

Australian crop report

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The next issue of *Australian crop report* is scheduled to be released on 11 September 2018.

In the next issue:

2018-19 winter crop area and production forecasts updated

2018–19 summer crop area and production forecasts

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National overview

The start to the 2018–19 winter crop season was mixed. Autumn rainfall was generally well below average but timely rainfall in May in most cropping regions in Western Australia, South Australia, Victoria and southern New South Wales facilitated sowing of winter crops in these regions. However, seasonal conditions in most cropping regions in Queensland and northern New South Wales were drier than average throughout autumn, which significantly constrained planting intentions. With lower layer soil moisture at the end of autumn below to very much below average across most cropping regions in Australia, sufficient and timely winter rainfall will be critically important for crop development.

Winter rainfall is likely to be around average in cropping regions in Western Australia but below average in most other cropping regions, according to the latest three-month rainfall outlook for June to August 2018 issued by the Bureau of Meteorology on 31 May 2018.

Total area planted to **winter crops** is forecast to decrease by 4 per cent to 21.1 million hectares as a result of forecast declines in New South Wales, Queensland and Western Australia. Favourable prices of cereal feed grains relative to prices of oilseeds and pulses and drier than average seasonal conditions are expected to result in a significant increase in area planted to barley and falls in area planted to canola, chickpeas and lentils.

For the major winter crops, area planted to **wheat** is forecast to fall by around 2 per cent to 12 million hectares, area planted to **barley** is forecast to increase by 10 per cent to 4.3 million hectares and **canola** is expected to fall 10 per cent to 2.5 million hectares. Among other crops, area planted to **chickpeas** is expected to fall significantly by 53 per cent to 528,000 hectares and area planted to **oats** is expected to fall 7 per cent to 693,000 hectares.

Winter crop production forecast to fall slightly in 2018–19 to 37.7 million tonnes, assuming winter rainfall will be timely, particularly in areas where below average winter rainfall is likely. For the major winter crops, **wheat** production is expected to increase by 3 per cent to 21.9 million tonnes, **barley** production is forecast to increase by 3 per cent to 9.2 million tonnes, and **canola** production is forecast to fall by 16 per cent to 3.1 million tonnes. Barley production is forecast to increase more modestly than might be expected given the forecast increase in planted area because barley yields in Western Australia are forecast to fall from above average back to average. Amongst other crops, **chickpeas** production is forecast to decline 40 per cent to 616,000 tonnes and **oats** production is forecast to remain largely unchanged at 1.1 million tonnes.

Table 1 Winter crop area, Australia, 2008–09 to 2018–19

Year	Unit	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
2008-09	'000 ha	6,295	3,492	1,208	3,979	7,899	22,901
2009-10	'000 ha	6,106	3,488	1,173	3,783	8,271	22,844
2010-11	'000 ha	6,158	3,457	1,217	3,821	7,715	22,392
2011-12	'000 ha	5,969	3,411	1,205	3,838	8,252	22,693
2012-13	'000 ha	5,852	3,457	1,222	3,776	8,097	22,421
2013-14	'000 ha	5,314	3,283	1,105	3,448	8,249	21,420
2014-15	'000 ha	5,491	3,304	995	3,639	8,313	21,760
2015-16	'000 ha	5,375	2,915	1,049	3,152	7,771	20,283
2016-17	'000 ha	6,062	3,231	1,375	3,904	8,531	23,123
2017–18 s	'000 ha	5,496	3,333	1,309	3,505	8,441	22,101
2018-19 f	'000 ha	4,798	3,378	1,099	3,588	8,262	21,148
% change 2017–18 to 2018–19		-13	1	-16	2	-2	-4

f ABARES forecast. **s** ABARES estimate.

Notes: Includes barley, canola, chickpeas, faba beans, field peas, lentils, linseed, lupins, oats, safflower, triticale and wheat. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Table 2 Winter crop production, Australia, 2008–09 to 2018–19

Year	Unit	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
2008-09	kt	9,438	3,887	2,326	4,863	13,785	34,378
2009-10	kt	7,787	5,889	1,617	7,035	12,943	35,344
2010-11	kt	14,784	7,625	1,821	9,316	8,044	41,672
2011-12	kt	11,952	7,352	2,329	7,371	16,600	45,670
2012-13	kt	11,123	6,886	2,156	6,470	11,243	37,934
2013-14	kt	9,773	6,773	1,516	7,221	16,510	41,878
2014-15	kt	10,445	5,117	1,464	7,439	14,662	39,197
2015-16	kt	11,624	3,568	2,104	6,105	14,206	37,687
2016-17	kt	15,510	9,513	3,159	10,661	17,737	56,674
2017–18 s	kt	7,181	7,634	1,390	6,945	14,619	37,824
2018-19 f	kt	8,277	6,146	1,609	7,226	14,326	37,676
% change 2017–18 to 2018–19		15	-19	16	4	-2	-0

f ABARES forecast. **s** ABARES estimate.

Notes: Includes barley, canola, chickpeas, faba beans, field peas, lentils, linseed, lupins, oats, safflower, triticale and wheat. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Total **summer crop** production is estimated to have increased by 13 per cent in 2017–18, driven by increased sorghum and cotton production.

Production of **grain sorghum** is estimated to have risen by 45 per cent in 2017–18 to 1.4 million tonnes, reflecting increases in planted area. Planted area rose by 44 per cent to 531,000 hectares.

Area planted to **cotton** is estimated to have declined by 10 per cent in 2017–18 to 500,000 hectares. Despite the fall in planted area, production is estimated to have risen by 17 per cent to around 1 million tonnes of lint and 1.5 million tonnes of seed.

Rice production in 2017–18 is estimated to have been 631,000 tonnes, a reduction of 22 per cent from the previous year. This fall was the result of a reduction in planted area.

Table 3 Summer crop area and production, Australia, 2007–08 to 2017–18

Year	New South Wales		Queensla	ınd	Australi	a
	'000 ha	kt	'000 ha	kt	'000 ha	kt
2007-08	398	1,668	791	2,877	1,199	4,567
2008-09	402	1,430	746	2,350	1,156	3,794
2009-10	381	1,405	514	1,342	903	2,764
2010-11	713	2,514	790	1,901	1,514	4,446
2011-12	757	3,064	783	2,379	1,558	5,494
2012-13	711	3,205	686	2,250	1,412	5,506
2013-14	568	2,317	559	1,469	1,139	3,847
2014-15	435	2,044	696	2,134	1,149	4,262
2015-16	412	1,656	624	1,821	1,054	3,563
2016-17	662	2,286	566	1,280	1,247	3,667
2017–18 s	614	2,324	711	1,814	1,334	4,158
% change 2016–17 to 2017–18	-7	2	26	42	7	13

s ABARES estimate.

Note: State production includes cottonseed, grain sorghum, corn (maize), mung beans, rice, peanuts, soybeans and sunflowers. Total for Australia also includes navy beans, and small areas and volumes of summer crops in other states. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Climatic and agronomic conditions

During autumn 2018, rainfall was average to extremely low in cropping regions in Queensland and well below average in cropping regions in northern New South Wales, Victoria and South Australia. Rainfall was severely deficient to extremely low in many cropping areas in central and southern New South Wales and Western Australia (Map 1).

Rainfall percentiles Northern Territory Severe deficiency Extremely low 10 - 20 Well below average Queensland Western Australia 20 - 30 Below average 30 - 70 Average South Australia 70 - 80 Above average **New South** 80 - 90 Well above average 90- 100 Extremely high ustralian Capital Territory Victoria Tasmania

Map 1 Australian rainfall percentiles, 1 March to 31 May 2018

Note: Rainfall percentiles are displayed for cropping regions only.

Source: Bureau of Meteorology

For the Australian cropping region, area-averaged rainfall during autumn 2018 was the second lowest on record and the lowest autumn since 2008 (Table 4). In cropping zones in New South Wales and Western Australia, area-average autumn rainfall totals were the sixth and third lowest on record.

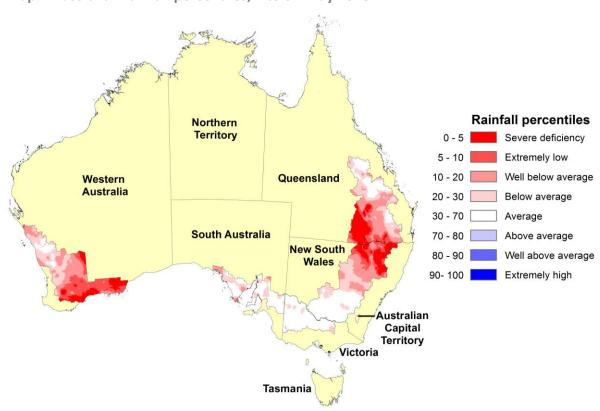
Table 4 Area-average rainfall

Region	Autumn (mm)	Rank (of 119)	Lowest on record (mm)	May (mm)	Rank (of 119)	Lowest on record
New South Wales	38.8	6	25.6 (2005)	14	22	1.7 (1912)
Victoria	48.8	15	16.6 (2005)	34.3	54	0.4 (1934)
Queensland	60	15	20.4 (1922)	5.6	13	0.7 (1975)
South Australia	36.2	12	17.6 (1994)	25.4	37	5.7 (1934)
Western Australia	33.3	3	28 (1914)	18.6	12	4.7 (1948)
Australia	43.9	2	36 (1902)	16.2	6	11.2 (2006)

Notes: Rank ranges from 1 (lowest) to 119 (highest). The figure within brackets in the lowest on record columns refer to the year in which lowest on records area-average rainfall was recorded.

During May 2018, rainfall was generally average in cropping regions in southern New South Wales, Victoria, South Australia and across northern cropping regions in Queensland (Map 2). Rainfall was also close to average in the Geraldton region of Western Australia. However, rainfall in May 2018 was extremely low to well below average in other cropping regions in New South Wales, Queensland and Western Australia. While there were rainfall deficiencies evident in many cropping regions in Western Australia during May, at the monthly scale, rainfall totals of between 10 millimetres and 50 millimetres were recorded on 25 and 26 May in most of these regions.

Map 2 Australian rainfall percentiles, 1 to 31 May 2018



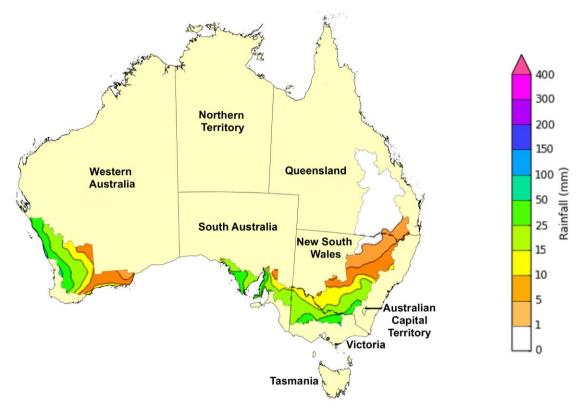
Note: Rainfall percentiles are displayed for cropping regions only.

Source: Bureau of Meteorology

Follow-up rainfall in June of between 5 millimetres and 50 millimetres is forecast in most Western Australian cropping areas. Similar rainfall totals are forecast for most cropping regions

in Victoria, South Australia and southern and central New South Wales (Map 3). Little to no rainfall is forecast for cropping regions in northern New South Wales and Queensland.

Map 3 Australian forecast rainfall totals, 5 to 12 June 2018



Note: Forecast rainfall totals are displayed for cropping regions only.

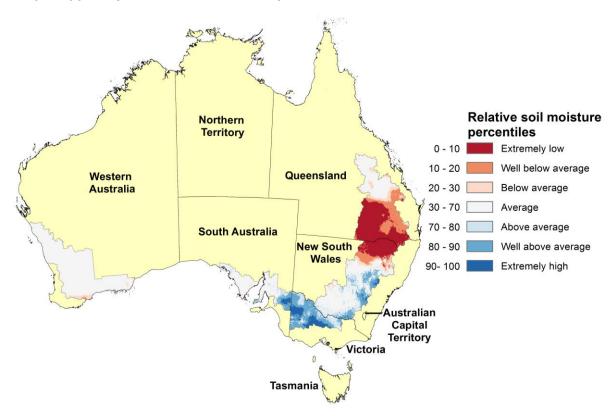
Source: Bureau of Meteorology

Map 4 and Map 5 show the relative levels of modelled upper layer (\sim 0.1 metres) and lower layer (\sim 0.1 to \sim 1 metres) soil moisture for cropping zones across Australia for May 2018. Soil moisture estimates are relative to the historical long-term average (1911 to 2015) and presented in percentiles.

Upper layer soil moisture responds quickly to seasonal conditions and often shows a pattern that reflects rainfall and temperature events in the days leading up to the analysis date. Lower layer soil moisture is a larger, deeper store that is slower to respond to seasonal conditions and tends to reflect the accumulated effects of events that have occurred over longer periods.

Relative upper layer soil moisture on 30 May 2018 was predominantly average in cropping regions in South Australia and Western Australia (Map 4). It was generally above average to well above average in cropping regions in Victoria. In most cropping regions in New South Wales relative upper layer soil moisture was around average but was extremely low in the northern cropping regions. In southern and central cropping regions in Queensland, relative upper layer soil moisture was generally extremely low to well below average but mostly around average in northern cropping regions.

Map 4 Upper layer soil moisture, 30 May 2018



Note: Relative upper layer soil moisture is displayed for cropping regions only. The extremely high band indicates where the estimated soil moisture level for 30 May 2018 fell into the wettest 10 per cent of estimated soil moisture levels on that day each year between 1910 and 2015. The extremely low band indicates where the estimated soil moisture levels for 30 May 2018 fell into the driest 10 per cent of estimated soil moisture levels on that day between 1910 and 2015. Source: Bureau of Meteorology.

Relative soil moisture in the lower layer as at 30 May 2018 was generally extremely low to well below average in most cropping regions in New South Wales, variable in South Australia, Western Australia and Queensland and generally average for most cropping regions in Victoria, with the Mallee region being the main exception at well below average (Map 5). Crop establishment and development in areas of well below average lower layer soil moisture will be highly reliant on in crop rainfall during the remainder of the growing season.

Relative soil moisture Northern percentiles Territory 0 - 10Extremely low Well below average 10 - 20 Western Queensland 20 - 30 Below average Australia 30 - 70 Average 70 - 80 Above average South Australia **New South** 80 - 90 Well above average Wales 90- 100 Extremely high ustralian Capital Territory Victoria **Tasmania**

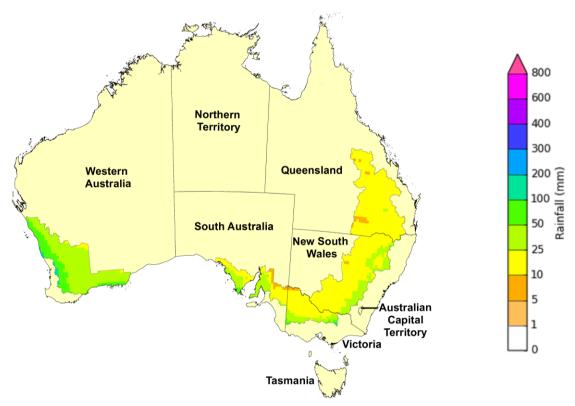
Map 5 Lower layer soil moisture, 30 May 2018

Note: Relative lower layer soil moisture is displayed for summer cropping regions only. The extremely high band indicates where the estimated soil moisture level on 30 May 2018 fell into the wettest 10 per cent of estimated soil moisture levels for that day each year between 1910 and 2015. The extremely low band indicates where the estimated soil moisture levels on 30 May 2018 fell into the driest 10 per cent of estimated soil moisture levels for that day between 1910 and 2015. Source: Bureau of Meteorology.

The current rainfall outlook reflects the neutral state of major climate drivers, with no strong shift towards wetter or drier conditions across most of Australia. When broadscale drivers are neutral, the climate is often influenced by more local effects, such as the ocean temperatures immediately surrounding the continent. Below average pressure over the Tasman Sea, associated with warmer than average ocean temperatures, are likely to weaken the westerlies that bring rain systems to southeast Australia.

The rainfall outlook scenario for June 2018, indicates that cropping regions in Western Australia have a 50 per cent chance of recording median rainfall for the month, and cropping regions in New South Wales, Victoria, South Australia and Queensland have a 50 per cent chance of recording half their median rainfall. This means cropping areas in Western Australia have a 50 per cent chance of receiving between 25 millimetres in the east and 100 millimetres in the west in June (Map 6). In New South Wales, Victoria and South Australia it means cropping regions have a 50 per cent chance of receiving at least 10 millimetres and possibly up to 50 millimetres of rain during June 2018 and most cropping regions in Queensland have a 50 per cent chance of receiving at least 10 millimetres of rain.

Map 6 Rainfall outlook scenario, 50 per cent chance of totals occurring for June 2018



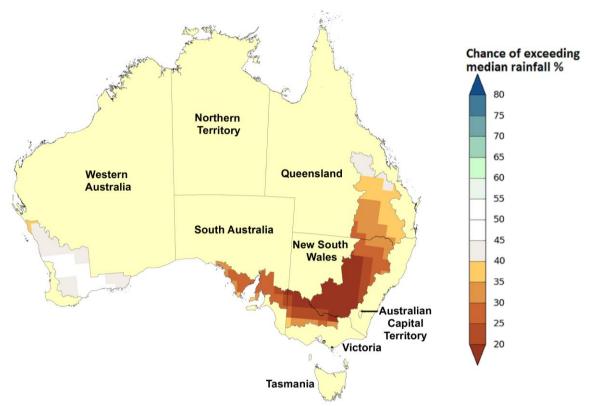
Note: Rainfall outlook scenario is displayed for cropping regions only.

Source: Bureau of Meteorology.

The Bureau of Meteorology's seasonal rainfall outlook for June to August 2018 indicates that a drier than average winter is likely for most Australian cropping regions (Map 7) The highest chance of exceeding average winter rainfall is in Western Australian cropping regions. Maximum temperatures are likely to be higher than average across southern and western Australia.

If seasonal conditions were to eventuate as forecast, this combination of warm and dry conditions during winter is likely to limit the level of soil moisture that is available for crop development during spring 2018.

Map 7 Rainfall outlook, June to August 2018



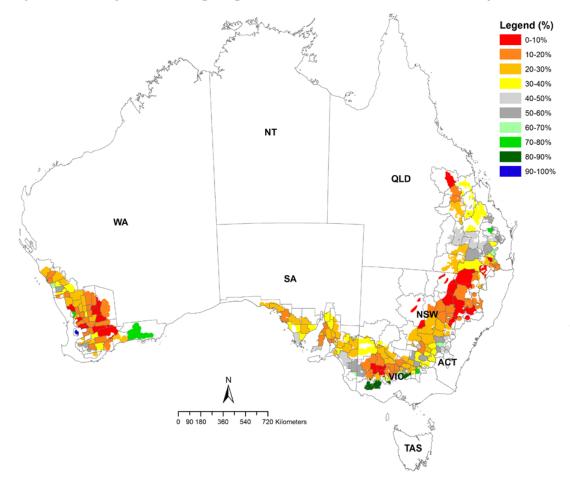
Note: Rainfall outlook is displayed for cropping regions only.

Source: Bureau of Meteorology

Map 8 shows the shire-scale forecast of wheat yields obtained from the University of Queensland's Queensland Alliance for Agriculture and Food Innovation (QAAFI). These forecasts are based on soil moisture conditions and the seasonal outlook, including the most recent trend in the Southern Oscillation Index (SOI).

At the beginning of June 2018, the probability of exceeding median wheat yields was generally below average to average in most cropping regions across northern and southern Victoria, southern New South Wales, South Australia, Queensland and some northern and southern cropping regions in Western Australia (between 20 per cent and 60 per cent). Central and eastern cropping regions in Western Australia, parts of northern and southern Queensland, central and northern New South Wales, central Victoria and scattered shires in South Australia show reduced chances of exceeding median yield (between 0 per cent and 20 per cent). This pattern is largely consistent with rainfall and soil moisture conditions as at the end of May 2018.

Map 8 Probability of exceeding long term simulated median shire wheat yield



Note: Forecast median wheat yield ranked relative to all years (%), given SOI phase was "consistently near zero" during April-May. Based on the OZ-Wheat MII regional scale crop simulation model.

Source: Queensland Alliance for Agriculture and Food Innovation, University of Queensland

Table 5 Rainfall in major cropping districts, median and actual, March 2018 to May 2018

District	District no.	March median	March 2018 mm	April median	April 2018	May median	May 2018
		mm		mm	mm	mm	mm
New South Wales							
NW Plains (W)	52	34	26	25	21	27	1
NW Plains (E)	53	44	34	27	15	32	3
NW Slopes (N)	54	54	41	30	19	37	2
NW Slopes (S)	55	45	32	32	14	34	5
N Tablelands (N)	56	72	44	38	29	40	5
CW Plains (S)	50	26	4	23	7	29	14
CW Plains (N)	51	27	15	17	10	28	7
CW Slopes (N)	64	41	43	32	8	34	10
CW Slopes (S)	65	37	8	33	12	38	23
C Tablelands (N)	62	46	46	37	16	36	15
C Tablelands (S)	63	51	39	50	15	42	24

continued ...

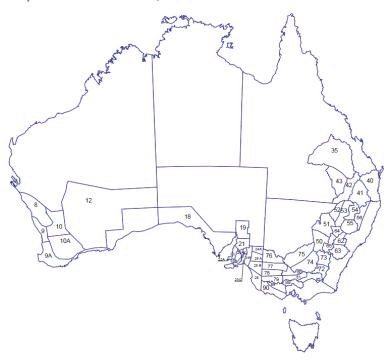
Table 5 Rainfall in major cropping districts, median and actual, March 2018 to May 2018 (continued)

District	Distric t no.	March median	March 2018	April median	April 2018	May median	May 2018
	• 1101	mm	mm	mm	mm	mm	mm
Riverina (W)	75	19	3	18	2	26	19
Riverina (E)	74	24	7	27	2	30	27
SW Slopes (N)	73	37	8	35	10	43	34
SW Slopes (S)	72	56	27	63	32	77	61
Victoria							
N Mallee	76	14	3	15	3	25	18
S Mallee	77	14	5	17	4	31	24
N Wimmera	78	16	7	21	7	39	38
S Wimmera	79	21	14	30	17	51	64
Lower North	80	18	7	24	6	35	30
Upper North	81	26	15	30	9	47	46
Lower North East	82	52	39	57	27	85	67
North Central	88	39	34	55	21	67	90
Western Plains	89	31	25	40	22	55	76
West Coast	90	38	30	54	37	73	105
Queensland							
Central Highlands	35	50	55	25	12	21	6
Maranoa	43	48	62	20	7	24	1
W Darling Downs	42	50	41	23	20	29	6
E Darling Downs	41	54	45	23	11	29	7
Moreton S Coast	40	98	83	56	34	48	39
South Australia							
Upper South East	25B	14	5	30	12	45	42
Murray Mallee	25A	10	4	16	2	30	24
Murray River	24	10	5	15	3	26	18
East Central	23	19	10	38	24	62	52
Yorke Peninsula	22A	12	6	25	13	44	34
Lower North	21	11	6	22	11	35	30
Upper North	19	10	1	13	3	25	15
Western Agricultural	18	9	1	18	6	25	16
Western Australia							
North Coast	8	10	6	15	1	45	27
Central Coast	9	11	4	35	15	101	57
Northern Central	10	14	6	17	4	39	19
South Central	10A	15	9	23	9	48	18
South East	12	20	8	16	8	21	3

Note: Median rainfall is calculated over the period 1900 to May 2018. Australian rainfall districts are shown in Map 9 of the Australian crop report.

Source: Bureau of Meteorology monthly district rainfall reports

Map 9 Rainfall districts, Australia



Note: Displayed for major cropping districts only. See Table 5 for district names and observed district rainfall. Source: Bureau of Meteorology.

Crop conditions and production forecasts, by state

New South Wales

Seasonal conditions during autumn were hotter and drier than average in cropping regions in New South Wales, particularly in the central west and northern regions. It was the State's warmest autumn on record and this is the second consecutive drier than average start to the winter cropping season in most northern cropping regions. There was record low May rainfall or the lowest May rainfall for at least 20 years in many cropping areas. With no significant rainfall in May, and the outlook for below average winter rainfall, area planted in these regions is forecast to fall considerably in 2018–19.

As a result of the unfavourable seasonal conditions during autumn, lower layer soil moisture is below average in most cropping areas in New South Wales. This means sufficient and timely winter rainfall will be vital for crop development in these areas.

According to the latest three-month rainfall outlook (June to August), issued by the Bureau of Meteorology on 31 May 2018, winter rainfall is likely to be below average in cropping areas in New South Wales. There is more than an 80 per cent chance of a lower than average June rainfall in cropping areas in southern and western New South Wales. If this outlook is realised and any rainfall is not timely, winter crop prospects in these regions will deteriorate.

The total area planted to **winter crops** in New South Wales is forecast to fall 13 per cent in 2018–19 to 4.8 million hectares. Forecast falls in area planted to wheat, canola and chickpeas are expected to be partially offset by a forecast increase in the area planted to barley. Total winter crop production is forecast to rise to 8.3 million tonnes, 22 per cent below the ten year average to 2016–17.

Although total winter crop production is forecast to increase in 2018–19 in New South Wales, the 2017–18 winter cropping season was generally very unfavourable from start to finish. May to October rainfall was below to very much below average, many crops in the north-west had already failed by the end of winter and many crops in the central west cropping region suffered from lack of spring rainfall. Additionally, there were frost events in late August and early spring that adversely affected crop development in many regions. As a result yields in most regions were estimated to be significantly below average.

Although the outlook for 2018–19 winter rainfall is currently unfavourable, it is still very early in the 2018–19 season and below average winter rainfall that is timely may be sufficient to lift yields from last year. Average yields are currently forecast to be around 10 per cent below average but if rainfall is insufficient or poorly timed, crop prospects in New South Wales would likely deteriorate further.

The area planted to **wheat** is forecast to fall by 10 per cent in 2018–19 to 2.8 million hectares. Although wheat can be planted until the end of June in parts of New South Wales, rainfall in the next few weeks will be critical for planting intentions to be realised. In southern New South Wales prospects for wheat crops are currently better than in central and northern areas. At this stage yields are forecast to be around 10 per cent below average but this assumes there will be sufficient rainfall in June. Production is forecast at 5.3 million tonnes.

The area planted to **barley** is forecast to increase by 8 per cent in 2018–19 to 850,000 hectares, which reflects expected higher returns from growing cereal crops compared to oilseeds and pulses and the drier than average autumn. Production is forecast to increase by 33 per cent to 1.6 million tonnes, reflecting an increase in the area planted and a forecast increase in average yield compared to the poor yielding 2017–18 barley crop.

The area planted to **canola** is forecast to decrease by 23 per cent in 2018–19 to 500,000 hectares, reflecting a combination of the very dry start to the season, higher expected returns for cereal crops and rotational constraints. At this early stage, average yields are forecast to increase from the very low yields of last year but are forecast to be 10 per cent below average, resulting in a 3 per cent fall in canola production in 2018–19 to 600,000 tonnes.

The area planted to **chickpeas** is forecast to fall by 52 per cent in 2018–19 to around 215,000 hectares. The fall reflects lower expected returns from chickpeas relative to cereal crops and rotational constraints following three consecutive years of significant increases in the area planted. Production is forecast to fall by 33 per cent in 2018–19 to 241,000 tonnes.

Table 6 Winter crop forecasts, New South Wales, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	2,800	1.90	5,320	-10	18
Barley	850	1.85	1,573	8	33
Canola	500	1.20	600	-23	-3

Note: Yields are based on area planted.

Total **summer crop** production in New South Wales is estimated to have risen marginally in 2017–18 to around 2.3 million tonnes.

Grain sorghum production is estimated to have increased by 11 per cent in 2017–18 to 430,000 tonnes. Despite the increase from the very low level of production in 2016–17, grain sorghum production was well below initial expectations because of the very hot and dry summer cropping season.

Cotton production is estimated to have increased by 22 per cent to 700,000 tonnes of lint and 990,000 tonnes of seed, largely reflecting a rise in the average yield of irrigated cotton. Area planted to cotton is estimated to have fallen by 16 per cent to 310,000 hectares in 2017–18.

Rice production is estimated to have fallen by 22 per cent in 2017–18 to 630,000 tonnes because of a fall in planted area. Seasonal conditions were generally favourable and yields are estimated to have slightly exceeded the ten year average.

Table 7 Summer crop estimates, New South Wales, 2017–18

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Grain sorghum	150	2.87	430	28	11
Cotton lint	310	2.26	700	-16	22
Cottonseed	310	3.19	990	-16	22
Rice	60	10.50	630	-27	-22

Note: Yields are based on area planted, except cotton which is based on area harvested.

Queensland

Rainfall was above to very much above average in February in much of Queensland's cropping region. However, below average rainfall from March to May decreased soil moisture reserves and slowed planting, particularly in the Darling Downs.

Strong feed grain prices are expected to encourage planting of cereal crops, but low levels of soil moisture and a poor rainfall outlook are expected to limit the ability of producers to fully realise winter planting intentions. Winter rainfall is likely to be below average across Queensland cropping regions according to the latest three-month rainfall outlook (June to August), issued by the Bureau of Meteorology on 31 May 2018.

Area planted to **winter crops** in Queensland is forecast to fall by 16 per cent in 2018–19 to around 1.1 million hectares. An increase in area planted to wheat and barley is expected to be more than offset by a significant fall in area planted to chickpeas. Total winter crop production is forecast to rise by 16 per cent to 1.6 million tonnes. In addition to a significant shift in area planted from chickpeas to higher yielding cereal crops, this forecast assumes that yields for all crops will be higher than the very low yields of 2016–17 but still remain below recent averages. Yields are unlikely to reach the ten year averages to 2017–18 because of lower than average rainfall prospects for winter and an expectation that a higher proportion than usual of the total crop will be sown late, which will adversely impact yield potential. It is still very early in the 2018–19 season and average yields are currently forecast to be around 10 per cent below the ten year average to 2017-18. But if rainfall is insufficient or poorly timed, crop prospects in Queensland would likely deteriorate further.

The area planted to **chickpeas** is forecast to fall by 57 per cent to around 250,000 hectares. This represents an area similar to the ten year average to 2017–18 following the record high area planted in 2017–18 in response to strong export demand for chickpeas. Production is forecast to fall by 46 per cent to 305,000 tonnes.

Area planted to **wheat** is forecast to rise by 10 per cent to around 670,000 hectares. Wheat production is expected to rise by 47 per cent to around 1 million tonnes. The average yield is expected to recover from the levels achieved in 2017–18 when very dry conditions in most of Queensland's cropping regions from April to September are estimated to have resulted in the lowest wheat yields in twenty years.

The area planted to **barley** is forecast to rise by 76 per cent to around 155,000 hectares. Barley production is expected to rise by 133 per cent to 280,000 tonnes. Barley yields are expected to recover from the levels achieved in 2017–18 when very dry conditions in much of Queensland's cropping region from April to September are estimated to have resulted in the lowest barley yields in ten years.

Table 8 Winter crop forecasts, Queensland, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
•	'000 ha	t/ha	kt	%	%
Wheat	670	1.50	1,005	10	47
Barley	155	1.81	280	76	133
Chickpeas	250	1.22	305	-57	-46

Note: Yields are based on area planted.

Total **summer crop** production in Queensland is estimated to have risen by 42 per cent in 2017–18 to around 1.8 million tonnes, largely reflecting a recovery in grain sorghum production.

Production of **grain sorghum** crops in Queensland is estimated to have risen by 67 per cent to 1 million tonnes. This rise is primarily driven by an estimated 52 per cent rise in planted area as well as a 10 per cent recovery in average yield from the below average yield achieved in 2016–17.

Cotton production is estimated to have increased by 9 per cent to 344,000 tonnes of lint and around 487,000 tonnes of seed in 2017–18. Area planted to cotton is estimated to have risen by 2 per cent to 190,000 hectares and the average yield is estimated to have increased by 7 per cent.

Table 9 Summer crop estimates, Queensland, 2017–18

Crop	Area	Yield	Production	Area change	Prod. Change
	'000 ha	t/ha	kt	%	%
Grain sorghum	380	2.65	1,007	52	67
Cotton lint	190	1.81	344	2	9
Cottonseed	190	2.56	487	2	9

Note: Yields are based on area planted, except Cotton which is based on area harvested.

Victoria

Autumn rainfall in cropping regions in Victoria was lower than average, particularly in the Mallee. However, rainfall in May in most cropping areas replenished soil moisture levels and provided a timely boost to crops that were dry sown. With large areas dry sown with low soil moisture, timely and sufficient winter rainfall will be essential for crop development, especially in the Mallee. Sowing programs are estimated to be largely completed, with producers expected to mostly realise planting intentions.

According to the latest three-month rainfall outlook (June to August), issued by the Bureau of Meteorology on 31 May 2018, winter rainfall is likely to be below average in the major cropping regions of Victoria.

In 2018–19 total **winter crop** area is forecast to increase by 1 per cent to 3.4 million hectares. Area planted to barley and wheat is expected to increase because of higher domestic feed prices. However, these forecast rises are expected to be largely offset by falls in area planted to canola and pulses. Winter crop production is forecast to decrease by 19 per cent to 6.1 million tonnes, driven by lower yields. Yields are assumed to be slightly below the five year average to 2017–18.

Area planted to **wheat** is forecast to increase by 3 per cent to 1.6 million hectares. Wheat production is forecast to decrease by 23 per cent to 3.1 million tonnes. Yields are assumed to fall from last year because of the unfavourable seasonal conditions.

Barley planted area is forecast to increase by 10 per cent to 880,000 hectares with producers responding to favourable prices compared with production alternatives. Rotational constraints and below average rainfall in early autumn provided additional incentives to substitute away from canola and pulses. Production is forecast to decrease by 14 per cent to 1.8 million tonnes.

Canola planted area is forecast to decrease by 7 per cent to 420,000 hectares, with higher feed grain prices providing an incentive to substitute away from canola. Production is forecast to decrease by 25 per cent to 560,000 tonnes because of an assumed fall in the average yield.

Table 10 Winter crop forecasts, Victoria, 2018–19

Crop	Area	Yield	Production	Area change	Prod. Change
	'000 ha	t/ha	kt	%	%
Wheat	1,590	1.95	3,100	3	-23
Barley	880	2.05	1,800	10	-14
Canola	420	1.33	560	-7	-25

Note: Yields are based on area planted.

South Australia

The beginning of autumn was drier and warmer than average in most cropping regions in South Australia following a warmer than average summer. Significant area of crops were sown dry and soil moisture reserves were well below average in late April. Rainfall in early May was timely on lower Eyre Peninsula, Yorke Peninsula, the Mid and Lower North, the South East and the Southern Murray Mallee. However parts of Western and Eastern Eyre Peninsula, the Upper North and the Northern Murray Mallee did not receive sufficient rainfall in May to germinate dry sown crops. Sufficient and timely winter rainfall is required for the germination of many crops and the development of most crops in South Australia.

According to the latest three-month rainfall outlook (June to August), issued by the Bureau of Meteorology on 31 May 2018, below average winter rainfall is likely in cropping regions in South Australia. ABARES has assumed winter rainfall will be timely, even if below average.

Total area planted to **winter crops** is forecast to increase 2 per cent to 3.6 million hectares in 2018–19. Winter crop production is forecast to increase 4 per cent to 7.2 million tonnes. Crop yields for the state are assumed to be slightly below the five year averages to 2017–18.

Wheat planted area is forecast to increase 4 per cent to 2.1 million hectares driven largely by increased plantings on the Eyre Peninsula in areas left fallow last year due to unfavourable seasonal conditions. Production is forecast to increase by 5 per cent to 4.3 million tonnes.

Area planted to **barley** is forecast to rise by 8 per cent to 860,000 hectares. High prices of barley relative to pulses and canola provided strong incentives for increased barley plantings. Production is forecast to increase by 10 per cent to marginally under 2 million tonnes.

Canola planted area is forecast to fall by 5 per cent to 238,000 hectares. An increase in area planted to canola on the Eyre Peninsula as a result of areas unplanted last year is expected to be offset by declines in the rest of the state due to substitution towards barley and unfavourable seasonal conditions in the Upper North and Northern Murray Mallee. Production is forecast to fall by 3 per cent to 310,000 tonnes.

Table 11 Winter crop forecasts, South Australia, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	2,052	2.10	4,308	4	5
Barley	860	2.30	1,978	8	10
Canola	238	1.30	310	-5	-3

Note: Yields are based on area planted.

Western Australia

Above average summer rainfall in Western Australia was followed by warmer and drier than average seasonal conditions over much of autumn. This meant soil moisture levels were well below average during the opening of the planting window and large areas of crop were sown dry. Rainfall late in May across much of the northern and central cropping areas provided a timely season break. Planting intentions are expected to be realised in most parts of the state. Soil moisture levels remain below average in the Esperance region and timely and sufficient rainfall will be required to ensure even crop germination and development.

According to the latest three-month rainfall outlook (June to August), issued by the Bureau of Meteorology on 31 May 2018, there is no strong tendency toward either higher or lower than average winter rainfall in Western Australian cropping regions. ABARES has assumed average winter rainfall.

Total area planted to **winter crops** is forecast to fall by 2 per cent to 8.3 million hectares in 2018–19. Winter crop production is forecast to decrease to 14.3 million tonnes, assuming average seasonal conditions. Yields for all crops are assumed to be close to the five year averages to 2017–18.

The area planted to **wheat** is forecast to fall by 3 per cent to 4.8 million hectares. This is due to an expectation of slightly reduced planting in eastern cropping areas, where cropping tends to be more opportunistic than other parts of the state. Production is forecast to increase by 2 per cent to 8.1 million tonnes.

The area planted to **barley** is forecast to rise by 8 per cent to 1.5 million hectares. Expected margins on barley are providing a strong incentive to increase planted area, and conditions were less favourable for canola planting earlier in the season. Production is forecast to decrease by 5 per cent to 3.5 million tonnes due to yields falling to average levels.

The area planted to **canola** is forecast to fall by 6 per cent to 1.3 million hectares. Reduced area planted to canola is expected to be offset by increased area planted to barley in many cropping programs. Rotational constraints are likely to limit canola planting for some growers. Production is forecast to decrease by 18 per cent to 1.6 million tonnes.

Table 12 Winter crop forecasts, Western Australia, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	4,832	1.68	8,120	-3	2
Barley	1,510	2.34	3,531	8	-5
Canola	1,300	1.25	1,623	-6	-18
Lupins	320	1.38	441	-9	0

Note: Yields are based on area planted.

Statistical tables

Table 13 Winter crop production and area, Australia, 2016–17 to 2018–19

Crop		Area			Production	
	2016-17	2017-18 s	2018-19 f	2016-17	2017-18 s	2018-19 f
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Wheat	12,191	12,237	11,953	31,819	21,244	21,901
Barley	4,834	3,878	4,264	13,506	8,928	9,196
Canola	2,681	2,729	2,461	4,313	3,669	3,096
Chickpeas	1,069	1,116	528	2,004	1,028	616
Faba beans	233	220	235	484	330	348
Field peas	230	222	185	415	289	213
Lentils	276	353	270	680	465	385
Lupins	515	518	445	1,031	631	581
Oats	1,028	742	693	2,266	1,119	1,120
Triticale	62	77	108	150	114	215

f ABARES forecast. **s** ABARES estimate.

Notes: Crop year refers to crops planted during the 12 months to 31 March. Slight discrepancies may appear between tables as a result of including the Northern Territory and Australian Capital Territory in Australian totals.

Sources: ABARES; Australian Bureau of Statistics; Pulse Australia

Table 14 Summer crop production and area, Australia, 2015–16 to 2017–18

Crop		Area			Production	
	2015-16	2016-17	2017-18 s	2015-16	2016-17	2017-18 s
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Grain sorghum	521	368	531	1,791	994	1,439
Cottonseed a	270	557	500	890	1,260	1,477
Cotton lint a	270	557	500	629	891	1,044
Rice	27	82	60	274	807	631
Corn (maize)	53	68	56	400	436	383
Soybeans	21	17	37	40	31	63
Sunflower	23	16	17	25	17	31

a Cotton area is estimated harvested area. s ABARES estimate.

Notes: Crop year refers to crops planted during the 12 months to 31 March. Slight discrepancies may appear between tables as a result of including the Northern Territory and Australian Capital Territory in Australian totals.

Sources: ABARES; Australian Bureau of Statistics; Cotton Australia.

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Table 15 Production, major crops, Australian states, 2015–16 to 2018–19

Winter crops	New South	Wales	Victo	ria	Queens	land	South Au	stralia	Western A	ustralia	Tasm	ania
	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt								
Wheat												
2018-19 f	2,800	5,320	1,590	3,100	670	1,005	2,052	4,308	4,832	8,120	9	48
2017–18 s	3,100	4,495	1,550	4,000	610	683	1,970	4,090	5,000	7,945	7	30
2016–17	3,248	9,819	1,454	4,665	622	1,502	2,178	6,133	4,678	9,645	10	56
Five-year average to 2017–18	3,143	6,892	1,475	3,301	647	1,105	1,978	4,552	4,889	8,980	9	45
Barley												
2018–19 f	850	1,573	880	1,800	155	280	860	1,978	1,510	3,531	9	34
2017–18 s	790	1,185	800	2,100	88	120	795	1,800	1,400	3,705	5	17
2016-17	1,056	2,832	946	3,083	149	436	981	3,002	1,694	4,120	8	33
Five-year average to 2017–18	882	1,980	885	1,940	121	272	839	2,071	1,409	3,564	6	22
Canola												
2018–19 f	500	600	420	560	1	1	238	310	1,300	1,623	2	3
2017–18 s	650	618	450	750	2	1	250	320	1,376	1,978	1	1
2016-17	786	1,248	327	633	0	0	218	382	1,349	2,048	1	3
Five-year average to 2017–18	675	948	395	588	1	1	246	333	1,305	1,754	1	2
Oats												
2018–19 f	245	248	130	230	20	14	45	72	250	550	3	7
2017–18 s	280	252	120	270	24	8	45	105	270	478	3	6
2016–17	327	496	162	493	47	56	86	179	403	1,036	3	5
Five-year average to 2017–18	303	353	132	268	39	21	61	112	293	667	3	7

continued ...

Table 15 Production, major crops, Australian states, 2015–16 to 2018–19 (continued)

Summer crops	New South	Wales	Victo	ria	Queens	land	South Aus	tralia	Western Au	ıstralia	Tasmania	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
Grain sorghum												
2017–18 s	150	430	0	0	380	1,007	0	0	1	2	0	0
2016-17	117	387	0	1	250	604	0	0	1	2	0	0
2015-16	155	604	1	3	363	1,177	0	0	2	5	0	0
Five-year average to 2016–17	169	549	0	2	389	1,147	0	0	1	3	0	0
Cottonseed a												
2017–18 s	310	990	0	0	190	487	0	0	0	0	0	0
2016-17	370	814	0	0	187	446	0	0	0	0	0	0
2015-16	163	559	0	0	107	331	0	0	0	0	0	0
Five-year average to 2016–17	239	725	0	0	132	392	0	0	0	0	0	0
Rice												
2017–18 s	60	630	0	0	0	0	0	0	0	0	0	0
2016-17	82	806	0	0	0	1	0	0	0	0	0	0
2015-16	25	262	0	0	2	11	0	0	0	0	0	0
Five-year average to 2016–17	73	745	0	3	1	2	0	0	0	0	0	0

a Cotton area is estimated harvested area. f ABARES forecast. s ABARES estimate.

Note: Zero is used to denote nil or less than 500 tonnes or 500 hectares.

Sources: ABARES; Australian Bureau of Statistics

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Table 16 Production, other crops, Australian states, 2015–16 to 2018–19

Winter crops	New South	ı Wales	Victo	ria	Queens	land	South Au	stralia	Western A	ustralia	Tasma	nia
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
Chickpeas												
2018-19 f	215	241	35	40	250	305	22	23	6	8	0	0
2017–18 s	450	360	55	60	575	565	30	35	6	8	0	0
2016-17	480	792	16	28	550	1,150	19	27	4	7	0	0
Five-year average to 2017–18	351	435	32	39	352	517	20	22	4	6	0	0
Field peas												
2018-19 f	31	28	50	55	0	0	84	104	20	25	0	0
2017-18 s	52	52	60	70	0	0	90	125	20	42	0	0
2016-17	50	85	49	100	0	0	100	175	31	55	0	0
Five-year average to 2017–18	50	66	53	65	0	0	105	139	26	39	0	0
Lentils												
2018-19 f	0	0	120	150	0	0	139	222	11	13	0	0
2017-18 s	22	29	150	180	0	0	175	250	6	6	0	0
2016-17	5	10	110	200	0	0	160	470	0	0	0	0
Five-year average to 2017–18	6	9	106	122	0	0	128	232	2	2	0	0
Lupins												
2018-19 f	40	46	30	30	0	0	55	63	320	441	0	0
2017–18 s	75	75	35	40	0	0	58	75	350	441	0	0
2016-17	51	66	33	60	0	0	70	100	361	805	0	0
Five-year average to 2017–18	67	75	35	37	0	0	63	76	315	509	0	0

continued ...

Table 16 Production, other crops, Australian states, 2015–16 to 2018–19 (continued)

Summer crops	New Soutl	ı Wales	,	Victoria	Que	ensland	South A	ustralia	Western A	ustralia	Та	smania
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
Corn (maize)												
2017–18 s	20	178	1	7	35	195	0	0	0	4	0	0
2016-17	23	203	8	69	35	146	0	1	2	17	0	1
2015-16	17	170	5	61	30	164	0	1	0	4	0	0
Five-year average to 2016–17	24	218	5	51	32	169	0	0	1	7	0	0
Soybeans												
2017–18 s	24	40	1	1	13	22	0	0	0	0	0	0
2016-17	11	22	1	1	5	8	0	0	0	0	0	0
2015-16	13	26	1	1	7	12	0	0	0	0	0	0
Five-year average to 2016–17	19	30	0	1	7	11	0	0	0	0	0	0
Sunflower												
2017-18 s	10	21	0	0	7	10	0	0	0	0	0	0
2016-17	8	10	0	0	5	4	0	0	3	3	0	0
2015-16	11	13	0	0	9	9	0	0	3	3	0	0
Five-year average to 2016–17	12	16	1	0	8	7	0	0	2	2	0	0

f ABARES forecast. **s** ABARES estimate.

Note: Zero is used to denote nil or less than 500 tonnes or 500 hectares.

Sources: ABARES; Australian Bureau of Statistics; Pulse Australia

Table 17 Supply and disposal of wheat, canola and pulses, Australia, 2011–12 to 2016–17

Crop	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 s
	kt	kt	kt	kt	kt	kt
Wheat						
Production	29,905	22,855	25,303	23,743	22,275	31,819
Apparent domestic use	6,334	6,451	6,785	7,154	7,231	7,805
- seed	649	631	619	564	610	612
- other a	5,685	5,820	6,165	6,590	6,621	7,193
Exports b	24,656	18,644	18,612	16,587	16,116	22,636
Imports b	14	17	20	22	25	25
Canola						
Production	3,427	4,142	3,832	3,540	2,775	4,313
Apparent domestic use a	871	631	969	915	1,088	972
Exports	2,557	3,512	2,863	2,626	1,857	3,458
Pulses						
Production						
- lupins	982	459	626	549	652	1,031
- field peas	342	320	342	290	205	415
– chickpeas	673	813	629	555	875	2,004
Apparent domestic use a						
- lupins	416	290	286	306	398	614
- field peas	130	145	175	124	72	148
- chickpeas	93	1	0	1	1	1
Exports						
- lupins	565	169	340	243	254	418
- field peas	215	177	169	168	134	269
- chickpeas	581	853	629	663	1,145	2,293

a Calculated as a residual: production plus imports less exports less any observed or assumed change in stocks and, for wheat only, less seed use. **b** Includes grain and grain equivalent of wheat flour. **s** ABARES estimate.

Notes: Production, use, trade and stock data are on a marketing year basis: October–September for wheat; November–October for canola and pulses. Export data on a marketing year basis are not comparable with financial year export figures published elsewhere. Zero is used to denote nil or less than 500 tonnes. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Sources: ABARES; Australian Bureau of Statistics; Pulse Australia

Table 18 Supply and disposal of coarse grains, Australia, 2011–12 to 2016–17

Crop	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 s
	kt	kt	kt	kt	kt	kt
Barley						
Production	8,221	7,472	9,174	8,646	8,992	13,506
Apparent domestic use	2,075	2,182	2,218	2,714	2,651	3,633
- seed	164	172	184	185	180	169
– other a	1,911	2,011	2,035	2,529	2,471	3,464
Export	6,146	5,289	6,957	5,932	6,342	9,873
– feed barley	3,758	2,972	3,944	3,070	4,351	6,364
– malting barley	1,619	1,512	2,273	2,149	1,394	2,826
- malt (grain equivalent)	770	805	740	713	596	683
Oats						
Production	1,262	1,121	1,255	1,198	1,300	2,266
Apparent domestic use	1,049	884	1,001	960	1,074	1,708
- seed	35	34	41	39	44	36
– other a	1,014	850	960	920	1,030	1,672
Export	213	237	253	238	226	558
Triticale						
Production	285	171	126	143	127	150
Apparent domestic use	285	171	126	143	127	150
- seed	5	4	4	4	5	4
– other a	280	167	122	139	122	146
Export	0	0	0	0	1	0
Grain sorghum						
Production	2,239	2,229	1,282	2,209	1,791	994
Apparent domestic use b	984	1,060	1,083	885	572	878
- seed	3	3	3	4	3	2
– other a	981	1,056	1,080	881	569	875
Export b	950	1,179	1,146	397	1,638	913
Corn (maize)						
Production	451	506	390	495	400	436
Apparent domestic use b	312	347	401	331	432	337
- seed	1	1	1	1	1	1
– other a	311	346	400	330	431	336
Export b	46	106	106	60	64	63

a Calculated as a residual: production plus imports less exports less any observed or assumed change in stocks less seed use. **b** For summer crops, export and apparent domestic use volumes are shown in year of actual export and consumption, which is typically in the year following production. Export data are on a marketing year basis and are not comparable with financial year export figures published elsewhere. **s** ABARES estimate.

Notes: Production, use and export data are on a marketing year basis: November—October for barley, oats and triticale; March—February for grain sorghum and corn (maize). Zero is used to denote nil or less than 500 tonnes. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Sources: ABARES; Australian Bureau of Statistics; UN Commodity Trade Statistics Database (UN Comtrade)

Table 19 Grain, oilseed and pulse prices, third quarter 2016 to first quarter 2018

Crop	2016	2016	2017	2017	2017	2017	2018
СГОР	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	A\$/t						
Wheat							
Domestic: feed, del. Sydney	240	238	209	226	260	262	266
International: US no. 2 hard red winter, fob Gulf a	249	253	268	274	277	283	303
Barley							
Domestic: 2 row feed, del. Sydney	191	183	183	210	243	252	274
Export: feed b	248	232	225	225	235	274	269
Export: malting b	275	267	243	261	244	263	283
International: feed, fob Rouen \boldsymbol{a}	204	204	214	217	222	241	259
Grain sorghum							
Domestic: feed, del. Sydney	219	234	245	265	306	313	320
Export b	272	284	333	331	323	493	380
Oats							
Domestic: feed, del. Sydney	239	194	152	165	190	188	180
International: CME oats nearby contract	168	200	224	221	229	230	225
Corn (maize)							
Domestic: feed, del. Sydney	367	346	360	352	375	382	387
International: US no. 2 yellow corn, fob Gulf a	204	204	213	211	193	195	210
Oilseeds							
Domestic: canola, del. Melbourne	508	548	539	529	523	543	504
International: Europe rapeseed, cif Hamburg	544	578	586	563	539	561	542
International: US no. 2 soybeans, fob Gulf a	544	521	518	481	479	490	497
Pulses							
Domestic: lupins, del. Kwinana	278	272	234	267	296	286	292
Domestic: chickpeas, del. Melbourne	1,108	776	827	1,034	869	763	598
Domestic: field peas, del. Melbourne	413	355	343	362	318	298	305
Export: chickpeas b	1,272	968	942	1,024	1,012	957	822
Export: field peas b	634	506	444	458	416	368	375

a Average of daily offer prices made in US dollars and converted to Australian dollars using quarterly average of daily exchange rates. **b** Export unit values reflect the average price received for grain exported over the quarter, not current market prices. These prices are the average unit value (free on board) of Australian exports recorded by the Australian Bureau of Statistics. A long lag time can exist between when exporters negotiate prices and when the product is exported. Note: Q1 refers to the period January–March; Q2 refers to April–June; Q3 refers to July–September; Q4 refers to October–December. Prices used in these calculations exclude GST.

Sources: ABARES; Australian Bureau of Statistics; CME Group; Farm Weekly; International Grains Council; The Land; The Weekly Times; US Department of Agriculture