

Agricultural overview

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\$58b
Value of
production
in 2018–19



Agricultural overview

The value of farm production is forecast to decline by 4% in 2018–19, driven mainly by lower production of grains, oilseeds and pulses.

- At the national level, farm profitability is expected to be lower in 2018–19 compared with the previous two years, but remain comparatively high.
- Assuming seasonal conditions improve, agricultural production is forecast to recover in 2019–20 and then grow slowly over the medium term.
- The volume of farm production in 2023–24 is projected to reach \$64 billion, below the 2016–17 peak of \$65 billion.
- Risks to export earnings have increased. Trade tensions could lower income growth in Australia's largest export markets, and competition is increasing in many important markets.

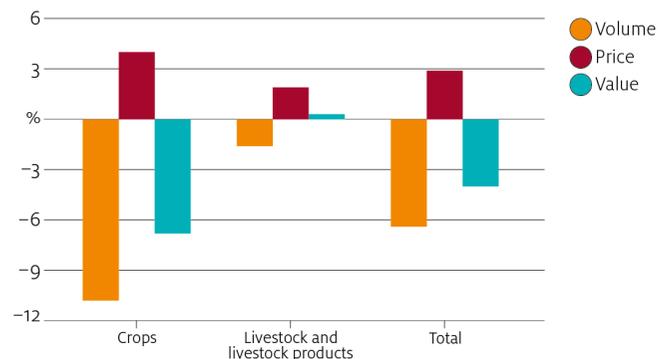
Farm performance in 2018–19

The national agricultural production system is resilient and well attuned to the variable Australian climate. However, the ongoing drought in the eastern states and flooding in northern Queensland have been devastating for those affected.

At a national level, the volume of farm production (in 2018–19 dollars) is expected to have declined by 6%, driven by an 11% reduction in the volume of crop production (see [Introduction of chain volume measures of farm production](#)). Drought in the eastern states significantly reduced the 2018–19 winter crop, but one of the largest Western Australian harvests on record has provided a buffer to the national total.

The volume of production for livestock and livestock products is expected to decline by 2% in 2018–19 as a result of several factors. Milk and wool production have been affected by the drought, and a significant decline in live animal exports also contributed to the fall. This is largely because of a cessation in live sheep exports during the northern hemisphere summer months. Floods in Queensland in February 2019 could also reduce live cattle exports. Despite rises in beef and mutton production, growth in total meat production is expected to be constrained by flock and herd rebuilding.

Growth in the value of farm production, by price and volume, 2018–19



Note: Chained Fisher volume and price indexes, reference year 2018–19.

Sources: ABARES; Australian Bureau of Statistics

In 2018–19 the value of farm production is expected to decline by 4% to \$58 billion. Improved commodity prices are cushioning this decline. International and domestic prices for crops have been rising from low levels. In 2018–19 grain prices are expected to increase by 11% on average and contribute to a 3% rise in farmgate prices. Strong export demand for wool and sheep meat is contributing to a small overall rise in the prices of livestock and livestock products.

Drought in south-eastern Australia the dominant influence on farm incomes in 2018–19

At the national level, farm profitability is expected to be lower in 2018–19 compared with the previous 2 years. This is due to the effects of drought in south-eastern Australia on production and costs.

However, farm incomes are expected to remain comparatively high overall. This is because generally favourable prices received for most

commodities and a lower Australian dollar are boosting export returns.

Average to above average production outside drought-affected regions is also supporting farm incomes at the national level. The average farm cash income for all broadacre farms is projected to fall by 18% from \$201,300 per farm in 2017–18 to \$173,000 per farm in 2018–19. This is still well above the longer-term average of \$140,000 per farm in real terms for the 10 years to 2017–18.

In 2018–19 farm cash incomes for around 50% of Australian broadacre farms are expected to be lower than they were in 2017–18. Farm profitability in 2018–19 is expected to be much worse in parts of Queensland, New South Wales, Victoria and South Australia, where the drought is most severe. Lower production from winter crops in eastern Australia is contributing to higher prices for fodder and feed-grains across the country and increased expenditure on purchased feed for livestock in all regions. High prices for irrigation water in the Murray–Darling Basin are also affecting farm profitability in the irrigation sector.

In contrast, some states and regions are benefiting from high prices for feed grains and fodder caused by drought. In states and regions not directly affected by drought, average farm incomes in 2018–19 are expected to be above to well above longer-term average levels. For example, average farm cash incomes on broadacre farms in Western Australia are projected to increase from \$368,800 per farm in 2017–18 to \$490,000 per farm in 2018–19.

Across Australia, the sheep industry is benefiting from high prices for sheep, lambs and wool. Average farm cash incomes on sheep industry

farms are projected to increase from \$131,600 per farm in 2017–18 to \$142,000 per farm in 2018–19.

Lower farm cash incomes are also expected for around 75% of Australian dairy farms in 2018–19. Average farm cash incomes are projected to decline in every state except Tasmania, as a result of lower milk production and higher expenditure on purchased feed and, in some regions, irrigation water. At the national level, the average farm cash income for dairy farms is projected to decrease from \$160,900 per farm in 2017–18 to \$93,000 per farm in 2018–19.

For more detail on the performance of broadacre and dairy farms see the article on [Farm performance](#).

Volume of farm production to remain below 2016–17 peak

The volume of farm production is forecast to increase over the outlook period to \$64 billion by 2023–24 (in 2018–19 dollars). This is lower than the record \$65 billion achieved in 2016–17 following the record winter crop harvest.

In 2019–20 the volume of farm production is forecast to increase by 4% to \$60 billion. The forecast assumes a return to average seasonal conditions across Australia and an associated increase in crop production. This is forecast to be slightly offset by a decline in livestock slaughter because improved pasture availability and relatively high livestock prices will encourage herd and flock rebuilding. From 2020–21 to 2023–24 the volume of farm production is forecast to increase by 1.5% per year, in line with the historical average rate of [agricultural productivity growth](#).

Volume of farm production, 1989–90 to 2023–24



f ABARES forecast. z ABARES projection.

Note: Chained Fisher volume index, reference year 2018–19.

Sources: ABARES; Australian Bureau of Statistics

There is significant uncertainty around the 2019–20 forecast for production. Relative soil moisture levels are extremely low to below average across most of Australia for this time of year, following an extended period of hot and dry conditions. Winter crop plantings, which typically begin in April and represent 25% of the total volume of farm production, require sufficient and timely rainfall. The Bureau of Meteorology's mid-month climate outlook for March to May 2019 indicates an equal chance of above average or below average rainfall across Australia's cropping regions.

Parts of northern Australia have had record-breaking rainfall and flooding, but others have been very dry. Cattle herd and sheep flock rebuilding is forecast, but this will depend on pasture growth. A run of good growing seasons could result in [the cattle herd increasing](#) to 30 million head by 2023–24, but a run of poor seasons could result in a herd of less than 25 million head.

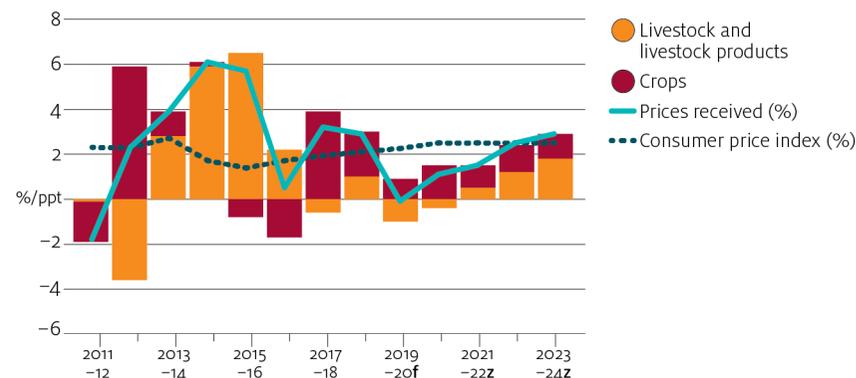
Slower growth in farmgate prices over the outlook period

In 2019–20 farmgate prices are forecast to be virtually unchanged overall, with increases in average prices for crops offsetting a decline in average prices for livestock and livestock products. Prices for cattle, lamb and wool are forecast to decline but to remain historically high after increasing significantly over recent years.

Between 2020–21 and 2023–24 farmgate prices are forecast to rise, supported by an increase in the unit values of livestock and livestock products. Growth in crop prices are assumed to remain constrained over the outlook period due to strong growth in global corn, oilseeds and wheat production over the same period.

The outlook for farmgate prices is subject to considerable uncertainty around unforeseen supply shocks in Australia and globally. These include variable climate, natural disasters, disease outbreaks and major policy shifts. The balance of risks is to the upside for prices, especially crop prices. However, Australia has a more variable climate than many major competitors, so a greater focus on costs that can be controlled at the enterprise level will be critical to maintaining farm incomes over the outlook period.

Growth in prices received by sector and inflation, 2011–12 to 2023–24



f ABARES forecast. z ABARES projection.

Note: Prices received is a chained Fisher price index, reference year 2018–19 = 100.

Sources: ABARES; Australian Bureau of Statistics

Downside risks cloud the outlook for agricultural export earnings

Export earnings are forecast to decline to \$45 billion in 2019–20, following an expected 6% decline in 2018–19. Over the outlook period, export earnings are projected to increase by 0.8% per year to reach \$47 billion by 2023–24 (in 2018–19 dollars).

The forecast gradual rise in export earnings is underpinned by assumed strong population and income growth in Australia's major export markets over the outlook period. However, the rise in [downside risks to global economic growth](#) over 2018 have increased the uncertainty for Australian agricultural export earnings. In particular, trade tensions between China and the United States (our largest and third-largest export markets, respectively) could affect

global income growth and reduce import demand from not only the United States and China but also from across Asia.

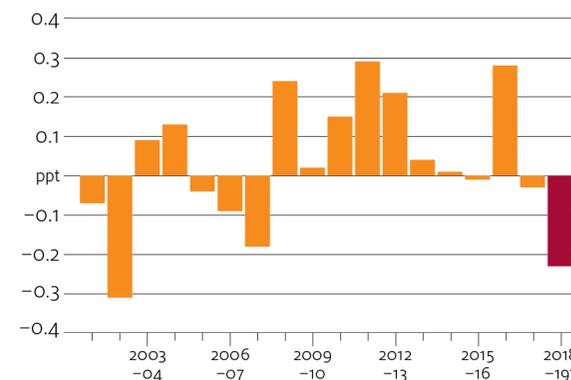
Increasing competition from major exporters in grains and livestock markets is also expected to weigh on export earnings. Increasing global supplies are reducing demand for Australian agricultural goods in some key export markets and are projected to exert downward pressure on export prices over the medium term. For example, increased US beef supply is forecast to reduce demand for Australian beef in the United States and Japan in 2019–20 and 2020–21. [Low-cost wheat exporters](#), such as Argentina and the Russian Federation, are expected to compete strongly with Australia in price-conscious Asian grain markets. New trade agreements between agricultural exporters and Australia's key trading partners, such as the EU–Japan Economic Partnership Agreement, are also increasing competition.

Lower export volumes to detract from Australian economic growth in 2018–19

Australian agricultural production and exports are expected to decline in 2018–19 as a result of dry seasonal conditions in the eastern states. ABARES estimates that lower farm production could subtract 0.2 percentage points from real GDP growth in 2018–19.

Exports of rural goods represent about 14% of the total volume of goods and services exported annually. Lower farm production could subtract 0.9 percentage points from goods and services exports growth in 2018–19.

Contribution of rural goods exports to real GDP growth, 2001–02 to 2018–19



f ABARES forecast.

Note: Laspeyres chain-volume measures, reference year 2015–16.

Sources: ABARES; Australian Bureau of Statistics

The forecast fall in export volumes in 2018–19 will be partially offset by export prices, which are expected to increase by 4%. This will contribute positively to Australia's terms of trade and support agricultural incomes.

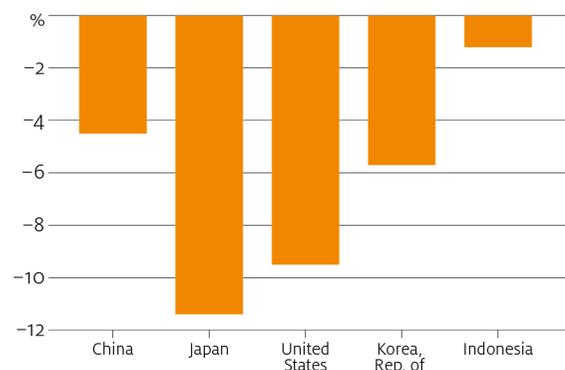
Favourable prices and lower Australian dollar assisting export earnings in 2018–19

Rising grain prices, high livestock prices and a lower Australian dollar will help support earnings in the face of much lower production and higher input costs, including feed and water.

The lower Australian dollar has provided a boost to Australian agricultural export earnings. Over 2018 the Australian dollar depreciated by 10% against the US dollar and 6% on a trade-weighted

basis. This includes an 11% decline against the Japanese yen and a 6% decline against the Korean won.

Change in Australian dollar exchange rates, major export markets, 2018



Note: Countries organised in descending order of value of Australian agricultural exports.
Source: Reserve Bank of Australia

The recent decline in the Australian dollar has helped Australian agricultural goods compete. This includes Australian beef, for which Japan and Korea are major importers. The lower Australian dollar has also increased the average unit return on goods exported in US dollars, helping to raise Australian agricultural export prices through 2018. ABARES monthly agricultural export price index increased by 12% year-on-year in December 2018.

Agricultural export price and the Australian dollar, December 1990 to December 2018



Note: Chained Fisher price index, reference year 1990 = 100.
Sources: ABARES; Australian Bureau of Statistics; Reserve Bank of Australia

During the drought years of 2002–03 and 2006–07, the Australian dollar appreciated. In contrast, the Australian dollar has depreciated during the 2018–19 drought. The Australian dollar was much lower in 2002–03, but its 12% appreciation against the US dollar meant that farmers and exporters were not able to fully benefit from rising commodity prices, which are typically expressed in US dollars.

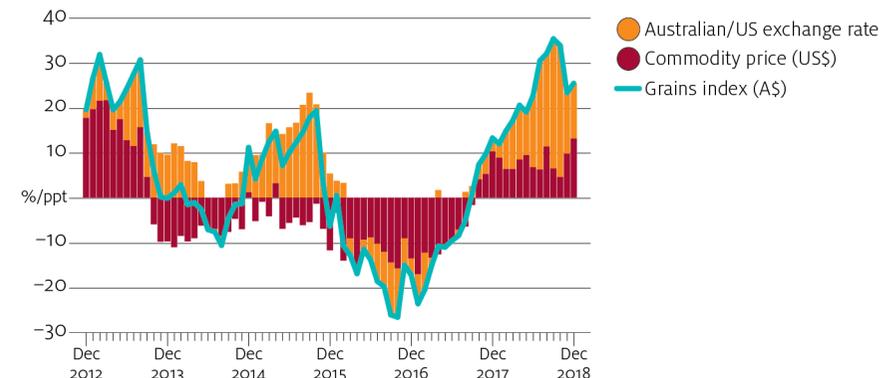
Australian exchange rate against US dollar, drought years, 2002–03 to 2018–19



f ABARES forecast.
Sources: ABARES; Reserve Bank of Australia

During the 2015–16 drought, the depreciation of the Australian dollar was beneficial for Australian export earnings and farm incomes because it largely offset a sharp decline in the international price for grain. The higher price received for Australian grain exports since September 2017 has also benefited from a depreciation in the Australian dollar.

Contribution to growth of grains export unit value index, December 2012 to December 2018



Note: Monthly Fisher export price index, reference year 1989–90 = 100.
Sources: ABARES; Australian Bureau of Statistics; Reserve Bank of Australia

Two-thirds of agricultural exports shipped to Asia in 2017–18

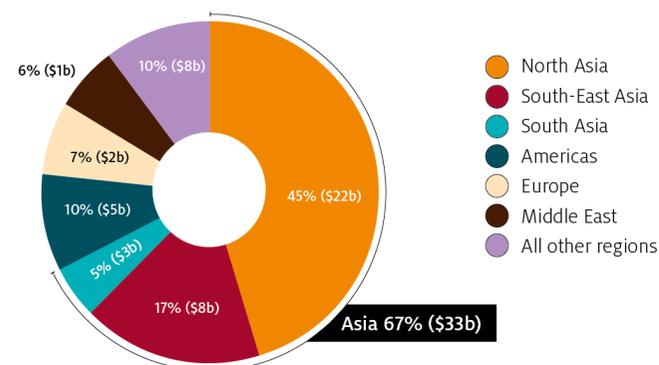
In 2017–18 Australia's largest agricultural export market was China, with trade valued at \$11.8 billion. This was followed by Japan (\$4.9 billion), the United States (\$3.9 billion) and the Republic of Korea (\$2.9 billion).

Regionally, Asia is Australia's largest market for agricultural goods, accounting for approximately 67% of all Australian agricultural exports in 2017–18. The second-largest regional market is the Americas—dominated by trade to the United States. Agricultural exports to the Americas accounts for about 10% of Australia's total agricultural exports. Europe and the Middle East represent 7% and 6% of Australia's agricultural exports, respectively.

North Asia, which includes most of Australia's largest markets (China, Hong Kong, Japan, the Republic of Korea and Taiwan), accounts for two-thirds of all Australian goods destined for Asia. Approximately 26% of exports to Asia are destined for markets in South-East Asia and 8% is exported to Southern Asia, to countries such as Bangladesh, India and Pakistan.

The significant proportion of Australian agricultural exports to Asia has been determined by Australia's geographic proximity relative to other major exporters, and the pace of income and population growth in Asia compared with other regions. The disparity between Australian exports to North Asia and South-East Asia compared with Southern Asia can be partially explained by the differing stages of economic development in these regions and by differing domestic agricultural policies. Countries in North Asia and South-East Asia have relatively open economies. They also have higher per person average incomes, enabling them to import high-quality agricultural products from countries such as Australia.

Value share of Australian agricultural exports, by region, 2017–18



Note: Components may not total 100 due to rounding.

Source: ABARES; Australian Bureau of Statistics

Little change in 2018 US farm bill

The Agriculture Improvement Act of 2018 (2018 farm bill) provides funding for programs to support US agricultural producers, the food stamp program and the administration of crop insurance. A new farm bill is passed every 5 to 6 years.

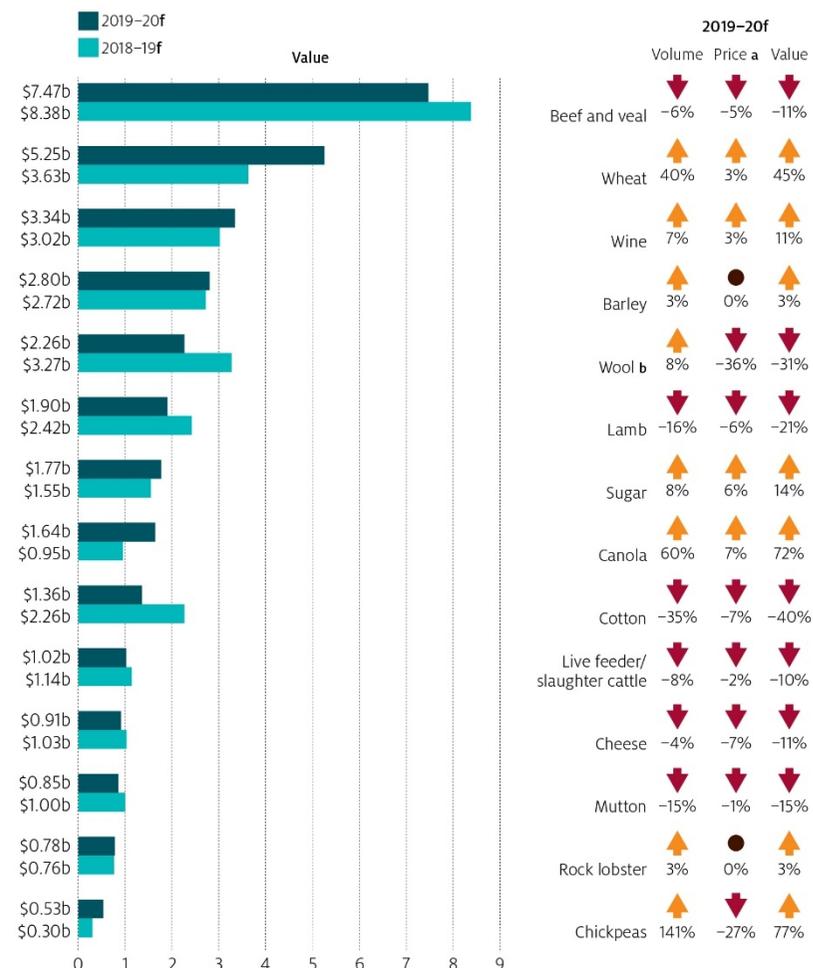
The 2018 farm bill is touted as a policy evolution rather than revolution. The bill includes a new Priority Trade Promotion, Development, and Assistance program that will consolidate and supplement existing trade and export programs. Other significant changes include replacement of the Dairy Margin Protection Program with the Dairy Margin Coverage program. This new program is intended to support smaller producers by modifying coverage levels and premiums and will apply to all dairy farmers. A new Animal Disease Prevention and Management program aims at reducing the

risk of foot-and-mouth disease, bolstering testing capacity at borders and focusing on overall food security. The 2018 farm bill also includes industrial hemp farmers for the first time, allowing those producers to qualify for crop insurance. Other aspects of the crop insurance program remain unchanged.

The commencement of a new farm bill also gives farmers the opportunity to choose either Agricultural Risk Coverage or Price Loss Coverage programs for the 2019 to 2023 crop years. These programs provide grain farmers with support payments if prices fall below certain thresholds. The Agricultural Risk Coverage program is based on revenue per acre of crop based on a reference year. The Price Loss Coverage program provides farmers with payments based on the gap between the reference price and market price of the crop.

The 2018 farm bill remains separate from the farm support package announced in mid 2018 in response to China's introduction of tariffs on US agricultural products.

Major Australian agricultural commodity exports



a All commodity prices are expressed as export unit returns in A\$. **b** Greasy wool. Export unit returns are obtained by dividing the value and quantity of the commodity exported. **f** ABARES forecast.

Introduction of chain volume measures of farm production

As of *Agricultural commodities: March quarter 2019*, ABARES is using chain volume measures (CVMs) to provide an estimate of Australian farm production that is free of the direct effect of price changes. This follows the introduction of CVMs for agricultural exports in March 2018.

CVMs allow the aggregation of different types of commodities into broad groupings, such as total farm production, crop production, and livestock and livestock products production. This is otherwise impossible because different commodities have different physical measurements.

Aggregation across commodities allows a top-down view of economic activity, informs users of the performance of different commodity groups and shows the extent to which changes in quantities and prices drive the nominal value of growth in farm production.



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

		2016–17	2017–18 s	2018–19 f	2019–20 f	2020–21 z	2021–22 z	2022–23 z	2023–24 z
Exchange rate	US\$/A\$	0.75	0.78	0.72	0.73	0.74	0.74	0.74	0.74
Australian export unit returns a									
Agriculture	index	100.0	102.7	107.1	104.1	104.7	106.7	109.3	110.3
real b	index	100.0	100.7	102.9	97.8	96.0	95.4	95.3	93.9
Value of exports									
Agriculture	A\$m	48,941	48,753	46,792	46,408	48,548	50,213	52,394	53,554
real b	A\$m	50,932	49,776	46,792	45,387	46,321	46,742	47,582	47,449
Crops	A\$m	27,939	24,818	22,921	25,624	27,196	28,349	29,262	29,032
real b	A\$m	29,076	25,338	22,921	25,060	25,949	26,389	26,575	25,723
Livestock	A\$m	21,002	23,935	23,871	20,784	21,352	21,864	23,132	24,522
real b	A\$m	21,856	24,437	23,871	20,326	20,373	20,353	21,008	21,727
Fisheries products	A\$m	1,435	1,575	1,562	1,648	1,713	1,765	1,827	1,893
real b	A\$m	1,494	1,608	1,562	1,611	1,635	1,643	1,659	1,677
Gross value of production c									
Farm	A\$m	61,614	59,994	57,828	60,074	61,587	63,419	66,062	68,883
real b	A\$m	64,120	61,252	57,828	58,752	58,763	59,035	59,996	61,031
Crops	A\$m	33,515	30,853	28,616	32,396	33,479	34,520	35,551	36,560
real b	A\$m	34,878	31,500	28,616	31,683	31,943	32,133	32,286	32,393
Livestock	A\$m	28,099	29,141	29,212	27,678	28,108	28,899	30,511	32,322
real b	A\$m	29,242	29,752	29,212	27,069	26,819	26,901	27,709	28,638
Fisheries products	A\$m	3,058	3,148	3,163	3,299	3,394	3,492	3,620	3,751
real b	A\$m	3,182	3,214	3,163	3,227	3,238	3,251	3,288	3,323
Forestry products	A\$m	2,571	2,553	2,575	2,620	2,626	2,635	2,632	2,649
real b	A\$m	2,676	2,607	2,575	2,562	2,505	2,453	2,390	2,347
Volume of production d									
Farm	index	131.3	123.5	115.4	120.6	122.3	124.1	126.2	128.0
Crops	index	164.5	138.9	123.0	138.6	139.3	141.2	142.2	143.3
Livestock	index	103.7	109.1	107.3	103.9	106.5	108.2	111.3	113.6
Forestry	index	156.7	155.5	153.7	153.5	151.5	149.6	146.7	145.0
Production area and livestock numbers									
Crop area									
grains, oilseeds and pulses	'000 ha	24,373	23,436	19,232	22,655	22,741	22,873	22,863	22,854
Sheep	million	72.1	68.8	66.1	68.5	70.8	73.0	73.7	74.2
Cattle	million	26.2	25.8	25.5	25.5	25.7	26.0	26.4	26.9
Farm sector									
Net cash income e	A\$m	27,408	26,360	21,254	22,284	22,248	22,606	23,567	24,843
real b	A\$m	28,522	26,913	21,254	21,793	21,228	21,043	21,403	22,012
Net value of farm production g	A\$m	21,786	20,630	15,404	16,302	16,117	16,321	17,125	18,241
real b	A\$m	22,672	21,063	15,404	15,944	15,378	15,193	15,553	16,162
Farmers' terms of trade h	index	109.5	109.9	105.0	104.2	102.7	101.8	101.5	102.2

a Base: 2016–17 = 100. b In 2018–19 Australian dollars. c For a definition of the gross value of farm production see Table 13. d Chain-weighted basis using Fisher's ideal index with a reference year of 1997–98 = 100. e Gross value of farm production less total cash costs. f ABARES forecast. g Gross value of farm production less total farm costs. h Ratio of index of prices received by farmers and index of prices paid by farmers, with a reference year of 1997–98 = 100. s ABARES estimate. z ABARES projection.

Sources: ABARES; Australian Bureau of Statistics; Reserve Bank of Australia