Queensland AgTrends 2017–18

Forecasts and trends in Queensland agricultural, fisheries and forestry production

Queensland Government

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Acronyms

ABARES Australian Bureau of Agricultural and Resource Economics and Sciences

ABS Australian Bureau of Statistics

ALFA Australian Lot Feeders' Association

ANZSIC Australian and New Zealand Standard Industrial Classification

ASEAN-5 Association of Southeast Asian Nations' five strongest economies (Indonesia, Malaysia, the Philippines, Singapore and Thailand)

DAF Department of Agriculture and Fisheries

EYCI Eastern Young Cattle Indicator

FAO Food and Agriculture Organization

GVP gross value of production

IMF International Monetary Fund

IPS international polarity scale

MLA Meat and Livestock Australia

SA2 statistical area level 2

US United States

Summary of key findings

Total value of Queensland's primary industries

For 2017–18, the total value of Queensland's primary industry commodities (combined gross value of production and first-stage processing) is forecast to be $19.87 billion, 5 per cent less than 2016–17 but 11 per cent greater than the average for the past 5 years.

Gross value of production ('farm gate')

For 2017–18, the gross value of production (GVP) of Queensland's primary industry commodities at the 'farm gate' is forecast to be almost $15.72 billion, 4 per cent less than 2016–17 but 12 per cent greater than the average for the past 5 years.

Livestock industries

The 2017–18 GVP forecasts for livestock industries are shown in tables 1 and 2.

Table 1: Livestock disposals GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Cattle and calves	5379	−6
Poultry	560	−14
Pigs	239	−19
Other livestock	41	3
Sheep and lambs	11	10

Table 2: Livestock products GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Eggs	244	15
Milk (all purpose)	235	1
Wool	75	14

Crops

The 2017–18 GVP forecasts for crops are shown in tables 3–6.

Table 3: Fruit and nuts and vegetables GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Fruit and nuts	1794	2
Vegetables	1242	7

Table 4: Lifestyle horticulture GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Nurseries	907	1
Turf	180	0
Cut flowers	161	0

Table 5: Other crops GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Sugar cane	1180	−19
Cotton	884	−10

Table 6: Cereal grains GVP, 2017–18

Industry	Forecast GVP ($m)	Percentage change since 2016–17
Chickpeas	633	−17
Sorghum	359	119
Wheat	346	−31
Other cereal grains	263	−7
Barley	74	−1
Maize	71	−23

Fisheries

The GVP for Queensland's fisheries in 2017–18 is forecast to be $397 million.

In this edition, recreational fishing, which is an important part of Queensland's fisheries, is included in the forecast for 2017–18 with an estimated value of $94 million. The values of commercial fishing and aquaculture are forecast to be $178 million (20 per cent greater than 2016–17) and $125 million (a 36 per cent increase from 2016–17), respectively.

Forestry

The GVP for the forest-growing sector of Queensland's forest industry in 2017–18 is forecast to be $270 million, 4 per cent greater than last year. This translates into a value of $435 million for the first-stage processing sector.

First-stage processing

For 2017–18, the value of first-stage processing (or value-added production) is forecast to be nearly $4.15 billion.

Table 7: Forecast value of first-stage processing, 2017–18

Industry	Forecast ($m)
Meat processing	2390
Sugar processing	650
Log sawmilling, timber dressing and plywood and veneer manufacturing	435
Fruit and vegetables processing	255
Flour mill and feed processing	135
Milk and cream processing	124
Cotton ginning	101
Seafood processing	60
Total	**4150**

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. The most recent changes in methodology used in these publications 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 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 for the current year and estimates for previous years are provided for:

- meat processing
- sugar processing
- milk and cream processing
- fruit and vegetables processing
- flour mill and feed processing
- seafood processing
- log sawmilling, timber dressing and plywood and veneer manufacturing
- cotton ginning.

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 2017–18 should not be compared with the estimates for years before 2010–11.

Lifestyle horticulture

In September 2008, the then Department of Primary Industries commissioned Queensland Treasury's Office of Economic and Statistical Research 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 and Fisheries (DAF) uses a new benchmark to improve our understanding of the scope and economic contribution of this important industry.

In Table 9, pages 17–19, 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 17–19, the value of Queensland's forestry 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, timber dressing, and plywood and veneer manufacturing.

Maps showing main production regions

For livestock, horticulture and crops, maps are included to show indicative production areas for individual commodities. The maps are based on ABS 2010–11 agricultural census data. They show statistical areas level 2 (SA2s) in Queensland where the majority 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 2015–16, released in July 2017, are included in Table 9 (pages 17–19). 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.

About Queensland's primary industries

In 2015–16, Queensland's primary industries directly contributed an estimated $7.7 billion on a value-added basis to the state economy—this was 2.6 per cent of the gross state product.[1]

Geographically, Queensland is Australia's second largest state, covering more than 173 million hectares. This area is more than twice the size of Texas, four times that of Japan and seven times that of Great Britain. 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 2015–16, Queensland exported $9.2 billion worth of agriculture and food products. Exports of these primary products comprised 19 per cent of the state's overseas commodity exports in 2015–16.[2]

Queensland is Australia's largest producer and exporter of beef, with more than three-quarters of the state's $5.2 billion beef exports going to Asian markets. Beef is the most significant agricultural commodity for Queensland, with cattle and calf sales worth an estimated $5.9 billion in 2015–16.[3] Queensland also has the largest amount of 'certified organic' agricultural production land in Australia, with almost 2.3 million hectares in total. This includes large tracts of organic grazing land in Queensland's Channel Country, resulting in almost 70 per cent of Australia's growing organic beef industry coming from Queensland.

Queensland is one of the largest producers of pork in Australia. The estimated GVP in 2015–16 was $320 million.[4]

Queensland is one of the largest producers of fruit and vegetables in Australia. Its major vegetable crops include tomatoes, capsicums, beans, mushrooms, sweet potatoes and lettuce.[5]

The state grows over 95 per cent of Australia's bananas and Queensland is also the biggest producer of tropical fruits like mangoes, pineapples and avocados in Australia.[6]

Queensland produces around 95 per cent of Australia's raw sugar, with a large percentage of the product sold on the world market.[7]

In 2014–15, the combined employment associated with the whole food supply chain equated to an estimated 304 000 employees. This means that roughly one in seven Queenslanders was either partly or entirely supported by the food sector.[8]

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1   ABS 2016, *Australian national accounts: state accounts*, 2015–16, cat. no. 5220
2   ABS 2016, *Exports from Queensland and Australia to all countries, by commodity, value, 2015–16*; Office of Economic and Statistical Research 2016, Standard international trade classification 2 digit, food and live animals.
3   ABS 2017, *Value of agricultural commodities produced, Australia*, 2015–16, cat. no. 7503
4   As above
5   As above
6   As above
7   As above
8   *AgTrends*, April 2017

About the department

Our vision

Productive and profitable agriculture, fishing and forestry sectors

Our purpose

Promote a sustainable and innovative agriculture, fisheries and forestry sector and rural businesses that add value to the economy and community

Our objectives

1. Create the conditions for successful agribusinesses and supply chains that encourage innovation and productivity.

2. Assist people in agriculture, fisheries, forestry and rural businesses respond to challenges and protect environmental values.

3. Ensure the sustainable management of natural resources to underpin productivity and protect the environment.

The way we work to deliver our objectives

Lead

Provide a clear sense of direction, bringing the sector and the community together, offering evidence and advocacy for a way forward.

Engage

Work purposefully with others to achieve results, developing consistent approaches that invite stakeholders and the community to participate in the development of policy and services.

Invest

Deliver better results with what we have, prioritising our effort for the highest impact, using evidence to direct resources to high-value activity.

Enable

Build our capability in areas such as governance and business systems, embedding the public service values and our expected behaviours through good leadership and management practices. Drive a culture of innovation and collaboration across the organisation and in external relationships.

Deliver

Improve the customer service experience and enable a collaborative and mobile workforce making it easier to interact with us. Streamline business processes and integrate services to enable greater self-service and self-reliance.

Strategic opportunities

Global demand for food and fibre—The growing global population and affluence in emerging economies results in demand for protein foods, niche primary products and agricultural scientific expertise that can provide expanded and new markets for Queensland producers and new sources of investment for the sector.

New technologies—New technologies to detect threats and improved modelling supported by increased processing power and big data can help DAF prevent the spread of biosecurity diseases and pests, improve fisheries management and assist producers to improve decision-making, leading to increased productivity and the ability to better predict climatic change.

Strategic partnerships—Strengthening partnerships with research organisations, industry bodies and other government agencies enables DAF to leverage expertise and share resources aimed at increasing innovation and promoting rural economic development.

Strategic risks

Climate—The frequency and duration of extreme weather events impacts on the ability of the sector and the department to direct resources to growth opportunities.

Biosecurity threats—Greater global movement of goods and people increases the transmission of exotic pests and diseases, which may have a significant impact on the agricultural and broader economy, compromise our disease-free reputation and restrict market access.

Organisational agility—The diverse and unpredictable nature of conditions affecting the sector challenges DAF's ability to adapt and renew its business model, skills base and services to better meet the changing needs of customers and grow rural economies.

Competition for resources—Resources used for agriculture, fisheries and forestry are increasingly subject to demands for competing access from other economic, environmental and social interests that are not always possible to fully resolve.

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 governments, government departments, educational institutions, primary producers and other businesses along the value chain.

This edition of *AgTrends* contains:

- initial GVP forecasts for 2017–18
- initial first-stage processing forecasts for 2017–18
- GVP estimates for 2016–17
- the percentage difference between each 2017–18 forecast and the average for the past 5 years.

AgTrends is available on the DAF website (www.daf.qld.gov.au).

About the *AgTrends* update

The forecasts provided in this edition will be updated in April 2018. Updated forecasts will be made available electronically and can be downloaded from www.daf.qld.gov.au. This is in line with our commitment to upgrade the DAF 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:

> AgTrends
> Industry Analysis Unit
> Department of Agriculture and Fisheries
> GPO Box 46
> BRISBANE QLD 4001

Visit www.daf.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.

Editions before 2010–11 used the methodology derived from the Queensland 2000–01 manufacturing survey. Therefore, the first-stage processing forecasts from 2010–11 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, September and October 2017, and followed consultation with experts from industry and DAF.

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 2017 to March 2018

The Science Delivery Division of the Department of Science, Information Technology and Innovation considers that, for most of Queensland, the probability of exceeding median summer rainfall (November 2017 to March 2018) is currently near normal.

Their seasonal outlooks for Queensland are based on the current and projected state of the El Niño – Southern Oscillation phenomenon and on factors that alter the impact of that phenomenon on Queensland rainfall, such as the extra-tropical sea surface temperature pattern in the Pacific Ocean.
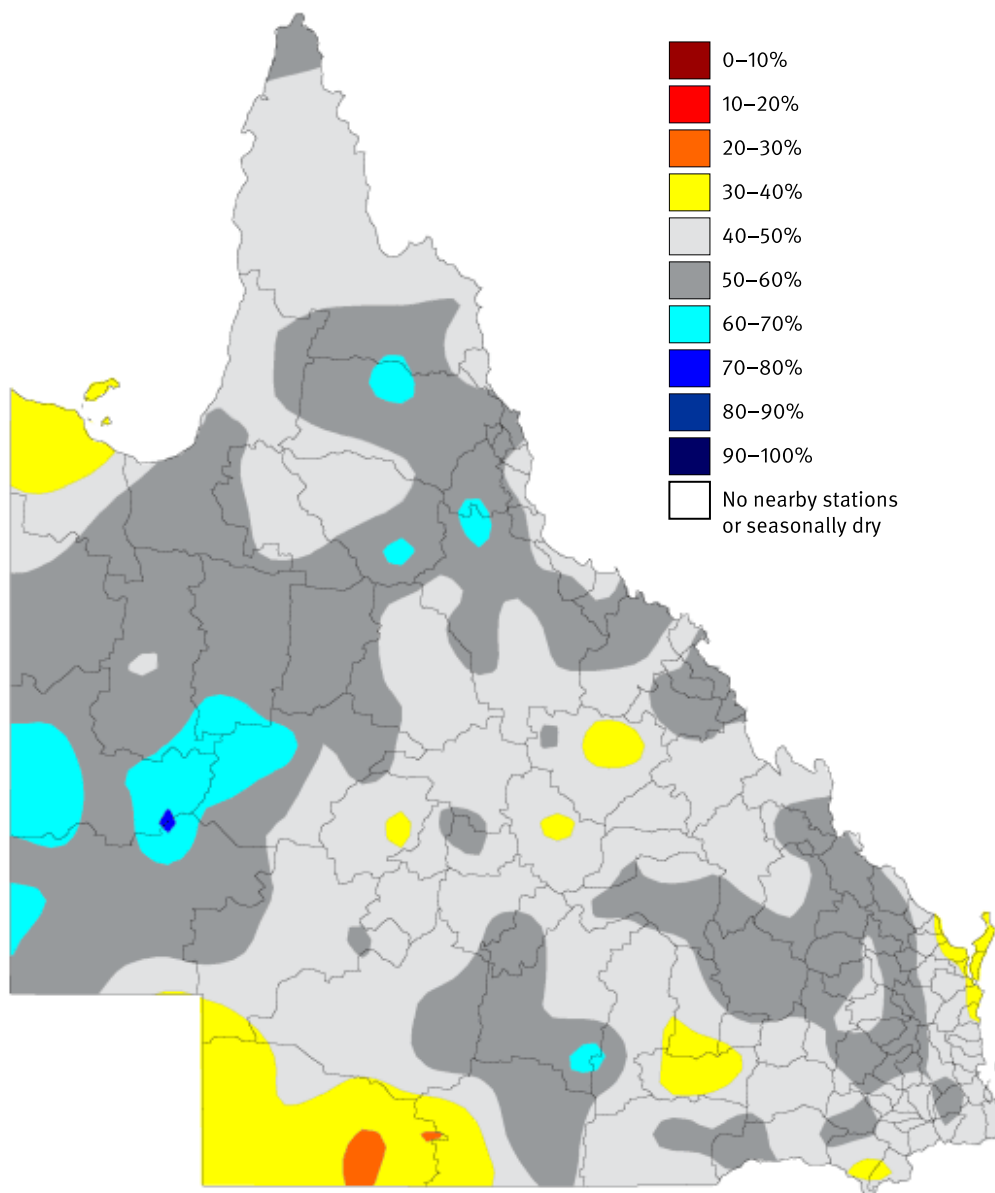
Figure 1: Probability of exceeding median rainfall for January 2017 to March 2018

Source: The Science Delivery Division, Department of Science, Information Technology and Innovation, 2016.

Drought situation

As reviewed on 27 September 2017, there are a total of 31 councils and 3 part-council areas drought-declared, with 67 individually droughted properties in a further 11 council areas.
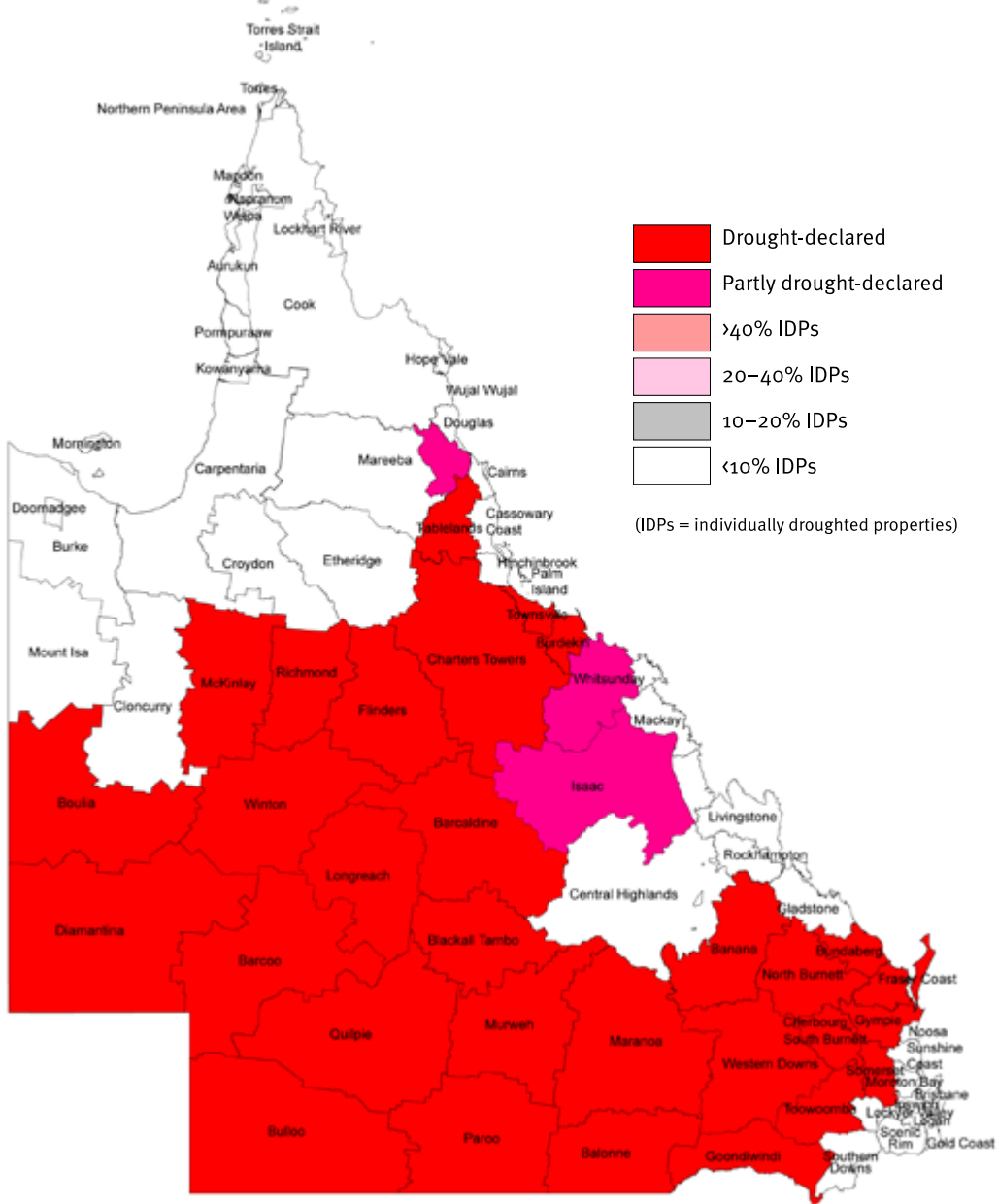
Figure 2: Drought-affected areas in Queensland, October 2017

World and Australian economic environment

The International Monetary Fund's (IMF) October 2017 *World economic outlook* report[9] paints the picture of a world economy on the mend. Growth in 2017, already looking better than anticipated, is expected to further accelerate (Table 8). Markdowns for the United States, United Kingdom and India are forecast to be generously offset by better performance in the euro zone, emerging Europe and Russia, Japan and China. Sub-Saharan Africa, the Middle East and Latin America are still to catch up. India, China and the ASEAN-5 (Association of Southeast Asian Nations' five strongest economies—Indonesia, Malaysia, the Philippines, Singapore and Thailand) remain the standout performers and, given their expansion, increasingly the engines in world economic growth.

Weak productivity growth and rising old-age dependency ratios are brakes on the world economy. Low inflation and interest rates mean that meagre reserves are available to central banks in the case of unexpected downturns, and protectionist pressures pose a risk to world trade.

However, it is encouraging for agriculture that the sector's terms of trade are forecast to remain favourable. As the chart of commodity indices (Figure 3) shows, food prices have gained over those for metals and fuels over the last 7 years, and the IMF expects those ratios to continue in the near future.

Nevertheless, remaining persistently high tariff barriers constitute a hindrance to agricultural trade, and their revision under the Trade Facilitation Agreement, in force since February 2017, could bring significant benefits.

Commodity prices softened during the first half of 2017.
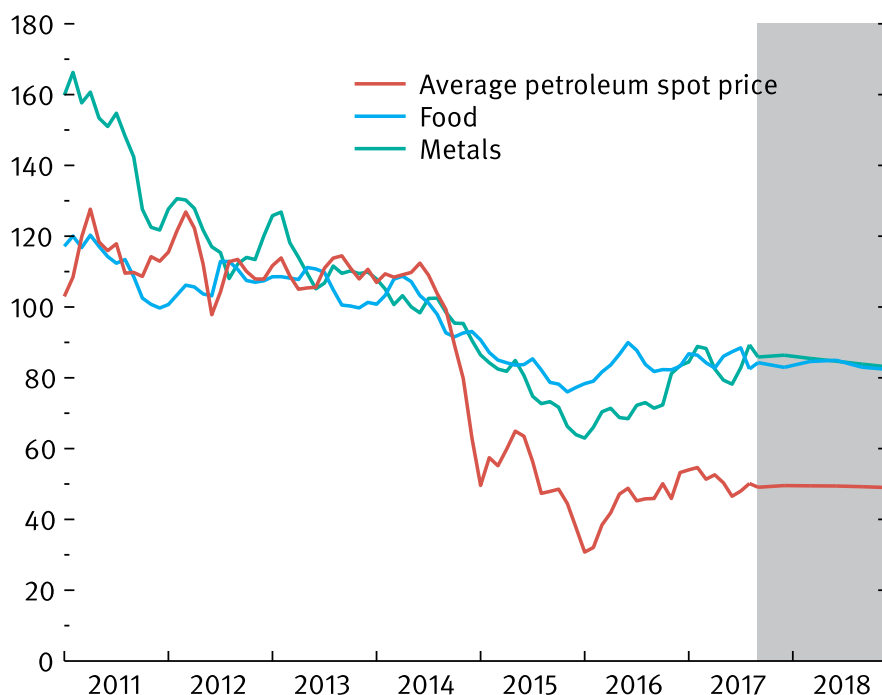
Figure 3: Price indices for food, metals and petroleum, 2011–18

Note: Deflated using US consumer price index; index, 2014 = 100.

Sources: IMF, Primary Commodity Price System; and IMF staff estimates.

9   See ‹http://www.imf.org/en/Publications/WEO/Issues/2017/09/19/world-economic-outlook-october-2017›

Table 8: IMF world economic outlook projections

	Year-on-year percentage change			Difference from July 2017 update[1]	
	Actual	Projections			
	2016	2017	2018	2017	2018
World output	3.2	3.6	3.7	0.1	0.1
Advanced economies	1.7	2.2	2.0	0.2	0.1
United States	1.5	2.2	2.3	0.1	0.2
Euro area	1.8	2.1	1.9	0.2	0.1
Japan	1.0	1.5	0.7	0.2	0.1
United Kingdom	1.8	1.7	1.5	0.0	0.0
Canada	1.5	3.0	2.1	0.5	0.2
Other advanced economies[2]	2.2	2.6	2.5	0.3	0.1
Australia	2.5	2.2	2.9		
Emerging market and developing economies	4.3	4.6	4.9	0.0	0.1
Commonwealth of Independent States	0.4	2.1	2.1	0.4	0.0
Russia	−0.2	1.8	1.6	0.4	0.2
Emerging and developing Asia	6.4	6.5	6.5	0.0	0.0
China	6.7	6.8	6.5	0.1	0.1
India[3]	7.1	6.7	7.4	−0.5	−0.3
ASEAN-5[4]	4.9	5.2	5.2	0.1	0.0
Emerging and developing Europe	3.1	4.5	3.5	1.0	0.3
Latin America and the Caribbean	−0.9	1.2	1.9	0.2	0.0
Brazil	−3.6	0.7	1.5	0.4	0.2
Middle East, North Africa, Afghanistan and Pakistan	5.0	2.6	3.5	0.0	0.2
Sub-Saharan Africa	1.4	2.6	3.4	−0.1	−0.1
World trade volume (goods and services)	2.4	4.2	4.0		
Imports					
Advanced economies	2.7	4.0	3.8		
Emerging market and developing economies	2.0	4.4	4.9		
Exports					
Advanced economies	2.2	3.8	3.6		
Emerging market and developing economies	2.5	4.8	4.5		
Commodity prices (US dollars)					
Oil	−15.7	17.4	−0.2		
Non-fuel (average based on world commodity export weights)	−1.8	7.1	0.5		

1   Difference based on rounded figures for the current and July 2017 *World economic outlook* update forecasts.

2   Excludes the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

3   For India, data and forecasts are presented on a fiscal year basis, and gross domestic product from 2011 onwards is based on gross domestic product at market prices with fiscal year 2011–12 as a base year.

4   Indonesia, Malaysia, the Philippines, Thailand, Vietnam.

The United Nations' Food and Agriculture Organization (FAO) predicts[10] that the growth in demand for food will ease significantly during the period 2017–26. Record production levels and large stockpiles of food commodities in 2016 caused prices to ease well below the peaks earlier in this decade. Previously expected convergence to meat-heavy Western diets by the rest of the world looks less likely now, and additional calories are forecast to come from vegetable oils, sugar and dairy.

Although trade is likely to remain a constant proportion of increasing global production, food imports will be increasingly important, especially for Sub-Saharan and North Africa and the Middle East. Net exports are forecast to rise in the Americas, Eastern Europe and Central Asia.

The FAO expect crop lands to keep increasing in Australia, although at a much lower rate than before. Of the major export commodities, the nation's beef and sugar production is forecast to grow.

Despite the recovery in 2016–17 (Figure 4[11]), and the apparent positive trend line in nominal terms, global food prices are in fact at best steady in real terms after the period of growth in 2008–2012 (Figure 5). Among the individual commodities (Figure 6), dairy prices rebounded from their decline in previous years. Sugar prices were declining throughout 2016–17, while vegetable oils, meat and cereals were treading water.

The Australian Reserve Bank[12] concurs with the IMF's view of the world economy. It sees the nation's economy growing at 3 per cent over the near future, with declining unemployment and inflation slightly rising but still moving between the target range of 2–3 per cent. Expected 5.5 per cent unemployment by 2019 would herald the approaching of capacity constraints in the economy, resulting in increased wages growth and higher consumer spending.

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10   See ‹http://www.fao.org/3/a-i7465e.pdf›

11   Source for figures: ‹http://www.fao.org/worldfoodsituation/foodpricesindex/en/›

12   See ‹http://www.rba.gov.au/publications/smp/2017/aug/pdf/statement-on-monetary-policy-2017-08.pdf›

2002–2004 = 100
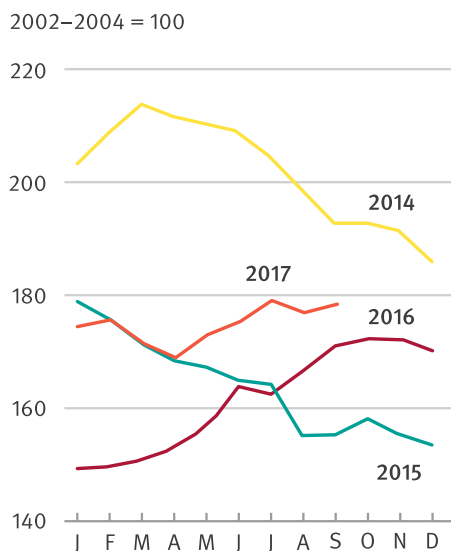
Figure 4: FAO food price index, 2014–2017

2002–2004 = 100

*The real price index is the nominal price index deflated by the World Bank Manufactures Unit Value Index (MUV)
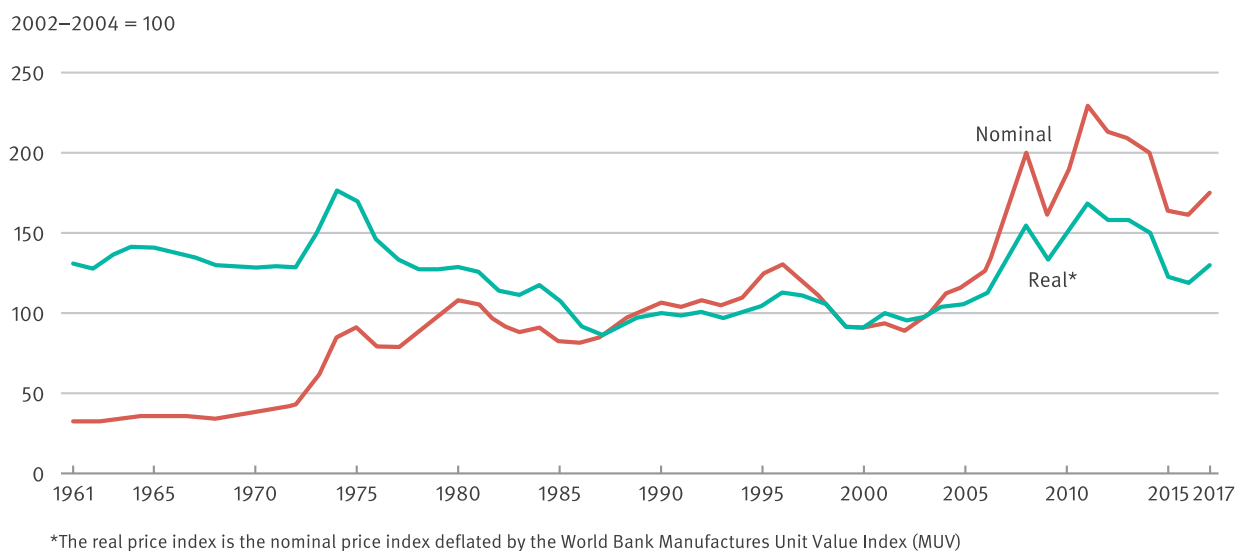
Figure 5: FAO food price index, 1961–2017

2002–2004 = 100
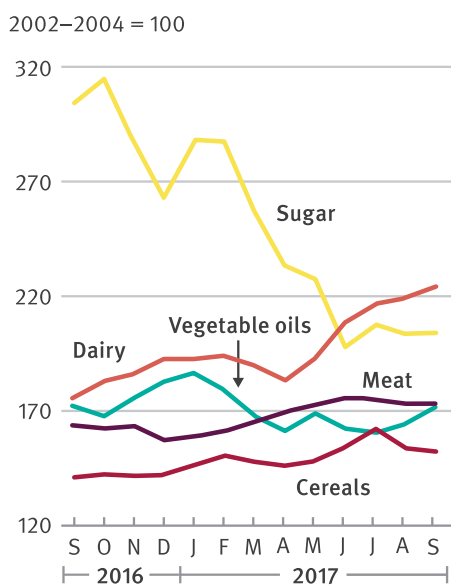
Figure 6: FAO food commodity price indices, 2016–17

Primary industries—estimates and forecasts

Table 9: GVP, first-stage processing and total primary industries estimates and forecasts, 2014–15 to 2017–18, and difference between 2017–18 forecast and average for past 5 years

Commodity GVPa	2015 Aprilb	2016 Aprilc	2017 Aprild	2017 Octoberd	Change April to October	Last 5 years average	Change over 5 years to 2017
	$m	$m	$m	$m	%	$m	%
Livestock disposals							
Cattle and calves	5 076	5 861	5 744	5 379	−6%	4 764	13%
Poultry	588	590	650	560	−14%	552	1%
Pigs	270	320	294	239	−19%	270	−11%
Other livestock	44	43	40	41	3%	42	−3%
Sheep and lambs	66	58	10	11	10%	48	−77%
Total livestock disposals	**6 044**	**6 872**	**6 738**	**6 230**	**−8%**	**5 676**	**10%**
Livestock products							
Eggs	202	210	212	244	15%	198	23%
Milk (all purpose)	235	237	233	235	1%	232	1%
Wool	61	62	66	75	14%	75	0%
Total livestock productse	**498**	**509**	**511**	**554**	**8%**	**498**	**11%**
Total livestock	**6 542**	**7 381**	**7 249**	**6 784**	**−6%**	**6 174**	**10%**
Horticulture							
Fruit and nuts							
Bananas	538	580	572	580	1%	552	5%
Other fruit and nuts	224	248	264	269	2%	234	15%
Avocados	148	151	225	240	7%	166	44%
Strawberries	203	180	144	160	11%	164	−3%
Macadamias	76	120	140	126	−10%	88	43%
Mandarins	86	94	107	107	0%	86	25%
Mangoes	58	75	96	96	0%	75	28%
Apples	58	82	90	93	3%	70	32%
Pineapples	53	71	70	70	0%	70	0%
Table grapes	52	53	53	53	0%	52	3%
Total fruit	**1 496**	**1 654**	**1 761**	**1 794**	**2%**	**1 558**	**15%**
Vegetables							
Tomatoes	273	294	250	298	19%	270	10%
Other vegetables	201	217	220	231	5%	219	5%
Capsicums and chilliesf	153	142	132	128	−3%	144	−11%
Beans	88	79	72	77	7%	87	−11%
Mushrooms	70	70	70	70	0%	68	4%
Sweet potatoes	52	62	64	64	0%	56	13%
Melons (rock and cantaloupe)	42	55	50	59	18%	43	37%
Lettuce	54	54	56	56	0%	58	−3%
Potatoes	63	53	52	52	0%	59	−11%
Sweet corn	39	45	41	44	7%	40	11%

Continued

Table 9 continued

Commodity GVP[a]	2015 April[b] $m	2016 April[c] $m	2017 April[d] $m	2017 October[d] $m	Change April to October %	Last 5 years average $m	Change over 5 years to 2017 %
Zucchini and button squash	46	41	39	41	5%	43	−5%
Melons (watermelon)	36	33	31	37	19%	34	9%
Pumpkin	26	36	30	32	7%	27	19%
Carrots	17	31	27	27	0%	24	13%
Onions	28	27	26	26	0%	25	2%
Total vegetables	**1 188**	**1 239**	**1 160**	**1 242**	**7%**	**1 197**	**4%**
Total fruit and vegetables	**2 684**	**2 893**	**2 921**	**3 036**	**4%**	**2 735**	**11%**
Lifestyle horticulture - production							
Nurseries[k]	880	898	902	907	1%	883	3%
Turf[k]	160	175	180	180	0%	156	15%
Cut flowers[k]	151	151	161	161	0%	153	5%
Total lifestyle horticulture production	**1 191**	**1 224**	**1 243**	**1 248**	**0%**	**1 192**	**5%**
Total horticulture	**3 875**	**4 117**	**4 164**	**4 284**	**3%**	**3 927**	**9%**
Other field crops							
Sugar cane[g]	1 239	1 209	1 460	1 180	−19%	1 229	−4%
Cotton (raw)[h]	383	466	985	884	−10%	642	38%
Other crops[c]	65	59	81	177	119%	69	157%
Total other crops	**1 687**	**1 734**	**2 526**	**2 241**	**−11%**	**1 940**	**16%**
Cereal grains							
Chickpeas	117	291	767	633	−17%	286	121%
Grain sorghum	486	312	164	359	119%	317	13%
Wheat	329	384	504	346	−31%	414	−16%
Other cereal grains	166	202	284	263	−7%	190	38%
Barley	79	102	75	74	−1%	71	5%
Maize	63	52	92	71	−23%	60	17%
Total cereal grains	**1 240**	**1 343**	**1 886**	**1 746**	**−7%**	**1 338**	**31%**
Total crops	**6 802**	**7 195**	**8 576**	**8 271**	**−4%**	**7 204**	**15%**
Total agriculture	**13 344**	**14 576**	**15 825**	**15 055**	**−5%**	**13 437**	**12%**
Fisheries[c i]							
Commercial fishing							
Crustaceans	116	104	80	107	34%	107	0%
Finfish	62	65	64	67	5%	65	3%
Mollusc	5	4	3.6	4	6%	6	−38%
Total commercial fishing	182	173	148	178	20%	178	0%
Recreational fishing	94	94	94	94	0%	86	10%
Aquaculture	103	111	92	125	36%	102	23%
Total fisheries	**379**	**378**	**334**	**397**	**19%**	**366**	**9%**
Forestry and logging[c j]	**187**	**243**	**260**	**270**	**4%**	**203**	**33%**
Total primary industries (farm gate)	**13 911**	**15 197**	**16 419**	**15 722**	**−4%**	**14 005**	**12%**

Continued

Table 9 continued

Commodity GVP[a]	2015 April[b] $m	2016 April[c] $m	2017 April[d] $m	2017 October[d] $m	Change April to October %	Last 5 years average $m	Change over 5 years to 2017 %
First-stage processing value added[k]							
Meat processing[c]	2 318	2 636	2 584	2 390	−8%	2 195	9%
Sugar processing[c]	655	533	860	650	−24%	658	−1%
Log sawmilling and timber dressing and plywood and veneer manufacturing[c]	386	413	423	435	3%	378	15%
Fruit and vegetables processing[c]	226	243	246	255	4%	230	11%
Flour mill and feed processing[c]	96	104	146	135	−7%	104	31%
Milk and cream processing[c]	124	125	123	124	1%	125	−1%
Cotton ginning[c]	44	53	112	101	−10%	73	38%
Seafood processing[c]	57	57	50	60	19%	55	9%
Total primary industries (first-stage processing)	**3 905**	**4 164**	**4 545**	**4 150**	**−9%**	**3 818**	**9%**
Total primary industries	**17 816**	**19 361**	**20 964**	**19 872**	**−5%**	**17 823**	**11%**

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 2014–15 unless otherwise indicated.

c. ABS final estimates for 2015–16 unless otherwise indicated.

d. DAF forecasts.

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

f. Gross value of sugar cane at mill door.

g. Includes value of cottonseed and lint.

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

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

j. See page 66 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.

k. The value of the lifestyle horticulture sector has been calculated on a gross-turnover basis rather than a value-added basis and therefore will contain some double counting.

l. Revised GVP data from DAF's Fisheries group required amendment of previous estimates.

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 2007–08 to 2017–18 is detailed in Table 10.

The index for agriculture for 2017–18 is forecast to be 113. This indicates that Queensland's agricultural production in 2017–18 is forecast to be 13 per cent higher (on average) than in the base year of 1996–97. On average, the volume of agricultural production in 2017–18 is forecast to be 1 per cent lower than in 2016–17.

Table 10: Volume of production index for Queensland's major agricultural commodities

Volume Index [a]	2007-08	2008-09	2009-10	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017(f)	2017-18(f)
Wheat	48	102	68	77	95	82	52	50	66	74	57
Grain sorghum	251	176	92	118	141	147	86	161	117	114	142
Barley	33	40	26	34	45	40	42	59	87	76	56
Major cereal grains	102	117	73	84	104	96	62	83	84	88	83
Sugarcane	86	82	81	65	67	72	80	85	89	91	89
Cotton lint	26	93	84	211	187	189	190	98	114	218	195
Major other field crops	71	84	81	100	97	100	106	87	94	122	115
Major fruit	148	161	176	125	166	178	164	215	215	220	219
Major vegetables	110	113	109	111	137	103	75	78	81	91	92
Major fruit and vegetables	129	138	144	118	152	142	121	123	150	157	157
Crops	90	103	92	100	110	108	98	93	103	115	34
Beef	131	134	133	132	130	136	149	134	152	117	127
Pigs	128	114	113	108	109	110	108	109	130	114	110
Poultry(chicken meat)	156	158	168	170	174	174	208	212	221	225	214
Sheep and lambs	69	62	42	34	39	46	49	39	41	45	5
Major livestock disposals	131	132	131	130	129	137	148	136	153	125	130
Milk (all purposes)	61	64	66	61	61	57	54	52	49	51	52
Wool	46	23	19	34	38	34	25	18	12	12	19
Eggs	445	266	290	340	385	395	588	603	413	472	450
Major livestock products	78	61	63	68	72	69	75	72	57	62	63
Livestock	116	112	112	113	113	118	127	118	127	107	112
Total agriculture [b]	**102**	**107**	**101**	**105**	**111**	**112**	**111**	**104**	**113**	**114**	**113**

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

b   Excludes lifestyle horticulture due to insufficient data.

Source: Compiled by DAF using ABS and DAF data.

Livestock disposals
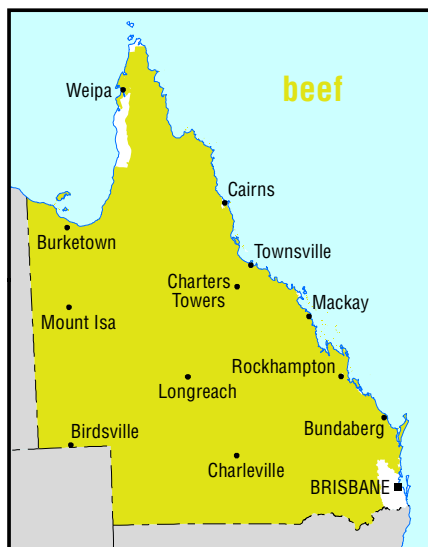
Cattle and calves

Key findings

Approximately 3.4 million cattle and calves were slaughtered in Queensland in 2016–17, 11 per cent less than the last financial year.

The national cattle herd is forecast to increase by 4 per cent to 26.7 million head (including 24 million beef cattle).

Following years of record cattle turn-off for processing and live export, the nation's beef industry has entered a rebuilding phase. Indicative of this are high prices for stock suitable for restocking as well as cow and heifer retention, as female cattle continue to make up the majority of the decline in overall cattle processed so far in 2017–18.

Average carcase weights in 2017 have lifted significantly, due to near record numbers being placed at feedlots as producers take advantage of higher grain supply and reduced prices. Overall, carcase weights are expected to decrease slightly based on the outlook for the continuation of poor rainfall across the state.

The Eastern Young Cattle indicator, a leading indicator of saleyard prices, has fallen below the 600 cents per kilogram carcase (dressed) weight (c/kg cwt) but is still above the average for the last 5 years.

Beef processors experiencing high cattle prices and poor availability have adjusted operations with staff reductions, limiting days of operation and reducing shifts. The closure of the largest domestic processor located at Churchill has brought concerns of further rationalisation within the sector.

Exports of Australian beef and veal decreased by 16.9 per cent from 1 231 610 tonnes in 2015–16 to 1 022 953 tonnes in 2016–17. However, beef and veal export volumes are expected to increase to 1.1 million tonnes as a result of higher production.

The global beef market has been characterised by significant changes in 2017—food safety scares in Brazilian beef leading to a halt in trade to the United States (US), a proposed ban on slaughter in India and a new trade agreement between the US and China.

US demand for our beef is expected to weaken as US beef producers continue to expand their domestic herd numbers.

Forecast

The 2017–18 GVP (at the farm gate) for Queensland's cattle and calf industry (including all farm sales for slaughter, live export, saleyards, other producers) is forecast to be $5.38 billion. This is 6 per cent lower than the final estimate for 2016–17, but 13 per cent higher than the average for the past 5 years. Cattle supply and continued drought conditions will dictate recovery efforts in rebuilding herd numbers.

Analysis and discussion

Cattle and calves sold for slaughter

For 2017–18, the GVP for cattle and calves sold for slaughter is forecast to be $5.2 billion, which is a 6 per cent reduction on last year's final estimate. In 2016–17, 3.4 million head of cattle and calves were slaughtered in Queensland, 11 per cent less than in the previous year.

Figure 7: Queensland cattle and calf slaughterings, 2001–02 to 2017–18

Source: ABS catalogue 7218.0.

The record cattle slaughterings experienced between 2012–13 and 2015–16 were heavily impacted by drought-induced cattle turn-off, as well as record live cattle exports of well over 1.1 million head per year. Following many years of herd build-up, particularly in female cattle numbers that are required to service the live cattle sector, cattle producers were forced to off-load stock due to drought. The live cattle market demands younger cattle turn-off, hence allowing the ability for producers to hold more female cattle. This period of record turn-off could have been much worse for the nation if export demand wasn't firm. Prices for beef to the US were particularly favourable, as well as to Japan, South Korea, Taiwan and China. It is expected that slaughter rates and turn-off will return to levels consistent with the average in the next few years as herd rebuilding is undertaken.

Cattle projections from Meat and Livestock Australia (MLA) are indicating that the Australian cattle market will be influenced by a poor rainfall outlook for southern Australia following a dry autumn, a 20-year–low for cow and heifer slaughter and a volatile global market for the remainder of 2017. From a supply point of view, cattle numbers are expected to increase again with lower turn-off, following the trend of last year. However, numbers are still expected to be below the recent peak by a few per cent.

Slaughter

Approximately 3.4 million cattle and calves were slaughtered in Queensland in 2016–17, 11 per cent less than the previous year. However, if dry conditions experienced across much of the country over winter of 2017 continue throughout spring and summer, there could potentially be more producers turning off stock over the coming months.

With the herd rebuilding phase ongoing, cow and heifer retention has seen female cattle continue to make up the majority of the decline in overall processing so far this year, fortuitously just as

US demand has eased. Female slaughter totalled just under 40 per cent of all cattle slaughtered for the year to date, the same percentage as the previous year. However, the actual total number of female cattle slaughtered fell by 172 600 head, compared to the previous year's figure of 1.53 million head. Steers, bullocks and bull slaughter for 2016–17 fell by just over 217 600 head, compared with the previous year's total of 2.19 million head.

Despite deteriorating pasture conditions, MLA expects the female component of the national cattle slaughter to remain below the 10-year average, simply due to limited availability and already relatively low stocking rates following the liquidation that occurred between 2012 and 2015.

Production

Beef and veal production for 2016–17 was 1 024 835 tonnes carcase weight (cwt). This total was 7 per cent lower than the previous year. However, the average carcase weights for the year to date according to MLA were 7.8 kilograms heavier than the previous record set in 2012. This can be put down to the greater proportion of cattle being grain finished last year.

Cattle numbers at feedlots have been near record levels due to cheaper grain prices following good cropping seasons. Cattle producers are taking the opportunity to value add to available stock by placing suitable cattle at feedlots. However, MLA expects carcase weights to decline slightly for the remainder of 2017 as weather impacts productivity.

Cattle numbers

Figure 8: Total cattle and calf numbers, Queensland vs Australia (2006–15)

Source: ABS catalogue 7121.0.

The number of beef cattle in Queensland has ranged between 40 and 45 per cent of the total Australian herd over the past decade. By 2015, numbers had fallen due to record slaughtering and live cattle exports, but they are expected to increase over the next few years as rebuilding herds becomes a priority.
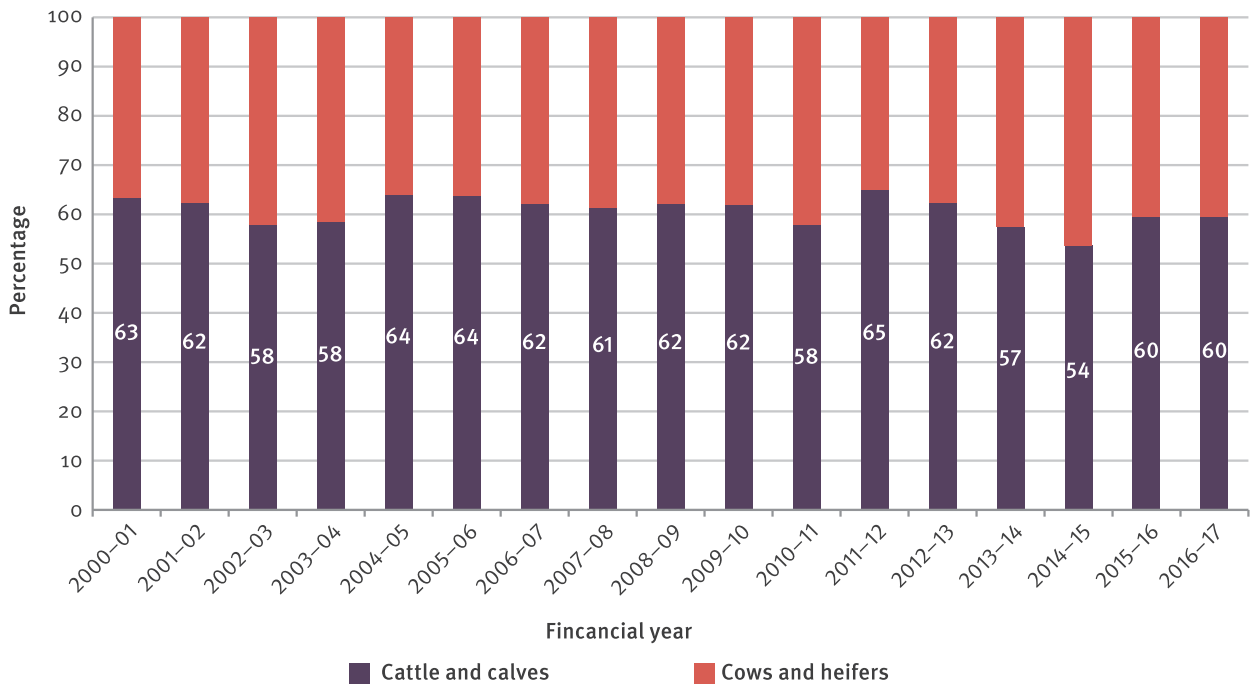
Figure 9: Percentage share of total slaughter for cattle and calves and cows and heifers, Queensland (2000–01 to 2016–17)

Source: ABS, 2017.

The proportion of the total cattle slaughter that are female has remained constant in 2015–16 (40.4 per cent) and 2016–17 (40.1 per cent), but is below the previous high levels of 2014–15 (46.4 per cent) (as shown in Figure 9). The constant percentage is illustrative of producers increasing their herd rebuilding efforts in response to improved seasonal conditions, as well as the relative forced turn-off of female cattle in previous years.

Cattle prices

Figure 10: Eastern Young Cattle Indicator (EYCI), 2010–17

Source: MLA, 2016.

The Eastern Young Cattle Indicator (EYCI) is a 7 calendar day rolling weighted average of 24 young cattle types from 26 prime saleyards in Queensland, New South Wales and Victoria. Cattle included are vealer and yearling heifers and steers, C2 or C3, with live weight greater than 200 kilograms. The cattle are sold on a live-weight basis.

Most cattle sales in Queensland occur directly from cattle producers to a beef processor, and cattle are sold on a 'over the hooks' rate that is based on carcase weight. Price reporting also includes trade, medium, heavy and feeder steers; medium cow, 100-day grain-fed, grass-fed yearlings; and domestic feeder cattle based on the time they have been grain-fed. Queensland's biggest saleyards are located at Roma and Gracemere and offer cattle for store markets, restockers and processors.

A Rabobank spokesman said while global markets will have a bearing on Australian cattle prices, the local supply of cattle—dictated largely by seasonal conditions—will drive prices over the next 12 months.

> 'There are a number of scenarios that could play out. For example, if Australian beef producers get a good spring, this would see restocker interest in the market remain high, and prices would hold up accordingly, but come off a bit from their record highs.'

Exports

According to MLA, following 4 consecutive years of increasing Australian beef export volumes, the nation's beef exports in 2016–17 are down by over 200 000 tonnes on 2015–16. Rabobank says the global beef market has been characterised by three significant changes in recent months—food safety scares in Brazilian beef, proposed bans on slaughter in India and a new trade agreement between the US and China. A Rabobank spokesman said while these changes may not have an immediate impact on Australian beef producers, they are likely to have long-term and significant implications on global beef markets.
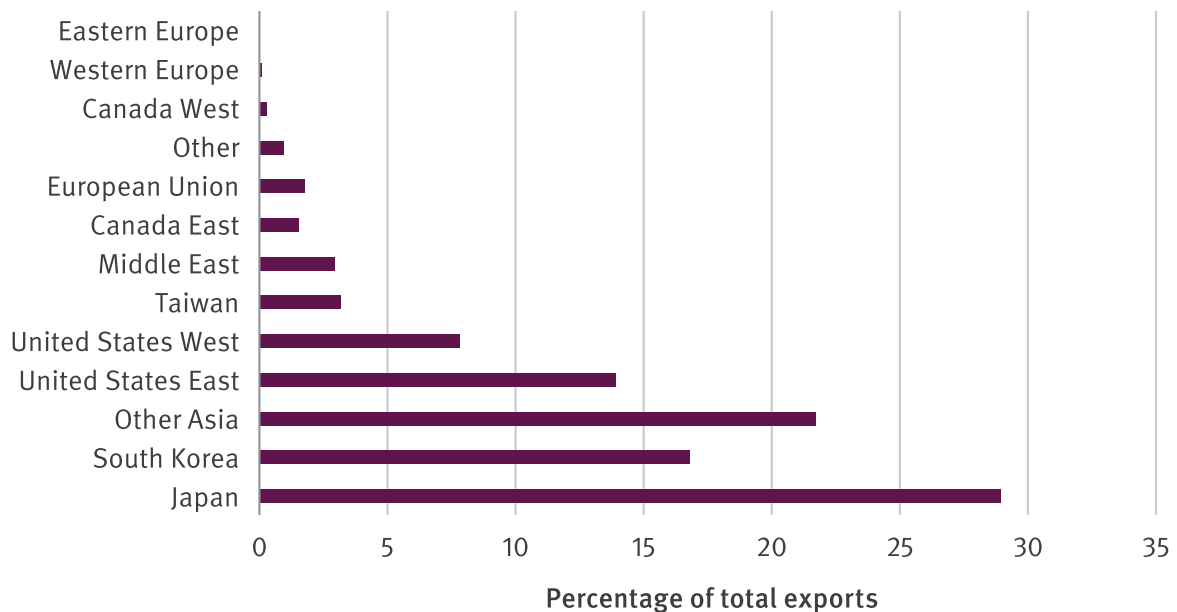
Figure 11: Australian exports of beef and veal as a percentage of total export tonnage, 2016–17

Source: DAF, 2017.

Exports of Australian beef and veal decreased by 18 per cent from 1 231 610 tonnes in 2015–16 to 1 022 953 tonnes in 2016–17. For 2016–17, shipments to the US totalled 209 682 tonnes shipped weight down nearly 39 per cent on the previous year. However, shipments to the US in August this year have increased by just over 50 per cent year-on-year, with the majority of increase being sourced for the manufacturing product for use in hamburgers. According to MLA, exports to the US continue to be challenged by a surge in US beef production and a stronger Australian dollar.

According to MLA, beef exports to China in August have declined by one-fifth year-on-year, mainly due to the Chinese government's temporary ban on beef imports from six Australian processors in late July this year, as well as active substitution of Australian produce with beef from Brazil and Uruguay.

China, like other nations, banned Brazilian beef in March 2017 due to food safety/inspection concerns. This trade was restored relatively quickly, however, and Brazil will remain Australia's biggest competitor in the Chinese market due to similarities in beef products and cheaper prices for Brazilian beef.

Australian exports to Japan increased slightly (3 per cent) on the previous year, at 282 228 tonnes shipped weight, but it fills the number one position as Australia's largest export market by volume overtaking the US. There was, however, a reduction of 7 per cent in the volume of beef shipped to South Korea, which totalled 185 096 tonnes shipping weight. However, there is increasing competition in both these markets from the US.

US beef exports have outpaced Australian exports to Japan so far in 2017 for the first time in 14 years. Despite the US suffering an 8 per cent tariff disadvantage relative to Australian chilled beef, it is enjoying renewed access to the Japanese market. In fact, Japan activated it's 'safeguard' provisions on the US due to oversupply of frozen beef, and US suppliers will pay an increased tariff from 38.5 per cent to 50 per cent until the close of the Japanese trade year in March 2018. Australia will enjoy a massive 22.8 per cent tariff advantage over US beef as our tariff effectively remains at 22.8 per cent due to our free trade agreement with Japan.

Australia's and Queensland's exports to South Korea have been outstripped by US exports so far in 2017, primarily due to US tariff advantages gleaned from their free trade agreement with South Korea, which is more mature than the Australia–Korea free trade agreement, as well as reduced cattle supply to process in Australia.

Our Middle Eastern markets have also suffered at the hands of the more price-competitive Brazilian beef market, with trade down by 35 per cent from 43 354 to 28 060 tonnes in 2016–17.
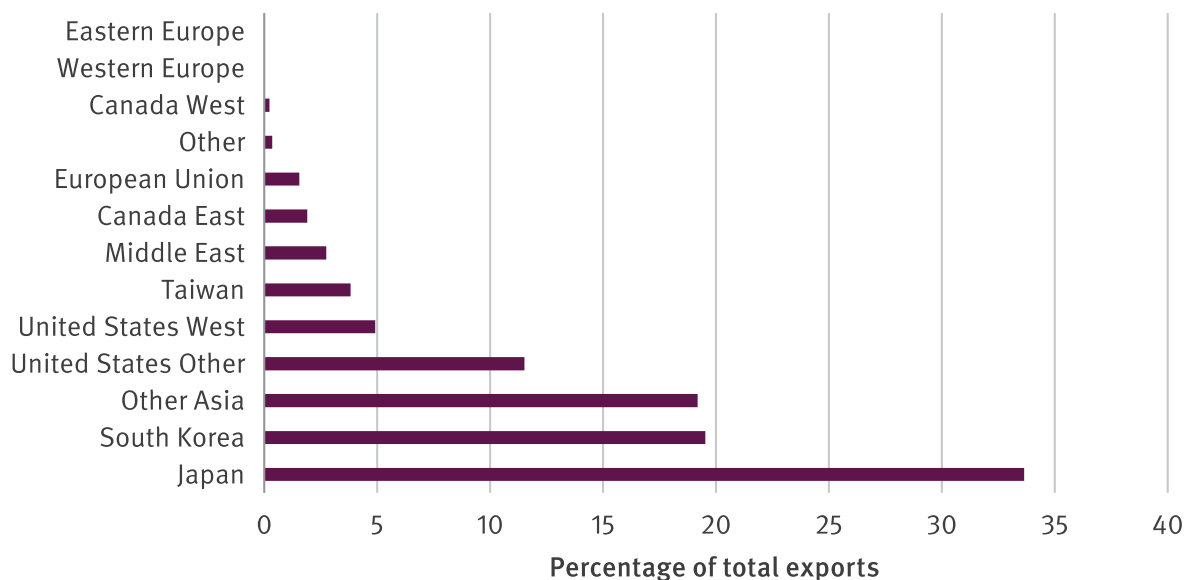
Figure 12: Queensland exports of beef and veal, 2016–17

Source: DAF, 2017.

In 2016–17, Queensland exported 584 594 tonnes of beef and veal, accounting for 57 per cent of Australia's beef and veal exports. This was a decrease of approximately 88 003 tonnes from the previous year. Japan was Queensland's largest export market, accounting for 34 per cent of exports, followed by South Korea (20 per cent) and the US (17 per cent).

Preliminary figures for 2016–17 indicate that Queensland exported $4.1 billion of beef, down 12 per cent from the previous year. Fresh and chilled beef exports decreased by nearly 16 per cent to just over $1.83 billion, whereas frozen beef exports eased back nearly 11 per cent to $2.31 billion.

Feedlots

In the June 2017 quarter, Queensland's feedlots were operating at 90 per cent capacity—the highest since the September 2015 quarter. According to the Australian Lot Feeder's Association (ALFA), the results for the first half of 2017 indicate an increase in cattle numbers on feed for all states except Western Australia, perhaps reflecting deteriorating seasonal conditions over the last couple of months combined with a poor-to-average rainfall outlook.

ALFA reports that Australian grain-fed beef exports were 258 000 tonnes shipping weight (swt) in 2016–17, which is down 4 per cent year-on-year due to reduced turn-off numbers. However, the numbers placed on feed lifted in the second half of the year, supporting grain-fed beef exports. ALFA reports that the 2016–17 grain-fed beef exports were still above the 5-year average.

ALFA also reports that while shipments of grain-fed beef to Japan and Korea increased by 1 per cent year-on-year respectively, volumes of grain-fed beef to China for the past year have lifted 11 per cent to account for 10 per cent of total grain-fed exports.

In July 2017, the numbers of cattle at feedlots reached a record 1.1 million head on feed. The 2016–17 year produced the largest year of grain production on record. This increased grain production resulted in lower grain prices positively impacting returns for grain-fed beef. Producers have used feedlots as insurance against deteriorating conditions in Queensland—fortuitously, international prices for grain-fed beef have remained firm.
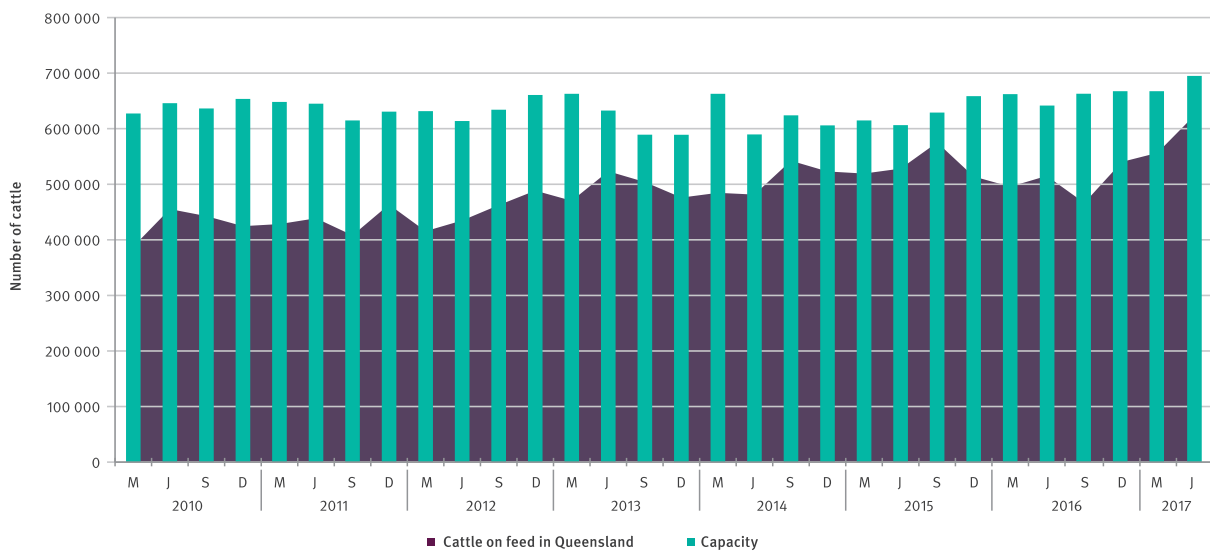
Figure 13: Queensland cattle on feed and feedlot capacity, March 2010 to June 2017

Source: ALFA/MLA, June 2017 national accredited feedlot survey.

Live cattle exports

The GVP for Queensland's live cattle exports in 2017–18 is forecast to be $220 million. This is 16 per cent less than the final estimate for 2016–17, but still greater than the average for the last 5 years. The main export countries for live cattle from Queensland in 2016–17 were Vietnam (38 per cent) and Indonesia (57 per cent), with the latter significantly increasing its intake over that period.

So far in 2017, live cattle markets remain subdued as demand from Vietnam particularly has eased due primarily to relatively high cattle prices. Cattle supply will remain the biggest issue for live exporters as cattle types suitable for export to Indonesia remain in short supply as well as at a premium price.

Rumoured live cattle exports to China have occurred, with small shipments departing southern states. Northern Australia will contend with issues dealing with bluetongue virus prior to any numbers being exported in the future.
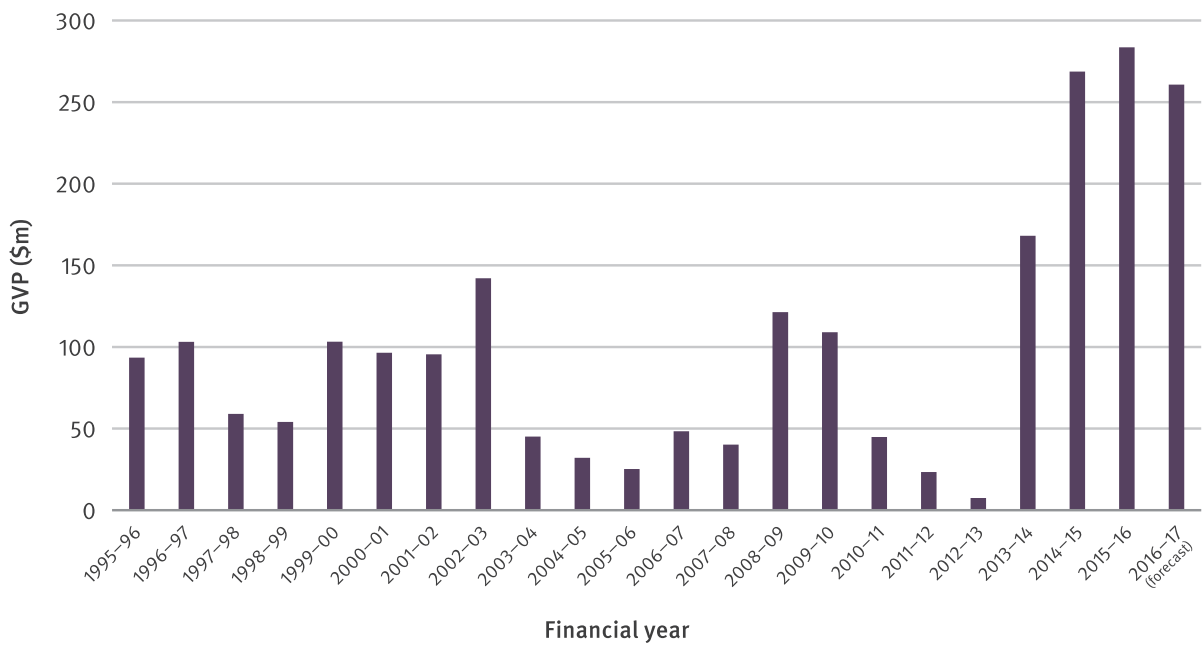
Figure 14: Queensland live cattle exports, 1995–96 to 2016–17

Source: MLA, 2017.

Figure 15: Queensland live cattle exports by country of destination, 1995–96 to 2016–17

Source: MLA, 2017.

The forecast lower export prices are expected to place downward pressure on saleyard and live export prices.

Poultry
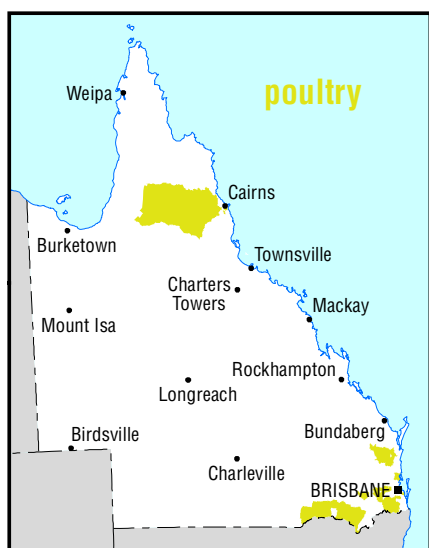
Forecast

The gross value of Queensland's poultry production in 2017–18 is forecast at $560 million, 14 per cent lower than the DAF final estimate for 2016–17 and 1 per cent higher than the average for the past 5 years.

Analysis and discussion

The gross value of Queensland's poultry production in 2017–18 is estimated to decrease by 14 per cent from previous financial year as a result of the closure of the Baiada processing plant in Ipswich planned for January 2018. Despite the fact that demand for chicken meat remains strong and it is still the most consumed meat protein in Queensland due to relatively lower retail prices, the decision over the Baiada closure is believed to have a significant effect on the industry and local communities.[13] In terms of GVP, the losses would range from $100 million (DAF estimate) to $150 million (Queensland Chicken Growers Association estimate). This decrease will result in returning to the state production levels of 2014–15 (131 million slaughterings per annum[14]) and almost no change in GVP over the last 5 years (Figure 16).

At the national level, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) forecasts Australian poultry meat production to increase by 4 per cent compared to previous financial year, reaching almost 1.3 million tonnes (carcase weight) or 680 million birds. In terms of GVP, a 4 per cent increase will result in $2.971 million.[15]

In 2017–18, low feed prices, continuing growth in domestic consumption (50 kilograms of chicken meat per person) as well as in export volume (11 per cent increase), and ongoing population growth are among the factors that will stimulate further growth in the Australian poultry industry. The projected rise in popularity of free-range and organic poultry products is expected to support continued poultry consumption growth over the next 5 years.[16] In addition, recent productivity improvements will continue to reduce the retail price of poultry and keep demand up.

Although the poultry meat farming industry grows various types of birds, chickens (mainly conventionally farmed) still dominate the industry, accounting for over 90 per cent of industry revenue in 2016–17 (Figure 17). Queensland is now the second largest poultry producing state in Australia (accounting for 23 per cent of total Australian slaughterings in 2016–17), with New South Wales being the largest producing state (29 per cent) and Victoria amounting to 21 per cent.[17]

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13   Queensland Farmers' Federation, *Queensland chicken farmers lose $150 million from Baiada closure,* 31 August 2017.

14   ABS, *7215—Livestock products, Australia*, livestock slaughtered, released 14 August 2017.

15   ABARES, *Agricultural commodities*, September quarter 2017.

16   IBISWorld, *Poultry meat farming in Australia*, industry report A0171, January 2017.

17   ABS, *7215—Livestock products, Australia*, livestock slaughtered—chickens, released 18 May 2017.
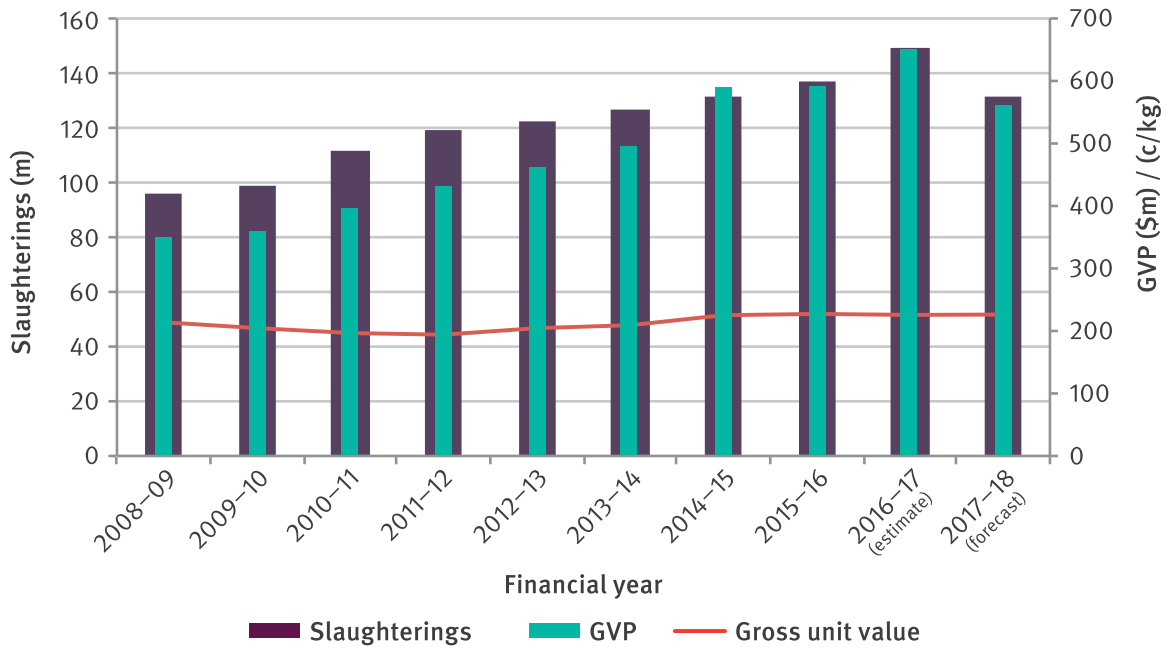
Figure 16: Queensland poultry production, 2008–09 to 2017–18

Note: Gross unit value refers to average gross unit value across all grades in principal markets and includes the cost of containers, commission and other expenses incurred in getting the commodities to their principal markets, which are significant.

Source: For slaughterings and GVP: ABS, *7215—Livestock products, Australia*; for gross unit value: ABARES, *Agricultural commodities.*

Figure 17: Australian poultry production types in terms of industry revenue, 2016–17

Source: IBISWorld, *Poultry meat farming in Australia*, industry report A0171, January 2017.

Pigs
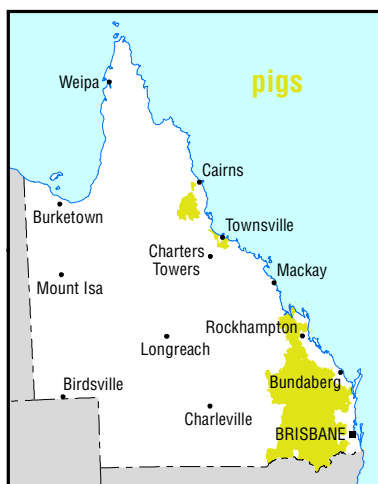
Forecast

The gross value of Queensland's pig production in 2017–18 is forecast at $239 million, 19 per cent lower than the ABS estimate for 2016–17[18] and 11 per cent lower than the average for the past 5 years.

Analysis and discussion

The gross value of Queensland's pig production in 2017–18 is estimated to decrease by almost 20 per cent from 2016–17 as a result of a significant price decrease and modest increase in production (Figure 18). In 2017–18, state production is forecast to equal the average for the past 5 years at 1.1 million slaughterings, 3 per cent higher compared to 2016–17. Low feed prices (a major input to pig production) are set to support increased pig production as farmers expand production given increased returns. Rising health consciousness and continued marketing efforts by Australian Pork Limited are likely to drive consumer demand towards fresh pork over the next 5 years.[19]

At the national level, ABARES forecasts a 4 per cent increase in pig production to 411 000 tonnes (carcase weight), while the over-the-hook price of pigs is forecast to decrease by 18 per cent to 285 cents per kilogram, due to increased competition from alternative meats.[20] For similar reasons, coupled with strict biosecurity policies, national demand for processed pig meat imports is forecast to increase by only 2 per cent, although it remains strong.

Due to slower growth in the national consumption of pig meat, Australian pig meat exports are forecast to increase by around 10 per cent to 34 000 tonnes (shipped weight), although their value is forecast to decline by around 4 per cent to $119 million because of lower average export unit values, accounting for 11 per cent of GVP. Queensland's share of exports is likely to be slightly above the national average, in part due to the state's proximity to major Asian export markets meaning lower freight times.

In Australia, commercially raised pigs are primarily classified as porkers (60 per cent of industry revenue in 2016–17) and baconers (37 per cent) (Figure 19). Porkers are used to make fresh pork, while baconers are processed into bacon, ham and smallgoods. Porkers have grown as a share of production over past years in line with rising demand for leaner sources of pig meat, whereas production of baconers has declined.

Queensland is now the third largest pig-producing state in Australia (accounting for 21 per cent of total Australian slaughterings in 2016–17), with South Australia being the largest producing state (26 per cent) and Victoria amounting to 23 per cent.[21]

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18   ABS, *7215—Livestock products, Australia,* gross value of livestock slaughtered, released 14 August 2017.

19   IBISWorld, *Pig farming in Australia*, industry report A0192, January 2017.

20   ABARES, *Agricultural commodities*, September quarter 2017.

21   ABS, *7215—Livestock products, Australia*, livestock slaughtered—excluding chickens, released 18 May 2017.
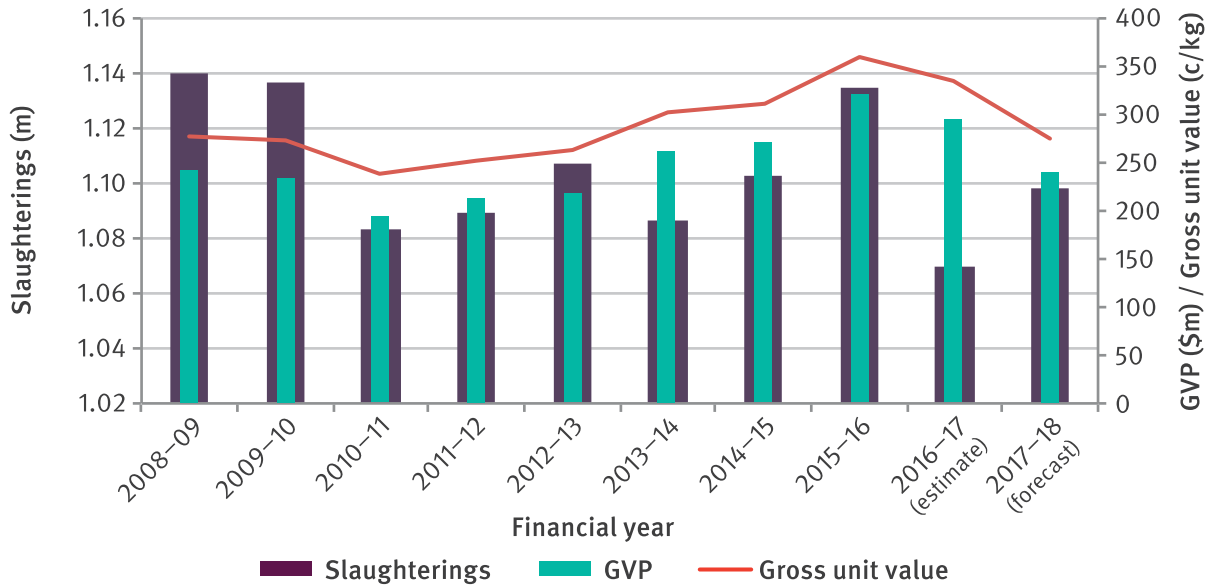
Figure 18: Queensland pig production, 2008–09 to 2017–18

Note: Gross unit value refers to average gross unit value across all grades in principal markets and includes the cost of containers, commission and other expenses incurred in getting the commodities to their principal markets, which are significant.

Source: For slaughterings and GVP: ABS, *7215—Livestock products, Australia*; for gross unit value: ABARES, *Agricultural commodities.*
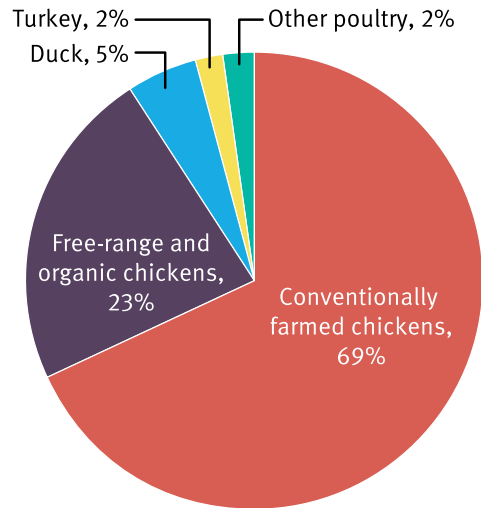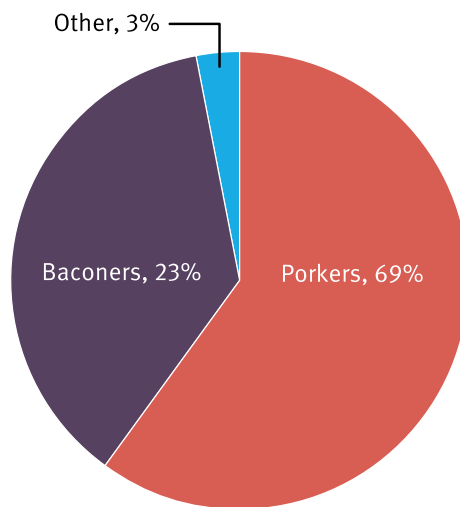

Figure 19: Australian pig production types in terms of industry revenue, 2016–17

Source: IBISWorld, *Pig farming in Australia*, industry report A0192, January 2017.

Sheep and lambs

Forecast

The gross value of Queensland's sheep and lamb production in 2017–18 is forecast at $11 million, which is 10 per cent above DAF's final estimate for 2016–17 but 77 per cent below the average for the past 5 years.

Analysis and discussion

Despite a strong first half of 2017, the outlook for the Australian sheep and lamb market according to MLA is very uncertain. Furthermore, MLA states that processor capacity has been reduced, with temporary and permanent plant closures due to limited supplies over the past year. According to MLA, this poses a risk when lamb and sheep availability does begin to ramp up, particularly if seasonal conditions don't improve.

Results from the recent MLA and Australian Wool Innovation wool and sheep meat survey indicated that Australian producers still have a strong intent to increase or maintain the size of their breeding ewe flock for the next 12 months. Therefore, MLA believes that processing levels are anticipated to increase in 2018 to 22 million head for lambs Australia-wide, and continue on the long-term growth trajectory. MLA believes there will be considerably greater revision to the projected number of sheep to be processed in 2018, with nearly 6.9 million head to be processed.

ABARES expects Australian sheep and lamb saleyard prices to rise in 2017–18 by around 6 per cent in response to continued flock rebuilding and firm export demand.[22] Queensland saleyard prices are forecast to follow this national trend (Figure 20). In 2016–17, Queensland supplied, respectively, 0.17 and 0.31 per cent of the national slaughterings in sheep and lambs. This proportion is also assumed to continue in the current year.

On the supply side, in the 7 months to the end of July, ABARES reports lamb turn-off increased by 12 per cent year-on-year, whereas lamb slaughter was down by 7 per cent. In 2016–17, improved seasonal conditions across major Australian sheep-producing regions led to an increase in the retention of breeding ewes and widespread flock rebuilding. As a result, the national flock is estimated to have increased by 5 per cent to around 71 million head by the end of June 2017. The national flock is forecast to rise by 3 per cent to 73 million head by the end of June 2018.

Australian lamb exports are expected to be around 235 000 tonnes for 2017, which is 3 per cent lower than last year's record total. Shipments to China have recorded 16 per cent growth to just under 25 000 tonnes. Mutton exports are projected to be 110 000 tonnes, which is 12 per cent down on a year-on-year basis.

For a discussion on wool, see page 39.

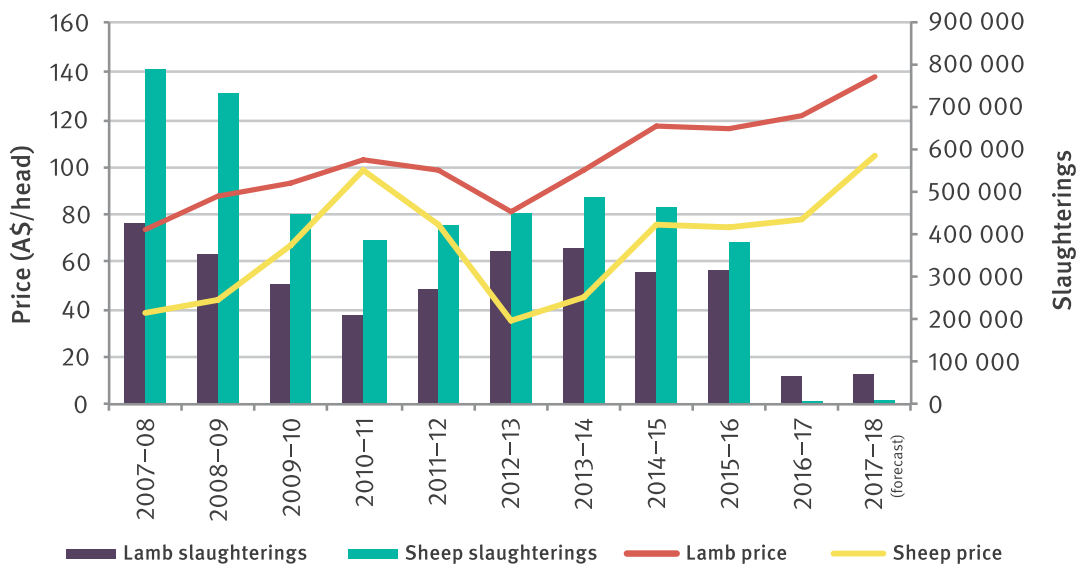22   ABARES 2017, *Agricultural commodities*, September quarter.

Figure 20: Queensland sheep and lamb saleyard prices and slaughterings, 2007–08 to 2017–18

Sources: ABS, ABARES.

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 (GVP in 2013–14 was estimated to be $17 million), beekeeping is important to cropping industries. In particular, bees provide significant pollination services as a by-product of honey/pollen collection. 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.[23]

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. Discovery of varroa-infested Asian honey bees in Townsville in July this year triggered a strong response from Biosecurity Queensland, along with the standard national process for dealing with potentially high-impact biosecurity threats.

Milk

Forecast

The GVP for milk in Queensland for 2017–18 is forecast to be $235 million, 1 per cent higher than DAF's final estimate for 2016–17 and 1 per cent higher than the average for the past 5 years.

Milk production in 2017–18 is expected to fall slightly, at around 415 million litres. Two of the major processors in Queensland have reduced farmgate prices paid to dairy farmers and this is already having a negative impact on production, with a number of farmers ceasing dairying as a result. It is likely that this trend will continue over the next year, especially as input prices continue to increase.

It is forecast that packaged milk sales for Queensland in 2017–18 will remain close to the levels reached in 2016–17 at 578 million litres.

Analysis and discussion

Queensland milk production has increased in the last year, with production up 1 per cent in 2016–17. Unlike other states, farmgate prices in 2016–17 were stable and this has led to stabilised production. In other states, farmgate prices fell considerably and consequently milk production in Australia fell by 7 per cent in 2016–17. There continues to be a slow exodus of dairy farmers from the industry but production is stable. During 2016–17, Queensland dairy farm numbers fell slightly by approximately 10 farms from 430 to 420.

A number of factors could significantly influence the northern dairy industry over the year. These include:

- the impact of lower farmgate milk prices on production
- the outcome of an Australian Competition and Consumer Commission investigation into $1 per litre milk by major retailers
- the outcome of the senate enquiry into the dairy industry
- the introduction of the effects test into competition law, regulating the relationship between big and small businesses.

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23   The latest Australian figure of $4–6 billion quoted by the New South Wales Department of Primary Industries is unattributed. However, peer-reviewed work puts the value of ecosystem services by bees in New Zealand to nearly NZ$2 billion (‹https:// peerj.com/articles/2099.pdf›). The figure of $17 million was found by taking the proportion of bee hives in Australia that Queensland has and multiplying it by the Australian GVP estimate.

Eggs

Forecast

The gross value of Queensland's egg production in 2017–18 is forecast at $244 million, 15 per cent higher than the DAF final estimate for 2016–17 and 23 per cent higher than the average for the past 5 years.

Analysis and discussion

Since 2008–09, there has been stable growth in Queensland egg production, both in terms of quantities and gross value (Figure 21). In 2017–18, state production is forecast to reach almost 100 million dozen, 3 per cent higher than the DAF estimate for 2016–17. The increase in gross value is even higher—$244 million in 2017–18 versus $212 million estimated for 2016–17. This growth comes largely as a result of increasing production fuelled by growing demand, and despite a decreasing gross unit values forecast by ABARES for 2017–18.[24] The GVP has been increasing annually by 10 per cent on average over the last 10 years.[25]

Queensland egg producers are thought to be in a good place, with domestic consumption on the rise and new export opportunities, including to South Korea, where avian influenza had wiped out millions of hens.[26] Although international trade remains negligible, it is believed that, being close to export markets, Queensland is in a great position to benefit from the export opportunities recently promoted by the federal government. Also, as the number of chicks hatched continues to grow, it would appear more hens are on farm to maintain egg supply.

At national level, total egg production is expected to rise due to population growth and consequent increasing demand. ABARES forecasts a 3 per cent increase in egg production to 349 million dozen, while GVP is forecast to decrease by 4 per cent in 2017–18 compared to the previous year, reaching $789 million. Meanwhile, as more farmers switch to free-range methods, which typically produce eggs at a slower rate than cage farming, growth in egg production is anticipated to slow.[27]

In fact, the percentage of free-range egg farming compared to cage egg production has been increasing, although the former method is less productive than cage egg farming. The consumption of caged eggs is still higher than free-range eggs (owing to a lower price), despite the growth in free-range production. A unit cost of cage eggs is about $3 per dozen versus $7–8 per dozen for free-range eggs. In general, eggs have four broad production types—free-range (51 per cent of Australian industry revenue in 2016–17), cage (38 per cent), barn-laid (9 per cent), and organic and specialty non-chicken (2 per cent) (Figure 22).

Queensland is now the second largest egg producing state in Australia (accounting for 29 per cent of total Australian hen eggs produced for human consumption in 2015–16), with New South Wales being the largest producing state (32 per cent) and Victoria amounting to 27 per cent.[28]

24   ABARES, *Agricultural commodities*, September quarter 2017.

25   ABS, *7503–Value of agricultural commodities produced*, Australia, Annual publications.

26   ABC Rural, *Queensland egg producers boosted by export opportunities and increasing consumption*, 23 May 2017.

27   IBISWorld, *Egg farming in Australia,* industry report A0172, September 2016.

28   ABS, *7121—Agricultural commodities, Australia, 2015–16*, released 7 July 2017.
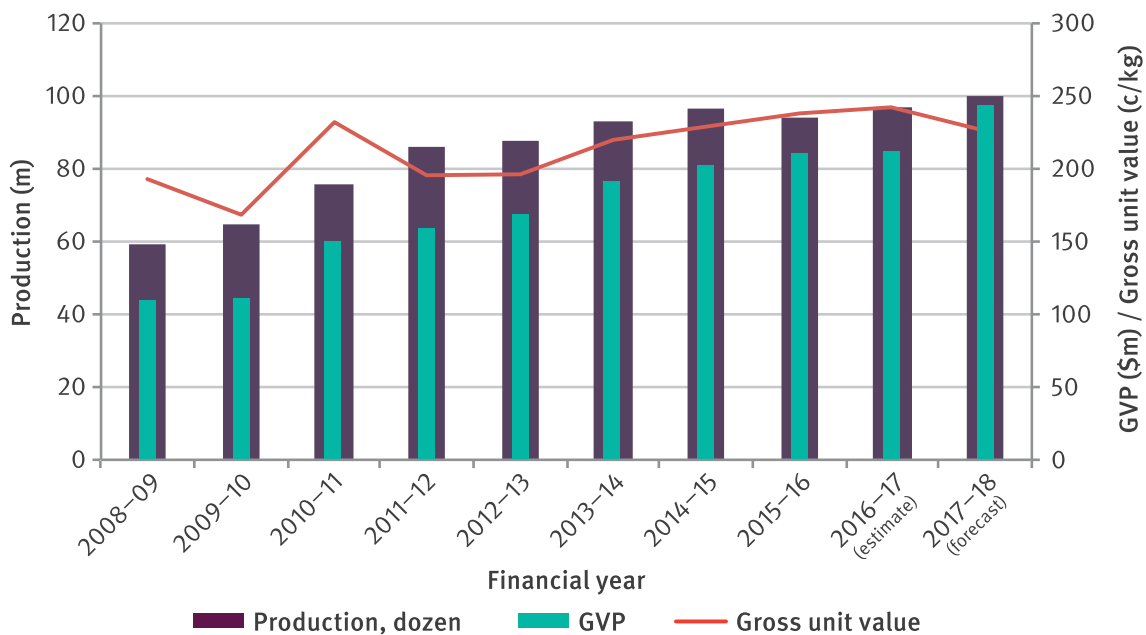
Figure 21: Queensland egg production, 2008–09 to 2017–18

Note: Gross unit value refers to average gross unit value across all grades in principal markets and includes the cost of containers, commission and other expenses incurred in getting the commodities to their principal markets, which are significant.

Source: For production and GVP: ABS, *7121—Agricultural commodities, Australia*; for gross unit value: ABARES, *Agricultural commodities.*
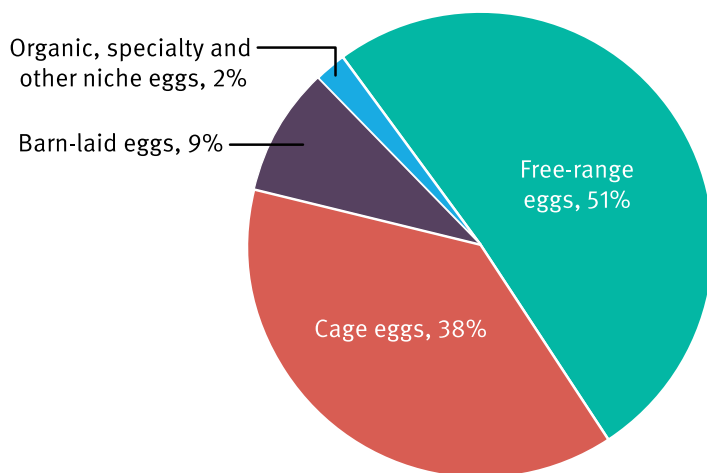
Figure 22: Queensland egg production types in terms of industry revenue, 2016–17

Source: IBISWorld, *Egg farming in Australia*, industry report A0172, September 2016.

Wool

Forecast

The gross value of wool production is forecast to be $75 million in 2017–18, 14 per cent higher than DAF's final forecast for 2016–17 and the same as the average for the past 5 years.

Analysis and discussion

The Australian Wool Production Forecast Committee expects a total greasy wool production in Queensland in 2016–17 of 8.5 million kilograms, representing an 11 per cent fall from the final estimate of 2016–17. Due to favourable seasonal conditions in 2016–17, Queensland saw higher fleece weights and an increase in the number of sheep shorn. Disappointingly, crucial summer rains failed in 2016–17 and dry conditions have continued in key wool-growing regions such as Longreach, Cunnamulla and Quilpie. Therefore, for 2017–18, it is expected that fleece weights will fall by as much as 9 per cent and the number of sheep shorn will fall by up to 2 per cent, with the net result seeing a fall in shorn wool production of nearly 11 per cent.

ABARES forecasts an average Eastern Market Indicator price for 2017–18 of 1550 cents per kilogram,[29] 10 per cent above the 2016–17 price. The Eastern Market Indicator finished 2016–17 at 1415 cents per kilogram, which was above the previous year's average of 1256 cents. The upward revision to 1550 cents per kilogram reflects stronger than expected growth in global demand for woollen textiles and apparel relative to growth in global fine wool supplies. In particular, prices for superfine apparel wool (19 micron and finer) have increased, driving the Eastern Market Indicator to a record 1614 cents per kilogram in August 2017 (Figure 23).

These forecast higher prices are expected to increase the value of wool exports to $4.1 billion, which is about 13 per cent higher than last year. The total tonnage of wool is also expected to rise, but by only 3 per cent to 442 000 tonnes in 2017–18. As our largest wool importer, China is expected to take an additional 3 per cent of the wool produced, totalling 346 000 tonnes or nearly 80 per cent of our exports.
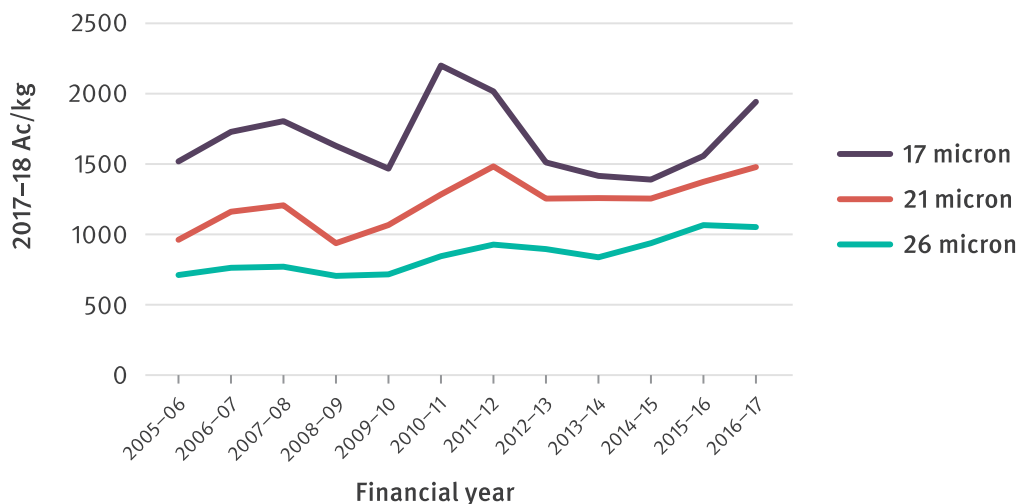

Figure 23: Australian average wool prices, 2005–06 to 2016–17

Source: ABARES, *Agricultural commodities,* September 2017.

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29   ABARES, 2017, *Agricultural commodities*, September quarter, Commonwealth of Australia, Canberra.

Crops

Horticulture crops

Fruit and nuts

Forecast

The total GVP for fruit and nuts in Queensland for 2017–18 is forecast to be $1.79 billion. This is 2 per cent higher than DAF's final estimate for 2016–17 and 15 per cent greater than the average for the past 5 years.

Analysis and discussion
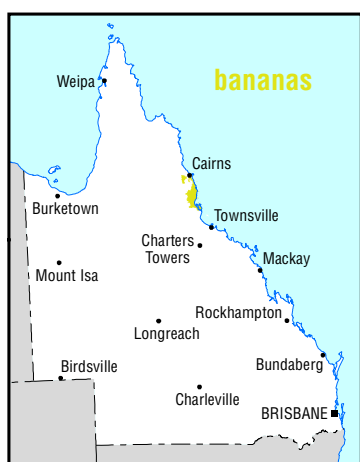
The GVP for **bananas** for 2017–18 is forecast to be $580 million, 1 per cent greater than DAF's final estimate for 2016–17 and 5 per cent greater than the average for the past 5 years. Queensland banana production is expected to be a bit lower this year compared to last year, which was a record production year. The lower production is due to the unfavourable seasonal conditions reducing the area planted by growers. However, the lower supply is expected to lift wholesale prices this year, resulting in a marginally higher GVP forecast.

Most of the state's banana production occurs in the SA2 geographical areas of Tully, Johnstone, Babinda, Atherton, Mareeba, Innisfail and Gordonvale–Trinity in northern Queensland.

The GVP for **strawberries** for 2017–18 is forecast to be $160 million, 11 per cent greater than DAF's final estimate for 2016– 17 but 3 per cent lower than the average for the past 5 years.

Queensland strawberry plantings in March and April were up possibly by as much as 15–20 per cent, although plantings were delayed because adverse weather significantly delayed harvesting in Queensland runner nurseries. This meant early season production (May, June, July) when prices are high was down, while late season production was 'normal' (August, September, October) but prices fell away during these months.

Most of Queensland's strawberry production occurs in the SA2 geographical boundaries of Dayboro, Beerwah, Wamuran, Elimbah and Caboolture.

The GVP for **avocados** for 2017–18 is forecast to be $240 million, 7 per cent greater than DAF's final estimate for 2016–17 and 44 per cent greater than the average for the past 5 years.

The forecast volume for 2017–18 is similar to the forecast volume last year (just over 40 000 tonnes). However, prices are expected to be higher, therefore reflecting a higher GVP again this year.

Most of the state's avocado production occurs in the SA2 geographical areas of Bundaberg Region—North, Bundaberg Region—South, Tablelands, Atherton, Mareeba, Crows Nest—Rosalie, Gympie Region and Nanango.
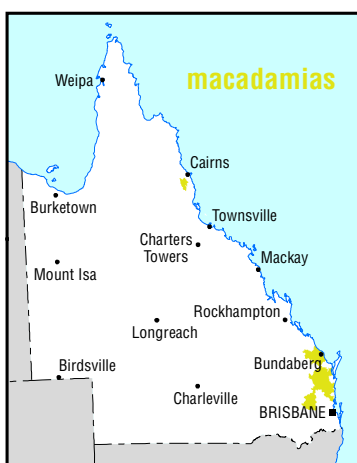
The GVP for **macadamias** for 2017–18 is forecast to be $126 million, 10 per cent lower than DAF's final estimate for 2016–17 but 43 per cent greater than the average for the past 5 years.

Severe weather has impacted the 2017 macadamia crop, with the forecast now revised to approximately 23 500 tonnes in shell at 10 per cent moisture. Rain and flooding from Cyclone Debbie in March disrupted harvesting and caused crop loss in affected areas. This represents around a 10 per cent reduction from the record crop of 52 000 tonnes last year. Prices for this year will average $5.20 per kilogram for nut in shell at 10 per cent moisture.

According to the Australian Macadamia Society, innovative orchard practices, coupled with substantial new investment in the industry via new plantings and the establishment of large new orchards, mean that macadamia crops will show consistent, steady growth in the coming years. Global demand remains strong across the board for both Australian kernel and in shell.

Most of the state's macadamia nut production occurs in the SA2 geographical areas of Bundaberg North—Gooburrum, Bundaberg Region—North, Bundaberg Region—South, Gympie Region and Glass House Mountains.

The GVP for **mandarins** for 2017–18 is forecast to be $107 million, the same as the DAF's final forecast for 2016–17 but 25 per cent greater than the average for the past 5 years.

The climate was warmer than average in July and rainfall has been variable throughout the growing districts. The Murcott harvest in July was successful, with good quality fruit and strong consumer demand for this product. Unlike last year, there is no evidence of creasing in the fruit and also the pest pressure has been low.

Most of the state's citrus production occurs in the SA2 geographical areas of Gayndah—Mundubbera and Central Highlands—West.
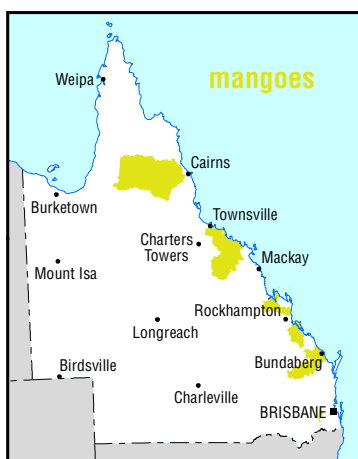
The GVP for **mangoes** for 2017–18 is forecast to be $96 million, the same as DAF's final estimate for 2016–17 and 28 per cent greater than the average for the past 5 years.

At this stage Queensland mango production is tracking normally, but it's too early in the season to give an accurate assessment of total production—the Queensland season is from December to February. Cyclone Debbie had some impact in the Bowen region; however, the majority of buds throughout all regions are showing good growth. The Queensland GVP forecast is therefore expected to be similar to the 2016–17 financial year.

Most of the state's mango production occurs in the SA2 geographical areas of Tablelands, Burdekin, Mareeba, Collinsville, Bundaberg Region—North and Bowen.
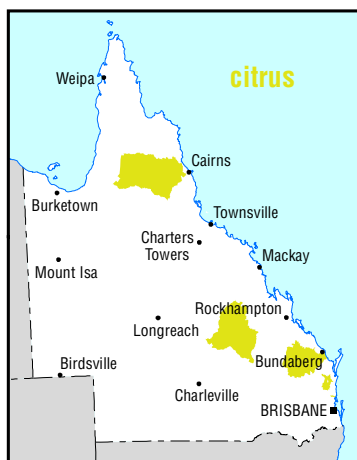

The GVP for **apples** for 2017–18 is forecast to be $93 million, 3 per cent greater than DAF's final estimate for 2016–17 and 32 per cent greater than the average for the past 5 years.

The Gala harvest—Queensland's second largest variety—was impacted by the hot summer, but the rainfall from Cyclone Debbie in March benefitted the Pink Lady crop—our largest variety—which were a good size and of good quality and colour. Also, the quality of the Granny Smith and Red Delicious varieties were good this harvest. Prices of apples were somewhat lower though, and this may be due to the fact that retailers have requested apples not be waxed anymore (a vegetable wax was used). This, in turn, has reduced the shelf life and lessened the appearance of apples in the store, which in turn has depressed demand.

The new crop is harvested in February to May, so it's too early to give an accurate assessment of total production as trees are currently dormant. At this stage, apple production is likely to be good next season and the GVP forecast is expected to be slightly greater than last year.

Most of the state's apple production occurs in the Stanthorpe Region.
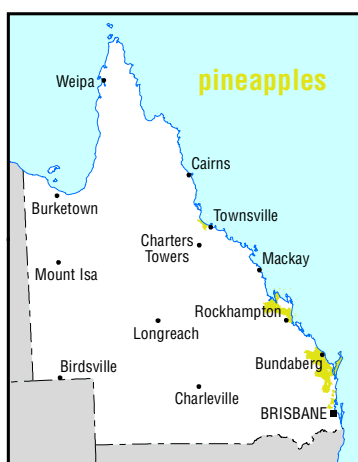
The GVP for **pineapples** for 2017–18 is forecast to be $70 million, the same as the DAF's final estimate for 2016–17 and the same as the average for the past 5 years.

Fresh fruit production is expected to be marginally higher this year. There have been some losses due to natural flowering and drought, although better than average fruit size in the second part of the year has offset these losses. Cannery fruit is expected to be down, mainly due to a high level of translucent fruit this year. Also, fresh fruit wholesale prices have been lower due to the glut of fruit from natural flowering; however, prices are recovering with the lower supply.

Most of the state's pineapple production occurs in the SA2 geographical areas of Wamuran, Yeppoon, Bundaberg Region—North, Elimbah, Glass House Mountains and Beerwah.

Vegetables

Forecast

In 2017–18, Queensland's gross value of vegetable production is forecast at $1.242 billion, 7 per cent higher than 2016–17 and 4 per cent higher than the average for the previous 5 years.

Analysis and discussion

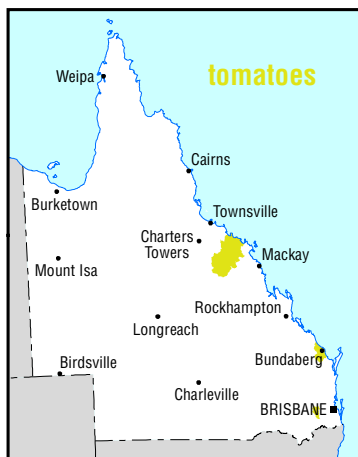Queensland's GVP for **tomato** production for 2017–18 is forecast at $298 million, 19 per cent greater than DAF's final forecast for 2016–17 and 10 per cent higher than the previous 5-year average.

Tomato production is expected to return to pre–Cyclone Debbie production yields. However, prices have started to fall in recent times—in some cases by up to 10 per cent. Most of the state's tomato production occurs in the SA2 geographical areas of Bundaberg Region—South, Collinsville and Bowen.
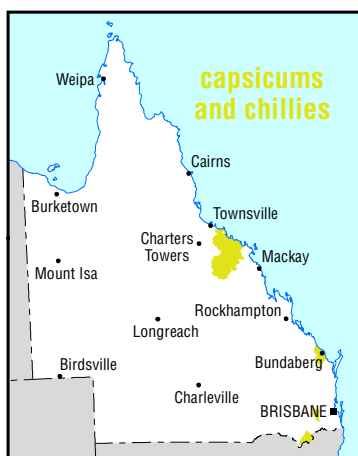
The gross value of **capsicum and chilli** production in Queensland is forecast at $128 million for 2017–18, 3 per cent less than DAF's final forecast for 2016–17 and 11 per cent less than the average for the past 5 years.

Capsicum production has fallen in Bowen due to the closure of one of the district's largest operators. However, some capsicum growers in Gumlu have increased their production to try to counter this loss.

Most of the state's capsicum and chilli production occurs in the SA2 geographical areas of Collinsville, Bundaberg Region—South and Bowen.
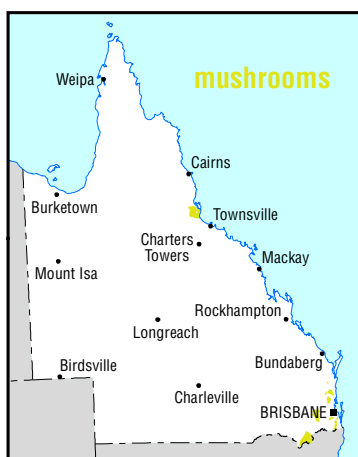
Queensland's GVP for **mushrooms** for 2017–18 is forecast to be $70 million, the same as DAF's final estimate for 2016–17 and 4 per cent higher than the average for the past 5 years.

Most of the state's mushroom production occurs in the SA2 geographical areas of Greenbank, Stanthorpe Region and Palmwoods.

The gross value of **sweet potatoes** is forecast at $64 million for 2017–18, which is the same as DAF's final forecast for 2016–17 and 13 per cent above the previous 5-year average. Queensland produces a large percentage of Australia's sweet potatoes, with Bundaberg the main growing area.

Other vegetables

The gross value of **lettuce** production in Queensland in 2017–18 is forecast at $56 million, the same as DAF's final forecast for 2016–17 and 3 per cent below the average over the past 5 years.

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

Most of the state's lettuce production occurs in the SA2 geographical areas of Lockyer Valley—East, Lockyer Valley—West, Stanthorpe Region, Cambooya–Wyreema, Southern Downs—West and Gatton.
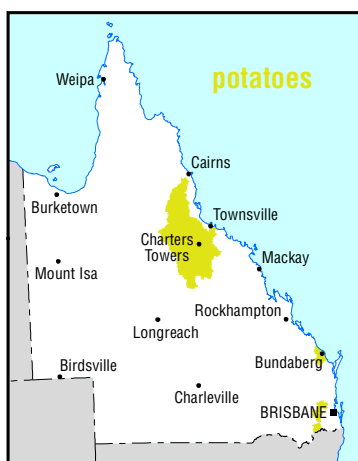
Queensland's gross value of **potato** production is forecast at $52 million, the same as DAF's final forecast for 2016–17 but 11 per cent less than the average of the past 5 years.

Most of the state's potato production occurs in the SA2 geographical areas of Atherton, Lockyer Valley—East, Lockyer Valley—West, Dalrymple, Malanda–Yungaburra and Herberton.
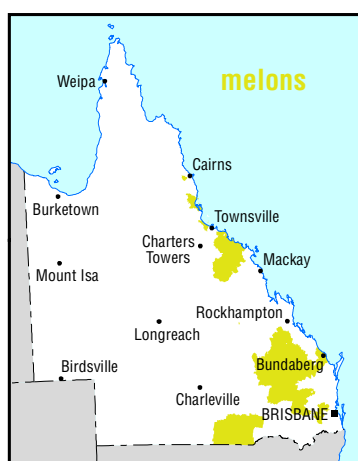
Watermelon production in Queensland in 2017–18 is forecast at $37 million, which is 19 per cent greater than DAF's final forecast for 2016–17 and 9 per cent greater than the average from the previous 5 years.

The volume of watermelons is expected to be greater in the Gumlu region for 2017–18. However, the prices are expected to fall as a result.

Most of the state's watermelon production occurs in the SA2 geographical areas of Burdekin, Collinsville, Chinchilla, Bargara–Burnett Heads, Jondaryan and Lockyer Valley—West.

Lifestyle horticulture

Production nurseries
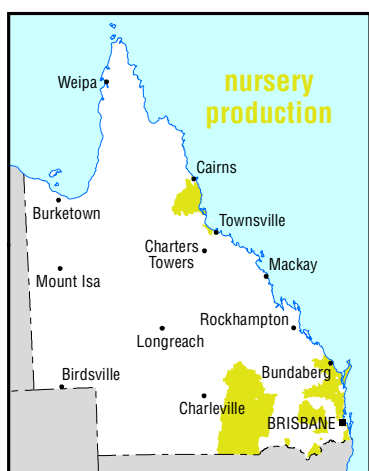
Forecast

The GVP for **production nurseries** for 2017–18 is forecast to be 1 per cent greater than last year at $907 million, 3 per cent above the average for the past 5 years.

Analysis and discussion

The lack of rain and so the recharging of water supplies (surface, subsurface and on-farm dams) is of concern, particularly in south-east Queensland. Much of the northern Queensland nursery production areas remain in drought, which may limit higher growth of the industry for the remainder of 2017 and into 2018. Cyclone Debbie also impacted the industry across the state. However, strong resilience through disaster planning strategies and modern production systems enabled many producers to return to full production relatively quickly.

In spite of current dry conditions, demand remains strong for product across all stock types within all supply chains. This sustained demand, over the past 3 years, has stretched supply both domestically (Queensland) as well as interstate. The buoyant market conditions have seen industry maximise production capacity on farm, with increased profitability being driven through production efficiencies and higher stock turnover per hectare. There is still some potential for further growth in the industry, as currently the supply of ornamentals is not meeting demand. The unseasonal temperature fluctuations, although challenging, have resulted in better than average production for seedling suppliers.

The good rain in 2010–11, together with follow-up rain since, is driving commercial horticulture expansion, which, in combination with Global Financial Crisis recovery catch-up, continues to drive demand in the production nursery sector. The expansion in the property development sector continues to grow demand for greenscape inputs, along with a growing big box hardware retail sector supporting greenlife sales in urban centres. There is some impact from southern suppliers moving into the Queensland market. Importantly though, this solid industry performance means growth in the industry research and development levy fund, which will provide the research and innovation to further secure the industry's future.

Table 11: Production nurseries GVP by sector, 2017–18

Products	GVP ($m)	Percentage of total production nurseries GVP
Retail stock	399.1	44.0
Landscape stock	226.7	25.0
Fruit and vegetable stock	185.9	20.5
Forestry stock	81.6	9.0
Revegetation/rehabilitation stock	13.6	1.5
Total	907.0	100.0

Turf

Forecast

The GVP for **turf** for 2017–18 is forecast to be $180 million, the same as the 2016–17 estimate and 15 per cent above the average for the past 5 years.

Analysis and discussion

The long-term growth in the turf industry has been driven by the continued buoyancy of the commercial and residential construction sectors. However, the effects of Cyclone Debbie on the industry are expected to continue into early 2018. Turf farmers have experienced significant infrastructure damage and many have also suffered losses resulting from siltation following localised flooding events.

The industry has been accessing insurances and grants to enable them to return to full production as soon as possible. The commercial sector, especially stadium construction and maintenance, continues to sustain a strong demand for turf. Increased attraction of large stadium events to Queensland creates increased maintenance requirements, generating further demand for turf. An increase in greenscapes generally leading up to the 2018 Commonwealth Games also continues to sustain growth. There are shortages in the supply of some turf species and a sustained strong price continues to create favourable market conditions. Increases in automation and precision agriculture are likely to boost industry efficiency and value over the coming years.

Cut flowers
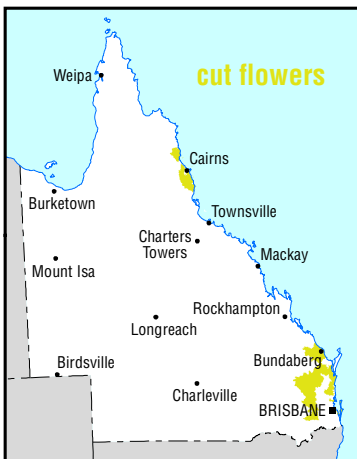
Forecast

The GVP for **cut flowers** and foliage for 2017–18 is forecast to be $161 million. This is the same as the final estimate for 2016–17 but 5 per cent above the average for the past 5 years.

Analysis and discussion

The fairly static growth in cut flower and foliage production is a result of many older growing enterprises retiring and selling up, with their peri-urban properties being encroached upon by a growing suburbia and owners selling their land to housing developers. The cost of land in these areas is also a significant barrier to potential new industry entrants.

Additional pressure on production enterprises has been applied by the dramatic increase in imported cut flower and foliage from countries such as Colombia, Ecuador and Kenya. The volume of imports has increased an estimated 20 times over the past decade, significantly impacting some producers of products such as roses and chrysanthemums. Competition from imports has shifted producers from more traditional products to those where there is a gap to be filled domestically, such as gerberas, where logistical issues and phytosanitary restrictions have limited the financial feasibility of imports.

The market for flowers, however, continues to grow, which has subsequently consolidated the industry as the remaining growers expand to service a market with reduced numbers of domestic

suppliers. Online flower sales, which continue to increase due to Millennials who prefer online channels for purchasing, are also driving demand as the retail sector improves its online presence.

Exports of Australian natives and wildflowers are increasingly driven by improvements in the economies of our main export markets, namely Japan, the US and European Union. However, exports are yet to reach levels where they balance the significant downturn experienced during the Global Financial Crisis.

Other crops

Sugar cane

Forecast

The GVP for Queensland's sugar cane in 2017–18 is forecast to be $1.18 billion, a 19 per cent decrease over the final estimate for the 2016–17 crop and 4 per cent below the average for the last 5 years. Total revenue from the 2017 Queensland crop, in raw-sugar equivalent, is expected to be $1.83 billion.

Analysis and discussion

Queensland's 2017–18 sugar cane crop is forecast to reach 32.3 million tonnes. This result would be a decrease of just over 2 million tonnes compared to the 2016–17 crop.

While Cyclone Debbie caused serious damage at an individual farm level in some areas, at the state level the major factor contributing to the forecast lower yield was cooler growing conditions over winter. This reduced plant growth but should result in a higher sugar content in the plant tissue.

Results 2 months into the 2017 crush suggest that the average commercial cane sugar for the season should reach 13.6 units, which is comfortably above the 12.92 units achieved in 2016–17. At $36.6 per tonne of sugar cane, the average return to Queensland cane growers for 2017–18 is forecast to be 13.9 per cent lower than the final estimate for 2016–17.

As at 1 September 2017, Queensland Sugar Limited estimated its harvest pool return to be $416 per tonne IPS (International Polarity Scale). This is approximately 20.4 per cent lower than the 2016–17 estimate of $527.

Industry situation

ABARES has forecast that world sugar production will be close to all-time record levels in 2017–18. The last monsoon season provided average levels of rainfall and will result in production recoveries in India and Thailand. Increased cane plantings have been reported in China. Quota management of sugar beet in Europe will end as of 30 September 2017 and ABARES predicts that sugar production by European counties will reach the highest levels in 22 years.

Growth in sugar consumption is forecast to soften in 2017–18 such that world supply is expected to exceed demand. This follows 2 years of deficit and will place downward pressure on world prices.

Cotton
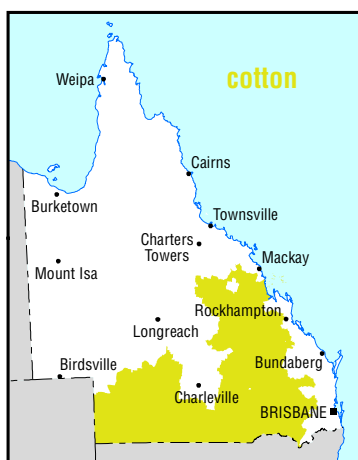
Forecast

The GVP for cotton for 2017–18 is forecast to be $884 million, 10 per cent less than DAF's final estimate for 2016–17 but 38 per cent above the average for the past 5 years. The 2017–18 season has very strong prospects but will depend on reliable water supplies.

Analysis and discussion

Cotton production is forecast to decrease by 10 per cent to 322 000 tonnes of cotton lint and 482 000 tonnes of cottonseed in 2017–18. The total area planted is forecast to fall by 12 per cent to 155 000 hectares, down from 176 000 hectares. The average yield is forecast to fall because of an expected 17 per cent decrease in the area planted to irrigated cotton (down to 108 000 hectares). However, the area planted to dryland cotton is expected to increase by 1 per cent to 47 000 hectares. The main dryland and irrigated cotton growing areas in Queensland include Darling Downs (60 000 hectares), Macintyre Valley (55 000 hectares), Central Highlands (19 000 hectares), St George (13 000 hectares), Dawson Valley (5000 hectares) and Dirranbandi (3000 hectares).

Water storages

There have been increases in irrigated water supplies into the Beardmore and Coolmunda dams since last year, but levels in the Fairbairn and Leslie dams have both fallen slightly to be around 40 per cent and 20 per cent full respectively.
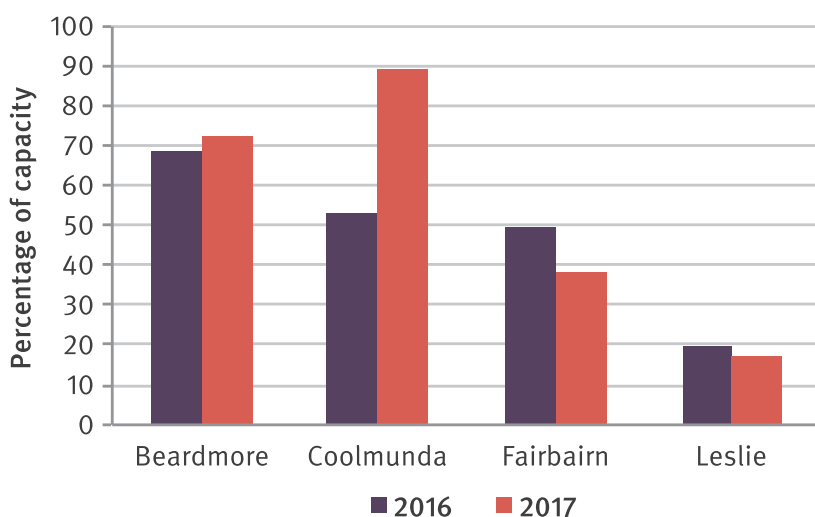
Figure 24: Stored volumes in major Queensland irrigation dams, September 2016 and 2017

Source: SunWater.

World production

As detailed in Table 12, India was the world's largest cotton producer in 2016–17, yielding just under 5.9 million tonnes and accounting for 25 per cent of world production. The next largest cotton producers are China, the US and Pakistan, contributing 21 per cent, 16 per cent and 7 per cent respectively to world production. India, China and the US are forecast to produce more than the previous year, whereas China will produce less. The US is the world's largest cotton exporter

and is forecast to export 2.9 million tonnes of cotton in 2017–18, accounting for just over a third of world cotton exports.

Table 12: World production of cotton, 2016–17 and 2017–18

Producer	2016–17 production ('000s of tonnes)	Share of world production (%)	2017–18 forecast production ('000s of tonnes)
India	5 879	25	6 314
China	4 953	21	5 334
US	3 738	16	4 473
Pakistan	1 676	7	1 992
Brazil	1 481	6	1 524
Australia	914	4	1 045
Uzbekistan	800	3	806
Total world production	**23 185**	**100**	**25 541**

Note: Not all cotton producers are represented in the table.

Source: Foreign Agriculture Service, United States Department of Agriculture 2017, *Cotton: world markets and trade monthly circular,* August 2017.

International supply and demand

For the major world importers, the United States Department of Agriculture forecasts the following changes for 2017–18:

- Indonesia is up by 150 000 bales to 37.183 million due to higher forecast mill use.

- Mexico is up by 100 000 bales due to higher US supply leading to higher Mexican stock holding.

- Vietnam is up by 100 000 bales due to expected continued strong imports from the US.

Changes to rates of cotton exports by most major exporters are also forecast for 2017–18:

- US exports to increase by 700 000 bales due to a much larger expected crop.

- In Australia, exports will drop by 350 000 bales due to high June exports shifting some of the exportable supply into the 2016–17 marketing year instead of 2017–18.

As at August 2017, world cotton imports for 2017–18 are forecast to be 8.1 million tonnes and world closing stocks are expected to be 19.62 million tonnes. Total world production is projected to be 25.54 million tonnes, slightly less than the consumption of 25.56 million tonnes. Ending stocks are expected to be lower than in 2016–17.

Other major field crops

Peanuts

Forecast

The GVP of Queensland peanuts, the majority grown around Kingaroy, is projected to be $25 million, 32 per cent above the GVP of $18 million achieved in the 2016–17 season. This is due to an anticipated larger area sown and a modest increase in price.

Analysis and discussion

Peanut area sown is forecast to increase 25 per cent to 10 000 hectares in the September quarter for 2017–18, from 8000 hectares in the March quarter for 2016–17. Assuming average seasonal conditions, yields are expected to average around 2.5 tonnes per hectare. It is estimated that around 40 per cent of total peanut area is irrigated, with 60 per cent dryland grown. Irrigated yields average around 5 tonnes per hectare, while dryland average 2.5 tonnes per hectare. To allow for the possibility of a dry and hot season, which is a likelihood for spring, dryland yield can fall to 1.5 tonnes per hectare, with peanut kernels potentially shrivelling, lowering yield outcome.

Current Queensland irrigation storage levels constitute a further risk to yield outlook, varying from 45 per cent capacity for Tinaroo Dam (Mareeba–Dimbulah region peanuts in northern Queensland), up to 100 per cent capacity for Rockhampton. Early plantings of peanuts take place in October, provided ample rainfall is received. Later planting of crops can take place around December, but may extend up until February to capitalise on summer or cyclone-generated rainfall. If ample rain is not received up until the end of the December peanut planting window, allocation of grower irrigation entitlements may fall below 100 per cent—in which case area sown and or yields may not reach their potential. However, the industry is hoping for average moisture and temperature conditions, in which case a yield average of 2.5 tonnes per hectare would be achieved.

A modest increase of price by around 5 per cent to $950 per tonne of peanuts is expected for the coming season, from $900 per tonne received in the March quarter for 2016–17. Overall, a 25 per cent increase in production coupled with a price increase is estimated to take GVP almost a third higher than for the previous season.

Soybeans
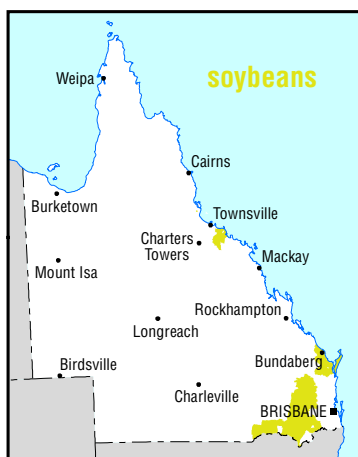
Forecast

The GVP of soybeans as at the September quarter 2017–18 is projected to be around $12 million, up 7 per cent from the estimate of $11 million in the 2016–17 season. This is due to closer to average yields despite a smaller anticipated area sown. Current GVP forecast is 4 per cent above the estimate made in the March quarter of 2015–16, at $11.2 million, mainly due to a 6 per cent higher forecast price for 2017–18.

Analysis and discussion

Area sown to soybeans is forecast to approximate the 10-year average (2007–08 to 2016–17) at around 11 500 hectares, 10 per cent below the 12 800 hectares estimated to be sown in the previous season. Although area sown was higher in 2016–17, yields were below average due to dry conditions. For the coming season, yields are forecast at 1.7 tonnes per hectare, reflecting a 10-year average, and 17 per cent higher than the 1.45 tonnes estimated in 2016–17. Production is projected to increase 5 per cent to around 19 500 tonnes, from 18 550 tonnes estimated for the previous season.

Price is forecast to increase just marginally, by around 2 per cent to average $600 per tonne, from $593 per tonne in the March quarter of 2016–17. Higher production coupled with increased price is projected to take soybean GVP modestly higher.

Sunflowers
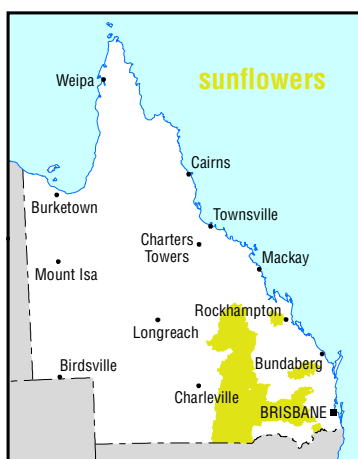
Forecast

The GVP of sunflowers as at the September 2017–18 quarter is projected to fall by around 38 per cent to $20 million, from $33 million estimated for the March 2016–17 quarter. This is due to forecast smaller area sown and yields, and slightly lower price. Current GVP forecast is around 135 per cent above the $8.5 million estimated for 2015–16, with dry conditions adversely impacting area sown in that year.

Analysis and discussion

Area sown is forecast to be around 17 100 hectares, approximately in line with the 10-year average (2007–08 to 2016–17), and 15 per cent below the 20 243 hectares estimated for the previous season. Area sown to sunflowers, in addition to being weather influenced, will depend on prices of competing summer crops such as sorghum, cotton, mung beans and, to a lesser extent, soybeans and maize.

Yields are also forecast to fall around 19 per cent to an average of 1.2 tonnes per hectare, taking production commensurately 32 per cent lower to 20 479 tonnes, reflecting a 10-year average. Current production forecast is 32 per cent below the production of 30 000 tonnes achieved for 2016–17, commensurate with more average seasonal conditions in terms of temperature and rainfall received in southern and central Queensland.

Price is conservatively forecast to average $1000 per tonne, around 9 per cent below an average price of $1100 per tonne received in the March quarter for 2016–17. It is expected that seed for

crushing (both polyunsaturated and monounsaturated) will account for around 65 per cent of quantity, while seed from the grey sunflower variety for birdseed accounts for the remainder. In 2016–17, sunflower for birdseed was commanding prices of between $1300 and $1400 per tonne, compared to around $800 per tonne received on seed to crushing for oil.

Summer cereal grains

Grain sorghum
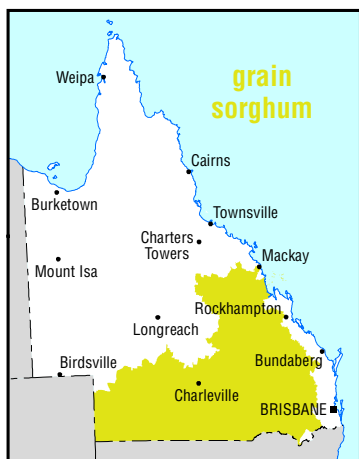
Forecast

The GVP of sorghum in the September quarter for 2017–18 is projected to be $359 million, 119 per cent above the final estimate for 2016–17 and 13 per cent above the average for the last 5 years.

Analysis and discussion

Area sown to sorghum is forecast to increase 65 per cent to 480 000 hectares in 2017–18 from a drought-plagued 2016–17 crop of 290 000 hectares. Assuming average seasonal conditions for the coming season (across grain-growing areas of central and southern Queensland), devoid of prolonged and excessively hot or dry weather, yields are anticipated to average around 3 tonnes per hectare, approximately in line with the 10-year average yield of 3.1 tonnes per hectare (2007–08 to 2016–17). A larger area sown and higher yields than last season are estimated to take production 123 per cent higher to reach 1 425 000 tonnes. This lies 5 per cent above the 10-year average of 1.35 million tonnes. The yield outlook could be revised higher should above-average summer rainfall be received.

Average price has increased modestly since the March quarter, when it was $258 per tonne, to reach $276 per tonne. Coarse grain prices such as for sorghum are expected to broadly follow white grain prices up, given recent strengthening of global wheat prices. Higher anticipated local production coupled with an increase in price is estimated to take sorghum GVP significantly higher. Current GVP forecast is 10 per cent above the 10-year average of $328 million.

Maize
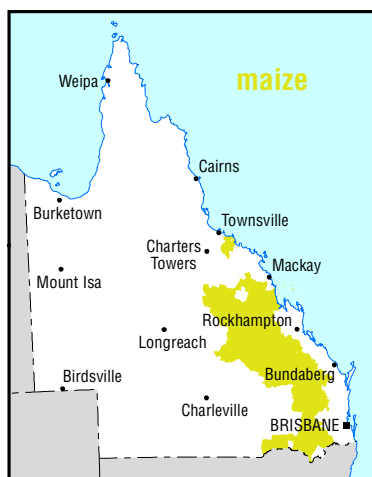
Forecast

The GVP of maize is forecast to be $71 million for the 2017–18 season, 23 per cent below the estimate made for the previous season in April 2017 but 17 per cent above the average for the last 5 years.

Analysis and discussion

Area sown to maize is forecast to approximate the 10-year average (2007–08 to 2016–17) at around 36 500 hectares, combined with a long-term average yield of 5.6 tonnes per hectare, producing 206 000 tonnes. This is assuming that average rainfall is received in southern, central and northern Queensland, combined with average spring and summer temperatures. Overall, maize area sown is forecast to be

5.8 per cent above the March 2016–17 estimate of 36 540 hectares, but yields are forecast to be closer to average at 32 per cent below the above-average yields of the previous season, taking production commensurately lower by 28 per cent.

About 75 per cent of the Queensland crop is grown in southern Queensland, with the balance produced in central Queensland and northern Queensland (6 per cent of the Queensland crop). In northern Queensland (Atherton Tablelands), traditional areas sown to maize have come under increasing competition from peanuts and bananas. Approximately 60 per cent of the Queensland maize crop will be planted as high quality grit maize for human consumption (132 000 tonnes), with 40 per cent planted as feed maize and silage (88 000 tonnes).

Grit maize is expected to fetch an average of between $320 and $330 per tonne, with feed maize priced at around $50 per tonne above the expected sorghum price of $276 per tonne. Of Queensland grit maize produced, around 50 000 tonnes (maize variety P1756) or 38 per cent is expected to be exported to South Korea. Average maize price for all Queensland is forecast to be $322 per tonne (allowing for maize price of $280 per tonne received for the northern Queensland crop), which is around 8 per cent above the average price of $299 per tonne in the March quarter for 2016–17. Overall, a forecast 28 per cent fall in production from the previous season is estimated to more than offset an increase in maize price, taking projected GVP around 23 per cent lower in 2017–18.

Winter cereal grains

Wheat
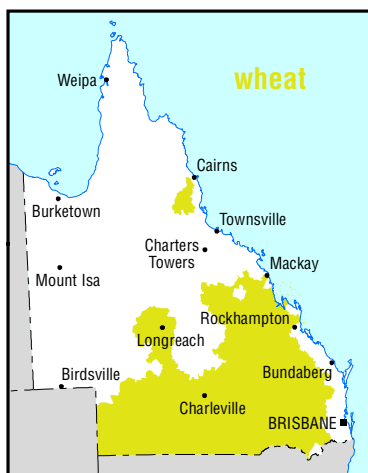
Forecast

The GVP of wheat is forecast to be around $346 million, 31 per cent below the estimate made in April 2017 and 16 per cent below the average for the last 5 years.

Analysis and discussion

In April–May, many Queensland grain growers dry seeded their wheat crops due to insufficient rain, relying on previously stored soil moisture in some areas received from Cyclone Debbie. In Goondiwindi, isolated storms also supported dry seeding strategies. Area sown to wheat is estimated to be around 541 000 hectares, 23 per cent below the 708 000 hectares estimated for 2016.

Grain growers have been nervous about current below-average rainfall received in the period May to July, an outlook initially forecast by the Australian Bureau of Meteorology in autumn, applying to the southern two-thirds of the continent. The current forecast is for drier than average conditions to persist from July through to September.

The yield outlook faces downside risk. Although yields are holding on to a reasonable degree on the Darling Downs, persistent dry weather is placing these in jeopardy. Further west the outlook is bleak, with some crops suffering poor germination potentially compromising yield. Light showers across the Darling Downs and Maranoa at the beginning July did little to ease concerns. Due to these dry conditions, the yield outlook has been adjusted downward 24 per cent to an average 2.1 tonnes per hectare, from around 2.7 tonnes estimated for the previous season. Smaller area sown coupled with lower average yields is projected to take production 42 per cent lower to 1 137 000 tonnes, from the 1.96 million tonnes estimated for 2016.

US wheat futures rallied in June, sending domestic prices up $40 per tonne. This was due to snow blizzards (beginning of May) damaging the US Hard Red Wheat crop by over 2 million tonnes. However as at July, aggressive export programs from other wheat-producing countries, including the Black Sea region, has limited the price rally. One factor supporting wheat prices is that for 2017–18, world wheat production is estimated to be 1.7 megatonnes down and end stocks 0.6 megatonnes lower (month on month). Locally, price direction will depend on whether adequate spring rains are received to boost yields after a drier than average winter. Feed wheat at the beginning of July was commanding $333 per tonne, feed barley $312 and sorghum $296. These are up on March 2017 prices by 31 per cent for wheat from $255, by 34 per cent for barley from $232, and by 10 per cent for sorghum from $269. Average Australian Premium White wheat price for the September 2017–18 quarter is estimated at $304 per tonne, 18 per cent higher than the estimate of $257 in the March 2016–17 quarter.

Forecast lower wheat production is estimated to more than offset an increase in price, taking wheat GVP 31 per cent lower.

Barley
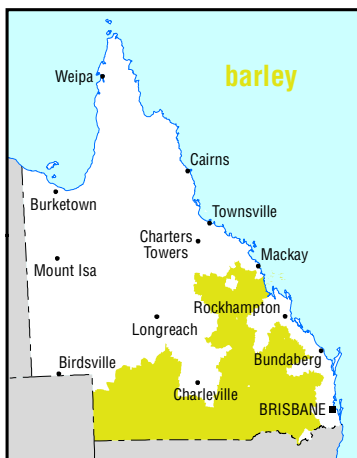
Forecast

The GVP of barley for winter 2017 (2017–18 crop) is forecast to be $74 million, marginally (1 per cent) below the GVP estimated in April 2017 but 5 per cent above the average for the last 5 years.

Analysis and discussion

Area sown to barley is projected to contract marginally, by around 1 per cent to 93 500 hectares from 94 500 hectares estimated in the March quarter for 2016–17. Due to dry growing conditions and below-average rainfall over autumn and much of winter, yields are forecast to fall by about one-third to around 2.5 tonnes per hectare, from around the 3.8 tonnes per hectare average estimated for the previous season. As a result, production is forecast to fall commensurately to 238 000 tonnes from 360 000 tonnes in 2016. Despite this, current production forecast still exceeds the 10-year average of 210 000 tonnes (2007–08 to 2016–17). This is mostly due to the 2017 crop being sown on some stored soil moisture from Cyclone Debbie in March 2017. However, extra rainfall is required for the remainder of winter and into spring in central and southern Queensland to maintain the current yield outlook.

Barley price per tonne is currently averaging $309, following the recent rise of global wheat prices through the Australian winter, 49 per cent above the price of $208 per tonne estimated for the March 2016–17 quarter. Current barley price exceeds the 10-year average of $252 per tonne by 22 per cent. A forecast fall in production is estimated to more than offset an increase in price, reducing projected barley GVP marginally.

On industry news, it may soon be possible to develop a new barley variety that is more resistant to extremes of heat and drought, frost, pests and diseases. A Western Barley Genetics Alliance has been formed, consisting of 10 countries including Australia. Such a large alliance of crop scientists has been necessary to map the very complex barley genome, which reportedly has around 5 billion genetic letters incorporated into 7 chromosomes. Mapping this genome will give researchers the capability to breed new high-performance barley varieties adapted to Australia's harsh environments.

Chickpeas

Forecast

The GVP of chickpeas is projected to be $633 million for 2017–18, around 17 per cent below the GVP for the final estimate for 2016–17 but 121 per cent higher than the average for the last 5 years.

Analysis and discussion

Area sown to chickpeas is estimated to be approximately 500 000 hectares in the 2017 calendar year, around 2 per cent above the estimate of 492 000 hectares in 2016. The large areas sown in both years was largely in response to high chickpea prices of over $800 per tonne.

Crop yield outlook is better than expected after a very dry autumn and winter up until end of July, with crops drawing on good subsoil moisture storage from Cyclone Debbie in March. However, crops will require an additional 25 millimetres of rain to maintain decent yields, currently forecast at around 1.5 tonnes per hectare, which is 16 per cent above the 10-year average of 1.34 tonnes per hectare (2007–08 to 2016–17). Current yield forecast is 13 per cent below the estimate for the previous season due to a wet winter in 2016. Overall production is projected fall 5 per cent to 776 000 tonnes, compared to a record 884 000 tonnes in 2016. Despite this, current production outlook still lies 175 per cent above the 10-year average of 282 000 tonnes.

There is some risk to the current yield projection due to a high incidence of chickpea-on-chickpea rotation for the past several seasons, which may increase the chance of crop disease such as ascochyta blight fungus. However, this seems to be well controlled with fungicides by growers and continued dry winter conditions.

Current chickpea price is around $815 per tonne, 6 per cent below the estimate for the March 2016–17 quarter of $867. Despite this, current price exceeds the 10-year average at $538 by 50 per cent. Lower anticipated production and slightly lower price is projected to take chickpea annual GVP 17 per cent down, albeit 300 per cent higher than the 10-year average of $152 million.

Fisheries

Forecast

The GVP for Queensland's fisheries for 2017–18 is forecast to be $397 million, 19 per cent higher than for 2016–17 and 9 per cent greater than the average for the past 5 years. The commercial fishing sector provides around 45 per cent of the forecast GVP at $178 million, while the aquaculture sector with $125 million and the recreational sector with $94 million[30] provide 31 per cent and 24 per cent respectively.

The forecast GVP for Queensland's aquaculture industry of $125 million is an increase of approximately 36 per cent from DAF's final estimate for 2016–17, and is 23 per cent greater than the average for the past 5 years.

Analysis and discussion

Commercial 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 based on three main sectors—crustaceans, finfish and molluscs. The crustacean sector is comprised of the total catch of prawns, bugs, crabs and tropical rock lobster, while the finfish sector is made up of inshore and offshore finfish. The mollusc sector is made up of the total catch of scallops and squid.

According to the most recent data available, the GVP of commercial fisheries contributed $189 million to Queensland's economy in 2016–17. This is a significant increase from 2015–16 (7 per cent), but represents a return to more usual revenue levels for Queensland. In terms of GVP, the 2016–17 financial year showed increasing or steady GVP results for crustaceans and finfish, while mollusc GVP continues a declining trend.

The 2017–18 forecast for GVP of Queensland commercial fisheries, based upon the last 5 years of GVP data, is $178 million. GVP had steadily declined from 2012–13 to 2015–16, but had increased in 2016–17 as discussed above.

Figures 25 and 26 indicate the output for fisheries managed by Fisheries Queensland for the major categories over the last 5 financial years up to the 2016–17 financial year.

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30 Valued conservatively at the wholesale price of the retained catch. For more discussion of the valuation of recreational fishing, see page 53 of *Queensland AgTrends* 2014–15, ‹https://publications.qld.gov.au/storage/f/2014-1127Too per cent3A59 per cent3A40.326Z/queensland-agtrends-2014-15.pdf›.
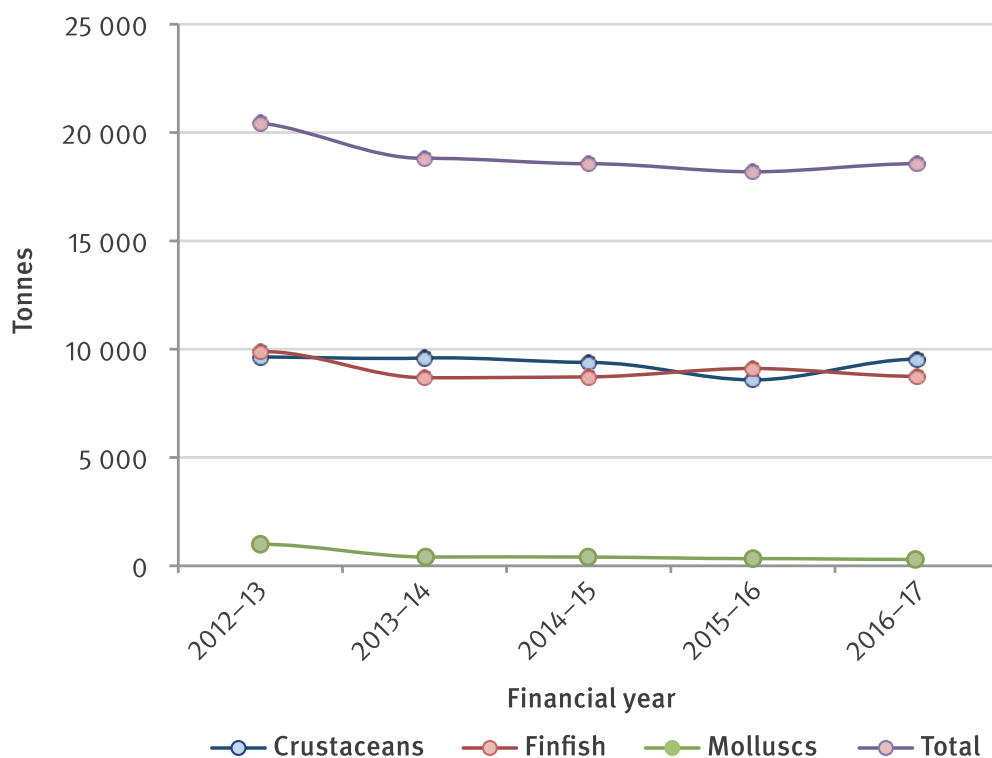
Figure 25: Queensland fisheries total catch by major categories, 2012–13 to 2016–17

Across the three major categories of commercial catch, the crustacean catch in 2016–17 increased by 9 per cent from the previous financial year. Both finfish and mollusc catches declined, by 4 per cent and 10 per cent respectively.

The actual catch of the major fisheries had declined to some extent over the previous 4 financial years by volume (Figure 25). However, 2016–17 shows an increase in total catch for the first time in 5 years, increasing by 2.2 per cent.

Crustaceans are the greatest contributor to Queensland fisheries GVP with $120 million, followed by the contribution of finfish at $65 million. Although the total catch of prawns (by weight) in any year, across subcategories, does not represent the largest contributor to the total catch (33 per cent, as opposed to inshore finfish at 36 per cent), it generally contributes double to the GVP of fisheries in Queensland. Prawns contributed $76 million to the total GVP of $189 million, followed by offshore finfish at $36 million and inshore finfish at $29 million.
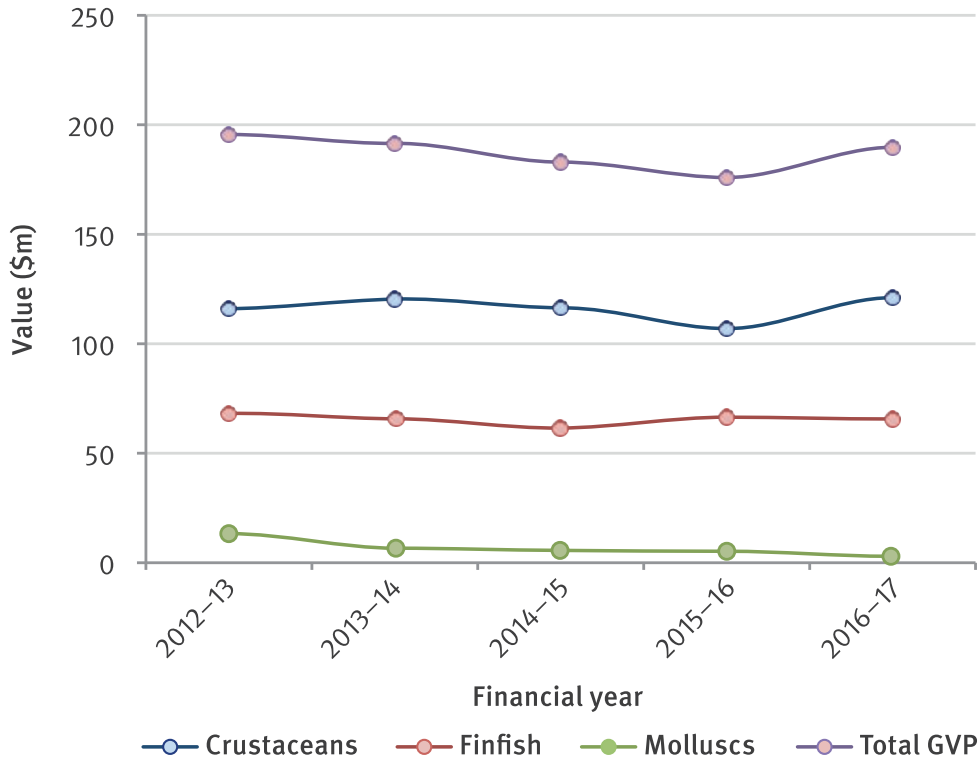
Figure 26: Queensland fisheries current GVP by major category, 2012–13 to 2016–17

There were increases in catch for prawns, rock lobster and squid for the 2016–17 financial year, compared to 2015–16. Catches in the remaining subcategories all declined. The total catch and value of the output, or GVP, for all subcategories is shown in Figures 27 and 28.
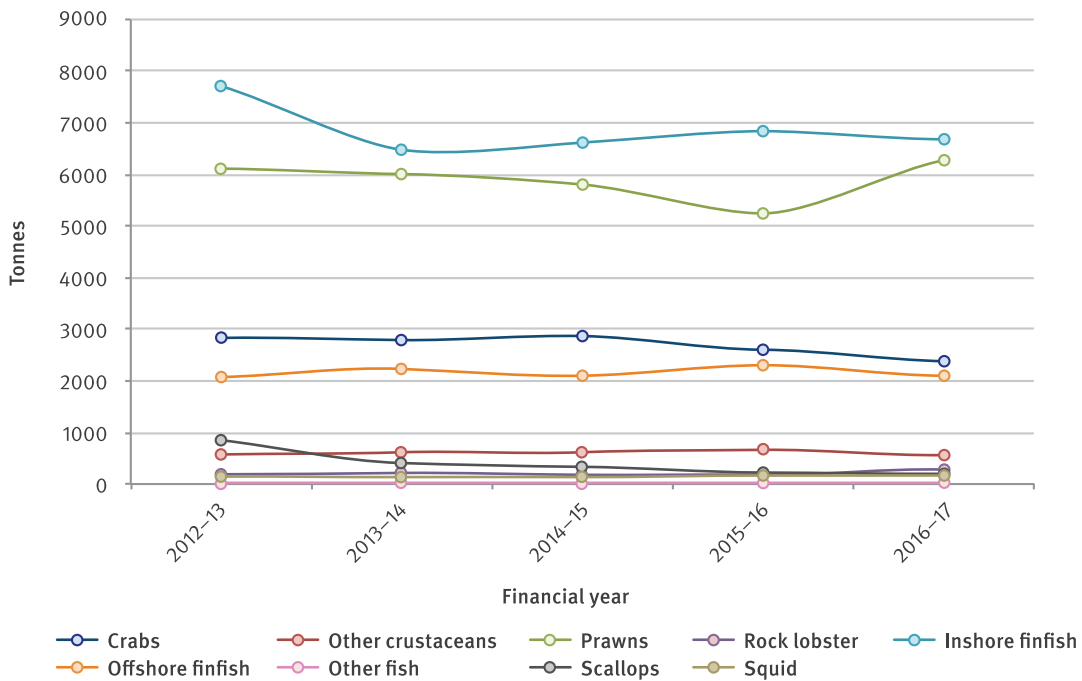

Figure 27: Queensland fisheries catch by subcategories, 2012–13 to 2016–17
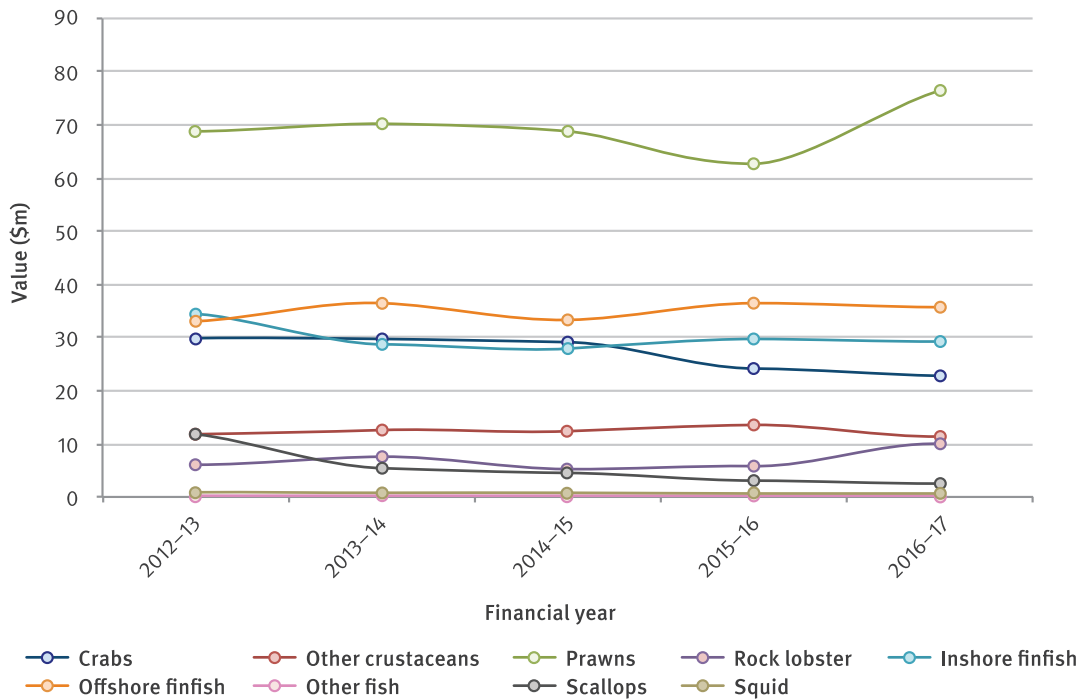
Figure 28: Queensland fisheries current GVP by subcategories, 2012–13 to 2016–17

Inshore finfish (6696 tonnes) and prawns (6300 tonnes) are the significant contributors to the overall catch in Queensland, followed by crabs (2351 tonnes) and offshore finfish (2077 tonnes) respectively.

There were declines in catches across the crab (9 per cent), inshore finfish (2 per cent), offshore finfish (10 per cent) and scallop (19 per cent) sectors for the 2016–17 financial year, compared to 2015–16. Mud crab catches have been low, most likely due to a series of dry years in the Gulf of Carpentaria with poor river flow. White spot disease may have also had an impact due to movement restrictions within Moreton Bay preventing export of live crabs outside of the zone. In an attempt to protect scallop stocks, a series of area closures, beginning in January 2017, were expected to reduce scallop catches by up to 40 per cent.

The most significant shift was in the prawn subcategory. In 2015–16, catches dropped to 5200 tonnes for prawns, while the previous 3 years remained steady at around 6000 tonnes. The 2016–17 catch was estimated at 6300 tonnes for prawns, a 17 per cent increase on 2015–16 catches.

The largest gains in GVP were realised in the prawn subcategory, increasing by 22 per cent ($14 million) from the previous financial year, and rock lobster, increasing by 75 per cent ($4.4 million) for the same period.
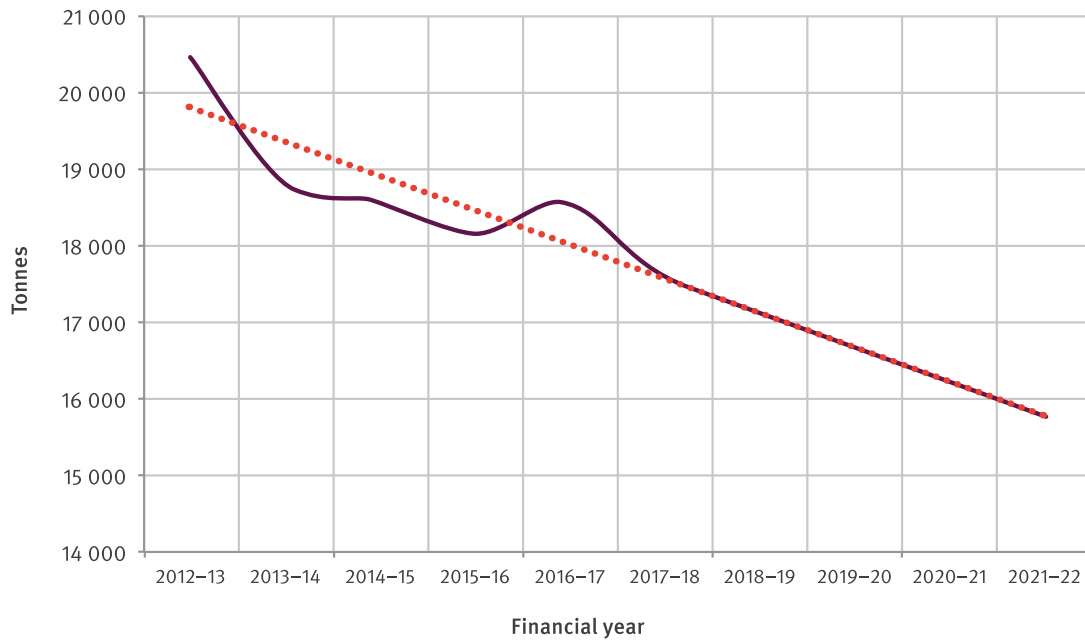
Figure 29: Queensland fisheries total catch trend analysis, 2012–13 to 2020–21

Further trend analysis on the major categories indicates that, based on the last 5 years of data, all categories will demonstrate some level of decline. For the 2017–18 financial year, the forecast is for crustaceans to decline by 5 per cent, finfish to decline by 2 per cent and mollusc catches to decline by 15 per cent. The mollusc catch forecast is significantly impacted by the decline of scallop catches from 830 tonnes in 2012–13 to 176 tonnes in 2016–17. However, scallop catches are likely to stabilise in coming years following the initial introduction of new management arrangements (i.e. area closures).

Aquaculture

The gross value of the Queensland aquaculture industry is forecast to be $125 million in 2017–18. This is an approximately 36 per cent increase from the DAF final estimate for 2016–17, and 23 per cent above the average over the last 5 years.

Prawn farming remains the largest sector of the Queensland aquaculture industry. This sector is expecting a significant decrease in production from the previous season, with the farmgate value of prawns predicted to reach $64.0 million. This would represent a 22.3 per cent decrease on the estimated 2016–17 value of $82.4 million.

Barramundi, the second-largest sector, is expected to increase production from the previous season. In 2017–18, the barramundi farming sector is predicted to achieve an estimated value of $32.0 million. This would represent a 6.6 per cent increase on the estimated 2016–17 value of $30.0 million. The freshwater fish sector (primarily silver perch, Murray cod and jade perch) is estimated to be valued at $2.5 million. This would represent a 56 per cent increase in the estimated 2016–17 value of $1.6 million.

Redclaw, oyster and hatchery sectors are expecting to increase slightly on production levels achieved in 2016–17.

Forestry

Forecast

The GVP for the forest-growing sector of the Queensland forest and timber industry for 2017–18 is forecast to be $270 million. This is 4 per cent higher than DAF's final estimate of $260 million for 2016–17, and 33 per cent higher than the average for the last 5 years.

DAF forecasts the first-round processing sector of the industry will contribute $435 million to the Queensland economy in 2017–18, 3 per cent above the 2016–17 final estimate of $423 million.

Together, the forest-growing and first-round processing sectors of the Queensland forest and timber industry are forecast to make a total contribution of $705 million to the Queensland economy in 2017–18.

Analysis and discussion

The increase in the forecast GVP for the forest-growing sector for 2017–18 relates to strong sales of softwood into domestic and export markets. Exports through the Port of Gladstone are expected to account for around one-quarter of the total volume of plantation softwood sold in 2017–18, which includes the continuing salvage of recoverable log timber from plantations at Byfield damaged by Cyclone Marcia.

The forecast sales of state-owned native forest timber in 2017–18 are 7 per cent less than the previous financial year. In 2016–17, sales of native cypress and hardwood log timber were 262 000 cubic metres, which is a 4 per cent increase over the 252 000 cubic metres sold in 2015–16. These variations in volumes are expected at the start of the next 5-year sales agreement cycle—the current cycle commenced in 2015–16 in one of the key supply zones.

Although no reliable data are available for privately owned native forest timber, anecdotal evidence suggests that approximately 50 per cent of Queensland's hardwood timber is sourced from these forests. It is expected that demand for hardwood log timber from privately owned land will remain strong for the foreseeable future, with a similar or slightly greater volume anticipated to be harvested in 2017–18.

The prospects for the forest and timber industry largely reflect the activity in the housing and construction sector, which accounts for most of the demand for domestically produced timber in Queensland. The record dwelling commencements in Queensland in 2015 of around 47 000 were sustained during 2016. Initial statistics for 2017 indicate that dwelling commencements have eased and are unlikely to continue at the rate seen in 2015–16. BIS Oxford Economics forecast that Queensland will experience an oversupply in the multi-residential market over the next 3 years, and this will result in a decline in new building activity.

In addition to cycles in building activity, sawn timber production in Queensland is also impacted by the balance of forest and timber industry imports and exports. Although only provisional 2016–17 information is available, overseas trade data shows very little increase in the value of imports of manufactured wood product over 2015–16 and an increase of 6 per cent in pulp and paper imports. For the same period, exports of manufactured wood products from Queensland decreased by approximately 15 per cent. There was, however, a very strong 30 per cent increase in the value of overseas exports of log material in the last financial year, which is mostly plantation softwood material.

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 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.

Special feature: The banana supply chain

National awareness of the Queensland banana industry is well reflected in the nickname for Queenslanders—banana benders. What is less well known is how significant the industry is for Queensland and nationally. Apples and bananas are the most important fruits consumed in Australia, contributing, respectively, 29 and 19 per cent of fruit serves in peoples' diet.[31] However, all bananas consumed in Australia are produced domestically, over 90 per cent of them in northern Queensland. The industry is worth around $580 million dollars at the farm gate—with upstream and downstream activities included the value is over $900 million.

The industry's concentration around Cairns is a double-edged sword. On the one hand, maximum production is achieved through ideal climate, supply chains are optimal through good transport links and a local critical mass of supporting upstream industries, and labour supply is augmented by backpackers attracted by northern Queensland's natural wonders. On the other hand, the recent occurrence of Panama disease was another reminder of exposure to biosecurity risks and cycle damage of the climatic ones.

Figure 30 illustrates the supply chain formed around banana production—input supplies, packaging, transport and distribution.
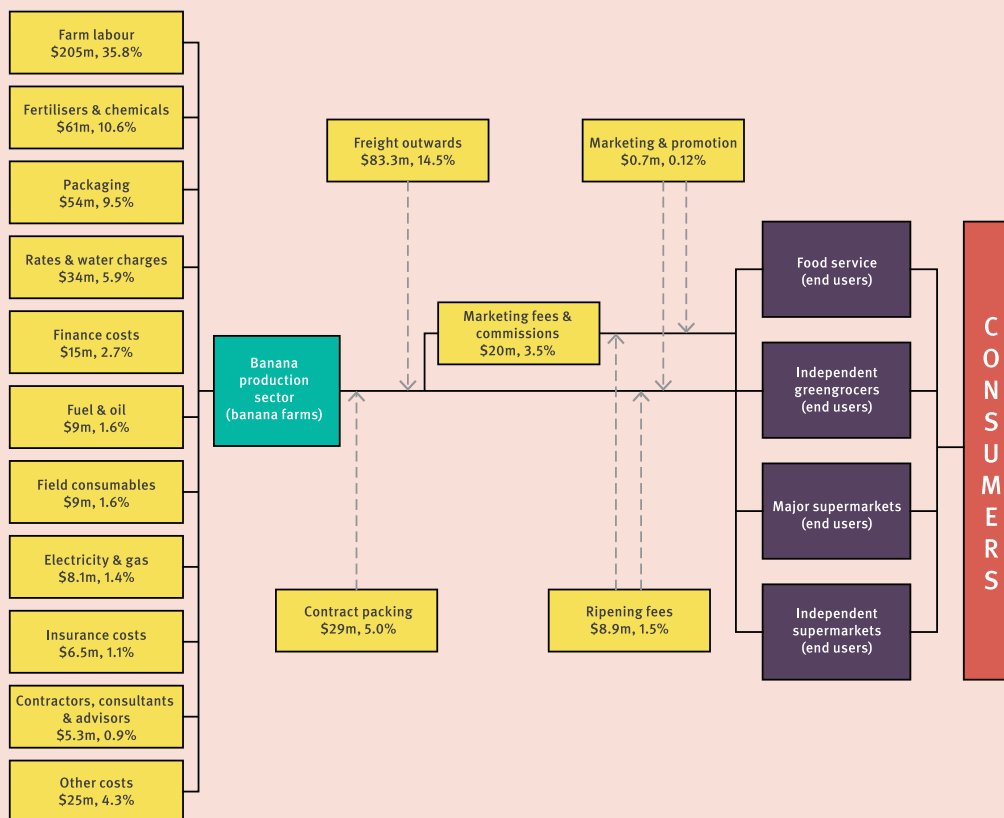

Figure 30: The banana supply chain and industry expenditure, 2009–10

Source: Hall and Gleeson 2013, *Value of the Australian banana industry to local and national economies*, Horticulture Australia Limited.

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31   ABS 2016, *4364.0.55.012—Australian health survey: consumption of food groups from the Australian dietary guidelines*, 2011–12.

Consumers' demand for perfection causes around 30 per cent of the crop to be unsold. This is a challenge being taken up by innovative producers, with the production of banana flour the latest attempt to make a dollar out of previously discarded, but perfectly healthy fruit.

Queensland plant breeders are racing against the clock to produce varieties that are less susceptible to Panama disease and other potentially devastating threats. Although Honduran-bread Goldfinger is resistant to the Panama virus, its commercial qualities are behind Cavendish—hopefully, in time, the two favourable characteristics can be combined.

Total primary industry GVP in the far north region economy is estimated at $1.509 billion, with banana industry GVP accounting for 35 per cent ($526 million) and other primary industries (including forestry and fisheries) worth around $983 million. Banana GVP accounts for approximately 3.4 per cent of the far north region gross state product, estimated at $15.4 billion.
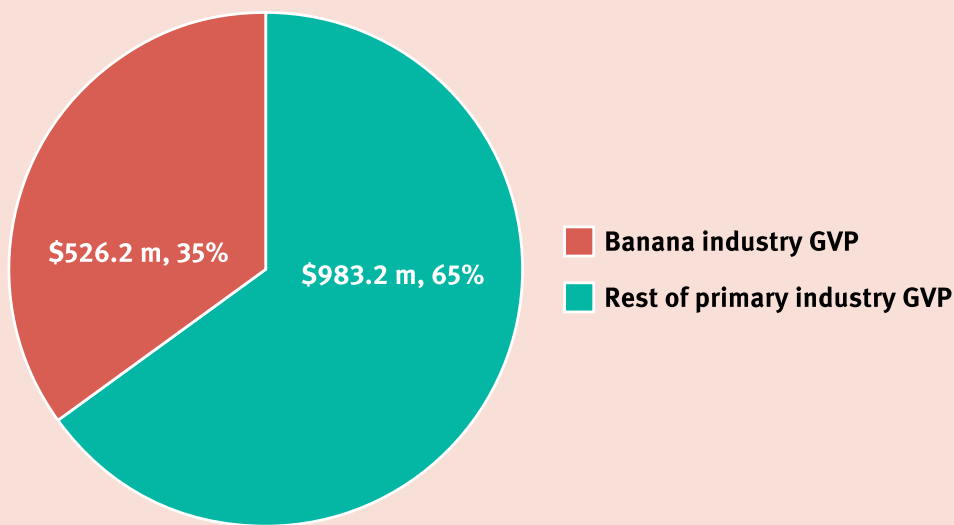

Legend:
- Banana industry GVP
- Rest of primary industry GVP

Pie chart labels: $526.2 m, 35% | $983.2 m, 65%

Figure 31: Far north region banana industry GVP ($526 million) as a proportion of total primary industry GVP ($1.509 billion), 2016–17

Sources:

Far north and northern region GVPs: Ergashev, A & Telford, P 2017, *Overview of the Queensland banana supply chain: risks & policy implications*, Department of Agriculture and Fisheries, Brisbane.

Gross state product values of far north and northern Queensland region economies: ABS price indexed *2005–06 Queensland input-output tables*, converted to 2016–17 dollars with estimated Queensland regional gross state product shares; ABS cat. no. 5220.0 Queensland GSP 2015–16 = $316.2b; $320b approximate GSP assumed for 2016–17.

Far north Queensland gross state product share of state total assumed at 4.8 per cent; northern Queensland gross state product share assumed at 5 per cent.

Total primary industry GVP in the northern region economy is estimated at $1.154 billion, with banana industry GVP accounting for 4 per cent ($45 million) and other primary industries (including forestry and fisheries) worth around $1.108 billion. Banana GVP accounts for approximately 0.17 per cent of the northern region gross state product estimated at $16.1 billion.
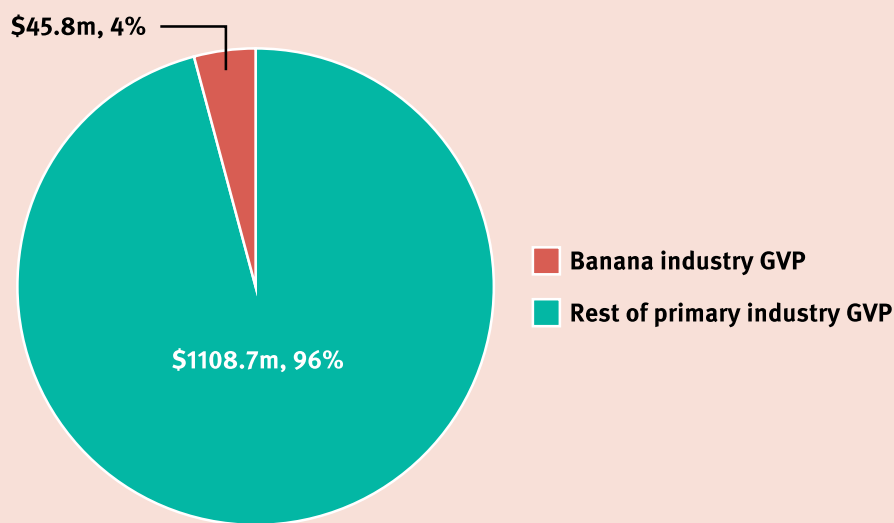
$45.8m, 4%

$1108.7m, 96%

■ **Banana industry GVP**

■ **Rest of primary industry GVP**

Figure 32: North region banana industry GVP ($45 million) as a proportion of total primary industry GVP ($1.154 billion), 2016–17

Sources: as for Figure 31.

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 DAF.

- 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

Queensland AgTrends 2017–18
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