared with 2008–09. Most of the increase in farmed prawn production in 2009–10 occurred in Queensland where the volume of aquaculture prawn production increased by 37 per cent (1395 tonnes) to 5216 tonnes.

Historically, Australia was a net importer of fisheries products in volume terms but a net exporter in value terms. This disparity reflected the composition of Australian fisheries exports compared with imports, with Australian fisheries exports dominated by high value products such as rock lobster, tuna and abalone and imports by lower value products such as frozen fish fillets, prepared and preserved fish, and frozen prawns. In recent years, the gap between imports and exports in value terms closed and in 2007–08 Australia became a net importer of fisheries products in value terms. In 2009–10, this trend continued although the value of Australian imports of fisheries products fell by $195.1 million (11 per cent) compared with 2008–09. Australian exports of fisheries products also decreased, by a greater amount ($282.7 million), further increasing the net import gap in the value of Australian fisheries product trade.

In 2009–10, Hong Kong remained Australia's largest export destination for fisheries products, accounting for 52 per cent ($629 million) of Australia's total fisheries product exports. Other major export destinations for Australia's fisheries products in 2009–10 included Japan (22 per cent, $265 million), the United States (5 per cent, $64 million), China (4 per cent, $44 million) and Singapore (3 per cent, $39 million). Together, these five economies accounted for 86 per cent of the total value of Australian fisheries product exports in 2009–10.

Major export markets for Australian fisheries products, 1992–93 to 2009–10



In real terms, the value of Australian fisheries exports fell by 55 per cent ($1.5 billion) between 2000–01 and 2009–10 to $1.2 billion, with most of this decline occurring over the period to 2004–05. The main factors contributing to this decline were a 38 per cent (24 739 tonnes) decrease in the volume of edible exports and falling unit export prices for most of the major export products, particularly prawns, tuna and abalone. Since 2004–05, the value of Australian fisheries exports decreased by 18 per cent ($282.7 million) as a result of lower export unit prices, following an 18 per cent appreciation of the Australian dollar over the period to 2009–10.

In 2009–10, the total value of Australian fisheries imports decreased by 11 per cent ($195.1 million) to $1.5 billion, with most of this fall attributed to lower import values of non-edible fisheries products

(predominantly pearl re-imports). Approximately 82 per cent of import value consisted of edible fishery products in 2009–10, which declined in value terms by 3 per cent ($37.0 million) to $1.2 billion driven mainly by lower import unit prices as a result of the appreciation of the Australian dollar.

Outlook

In 2010–11, Australian fisheries production is estimated to have been around $2.2 billion, representing a decline of less than 1 per cent on the previous year. Lower production of prawns was largely offset by higher production of rock lobster and salmonids.

In 2011–12, the value of fisheries production is forecast to remain largely unchanged at $2.2 billion. The assumed appreciation of the Australian dollar against the US dollar will be a major factor leading to lower export prices and increased import competition for Australian fisheries products. However, this negative pressure is forecast to be largely offset by higher production volumes for several major species.

Fisheries outlook

		2009–10	2010–11 s	2011–12 f	% change
Gross value of fisheries production					
Fish **b**	$m	897	955	996	*4.4*
Crustaceans	$m	768	770	726	*– 5.7*
Molluscs	$m	363	373	386	*3.6*
Pearls	$m	104	93	90	*– 4.1*
Total **c**	$m	2 185	2 175	2 169	*– 0.2*
Export value					
Fish	$m	258	287	268	*– 6.6*
Crustaceans **d**	$m	455	433	503	*16.1*
Molluscs **e**	$m	216	212	215	*1.5*
Other fisheries products	$m	43	60	107	*79.0*
Total seafood	$m	1 003	1 007	1 129	*12.1*
Pearls	$m	244	241	231	*– 4.1*
Total fisheries products	$m	1 247	1 249	1 360	*8.9*

b Excludes tuna transhipped at sea or captured under joint venture or bilateral agreements. **c** Also includes fish and aquaculture values not elsewhere included. **d** Includes prawns (headless and whole) and rock lobster (tails and whole). Other prawn products included in other fisheries products. **e** Includes abalone and scallops. **s** ABARES estimates. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics

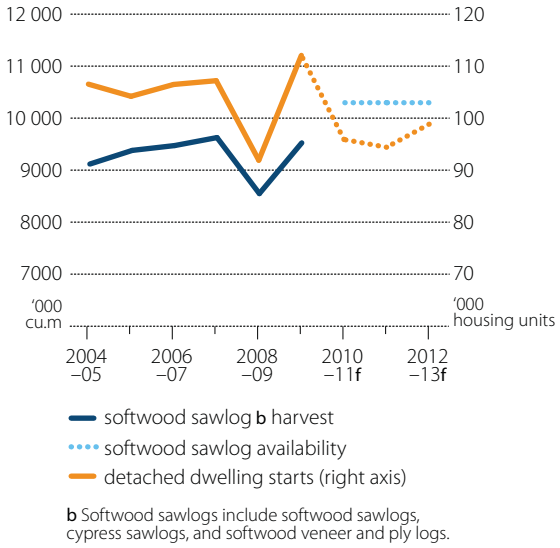
Forestry

Sawnwood

Bethany Burke and Phil Townsend

- Over the past 10 years, around half of all logs harvested in Australia were sawlogs primarily grown to produce structural sawnwood for the domestic housing construction and renovation markets.
- A range of domestic and global market pressures are affecting this sector. A flat housing market in the United States and the high Australian dollar have made the domestic market an attractive destination for excess global sawnwood, particularly from Europe.
- With a relatively weak domestic housing market, Australia's sawmilling sector is competing with increased imports from some European and South American sources, but declining imports from New Zealand.
- These competitive pressures are set to continue with potential implications for the future structure of the processing sector and for other sectors of the forest and wood products industry.

Australia's annual softwood sawlog harvest, detached dwelling starts and sawlog availability 2004–05 to 2012–13



b Softwood sawlogs include softwood sawlogs, cypress sawlogs, and softwood veneer and ply logs.

Domestic drivers of Australia's sawnwood production and consumption

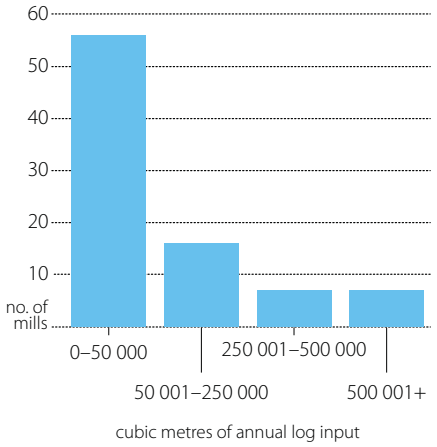
The key domestic factors influencing Australian sawnwood production and consumption are domestic housing demand (particularly detached dwellings), the volume of sawnwood imports, sawlog availability in Australia, and the structure of Australia's sawnwood industry.

Residential construction and renovation are a major use of Australia's sawnwood, especially softwood sawnwood which is used in wall frames and roof trusses. The construction sector generally uses hardwood sawnwood for strength and decorative purposes. Housing (detached dwelling) starts in Australia have been fairly flat since 2004–05. They fell considerably in 2008–09 and recovered the following year as the Australian Government's stimulus package boosted growth across the economy, but fell again in 2010–11. Australia's Housing Industry Association expects detached dwelling commencements to remain little changed in 2011–12, with a moderate upturn is forecast for 2012–13.

Australia's sawnwood and sawmilling sectors

Factors affecting Australian sawnwood producers' competitiveness include the generally small scale of operations, high labour cost, and disaggregated resource base that supports mostly small mills by global standards. Imports are coming through ports in close proximity to major consuming markets, which is in contrast to domestically produced sawnwood which must be hauled long distances from mills to markets.

Size distribution of softwood sawmills in Australia, 2011



Most softwood sawmills in Australia are smaller in scale than those in North America and Europe. The average capacity of Australian softwood sawmills is just over 100 000 cubic metres of log input a year, with 56 mills having a processing capacity of 50 000 cubic metres or less and only seven mills with capacity greater than 500 000 cubic metres. Larger European sawmills, that are among the world's largest sawnwood operations, average around 900 000 cubic metres of log input a year (based on current production); while 60 mills of the larger producers in North America average 1.3 million cubic metres of log input a year. Competitive pressures will therefore persist for Australian sawmills, but may be greatest for those with installed capacity of up to 50 000 cubic metres of log intake a year.

Of the 512 sawmills operating in Australia, 371 are hardwood mills with an average capacity of 11 000 cubic metres of log input a year. Hardwood sawmills in Australia have been closing as log availability falls and some hardwood products are replaced by softwood products or hardwood imports.

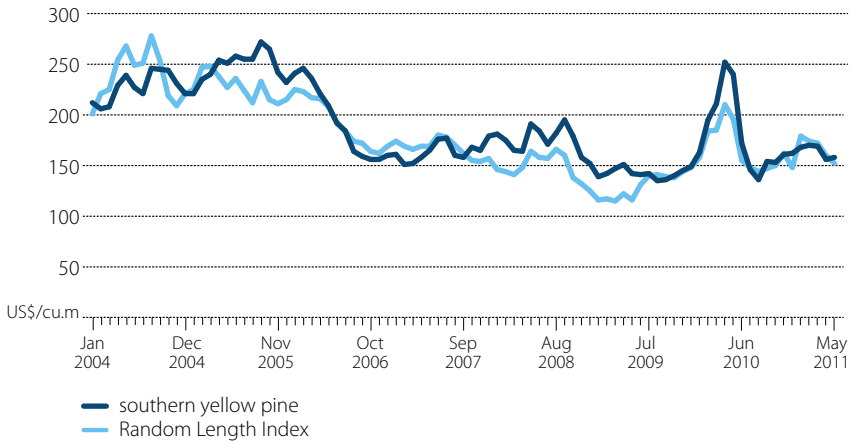
Australia's total log harvest in 2008–09 was 25.5 million cubic metres, including 11.4 million cubic metres of sawlogs which were processed to produce 4.7 million cubic metres of sawnwood. Over the last 10 years, an estimated 47 per cent of total harvest has been sawlogs.

Global drivers influencing Australia's sawnwood production and trade

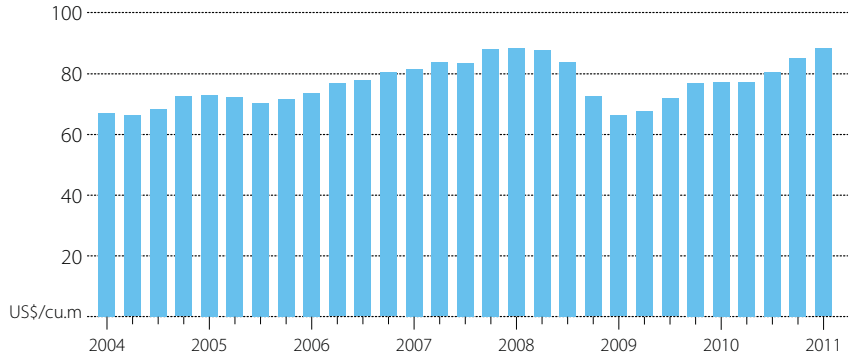
The US housing market is the major driver of global sawnwood trade, particularly for softwood sawnwood. The United States is the world's largest importer of softwood sawnwood, importing 22 million cubic metres in 2010, compared with around 43 million cubic metres in 2007. Changes in US consumption, which accounted for 26 per cent of global production in 2007, have the potential to significantly affect global sawnwood markets, and particularly the countries supplying the US market.

US housing starts fell from 1.72 million in 2005 to 445 000 in 2009, reducing sawnwood consumption by 46 per cent. A decrease in the supply of lumber coming onto the US market in the first half of 2010, saw lumber prices rise but the effect was short lived with a slowdown in the second half of 2010 and into 2011. These changes are reflected in US softwood sawnwood prices which began to fall in early 2006. However, they did not immediately flow through to the global market, with the global conifer sawlog price not falling until mid-2008. At the end of the first quarter of 2011, US prices had returned to near the bottom of the market and futures prices for sawnwood (CME Random Length Lumber futures) do not indicate any improvement or recovery in the near future.

Sawnwood prices in the United States 2004 to 2011



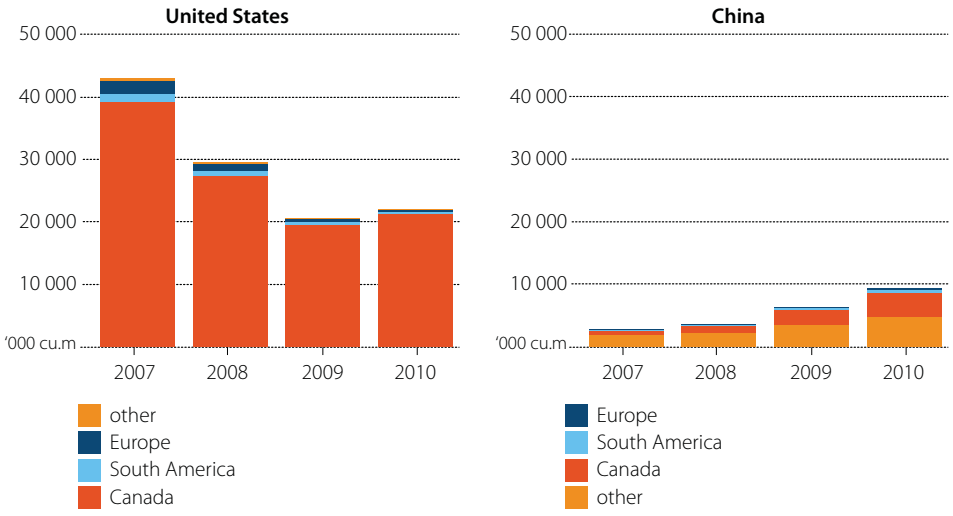
Global conifer sawlog price 2004 to 2011



Source: Wood Resources International 2011, *Wood Resource Quarterly - 1Q/2011*, Seattle, US

China's demand for softwood sawnwood is increasing their influence in global sawnwood markets; however, the total increase in China's imports between 2007 and 2010 is much smaller than the total decrease in US imports for the same period. This increase in China's sawnwood imports represents around 30 per cent of the decrease in US imports, which means a significant volume of sawnwood is still available for diversion to other markets, including Australia.

Major suppliers of softwood sawnwood to the United States and China, 2007 to 2010



These global market influences, together with conditions in the domestic market, have led to significant changes in Australia's sawnwood imports.

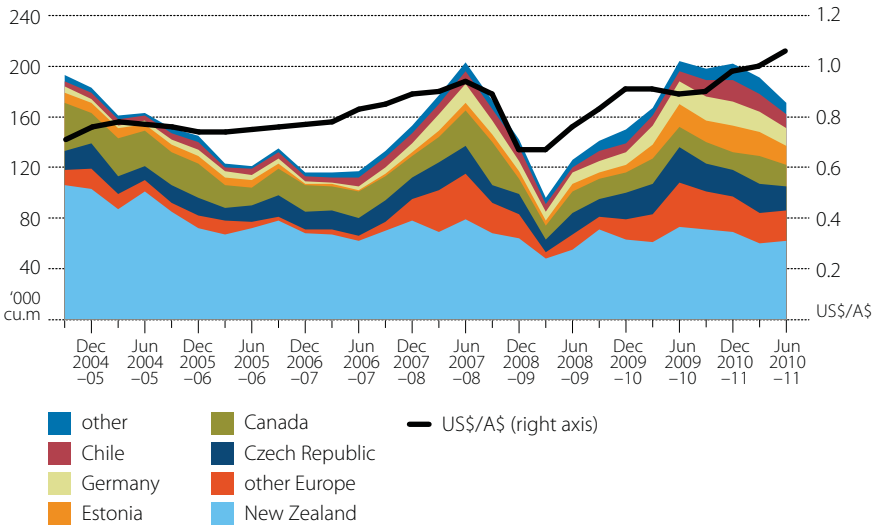
Australia's imports of sawnwood

Australia is a net importer of both softwood and hardwood sawnwood. In 2010–11, imports of softwood sawnwood were valued at $382 million, while $72 million was exported. Imports of hardwood sawnwood and other hardwood products totalled $500 million, compared with exports worth $104 million. While the value of Australia's imports of both softwood and hardwood sawnwood have increased since 2004–05, the trends and drivers in each market are quite distinct.

Softwood sawnwood

Australia's imports of softwood sawnwood fell between 2004–05 and 2006–07 with domestic sawnwood production increasing in the presence of a relatively weak exchange rate. Imports grew strongly from the fourth quarter of 2006–07, driven by solid economic growth and an appreciation of the Australian dollar. The global financial crisis led to a slowdown in economic activity, resulting in a sharp reduction in imports. Growth in imports resumed during 2009 and 2010, assisted by the appreciation of the Australian dollar. A decline in imports in the third and fourth quarters of 2010–11 correlates with the slowdown in the domestic market, as evidenced by the recent fall in housing starts, however import volumes remain relatively high.

Quarterly imports of softwood sawnwood by Australia and Australian exchange rate, 2004–05 to 2010–11

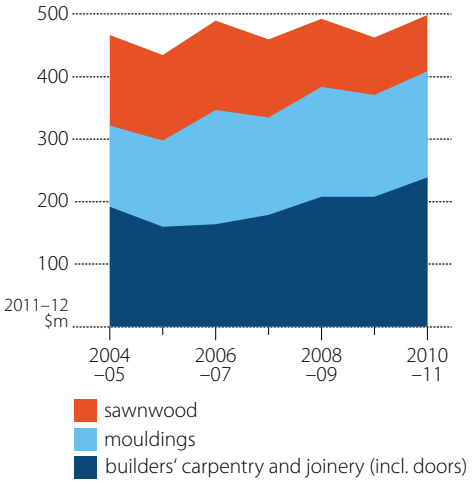


The structure of Australia's softwood sawnwood imports has changed since 2004–05. Imports from New Zealand have declined steadily, in contrast to increased imports from Europe and South America. The volume of imports from New Zealand—still Australia's biggest supplier—has fallen considerably, accounting for 35 per cent of total import volumes in 2010–11 compared with 57 per cent in 2004–05. Average unit value of imports from New Zealand increased from $591 per cubic metre to $724 per cubic metre over the same period. Lower unit value imports from other suppliers have replaced some of the last trade with New Zealand.

Chile and some European countries have increased their volume of softwood sawnwood exports to Australia since 2004–05, as well as their share of the Australian market. Recent increases have been the largest (in volume terms) from Estonia and the Czech Republic. The average unit value of sawnwood coming from European markets has stayed relatively stable, averaging $328 per cubic metre over the seven years from 2004–05. The average unit value of sawnwood imports from Chile between 2004–05 and 2010–11 was $583 per cubic metre.

The value of Australia's imports of softwood sawnwood has followed the same trend as the volume of imports since 2004–05.

Imports of hardwood sawnwood and similar hardwood products by Australia, 2004–05 to 2010–11



Hardwood sawnwood

The value of Australian imports of hardwood sawnwood and other similar hardwood products (mouldings, builders' joinery) has risen by 7 per cent (in real terms) since 2004–05 to reach $500 million (in 2011–12 dollars) in 2010–11. This growth in imports correlates with the decline in Australia's hardwood sawlog harvest and sawnwood production. In 2009–10, the domestic harvest of hardwood sawlogs was 27 per cent less than in 2004–05, while hardwood sawnwood production was 21 per cent less in 2008–09 than in 2004–05.

Australian exports of softwood sawnwood

Australian exports of softwood sawnwood have almost doubled since 2004–05. However, the softwood sawnwood exported from Australia is a lower grade product than imports, averaging $275 per cubic metre from 2004–05 to 2010–11, compared with the average unit value of $544 per cubic metre for imports during this time. The export market remains an important avenue for domestic producers to sell this lower grade material.

Outlook for Australia's sawnwood production, consumption and trade

The outlook for Australia's sawnwood production and consumption is being affected by relatively weak domestic housing demand, the recent increase in sawnwood imports, and the structure of the domestic sawnwood industry. Changes in global trade with the decline in US demand, as well as the strong Australian dollar, are the main factors behind the increase in sawnwood imports that have intensified competitive pressures on the Australian sawnwood and sawmilling sectors. Structural change in these two sectors is likely if recent trends continue, flowing through to other sectors within the forest growing and wood processing industries.

Agricultural commodities

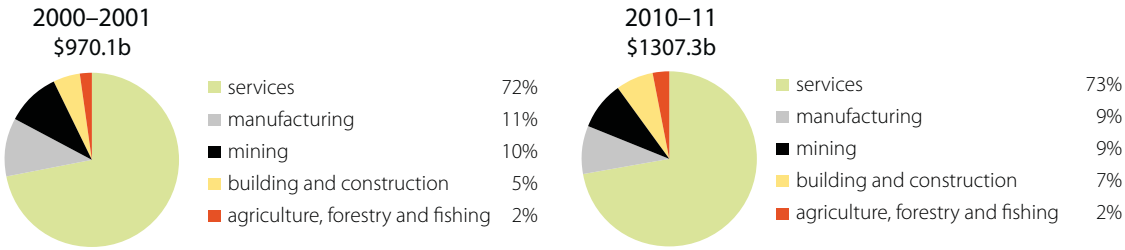
Statistical tables

Graphs

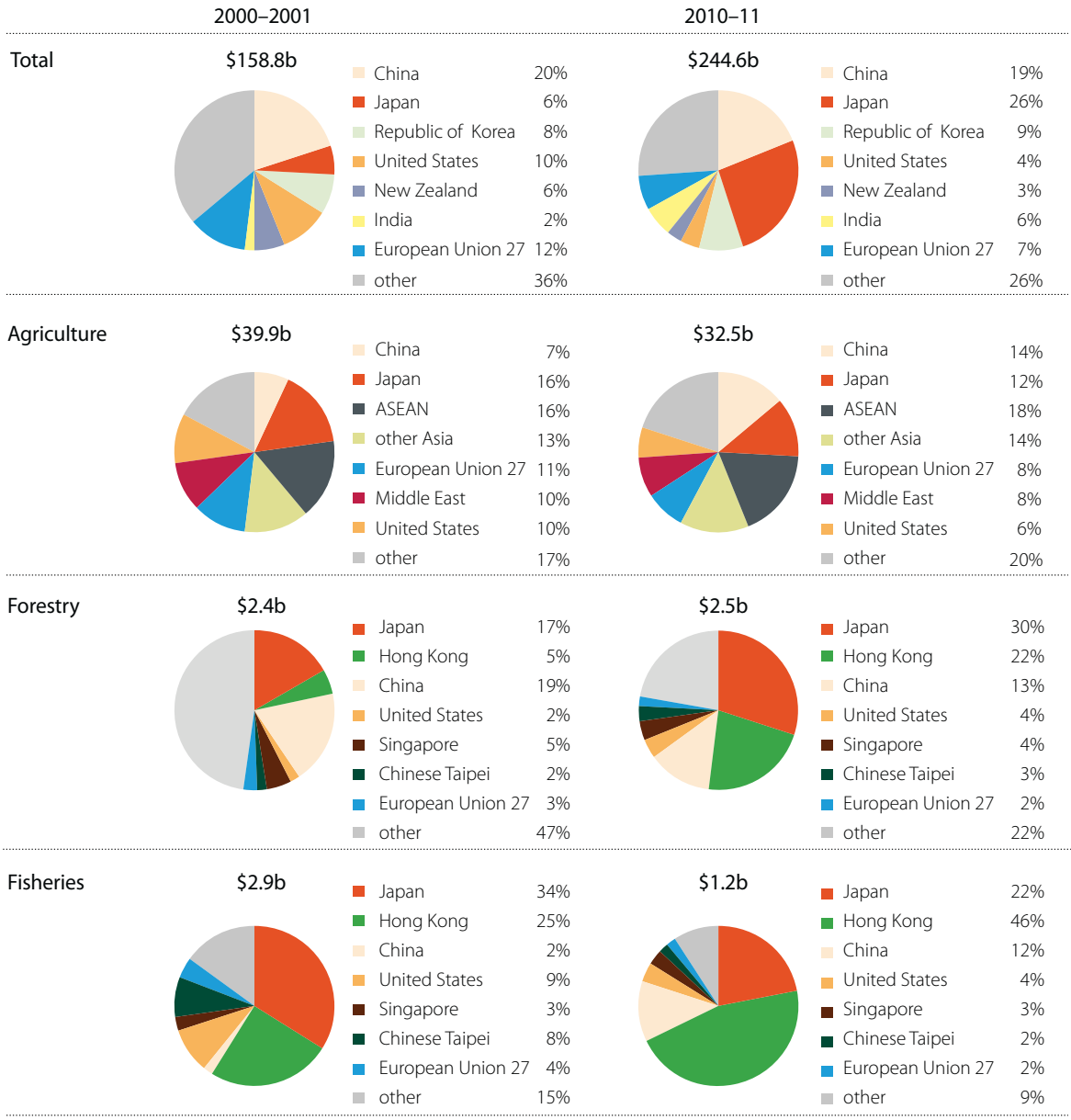
Tables

Contribution to GDP

Australia reference year 2010–11



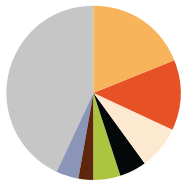
Markets for Australian exports in 2010–11 dollars



Share of Australian imports in 2010–11 dollars

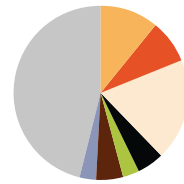
Total

2000–2001: $157.2b



United States	19%
Japan	13%
China	8%
Germany	5%
Malaysia	5%
Singapore	3%
New Zealand	4%
other	43%

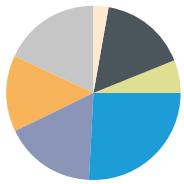
2010–11: $214.2b



United States	11%
Japan	8%
China	19%
Germany	5%
Malaysia	3%
Singapore	5%
New Zealand	3%
other	46%

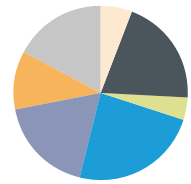
Agriculture

2000–2001: $6.9b



China	3%
ASEAN	16%
other Asia	6%
European Union 27	26%
New Zealand	17%
United States	14%
other	18%

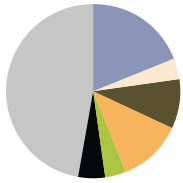
2010–11: $11.0b



China	6%
ASEAN	20%
other Asia	4%
European Union 27	24%
New Zealand	18%
United States	11%
other	17%

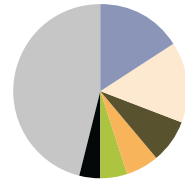
Forestry

2000–2001: $5.1b



New Zealand	19%
China	4%
Indonesia	9%
United States	12%
Malaysia	4%
Germany	5%
other	47%

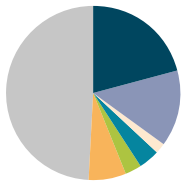
2010–11: $4.4b



New Zealand	16%
China	15%
Indonesia	8%
United States	6%
Malaysia	5%
Germany	4%
other	46%

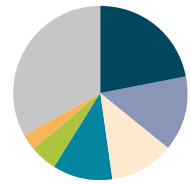
Fisheries

2000–2001: $1.5b



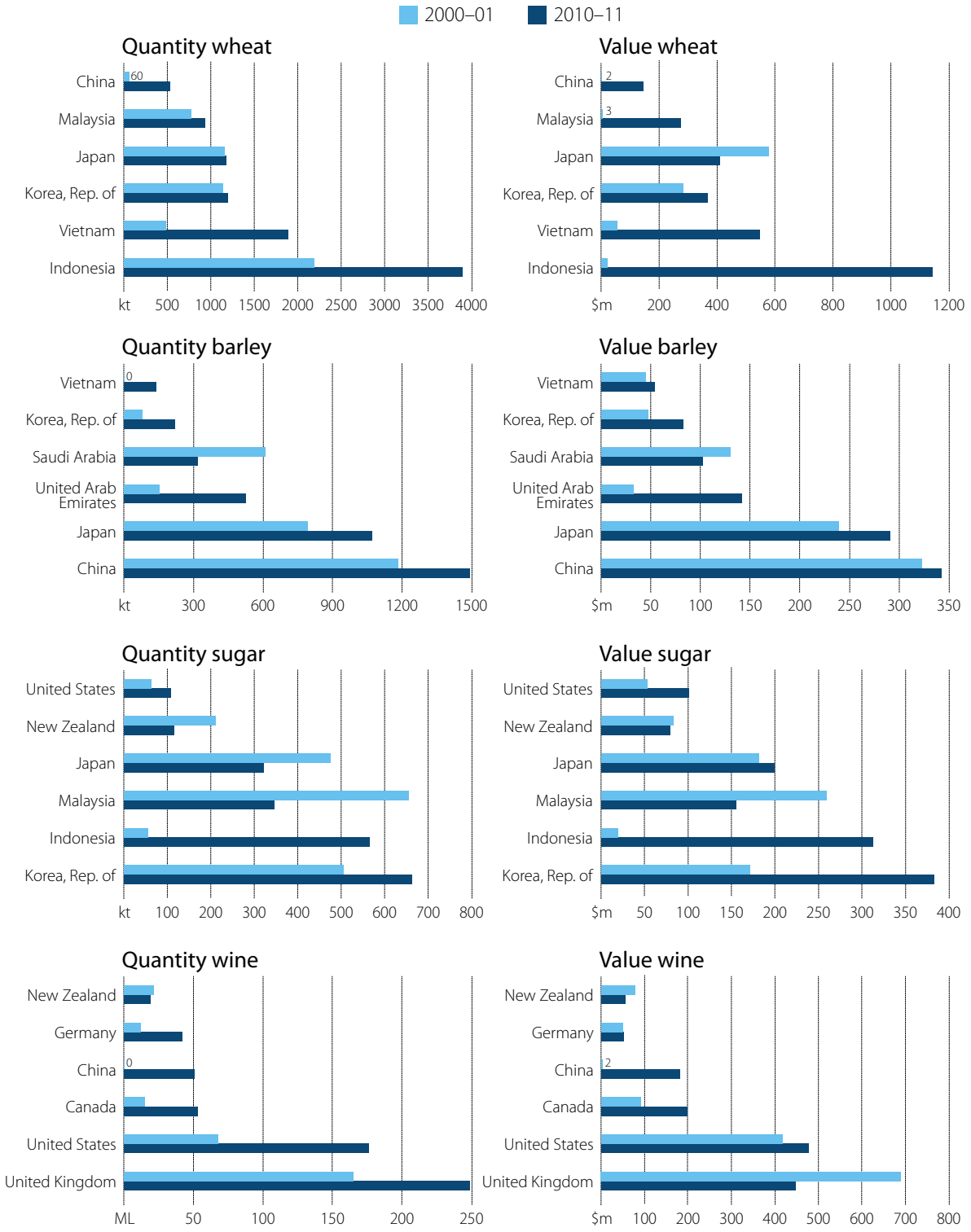
Thailand	21%
New Zealand	14%
China	2%
Vietnam	4%
Malaysia	3%
United States	7%
other	49%

2010–11: $1.5b

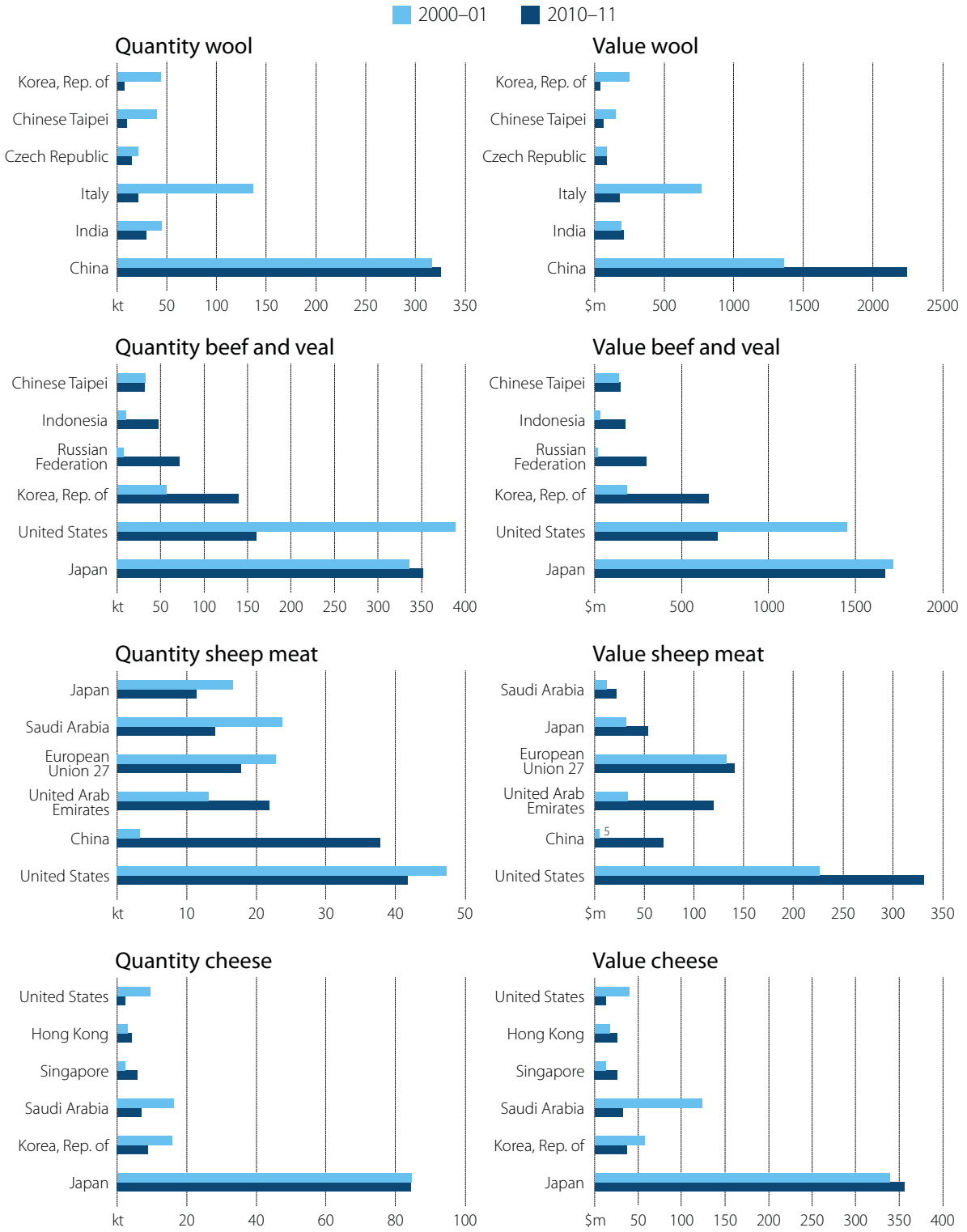


Thailand	22%
New Zealand	14%
China	12%
Vietnam	11%
Malaysia	5%
United States	3%
other	33%

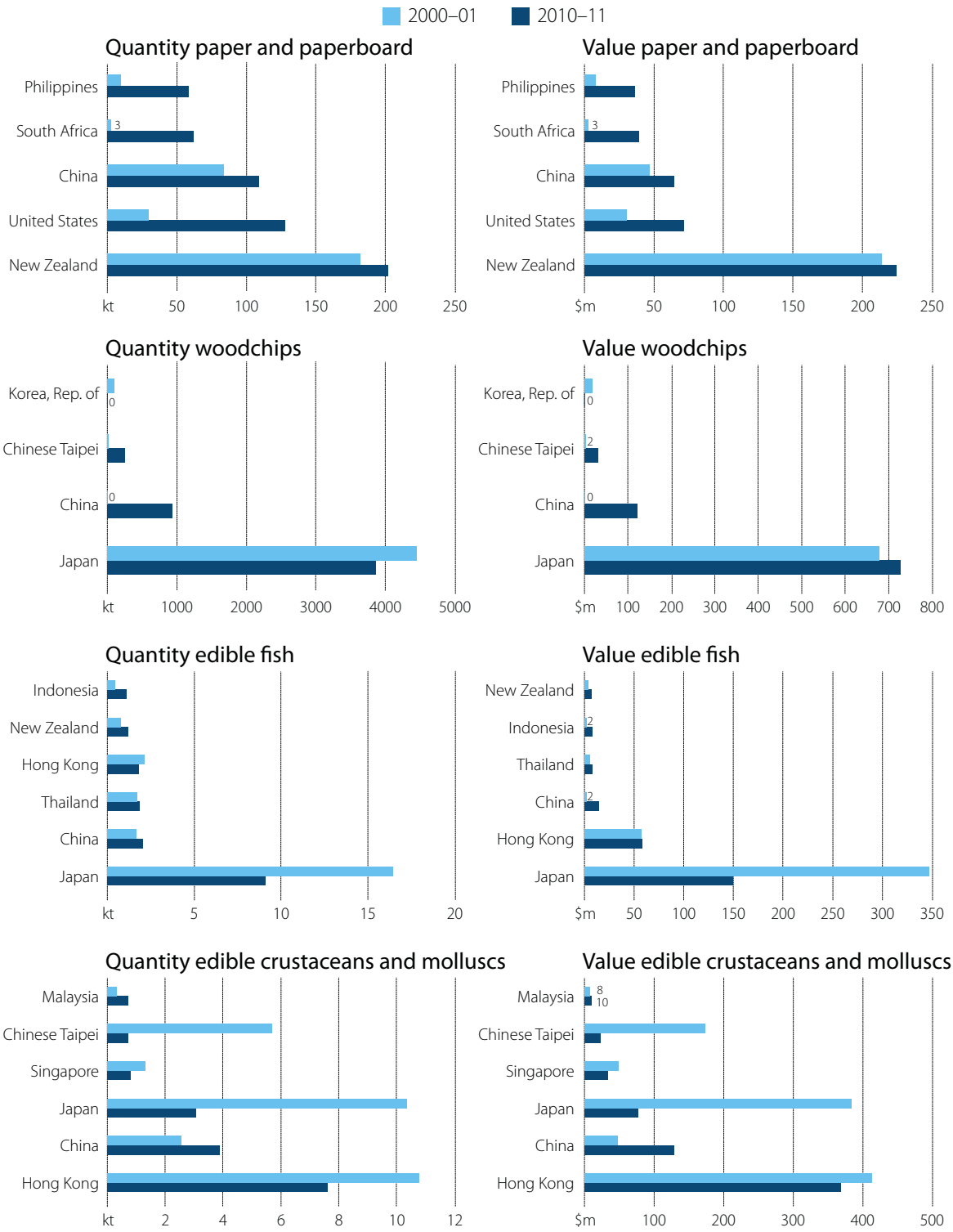
Principal markets for Australian agricultural, forestry and fisheries exports



Principal markets for Australian agricultural, forestry and fisheries exports



Principal markets for Australian agricultural, forestry and fisheries exports



1 Indexes of prices received by farmers

Australia

	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Crops sector						
Grains						
Winter crops						
barley	153.3	196.9	145.3	108.6	127.2	130.7
canola	102.8	140.7	142.2	113.4	140.4	133.4
lupins	135.7	171.0	142.9	127.0	167.6	142.4
oats	235.8	136.9	158.3	116.9	108.7	105.5
wheat	122.4	197.2	142.1	110.4	144.4	146.8
Summer crops						
grain sorghum	126.1	152.4	121.3	126.7	130.9	128.0
Total grains a	128.5	178.3	137.4	108.8	134.3	134.7
Cotton	82.5	87.7	96.7	98.4	132.4	110.3
Sugar	108.4	80.6	98.3	137.8	139.4	139.8
Hay	230.7	254.6	219.0	181.5	151.1	128.4
Fruit	184.0	148.4	148.2	146.6	181.8	186.4
Vegetables	141.3	153.7	152.9	150.4	167.3	171.5
Total crops sector	127.6	138.0	120.2	109.0	128.5	127.1
Livestock sector						
Livestock for slaughter						
cattle	174.3	164.6	171.3	163.7	183.2	174.3
lambs b	165.6	170.3	204.3	218.7	275.2	276.3
sheep	156.2	183.3	216.8	343.3	472.0	477.1
live sheep for export	179.1	180.7	214.2	249.3	305.7	294.8
pigs	124.8	120.7	140.1	137.6	120.0	127.0
poultry	84.5	109.4	120.0	114.2	115.6	115.1
total	152.6	152.7	165.5	164.8	183.6	179.7
Livestock products						
wool	115.5	127.9	109.2	116.0	186.7	198.9
milk	111.1	166.1	142.3	125.2	145.4	142.4
eggs	102.0	107.5	108.5	105.5	104.2	105.2
total	112.2	147.0	127.5	120.0	154.8	157.3
Store and breeding stock	157.8	153.7	165.1	168.4	202.4	197.1
Total livestock sector	135.9	148.2	149.2	146.3	171.5	169.8
Total prices received	130.4	141.7	132.5	125.1	147.0	145.5

a Total for the group includes commodities not separately listed. **b** Lamb saleyard indicator weight 18–22 kg. **s** ABARES estimate. **f** ABARES forecast.

Notes: **1** ABARE revised the method for calculating these indexes in October 1999. The indexes for commodity groups are calculated on a chained weight basis using Fisher's ideal index with a reference year of 1997–98 = 100. Indexes for most individual commodities are based on annual gross unit value of production. **2** Prices used in these calculations exclude GST.

Source: ABARES

2 Indexes of prices paid by farmers, and terms of trade

Australia

	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Farmers' terms of trade a	96.0	91.4	88.9	88.8	101.2	96.9
Materials and services						
Seed, fodder and livestock						
fodder and feedstuffs	151.7	195.3	167.9	145.9	121.2	120.7
seed, seedlings and plants	109.9	135.0	120.6	109.5	124.7	125.9
store and breeding stock	157.8	153.7	165.1	168.4	202.4	197.1
total	147.2	178.0	161.7	147.0	140.3	138.8
Chemicals	124.7	149.7	136.7	116.2	110.4	113.1
Electricity	107.6	111.3	121.4	142.0	158.8	174.7
Fertiliser	121.4	220.4	239.6	156.0	157.3	161.3
Fuel and lubricants	208.3	243.7	211.0	191.7	211.3	228.2
Total	140.3	170.8	164.2	146.5	147.1	150.5
Labour	133.5	138.0	142.6	147.3	151.8	156.5
Marketing	129.1	143.2	137.1	133.9	144.7	155.2
Overheads						
Insurance	139.4	143.5	155.6	167.0	180.4	189.4
Interest paid	127.8	142.6	116.7	111.1	122.3	127.8
Rates and taxes	132.7	137.3	141.6	144.8	149.3	153.9
Other overheads	128.5	132.8	137.1	140.5	144.8	149.3
Total	130.8	141.8	126.6	124.3	133.9	139.5
Capital items	132.3	136.8	141.1	144.7	149.3	154.0
Total prices paid	135.9	155.1	149.0	140.8	145.3	150.2
Excluding capital items	136.2	157.3	150.0	140.4	144.9	149.8
Excluding capital and overheads	137.6	161.7	156.9	145.0	147.8	152.4
Excluding seed, fodder and store and breeding stock	133.6	150.3	146.4	139.4	146.3	152.5

a Ratio of index of prices received by farmers and index of prices paid by farmers. **s** ABARES estimate. **f** ABARES forecast.
Notes: **1** ABARE revised the method for calculating these indexes in October 1999. The indexes for commodity groups are calculated on a chained weight basis using Fisher's ideal index with a reference year of 1997–98 = 100. **2** Prices used in these calculations exclude GST.
Sources: ABARES; Australian Bureau of Statistics

3 Farm costs and returns

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Costs							
Materials and services							
chemicals	$m	1 545	1 901	1 792	1 473	1 459	1 478
fertiliser	$m	1 659	3 034	3 381	2 118	2 221	2 268
fuel and lubricants	$m	2 199	2 551	2 243	1 946	2 215	2 383
marketing	$m	2 744	3 180	3 733	3 814	3 839	3 891
repairs and maintenance	$m	2 466	3 073	3 080	3 002	3 887	4 108
seed and fodder	$m	4 955	6 177	5 263	4 526	4 176	4 242
other	$m	3 543	3 659	3 829	3 967	4 287	4 444
total	$m	19 111	23 575	23 320	20 846	22 082	22 815
Labor	$m	3 654	3 667	3 827	3 766	4 013	4 137
Overheads							
interest paid	$m	3 848	4 901	4 331	4 455	5 023	5 382
rent and third party insurance	$m	447	462	477	493	513	529
Total	$m	7 950	9 030	8 634	8 713	9 549	10 048
Total cash costs	$m	27 060	32 605	31 955	29 560	31 631	32 863
Depreciation **a**	$m	4 383	4 532	4 676	4 794	4 945	5 102
Total farm costs	$m	31 443	37 137	36 631	34 354	36 576	37 965
Returns							
Gross value of farm production	$m	36 663	43 752	42 124	39 636	49 250	50 002
Gross farm cash income **b**	$m	37 427	43 439	38 015	39 636	49 250	50 002
Net returns and production							
Net value of farm production **c**	$m	5 220	6 615	5 493	5 282	12 674	12 037
Real net value of farm production **d**	$m	6 055	7 422	5 976	5 615	13 069	12 037
Net farm cash income **e**	$m	10 367	10 834	6 060	10 076	17 619	17 139
Real net farm cash income **d**	$m	12 026	12 155	6 593	10 712	18 169	17 139

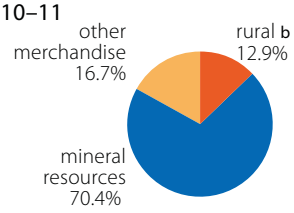
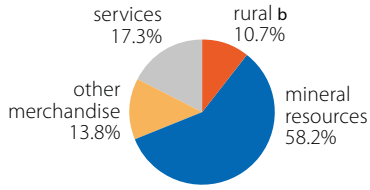
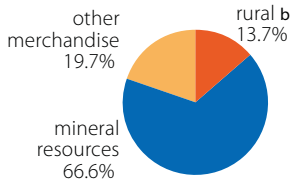
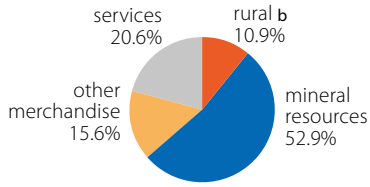
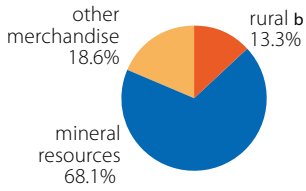
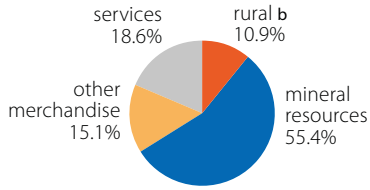
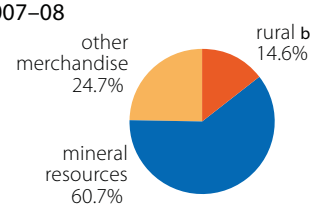
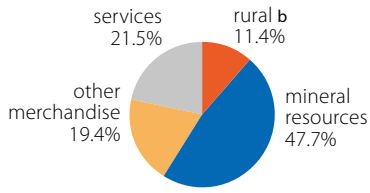
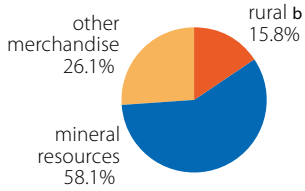
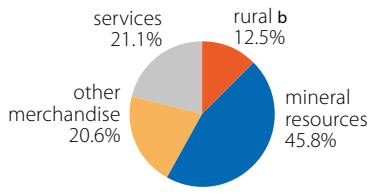
a Based on estimated movements in capital expenditure and prices of capital inputs. **b** Gross value of farm production less increase in farmers' assets held by marketing organisations. **c** Gross value of farm production less total farm costs. **d** In 2011–12 Australian dollars. **e** Gross farm cash income less total cash costs. **s** ABARES estimate. **f** ABARES forecast

Note: Prices used in these calculations exclude GST.

Sources: ABARES; Australian Bureau of Statistics.

4 Contribution to exports by sector, balance of payments basis

Australia

	Proportion of merchandise exports	Proportion of exports of goods and services
2010–11		
2009–10		
2008–09		
2007–08		
2006–07		

b Includes farm, forest and fisheries products.
Source: Australian Bureau of Statistics

5 Volume of production indexes

Australia

	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Farm						
Grains and oilseeds	58.2	88.0	116.2	116.6	140.3	138.0
Total crops	84.0	103.9	113.4	114.4	127.5	132.4
Livestock slaughterings	115.5	113.4	112.1	109.6	110.6	110.9
Total livestock	105.2	102.3	100.8	98.7	99.2	100.1
Total farm sector	94.8	103.9	108.2	107.5	114.0	116.9
Forestry a						
Broadleaved	124.2	130.1	120.8	106.2	111.1	115.9
Coniferous	132.4	136.3	117.5	127.4	124.8	127.9
Total forestry	128.4	133.3	119.5	117.8	118.8	122.7

a Volume of logs harvested excluding firewood. **s** ABARES estimate. **f** ABARES forecast.
Note: ABARE revised the method for calculating production indexes in October 1999. The indexes for the different groups of commodities are calculated on a chained weight basis using Fisher's ideal index with a reference year of 1997–98 = 100.
Sources: ABARES; Australian Bureau of Statistics

6 Industry gross value added a, b

Australia

	unit	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Agriculture, forestry and fishing							
agriculture	$m	21 936	17 959	19 455	23 296	23 615	28 927
forestry and fishing	$m	4 137	4 077	4 118	4 426	4 815	5 114
total	$m	26 019	22 042	23 573	27 721	28 430	34 040
Mining	$m	100 780	109 323	111 540	114 462	121 095	117 720
Manufacturing							
food, beverage and tobacco	$m	22 744	22 972	22 945	22 228	23 687	23 394
textile, clothing and other manufacturing	$m	6 153	6 096	6 381	5 720	4 641	4 325
wood and paper products	$m	8 309	8 081	7 768	7 176	7 444	7 273
printing and recorded media	$m	5 484	5 536	5 676	4 683	4 452	4 463
petroleum, coal, chemical, etc.	$m	20 980	20 608	21 113	18 995	19 652	19 918
non-metallic mineral products	$m	5 425	5 551	5 802	5 764	5 663	5 490
metal products	$m	20 049	22 024	24 520	23 738	22 990	25 212
machinery and equipment	$m	21 671	21 658	22 376	21 099	22 338	21 874
total	$m	109 798	111 869	116 306	109 402	110 868	111 948
Building and construction	$m	77 526	81 794	87 485	90 087	89 872	95 074
Electricity, gas and water supply	$m	13 217	13 272	13 630	14 249	14 397	14 485
Taxes less subsidies on products	$m	80 244	82 481	84 111	83 340	83 126	84 219
Statistical discrepancy	$m	0	– 1	0	0	1 236	–4 859
Gross domestic product	$m	1150 643	1 191 655	1 237 320	1 255 241	1 283 572	1 307 291

a Chain volume measures, reference year is 2008–09. **b** ANZSIC 2006. 0 is used to denote nil or less than $0.5 million.
Source: Australian Bureau of Statistics, *Australian National Accounts: National Income, Expenditure and Product,* cat. no. 5206.0, Canberra

7 Employment [a, b]

Australia

	2005–06 '000	2006–07 '000	2007–08 '000	2008–09 '000	2009–10 '000	2010-11 '000
Agriculture, forestry and fishing						
agriculture	300	306	302	322	325	307
forestry and logging	8	8	8	8	7	6
commercial fishing [c]	12	10	14	9	11	12
support services	27	26	30	24	26	27
total	348	350	354	362	369	351
Mining	129	135	146	170	173	205
Manufacturing						
food, beverages and tobacco	205	214	229	226	228	229
textiles, clothing, footwear and leather	56	50	50	48	46	45
wood and paper product	77	78	69	67	64	57
printing, publishing and recorded media	52	51	54	51	52	56
petroleum, coal and chemical product	88	92	98	90	88	85
non-metallic mineral product	38	36	42	40	37	37
metal product	161	161	159	157	147	147
other manufacturing	347	342	359	348	343	336
total	1 025	1 024	1 060	1 028	1 006	992
Other industries	8 587	8 864	9 124	9 332	9 479	9 806
Total	10 088	10 374	10 684	10 892	11 027	11 355

a Average employment over four quarters. **b** ANZSIC 2006. Caution should be used when utilising employment statistics at the ANZSIC subdivision and group levels due to estimates that may be subject to sampling variability and standard errors too high for most practical purposes. **c** Includes aquaculture, fishing, hunting and trapping.
Source: Australian Bureau of Statistics, *Labour Force, Australia,* cat. no. 6291.0, Canberra

8 All banks lending to business [a]

Australia

	2009–10			2010–11			
	Dec $b	Mar $b	Jun $b	Sep $b	Dec $b	Mar $b	Jun $b
Agriculture, fishing and forestry	58.4	57.8	59.1	58.7	58.8	58.6	60.4
Mining	13.9	14.1	12.1	11.3	11.2	11.0	12.1
Manufacturing	40.6	40.8	39.2	38.6	38.2	40.1	39.9
Construction	29.7	29.3	28.2	28.3	28.2	28.7	28.4
Wholesale, retail trade, transport and storage	91.9	91.9	90.5	89.3	92.0	92.6	92.5
Finance and insurance	131.9	126.2	133.0	132.0	125.0	121.2	114.8
Other	308.4	305.3	307.3	306.6	303.9	309.0	307.1
Total	674.8	665.4	669.3	664.7	657.2	661.2	655.2

a Includes variable and fixed interest rate loans outstanding plus bank bills outstanding.
Source: Reserve Bank of Australia, *Bank Lending to Business – Selected Statistics,* Bulletin Statistical Table D8

9 Rural indebtedness to financial institutions [a]

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Rural debt						
All banks **a**	43 546	47 188	53 743	57 384	59 331	na
Other government agencies **b**	1 073	1 286	1 409	1 620	1 816	na
Pastoral and other finance companies	3 454	4 592	5 126	4 462	2 029	na
Large finance institutional debt **c**	48 073	53 066	60 278	63 467	63 176	na
Deposits						
Farm management deposits	2 797	2 782	2 879	2 843	2 784	3 216

a Derived from all banks lending to agriculture, fishing and forestry. **b** Includes the government agency business of state banks and advances made under War Service Land Settlement. Prior to 1996, includes loans from the Queensland Industry Development Corporation. From 1996 these loans are included in bank lending. **c** Sum of the above. **na** Not available.
Sources: ABARES; Department of Agriculture, Fisheries and Forestry; Reserve Bank of Australia, *Estimated Rural Debt to Specified Lenders*, Bulletin Statistical Table D9

10 Annual world indicator prices of selected commodities

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
World							
Crops							
Wheat **a**	US$/t	212	362	271	209	317	310
Corn **b**	US$/t	151	201	190	160	254	306
Rice **c**	US$/t	320	551	609	532	518	615
Soybeans **d**	US$/t	335	549	421	429	555	566
Cotton **e**	USc/lb	58.1	72.9	61.2	77.5	162.0	103.0
Sugar **g**	USc/lb	11.2	10.9	13.3	20.9	25.5	29.0
Livestock products							
Beef **h**	USc/kg	282	289	307	319	391	379
Wool **i**	Ac/kg	864	945	794	872	1 132	1 200
Butter **j**	US$/t	2 023	4 027	2 485	3 477	4 683	4 200
Cheese **j**	US$/t	3 004	5 073	3 281	3 748	4 221	4 250
Skim milk powder **j**	US$/t	3 188	4 204	2 333	2 948	3 392	3 390

a US hard red winter wheat, fob Gulf. **b** US no. 2 yellow corn, delivered US Gulf. **c** USDA nominal quote for Thai white rice, 100 per cent, Grade B, fob, Bangkok (August–July basis). **d** US cif Rotterdam (October–September basis). **e** Cotlook 'A' index. **g** Average of monthly averages of New York no. 11 spot price; basis: fob Caribbean ports . **h** US cif price. **i** Australian Wool Exchange eastern market indicator. **j** Average of traded prices (excluding subsidised sales). **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics; Australian Dairy Corporation; Meat & Livestock Australia; Australian Wool Exchange; Cotlook Ltd; Food and Agriculture Organisation; General Agreement on Tariffs and Trade; International Grains Council; ISTA Mielke and Co.; New York Board of Trade; Reuters Ltd; United States Department of Agriculture

11 Gross unit values of farm products [a]

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Crops [b]							
Grains and oilseeds							
Winter crops							
barley	$/t	244	313	231	173	203	208
canola	$/t	397	543	548	437	542	514
field peas	$/t	283	407	345	241	229	225
lupins	$/t	266	335	280	248	328	279
oats	$/t	241	281	216	160	149	144
triticale	$/t	223	252	257	220	218	207
wheat	$/t	242	390	281	218	286	290
Summer crops							
maize	$/t	249	258	283	268	296	282
rice	$/t	337	414	528	457	368	373
grain sorghum	$/t	213	258	205	214	222	217
soybeans [c]	$/t	353	554	551	551	690	622
sunflower seed [c]	$/t	706	814	696	696	765	712
Industrial crops							
Cotton lint [d]	c/kg	177	191	193	205	372	231
Sugar cane (cut for crushing)	$/t	34	26	32	44	41	42
Wine grapes	$/t	881	787	527	464	413	410
Livestock							
Beef cattle	c/kg	339	321	334	319	357	341
Lambs	c/kg	336	346	415	444	559	561
Pig	c/kg	247	239	277	273	238	251
Poultry	c/kg	151	196	215	205	207	206
Livestock products							
Wool	c/kg	454	503	430	456	734	782
Milk	c/L	33.2	49.6	42.5	37.4	43.4	42.5

a Average gross unit value across all grades in principal markets, unless otherwise indicated. Includes the cost of containers, commission and other expenses incurred in getting the commodities to their principal markets. These expenses are significant. **b** Average unit gross value relates to returns received from crops harvested in that year, regardless of when sales take place, unless otherwise indicated. **c** Price paid by crusher. **d** Australian base price for sales in the financial year indicated. **s** ABARES estimate. **f** ABARES forecast.
Note: Prices used in these calculation exclude GST.
Sources: ABARES; Australian Bureau of Statistics

12 World production, consumption, stocks and trade for selected commodities [a]

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Farm							
Grains							
Wheat							
production	Mt	597	609	686	679	651	679
consumption	Mt	609	606	644	652	657	673
closing stocks	Mt	125	129	171	197	192	198
exports [b]	Mt	111	110	137	128	126	131
Coarse grains							
production	Mt	986	1 078	1 107	1 107	1 091	1 131
consumption	Mt	1 008	1 056	1 072	1 099	1 127	1 148
closing stocks	Mt	139	162	193	196	159	142
exports [b]	Mt	118	127	113	123	115	117
Rice							
production [c]	Mt	421	433	447	440	451	459
consumption [c]	Mt	418	426	434	435	446	457
closing stocks [c]	Mt	75	81	92	94	97	99
exports [bd]	Mt	30	30	29	32	33	32
Oilseeds and vegetable oils							
Oilseeds							
production	Mt	404	392	396	442	452	450
consumption	Mt	393	401	401	423	442	453
closing stocks	Mt	73	62	56	73	78	72
exports	Mt	83	93	94	111	106	113
Vegetable oils							
production	Mt	122	128	133	139	146	152
consumption	Mt	122	126	130	138	151	155
closing stocks	Mt	10	11	13	13	9	8
exports	Mt	49	54	56	58	59	59
Vegetable protein meals							
production	Mt	224	226	223	239	253	258
consumption	Mt	223	223	223	235	249	270
closing stocks	Mt	8	7	6	7	8	9
exports	Mt	69	72	69	69	76	75
Industrial crops							
Cotton							
production	Mt	27	26	23	22	25	27
consumption	Mt	27	27	24	26	25	26
closing stocks	Mt	14	13	13	10	10	11
exports	Mt	8	8	7	8	8	9
Sugar							
production	Mt	166	166	151	159	167	176
consumption	Mt	157	160	161	164	166	169
closing stocks	Mt	65	71	61	56	57	64
exports	Mt	49	48	48	53	52	50

Continued

12 World production, consumption, stocks and trade for selected commodities [a]

continued

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Livestock products							
Meat **deg**							
production	Mt	239	247	248	248	259	262
consumption	Mt	238	245	247	253	257	262
closing stocks	Mt	2.2	2.6	2.6	2.3	2.3	2.7
exports **b**	Mt	20.7	29.0	28.0	23.0	23.5	23.6
Wool **h**							
production	kt	1 229	1 201	1 108	1 134	1 123	1 128
consumption **di**	kt	1 223	1 165	1 105	1 115	1 150	1 150
closing stocks **j**	kt	75	55	65	55	48	26
exports **k**	kt	590	553	484	501	507	501
Butter **dg**							
production	kt	7 565	7 872	8 040	8 145	8 432	8 600
consumption	kt	7 281	7 474	7 527	7 842	7 940	8 100
closing stocks	kt	201	250	281	136	155	182
exports	kt	785	705	827	741	783	800
Skim milk powder **gl**							
production **d**	kt	3 229	3 311	3 455	3 370	3 532	3 620
consumption **d**	kt	2 923	2 988	2 923	2 975	3 166	3 220
closing stocks **d**	kt	279	347	556	534	371	300
exports	kt	1 095	1 087	1 140	1 349	1 505	1 560

a Some figures are not based on precise or complete analyses. **b** Includes intra-EU trade. **c** Milled equivalent. **d** On a calendar year basis, e.g. 1991–92 = 1992. **e** Beef and veal, mutton, lamb, goat, pig and poultry meat. **g** Selected countries. **h** Clean equivalent. **i** Virgin wool at the spinning stage in 65 countries. **j** Held by marketing bodies and on-farm in five major exporting countries. **k** Five major exporting countries. **l** Non-fat dry milk. **s** ABARES estimate. **f** ABARES forecast.

Sources: ABARES; Australian Bureau of Statistics; Meat & Livestock Australia; Commodities Research Unit; Commonwealth Secretariat; Department of Agriculture, Fisheries and Forestry; Economic Commission for Europe; Fearnleys; Food and Agriculture Organisation; International Sugar Organization; International Grains Council; ISTA Mielke and Co.; Ministry of Agriculture, Forestry and Fisheries (Japan); New Zealand Dairy Board; New Zealand Wool Board; Uruguayan Association of Wool Exporters; United States Department of Agriculture; Poimena Analysis, Beef + Lamb New Zealand; Capewools South Africa; Argentine Wool Federation

13 Agricultural, fisheries and forestry commodity production

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Crops							
Grains and oilseeds							
Winter crops							
barley	kt	4 257	7 160	7 997	7 865	9 334	8 312
canola	kt	573	1 214	1 844	1 920	2 136	2 293
chickpeas	kt	229	313	443	487	379	407
field peas	kt	140	268	238	356	434	384
lupins	kt	470	662	708	823	618	694
oats	kt	748	1 502	1 160	1 162	1 536	1 563
triticale	kt	199	450	363	545	685	580
wheat	kt	10 822	13 569	21 420	21 834	26 325	26 196
Summer crops							
cottonseed s	kt	388	188	466	547	1 269	1 617
maize	kt	239	387	376	328	351	300
rice	kt	163	18	65	197	807	909
grain sorghum	kt	1 283	3 790	2 692	1 508	2 137	1 867
soybeans	kt	34	35	80	60	47	39
sunflower seed	kt	21	73	55	41	44	33
other oilseeds a	kt	34	56	34	41	40	38
Total grains and oilseeds	kt	19 602	29 683	37 940	37 713	46 141	45 230
Industrial crops							
Cotton lint	kt	301	133	329	387	898	1 144
Sugar cane (cut for crushing)	kt	36 397	32 621	31 457	31 235	27 443	31 073
Sugar (tonnes actual)	kt	5 026	4 763	4 634	4 472	3 610	4 201
Wine grapes	kt	1 410	1 837	1 684	1 528	1 497	1 654
Horticulture							
Fruit							
apples	kt	270	265	295	264	234	250
bananas	kt	213	207	270	302	241	280
oranges	kt	471	409	348	391	277	388
Vegetables							
carrots	kt	271	273	264	267	253	275
onions	kt	246	254	284	260	281	282
potatoes	kt	1 212	1 400	1 179	1 278	1 217	1 300
tomatoes	kt	296	382	440	472	407	450
Livestock slaughterings							
Number slaughtered							
Cattle and calves	'000	9 081	8 799	8 643	8 364	8 097	8 009
Cattle exported live b	'000	636	708	845	871	728	450
Sheep	'000	13 271	11 158	10 501	7 333	5 341	6 000
Lambs	'000	20 158	20 529	20 395	19 478	17 880	19 000
Sheep exported live b	'000	4 138	4 069	4 064	3 055	2 909	3 100
Pigs	'000	5 322	5 217	4 499	4 561	4 643	4 711
Meat produced							
Beef and veal c	kt	2 226	2 155	2 137	2 109	2 133	2 124
Lamb c	kt	413	428	416	413	391	409
Mutton c	kt	271	243	220	162	123	138
Pig meat	kt	382	377	322	331	342	346
Poultry meat c	kt	855	835	866	872	1 053	1 087
Total	kt	4 147	4 039	3 961	3 886	4 043	4 105

Continued

13 Agricultural, fisheries and forestry commodity production *continued*

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Livestock products							
Wool **d**	kt	502	459	420	423	409	420
Milk **e**	ML	9 583	9 223	9 388	9 023	9 102	9 300
Butter **g**	kt	133	128	148	128	122	124
Cheese	kt	364	361	325	349	338	345
Casein	kt	8	10	10	8	5	5
Skim milk powder **h**	kt	191	164	212	190	222	217
Whole milk powder	kt	135	142	148	126	151	154
Buttermilk powder	kt	14	13	15	13	12	13
Forestry – logs harvested i							
Broadleaved	'000 m^3	12 602	13 200	12 174	10 697	11 190	11 681
Coniferous	'000 m^3	14 590	15 157	13 314	14 436	14 144	14 491
Total	'000 m^3	27 192	28 357	25 488	25 132	25 333	26 173
Fisheries j							
Tuna	kt	13.1	14.6	13.7	11.0	9.9	10.5
Salmonids **k**	kt	25.6	25.9	30.0	31.9	35.0	37.9
Other fish	kt	118.8	119.6	122.1	120.4	121.8	122.5
Prawns	kt	20.8	22.8	24.2	27.0	26.4	23.8
Rock lobster **l**	kt	14.3	14.3	12.2	9.6	9.4	9.1
Abalone	kt	5.5	5.3	5.6	5.2	5.4	5.5
Scallops	kt	10.5	10.3	7.6	7.5	8.4	10.5
Oysters	kt	15.4	13.5	14.2	14.9	14.6	15.5
Other molluscs	kt	9.3	6.8	6.6	6.3	6.6	6.5
Other crustaceans	kt	6.5	6.4	5.8	6.2	6.6	6.2

a Linseed, safflower seed and peanuts. **b** Excludes animals exported for breeding purposes. **c** In carcass weight and includes carcass equivalent of canned meats. **d** Greasy equivalent of shorn wool (includes crutching), dead and fellmongered wool and wool exported on skins. **e** Includes the whole milk equivalent of farm cream intake. **g** Includes the butter equivalent of butteroil, butter concentrate, ghee and dry butterfat. **h** Includes mixed skim and buttermilk powder. **i** Excludes logs harvested for firewood. **j** Liveweight. **k** Includes salmon and trout production. **l** Includes Queensland bugs. **s** ABARES estimate. **f** ABARES forecast.

Sources: ABARES; Australian Bureau of Statistics; Australian Dairy Corporation; Raw Cotton Marketing Advisory Committee. Australian Fisheries Management Authority; Fisheries Victoria, Department of Primary Industries; Industry & Investment New South Wales; Northern Territory Department of Regional Development, Primary Industry, Fisheries and Resources; Fisheries Queensland, Department of Employment, Economic Development and Innovation; South Australian Research and Development Institute; Primary Industries and Resources, South Australia; Department of Primary Industries, Parks, Water and Environment, Tasmania; Department of Fisheries, Western Australia; State and Territory Forest Services; forestry industries

14 Gross value of farm and fisheries production

Australia

	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m	2011–12 f $m
Crops						
Grains and oilseeds						
Winter crops						
barley	1 039	2 244	1 850	1 359	1 891	1 730
canola	227	659	1 011	840	1 157	1 180
chickpeas	151	195	199	194	182	186
field peas	40	109	82	86	99	86
lupins	125	222	198	205	203	193
oats	181	423	251	186	228	225
triticale	44	113	93	120	149	120
wheat	2 619	5 292	6 021	4 765	7 519	7 605
Summer crops						
maize	60	100	106	88	104	84
rice	55	7	34	90	297	339
grain sorghum	274	977	553	323	474	404
soybeans	12	19	44	33	32	24
sunflower seed	15	59	38	29	33	23
other oilseeds a	21	35	28	35	36	33
Total grains and oilseeds	5 090	10 803	10 778	8 676	12 867	12 626
Industrial crops						
Cotton lint and cottonseed b	542	254	693	828	2 588	2 747
Sugar cane (cut for crushing)	1 221	861	1 021	1 382	1 128	1 316
Wine grapes	1 243	1 446	887	709	618	678
Total industrial crops	3 005	2 560	2 601	2 919	4 334	4 741
Horticulture						
Table and dried grapes	240	202	286	273	284	263
Fruit and nuts (excl. grapes)	3 499	2 758	2 871	2 950	3 168	3 452
Vegetables	3 165	3 363	3 012	3 023	3 370	3 588
Other horticulture	1 730	1 693	1 556	1 649	1 882	1 950
Total horticulture	8 633	8 015	7 725	7 895	8 705	9 253
Other crops nei c	1 683	2 858	1 711	1 695	1 670	1 645
Total crops	18 411	24 237	22 815	21 185	27 577	28 266

Continued

14 Gross value of farm and fisheries production *continued*

Australia

	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m	2011–12 f $m
Livestock slaughterings						
Cattle and calves **d**	7 552	6 907	7 144	6 718	7 606	7 243
Cattle exported live **e**	436	446	538	550	499	327
Sheep **g**	380	400	428	499	522	592
Lambs **gh**	1 387	1 481	1 725	1 832	2 187	2 295
Sheep exported live	289	286	339	297	346	356
Pigs	944	902	895	903	813	870
Poultry	1 294	1 637	1 861	1 785	2 179	2 241
Total livestock slaughterings **k**	12 335	12 103	12 982	12 634	14 205	13 976
Livestock products						
Wool **i**	2 282	2 309	1 806	1 928	3 005	3 287
Milk **j**	3 178	4 572	3 988	3 371	3 950	3 953
Eggs	388	468	447	428	421	426
Honey and beeswax	70	64	86	90	92	94
Total livestock products	5 917	7 412	6 327	5 816	7 469	7 760
Total farm	36 663	43 752	42 124	39 636	49 250	50 002
Forestry products l						
Broadleaved	843	946	909	817	na	na
Coniferous	869	890	823	929	na	na
Total	1 713	1 836	1 732	1 746	1 734	1 828
Fisheries products m						
Tuna	161	210	187	125	139	134
Salmonids **n**	291	302	326	369	416	465
Other fish **o**	397	413	390	403	399	398
Prawns	267	272	290	324	308	269
Rock lobster **p**	461	426	415	368	375	381
Abalone	217	189	189	181	183	185
Scallops	29	33	26	26	27	31
Oysters	91	89	93	100	104	114
Pearls **q**	124	114	90	104	93	90
Other molluscs **r**	70	52	53	57	59	56
Other crustaceans	63	63	66	76	86	76
Total fish	2 217	2 207	2 214	2 185	2 175	2 169

a Linseed, safflower seed and peanuts. **b** Value delivered to gin. **c** Mainly fodder crops. **d** Includes dairy cattle slaughtered. **e** Excludes animals exported for breeding purposes. **g** Excludes skin values. **h** Lamb saleyard indicator weight 18–22 kg. **i** Shorn, dead and fellmongered wool and wool exported on skins. **j** Milk intake by factories and valued at the farm gate. **k** Total livestock slaughterings includes livestock disposals. **l** Excludes logs harvested for firewood. **m** Value to fishermen of product landed in Australia. **n** Includes salmon and trout production. **o** Includes an estimated value of aquaculture. **p** Includes Queensland bugs. **q** Includes Northern Territory aquaculture production from 2009–10. **r** Also includes fish and aquaculture values not elsewhere included. **s** ABARES estimate. **f** ABARES forecast. **na** Not available.

Note: The gross value of production is the value placed on recorded production at the wholesale prices realised in the marketplace. The point of measurement can vary between commodities. Generally the marketplace is the metropolitan market in each state and territory. However, where commodities are consumed locally or where they become raw material for a secondary industry, these points are presumed to be the marketplace. Prices used in these calculations exclude GST.

Sources: ABARES; Australian Bureau of Statistics

15 Crop areas and livestock numbers

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Crop areas							
Grains and oilseeds							
Winter crops							
barley	'000 ha	4 182	4 902	5 015	4 422	4 077	4 118
canola	'000 ha	1 052	1 277	1 693	1 712	1 642	1 705
chickpeas	'000 ha	284	306	338	429	546	285
field peas	'000 ha	384	293	300	285	292	244
lupins	'000 ha	736	752	577	692	568	490
oats	'000 ha	1 003	1 238	870	850	917	1 003
triticale	'000 ha	369	360	323	350	330	330
wheat	'000 ha	11 798	12 578	13 530	13 881	13 374	14 108
Summer crops							
maize	'000 ha	49	68	65	59	61	54
rice	'000 ha	20	2	8	19	89	101
grain sorghum	'000 ha	613	942	767	498	637	617
soybeans	'000 ha	14	15	42	31	19	18
sunflower seed	'000 ha	22	48	52	27	29	26
other oilseeds a	'000 ha	43	49	22	16	17	16
Total grains and oilseeds	'000 ha	21 191	23 237	24 084	23 793	23 574	24 118
Industrial crops							
Cotton	'000 ha	144	63	164	208	590	600
Sugar cane b	'000 ha	409	381	391	389	334	376
Winegrapes	'000 ha	163	166	157	152 e	153 e	154 e
Livestock numbers c							
Cattle							
beef	million	25.37	24.78	25.29	24.04	24.88	25.46
dairy	million	2.66	2.54	2.61	2.51	2.53	2.54
milking herd d	million	1.80	1.64	1.68	1.60	1.61	1.62
total	million	28.04	27.32	27.91	26.55	27.40	28.00
Sheep	million	85.7	76.9	72.7	68.0	70.0	71.2
Pigs	million	2.60	2.41	2.30	2.29	2.31	2.33
Forestry plantation area							
Broadleaved	'000 ha	883	950	991	973	na	na
Coniferous	'000 ha	1 010	1 014	1 020	1 024	na	na
Total plantation area g	'000 ha	1 903	1 973	2 020	2 009	na	na

a Linseed and safflower seed. **b** Cut for crushing. **c** At 30 June. **d** Cows in milk and dry. **e** This figure is for grapes for wine only. Prior to 2008–09 this figure includes grapes used for winemaking and other purposes such as drying and table. **g** Includes areas where plantation type is unknown. **s** ABARES estimate. **f** ABARES forecast. **na** Not available.

Sources: ABARES; Australian Bureau of Statistics

16 Average farm yields

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Crops							
Grains and oilseeds							
Winter crops							
barley	t/ha	1.02	1.46	1.59	1.78	2.29	2.02
canola	t/ha	0.54	0.95	1.09	1.12	1.30	1.35
chickpeas	t/ha	0.81	1.02	1.31	1.14	0.69	1.43
field peas	t/ha	0.37	0.91	0.79	1.25	1.49	1.57
lupins	t/ha	0.64	0.88	1.23	1.19	1.09	1.42
oats	t/ha	0.75	1.21	1.33	1.37	1.68	1.56
triticale	t/ha	0.54	1.25	1.12	1.56	2.07	1.75
wheat	t/ha	0.92	1.08	1.58	1.57	1.97	1.86
Summer crops							
maize	t/ha	4.92	5.69	5.82	5.56	5.75	5.55
rice	t/ha	8.15	8.15	8.18	10.39	9.04	9.02
grain sorghum	t/ha	2.09	4.02	3.51	3.03	3.36	3.03
soybeans	t/ha	2.51	2.34	1.89	1.90	2.47	2.16
sunflower seed	t/ha	0.96	1.51	1.07	1.54	1.51	1.25
Industrial crops							
Cotton (lint)	t/ha	2.10	2.12	2.01	1.86	1.52	1.91
Sugar cane (for crushing)	t/ha	89	86	80	80	82	83
Winegrapes	t/ha	8.7	11.1	10.7	10.1	9.8	10.7
Livestock							
Wool a	kg/sheep	4.09	4.30	4.29	4.26	4.37	4.39
Whole milk	L/cow	5 336	5 624	5 602	5 653	5 654	5 741

a Shorn (including lambs). **s** ABARES estimate. **f** ABARES forecast.
Sources: ABARES; Australian Bureau of Statistics

17 Volume of agricultural, fisheries and forestry exports

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Farm							
Grains and oilseeds							
Winter crops							
barley **a**	kt	3 136	4 051	3 898	4 234	4 625	4 421
canola	kt	238	519	973	1 238	1 453	1 527
chickpeas	kt	244	218	467	459	407	345
lupins	kt	174	76	157	377	320	329
oats (unprepared)	kt	62	115	196	216	127	142
peas **b**	kt	248	142	118	163	255	266
wheat **c**	kt	11 196	7 408	13 410	13 725	18 453	20 455
Summer crops							
cottonseed	kt	104	18	37	106	268	863
rice	kt	491	78	32	88	266	651
grain sorghum	kt	46	251	1 368	487	553	591
other oilseeds **d**	kt	13	11	10	13	7	9
Total grains and oilseeds	kt	15 950	12 886	20 667	21 107	26 735	29 599
Industrial crops							
Raw cotton **e**	kt	487	266	260	395	505	978
Sugar	kt	3 719	3 493	3 268	3 506	2 514	2 776
Wine	ML	798	709	750	777	728	720
Meat and live animals for slaughter							
Beef and veal **gh**	kt	974	930	968	899	937	920
Live cattle **i**	'000	636	708	845	871	728	450
Lamb **g**	kt	150	163	156	157	157	162
Live sheep **i**	'000	4 138	4 069	4 064	3 055	2 909	3 100
Mutton **g**	kt	162	158	146	111	86	95
Pig meat **g**	kt	41	39	32	30	31	34
Poultry meat **g**	kt	28	30	37	28	31	30
Wool							
Greasy **js**	kt	402	343	314	308	335	327
Semi-processed	kt (gr. eq.)	82	67	62	49	44	40
Skins	kt (gr. eq.)	92	73	69	70	65	63
Total **js**	kt (gr. eq.)	576	483	445	428	444	430
Dairy products							
Butter **k**	kt	81	57	70	74	56	55
Cheese	kt	213	203	146	168	163	169
Casein	kt	12	9	8	10	5	5
Skim milk powder	kt	164	123	162	126	156	148
Whole milk powder	kt	94	82	116	91	108	112

Continued

17 Volume of agricultural, fisheries and forestry exports *continued*

Australia

	unit	2006–07	2007–08	2008–09	2009–10	2010–11 s	2011–12 f
Forest products							
Sawnwood	'000 m^3	416	338	355	387	389	na
Wood-based panels	'000 m^3	309	274	345	244	296	na
Paper and paperboard	kt	805	790	769	890	1 029	1 113
Woodchips	kt	5 952	6 166	5 255	4 818	5 064	5 335
Fisheries products							
Tuna	kt	11.6	12.6	11.5	9.5	7.8	8.3
Other fish	kt	11.4	9.8	14.2	11.2	14.1	13.0
Prawns l							
headless	kt	0.1	0.4	0.5	0.5	0.5	0.5
whole	kt	6.0	3.9	4.0	3.8	4.8	4.7
Rock lobster							
tails	kt	1.5	1.0	0.8	0.6	0.4	0.4
whole	kt	8.3	8.1	8.4	7.0	6.4	6.2
Abalone							
fresh, chilled or frozen	kt	2.2	2.1	2.1	2.2	2.1	2.1
prepared or preserved	kt	1.7	1.4	1.2	1.4	1.4	1.4
Scallops m	kt	1.4	1.1	1.1	1.1	0.6	1.3

a Includes the grain equivalent of malt. **b** Includes field peas and cowpeas. **c** Includes the wheat equivalent of flour. **d** Includes soybeans, linseed, sunflower seed, safflower seed and peanuts. Excludes meals and oils. **e** Excludes cotton waste and linters. **g** In shipped weight. Fresh, chilled or frozen. **h** Includes meat loaf. **i** Excludes breeding stock. **j** ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. **k** Includes ghee, dry butterfat, butter concentrate and butteroil, and dairy spreads, all expressed as butter. **l** Excludes volume of other prawn products. **m** Includes crumbed scallops. **s** ABARES estimate. **f** ABARES forecast. **na** Not available.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra; Department of Foreign Affairs and Trade; Department of Agriculture, Fisheries and Forestry

18 Value of agricultural, fisheries and forestry exports (fob)

Australia

	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m	2011–12 f $m
Farm						
Grains and oilseeds						
Winter crops						
barley a	833	1 496	1 321	1 093	1 295	1 228
canola	108	303	595	583	856	923
chickpeas	168	139	275	255	213	180
lupins	38	31	61	115	97	85
oats	20	37	64	53	37	35
peas b	80	61	62	60	86	87
wheat c	2 765	2 990	5 028	3 692	5 526	6 420
Summer crops						
cottonseed	31	8	19	46	85	363
rice	347	71	31	78	129	616
grain sorghum	13	76	405	116	146	119
other oilseeds d	22	27	27	24	14	27
Total grains and oilseeds	4 426	5 240	7 890	6 113	8 483	10 082
Industrial crops						
Raw cotton e	823	466	500	755	1 367	2 233
Sugar	1 510	1 006	1 338	1 887	1 492	1 491
Wine	2 990	2 683	2 428	2 164	1 958	1 910
Total	5 323	4 155	4 266	4 805	4 817	5 635
Horticulture						
Fruit	627	606	692	593	463	435
Tree nuts	169	177	229	198	207	252
Vegetables	385	375	437	497	560	423
Nursery	30	28	26	20	17	20
Total horticulture	1 211	1 186	1 384	1 309	1 247	1 130
Other crops	2 131	2 451	3 349	3 023	3 096	3 165
Total crops	13 091	13 032	16 889	15 251	17 644	20 012
Meat and live animals for slaughter						
Beef and veal	4 634	4 190	4 857	3 953	4 327	4 079
Live cattle g	436	446	538	550	499	327
Lamb	748	803	925	916	1 026	1 066
Live sheep g	289	286	339	297	346	356
Mutton	458	443	482	433	404	451
Pig meat	142	128	124	109	106	118
Poultry meat	26	32	43	36	38	41
Total	6 732	6 329	7 308	6 293	6 747	6 438
Wool						
Greasy h	2 316	2 115	1 729	1 777	2 376	2 412
Semi-processed	393	362	281	238	251	235
Skins	356	319	312	291	426	439
Total h	3 065	2 796	2 322	2 307	3 053	3 086

Continued

18 Value of agricultural, fisheries and forestry exports (fob) *continued*

Australia

	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m	2011–12 f $m
Dairy products						
Butter	179	195	232	211	252	213
Cheese	824	968	796	715	732	734
Casein	113	125	107	88	53	52
Skim milk powder	505	533	553	358	505	463
Whole milk powder	275	392	475	296	402	394
Other dairy products	543	551	518	419	402	398
Total	2 439	2 764	2 682	2 088	2 346	2 254
Other livestock exports	2 577	2 611	2 836	2 632	2 678	2 803
Total livestock exports	14 814	14 500	15 147	13 319	14 823	14 581
Total farm exports	27 905	27 532	32 036	28 570	32 467	34 593
Forest products						
Sawnwood	145	120	125	125	115	117
Wood-based panels	126	109	101	88	105	113
Paper and paperboard	650	635	606	649	747	808
Woodchips	950	1 072	997	856	884	903
Other	483	535	514	543	629	685
Total forest products	2 355	2 471	2 343	2 261	2 480	2 627
Fisheries products						
Tuna	162	206	177	118	131	126
Other fish	118	119	157	140	156	142
Prawns i						
headless	2	6	8	5	4	4
whole	89	56	71	53	64	65
Rock lobster						
tails	102	63	53	35	24	22
whole	357	333	405	363	341	411
Abalone						
fresh, chilled or frozen	139	124	119	133	120	124
prepared or preserved	107	93	89	83	92	91
Scallops j	35	28	33	30	15	36
Pearls	314	264	366	244	241	231
Other fisheries products	69	49	52	43	60	107
Total fisheries products	1 494	1 342	1 529	1 247	1 249	1 360
Total rural exports k	31 754	31 345	35 908	32 078	36 196	38 580

a Includes the grain equivalent of malt. **b** Field peas and cowpeas. **c** Includes the wheat equivalent of flour. **d** Includes soybeans, linseed, sunflower seed, safflower seed and peanuts. Excludes meals and oils. **e** Excludes cotton waste and linters. **g** Excludes breeding stock. **h** On a balance of payments basis. ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. **i** Other prawn products included in other fisheries products. **j** Includes crumbed scallops. **k** Derived from farm, forest and fisheries products. **s** ABARES estimate. **f** ABARES forecast.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

19 Volume of forest products exports (fob)

Australia

	unit	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Quantity							
Roundwood	'000 m^3	863.6	1 171.4	1 044.9	986.4	1 377.4	1 696.6
Sawnwood **a**							
Coniferous roughsawn	'000 m^3	226.4	317.3	258.5	282.7	322.0	272.2
Coniferous dressed	'000 m^3	23.4	49.3	23.3	18.2	12.7	22.8
Broadleaved roughsawn	'000 m^3	31.0	36.3	39.9	40.5	37.0	64.3
Broadleaved dressed	'000 m^3	11.8	12.7	16.4	13.1	15.6	29.3
Total	'000 m^3	292.6	415.6	338.1	354.5	387.3	388.7
Railway sleepers	'000 m^3	9.2	10.5	10.8	9.3	8.5	8.0
Wood-based panels							
Veneers	'000 m^3	2.9	3.9	34.8	85.7	89.8	119.0
Plywood	'000 m^3	3.7	13.1	14.8	52.6	23.8	11.1
Particleboard	'000 m^3	13.6	18.2	6.2	16.7	9.4	35.9
Hardboard **b**	'000 m^3	7.4	4.4	0.4	1.8	1.3	2.2
Medium density fibreboard	'000 m^3	352.4	259.7	203.6	181.0	118.0	114.9
Softboard and other fibreboards	'000 m^3	11.4	10.2	14.2	7.6	1.7	12.9
Total	'000 m^3	391.5	309.5	273.8	345.4	244.0	296.0
Paper and paperboard							
Newsprint	kt	0.2	0.2	4.7	2.2	5.5	19.4
Printing and writing	kt	147.0	131.7	119.0	111.9	145.6	84.1
Household and sanitary	kt	31.6	32.5	36.7	37.9	31.1	38.7
Packaging and industrial	kt	632.2	640.5	629.6	617.0	707.6	887.0
Total	kt	811.0	804.8	790.0	769.0	889.8	1 029.3
Recovered paper	kt	906.8	1 059.9	1 285.9	1 215.9	1 444.4	1 322.6
Pulp	kt	5.9	15.9	21.2	22.0	17.5	30.7
Woodchips **cd**	kt	5 363.4	5 952.4	6 166.2	5 254.8	4 817.6	5 064.4

a Excludes railway sleepers. **b** Uncoated hardboard confidential from January 2007. **c** Includes particles. **d** Bone dry tonnes.
Sources: Engineered Wood Products Association of Australasia; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra; ABARES

20 Value of forest products exports (fob)

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Value						
Roundwood	82.4	117.4	105.4	101.0	137.8	197.6
Sawnwood						
Coniferous roughsawn	63.3	80.7	63.1	69.7	76.1	67.2
Coniferous dressed	15.1	18.1	11.5	8.8	7.0	4.5
Broadleaved roughsawn	30.6	35.5	37.9	38.3	33.1	34.9
Broadleaved dressed	12.0	11.1	8.0	8.0	9.3	8.4
Total	121.0	145.3	120.4	124.8	125.5	115.0
Railway sleepers	3.7	4.6	3.3	3.7	2.5	3.0
Miscellaneous forest products	68.7	62.5	56.0	51.1	59.0	65.2
Wood-based panels						
Veneers	6.5	5.8	18.8	36.5	44.3	52.1
Plywood	4.7	7.9	8.8	4.1	2.6	1.7
Particleboard	6.2	6.5	3.8	6.6	3.4	6.3
Hardboard **a**	5.0	3.0	0.1	1.2	1.3	2.1
Medium density fibreboard **b**	120.9	96.9	75.7	52.0	36.1	41.8
Softboard and other fibreboards	9.6	5.6	1.5	0.8	0.6	0.6
Total	153.0	125.6	108.7	101.2	88.3	104.6
Paper and paperboard						
Newsprint	0.2	0.2	2.7	2.0	5.7	13.3
Printing and writing	147.1	148.9	132.5	128.1	142.8	88.4
Household and sanitary	98.1	101.7	105.7	110.9	96.8	94.0
Packaging and industrial	355.7	399.7	394.6	364.4	403.6	551.7
Total	601.1	650.5	635.5	605.5	648.9	747.4
Paper manufactures	125.1	111.6	103.5	106.1	102.4	111.7
Recovered paper	140.1	175.1	251.7	234.8	227.9	239.9
Pulp	5.5	12.0	14.7	17.7	13.2	11.3
Woodchips	839.0	950.3	1 072.2	996.8	855.5	884.4
Total	2 139.6	2 354.9	2 471.4	2 342.7	2 261.0	2 480.2

a Uncoated hardboard confidential from January 2007. **b** Some categories of medium density fibreboard are confidential.
Sources: Engineered Wood Products Association of Australasia; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra; ABARES

21 Volume of forest products imports

Australia

	unit	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Quantity							
Roundwood	'000 m^3	0.6	5.0	0.7	1.4	0.9	0.6
Sawnwood **a**							
Coniferous roughsawn	'000 m^3	301.4	289.2	340.2	255.6	292.6	290.1
Coniferous dressed	'000 m^3	239.3	193.9	321.2	278.8	367.3	468.6
Broadleaved roughsawn	'000 m^3	70.5	67.4	61.5	52.2	44.1	43.8
Broadleaved dressed	'000 m^3	60.4	60.1	60.9	41.7	44.1	44.2
Total	'000 m^3	671.5	610.7	783.9	628.4	748.1	846.7
Wood-based panels							
Veneers	'000 m^3	23.7	29.0	31.5	21.4	15.4	17.4
Plywood	'000 m^3	204.8	244.0	236.6	199.1	227.7	277.5
Particleboard	'000 m^3	36.8	77.5	99.6	68.7	64.2	73.4
Hardboard	'000 m^3	30.2	38.4	32.1	23.5	33.0	47.4
Medium density fibreboard	'000 m^3	51.9	26.5	68.8	88.3	69.9	60.0
Softboard and other fibreboards	'000 m^3	14.3	14.2	14.3	10.6	6.2	11.6
Total	'000 m^3	361.7	429.5	482.8	411.7	416.4	487.3
Paper and paperboard							
Newsprint	kt	324.5	262.5	227.6	197.6	190.6	221.5
Printing and writing	kt	1 140.1	1 173.5	1 235.3	1 122.1	1 167.4	1 236.7
Household and sanitary	kt	87.9	101.8	81.1	82.0	101.1	113.8
Packaging and industrial	kt	190.8	258.4	303.1	254.0	285.3	318.3
Total	kt	1 743.4	1 796.3	1 847.1	1 655.7	1 744.4	1 890.3
Recovered paper	kt	7.4	9.6	10.2	3.0	3.4	2.0
Pulp	kt	348.0	359.0	388.7	344.7	265.0	233.2
Woodchips	kt	0.9	0.8	0.7	0.7	0.7	1.2

a Excludes railway sleepers.

Sources: Engineered Wood Products Association of Australasia; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra; ABARES

22 Value of forest products imports

Australia

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
	$m	$m	$m	$m	$m	$m
Value						
Roundwood	0.4	0.6	0.8	1.1	0.4	0.6
Sawnwood						
Coniferous roughsawn	150.3	148.1	186.0	133.9	140.3	134.6
Coniferous dressed	150.5	143.3	191.4	167.5	199.9	247.8
Broadleaved roughsawn	65.2	66.9	58.8	50.7	40.9	41.3
Broadleaved dressed	53.5	59.9	56.0	52.7	48.1	49.2
Total	419.4	418.2	492.3	404.8	429.2	472.8
Miscellaneous forest products	527.6	567.1	583.2	650.5	602.7	682.2
Wood-based panels						
Veneers	24.9	31.5	33.4	28.3	21.7	20.9
Plywood	133.6	167.7	152.7	145.4	137.7	170.3
Particleboard	13.7	26.2	34.4	26.8	20.3	17.9
Hardboard	27.3	29.9	28.1	25.7	30.4	38.8
Medium density fibreboard	21.6	13.8	32.7	41.0	36.9	37.1
Softboard and other fibreboards	7.1	7.2	2.9	4.0	2.9	3.0
Total	228.2	276.3	284.2	271.2	249.9	287.9
Paper and paperboard						
Newsprint	266.9	224.1	184.6	173.4	158.0	175.7
Printing and writing	1 438.2	1 453.2	1 456.1	1 467.8	1 354.9	1 347.1
Household and sanitary	151.6	177.1	137.3	154.2	163.5	185.2
Packaging and industrial	330.3	416.1	470.4	481.0	498.8	515.3
Total	2 187.0	2 270.5	2 248.4	2 276.4	2 175.1	2 223.3
Paper manufactures **a**	425.8	469.5	513.3	590.2	562.8	557.2
Recovered paper	1.5	2.3	2.4	0.8	0.6	0.4
Pulp	225.0	265.2	285.2	262.6	177.8	180.3
Woodchips	2.1	1.5	1.8	1.7	1.2	1.8
Total	4 017.0	4 271.2	4 411.5	4 459.2	4 199.8	4 406.5

a Includes other paper articles that have had some further processing.

Sources: Engineered Wood Products Association of Australasia; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra; ABARES

23 Volume of fisheries products exports (fob)

Australia

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
	kt	kt	kt	kt	kt	kt
Edible						
Fish						
Live	na	na	na	na	na	na
Fresh, chilled or frozen						
Whole						
Tuna **a**	11	11	12	11	9	8
Other	7	7	6	11	8	11
Fillets	2	2	1	0	1	1
Prepared and preserved	1	1	2	2	1	1
Dried, salted and smoked	0	0	0	0	0	0
Other fish products	1	1	1	1	1	1
Total fish **b**	23	23	22	26	21	22
Crustaceans and molluscs						
Rock lobster	12	10	9	10	8	7
Prawns	9	6	5	5	5	6
Abalone	4	4	4	3	4	3
Scallops	1	1	1	1	1	1
Oysters	0	0	0	0	0	0
Crabs	2	1	1	1	1	1
Other	1	1	1	1	1	1
Total	29	25	22	21	19	20
Total edible **b**	52	48	44	47	40	42

a Exports of tuna landed in Australia. **b** Excludes live tonnage. **na** Not available. 0 is used to denote nil or less than 500 tonnes.
Source: Australian Bureau of Statistics, *International Trade, Australia*, cat. no. 5465.0, Canberra

24 Value of fisheries products exports (fob)

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Edible						
Fish						
Live	40	41	43	46	40	33
Fresh, chilled or frozen						
Whole						
Tuna **a**	177	160	202	175	117	130
Other	31	34	37	71	57	82
Fillets	15	13	6	5	10	10
Prepared and preserved	7	6	13	10	6	5
Dried, salted and smoked	14	15	17	17	13	19
Other fish products	12	10	8	9	15	8
Total fish b	295	280	325	334	258	287
Crustaceans and molluscs						
Rock lobster	489	463	401	462	400	369
Prawns	134	94	69	82	61	77
Abalone	246	246	217	208	216	212
Scallops	39	35	28	33	30	15
Oysters	2	2	2	3	3	4
Crabs	18	17	16	16	14	13
Other	15	19	8	6	5	12
Total	943	878	741	811	729	704
Total edible b	1 237	1 158	1 065	1 145	988	991
Non-edible						
Marine fats and oils	4	12	5	5	5	5
Fish meal	9	5	1	1	2	2
Pearls **c**	290	314	264	366	244	241
Ornamental fish	1	2	2	3	3	2
Other non-edible	6	5	4	8	5	7
Total non-edible	310	336	276	384	259	258
Total fisheries products b	1 547	1 494	1 342	1 529	1 247	1 249

a Exports of tuna landed in Australia. **b** Includes live value. **c** Includes items temporarily exported and re-imported.
Source: Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

25 Volume of fisheries products imports
Australia

	2005–06 kt	2006–07 kt	2007–08 kt	2008–09 kt	2009–10 kt	2010–11 kt
Edible						
Fish						
Live fish	na	na	na	na	na	na
Fresh, chilled or frozen						
Fresh or chilled whole	6	6	7	7	8	8
Frozen whole	7	6	6	6	6	6
Fresh or chilled fillets	1	1	1	1	1	1
Frozen fillets	41	42	43	41	43	45
Other	5	4	5	3	4	2
Canned fish	53	52	54	54	54	60
Smoked, dried or salted fish	3	4	4	4	4	4
Other fish preparations	14	17	18	18	21	21
Total **a**	129	134	137	134	140	147
Crustaceans and molluscs						
Fresh, chilled or frozen **b**						
Prawns	23	26	19	13	18	16
Lobster	1	1	1	0	1	1
Scallops	2	3	2	2	3	3
Oysters	1	1	1	1	1	1
Mussels	2	2	2	3	2	3
Other	17	17	17	19	18	18
Prepared and preserved	13	15	19	21	24	24
Extracts and pastes	0	0	0	0	0	0
Other	322	420	197	212	297	286
Total	59	65	61	60	67	65
Total edible a	188	199	198	193	208	212

a Excludes live tonnage. **b** Includes dried and salted. **na** Not available. 0 is used to denote nil or less than 500 tonnes.
Source: Australian Bureau of Statistics, *International Trade, Australia*, cat. no. 5465.0, Canberra

26 Value of fisheries products imports

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Edible						
Fish						
Live fish	0	0	0	0	0	0
Fresh, chilled or frozen						
Fresh or chilled whole	36	46	52	55	60	63
Frozen whole	19	18	22	22	22	22
Fresh or chilled fillets	5	7	7	7	9	9
Frozen fillets	197	228	228	239	232	230
Other	16	17	15	13	19	13
Prepared and preserved fish	229	244	257	331	257	287
Smoked, dried or salted fish	36	53	45	50	46	43
Other fish preparations	64	88	87	107	106	102
Total **a**	602	701	715	825	751	769
Crustaceans and molluscs						
Fresh, chilled or frozen **b**						
Prawns	201	246	167	135	159	149
Lobster	10	13	14	9	11	14
Scallops	31	30	28	30	34	34
Oysters	6	7	7	9	9	6
Mussels	9	9	9	12	9	10
Other	80	74	63	75	82	98
Prepared and preserved	88	101	128	185	188	190
Extracts and pastes	0	0	0	0	0	0
Other	2	2	1	3	2	2
Total	426	483	417	458	494	504
Total edible **a**	1 028	1 184	1 132	1 283	1 246	1 273
Non-edible						
Pearls **c**	159	182	166	321	171	167
Fish meal	22	40	41	42	52	47
Ornamental fish	5	5	5	6	5	4
Marine fats and oils	17	24	27	34	27	31
Other marine products	34	32	26	25	15	10
Total non-edible	237	283	266	427	269	258
Total fisheries products **a**	1 266	1 467	1 398	1 710	1 515	1 531

a Includes live value. **b** Includes dried and salted **c** Mostly re-imports. **na** Not available. 0 is used to denote nil or less than $0.5 million.

Source: Australian Bureau of Statistics, *International Trade, Australia*, cat. no. 5465.0, Canberra

27 Agricultural exports to Japan (fob)

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m
Grains and oilseeds						
Winter crops						
barley **a**	195	218	234	335	284	314
canola	140	86	70	65	109	41
chickpeas	0	0	0	0	0	0
lupins	12	7	4	9	9	5
oats	3	2	2	3	2	2
peas **b**	0	0	0	0	0	0
wheat **c**	1	1	13	92	299	408
Summer crops						
cottonseed	41	25	8	16	31	24
rice	0	0	0	0	0	0
sorghum	14	1	25	319	70	105
other oilseeds **d**	2	1	6	4	1	1
Total grains and oilseeds	408	342	362	843	805	902
Industrial crops						
Raw cotton **e**	57	59	47	39	31	48
Sugar **s**	179	238	129	192	190	200
Wine	44	49	49	54	43	44
Total	280	346	225	285	264	291
Horticulture						
Fruit and nuts	110	101	93	85	77	85
Vegetables	27	21	19	27	20	24
Other crops	379	351	329	392	352	368
Total crops	1 205	1 161	1 029	1 632	1 519	1 670
Meat and live animals for slaughter						
Beef and veal	2 195	2 138	1 856	2 101	1 698	1 689
Live cattle **g**	19	18	18	15	15	16
Lamb	93	64	54	70	56	61
Live sheep **g**	0	0	0	0	0	0
Mutton	33	32	28	39	25	26
Pig meat	12	9	5	6	2	2
Poultry meat	0	0	0	0	0	0
Total	2 352	2 262	1 962	2 231	1 796	1 794
Wool						
Greasy **h**	6	6	0	2	4	9
Semi-processed	25	33	17	12	12	23
Skins	3	3	5	3	1	1
Total **h**	34	42	22	17	17	33
Dairy products						
Butter	5	8	17	11	2	6
Cheese	298	338	427	399	358	356
Casein	30	32	38	44	26	22
Skim milk powder	13	11	10	22	3	2
Whole milk powder	1	1	0	0	0	0
Other dairy products	51	63	53	46	44	37
Total dairy product exports	398	453	545	521	433	423
Other livestock exports	549	504	447	472	352	378
Total livestock exports	3 332	3 261	2 976	3 240	2 598	2 628
Total agricultural exports	4 537	4 422	4 004	4 872	4 117	4 298

a Includes the grain equivalent of malt. **b** Field peas and cowpeas. **c** Includes the wheat equivalent of flour. **d** Includes soybeans, linseed, sunflowerseed, safflowerseed and peanuts. Excludes meals and oils. **e** Excludes cotton waste and linters. **g** Excludes breeding stock. **h** On a balance of payments basis. ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. 0 is used to denote nil or less than $0.5 million. **s** ABARES estimate.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

28 Agricultural exports to United States (fob)

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m
Grains and oilseeds						
Winter crops						
barley **a**	1	1	0	0	0	0
canola	0	0	0	0	0	0
chickpeas	0	0	1	2	1	2
lupins	0	0	0	0	0	0
oats	0	0	0	1	0	0
peas **b**	0	1	0	0	1	0
wheat **c**	0	0	0	0	0	0
Summer crops						
cottonseed	0	0	0	0	10	0
rice	0	0	0	0	0	0
sorghum	0	0	0	0	0	0
other oilseeds **d**	1	0	0	0	0	0
Total grains and oilseeds	2	2	2	3	12	2
Industrial crops						
Raw cotton **e**	0	0	0	0	0	0
Sugar **s**	96	97	47	78	68	101
Wine	865	857	734	762	627	524
Total	961	955	782	841	695	625
Horticulture						
Fruit and nuts	93	77	72	64	78	37
Vegetables	0	0	0	0	0	1
Other crops	115	128	149	242	228	228
Total crops	1 171	1 163	1 004	1 149	1 013	893
Meat and live animals for slaughter						
Beef and veal	1 161	1 239	949	1 231	813	709
Live cattle **g**	0	0	0	0	0	0
Lamb	314	309	307	357	296	332
Live sheep **g**	0	0	0	0	0	0
Mutton	45	47	44	36	33	41
Pig meat	0	0	0	0	0	0
Poultry meat	0	0	0	0	0	0
Total	1 520	1 595	1 300	1 623	1 142	1 082
Wool						
Greasy **h**	17	16	9	7	9	11
Semi-processed	2	1	2	1	3	3
Skins	2	1	0	0	0	0
Total **h**	21	19	11	8	12	14
Dairy products						
Butter	25	13	10	19	10	3
Cheese	54	53	37	60	20	12
Casein	27	32	42	29	23	13
Skim milk powder	4	5	7	0	0	0
Whole milk powder	15	13	9	8	9	4
Other dairy products	14	7	10	10	13	17
Total dairy product exports	139	123	115	126	74	50
Other livestock exports	126	129	133	136	129	139
Total livestock exports	1 806	1 866	1 559	1 893	1 358	1 286
Total agricultural exports	2 978	3 029	2 563	3 043	2 371	2 179

a Includes the grain equivalent of malt. **b** Field peas and cowpeas. **c** Includes the wheat equivalent of flour. **d** Includes soybeans, linseed, sunflowerseed, safflowerseed and peanuts. Excludes meals and oils. **e** Excludes cotton waste and linters. **g** Excludes breeding stock. **h** On a balance of payments basis. ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. 0 is used to denote nil or less than $0.5 million. **s** ABARES estimate.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

29 Agricultural exports to China (fob)

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 s $m
Grains and oilseeds						
Winter crops						
barley **a**	276	220	295	235	280	455
canola	0	1	0	21	0	0
chickpeas	0	0	0	0	0	0
lupins	0	0	0	0	0	0
oats	0	0	0	0	0	0
peas **b**	0	0	0	0	0	0
wheat **c**	21	23	1	42	189	144
Summer crops						
cottonseed	0	0	0	0	0	44
rice	0	0	0	0	0	0
sorghum	0	0	0	0	4	14
other oilseeds **d**	1	1	1	2	1	1
Total grains and oilseeds	299	245	296	300	475	659
Industrial crops						
Raw cotton **e**	505	281	164	165	274	551
Sugar **s**	69	28	15	3	4	34
Wine	21	49	62	94	140	181
Total	595	358	241	262	418	766
Horticulture						
Fruit and nuts	13	16	17	16	11	9
Vegetables	0	0	0	0	0	0
Other crops	16	31	38	28	46	45
Total crops	923	651	592	606	950	1 478
Meat and live animals for slaughter						
Beef and veal	13	12	17	23	28	52
Live cattle **g**	8	8	0	16	43	19
Lamb	22	22	43	42	37	76
Live sheep **g**	2	0	0	0	0	0
Mutton	3	3	9	15	21	26
Pig meat	0	0	0	0	0	0
Poultry meat	0	0	0	0	0	0
Total	48	46	70	97	128	173
Wool						
Greasy **h**	1 258	1 689	1 455	1 328	1 460	1 869
Semi-processed	46	49	28	55	62	21
Skins	181	293	265	271	257	351
Total **h**	1 485	2 031	1 748	1 654	1 779	2 240
Dairy products						
Butter	1	3	4	3	5	4
Cheese	10	12	18	14	23	30
Casein	1	3	4	5	7	1
Skim milk powder	14	23	34	39	22	37
Whole milk powder	7	2	21	48	38	52
Other dairy products	27	37	58	54	45	35
Total dairy product exports	59	81	139	164	139	159
Other livestock exports	297	238	357	413	493	548
Total livestock exports	1 890	2 396	2 315	2 327	2 540	3 120
Total agricultural exports	2 813	3 046	2 907	2 933	3 490	4 598

a Includes the grain equivalent of malt. **b** Field peas and cowpeas. **c** Includes the wheat equivalent of flour. **d** Includes soybeans, linseed, sunflowerseed, safflowerseed and peanuts. Excludes meals and oils. **e** Excludes cotton waste and linters. **g** Excludes breeding stock. **h** On a balance of payments basis. ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. 0 is used to denote nil or less than $0.5 million. **s** ABARES estimate.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

30 Value of Australian forest products trade, by selected countries

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Exports						
China	251.5	269.7	359.7	390.4	393.8	544.4
Chinese Taipei	84.0	83.5	88.1	77.3	87.6	79.1
Hong Kong	92.2	71.6	53.8	51.3	68.4	42.3
Japan	801.9	887.8	965.2	860.5	774.4	745.3
Malaysia	46.8	48.5	56.7	78.5	82.5	105.7
New Zealand	369.0	365.1	375.3	323.8	319.1	314.4
Korea, Rep. of	74.8	115.5	91.1	103.2	48.4	39.6
Imports						
China	408.8	508.8	547.3	610.8	623.6	675.9
Finland	237.7	247.6	272.2	273.8	171.4	142.7
Germany	200.4	190.4	178.5	166.8	178.0	182.2
Indonesia	331.6	404.1	336.2	373.6	351.2	331.2
Malaysia	181.2	199.5	209.5	214.8	216.8	228.3
New Zealand	751.7	740.6	789.8	744.1	703.0	715.1
United States	280.7	276.0	288.6	319.6	313.1	285.3

Source: Australian Bureau of Statistics, *International Trade, Australia*, cat. no. 5465.0, Canberra

31 Value of Australian fisheries products trade, by selected countries

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Exports						
Edible (excluding live)						
China	102	59	26	30	43	143
Chinese Taipei	55	50	45	54	33	30
Hong Kong, China	396	447	426	525	491	394
Japan	371	306	328	302	215	226
Malaysia	6	5	8	13	9	13
New Zealand	12	10	13	9	17	10
Singapore	36	41	40	44	38	41
Thailand	8	8	8	7	9	16
United States	113	115	72	64	49	35
Nonedible						
Hong Kong, China	150	156	128	201	138	145
Japan	63	69	53	64	50	43
New Zealand	10	9	2	2	3	3
United States	28	34	24	22	15	8
Imports a						
Edible (excluding live)						
Canada	25	22	16	13	13	15
China	101	156	133	152	173	186
Chinese Taipei	24	27	32	33	37	39
Denmark	19	26	19	24	24	19
Indonesia	26	28	23	31	39	28
Japan	14	9	15	17	16	14
Malaysia	26	39	55	65	63	71
New Zealand	160	192	199	209	213	211
Norway	16	20	21	20	27	25
South Africa	29	33	24	23	30	28
Thailand	270	279	295	368	322	340
United States	27	40	29	50	37	40
Vietnam	133	155	142	167	153	162

a Country details for non-edible imports are not available.
Source: Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

32 Food exports by level of transformation

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Minimally transformed						
Live animals except fish	668	752	761	924	924	873
Fish or shellfish	657	632	647	747	650	667
Horticulture						
Vegetables	149	147	137	152	150	166
Fruit and nuts	482	451	433	563	472	369
Total	631	598	571	716	622	534
Grains a	4 305	3 329	4 221	6 383	4 632	6 744
Oilseeds	412	167	346	644	657	963
Food nec	49	54	41	49	43	50
Substantially and elaborately transformed						
Meat						
Meat processing	6 673	7 048	6 506	7 411	6 313	6 886
Poultry processing	21	26	32	43	36	38
Bacon, ham and smallgoods	91	43	33	47	54	57
Total	6 785	7 117	6 571	7 501	6 403	6 982
Seafood	606	548	440	417	357	350
Dairy						
Milk and cream processing	1 210	1 089	1 258	1 354	880	1 107
Ice cream	41	42	37	31	31	33
Cheese	837	824	968	796	715	732
Other dairy products	481	482	499	497	440	451
Total	2 569	2 438	2 763	2 679	2 066	2 323
Fruit and vegetables	555	574	568	575	523	572
Oil and fat	150	169	239	303	289	293
Flour mill and cereal food						
Flour mill products	230	269	315	419	365	345
Cereal food and baking mix	248	372	287	390	445	614
Total	478	642	602	809	811	958
Bakery products						
Bread, cake and pastry	26	27	26	25	26	22
Biscuit	107	111	118	127	135	134
Total	132	137	144	152	161	155
Other food						
Sugar a	1 503	1 551	1 035	1 374	1 924	1 536
Confectionery	208	215	237	269	260	252
Food nec	1 099	1 142	1 094	1 422	1 424	1 359
Total	2 809	2 907	2 366	3 065	3 607	3 146
Beverage and malt						
Soft drink, cordial and syrup	42	39	38	45	55	61
Beer and malt	218	273	335	447	406	318
Wine	2 768	2 894	2 700	2 493	2 188	2 009
Spirit	91	89	86	105	101	98
Total	3 120	3 294	3 159	3 091	2 750	2 486
Total food and beverage						
Minimally transformed	6 722	5 532	6 586	9 463	7 528	9 831
Substantially transformed	16 919	17 530	16 528	18 243	16 606	16 920
Elaborately transformed	286	297	324	350	362	346
Total	23 927	23 359	23 439	28 056	24 495	27 097

a Includes ABARES estimates where ABS confidentiality restrictions apply.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

33 Food imports by level of transformation

Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Minimally transformed						
Live animals except fish	1	1	1	2	1	2
Fish or shellfish	47	57	65	67	72	73
Horticulture						
Vegetables	41	45	53	49	58	76
Fruit and nuts	191	194	216	225	262	245
Total	233	238	269	274	320	322
Grains	1	2	2	2	3	4
Oilseeds	20	78	49	49	36	36
Food nec	140	176	188	180	229	306
Substantially and elaborately transformed						
Meat						
Meat processing	290	446	381	525	497	478
Poultry processing	0	0	0	0	0	0
Bacon, ham and smallgoods	43	42	50	68	82	90
Total	333	489	431	593	579	567
Seafood	998	1 151	1 095	1 249	1 201	1 231
Dairy						
Milk and cream processing	45	40	67	69	66	72
Ice cream	30	40	37	39	40	44
Cheese	292	302	377	365	360	398
Other dairy products	66	98	176	157	150	180
Total	432	480	656	631	615	694
Fruit and vegetables	1 043	1 233	1 390	1 559	1 367	1 486
Oil and fat	417	481	489	578	485	517
Flour mill and cereal food						
Flour mill products	57	34	66	83	66	48
Cereal food and baking mix	305	325	462	576	577	523
Total	362	358	527	659	643	572
Bakery products						
Bread, cake and pastry	138	163	175	197	191	222
Biscuit	199	254	267	297	305	338
Total	337	417	442	493	496	560
Other food						
Sugar	19	20	22	44	71	125
Confectionery	333	371	438	518	525	547
Food nec	1 075	1 186	1 270	1 492	1 450	1 525
Total	1 427	1 577	1 731	2 054	2 046	2 196
Beverage and malt						
Soft drink, cordial and syrup	571	656	697	791	798	818
Beer and malt	112	126	161	226	212	196
Wine	248	334	454	502	477	490
Spirit	414	465	491	530	538	545
Total	1 345	1 582	1 802	2 050	2 026	2 048
Total food and beverage						
Minimally transformed	441	551	574	574	661	742
Substantially transformed	6 435	7 430	8 167	9 437	9 024	9 425
Elaborately transformed	259	338	396	429	434	445
Total	7 135	8 319	9 138	10 441	10 119	10 613

0 is used to denote nil or less than $0.5 million.

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia*, cat. no. 5465.0, Canberra

34 Total food exports, by selected destination
Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Canada	425	423	402	380	335	na
China	786	664	917	1 178	1 426	na
Chinese Taipei	704	595	574	671	613	na
Egypt	471	151	174	315	266	na
Germany	172	123	162	153	109	na
Hong Kong, China	789	827	857	1 082	997	na
Indonesia	1 442	1 566	1 702	2 652	2 129	na
Japan	4 916	4 752	4 553	5 517	4 278	na
Korea, Rep. of	1 634	1 850	1 655	1 873	1 925	na
Malaysia	750	801	799	1 231	853	na
New Zealand	1 092	1 203	1 303	1 406	1 323	na
Philippines	285	240	308	563	318	na
Saudi Arabia	777	568	1 144	1 020	566	na
Singapore	622	650	712	792	722	na
Thailand	385	305	393	626	424	na
United Arab Emirates	419	284	445	567	528	na
United Kingdom	1 175	1 209	1 136	1 005	784	na
United States	3 006	3 058	2 552	3 054	2 379	na
Other	4 078	4 092	3 652	3 971	4 522	27 097
Total	23 927	23 359	23 439	28 056	24 495	27 097

Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

35 Total food imports, by selected source country
Australia

	2005–06 $m	2006–07 $m	2007–08 $m	2008–09 $m	2009–10 $m	2010–11 $m
Brazil	78	120	129	150	110	148
Canada	176	254	222	271	237	223
China **a**	416	552	634	776	733	775
France	194	224	279	290	281	299
India	122	144	160	179	168	172
Indonesia	117	140	163	207	198	198
Ireland	468	510	536	559	586	252
Italy	364	427	438	498	467	439
Malaysia	250	279	361	468	402	466
Netherlands	137	169	184	227	201	201
New Zealand	1 359	1 472	1 734	1 746	1 877	1 995
Papua New Guinea	34	38	36	45	44	57
Singapore	164	127	160	207	196	527
Spain	144	194	174	154	187	173
Thailand	450	483	554	713	698	770
United Kingdom	272	298	299	318	334	328
United States	631	721	810	1 006	902	978
Vietnam	245	279	251	299	282	305
Other	1 512	1 891	2 013	2 329	2 216	2 308
Total	7 135	8 319	9 138	10 441	10 119	10 613

a Excludes imports from Hong Kong.
Sources: ABARES; Australian Bureau of Statistics, *International Trade, Australia,* cat. no. 5465.0, Canberra

Report extracts

ABARES reports released since *Australian commodities* (vol 18 no 2 June quarter 2011)

Following is a selection of ABARES reports released since publication of the final issue of *Australian commodities* in June 2011. A brief description of the nature of each report is provided. While not comprehensive, the selection provides an overview of the range of interests ABARES covers. We intend including a similar list in each issue of this new ABARES publication, *Agricultural commodities*.

All reports can be downloaded from www.abares.gov.au/publications. For more information contact info@abares.gov.au.

Research reports

Innovation and productivity in the Australian grains industry

Research Report 11.6

Authors: Katarina Nossal and Kee Lim

Publication date: 20 July 2011

This study tests the influence of growers' innovative capacity on their adoption of innovation, and, in turn, their productivity. A model was used to empirically analyse the influence of farm-level factors on the likely effort allocated to innovation (measured by the extent of adoption of a range of innovative activities).

Public investment in agricultural R&D and extension: an analysis of the static and dynamic effects on Australian broadacre productivity

Research Report 11.7

Authors: Yu Sheng, Emily M Gray, John D Mullen and Alistair Davidson

Publication date: 14 September 2011

This research provides further evidence of the important contribution of public R&D and extension to broadacre total factor productivity in Australia.

Science and Economic Insights

Drivers of practice change in land management in Australian agriculture: preliminary national survey results

Science & Economic Insights, Issue 2.1 2011

Authors: Saan Ecker, Robert Kancans and Lyndal Thompson

Publication date: 16 August 2011

This document provides preliminary findings from the second phase of the drivers of practice change in land management in Australian agriculture project, which involved a national survey of farm managers in 2010–11.

Options for on-farm mitigation of greenhouse gases in Australia

Science and Economic Insights, Issue 3 2011

Authors: Jessica Sparkes, Sonja Nikolova, Alasebu Yainshet, James Walcott, John Gray, Edwina Heyhoe, Sarah Bruce and Sarah White

Publication date: 7 September 2011

This report identifies key greenhouse gas mitigation challenges and opportunities for Australia's agriculture sector, as well as future research requirements to address knowledge gaps. It is aimed at decision makers and may also be useful when introducing producers and landholders to the Carbon Farming Initiative.

Technical Reports

Scientific information for making decisions about natural resource management: a report on the value, status and availability of key ABARES datasets

Technical Report 11.2

Authors: Martin Mutendeudzi and Richard Stafford-Bell

Publication date: 5 July 2011

This report describes key scientific natural resource and social datasets held by ABARES. Fifty seven datasets relating to land use, land cover, vegetation, forests, climate, soil, salinity and water, social, fire, pests and invasive species were identified and assessed. The report describes the value, status, discoverability and accessibility of the datasets, and makes recommendations for ongoing improvements.

Target and path: Maximum Economic Yield in Fisheries Management

Technical Report 11.3

Author: Nhu Che

Publication date: 20 July 2011

This report explains the concept of maximum economic yield and why it is an appropriate target for fisheries. It also provides illustrative case studies of its actual and potential use in managing key Commonwealth fisheries, including the Northern Prawn Fishery and the Southern and Eastern Scalefish and Shark Fishery.

Scientific Working Group: additional analyses for the Australian sea lion management strategy

Technical Report 11.4

Authors: Lindsay Penrose, Simon D Goldsworthy and Ilona Stobutzki

Publication date: 22 July 2011

In response to concerns raised by reviews of the Australian Sea Lion Management Strategy, the Australian Fisheries Management Authority commissioned ABARES and the South Australian Research and Development Institute to contribute to the analyses. This technical report describes those analyses and results.

Community involvement in recreational fisheries data collection: Opportunities and challenges

Technical Report 11.5

Authors: Nyree Stenekes and Phil Sahlqvist

Publication date: 2 September 2011

Recreational fisheries information, especially catch and fishing effort data, is required to support sustainable management of marine ecosystems. Comprehensive statistics are difficult to obtain due the to seasonality of recreational fishing effort and variety of species caught. Community monitoring provides an alternative and potentially cost-effective way of extending recreational fisheries data collection while raising community awareness about the health of fisheries and marine ecosystems. This study focuses on opportunities and challenges involved in community monitoring of recreational fisheries effort and catch.

Other reports

Potential effects of climate change on forests and forestry in Australia: summaries for south-eastern NSW–eastern Victoria; Tasmania; Green Triangle; northern Australia; north-eastern NSW–south-eastern Queensland; and south-western Western Australia

Author: ABARES

Publication date: 24 August 2011

These reports describe the potential effects of climate change on forests and forestry. They estimate the resulting potential effects of those changes on wood production, the forestry and forest products industries and the communities that depend on those industries. Six detailed regional technical reports will also be released in the coming months.

Australian fisheries statistics 2010

Author: ABARES

Publication date: 30 August 2011

This report provides annual updates of fisheries production and trade data and serves as an important source of information for the fishing and aquaculture industry, fisheries managers, policy-makers and researchers. The report contains data on the volume and value of production from state and Commonwealth commercial fisheries, and on the volume and value of Australian fisheries trade, by destination, source and product. Profiles of Commonwealth and state commercial fisheries and state aquaculture for 2008–09 and 2009–10 are also provided. These cover selected species, fishing methods and number of licence holders. Additional information is also provided on the recreational and Indigenous fishing sectors.

Australian plantation statistics 2011

Authors: Mijo Gavran and Mark Parsons

Publication date: 31 August 2011

The National Plantation Inventory has been collecting data and reporting on plantations established primarily for timber production in Australia since 1993. Comprehensive map-based reports are published every five years and update reports based on summary tables are published in other years. *Australian plantation statistics 2011* is the fourth map-based report prepared by the National Plantation Inventory. Because the report is based on mapped data, it includes corrections and updates to data obtained from summary tables in previous years. This report compiles a wide range of data on plantation location, species, age, ownership and other details

Australian crop report, no. 159 September 2011

Authors: Benjamin Agbenyegah, Amelia Brown, Fiona Crawford, James Fell, Max Foster, Rebecca Gray, Ezaz Mamun, Matthew Miller, Margaret Nicholson and Henry To

Publication date: 13 September 2011

This report, released four times a year, provides a consistent and regular assessment of crop prospects for major field crops, estimates of area, yield and production, and a summary of seasonal conditions on a state-by-state basis.

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