



# Queensland AgTrends 2013–14

Forecasts and trends in Queensland agricultural, fisheries and forestry production



### Acknowledgements

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- DAFF researchers and industry experts
- the Office of Economic and Statistical Research (OESR)
- the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)
- the Australian Bureau of Statistics (ABS)
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- various industry representatives
- various market commentators and industry media.

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## Acronyms

<b>ABARES</b>	Australian Bureau of Agricultural and Resource Economics and Sciences
<b>ABS</b>	Australian Bureau of Statistics
<b>ALFA</b>	Australian Lot Feeders' Association
<b>ANZSIC</b>	Australian and New Zealand Standard Industrial Classification
<b>APW</b>	Australian Premium White
<b>BOM</b>	Bureau of Meteorology
<b>CCS</b>	commercial cane sugar
<b>DAFF</b>	(Queensland) Department of Agriculture, Fisheries and Forestry
<b>DPI</b>	Department of Primary Industries
<b>EMI</b>	Eastern Market Indicator
<b>ENSO</b>	El Niño Southern Oscillation
<b>ESCAS</b>	Exporter Supply Chain Assurance Scheme
<b>EYCI</b>	Eastern Young Cattle Indicator
<b>FAO</b>	Food and Agriculture Organization
<b>GRDC</b>	Grains Research and Development Corporation
<b>GVP</b>	gross value of production
<b>IDP</b>	individually droughted property
<b>IMF</b>	International Monetary Fund
<b>IPS</b>	international polarity scale
<b>MLA</b>	Meat and Livestock Australia
<b>OESR</b>	Office of Economic and Statistical Research
<b>QSL</b>	Queensland Sugar Limited
<b>SLA</b>	statistical local area
<b>SOI</b>	Southern Oscillation Index
<b>USDA</b>	United States Department of Agriculture

## This edition of *Queensland AgTrends*

In 2012, *Queensland AgTrends* replaced *Prospects for Queensland's primary industries* (launched in 2001) as the authoritative source of statistics, analyses and forecasts for Queensland's agricultural, fisheries and forestry production. To help it track the government's commitment of doubled production by 2040, we are further developing its scope. The most recent changes in methodology are outlined below.

### Total value of Queensland's primary industries

Before September 2007, the measure used to value Queensland's primary industry commodities in *Prospects* was gross value of production (GVP). From September 2007 onwards, the **total value of Queensland's primary industry commodities** reported in *Prospects* and then *AgTrends* comprised two components, which are reported separately. These components are a GVP figure for unprocessed primary commodities, and a value of first-stage processing for the commodities in the list below.

### Value of first-stage processing

First-stage processing forecasts and estimates for previous years are provided for:

- meat processing
- sugar processing
- milk and cream processing
- fruit and vegetable processing
- flour mill product and feed processing
- seafood processing
- log sawmilling, timber dressing and plywood and veneer manufacturing
- lifestyle horticulture services
- cotton ginning
- kangaroo processing.

In this edition of *AgTrends*, estimates of major primary industry processing activity are based on a methodology derived from the 2006–07 Australian Bureau of Statistics (ABS) manufacturing survey and census statistics released in April 2009.

The methodology assumes a constant ratio of farm output to processing output and a constant ratio of processing output to value added by the processing industry. Editions before 2010–11 used the methodology derived from the Queensland 2000–01 manufacturing survey. Therefore, the first-stage processing forecasts for 2013–14 should not be compared with the estimates for years before 2010–11.

### Lifestyle horticulture

In September 2008, the then Department of Primary Industries (DPI) commissioned Queensland Treasury's Office of Economic and Statistical Research (OESR) to undertake a comprehensive, statewide telephone survey to determine the economic value of the lifestyle horticulture industry. Lifestyle horticulture had changed significantly since a previous comprehensive survey in 2001. Now the Department of Agriculture, Fisheries and Forestry (DAFF) uses a new benchmark to improve our understanding of the scope and economic contribution of this important industry.

In Table 9, pages 14–16, the value of the industry is captured under 'lifestyle horticulture production' and includes the GVP of nurseries, cut flowers and turf.

## Forestry

In Table 9, pages 14–16, the value of Queensland's forest industry has two components:

- the gross value of the log timber produced from Queensland's plantations and native forests before it reaches a sawmill or primary timber processing plant
- the value-added component, which includes log sawmilling and timber dressing, and plywood and veneer manufacturing.

## Maps showing main production regions

For livestock, horticulture and crops, maps are included to show the main production areas for individual commodities. The maps are based on ABS 2005–06 agricultural census data. The maps show statistical local areas (SLAs) in Queensland where the top 80 per cent of production of each commodity is concentrated.

## Comparisons with previous years

From 2005–06, the ABS used a new methodology for gathering agricultural data. The ABS's final GVP estimates for 2009–10, released in July 2011, are included in Table 9 (pages 14–16). Due to this break in the series, the ABS advises that figures from 2005–06 onwards should not be compared to those for previous years.

# Key findings

## Total value of Queensland's primary industries

For 2013–14, the total value of Queensland's primary industry commodities (combined GVP and first-stage processing) is forecast to be \$14.86 billion, 1 per cent higher than 2012–13 and 4 per cent higher than the average for the past 5 years.

## Gross value of production ('farm gate')

For 2013–14, the GVP of Queensland's primary industry commodities at the 'farm gate' is forecast to be almost \$11.85 billion, 1 per cent higher than 2012–13 and 5 per cent higher than the average for the past 5 years.

### Livestock industries

The 2013–14 GVP forecasts for livestock industries are shown in Tables 1 and 2.

**Table 1** Livestock disposals GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Cattle and calves	3239	0
Poultry	456	4
Pigs	210	3
Sheep and lambs	54	15
Other livestock	30	0

**Table 2** Livestock products GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Milk (all purpose)	226	0
Eggs	162	17
Wool	105	-1

### Crops

The 2013–14 GVP forecasts for crops are shown in Tables 3–6.

**Table 3** Fruit and nuts and vegetables GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Fruit and nuts	1505	13
Vegetables	1151	3

**Table 4** Lifestyle horticulture GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Nurseries	867	0
Cut flowers	151	0
Turf	140	12

**Table 5** Other crops GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Sugar cane	1012	−11
Cotton	648	2

**Table 6** Cereal grains GVP, 2013–14

Industry	Forecast GVP (\$m)	Percentage change since 2012–13
Grain sorghum	441	45
Wheat	404	−27
Other cereal grains	157	−3
Maize	64	88
Barley	55	25

## Fisheries

The GVP for Queensland's fisheries in 2013–14 is forecast to be \$424 million.

In this edition, recreational fishing, which is an important part of Queensland fisheries, is included in the forecast for 2013–14 with an estimated value of \$73 million. The values of commercial fishing and aquaculture are forecast to be \$250 million (a 4 per cent decrease from 2012–13) and \$101 million (no change from 2012–13), respectively.

## Forestry

The GVP of the forest-growing sector of Queensland's forestry industry in 2013–14 is forecast to be \$175 million, 17 per cent greater than last year. This translates into a value of \$361 million for the first-stage processing sector.

## First-stage processing

For 2013–14, the value of first-stage processing (or value-added production) is forecast to be \$3.02 billion.

**Table 7** Forecast value of first-stage processing, 2013–14

Industry	Forecast (\$m)
Meat processing	1535
Sugar processing	551
Log sawmilling and timber dressing and plywood and veneer manufacturing	361
Fruit and vegetables processing	223
Milk and cream processing	119
Flour mill and feed processing	91
Cotton ginning	74
Seafood processing	64

## About Queensland's primary industries

In 2011–12, Queensland's primary industries directly contributed an estimated \$7.5 billion to the state economy—this was 3.0 per cent of the gross state product.<sup>1</sup>

Geographically, Queensland is Australia's second largest state, covering more than 173 million hectares. Almost 144 million hectares (or 83 per cent) of the land area is used for agriculture. Queensland has the largest area of agricultural land of any Australian state and the highest proportion of land area in Australia dedicated to agriculture.

In 2011–12, Queensland exported \$7.5 billion worth of agriculture and food products. Exports of these primary products comprised 14 per cent of the state's overseas commodity exports in 2011–12.<sup>2</sup>

In 2010–11, the combined employment associated with the whole food supply chain equated to an estimated 323 800 employees. This means that one in seven Queenslanders was either partly or entirely supported by the food sector.<sup>3</sup>

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<sup>1</sup> ABS 5220.0, *Australian national accounts: state accounts, 2011–12*.

<sup>2</sup> ABS, Exports from Queensland and Australia to all countries, by commodity, value, 2011–12, OESR, Standard International Trade Classification 2 digit, Food and Live Animals.

<sup>3</sup> ABS, Exports from Queensland and Australia to all countries, by commodity, value, 2010–11, OESR, Standard International Trade Classification 2 digit, Food and Live Animals.

# About the department

## Government objectives for the community

The department contributes to government policy and fiscal objectives for the community to:

- grow a four-pillar economy—by increasing agricultural productivity
- lower the cost of living—by reducing business costs through simplified and more effective regulatory processes
- deliver better planning and infrastructure—by ensuring industry interests are accounted for in plans and decision-making across government
- revitalise front-line services—by reviewing and renewing the design and delivery of our services to be more customer-centred.

## Values

As individuals and as a department we embed the Queensland Public Service core values in the way we do business:

- customer focus—putting Queenslanders at the centre of everything we do to increase customer satisfaction
- innovation—applying a different way of thinking and being open to new ideas to improve the way we operate
- high performance—working collaboratively to increase efficiency, build capability and enable our people to deliver exceptional outcomes
- accountability—being held to account for our decisions and actions to deliver on our promises
- our people—valuing our people and igniting their passion to make a difference and achieve a responsive and respected public sector.

## Strategic risks

We actively manage the following risks to achieve our objectives:

- co-investor/partner relationships—maintaining co-investor/partner confidence in our strategy and service direction
- natural disaster and biosecurity incidents—responding to fatigue and loss of continuity that result from natural disaster and biosecurity incidents
- skills and capability—ensuring we can access the skills and capability to support current and future organisational functions
- business-critical systems—addressing technology infrastructure to achieve business efficiency, digital service delivery and information sharing with service partners
- economic conditions—providing timely responses to emerging economic opportunities and challenges to help our industries adapt and grow.

## About *Queensland AgTrends*

*Queensland AgTrends* has a circulation of approximately 2000, with copies distributed to members of parliament, industry associations, agribusinesses, banks, law firms, local councils, government departments, educational institutions, primary producers and other businesses along the value chain.

This edition of *AgTrends* contains:

- initial GVP forecasts for 2013–14
- initial forecasts for 2013–14 for first-stage processing
- GVP estimates for 2012–13 and the average for the past 5 years.

*AgTrends* is available on the DAFF website ([www.daff.qld.gov.au](http://www.daff.qld.gov.au)).

## About the *AgTrends* update

The forecasts provided in this edition will be updated in April 2014. Updated forecasts will be made available electronically and can be downloaded from the DAFF website ([www.daff.qld.gov.au](http://www.daff.qld.gov.au)). This is in line with our commitment to upgrade the DAFF information technology platform to make services integrated, modern and user-friendly.

## Contact

We welcome your feedback. Please send your comments and suggestions to us at:

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Visit [www.daff.qld.gov.au](http://www.daff.qld.gov.au) to view current and previous editions of *AgTrends* and *AgTrends update*.

## Content and procedure

In *AgTrends*, GVP refers to the output of primary industry operations. Most non-commercial activities, such as home vegetable and flower gardening and hobbyist beekeeping, are not included due to a lack of data. This in no way diminishes the importance of these activities to the economy and society. Recreational fishing is included, but at a conservative valuation.

**Gross values of commodities produced** are calculated by multiplying the output from each primary industry activity by the average wholesale market price paid to producers.

Estimates of major primary industry processing activity used in this edition of *AgTrends* are based on a methodology derived from the 2006–07 ABS manufacturing survey and census statistics released in April 2009. The methodology assumes a constant ratio of farm output to processing output and a constant ratio of processing output to value added by the processing industry.

Previous editions used the methodology derived from the Queensland 2000–01 manufacturing survey. Therefore, the first-stage processing forecasts from 2009–10 onwards should not be compared with the estimates for previous years.

**Value added** refers to the additional value created at a particular stage of production. Value-adding that occurs beyond the first round is not included in this analysis. Note that for some industries, there are a significant number of rounds of processing and value-adding beyond the first round. For instance, timber is processed in numerous downstream industries, including wooden structural component, pulp, paper and paperboard, and paper product processing.

Economists use the value-added method as a way of avoiding double-counting. The sum of the value added in each of the different stages of production equals the value of the final product. Final products include consumer goods and fixed capital equipment. In a microeconomic context, value added is simply measured as the value of the output produced minus the costs of the intermediate inputs.

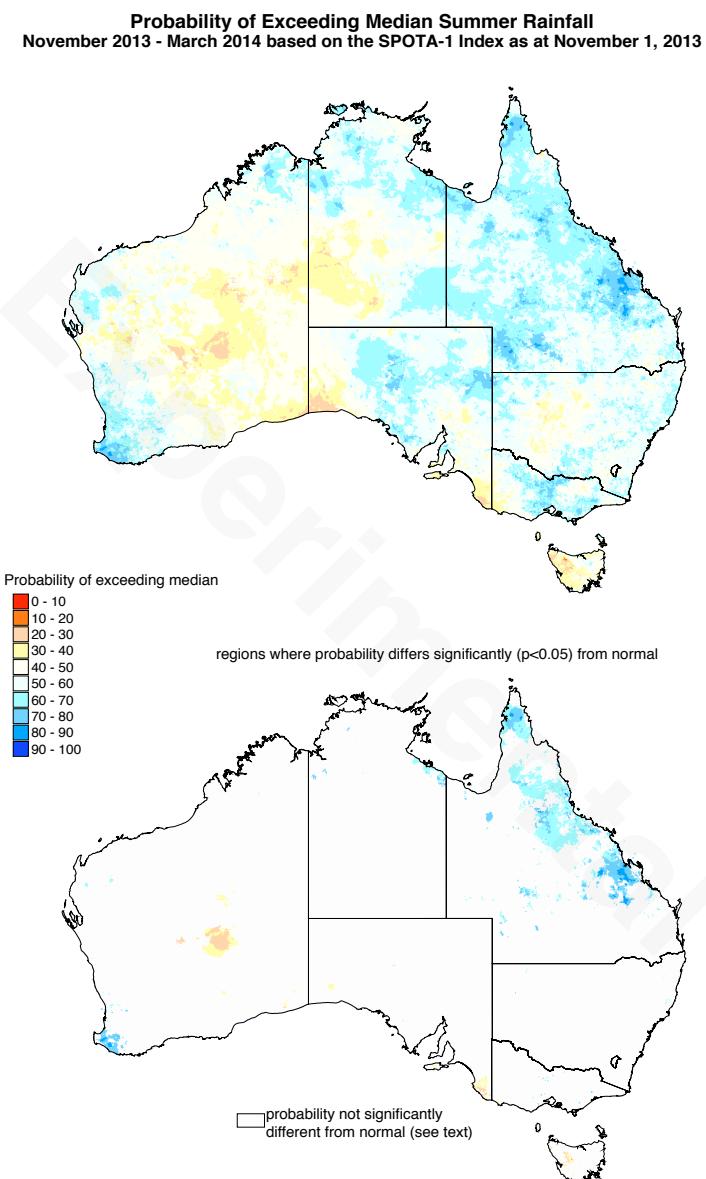
The estimates and forecasts contained in this edition of *AgTrends* were based on information available in August and September 2013, and followed consultation with experts from industry and DAFF.

The prices of all overseas-traded commodities are responsive to changes in the exchange rate of the Australian dollar relative to the currencies of our trading partners. Prices paid to primary producers, and therefore gross unit values, could change depending on whether exchange rates increase or decrease.

## Climate outlook for November 2013 to March 2014

The Bureau of Meteorology (BOM) considers that for the three-month period from October to December 2013, there is a near-average to slightly lower than average probability of rainfall being above the long-term median. For the coming summer (November 2013 to March 2014), there is a higher than normal probability of above-average rainfall for much of Queensland with an associated low probability of widespread dry or wet conditions. This means that there is a low probability of widespread drought-breaking rainfall across the state for the coming summer.

The majority of international global climate models surveyed by the International Research Institute for Climate and Society in the United States and most models surveyed by the BOM (*ENSO Wrap-Up*, 10 September 2013) suggest that central equatorial Pacific sea surface temperatures will remain within the ENSO-neutral range for the rest of 2013.<sup>4</sup>

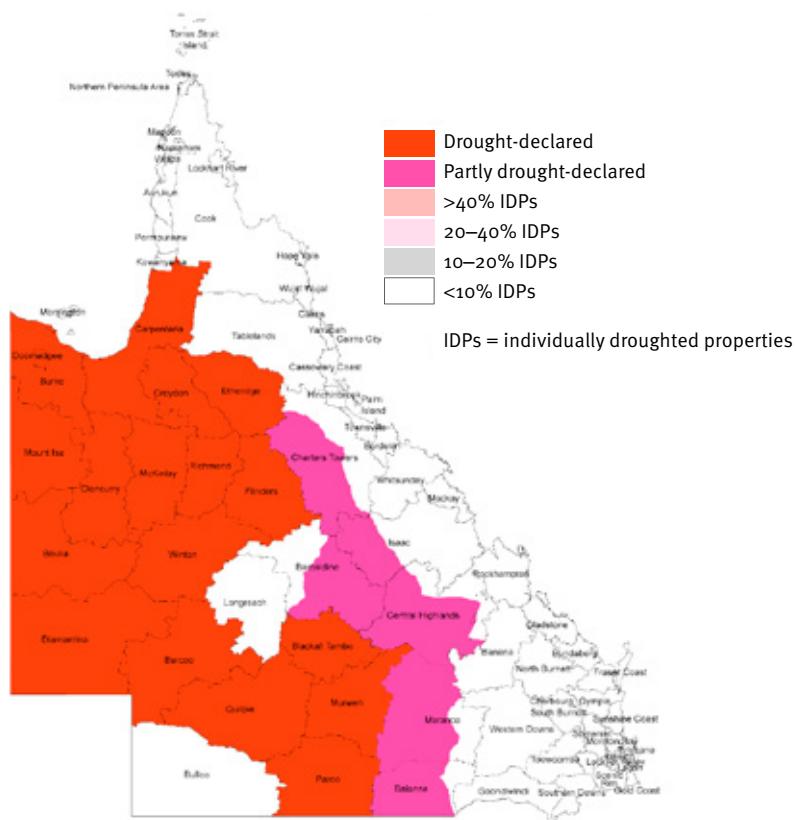


**Figure 1** Probability of exceeding median rainfall for October–December 2013 (based on a consistently near-zero phase during August–September)  
Source: BOM, 2013.

<sup>4</sup> ENSO = El Niño Southern Oscillation;  
<http://www.longpaddock.qld.gov.au/seasonalclimateoutlook/qccceclimatestatement/index.php>.

## Drought situation

At 29 October 2013, more than 60 per cent of Queensland was drought-declared under the state processes.



**Figure 2** Drought-affected areas in Queensland, 29 October 2013

## Impacts of the current drought

Following a run of years with well above average seasonal conditions, the western areas of Queensland slipped into drought after a failed 2012–13 wet season. Every drought is different. The millennium drought in the last decade, for example, started in the cropping areas of the Darling Downs. However, the 2013 Queensland drought began in the western pastoral areas, includes the Gulf Country (which largely avoided the millennium drought) and has featured water shortages much earlier than previous droughts (due to the lack of run-off in the previous two wet seasons).

At present, 62 per cent of Queensland is drought-declared. The drought will have a continuing impact on primary production over the next few years, even if the coming wet season is sufficient to bring the drought to an end.

### **Beef**

This drought is so far a pastoral industry drought. Since the end of the millennium drought, pastoral areas have had a run of exceptional seasons and producers have been able to build up herds, with the result of suppressing income. The temporary suspension in 2011 of live exports—which even after the suspension was lifted never returned to previous levels—further contributed to herd build-up and forced producers to divert cattle to local markets.

Producers who entered the drought carrying more than the usual number of cattle have been forced to reduce stock numbers and spend scarce funds on bringing in feed and water to cattle that remain. However, these drivers have not yet significantly changed the industry's overall value of production from that of previous years, as the lower prices have offset the greater volume of forced sales.

The drought will lead to reduced production in future years. The current increased slaughter of breeding cows (up 27 per cent from the previous year) is likely to result in lower calving and branding numbers than would otherwise have been expected. Drought conditions will also impact on conception rates due to stress and poor body condition.

Feedlots and processors have been winners out of the current seasonal conditions, with feedlot utilisation at 83 per cent capacity, 12 per cent higher in spring than the same time last year.

### **Sheep and wool**

This drought covers most of the pastoral wool-growing areas of the state, with the southern Darling Downs the only major Queensland wool-growing area not in drought or below average seasonal conditions.

Drought reduces the quality of available feed for sheep, and so is likely to lead to finer wool at the next shearing. However, production will fall as the numbers of sheep are reduced to suit the carrying capacity of the droughted pastures and the increasing competitive pressure from other grazing animals (such as kangaroos) for any remaining pastures.

### **Grains and cotton**

As the drought slowly extended from the western pastoral areas, its impacts on cropping areas really only started to be felt during the end of the winter crop and planting for summer crops. The warm, dry winter and early spring meant that winter crops had to rely on soil moisture, largely from the rain following Cyclone Oswald. Yields in Central Queensland were average to above average where moisture was sufficient. In southern Queensland, frost in late August impacted yields, and some wheat crops were grazed for stock feed.

Irrigators are relatively untouched by the drought so far as they have had water available for current crops. This situation for future crops may change if the coming wet season is poor.

### **Sugar**

Lower sugar prices and disease presented some challenges to cane producers. Also, while dry conditions reduced production for dryland crops, they raised sugar content higher than it might have been otherwise and ensured the crush at the mills could proceed with little interruption.

### **Dairy**

Price competition from producers in southern states and increased prices for fodder (due to temporary drought demand) has placed Queensland dairy farmers under even more pressure. Producers continue to exit as more milk becomes available from interstate.

*Note:* Forecasts in this edition of *AgTrends* are based on the recent BOM forecast that there is a higher than normal probability of near-average rainfall for much of Queensland with an associated low probability of widespread dry or wet conditions for the coming summer (November to March). The estimates will be revised in April 2014, when the impact the drought is having on Queensland's primary industries should become clearer.

## The global and Australian economic environment

In 2013, the world economy continued to exhibit slowing of growth following the high growth in 2010. Unlike in previous years, advanced economies took the central role in world growth from emerging nations, mainly because they had less slowing of growth. The International Monetary Fund (IMF) downgraded its forecast growth for both 2013 and 2014, although it still expects acceleration in 2014.<sup>5</sup>

**Table 8** IMF forecasts, October 2013

	Year-on-year percentage change				Difference from July 2013 update	
	Actual		Projection		2013	2014
	2011	2012	2013	2014		
<b>World output</b>	<b>3.9</b>	<b>3.2</b>	<b>2.9</b>	<b>3.6</b>	<b>-0.3</b>	<b>-0.2</b>
<b>Advanced economies</b>	<b>1.7</b>	<b>1.5</b>	<b>1.2</b>	<b>2</b>	<b>0</b>	<b>0</b>
United States	1.8	2.8	1.6	2.6	-0.1	-0.2
Euro area	1.5	-0.6	-0.4	1	0.1	0
Japan	-0.6	2	2	1.2	-0.1	0.1
United Kingdom	1.1	0.2	1.4	1.9	0.5	0.4
Canada	2.5	1.7	1.6	2.2	-0.1	-0.1
Other advanced economies	3.2	1.9	2.3	3.1	0	-0.2
<b>Emerging market and developing economies</b>	<b>6.2</b>	<b>4.9</b>	<b>4.5</b>	<b>5.1</b>	<b>-0.5</b>	<b>-0.4</b>
Central–Eastern Europe	5.4	1.4	2.3	2.7	0.2	-0.1
Commonwealth of Independent States	4.8	3.4	2.1	3.4	-0.7	-0.3
Russia	4.3	3.4	1.5	3	-1.0	-0.3
Developing Asia	7.8	6.4	6.3	6.5	-0.6	-0.5
China	9.3	7.7	7.6	7.3	-0.2	-0.4
India (for fiscal years)	6.3	3.2	3.8	5.1	-1.8	-1.1
ASEAN 5 <sup>a</sup>	4.5	6.2	5	5.4	-0.6	-0.3
Latin America, Caribbean	4.6	2.9	2.7	3.1	-0.3	-0.3
Brazil	2.7	0.9	2.5	2.5	0	-0.7
Mexico	4	3.6	1.2	3	-1.7	-0.2
Middle East, North Africa, Afghanistan, Pakistan	3.9	4.6	2.3	3.6	-0.7	-0.1
Sub-Saharan Africa	5.5	4.9	5	6	-0.2	0.1
<b>World trade volume (goods and services)</b>	<b>6.1</b>	<b>2.7</b>	<b>2.9</b>	<b>4.9</b>	<b>-0.2</b>	<b>-0.4</b>
Imports						
Advanced economies	4.7	1	1.5	4	0.1	-0.2
Emerging market and developing economies	8.8	5.5	5	5.9	-0.9	-1.4
Exports						
Advanced economies	5.7	2	2.7	4.7	0.3	0
Emerging market and developing economies	6.8	4.2	3.5	5.8	-0.7	-0.5
<b>Commodity prices (US dollars)</b>						
Oil	31.6	1	-0.5	-3.0	4.2	1.7
Non-fuel (weighted average)	17.9	-9.9	-1.5	-4.2	0.3	0.2

<sup>a</sup> Indonesia, Malaysia, Philippines, Thailand and Vietnam.  
Source: IMF, *World Economic Outlook*, October 2013.

5 <<http://www.imf.org/external/pubs/ft/weo/2013/02/pdf/text.pdf>>.

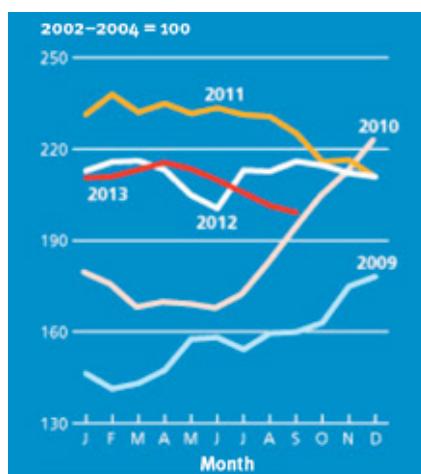
The United States continues its tentative economic recovery, not helped by the ongoing political clashes between the Republican Party and President Obama, which are increasingly spilling into economic management. Germany's steady economic performance cannot on its own balance the weakness in the rest of the euro zone, which is still just applying one temporary remedy after another to its problem members.

Paradoxically, the expectation of return to more normal economic policies in advanced economies is slowing developing ones. Curtailment of 'quantitative easing' (increasing the money supply through the Federal Reserve Bank buying United States Government bonds) and rising interest rates are reducing investment that boosted economic activity in key developing nations (China, India and Brazil) in recent years.

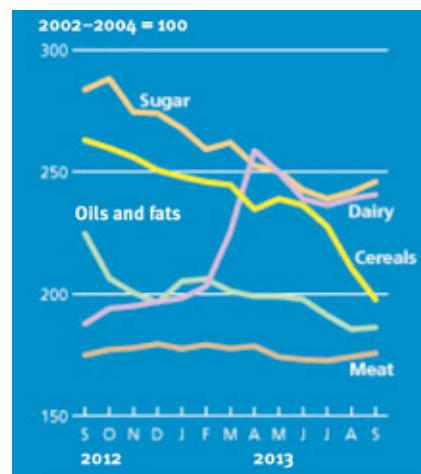
Reduced growth in China has the largest potential influence on Australia, through non-food commodity prices and quantities. The IMF stresses that the likely effect is not an end to the commodity boom, merely some cooling of their prices and volatility.

The IMF forecasts Australian economic growth to be 2.5 per cent and 2.8 per cent in 2013 and 2014, respectively, with inflation at 2.2 per cent and 2.5 per cent for the same years. The Australian dollar is expected to remain under parity with the United States dollar in 2013.

Latest data from the United Nations Food and Agriculture Organization (FAO) indicates a continuing easing of food price indexes from the high of 2011.<sup>6</sup>



**Figure 3** The FAO food price index, 2009–13



**Figure 4** FAO food commodity price indexes, 2012–13

Sugar and cereals have fallen furthest, from higher highs, while meats have been steady at a lower level.

The FAO still expects strong demand growth for agricultural commodities in developing countries and a slowing growth in production, resulting in generally higher prices over the next 10 years than in the pre-2007 decade.<sup>7</sup>

6 <<http://www.fao.org/worldfoodsituation/foodpricesindex/en>>.

7 <<http://www.oecd.org/site/oecd-faoagriculturaloutlook>>.

## Primary industries—estimates and forecasts

**Table 9** GVP, first-stage processing and total primary industries estimates and forecasts, 2008–09 to 2013–14 and average for past 5 years

Commodity GVP <sup>a</sup>	2008–09 <sup>b</sup>	2009–10 <sup>b</sup>	2010–11 <sup>b</sup>	2011–12 <sup>b</sup>	2012–13 <sup>d</sup>	2013 (October) <sup>d</sup>	Change March to September	Average for past 5 years	Difference from average for preceding 5 years
<b>Livestock disposals</b>									
Cattle and calves	3 366	3 229	3 418	3 450	3 247	3 239	0	3 342	-3
Poultry	351	359	396	430	438	456	4	395	16
Pigs	242	231	221	212	204	210	3	222	-5
Sheep and lambs	60	45	55	59	47	54	15	53	2
Other livestock	16	10	0	8	30	30	0	13	136
Kangaroos	0	15	39	20	12	12	0	17	-30
<b>Total livestock disposals</b>	<b>4 033</b>	<b>3 889</b>	<b>4 129</b>	<b>4 178</b>	<b>3 978</b>	<b>4 001</b>	<b>1</b>	<b>4 041</b>	<b>-1</b>
<b>Livestock products</b>									
Milk (all purpose)	293	296	258	260	226	226	0	266	-15
Eggs	109	110	149	159	138	162	17	133	22
Wool	87	87	118	115	106	105	-1	103	2
<b>Total livestock products<sup>e</sup></b>	<b>489</b>	<b>493</b>	<b>524</b>	<b>534</b>	<b>470</b>	<b>493</b>	<b>5</b>	<b>502</b>	<b>-2</b>
<b>Total livestock</b>	<b>4 522</b>	<b>4 382</b>	<b>4 653</b>	<b>4 712</b>	<b>4 448</b>	<b>4 494</b>	<b>1</b>	<b>4 543</b>	<b>-1</b>
<b>Horticulture</b>									
<b>Fruit and nuts</b>									
Bananas	390	448	283	415	500	550	10	407	35
Other fruit and nuts	126	257	129	92	200	226	13	161	39
Avocados	60	80	170	145	140	160	14	119	34
Strawberries	87	145	74	150	125	131	5	116	13
Apples	79	81	143	78	95	110	16	95	15
Mangoes	83	72	55	50	70	77	10	66	17
Mandarins	64	76	89	71	64	77	20	73	6
Pineapples	88	70	50	68	83	70	-15	72	-3
Macadamias	16	29	35	53	52	54	4	37	46
Table grapes	24	36	32	18	50	50	0	32	57
<b>Total fruit and nuts</b>	<b>1 017</b>	<b>1 294</b>	<b>1 062</b>	<b>1 139</b>	<b>1 334</b>	<b>1 505</b>	<b>13</b>	<b>1 169</b>	<b>28</b>
<b>Vegetables</b>									
Tomatoes	188	145	230	266	243	297	22	214	38
Other vegetables	212	200	262	257	223	235	5	231	2
Capsicums and chillies <sup>f</sup>	92	100	83	139	139	145	4	111	31
Mushrooms	22	60	41	37	64	64	0	45	43
Potatoes	54	57	52	43	54	54	0	52	4
Lettuce	71	65	64	54	54	54	0	62	-12
Sweet potatoes	44	55	53	56	52	52	-1	52	-1
Zucchinis and button squash	49	45	33	43	42	47	12	43	10
Melons (watermelon)	42	44	30	37	36	39	8	38	3
Melons (rock and cantaloupe)	31	30	24	34	32	38	19	30	26

	2008–09 <sup>b</sup>	2009–10 <sup>b</sup>	2010–11 <sup>b</sup>	2011–12 <sup>b</sup>	2012–13 <sup>d</sup>	2013 (October) <sup>d</sup>	Change March to September	Average for past 5 years	Difference from average for preceding 5 years
Commodity GVP <sup>a</sup>	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(%)	(\$m)	(%)
Sweet corn	18	30	36	36	36	38	6	31	22
Carrots	22	25	14	22	24	25	4	21	18
Onions	28	25	35	27	25	25	0	28	(continued)
Pumpkin	30	30	26	21	21	22	5	26	-14
Beans	50	50	94	78	74	18	-76	69	-74
<b>Total vegetables</b>	<b>952</b>	<b>961</b>	<b>1 077</b>	<b>1 150</b>	<b>1 119</b>	<b>1 151</b>	<b>3</b>	<b>1 052</b>	<b>9</b>
<b>Total fruit and nuts and vegetables</b>	<b>1 969</b>	<b>2 255</b>	<b>2 139</b>	<b>2 289</b>	<b>2 453</b>	<b>2 656</b>	<b>8</b>	<b>2 221</b>	<b>19</b>
<b>Lifestyle horticulture production</b>									
Nurseries	788	912	912	867	867	867	0	869	0
Cut flowers	81	151	159	151	151	151	0	139	9
Turf	110	166	182	125	125	140	12	142	-1
<b>Total lifestyle horticulture production</b>	<b>979</b>	<b>1 229</b>	<b>1 253</b>	<b>1 143</b>	<b>1 143</b>	<b>1 158</b>	<b>1</b>	<b>1 149</b>	<b>1</b>
<b>Total horticulture</b>	<b>2 948</b>	<b>3 484</b>	<b>3 392</b>	<b>3 432</b>	<b>3 596</b>	<b>3 814</b>	<b>6</b>	<b>3 370</b>	<b>13</b>
<b>Other field crops</b>									
Sugar cane <sup>g</sup>	968	1 425	940	1 080	1 140	1 012	-11	1 110	-9
Cotton (raw) <sup>h</sup>	325	355	660	981	633	648	2	591	10
Other crops <sup>c</sup>	355	255	79	56	197	157	-20	188	-17
<b>Total other crops</b>	<b>1 648</b>	<b>2 035</b>	<b>1 679</b>	<b>2 117</b>	<b>1 970</b>	<b>1 817</b>	<b>-8</b>	<b>1 890</b>	<b>-4</b>
<b>Cereal grains</b>									
Grain sorghum	356	155	320	279	305	441	45	283	56
Wheat	536	265	302	413	554	404	-27	414	-2
Other cereal grains	81	89	111	39	162	157	-3	96	63
Maize	60	37	136	51	34	64	88	64	1
Barley	43	31	33	40	44	55	25	38	44
<b>Total cereal grains</b>	<b>1 075</b>	<b>577</b>	<b>902</b>	<b>821</b>	<b>1 099</b>	<b>1 121</b>	<b>2</b>	<b>895</b>	<b>25</b>
<b>Total crops</b>	<b>5 672</b>	<b>6 096</b>	<b>5 973</b>	<b>6 370</b>	<b>6 664</b>	<b>6 752</b>	<b>1</b>	<b>6 155</b>	<b>10</b>
<b>Total agriculture</b>	<b>10 194</b>	<b>10 478</b>	<b>10 626</b>	<b>11 082</b>	<b>11 112</b>	<b>11 246</b>	<b>1</b>	<b>10 698</b>	<b>5</b>
<b>Fisheries<sup>c,i</sup></b>									
<b>Commercial fishing</b>									
Crustaceans	161	166	151	164	n/a	n/a	n/a	128	n/a
Molluscs	9	10	9	4	n/a	n/a	n/a	6	n/a
Finfish	103	108	100	107	n/a	n/a	n/a	84	n/a
<b>Total commercial fishing</b>	<b>273</b>	<b>284</b>	<b>260</b>	<b>275</b>	<b>260</b>	<b>250</b>	<b>-4</b>	<b>270</b>	<b>-8</b>
Recreational fishing	n/a	73	73	73	73	73	0	58	25
Aquaculture	85	102	94	93	101	101	0	95	6
<b>Total fisheries</b>	<b>358</b>	<b>459</b>	<b>427</b>	<b>441</b>	<b>434</b>	<b>424</b>	<b>-2</b>	<b>424</b>	<b>0</b>
<b>Forestry and logging<sup>c,j</sup></b>	<b>162</b>	<b>171</b>	<b>187</b>	<b>189</b>	<b>150</b>	<b>175</b>	<b>17</b>	<b>172</b>	<b>2</b>
<b>Total primary industries (farm gate)</b>	<b>10 714</b>	<b>11 108</b>	<b>11 239</b>	<b>11 712</b>	<b>11 696</b>	<b>11 845</b>	<b>1</b>	<b>11 294</b>	<b>5</b>
<b>First-round processing value added<sup>k</sup></b>									
Meat processing <sup>c</sup>	1 547	1 492	1 584	1 603	1 526	1 535	1	1 550	-1
Sugar processing <sup>c</sup>	406	722	550	672	646	551	-15	599	-8

Commodity GVP <sup>a</sup>	2008–09 <sup>b</sup>	2009–10 <sup>b</sup>	2010–11 <sup>b</sup>	2011–12 <sup>b</sup>	2012–13 <sup>d</sup>	2013 (October) <sup>d</sup>	Change March to September	Average for past 5 years	Difference from average for preceding 5 years
	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(%)	(\$m)	(%)
Log sawmilling and timber dressing and plywood and veneer manufacturing <sup>c</sup>	334	353	386	390	309	361	17	354	-61
Fruit and vegetables processing <sup>c</sup>	166	190	180	192	211	223	8	187	-90
Milk and cream processing <sup>c</sup>	155	156	136	137	119	119	0	141	-82
Flour mill and feed processing <sup>c</sup>	87	47	73	67	89	91	2	73	16
Cotton ginning <sup>c</sup>	37	40	75	112	72	74	2	67	2
Seafood processing <sup>c</sup>	54	69	64	66	65	64	-2	64	10
<b>Total primary industries first-round processing</b>	<b>2 786</b>	<b>3 069</b>	<b>3 048</b>	<b>3 239</b>	<b>3 033</b>	<b>3 018</b>	<b>-1</b>	<b>3 035</b>	<b>-14</b>
<b>Total primary industries</b>	<b>13 500</b>	<b>14 177</b>	<b>14 287</b>	<b>14 950</b>	<b>14 729</b>	<b>14 862</b>	<b>1</b>	<b>14 329</b>	<b>1</b>

a GVP(gross value of production) is defined as the gross value of commodities produced. It is a measure of economic output. In this publication, GVP relates to the output of primary industry commercial operations only. The GVP is the value of recorded production at wholesale prices realised in the marketplace (e.g. cattle sold at saleyards, sugar cane at the mill door, fruit and vegetables at the wholesale market). It is derived by multiplying the output from each primary industry by the average wholesale price paid to producers.

b ABS final estimates for 2010–11 unless otherwise indicated.

c DAFF estimates.

d DAFF forecasts.

e Excludes minor commodities such as honey, beeswax and mohair.

f DAFF estimate does not include chillies.

g Gross value of sugar cane at mill door.

h Includes value of cottonseed and lint.

i Includes catches from both Commonwealth-managed fisheries (including Torres Strait, Gulf of Carpentaria and East Coast Tuna fisheries) and state-managed fisheries.

j Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimates.

k See page 57 for the definition of value added. The forecasts for the value of first-stage processing in 2009–10 and beyond should not be compared with the previous years due to the change in value-added ratios.

## Volume of production index

A volume of production index describes the movement in production over a period of time relative to a base period. The volume of production index for each of Queensland's major agricultural commodities from 2001–02 to 2013–14 is detailed in Table 10.

The production index for agriculture for 2013–14 is forecast to be 119. This indicates that Queensland's agricultural production in 2013–14 is forecast to be 19 per cent higher (on average) than in the base year of 1996–97. On average, the volume of agricultural production in 2013–14 is forecast to be 3 per cent higher than in 2012–13.

**Table 10** Volume of production index<sup>a</sup> for Queensland's major agricultural commodities

Commodity	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10 <sup>c</sup>	2010–11	2011–12	2012–13 <sup>d</sup>	2013–14 <sup>d</sup>
Wheat	46	30	56	59	62	39	48	102	68	77	95	97	71
Grain sorghum	124	93	129	116	103	89	251	176	92	118	141	159	165
Barley	40	35	61	42	39	18	33	40	26	34	45	36	46
Major cereal grains	69	50	80	74	77	51	102	117	73	84	104	108	96
Sugar cane	78	94	93	97	95	91	86	82	81	65	67	83	80
Cotton lint	120	50	88	151	130	42	26	93	84	211	187	185	175
Other major field crops	88	83	92	110	103	78	71	84	81	100	97	108	103
Major fruit	151	139	137	149	131	167	148	161	176	125	166	196	202
Major vegetables	108	98	122	104	112	122	110	113	109	111	137	108	137
Major fruit and vegetables	130	119	130	134	127	145	129	138	144	118	152	153	171
Crops	92	82	97	105	99	85	90	103	92	100	110	117	115
Cattle, calves and live exports	133	136	131	135	132	140	131	134	133	132	130	129	141
Pigs	113	123	132	128	135	127	128	115	112	109	109	107	107
Poultry	116	123	127	138	143	147	156	158	168	170	174	174	209
Sheep and lambs	111	84	66	68	64	75	69	61	36	40	37	44	47
Major livestock disposals	129	132	129	132	131	137	131	132	131	131	129	132	142
Milk (all purposes)	93	90	85	78	73	67	61	64	66	61	59	56	60
Wool	67	55	50	60	54	54	46	23	19	34	38	34	32
Eggs	151	135	187	191	260	260	445	266	290	340	385	562	619
Major livestock products	87	80	78	78	77	77	78	61	63	68	70	78	83
Livestock	118	119	116	120	116	119	116	112	112	113	112	116	125
<b>Total agriculture<sup>b</sup></b>	<b>111</b>	<b>98</b>	<b>105</b>	<b>109</b>	<b>86</b>	<b>100</b>	<b>102</b>	<b>107</b>	<b>101</b>	<b>105</b>	<b>111</b>	<b>116</b>	<b>119</b>

a Base of each index is 1996–97 = 100.

b Excludes lifestyle horticulture due to insufficient data.

c ABS estimates (*Agricultural commodities, Australia, 2009–10*, cat. no. 7121.0). Production data for maize, peanuts, pineapples, capsicums, beans, lettuce and rockmelon are not contained in *Agricultural commodities, Australia, 2009–10*. For this reason, final DAFF production estimates for these commodities in 2009–10 have been used.

d Forecast.

Source: Compiled by DAFF using ABS and DAFF data.

The indexes of different commodities and groups of commodities were calculated using a simple Laspeyres index with 1996–97 as the base year. The year 1996–97 was chosen as the base year because it is considered to be a year when average production levels were recorded for most of Queensland's major agricultural commodities.

# Livestock disposals

## Cattle and calves

### Forecast

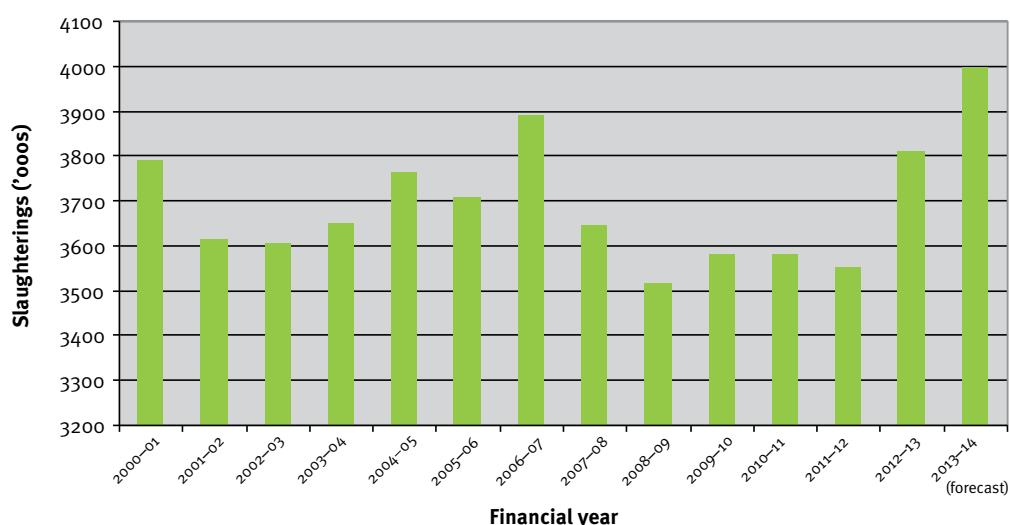
The GVP for Queensland's cattle and calf industry (including cattle and calves sold for slaughter plus live exports) for 2013–14 is forecast to be \$3.239 billion. This is only 0.23 per cent lower than the final estimate for 2012–13 and 3 per cent lower than the average for the past 5 years.

### Analysis and discussion

#### Cattle and calves sold for slaughter

For 2013–14, the GVP for cattle and calves sold for slaughter is forecast to be \$3.211 billion, which is slightly less than last year's final estimate. The expected slight increase in number of cattle and calves sold for slaughter is likely to be tempered by a forecast fall in saleyard prices over the next financial year. While the supply side of the outlook for the industry is not looking promising due to drought conditions in the main beef cattle regions of the state, the demand side has been strengthened by upward revisions of exports to China.

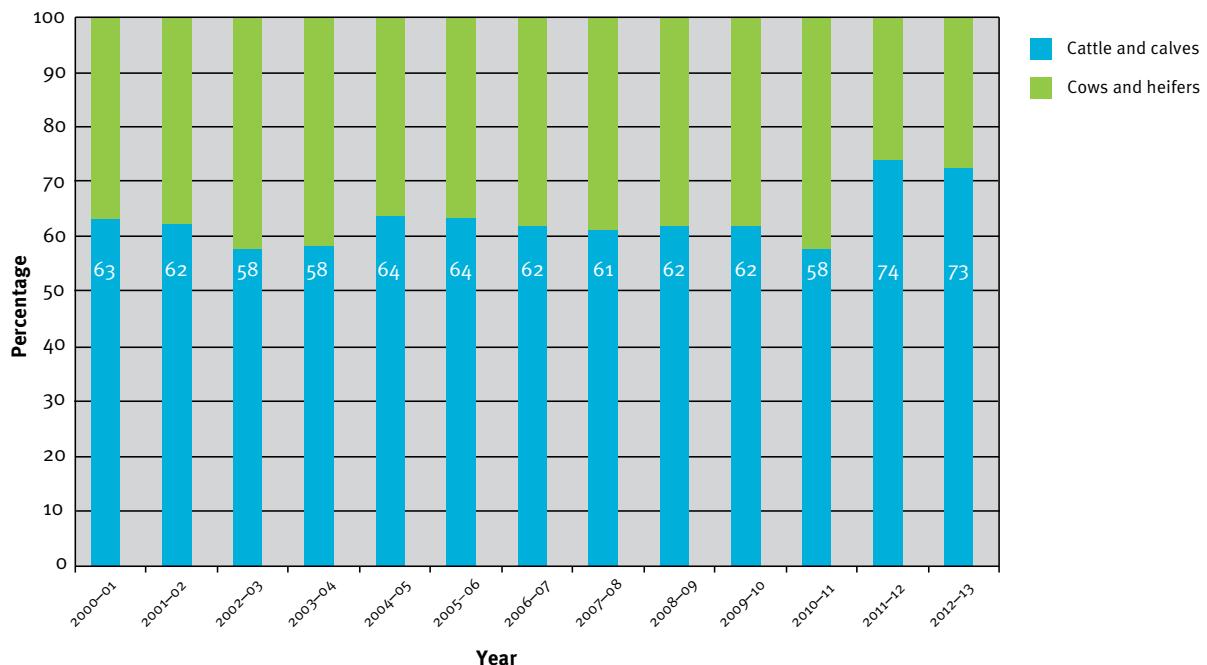
In 2012–13, around 3.81 million head of cattle and calves were slaughtered in Queensland; this was 7 per cent more than in the previous year.



**Figure 5** Queensland cattle and calf slaughterings, 2000–01 to 2013–14

The anticipated increase in slaughter numbers in Queensland is mainly due to the lack of rainfall and pasture growth over the past year providing beef producers with little option but to sell their cattle at market.

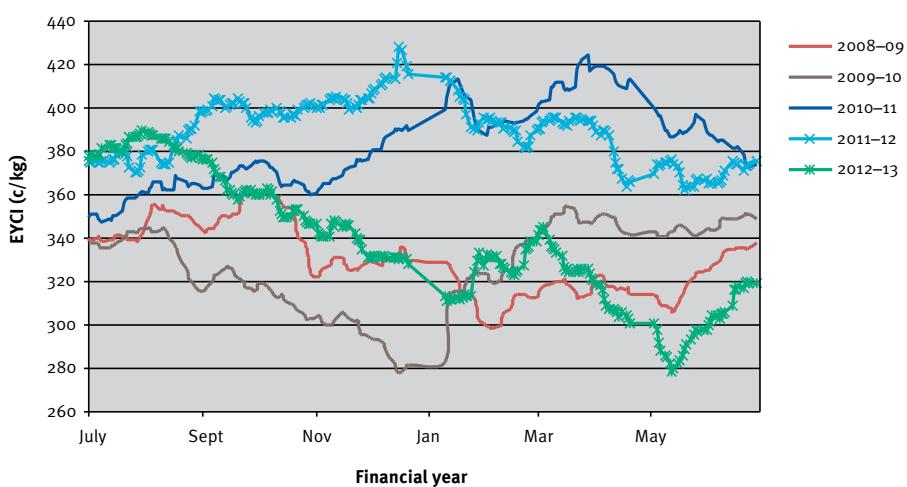
The female slaughter percentage has increased since last year, but it is still not near 2002–04 levels (as shown in Figure 6). The increase suggests more producers have reduced their herd rebuilding in response to the deteriorating seasonal conditions.



**Figure 6** Percentage share of total slaughter for cattle and calves and cows and heifers, Queensland, 2000–01 to 2012–13

Source: ABS, 2013.

As shown in Figure 7, current prices were the lowest they have been over the last 5 financial years. The Australian weighted average saleyard price for beef is forecast to fall by around 5 per cent in 2013–14 due to an assumed appreciation of the Australian exchange rate plus other short-term factors.



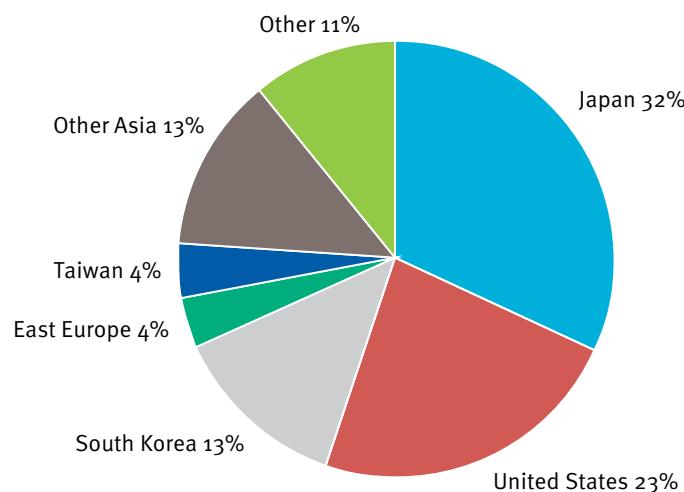
**Figure 7** Eastern Young Cattle Indicator (EYCI), 2008–09 to 2012–13

Source: MLA, 2013.

On the supply front, Meat and Livestock Australia (MLA) expects that continued unfavourable seasonal conditions will see a slight increase in the throughput of lighter beasts in the marketplace. On the demand side, exports to Australia's first and third largest export markets, Japan and Korea, have been revised downwards due to the continuing high Australian dollar, competition from the United States and higher domestic beef production in these markets.

According to the MLA and Australian Lot Feeders' Association (ALFA) quarterly lot feeding survey, just under 873 000 cattle were on feed at the end of the June quarter, up 9 per cent on the previous quarter and 11 per cent on the corresponding period in 2012.

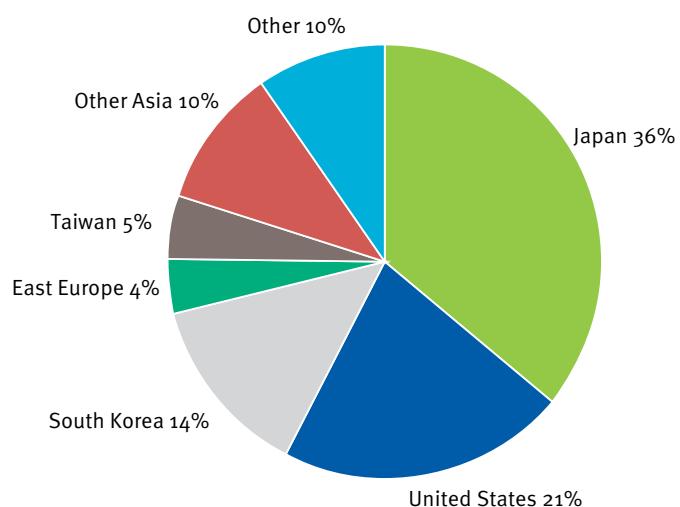
## Exports



**Figure 8** Australian exports of beef and veal, 2012–13

Source: DAFF, 2013.

Exports of Australian beef and veal increased by 2 per cent from 2011–12 (948 011 tonnes) to 2012–13 (963 537 tonnes). Japan was Australia's largest export market with shipments of 308 538 tonnes in 2012–13, just over 17 000 tonnes less than in 2011–12. Japan accounted for 32 per cent of Australia's beef and veal exports. This was followed by the United States (23 per cent) and South Korea (13 per cent). Together, these three countries accounted for nearly 70 per cent of Australia's beef and veal exports.



**Figure 9** Queensland exports of beef and veal, 2012–13

Source: DAFF, 2013.

In 2012–13, Queensland exported 576 986 tonnes of beef and veal, which was 60 per cent of Australia's beef and veal exports. This was an increase of approximately 10 000 tonnes from the previous year.

### **Japan**

Japan was Queensland's largest export market, accounting for 36 per cent of Queensland's beef and veal exports in 2012–13. This was followed by the United States (21 per cent) and South Korea (14 per cent).

According to MLA, demand for Australian beef in Japan remains largely influenced by its economy, currencies, and supply conditions from the United States. Over the longer term, MLA expects Australian exports to Japan to face continued competition from the United States, even though their beef industry is facing a period of higher production costs and diversified export destinations. MLA forecasts that in 2014, Australian beef and veal exports to Japan will decline 3 per cent to 280 000 tonnes.

### **South Korea**

MLA believes that despite sustained challenges with United States and domestic products, and increasing global competition for Australian product (specifically from China), shipments to Korea during the remainder of this year should be steady. They believe the main barriers impacting Australian beef for the Korean market for the remainder of 2013 and into 2014 will be increased domestic beef and pork supplies, along with the lower tariffs for United States beef. For 2014, MLA forecast a fall of 8 per cent in Australian beef exports to Korea to 120 000 tonnes.

### **United States**

MLA forecasts that Australia will export 225 000 tonnes of beef in 2013, down from 255 000 tonnes forecast earlier this year. This revised forecast is steady with 2012, but still one of the lowest annual totals of the past 15 years. A key factor in this was the demand for beef from other markets such as Saudi Arabia, which currently has a suspension on beef from Brazil and China, and has experienced remarkable growth in demand for imported beef over the past year.

### **Feedlots**

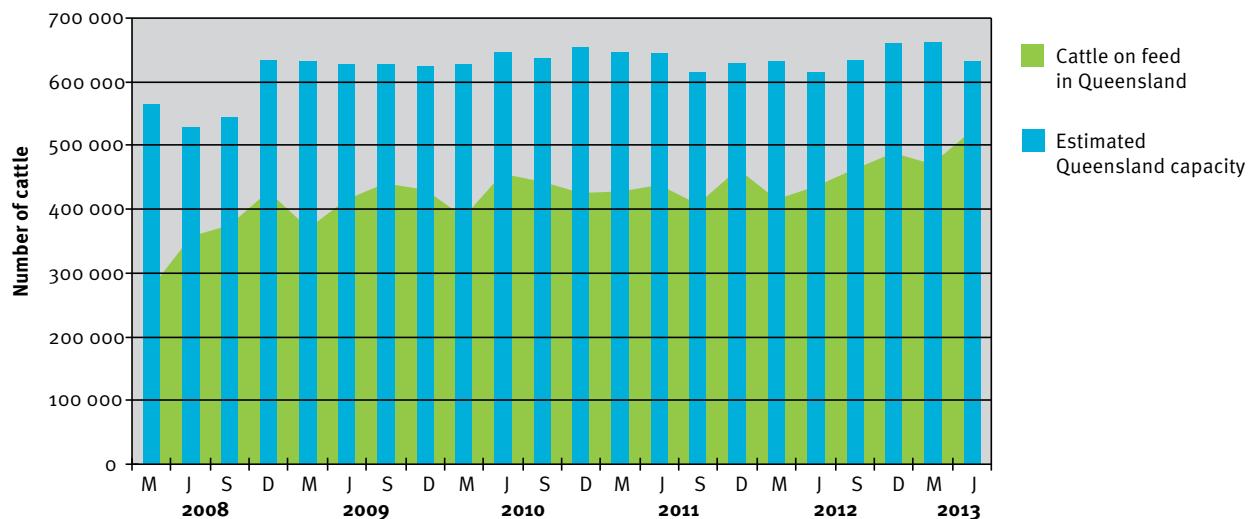
In the June 2013 quarter, Queensland's feedlots were operating at 83 per cent capacity—12 per cent greater than the June 2012 quarter and 9 per cent greater than the December 2012 quarter.

According to MLA, the results for the first half of 2013 indicate an increase in cattle numbers on feed in Queensland; this reflects the very dry conditions across the country leading to poor pasture conditions. As a result, cattle prices and quality declined, which has spurred additional lotfeeding activity well above expected levels.

While numbers on feed increased considerably after cattle prices and seasonal conditions deteriorated, feed grain prices also crept higher, offsetting some of the gains anticipated for lotfeeders.

Queensland's grain-fed cattle turn-off in the June quarter of 2013 was 3 per cent higher than at the same time last year. However, it was 1 per cent higher than in the previous quarter but 21 per cent less than in the quarter before that.

Turn-off from feedlots generally accounts for approximately 40 per cent of Queensland's total slaughter. Changes in the number of cattle on feed therefore have a significant impact on total slaughter numbers and beef production in Queensland.



**Figure 10** Queensland cattle on feed and feedlot capacity, March 2008 to June 2013

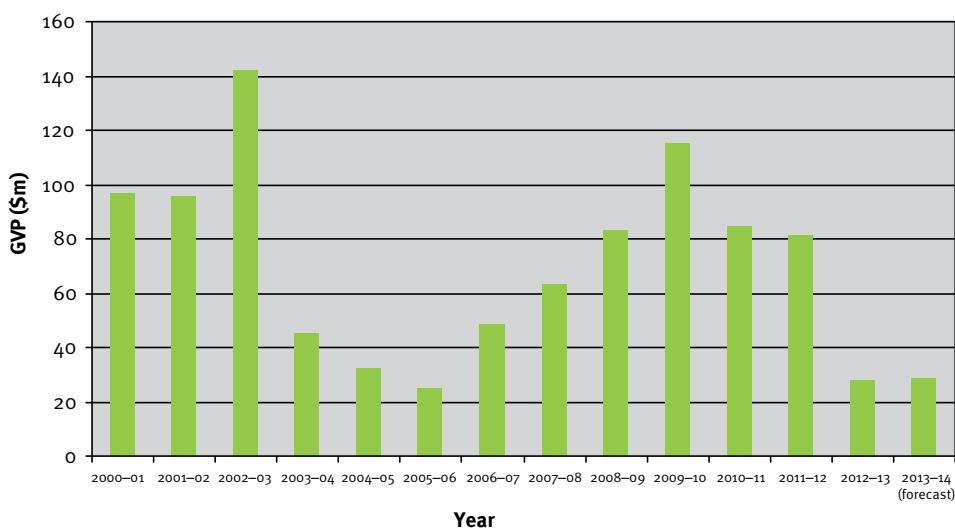
Source: ALFA/MLA June 2013 national accredited feedlot survey.

#### Live cattle exports

For 2013–14, the gross value of live cattle exports is forecast to be \$29 million. This is 2 per cent greater than the final estimate for 2012–13 but 64 per cent less than the average for the past 5 years.

According to MLA, the medium-term outlook for the Australian live cattle trade continues to hinge heavily on the requirements of the Exporter Supply Chain Assurance Scheme (ESCAS). At present there is limited conclusive information from Indonesia (our largest market) on further developments. The total Queensland exports of live cattle are estimated to have fallen by around 56 per cent in 2012–13 from 64 000 to 28 000 head.

According to MLA, the short-term outlook is for a decline in Australia's live cattle trade from around 620 000 head in 2012 to 575 000 head by 2013. However, MLA expects to see the number of cattle sold bounce back to around 700 000 head by 2017.



**Figure 11** Queensland live cattle export values, 2000–01 to 2013–14

## Pigs

### Forecast

The GVP for pigs in Queensland for 2013–14 is forecast to be \$210 million, a 3 per cent increase on DAFF's final estimate for 2012–13 but a 5 per cent decrease on the average for the past 5 years.

### Analysis and discussion

Prices of Queensland pig meat are forecast to increase by 3 per cent in 2013–14. This is partly due to increased domestic demand as imported pig meat becomes more expensive from the lower Australian dollar.

The quantity of Queensland pig meat produced is forecast to be unchanged in 2013–14.



## Poultry

### Forecast

The GVP for poultry in Queensland for 2013–14 is forecast to be \$456 million, a 4 per cent increase on DAFF's final estimate for 2012–13 and a 16 per cent increase on the average for the past 5 years.

### Analysis and discussion

The quantity of Queensland poultry meat produced is forecast to increase by 4 per cent in 2013–14.

The price of Queensland poultry meat is forecast to remain unchanged in 2013–14.

Anecdotally, production of poultry meat at the farm gate was not affected much by any lingering impacts of the February floods.

For a discussion of egg production, see page 28.



## Sheep and lambs

### Forecast

The GVP for sheep and lambs in Queensland for 2013–14 is forecast to be \$54 million, which is 15 per cent greater than DAFF's final estimate for 2012–13 and 2 per cent greater than the average for the past 5 years.

### Analysis and discussion

Australian sheep and lambs saleyard prices are forecast to rise substantially throughout 2013–14 following declining prices in 2012–13. ABARES estimates that sheep prices will increase by 28 per cent and lamb prices by approximately 15 per cent in 2013–14.<sup>8</sup> These price increases reflect lower supplies and growing demand from export markets.

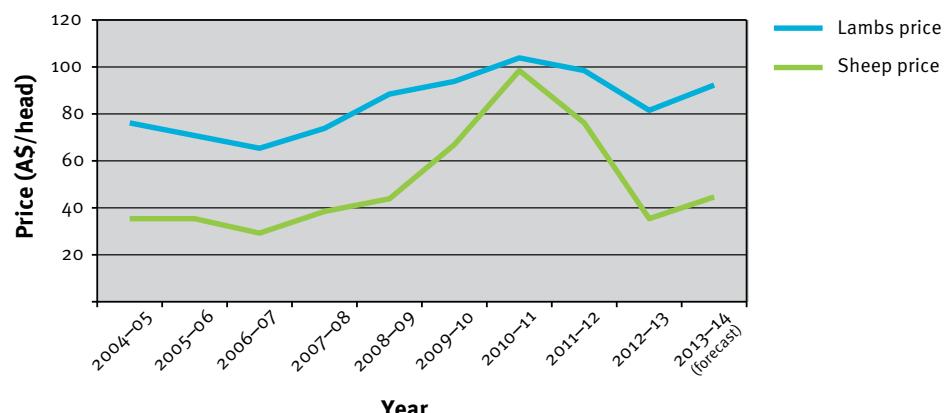
Queensland saleyard prices are forecast to follow this national trend (see Figure 12).



<sup>8</sup> ABARES 2013, *Agricultural commodities: September quarter 2013*, Commonwealth of Australia, Canberra.

On the supply side, turn-off of lambs and sheep in 2013–14 is forecast to decline significantly from 2012–13. ABARES estimates that sheep slaughterings will decrease by approximately 22 per cent and lamb slaughterings by approximately 7 per cent in 2013–14.<sup>9</sup> Fewer sheep and lambs are expected to be available for slaughter in 2013–14 following high turn-off in 2012–13 as a result of poor seasonal conditions. At the state level, this trend is not expected to be as visible, because in the final quarter of 2012–13 Queensland had the lowest percentage increase in slaughterings in Australia.

On the demand side, the outlook is positive, with a weakening Australian dollar, growth in demand from China, the Middle East and emerging markets in Asia, and the gradual recovery of the United States economy. These export destinations, with the exception of the emerging Asian markets, are Australia's main markets and are forecast to account for approximately 66 per cent of total export volume in 2013.<sup>10</sup> Adding to the forecast positive effect of a weaker Australian dollar on export demand is a forecast 10 per cent decrease in New Zealand lamb supply as the industry recovers from drought in the North Island.<sup>11</sup>



**Figure 12** Queensland sheep and lambs saleyard prices, 2004–05 to 2013–14  
Source: ABS, unpublished slaughter data.

For a discussion on wool, see page 27.

<sup>9</sup> ibid.

<sup>10</sup> MLA Australian sheep industry projections 2013 mid-year update, Meat and Livestock Australia Ltd, Sydney.

<sup>11</sup> ibid.

## Livestock products

Although *AgTrends* generally discusses only the larger primary industry sectors, special mention should be made of the beekeeping industry.

While the direct commodity production of the industry is relatively small (the GVP in 2001–02 was \$5.1 million, representing well below 1 per cent of Queensland's gross value of primary industry production), it has particular importance to cropping industries. In particular, bees provide significant pollination services as a by-product of the honey/pollen collection process. The value of pollination is reflected in the gross values of the cropping industries that honey bees service, but these services are difficult to value, primarily because of a lack of data about the extent of reliance on feral honey bees.

Australia is the last country that is free of the bee parasite varroa mite. If this mite were to become established in Australia, the importance of pollination by managed hives would increase significantly as feral bee numbers dropped.

## Milk

### Forecast

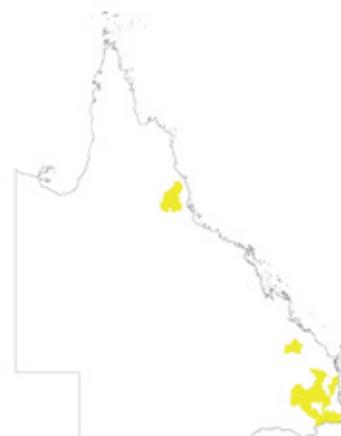
The GVP for milk in Queensland for 2013–14 is forecast to be \$226 million, the same as DAFF's final estimate for 2012–13 and 15 per cent lower than the average for the past 5 years.

This same forecast is a result of the combination of ongoing impacts from the supermarket 'milk price war' on processor margins and farm gate prices and greater forecast milk production. Queensland milk production for 2013–14 is forecast to increase by 5 per cent to approximately 480 million litres.

### Analysis and discussion

Queensland milk production for 2013–14 will greatly depend on the impacts of the ongoing supermarket 'milk price war' and the threat of drought-like conditions into the future. Over recent months there have been a number of significant changes that could influence the Queensland dairy industry over the year ahead. These include:

- high world prices and growing world demand for dairy products
- a falling Australian exchange rate
- significant increases in southern farm gate prices
- growing domestic market demand
- announced changes to milk procurement by both major supermarkets
- a general shortage of milk production.



The market growth forecast for the next decade equates to an additional 110 million litres and with transport costs increasing Queensland dairy farmers are well placed to provide year-round supply of high-quality fresh milk. However, if there is no increase in farm gate prices over the next year, more farmers are likely to exit the industry at a faster rate, so the market supply and demand gap in Queensland could quickly grow to more than 130 million litres during the 2013–14 financial year.

This winter has been particularly dry for the majority of Queensland dairying regions, leading to increased use of irrigation and purchased feed and fodder, resulting in higher operational costs. The Queensland Dairy Industry Survey has also measured a significant reduction in profitability and confidence of Queensland dairy farmers, with 68 per cent of respondents not being able to cover their monthly operational costs from their monthly milk revenue. Only 30 per cent replied that they expected to be dairying in 5 years and 8 per cent were unsure.

Targeted heavy discounting of store-brand fresh white milk products by major supermarket retailers has caused a loss of processor brand share in milk sales, stripped wholesale value from the milk category, and commoditised a wider range of products. This has caused a decrease in processor profitability and subsequently reductions in the farm gate price for dairy farmers. This pressure has continued through the current year and there is no sign of this changing in the short term.

Since the start of the supermarket ‘milk price war’ in 2011, more than 80 dairy farmers have exited the Queensland industry. Across the processing sector many more staff have been put off as processors seek to reduce costs and rationalise operations. The impacts of recent flooding and higher operational costs have also been significant. If there is not a substantial increase in farm gate prices, even more dairy farmers are expected to exit the industry.

The regional fresh milk market has continued to grow slightly above population growth during 2012–13. Packaged milk sales increased by 3.77 per cent from 531 million litres in 2011–12 to an estimated 551 million litres for 2012–13. This represents a shortfall of 93.5 million litres for the Queensland market demand for 2012–13.

The latest major attempt of product differentiation has been the introduction of processor brand lines that are advertised as not containing permeate. This latest differentiation tactic had yielded processors additional sales growth; however, when the major supermarkets launched their own ‘permeate free’ store-branded milk, they regained market share at the expense of processor brands.

Individual milk processors and industry groups have been publicly campaigning about the impact of the supermarket ‘milk price war’. They have encouraged consumers to support dairy farmers by buying processor milk brands, not discounted supermarket store brands.

Sales data from Dairy Australia for the last financial year indicates that the penetration of supermarket discounted milk has slowed and processors have managed to regain some market share.

Over the last financial year the two major supermarkets have launched new direct supply arrangements. Coles has announced new longer term supply contracts with farmer cooperatives to supply them with milk for general store brands and exclusive mid-range brands. These supply contracts do not start until mid-2014.

Woolworths has announced a trial direct supply arrangement with a collective group of farmers in New South Wales. Woolworths is proposing to use current milk processors on a contract pack arrangement to process and bottle the milk where groups of farmers do not have their own processing facilities.

This arrangement may provide farmers with a higher milk price, but the major supermarkets may require farmers to implement additional standards in their operations, which could add to their costs of production (as has been experienced in the United Kingdom). The objective of the direct approach of major supermarkets to dairy farmers is still not fully transparent. The change in market dynamics and industry supply chain margins from the introduction of mid-range ‘farmer own’ brands is also yet to be fully understood.

**Table 11** Queensland milk production estimates and forecasts by region, 2008–09 to 2013–14

	2008–09 (ML) <sup>a</sup>	2009–10 (ML) <sup>a</sup>	2010–11 (ML) <sup>a</sup>	2011–12 (ML) <sup>a</sup>	2012–13 (ML) <sup>a</sup>	2013–14 (ML) <sup>b</sup>	Change from 2009–10 to 2012–13 (%)
South East Queensland	406	428	397	399	376	394	-12
Far North Queensland	76	71	61	58	56	59	-21
Central Queensland	30	30	29	28	26	27	-13
<b>Total</b>	<b>512</b>	<b>529</b>	<b>487</b>	<b>485</b>	<b>458</b>	<b>480</b>	<b>-14</b>

a Estimate.

b Forecast.

Source: Dairy Australia.

# Wool

## Forecast

The GVP for wool (including the value of skins) for 2013–14 is forecast to be \$105 million, a 1 per cent decrease on DAFF's final forecast for 2012–13 and a 2 per cent decrease on the average for the past 5 years.



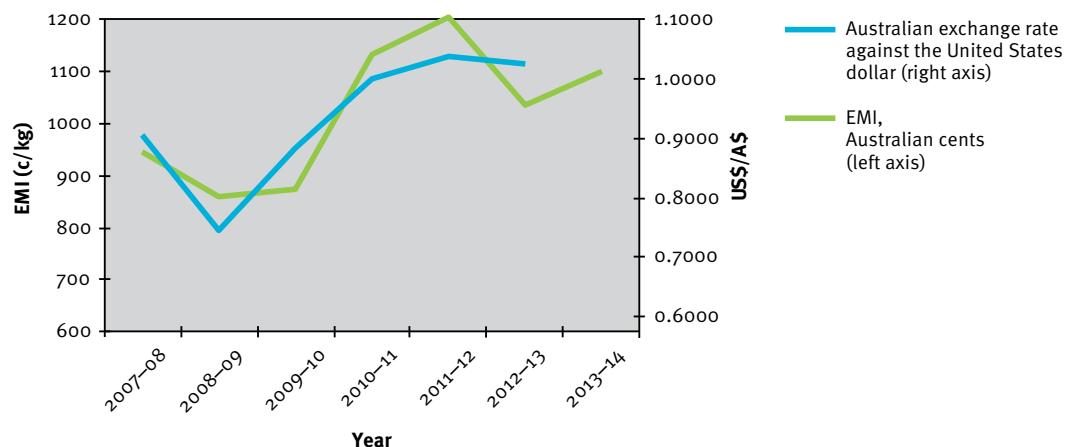
## Analysis and discussion

The GVP for Queensland wool is forecast to remain relatively unchanged from the final estimate for 2012–13, with decreased Queensland production expected to be offset by an increase in prices.

Very dry seasonal conditions across many Queensland sheep-growing regions in 2012–13 led to large areas of the state being drought-declared. In response to these conditions, 2012–13 saw higher sheep slaughterings, leading to lower opening sheep numbers available for shearing and therefore reduced clip weights in 2013–14. For 2013–14, the Australian Wool Production Forecasting Committee estimates a 5 per cent decrease in the number of sheep shorn in Queensland and a 2.6 per cent decrease in average cut per head.<sup>12</sup>

ABARES forecasts an average Eastern Market Indicator (EMI) price for 2013–14 of 1100 cents per kilogram.<sup>13</sup> This is an increase of 6.3 per cent on the 2012–13 price, following price declines from the historical highs of 2011–12 (see Figure 13). The last week of August and the first week of September saw an 11 per cent surge in the EMI to 1128 cents per kilogram. While this price surge increased the number of bales hitting the market, correction was inevitable as there is limited support across the entire supply chain to sustain prices at such levels—the EMI closed at 1095 cents per kilogram for the week ending 13 September.

A weaker Australian dollar and an expected fall in global wool production, coupled with firm demand from China (Australia's largest wool export destination, accounting for more than 75 per cent in 2012–13), is expected to support wool prices in 2013–14. In addition, growth in consumer demand for wool in the United States as their economy recovers and the increasing competitiveness of wool against other fibres will also strengthen wool prices in 2013–14.



**Figure 13** EMI and the Australian exchange rate against the United States dollar, 2007–08 to 2013–14

Sources: EMI data—ABARES, *Agricultural commodities, September quarter 2013*; Exchange rate data—Reserve Bank of Australia, monthly data.

<sup>12</sup> Australian Wool Production Forecasting Committee 2013, *Australian wool production forecast report*, August 2013, Australian Wool Innovation Limited, Sydney.

<sup>13</sup> ABARES 2013, *Agricultural commodities: September quarter 2013*, Commonwealth of Australia, Canberra.

# Eggs

## **Forecast**

For 2013–14, the GVP for eggs in Queensland is forecast to be \$162 million; this is a 17 per cent increase on DAFF's final estimate for 2012–13 and a 22 per cent increase on the average for the past 5 years.

## **Analysis and discussion**

There is a forecast 10 per cent rise in prices received by Queensland egg producers for 2013–14. This is expected to offset the increased costs of electricity, labour, feed etc.

The quantity of Queensland egg production is forecast to grow by 10 per cent in 2013–14. There are no significant adverse impacts on the quantity of eggs produced.

Demand for free-range eggs continues to increase, as does the price, although there is still no clear national standard for bird densities in free range. Woolworths has announced that they will stock free-range eggs only from 2018 and this foreshadows more change in the industry.



# Crops

## Horticulture crops

### Fruit and nuts

#### **Forecast**

The total GVP for fruit and nuts in Queensland for 2013–14 is forecast to be \$1.51 billion. This figure is 13 per cent greater than DAFF's final estimate for 2012–13 and 29 per cent greater than the average for the past 5 years.

#### **Analysis and discussion**

The GVP for **bananas** is forecast to be \$550 million for 2013–14, 10 per cent greater than DAFF's final estimate for 2012–13 and 35 per cent greater than the average for the past 5 years.

Much of this increase is due to a recovery from the impact of Cyclone Yasi.

Most of the state's banana production occurs in the Cardwell and Johnstone areas in northern Queensland.



The GVP for **strawberries** is forecast to be \$131 million for 2013–14, up 5 per cent on DAFF's final estimate for 2012–13 but 13 per cent above the average for the past 5 years.

Higher production of strawberries is due to a slightly better growing season with prices expected to remain unchanged.

Most of Queensland's strawberry production occurs in the Caboolture area, just north of Brisbane, and along the Caloundra rail corridor.



The GVP for **mandarins** for 2013–14 is forecast to be \$77 million, 20 per cent greater than DAFF's final estimate for 2012–13 and 6 per cent greater than the average for the past 5 years.

The quantity of mandarins produced is forecast to be 20 per cent higher in 2013–14 than in 2012–13. Production trends in the Central Burnett region are on the rise as younger trees reach full production.

Half of Queensland's mandarin production occurs in the Gayndah area. A further third of production occurs in Mundubbera (not shown on the map).



The GVP for **mangoes** is forecast to be \$77 million in 2013–14, 10 per cent greater than DAFF's final estimate for 2012–13 and 17 per cent greater than the average for the past 5 years.

More than 40 per cent of Queensland's mango production is in the Mareeba area in Far North Queensland. A further 39 per cent of production occurs in the neighbouring Burdekin, Bowen and Townsville areas.

Note that any estimate made is tentative, as it was early in the flowering stage when data was collected for this report. Subsequent weather conditions can significantly influence crop size. In addition, the pattern of alternating high-production and low-production years has broken down over the last few years, making early-season forecasts even more difficult.



The GVP for **avocados** is forecast to be \$160 million for 2013–14, 14 per cent greater than DAFF's final estimate for 2012–13 and 34 per cent greater than the average for the past 5 years.

The quantity of avocados produced is forecast to be 16 per cent greater than in 2012–13. This is due to the start of the recovery from the past three wet summers. The price of Queensland avocados is forecast to fall by 2 per cent in 2013–14 due to greater supply of avocados to the market.

The Isis and Burnett areas produce 37 per cent of Queensland's avocados, with 29 per cent of production occurring in the Atherton and Mareeba areas in Far North Queensland. Just over 10 per cent of avocados are grown in the Crows Nest area on the Darling Downs.



The GVP for **pineapples** is forecast to be \$70 million for 2013–14, which is 15 per cent lower than DAFF's final estimate for 2012–13 and 3 per cent lower than the average for the past 5 years.

This forecast decrease is due to poorer than expected growing conditions. The price of pineapples is forecast to fall in 2013–14 due to lower consumer demand flowing from consumers being less likely to purchase undersized pineapples.

More than a third of pineapple production occurs in the Caboolture area, just north of Brisbane, with a further 20 per cent of production in the Caloundra area and 10 per cent north of Yeppoon in the Livingstone area on the Central Queensland coast.



The GVP for **apples** is forecast to be \$110 million for 2013–14, 16 per cent greater than DAFF's final estimate for 2012–13 and 15 per cent greater than the average for the past 5 years.

The quantity of apples produced is forecast to remain much the same but the price is forecast to be 15 per cent higher in 2013–14.

More than 95 per cent of Queensland's apples are grown in Stanthorpe.



The GVP for **macadamias** in 2013–14 is forecast to be \$54 million, 4 per cent greater than DAFF's final estimate for 2012–13 and 46 per cent greater than the average for the past 5 years.

A major production area is in the Burnett area north of Bundaberg, where 40 per cent of macadamias are grown. Significant amounts are also grown around Gympie and just north of Gympie in the Tiaro area.



The GVP for **table grapes** is forecast to be \$50 million for 2013–14, the same as DAFF's final estimate for 2012–13 and 57 per cent greater than the average for the past 5 years.

The main varieties are Menindee Seedless, Flame Seedless and Red Globe. Queensland table grapes are early season, with 90 per cent harvested between October and December.

The major production areas are in the Balonne area, where more than 40 per cent of Queensland's table grapes are grown, and the Emerald area, where a third of production occurs.



# Vegetables

## **Forecast**

For 2013–14, Queensland's GVP for vegetables is forecast to be \$1.151 billion, 3 per cent less than for 2012–13 but 9 per cent greater than the average for the past 5 years.

## **Analysis and discussion**

Queensland's GVP for **potatoes** is forecast to be \$54 million, the same as DAFF's final forecast for 2012–13 but 4 per cent greater than the average for the past 5 years.

The main potato-growing areas are the Atherton and Herberton areas in Far North Queensland, the Burnett area, north of Bundaberg, and the Gatton area, west of Brisbane.



The GVP for **tomatoes** for 2013–14 is forecast to be \$297 million, 22 per cent greater than DAFF's final forecast for 2012–13 and 38 per cent greater than the average for the past 5 years.

Better growing conditions in the Bowen region have led to an increase of good-quality tomatoes on the eastern seaboard of Australia. This, in turn, has seen a fall in tomato prices, which are expected to stay lower for some time.

Half of Queensland's tomato production occurs in the Bowen area, and there is some production in the Isis area around Charters.



The GVP for **capsicums and chillies** for 2013–14 is forecast to be \$145 million, which is 4 per cent greater than DAFF's final forecast for 2012–13 and 31 per cent greater than the average for the past 5 years.

Reasonable water availability is likely to result in an increased volume of production across the state. However, a slight reduction in prices is expected to be associated with this improvement.

As with tomatoes, the main areas for capsicum production are the Bowen and Isis areas. The main chilli production region is Bowen, and some are grown in the Stanthorpe region.



The GVP for **sweet potatoes** is forecast to be \$52 million, which is the same as DAFF's final forecast for 2012–13 and 1 per cent less than the average for the past 5 years.

Good ground preparation and growing conditions have produced a bountiful Queensland sweet potato harvest. However, this in turn has pushed the price down, meaning lower prices for consumers, but also for growers.

Queensland produces 85 per cent of Australia's sweet potatoes, with Bundaberg being the main growing area. Some sweet potatoes are also grown in Cudgen in northern New South Wales. All production is sold domestically.



## Other vegetables

The GVP for **lettuce** in Queensland for 2013–14 is forecast to be \$54 million, the same as DAFF's final forecast for 2012–13 and 12 per cent lower than the average for the past 5 years.

The lettuce crop is expected to be about the same in terms of volume and price over the next year.

The Gatton, Esk and Cambooya areas are Queensland's main areas of lettuce production.



Queensland's GVP for **mushrooms** is forecast to be \$64 million, the same as DAFF's final forecast for 2012–13 but 43 per cent greater than the average for the past 5 years.

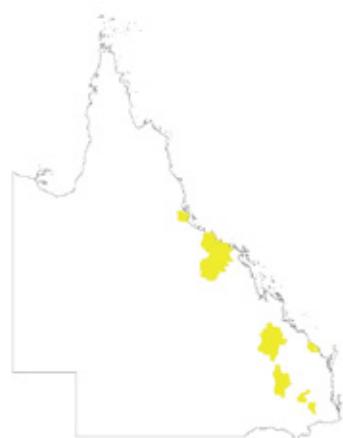
The two main production areas for mushrooms are the Beaudesert and Stanthorpe districts, south-west of Brisbane, where almost 60 per cent of production occurs. The neighbouring districts of Isis (around Childers) and Burnett (north of Bundaberg) account for 12 per cent of production, while 9 per cent of production occurs in the Maroochy area.



The GVP for **watermelons** in Queensland in 2013–14 is forecast to be \$39 million, which is 8 per cent greater than DAFF's final forecast for 2012–13 and 3 per cent greater than the average for the past 5 years.

The volume of watermelons is expected to be up fractionally on the previous year; however, the prices are likely to fall as a result.

A third of Queensland's watermelon production occurs in the Bowen and Burdekin areas of Central Queensland. Smaller pockets of production are in the Chinchilla and Rosalie areas on the Darling Downs, as well as in the Banana and Gatton districts.



## Lifestyle horticulture

### Forecast

The GVP for the production segment of the lifestyle horticulture industry in 2013–14 is forecast to be \$1.158 billion. This is a 1 per cent increase on DAFF's estimate for 2012–13 and 1 per cent above the average for the past 5 years.

### Analysis and discussion

**Nursery** production in Queensland is diverse and supplies products to the urban horticulture market and broader horticulture industries such as the fruit, vegetable and forestry sectors. Results vary across sectors but the total GVP is forecast to be \$867 million for 2013–14.

The nursery sector has a fluid market, making it difficult to accurately forecast for 2013–14. Low consumer sentiments and a period of economic uncertainty have impacted sales and overall business performance this financial year. The nursery sector is, however, optimistic in this post-election period that sales will stabilise and that new market opportunities will present.

Independent retailers supplying the urban market anticipate steady sales this season. High temperatures in spring and high input costs (such as labour, water, fertiliser and electricity) have impacted business performance to date. However, following a reported slow period this winter, businesses are optimistic that sales will stabilise if rain and a return to milder conditions are seen leading up to Christmas.

On the other hand, businesses supplying big-box outlets such as Bunnings and the supermarket chains are forecasting continued growth for 2013–14. Production has increased to meet the growing demand and sales remain strong.

Increased competition from local markets and the prevalence of big-box outlets has seen the closure of a number of independent retailers. Urban development has also reduced the availability of suitable sites for retail nurseries. This has prohibited new businesses entering the market.

Queensland nurseries are optimistic that government infrastructure projects such as the Commonwealth Games will create additional demand for nursery products and services in years to come.

The GVP for **turf** is forecast to be \$140 million for 2013–14. This is a moderate increase from the 2012–13 estimate.

Dry conditions this year have impacted production. Sales have been moderate leading up to spring. It is forecast that sales will significantly increase over the coming months, but rain is required to ensure production levels remain steady.

Greater competition between turf businesses for market share has impacted product price. Interstate trading has been strong as the turf industry competes for clients. The current fiscal situation and enforced budget restrictions continue to impact the sector.

Continued demand for product lines in big-box retailers creates confidence in the market. The strengthening of the housing market is also a contributing factor to the optimistic outlook for the industry over the coming year.

The GVP for **cut flowers** is forecast to be \$151 million for 2013–14. This remains unchanged from the 2012–13 forecast.

Dry weather has forced businesses to rely on irrigation systems to maintain adequate production to service the market. Demand for the domestic product market remains steady, with



continued growth in the supermarket trade. The florist sector remains strong with businesses offering customers product with a point of difference and service.

The threat of imports is an ongoing concern for Australian flower producers, as is the cost of production. The cost of labour, electricity and water continues to reduce profit margins for Queensland producers. However, the industry is confident that there will be stability in 2013–14.

## Other crops

### Sugar cane

#### Forecast

The GVP for Queensland's sugar cane in 2013–14 (i.e. from the 2013 harvest) is forecast to be \$1.01 billion, which is 11 per cent lower than DAFF's final estimate for 2012–13 (2012 crop) and 9 per cent lower than the average for the past 5 years.

Total revenue from the 2013 crop from Queensland, in raw-sugar equivalent, is expected to be \$1.563 billion.

#### Analysis and discussion

The forecast decline in Queensland's crop for 2013 reflects flood damage to new plantings in early 2013 following Cyclone Oswald. The crops largely impacted by this event were mostly in the Bundaberg, Maryborough and Isis growing districts.

However, with an unseasonally dry start to the wet season in northern Queensland, the associated rainfall was a welcome relief in the northern growing areas.

With such a poor start to the season, the size of the 2013 crop for Queensland is expected to remain at about 29 million tonnes, despite the Queensland sugar industry's efforts to increase the area under sugar cane and improve yields. This forecast is due to expected lower sugar yields (CCS<sup>14</sup> of about 13.6, down from the 2012 harvest average of 14.05), due in part to cases of yellow canopy syndrome in the Burdekin, Herbert and Mulgrave growing districts.

The average return to Queensland cane growers is forecast to decline by 12 per cent in 2013–14 to about \$35 per tonne of sugar cane—this reflects the forecast lower sugar prices for 2013–14. The decline in returns to growers, however, is expected to be partly offset by an assumed depreciation of the Australian dollar.

Lower sugar prices in 2013–14 are anticipated due to a forecast increase in world closing stocks of sugar by 4.8 million tonnes in 2013–14 (to a record 78.8 million tonnes). Queensland Sugar Limited (QSL) is forecasting its 2013–14 harvest pool return to be \$392 per IPS<sup>15</sup> tonne. While this is a decline from QSL's final 2012 season pool of \$428, QSL notes that the final harvest pool return depends on future movements in world sugar prices and the Australian exchange rate.



<sup>14</sup> CCS or commercial cane sugar is a measure of sugar content.

<sup>15</sup> International polarity scale.

## **Industry situation**

According to the September quarter forecasts from ABARES, world sugar production is expected to be 181.1 million tonnes in 2013–14, 1.8 million tonnes less than the record harvest of 2012–13. Forecast higher sugar production in Brazil and Thailand is expected to be more than offset by lower sugar production in Europe, Mexico and the United States.

Production of sugar cane in Brazil (the world's top producer) is forecast to reach a record 652 million tonnes in 2013–14, 11 per cent greater than last season. This increase reflects a further rise in land under sugar cane due to favourable world sugar and ethanol prices and a better seasonal outlook. Accordingly, sugar output is estimated to rise to a record 41.5 million tonnes in 2013–14, 2.1 per cent more than the harvest of 2012–13. Despite Brazil's central and southern production areas reporting less than ideal conditions in July (with wet conditions and frost limiting harvest), after the excessive rainfall interrupting the harvest last season, more normal seasonal conditions have spurred on this year's crush.

For a second consecutive year, Thailand's sugar production is forecast to increase. It is expected that in 2013–14 production will increase by 7 per cent to a total of 10.7 million tonnes. This increase is attributed to better sugar yields (an increase of about 3 per cent) as the area under sugar cane remains largely the same as for 2012–13.

After two consecutive bumper crops, production of sugar beet in Eastern Europe is forecast to decline by 16 per cent to 7.6 million tonnes. A return to normal seasonal conditions and the weakening in sugar prices are reported as the main reasons for a decline in production. This trend is also apparent in Mexico, where sugar production is forecast to decline by 1 million tonnes (from 7.4 million tonnes in 2012–13 to 6.4 million tonnes in 2013–14). This reduction is due to less land under sugar cane in response to lower sugar prices and a return to drier conditions.

While world sugar consumption is forecast to increase by 2.1 per cent in 2013–14 to 176.3 million tonnes, it is below the consumption growth average of 2.2 per cent per year experienced over the past decade. ABARES reports that growth in world sugar consumption is facing increasing competition from high-intensity sweeteners (both artificial and natural). A key driver for this is that alternative sweeteners deliver equivalent sweetness at a lower cost than sugar. Also, these sweeteners are typically low in calories (sometimes close to zero) and therefore preferred in weight-control diets.

# Cotton

## Forecast

The GVP for cotton for 2013–14 is forecast to be \$648 million, 2 per cent greater than DAFF's final estimate for 2012–13 but 10 per cent greater than the average for the past 5 years. The 2013–14 season still has very strong prospects based on very good water supplies.

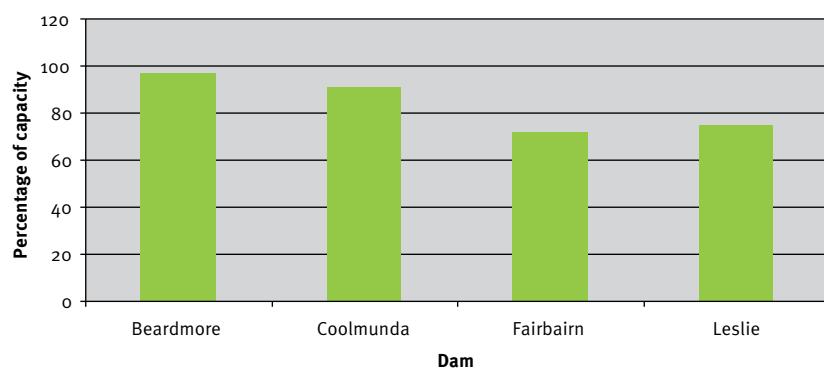


## Analysis and discussion

For 2013–14, the total area sown to cotton in Queensland is forecast to decrease by only 500 hectares. However, there is expected to be no decrease in average yields due to decreased irrigated cotton plantings, cotton lint production and cottonseed production. The cotton price per bale is expected to remain the same at \$400 per bale, and the cottonseed price is expected to remain constant at \$335 per tonne. The irrigated cotton cropping area is expected to increase by 5 per cent to 134 000 hectares across the state. This includes 35 000 hectares on the Darling Downs, 53 000 hectares in the St George – Dirranbandi region, 25 000 hectares in the Border Rivers region and 21 000 hectares in Central Queensland.

## Improved water storages and rainfall

There has been a slight decline in irrigation water supplies in the Condamine, Macintyre, Barwon and Moonie rivers and Border Rivers regions since last year. However, there is still ample water stored for irrigated growers. This is shown in Figure 14.



**Figure 14** Stored volumes in major Queensland irrigation dams, 12 September 2013

Source: SunWater.

## Domestic production

A forecast increase in area sown and under irrigation of 6000 hectares in 2013–14 is expected to increase cotton lint production to 1 269 500 bales (288 177 tonnes), up 29 500 bales from the 2012–13 level. Cottonseed production is also forecast to increase by 9710 tonnes from the 2012–13 level of 408 146 tonnes to 417 856 tonnes for 2013–14.

## World production

As detailed in Table 12, China is the world's largest cotton producer, yielding over 7 million tonnes in 2012–13 and accounting for 29 per cent of world production. The next largest cotton producers are India, the United States and Pakistan, contributing 22 per cent, 14 per cent and 8 per cent respectively to world production. Although China is the world's largest producer of cotton, it is also a net importer, possessing a large share of global cotton mills, and is the biggest manufacturer of cotton textiles. China is forecast to import 2.4 million tonnes of cotton in 2013–14. The United States produced less than half the amount that China did in 2012–13, but is the world's largest cotton exporter, and is forecast to export 2.3 million tonnes of cotton in 2013–14, accounting for around 28 per cent of global exports.

**Table 12** World production of cotton, 2012–13 and 2013–14<sup>a</sup>

Producer	2012–13 production ('000s tonnes)	2012–13 share of world production (%)	2013–14 forecast production ('000s tonnes)
China	7 620	29	7 185
India	5 770	22	6 096
United States	3 770	14	2 842
Pakistan	2 025	8	2 112
Brazil	1 263	5	1 524
Australia	1 002	4	980
<b>Total world production</b>	<b>26 359</b>	<b>100</b>	<b>25 340</b>

a Not all cotton producers are represented in this table.

Source: United States Department of Agriculture, Foreign Agriculture Service, *Cotton: World Markets and Trade Monthly Circular*, August 2013.

## International supply and demand forces

The latest information from the United States Department of Agriculture (USDA) indicates that the world supply is expected to decrease slightly due to decreases in production in China and the United States.

The USDA also forecasts that in 2013–14, Indonesia will increase imports by 100 000 bales to 2.55 million on projected higher demand.

Changes to cotton exports by most major exporters are also forecast for 2013–14:

- United States down 400 000 bales to 10.6 million on a smaller projected crop
- India up 450 000 bales to 6.25 million on strong early season demand
- Uzbekistan down 150 000 bales to 3.0 million on reduced crop prospects
- Australia up 100 000 bales to 4.3 million on weaker competition
- Pakistan up 100 000 bales to 400 000 on increased supplies
- Zimbabwe down 100 000 bales to 300 000 on a smaller projected crop.

As at August 2013, global cotton imports for 2013–14 are forecast to be 8.36 million tonnes. Global closing stocks are expected to be 20.42 million tonnes. Total global production is projected to be 25.34 million tonnes, slightly greater than the consumption of 23.92 million tonnes.

## Other major field crops

### Chickpeas

#### **Forecast**

The GVP for chickpeas for 2013–14 is forecast to be \$100 million, down 43 per cent on DAFF's final estimate for 2012–13 but 29 per cent greater than the average for the past 5 years.

#### **Analysis and discussion**

Despite dry conditions, area sown is estimated to have increased 6 per cent in 2013 to 214 000 hectares (up from 202 000 hectares in 2012). This is due to a higher price at planting time (autumn) than at the same time in 2012 (\$480 per tonne, up from \$440 per tonne).



#### **Yield and production**

Chickpea producers have been hit hard in some cases by frost and dry conditions. However, a closer to long-term yield expectation remains for Queensland chickpeas. Overall, yields are forecast to be 32 per cent lower than those experienced in 2012, which were higher than average. The increased area sown is expected to be outweighed by lower yields, causing a 28 per cent fall in chickpea production to 250 600 tonnes, down from an estimated 349 000 tonnes produced in 2012.

#### **Price**

The chickpea price has fallen significantly because India (Queensland's major chickpea export market) now has a smaller chickpea deficit than in recent years and Pakistan (the second largest export market) experienced a strong production season over their winter, making them a net exporter of chickpeas. In general, strong chickpea seasons in India and Pakistan have recently placed downward pressure on chickpea prices received by Queensland growers. Chickpea prices have fallen by up to \$150 per tonne over the past three months.

## Peanuts

### **Forecast**

The GVP for peanuts for 2013–14 is forecast to be \$31 million, the same as DAFF's final estimate for 2012–13 but 15 per cent higher than the average for the past 5 years.

### **Analysis and discussion**

#### **Area sown**

The area of peanuts sown for the 2013–14 season is forecast to remain the same as for the 2012–13 season, at 11 500 hectares.



#### **Yield and production**

Assuming average seasonal conditions apply to 2013–14, yields are forecast to be 3 tonnes per hectare for the summer. A return to average yields combined with constant area sown is predicted to maintain production at approximately 34 000 tonnes.

#### **Price**

The world market for peanuts is stable at present with the next driver being the size of the peanut crop in the United States, where harvesting has just commenced. Price is expected to remain at around \$900 per tonne into the 2013–14 season; this is \$50 above the average since 2009–10. The peanut price is partly linked to world oilseed prices. In line with current forecasts from the USDA, an increase in world soybean and sunflower seed production and exports will likely see some downward pressure on these oilseed prices. This could translate to some pressure on peanut prices received by domestic growers towards the end of 2013 and into the beginning of 2014. However, this is not expected to be significant.

# Soybeans

## Forecast

The GVP for soybeans for 2013–14 is forecast to be \$16 million, 11 per cent lower than DAFF's final estimate for 2012–13 and 1 per cent lower than the average for the past 5 years.



## Analysis and discussion

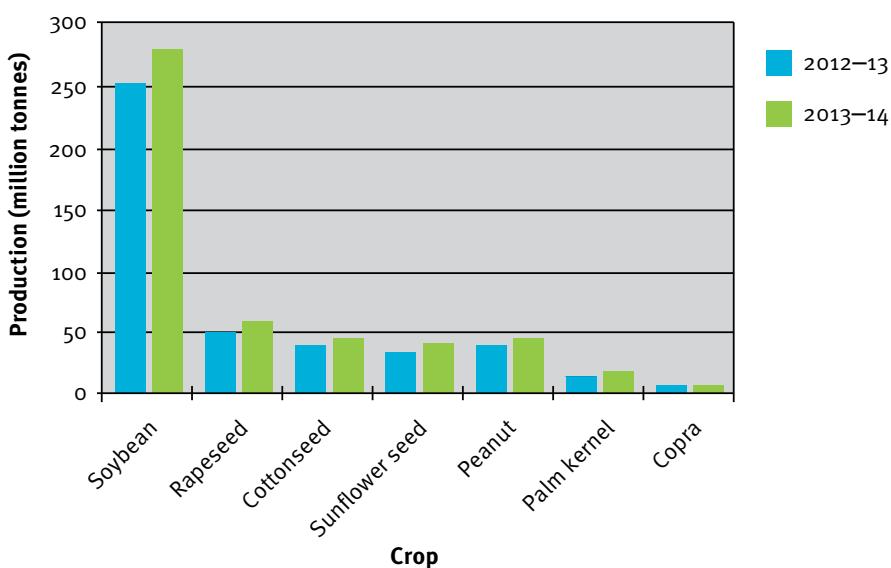
### Area sown and production

Area sown is likely to be down from the 2012–13 season area of 13 600 hectares, to 11 000 hectares. A small increase in yield is forecast (10 per cent), assuming that subsoil moisture levels, recharged by significant rainfall received in the second half of the 2012–13 summer and autumn, remain to a degree. Overall, the smaller area sown is estimated to more than offset the increase in yields, reducing soybean production by 10 per cent to 27 500 tonnes in 2013–14, down from the 30 500 tonnes estimated in March for the 2012–13 season.

### Price<sup>16</sup>

Prices received by Queensland soybean and sunflower growers are largely determined by international oilseed supply and demand forces, with a margin of up to around 10 per cent premium being paid for domestic oilseeds before globally priced imports compete with domestic product. Figures 15 to 17 show the major oilseeds produced in the world, the countries that grow them, and the major exporters, comparing the years 2012–13 and 2013–14 (USDA August forecast). Australian and Queensland soybean and sunflower producers are very small by comparison with world trade, and as such are price takers in a largely global market.

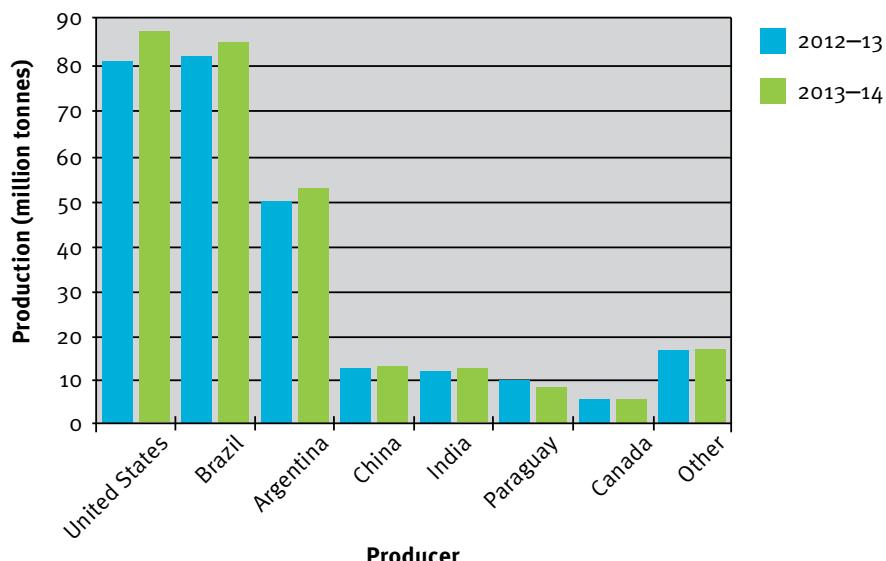
World production of oilseeds is forecast to increase by 4.5 per cent from 472 million tonnes in 2012–13 to 493 million tonnes in 2013–14 (USDA August projection). The world's biggest oilseed crop is soybeans, with 281 million tonnes of production forecast (see Figure 15).



**Figure 15** World oilseed production, 2012–13 (472 million tonnes) and 2013–14 (estimated August 2013 at 493 million tonnes)

<sup>16</sup> United States Department of Agriculture 2013, *Foreign Agricultural Service Circular Series FOPo8—13 Aug 2013 Oilseeds: World Markets and Trade*, viewed 9 September 2013, <<http://www.fas.usda.gov/psdonline/circulars/oilseeds.pdf>>.

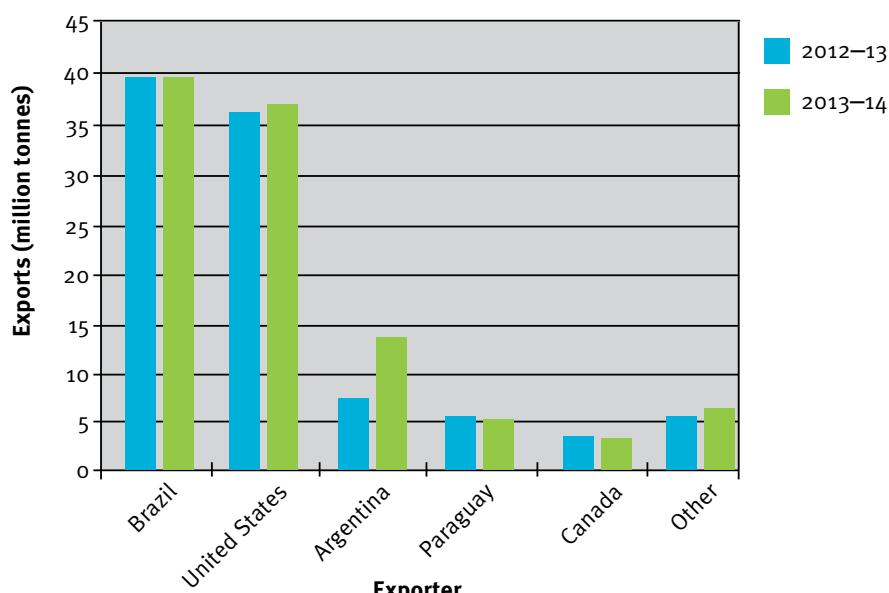
The world's biggest producers of soybeans are the United States (31 per cent of world production at 88.6 million tonnes forecast for 2013–14), followed by Brazil (30 per cent, 85 million tonnes) and Argentina (19 per cent, 53.5 million tonnes). An increase in soybean production of up to 8 per cent is projected for each of the major producers in 2013–14 (see Figure 16).



**Figure 16** World soybean production, 2012–13 (267.6 million tonnes) and 2013–14 (estimated August 2013 at 281.7 million tonnes)

A 15 per cent increase in world oilseed stocks is forecast for 2013–14, bringing the total to 80.7 million tonnes. This is mostly attributable to a 16 per cent increase in world soybean stocks to 72 million tonnes.

World soybean exports are forecast to increase 11 per cent in 2013–14, from 96.6 million tonnes to 107.4 million tonnes (see Figure 17). The world's biggest soybean exporters are Brazil, accounting for 39 per cent of world exports, followed by the United States (35 per cent) and Argentina (13 per cent). Exports from Argentina are forecast to nearly double.



**Figure 17** World soybean exports, 2012–13 (96.6 million tonnes) and 2013–14 (estimated August 2013 at 107.4 million tonnes)

A drop in biodiesel production in the European Union is set to increase world soybean oil exports, particularly from Argentina. World trade is up based on larger exports from Brazil and Bolivia. By comparison, Queensland is a marginal exporter of soybeans. Only about 500 tonnes of an annual average crop of 28 500 tonnes are exported to high-valued niche markets as edible whole soybeans for human consumption. These markets include Malaysia, Japan and Taiwan, which have great expansion potential. The remainder of soybeans go to the domestic market for crushing to produce soy oil. Soybeans are currently an opportunistic rotational crop, generally grown in conjunction with sugar cane. They have high moisture requirements with specific outlays required for establishment. However, their economic potential in Queensland is significant.

The season price remains largely unchanged for the first quarter of 2013–14, at \$575 per tonne to domestic growers. However, due to forecast increased world trade and stocks, some downward pressure on world soybean prices is expected towards the end of 2013. This will likely translate to soybean and sunflower seed prices domestically as the year progresses, assuming that the Australian dollar does not depreciate further against major trading partner currencies. This would have the effect of increasing the dollars received per tonne of grain exported (hence increasing price per tonne received by local growers).

## Sunflowers

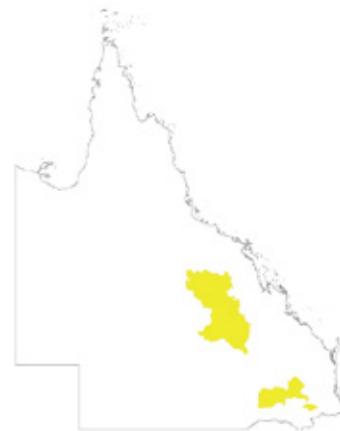
### **Forecast**

Sunflower seed GVP is forecast to be \$10 million for 2013–14, which is 27 per cent greater than DAFF's final estimate for 2012–13 but 20 per cent lower the average for the past 5 years.

### **Analysis and discussion**

#### **Area sown and production**

Early sowing of sunflowers takes place in October and a late planting follows in mid-January to February. In spring 2012 planting conditions were very hot and dry, and continued so for much of the growing phase of the early planted crops up until the end of January, when substantial rains were received. Consequently, the total area sown in central and southern Queensland was below average, at 12 000 hectares, well below the nearly 28 000 hectares of 2011–12. For the coming 2013–14 season, soil moisture conditions are assumed to be closer to average, with a 40 per cent increase in area sown to 16 800 hectares. Accompanying this is a projected increase in yields by around 20 per cent above the long-term average, taking production to 18 400 tonnes for 2013–14, 27 per cent above the production of 2012–13, which was 14 460 tonnes.

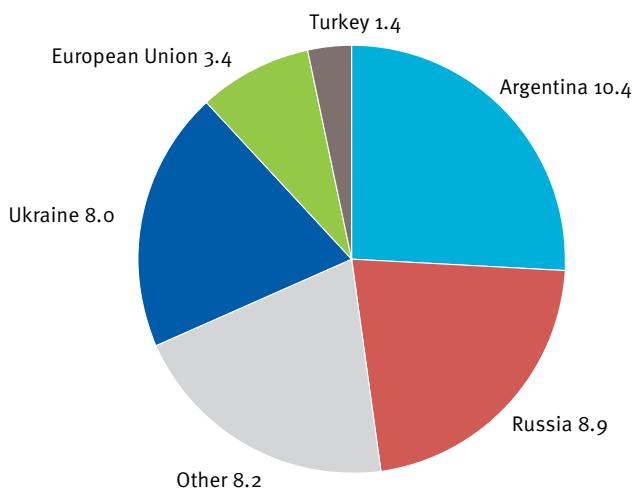


#### **Global sunflower seed production and exports, and domestic price<sup>17</sup>**

Domestic sunflower growers have the advantage that their seed is highly sought after by domestic processors of seed for oil. However, the price they receive is largely still subject to global oilseed price movements in not just sunflower seeds but soybeans also (see Soybeans, page 41). Figures 18 and 19 show the sizes of global supply and export forces that affect domestic growers.

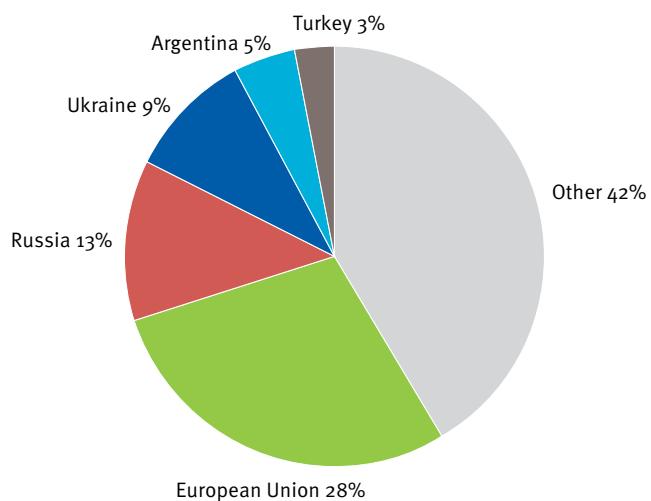
Global sunflower seed production is forecast to be over 40 million tonnes in 2013–14, up 30 per cent on the 36 million tonnes produced in 2012–13. The major producers (Argentina, Russia and the Ukraine) are expected to increase their production by up to 15 per cent. As shown in Figure 18, Argentina is forecast to produce the most sunflower seed at over 10 million tonnes (26 per cent of global production), followed by Russia (8.9 million tonnes, 22 per cent) and the Ukraine (8.2 million tonnes, 20 per cent). At a global level, 51 per cent of sunflower seed is expected to be used as a high-protein meal, with the balance going to crushing for mostly cooking oil.

<sup>17</sup> United States Department of Agriculture 2013, *Foreign Agricultural Service Circular Series FOPo8—13 Aug 2013 Oilseeds: World Markets and Trade*, viewed 9 September 2013, <<http://www.fas.usda.gov/psdonline/circulars/oilseeds.pdf>>.



**Figure 18** Forecast global production of sunflower seeds in million tonnes (total 40.3 million tonnes) by major producers, 2013–14

Overall, world exports are projected to increase by around 30 per cent from 1.2 million tonnes in 2012–13 to 1.5 million tonnes in 2013–14. The biggest increase is expected to come from Russia. Figure 19 shows that the European Union is expected to be the single largest exporter, accounting for 28 per cent of world exports (450 000 tonnes), followed by Russia (200 000 tonnes, 13 per cent) and the Ukraine (150 000 tonnes, 9 per cent).



**Figure 19** Forecast exports of sunflower seeds (1.5 million tonnes) by major countries, 2013–14

Global stocks are forecast to increase 9 per cent to 2.7 million tonnes in 2013–14, up from 2.5 million tonnes in 2012–13. Argentina is projected to hold the world's biggest stocks of oil sunflower seed in 2013–14 (646 000 tonnes), followed by Turkey (520 000 tonnes) and the Ukraine (511 000 tonnes). There has been some recent downward pressure on the price of internationally traded sunflower seeds, which is enticing demand from traditional Black Sea sunflower oil destinations such as Egypt and North Africa, as sunflower seeds compete with substitutes such as soybean oil.

Stocks of sunflower seed in other countries, particularly Argentina, would compete with Queensland-produced sunflowers once the domestic price exceeds the import or global price by 10 per cent. This effectively means that Australian sunflower growers are, by and large, price takers in a larger global oilseeds market. However, all domestically produced seed remains highly sought after by domestic crushing plants, with any shortfalls in domestic production offset by imports. Sunflower seeds in Queensland go to crushing plants for cooking oils and margarines.

An Australian dollar below parity with the United States dollar and devalued against other major currencies will make it more expensive for domestic processors to import seed, making domestic product more attractive. About 93 per cent of Queensland sunflower production consists of monounsaturated seeds, while 5 per cent are polyunsaturated seeds and 2 per cent are used for confectionery. Monounsaturated seeds command a price premium over polyunsaturated of around \$70 per tonne, due to diet and health benefits. The price of Queensland sunflower seeds is currently steady, with no change from the March estimate for 2012–13, at \$550 per tonne. Given the forecast increase in global sunflower seed exports and stocks, some downward pressure on sunflower seed prices is expected domestically towards the end of 2013.

## Winter cereal grains

### Wheat

#### Forecast

The GVP for wheat for 2013–14 is forecast to be \$404 million, 27 per cent lower than DAFF's final estimate for 2012–13 and 2 per cent below the average for the past 5 years.



#### Analysis and discussion

##### Area sown, yield and production

The area sown has fallen to 15 per cent below the estimate made for the winter 2012 crop, from 883 000 hectares to 754 000 hectares. There has been a reduction in area planted across all major wheat-growing areas in southern Queensland, including the southwest (Roma – St George), the Border Rivers and the Condamine (Inner and Outer Downs). Compounding this has been a 10 per cent fall in yields from the estimate for 2012. These have been due firstly to a dry planting period around mid-May 2013, and secondly to inadequate rainfall during the growing winter crop phase. Reportedly, rainfall and subsoil moisture have been very patchy in the southern and central areas of Queensland, with some areas receiving good rainfall while others have received scant levels.

At the end of July 2013, soil moisture conditions and the Southern Oscillation Index (SOI) indicated the chance of slightly below median wheat yields for Queensland, with a state average of 1.25 tonnes per hectare, slightly below the long-term median of 1.44 tonnes per hectare.

Due to lower yields and less plant head fill, crop nutrition via soil nitrogen is expected to increase per grain. This is forecast to increase grain quality and protein levels. Under this scenario, growers could expect to receive greater returns per tonne of grain than average. However, wheat revenue per farm is expected to fall due to the smaller area sown and lower yields. Overall, wheat production is forecast to fall 23 per cent, from 1.85 million tonnes estimated for the winter 2012 crop (2012–13) to 1.41 million tonnes for the winter 2013 crop (2013–14).

##### Domestic wheat price

In 2012 the United States suffered a disastrous corn crop, increasing corn price levels to those of wheat. This increased the demand for feed wheat relative to that for corn. As at the end of August, hot and dry conditions were persisting in the United States Midwest, with concerns that this may adversely impact the corn and soybean crops. Weather conditions leading up to the United States corn harvest will be critical in determining crop yields. However, 2013 is expected to see a record United States corn crop, due to larger area sown, despite lower average yields. This is expected to reduce corn prices to their usual discount to wheat. Greater supplies of northern hemisphere wheat and soybeans are also likely. A higher than average discount of corn to wheat is expected of around A\$65 per tonne. This could see a shift from the use of wheat to corn for livestock feed towards the end of 2013, which in turn could place some downward pressure on global wheat prices.

The outlook for grain prices into 2014 looks bearish at this stage. Conversely, factors outside of the current supply outlook could increase prices. These include poorer than expected crop prospects in the northern hemisphere, a further depreciating Australian dollar (which translates to more dollars per tonne of exported grain being received by Australian growers) and possibly increasing demand from China. Countering these upside possibilities to domestic growers, Black Sea countries are selling new crop to African and Middle Eastern countries at prices undercutting United States and Australian grain prices.

The outlook for Australian wheat will depend on the quality at harvest time in November to December 2013. A downgraded wheat crop will have to compete with more abundant supplies of corn on the global livestock feed market. However, if Australian wheat quality is high, it will attract higher average prices on the milling market. Under this scenario, domestic feed millers

would have to place higher bids to keep wheat from being exported to overseas millers of wheat for human consumption.

With Australian Premium White (APW) wheat averaging \$286 per tonne, sorghum (\$266) and barley (\$280) are both trading favourably against wheat. This likely reflects lower current domestic supplies of 2012–13 sorghum and barley than of wheat.

Domestically, wheat yields reportedly could reach average; however, final yields will depend on adequate rainfall (to replenish subsoil moisture) and on temperatures not reaching excessively high levels (so that crop flowering will not be diminished).

Due to the increasing northern hemisphere grain supplies, there has been a decrease in the APW wheat price since the March 2012–13 quarter, by around 5 per cent (from \$300 per tonne).

## Barley

### Forecast

The GVP for barley for 2013–14 is forecast to be \$55 million, 25 per cent greater than DAFF's final estimate for 2012–13 and 44 per cent above the average for the past 5 years.

### Analysis and discussion

#### Area sown, yield and production

2013 has seen an increase in area sown of around 10 per cent, from an estimated 83 000 hectares in 2012 to around 92 000 hectares. This has been due to relatively strong barley prices at planting time in autumn, and lacklustre wheat gross margins of 2012. Reportedly, on the Western Downs in 2012, the wheat crop experienced a dry finish, with an increase in grain quality being outweighed by a 50 per cent reduction in yields compared to barley on the Western Downs. This reduced wheat gross margins. Growers have responded in 2013 by substituting some barley areas for wheat.



Barley yields are expected to be around 14 per cent above those of 2012, due to more favourable soil moisture conditions combined with relatively dry atmospheric conditions, which kept crop diseases at bay. The anticipated yield increase relies on ample follow-up rain prior to crop harvest times, early October for Central Queensland, late October for the Western Downs, and late November to early December for the Eastern Downs. Reportedly, some crops were frost-damaged on the Western Downs, with growers using affected crops for hay and silage.

An increase in area sown coupled with a forecast increase in yields is expected to increase barley production by 26 per cent, from 155 000 tonnes in 2012 to 196 000 tonnes in 2013.

#### Domestic price

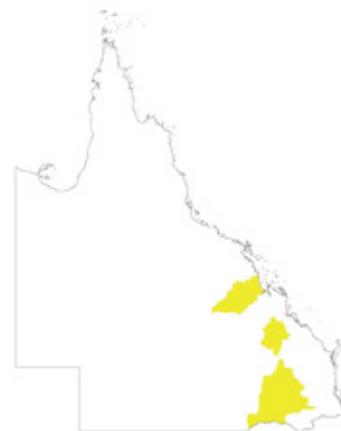
The United States corn crop, despite having deteriorated marginally in the last week of August, was still in significantly better shape than the same time in 2012. As for wheat, increased supplies of corn expected from the United States and increased wheat supplies from Black Sea countries on the world market are expected to place some downward pressure on world coarse grains, including barley. This will translate to somewhat lower domestic barley prices, although to levels that are still quite high by historical standards. The price per tonne at the beginning of November for barley (average of feed barley and malting barley) was \$280 per tonne, a marginal 1 per cent decrease on the price of \$283 per tonne estimated in March 2013.

## Summer cereal grains

### Grain sorghum

#### Forecast

The GVP for sorghum for 2013–14 is forecast to be \$441 million, which is 45 per cent greater than DAFF's final estimate for 2012–13 and 56 per cent greater than the average for the past 5 years.



#### Analysis and discussion

##### Area sown, yield and production

The sorghum area sown is forecast to increase by around 18 per cent from the dry start crop of 386 000 hectares in 2012–13 to 457 000 hectares in the 2013–14 season. The 2012–13 summer in southern and central Queensland was very dry until Christmas; after that, high rainfall was experienced through until autumn. The reasonable subsoil moisture levels established then are expected to remain until planting time for maize and sorghum at the end of spring 2013. Plantings in central and southern Queensland were below average in the 2012–13 summer due to the dry conditions in late 2012. The sorghum price is expected to remain quite high despite some downward pressure, and this will encourage increased plantings for the coming season.

The area sown to sorghum will also depend on the success of winter crops yields such as wheat and chickpeas, with good-yielding crops prompting growers to leave potential sorghum areas for summer fallow and unsuccessful crops prompting growers to double-crop and sow sorghum straight over ex-wheat and chickpea areas.

For the 2012–13 summer crops, early crops yielded poorly and later crops yielded well, due to early dry conditions. Assuming that ample subsoil moisture carries over from autumn 2013 into the 2013–14 planting window, yields are expected to increase by around a quarter on the 2012–13 season.

Increased area sown coupled with increased yields is forecast to increase production by nearly 50 per cent, from 1.1 million tonnes in 2012–13 to 1.7 million tonnes in 2013–14.

##### Domestic price and exports

Corn (called maize in Australia) is the major world coarse grain crop, before barley. The United States is the world's largest corn producer, with annual shifts in its production significantly impacting on world coarse grain prices, including sorghum, and to an extent barley and wheat. An increase in United States corn production will lower corn price, increasing substitution of feed corn for feed-grade wheat, barley and sorghum. This will have a downward impact on sorghum price (assuming demand factors are held constant) and, to a lesser extent, barley and wheat prices, due to significant quantities of barley varieties used for malting, and larger proportions of wheat used for high-protein milling for human consumption.

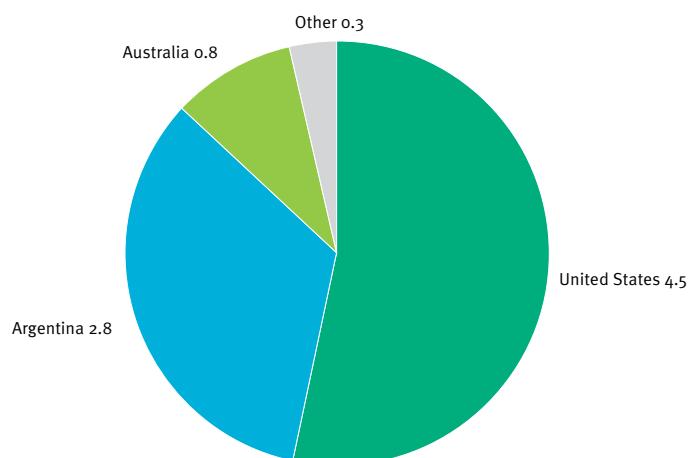
The United States is the major world sorghum exporter, accounting for 53 per cent (4.5 out of 8.5 million tonnes) of total world sorghum exports annually (projected to 2017–18; see Figure 20). This is followed by Argentina at 2.8 million tonnes (34 per cent) and Australia at 0.8 million tonnes (10 per cent). Queensland exports on average about 30 per cent of its crop annually. It is likely that Queensland sorghum exporters are price takers on the world market, and they are expected to export just under a third of the 1.39 million tonnes<sup>18</sup> average annual production over the medium term. The United States is also the major world corn exporter, with 50 million tonnes out of a total of 114 million tonnes exported annually (based on the average of projections to 2017–18).<sup>19</sup>

<sup>18</sup> DAFF 2013, *Medium term outlook Queensland cereal grains, March 2013*, DAFF, Brisbane.

<sup>19</sup> United States Department of Agriculture 2013, *Economic, statistics and market information system, agriculture baseline projection tables (94005)*, Long term agricultural projection tables to 2022, viewed 15 February 2013, <<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1192>>.

The United States is forecast to produce 355.7 million tonnes of corn in 2013, up 30 per cent on the 273.8 million tonnes of 2012. This is due to a record area planted and a forecast 27 per cent increase in yields, although this will depend on adequate rainfall being received up to harvest time in the currently dry Midwest areas. United States sorghum grain production is expected to increase 72 per cent in 2013, to 10.7 million tonnes, up from 6.2 million tonnes in 2012, due to a large area sown. This production level is set to increase the ending sorghum stocks-to-use ratio to 14.6 per cent in 2013, up from 8.5 per cent in 2012.<sup>20</sup>

The above factors are likely to see some downward pressure on world coarse grain prices, translating to lower sorghum prices received by domestic growers towards the end of 2013. The domestic price is currently estimated at \$266 per tonne, a 3.3 per cent fall on the price of \$275 per tonne for the year ended 2012–13. This is still high historically. A slide in price will be limited by continuing demand for corn as a feedstock to ethanol production, barley for use in biodiesel in Europe, and continuing strong demand for coarse grains, including sorghum, as livestock feed in Asia, the Middle East and Africa. Further, a majority of Queensland sorghum (70 per cent) goes to animal feedlots domestically, with feedlot demand in the poultry, pigs, dairy and beef industries remaining strong. Beef feedlot demand (accounting for about 35 per cent of the Queensland beef herd) does fluctuate annually according to rain-fed pasture production, with more cattle fattened on pasture in seasons of ample rainfall.



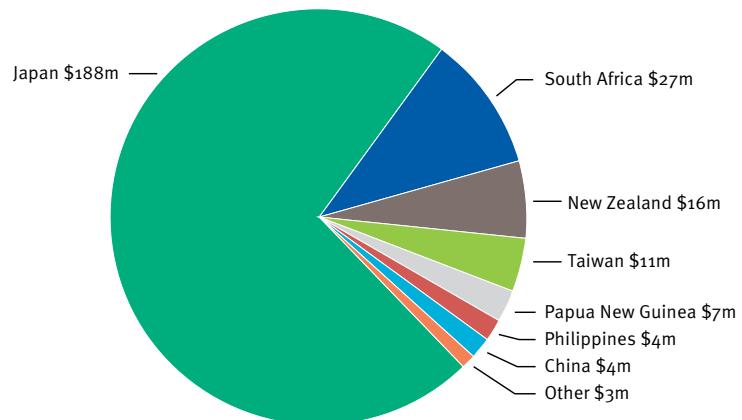
**Figure 20** USDA global sorghum export projections in million tonnes (total 8.5 million tonnes), annual average 2013–14 to 2017–18

Source: United States Department of Agriculture 2013, *Economic, statistics and market information system, agriculture baseline projection tables (94005)*, Long term agricultural projection tables to 2022, viewed 15 February 2013, <<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1192>>.

Figure 21 shows countries with high demand for sorghum as livestock feed to produce meat. About 20 per cent of Queensland sorghum exports are destined for human consumption, with the majority of the remainder of sorghum used for livestock feed. For 2011–12, the biggest markets for Queensland grain sorghum exports were Japan at \$188 million (72 per cent of export value), followed by South Africa at \$27 million (10.5 per cent) and New Zealand at \$16 million (16 per cent). Papua New Guinea and several prominent Asian economies are also significant (although smaller) importers of grain sorghum.

Contrary to historical exports, around mid-2013, 400 000 tonnes of sorghum were exported to China for alcohol manufacture. China has traditionally been a minority export buyer of Queensland sorghum (see Figure 21). This landmark purchase by China is a reflection of increasing middle-class wealth in China, and the commensurate increase in demand for income discretionary items (such as alcohol) that comes with affluence.

<sup>20</sup> Kansas State University June 2013 forecast webpage, viewed 30 August 2013, <<http://ksugrains.wordpress.com/2013/06/20/ksu-corn-and-grain-sorghum-market-outlook-june-2013>>.



**Figure 21** GVP for Queensland grain sorghum exports, 2011–12 (total \$259.3 million)

Source: DAFF Prospects and AgTrends data 2008–09 to 2012–13; OESR 2013, 8 digit export data, Queensland, by commodity, viewed 20 February 2013, <<http://datahub.qld.gov.au/economy/trade/trade-data-commodity-industry/index.shtml>>.

## Maize

### Forecast

The GVP for maize for 2013–14 is forecast to be \$64 million, 88 per cent greater than DAFF's final estimate for 2012–13 and 1 per cent above the average for the past 5 years.



### Analysis and discussion

#### Area sown, yield and production

Although some downward pressure on maize price is expected towards the end of 2013, the price is still historically quite high. This, coupled with reasonable subsoil moisture on average, is expected to maintain plantings at relatively high levels, but 7 per cent below the area of 2012–13 (48 000 hectares) to around 44 000 hectares. The expected increase in yields is estimated to just outweigh the reduced area sown, increasing production only slightly, by about 1.5 per cent, from 216 000 tonnes to 219 000 tonnes. This maize production forecast is 11 per cent above the ABARES 5-year average up to 2011–12.

#### Price

World coarse grain supplies are expected to increase over 2013 (see Sorghum, page 48) on the back of an expanded United States corn crop. As a result, some softening of prices received by Queensland maize producers is expected towards the end of 2013. Despite this, the maize price is still high by historical standards, with a current estimate of \$293 per tonne average for grit-maize and feed-grade maize. This is up on the \$260 per tonne in the September 2012 quarter, and exceeds the average price of \$257 per tonne received since the June quarter of 2008–09. Supporting the domestic maize price, the demand for maize internationally in biofuel remains firm (despite some reduction in biodiesel production in Europe). Additionally, demand for maize as a stockfeed globally and domestically is strong, as is domestic demand for grit-maize for human consumption.

Maize is costly to plant and growers require a contract to provide them the security to grow it. The contracts are either with feedlots for feed-grade maize (60 per cent of the Queensland maize crop), or with Kellogg's or other food-processing companies for higher priced grit-maize going to human consumption (40 per cent of the crop). New markets for grit-maize (for human consumption) are being established in Japan, by DuPont Pioneer, a seed production company.

## The new green bean



The first mungbean variety bred from start to finish by DAFF will be planted commercially this year with high expectations of producing increased yields for growers.

The Minister for Agriculture, Fisheries and Forestry, the Honourable John McVeigh MP, said the new mungbean variety was the result of research investment led by DAFF and the Grains Research and Development Corporation (GRDC). An independent economic analysis has shown that this collaborative breeding project is delivering an 18:1 return on investment.

The new variety, named Jade-AU and launched at the Australian Summer Grains Conference, will be available in limited quantities for planting this spring. It is expected to give growers long-term benefits in production and profitability.

Jade-AU is a large green shiny mungbean that fits Australia's main export market. It is expected to deliver up to \$100 extra per hectare for growers than the current variety, Crystal. This is due to an average 12 per cent higher grain yield and better tolerance of leaf diseases such as powdery mildew.

Jade-AU has proven performance across the existing growing regions from central Queensland to northern New South Wales. Although it has had limited testing, it appears suitable for production in the Burdekin Irrigation Area. Further evaluation in the Burdekin is planned for next season.

Mr McVeigh said the launch of Jade-AU highlighted Queensland's leading role in tropical pulse research and as a preferred supplier of premium-quality mungbeans to international markets.

Jade-AU is co-owned by DAFF and GRDC and protected by Plant Breeders Rights. The Australian Mungbean Association is the exclusive agent for its commercialisation, seed increase and distribution to growers.

# Fisheries

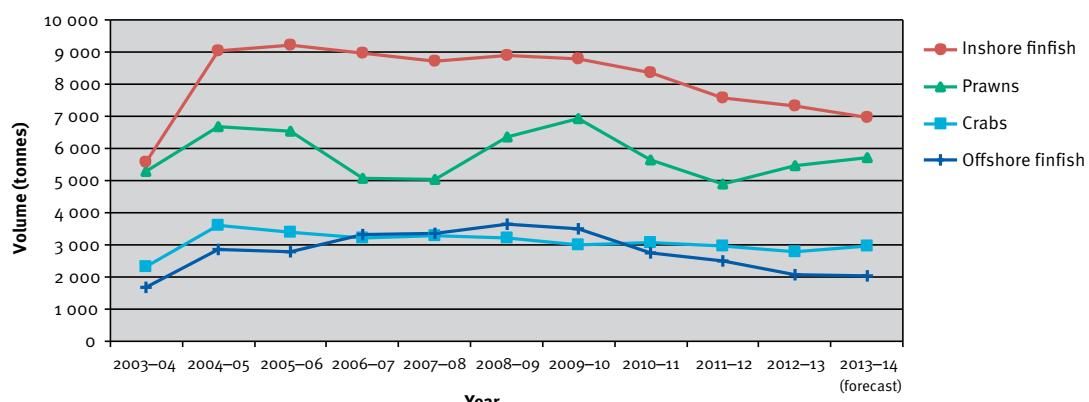
The GVP for Queensland's fisheries for 2013–14 is forecast to be \$424 million. The commercial fishing sector continues to provide more than 60 per cent of the forecast GVP while the aquaculture and recreational sectors provide about 40 per cent. This forecast comprises a contribution from fisheries managed by Fisheries Queensland of \$184 million, a contribution from fisheries managed by other agencies of \$66 million, a contribution from aquaculture of \$101 million and a contribution from the recreational sector of \$73 million.

## Queensland fisheries

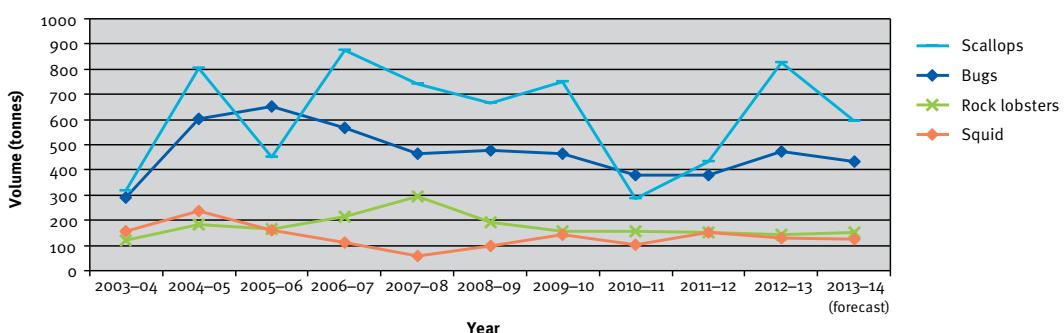
The Queensland commercial fishing sector operates across a number of fisheries managed by agencies governed by both state and federal legislation.

Fisheries Queensland aggregates commercial catch data for the fisheries it manages on the basis of three main sectors: crustaceans, finfish and molluscs. The crustacean sector comprises the total catch of prawns, bugs, crabs and tropical rock lobsters while the finfish sector comprises inshore finfish and offshore finfish. The mollusc sector comprises the total catch of scallops and squid.

Figures 22 and 23 indicate the output of major and minor catch types for fisheries managed by Fisheries Queensland for the last 10 financial years together with a prediction of expected output for 2013–14 based on regression and trend analysis.



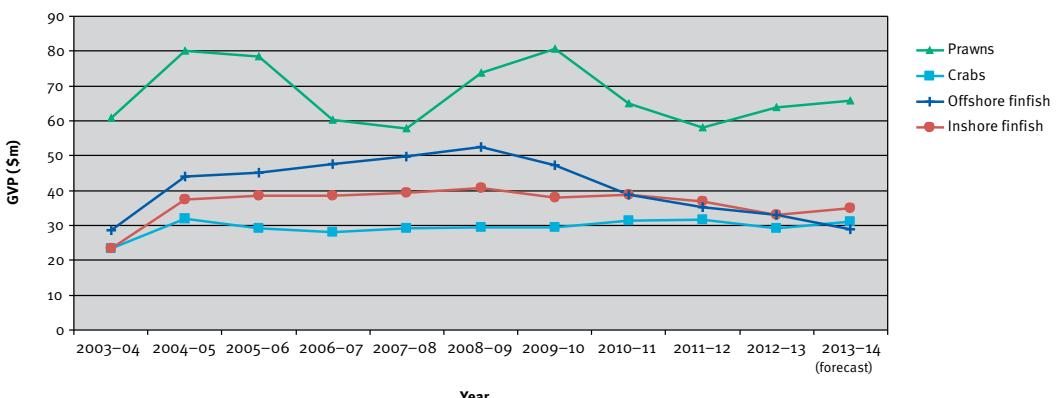
**Figure 22** Fisheries Queensland total catch for major types including predicted catch for 2013–14



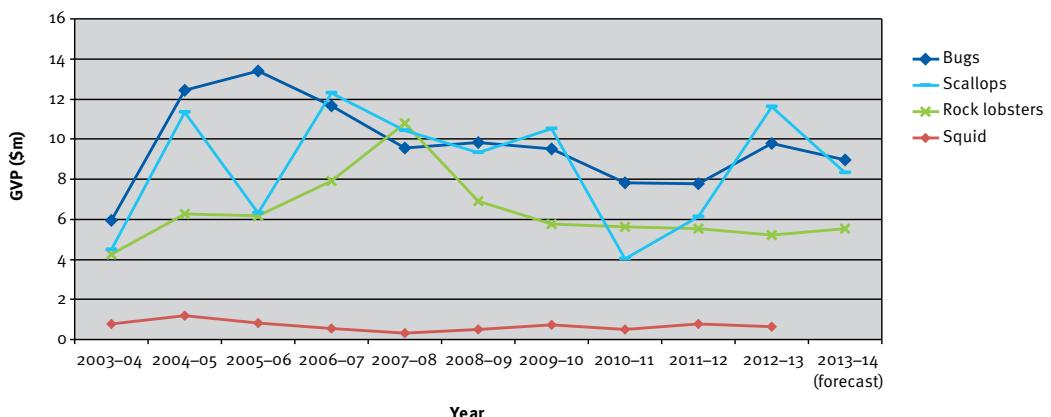
**Figure 23** Fisheries Queensland total catch for minor types including predicted catch for 2013–14

Even though the actual catch of the major fisheries has declined to some extent over the most recent financial years, the analysis suggests that a return to more normal operating conditions should stabilise the output of most fisheries.

The GVP for the same fisheries is shown in Figures 24 and 25. These figures also include a prediction for 2013–14 based on recent price trends.

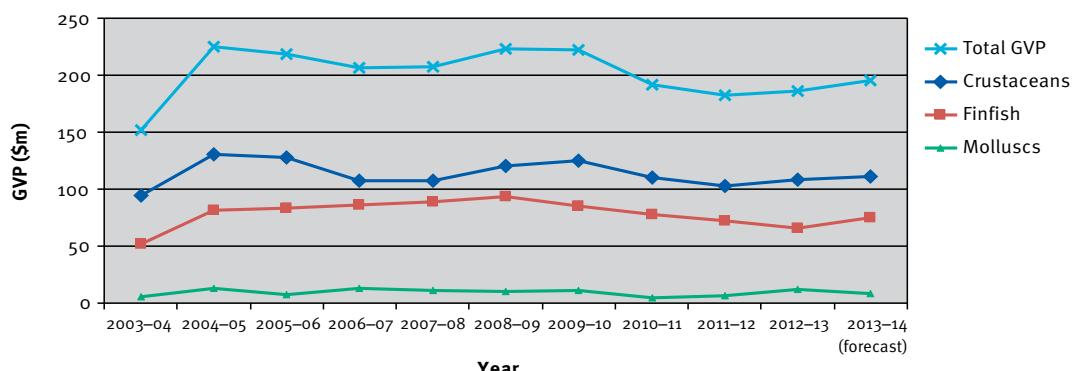


**Figure 24** Fisheries Queensland GVP for major types including an estimate for 2013–14



**Figure 25** Fisheries Queensland GVP for minor types including an estimate for 2013–14

Figure 26 indicates the GVP for the major sectors managed by Fisheries Queensland and the total GVP. Note that the amounts given for GVP have not been adjusted for the impact of inflation on the purchasing power of the prices paid and received.



**Figure 26** Sectoral and total GVP for fisheries managed by Fisheries Queensland including a prediction for 2013–14

Although the total catch of prawns (by weight) in any year is not significantly greater than the catch of the other major species, the contribution of prawn fisheries to the total GVP is generally double the contribution of any other species or group of species.

## Aquaculture

### **Forecast**

The GVP for the Queensland aquaculture industry for 2013–14 is forecast to be \$101 million. This is slightly less than DAFF's final estimate for 2012–13, but 6 per cent greater than the average for the past 5 years.

### **Analysis and discussion**

The aquaculture industry was impacted by the floods in Wide Bay Burnett and South East Queensland in 2013. As a result, it is expected that the industry will decline by 2 per cent, from \$103 million to \$101 million.

Prawn farming remains the largest sector of the Queensland aquaculture industry, even though this sector was affected by the floods in 2013. The farm gate value of prawns for 2013–14 is predicted to reach \$69 million. This is a 1 per cent decrease on DAFF's estimated value of \$70 million for 2012–13.

Barramundi farming, the second largest sector, will maintain strong growth. It is expected to achieve a value of \$28 million in 2013–14. This would represent a 9 per cent increase on DAFF's estimated value of \$25.6 million for 2012–13.

Freshwater fish production (primarily silver perch, Murray cod and jade perch) experienced a decline in value because of the floods. For 2013–14 the freshwater fish sector is expected to be valued at \$2.5 million. This would be a 20 per cent decrease on DAFF's estimated value of \$3.1 million for 2012–13.

Oyster and redclaw production is expected to decrease while the hatchery sectors are expecting to increase slightly on production levels achieved in 2012–13.

## Forestry

### **Forecast**

The GVP for the forest-growing sector of the Queensland forest industry for 2013–14 is forecast to be \$175 million. This is 17 per cent greater than DAFF's final estimate for 2012–13 and 2 per cent greater than the average for the past 5 years.

DAFF forecasts that the first-round processing sector of the Queensland forest industry will contribute \$361 million to the Queensland economy in 2013–14. This amount, when combined with that of the forest-growing sector, gives a forecast total contribution of \$536 million to the Queensland economy in 2013–14.

### **Analysis and discussion**

The lower final estimate for 2012–13 of \$150 million is largely due to the loss of production during the year from a fire at a major processor of plantation softwood logs. Industry advised that this event was expected to significantly reduce the plantation softwood log harvest for the year, which in turn is likely to have markedly reduced the GVP for the forest-growing sector.

The higher forecast GVP for 2013–14 of \$175 million reflects an expected recovery in the plantation softwood log harvest and improving economic conditions, plus an increase in native log timber sales.

Forecasts for the forest industry are closely linked to activity in the housing and construction sector. Queensland industry sources suggest that about 70 per cent of Queensland's sawn timber is used by the residential construction sector; this aligns with national estimates of timber use in residential construction.

Detached housing typically uses more wood than other types of buildings. The proportion of detached housing being built nationally is dropping significantly, and this will translate to a lessening demand for timber per average dwelling being constructed. We can assume that Queensland will follow a similar pattern to this national trend.

During 2012–13, the residential construction sector continued to experience subdued activity in line with industry forecasts. Industry reported early in 2013 that the detached housing sector remained weak in Queensland. Industry also reported in August 2013 that detached housing commencements declined in Queensland for the March 2013 quarter compared with the same quarter in 2012, despite lower interest rates and support from the first home buyer subsidy program.

Looking ahead to 2013–14 there are some positive indications from dwelling approvals data. The ABS reports that the trend estimate for total number of dwelling units approved in Queensland rose 0.1 per cent in July 2013 after being flat for the previous 2 months. The trend estimate for the number of private sector house approvals rose 1.8 per cent in July 2013 and has risen for 6 months.

Sawn timber production in Queensland is also affected by the balance of imports and exports of sawn timber into and out of the state, including interstate trade. The latest available information on imports from the ABS gives 165 000 cubic metres of sawn wood imports for 2011–12, with continuous quarterly rises since a low point established by the June 2012 quarter. Interstate movements of sawn wood are unknown.

DAFF forecasts that, after a long period of decline, there will be a 10 per cent increase in native log volume sales from state-owned native forests for 2013–14, due to policy changes on access to these forests. DAFF reports that 224 277 cubic metres of state-owned native forest log timber was sold in 2012–13.

Plantation softwood log production in Queensland for 2012–13 was substantially reduced because of fire at a major processor and difficult economic conditions. Production for 2013–14 is forecast to improve significantly as the affected processor returns to production and economic conditions improve.

On balance it is forecast that timber demand in Queensland will increase in 2013–14, although at a modest rate.

To address issues in the forest-growing and wood-processing sectors, the Queensland Government supported the development of a Queensland forest and timber industry plan led by industry. The plan aims to develop strategies and implement actions to respond to challenges and opportunities and will assist the forest and timber industry to remain vibrant, sustainable and globally competitive. The Queensland Government will shortly release its response to the industry plan.

## A note about forest industry data sources

Before September 2007, *Prospects* (now published as *AgTrends*) used the reported turnover of Australian and New Zealand Standard Industrial Classification (ANZSIC) Group 231 (*Log sawmilling and timber dressing*), as defined and measured by the ABS in their survey of manufacturing, as an indicator of the gross value of forest industry activity in Queensland. However, while this survey does separately report the forest-growing sector, it excludes some elements of the first-stage processing sector and also contains some double-counting.

*AgTrends* now uses data produced by ABARES in its twice-yearly publication *Australian forest and wood products statistics*. This publication gives the value of log production (gross value of logs delivered to the sawmill door or wharf gate) as an estimate of the gross value of the forest-growing sector in Queensland. This, together with estimates of the value added to intermediate inputs from ANZSIC Group 231 and ANZSIC Code 2321 (*Plywood and veneer manufacturing*), provides an overall estimate of Queensland forest industry activity.

## Notes

- Gross value of commodities produced is a measure of economic output.
- Estimates of the gross values of Queensland agricultural production are calculated and published at the state level by the ABS. Presently, the ABS publishes estimates for most agricultural commodities twice a year.
- A preliminary estimate for a particular financial year is published approximately 4 months after the end of that year. The second (final) estimate is published approximately 12 months after the preliminary estimate.
- Estimates of the gross value of Queensland's fisheries production are available from DAFF.
- All estimates provided in this publication are in nominal dollar values unless otherwise stated.

## Definitions

**crops** field and horticulture crops

**fisheries** trawl and non-trawl fishing, and aquaculture

**forestry** log sawmilling and timber dressing

**gross value of commodities produced** the value of recorded production at wholesale prices realised in the marketplace (e.g. cattle sold for slaughter and sugar cane at the mill)

**livestock disposals** cattle, sheep, pigs, poultry, kangaroos and other live animals sold for slaughter, plus live exports minus live imports

**livestock products** eggs, milk, wool and honey

**marketplace** generally, the metropolitan market in each state and territory (where commodities are consumed locally, or where they become raw material for a secondary industry); for exports, marketplace prices are generally free-on-board prices

**value added** the value of the output produced minus the costs of the intermediate goods