Australian Government
Department of Agriculture and Water Resources
ABARES

Australian crop report

Prepared by the Australian Bureau of Agricultural and Resource Economics and Sciences

No. 187
September 2018

Cataloguing data
ABARES 2018, *Australian crop report*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, September. CC BY 4.0.

ISSN 1447–8358
ISBN 978-1-74323–399-3
ABARES project 43506

Internet
This publication is available at agriculture.gov.au/abares/research-topics/agricultural-commodities/australian-crop-report

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)
Postal address GPO Box 858 Canberra ACT 2601
Switchboard +61,2,6272,2010
Email info.abares@agriculture.gov.au
Web agriculture.gov.au/abares

The next issue of *Australian crop report* is scheduled to be released on 4 December 2018.

In the next issue:

2018–19 winter crop area estimates and production forecasts updated

2018–19 summer crop area and production forecasts updated

Acknowledgements
This report was prepared by Andrew Cameron, Charley Xia, Tim Whitnall, Matthew Miller, Amelia Brown, Benjamin K Agbenyegah and Nathan Pitts

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Key points

- Total winter crop production in 2018–19 is forecast to decrease by 12% to 33.2 million tonnes.
- Forecast winter crop production is 9% below the 20 year average to 2017–18 but 91% above the lowest production during this period.
- Production in Queensland and New South Wales is forecast to be 38% and 46% below 2017–18 while production in Western Australia is forecast to be 12% above.

Seasonal conditions varied considerably in Australian cropping regions over winter and resulted in widely differing crop prospects at the beginning of spring.

In Western Australia, timely rainfall in late autumn and favourable winter rainfall increased soil moisture levels and yields are expected to be above average. In South Australia, timely rainfall in most southern cropping regions in August boosted yield prospects but unfavourable seasonal conditions in northern cropping regions in June and July reduced yield prospects in these regions. In Victoria, unfavourable seasonal conditions in the Mallee over winter reduced crop prospects but favourable winter conditions in the Wimmera and western districts generally boosted crop prospects.

Unfavourable seasonal conditions in most cropping regions in New South Wales and Queensland curtailed planting late in the planting window and yields are expected to be generally well below average.

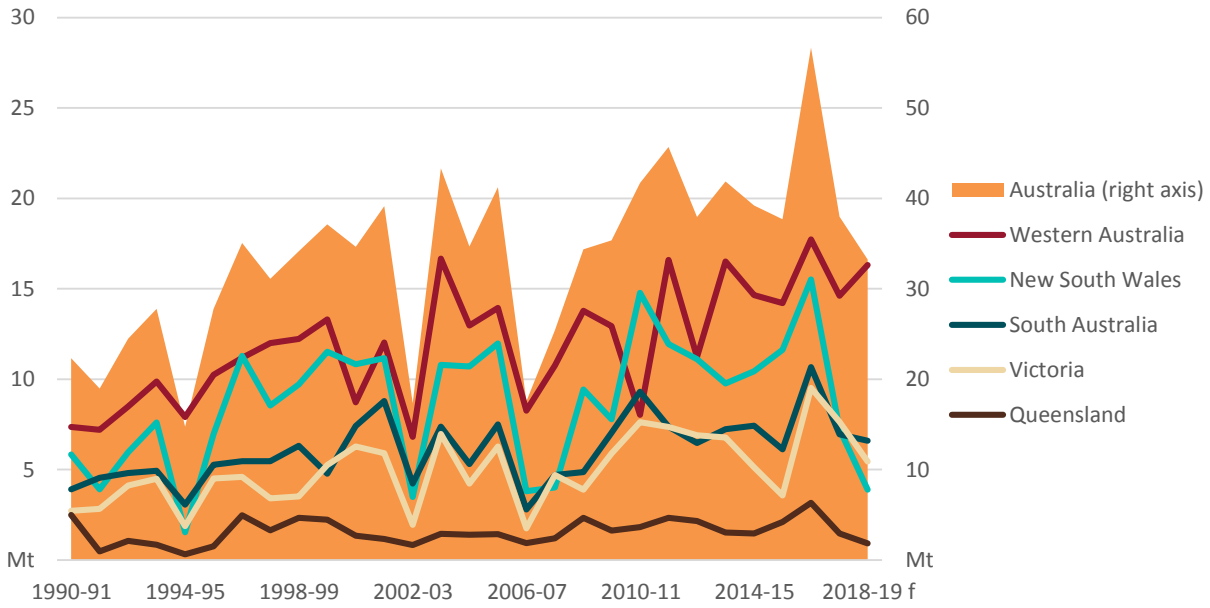
Winter crop production will be heavily dependent on seasonal conditions during the coming spring. Timely rainfall in early spring will be critical to ongoing crop development in many cropping regions in the eastern states (including South Australia) because of low levels of soil moisture. In Western Australia, favourable spring conditions could boost production beyond that being forecast.

According to the latest three-month climate outlook (September to November 2018), issued by the Bureau of Meteorology on 30 August 2018, rainfall exceeding median is unlikely in most cropping regions in Australia. Warmer than average temperatures in September are expected in Western Australia and some parts of Queensland. Temperatures in October are expected to be above average in most cropping regions in Australia.

Total **winter crops** production is forecast to decrease by 12% to 33.2 million tonnes with production declines forecast in all eastern states (including South Australia). This is a 12% downward revision from the ABARES forecast published in the June 2018 edition of *Australian Crop report*. Winter crop production is forecast to be 9% below the 20 year average to 2017–18 but 91% above the lowest production during this period.

While crop prospects fell over winter in many cropping regions, winter crop production in 2018–19 is expected to be significantly higher than in years with more widespread drought conditions. In 2018–19, exceptionally unfavourable seasonal conditions have been limited to Queensland, New South Wales and parts of Victoria and South Australia. In contrast, extremely unfavourable seasonal conditions affected most cropping regions in Australia during droughts in 1994–95, 2002–03, 2006–07 and 2007–08, resulting in lower national crop production than is forecast for 2018–19.

Winter crop production, Australia, 1990–91 to 2018–19



f – ABARES forecast

For the major winter crops, **wheat** production is forecast to decrease by 10% to 19.1 million tonnes, **barley** production is forecast to fall by 7% to around 8.3 million tonnes, and **canola** production is forecast to fall by 24% to around 2.8 million tonnes. Additionally, **chickpea** production is forecast to decrease by 69% to 351,000 tonnes and **oats** production to fall by 6% to 1.0 million tonnes.

Table 1 Winter crop production, Australia, 1998–99 to 2018–19

Year	Unit	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
1998–99	kt	9718	3507	2323	6304	12233	34159
1999–00	kt	11526	5252	2221	4770	13312	37142
2000–01	kt	10829	6266	1339	7429	8724	34662
2001–02	kt	11170	5893	1156	8796	12042	39133
2002–03	kt	3485	1943	829	4223	6812	17359
2003–04	kt	10795	6961	1450	7359	16676	43313
2004–05	kt	10712	4214	1391	5298	12978	34671
2005–06	kt	11981	6267	1433	7518	13945	41226
2006–07	kt	3794	1748	924	2793	8278	17580
2007–08	kt	3999	4692	1194	4706	10761	25415
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	56,678
2017–18 **s**	kt	7,228	7,652	1,463	6,945	14,619	37,963
2018–19 **f**	kt	3,887	5,439	907	6,581	16,322	33,228
% change 2017–18 to 2018–19		–46	–29	–38	–5	12	–12
% change 2018–19 to lowest production		12	211	9	136	140	91

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 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	21,419
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	23,126
2017–18 **s**	'000 ha	5,496	3,333	1,309	3,505	8,441	22,101
2018–19 **f**	'000 ha	3,448	3,328	802	3,642	8,304	19,547
% change 2017–18 to 2018–19		–37	–0	–39	4	–2	–12

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.

Area planted to **summer crops** is forecast to fall by 20% in 2018–19 to 1.1 million hectares, driven by forecast falls in area planted to rice and cotton. Summer crop production is forecast to fall by 16% to 3.5 million tonnes.

Area planted to **grain sorghum** is forecast to increase by 7% in 2018–19 to 568,000 hectares in response to favourable prices. This forecasts assumes adequate spring and early summer rainfall in cropping regions in northern New South Wales and Queensland. Grain sorghum production is forecast to increase by 8% to 1.6 million tonnes.

Area planted to **cotton** is forecast to fall by 50% to 250,000 hectares in 2018–19 because of below average rainfall in the first eight months of 2018 that resulted in a significant fall in water levels in irrigation dams serving cotton-growing regions and low soil moisture levels. Cotton production is forecast to fall by 44% to 580,000 tonnes of cotton lint and 820,000 tonnes of cottonseed.

Area planted to **rice** is forecast to fall by 10% to 54,000 hectares in 2018–19 in response to reduced supplies of irrigation water. Water storage levels in the Murrumbidgee valley were at 64% in early September 2018, compared to 74% at the same time in 2017.

Table 3 Summer crop area and production, Australia, 2008–09 to 2018–19

Year	New South Wales		Queensland		Australia	
	'000 ha	kt	'000 ha	kt	'000 ha	kt
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	3,846
2014–15	435	2,044	696	2,134	1,149	4,263
2015–16	412	1,656	624	1,821	1,054	3,562
2016–17	662	2,286	566	1,280	1,247	3,667
2017–18 **s**	614	2,324	711	1,814	1,335	4,166
2018–19 **f**	449	1,863	615	1,596	1,074	3,489
% change 2017–18 to 2018–19	–27	–20	–14	–12	–20	–16

f ABARES forecast. **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.

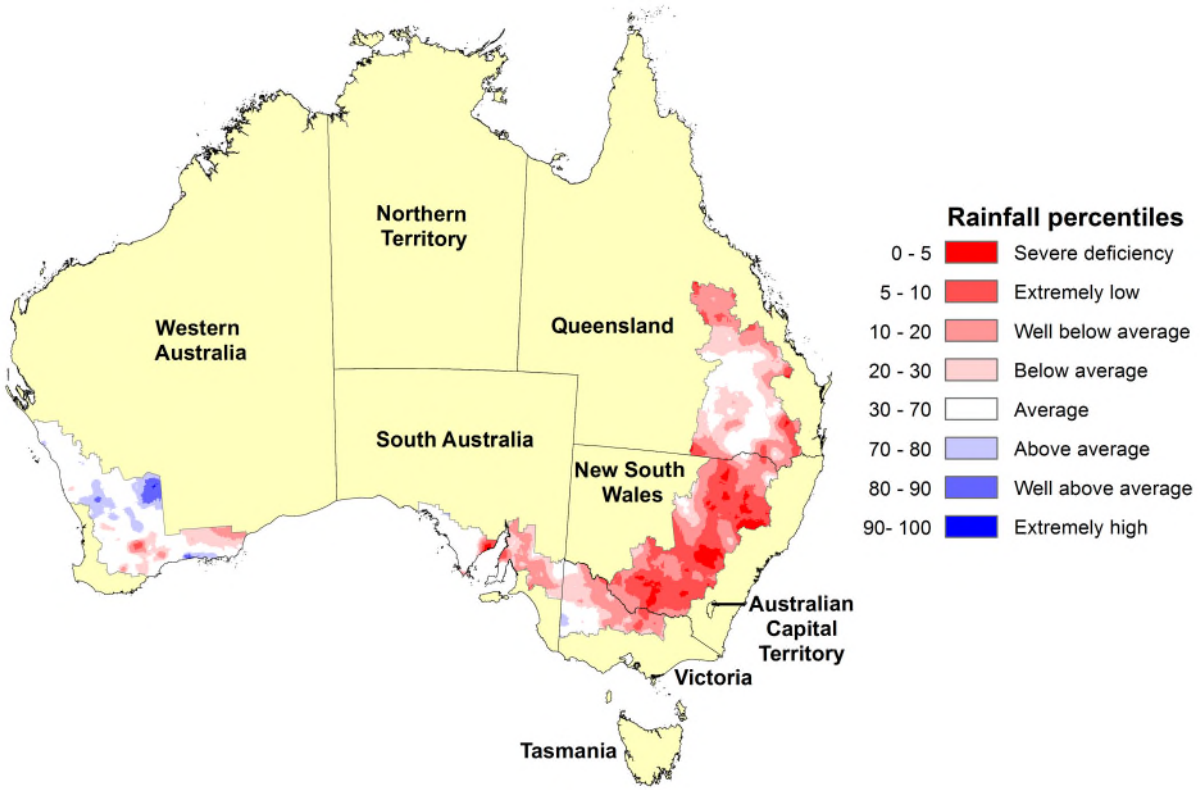
Climatic and agronomic conditions

Key points

- Area-averaged rainfall in Australian cropping regions during winter 2018 was the fifteenth lowest on record, implying this winter has been in the driest 13% of years.
- August rainfall was extremely low to well below average in southern cropping regions in New South Wales.
- Prospects for winter crop in the eastern states (including South Australia) will be highly dependent on timely spring rainfall because of low levels of soil moisture.

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

Map 1 Australian rainfall percentiles, 1 June to 31 August 2018



Note: Rainfall percentiles are displayed for cropping regions only.
Source: Bureau of Meteorology

For the Australian cropping region, area-average rainfall during winter 2018 was the fifteenth lowest on record (Table 4). For the New South Wales cropping region, the area-average winter rainfall total was the ninth lowest on record and the lowest area-average winter rainfall total since 2002. In New South Wales, this follows the sixth lowest area-average autumn rainfall total on record.

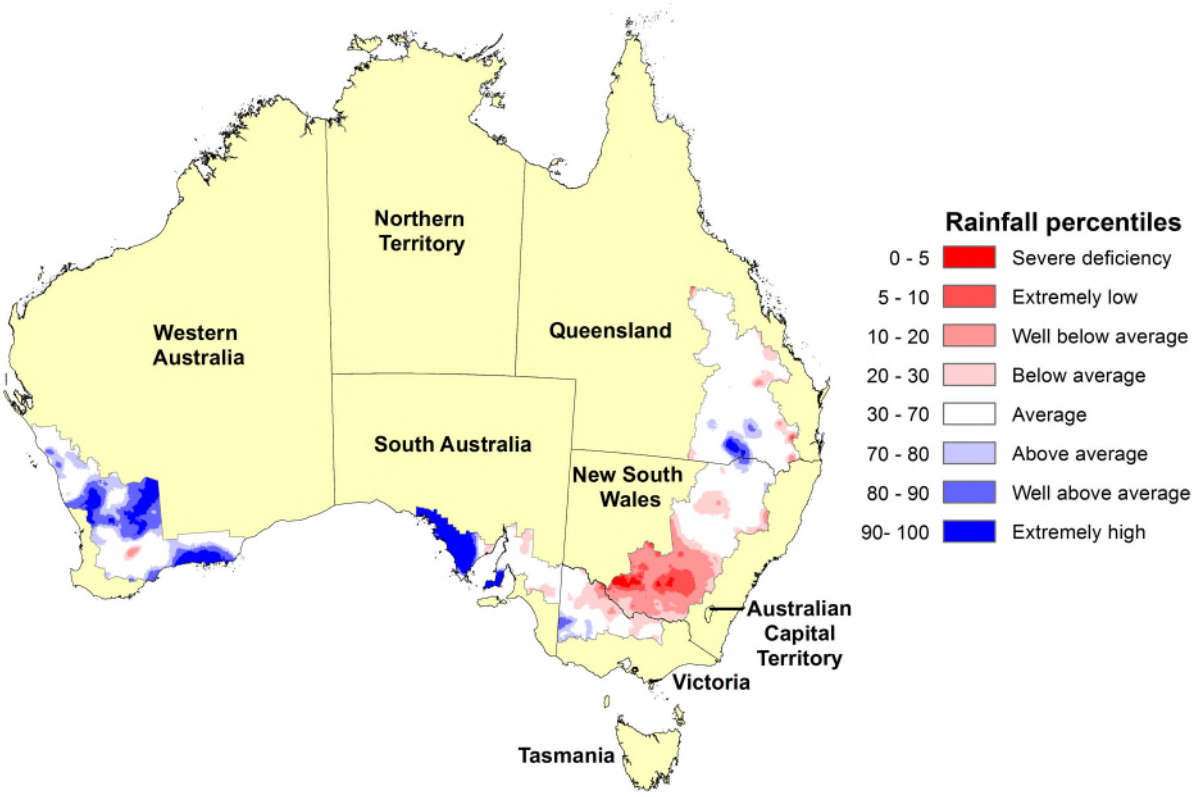
Table 4 Area–average rainfall

Region	Winter (mm)	Rank (of 119)	Lowest on record (mm)	August (mm)	Rank (of 119)	Lowest on record
New South Wales	54.2	9	26.9 (1982)	19.6	23	1.9 (1914)
Victoria	101.9	28	32.8 (1914)	37.8	46	2.9 (1944)
Queensland	43.6	26	5.2 (1946)	16	53	0 (1991)
South Australia	111.5	34	41.9 (1914)	57.4	88	5.1 (1914)
Western Australia	160.2	63	86.1 (2006)	61.3	102	12.1 (1956)
Australia	87.7	15	57.6 (1940)	33.9	51	8 (1914)

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 August 2018, rainfall was generally average in cropping regions in northern New South Wales, Victoria, eastern South Australia and Queensland (Map 2). Rainfall was average to extremely high in Western Australia and on the Eyre and Yorke Peninsulas in South Australia. However, rainfall was extremely low to well below average in southern cropping regions in New South Wales.

Map 2 Australian rainfall percentiles, 1 to 31 August 2018



Note: Rainfall percentiles are displayed for cropping regions only.
Source: Bureau of Meteorology

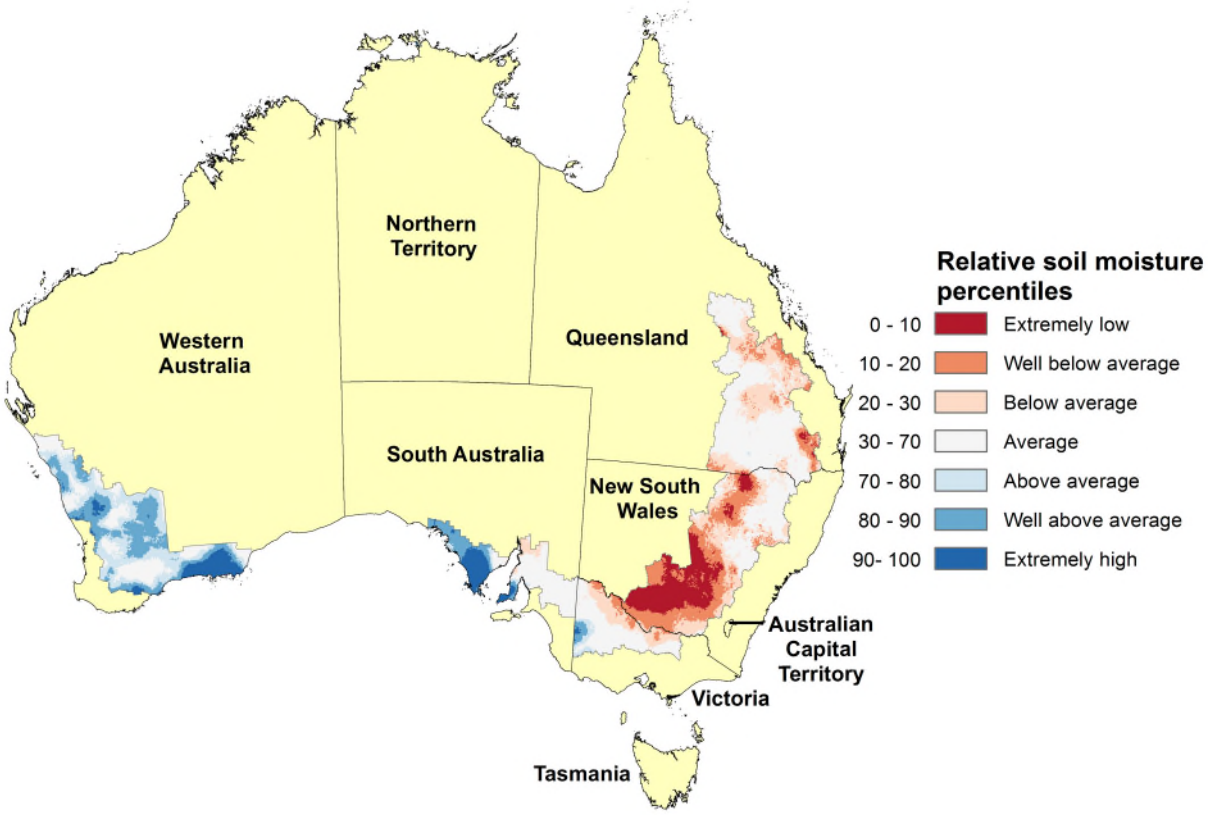
Map 3 and Map 4 show the relative levels of modelled upper layer (~0.1 metres) and lower layer (~0.1 to ~1 metres) soil moisture for cropping zones across Australia for August 2018. Soil

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 for August 2018 was predominantly average in cropping regions in north-eastern New South Wales, Victoria, eastern South Australia and Queensland (Map 3). It was generally above average to well above average in cropping regions in Western Australia and in the Eyre and Yorke Peninsula regions of South Australia. In southern and central cropping regions in New South Wales relative upper layer soil moisture was extremely low to well below average.

Map 3 Upper layer soil moisture, August 2018

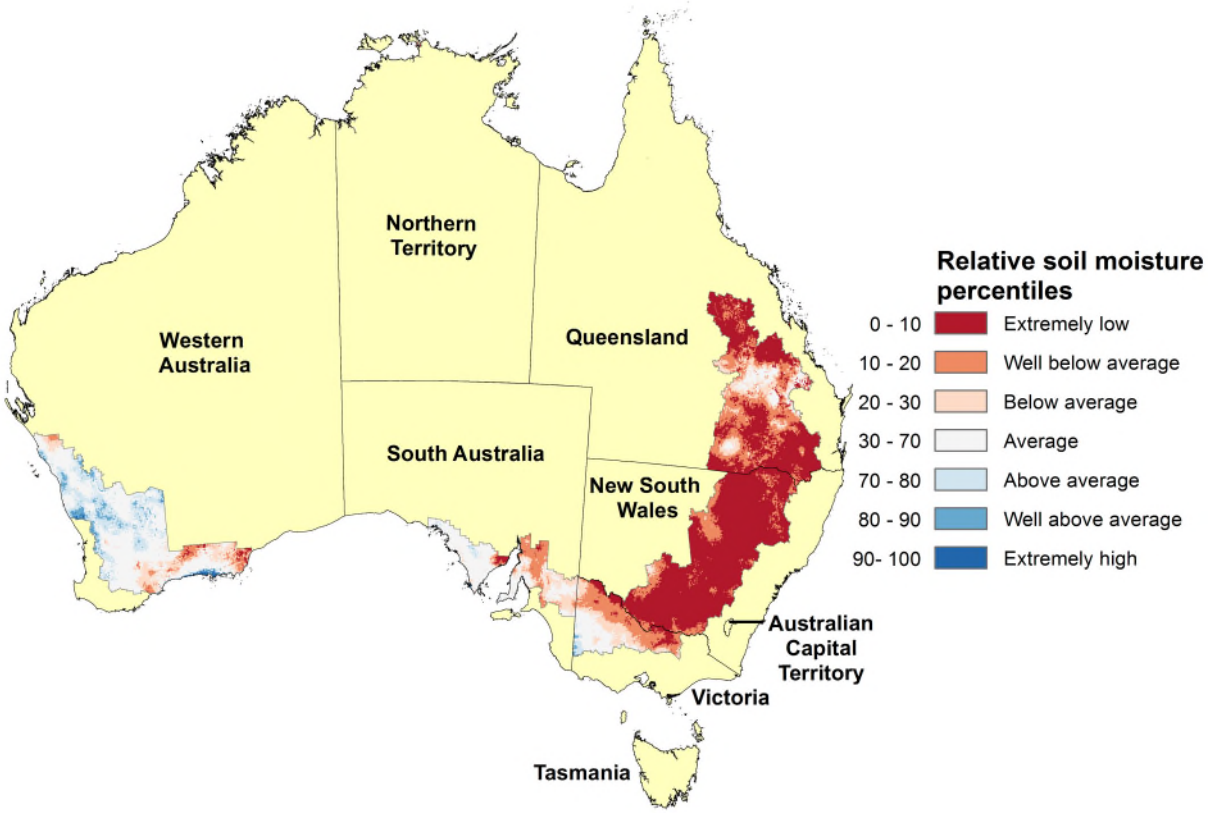


Note: Relative upper layer soil moisture is displayed for cropping regions only. The extremely high band indicates where the estimated soil moisture level for August 2018 fell into the wettest 10% of estimated soil moisture levels on that day each year between 1910 and 2015. The extremely low band indicates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

Relative soil moisture in the lower layer for August 2018 was generally extremely low to well below average in most cropping regions in New South Wales, northern and eastern Victoria, and the eastern Eyre Peninsula and upper north cropping regions of South Australia. It was generally average for most cropping regions in Western Australia, south-western Victoria, and much of the Eyre and Yorke Peninsulas in South Australia (Map 4).

Prospects for winter crop in areas of well below average lower layer soil moisture will be highly dependent on in crop rainfall during the remainder of the growing season.

Map 4 Lower layer soil moisture, August 2018



Note: Relative lower layer soil moisture is displayed for cropping regions only. The extremely high band indicates where the estimated soil moisture level for August 2018 fell into the wettest 10% 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 for August 2018 fell into the driest 10% of estimated soil moisture levels for that day between 1910 and 2015.
Source: Bureau of Meteorology.

The current outlook reflects the neutral state of broad-scale climate drivers, such as El Niño, La Niña and the Indian Ocean Dipole (IOD), meaning they are currently having little influence on Australia's climate. However, current observations and model outlooks indicate El Niño and a positive IOD could develop in spring. The latest model run from the Bureau of Meteorology's operational climate model also suggests that sea surface temperatures will continue to be cooler than average to Australia's northwest which is likely acting to suppress rainfall over southern and central Australia.

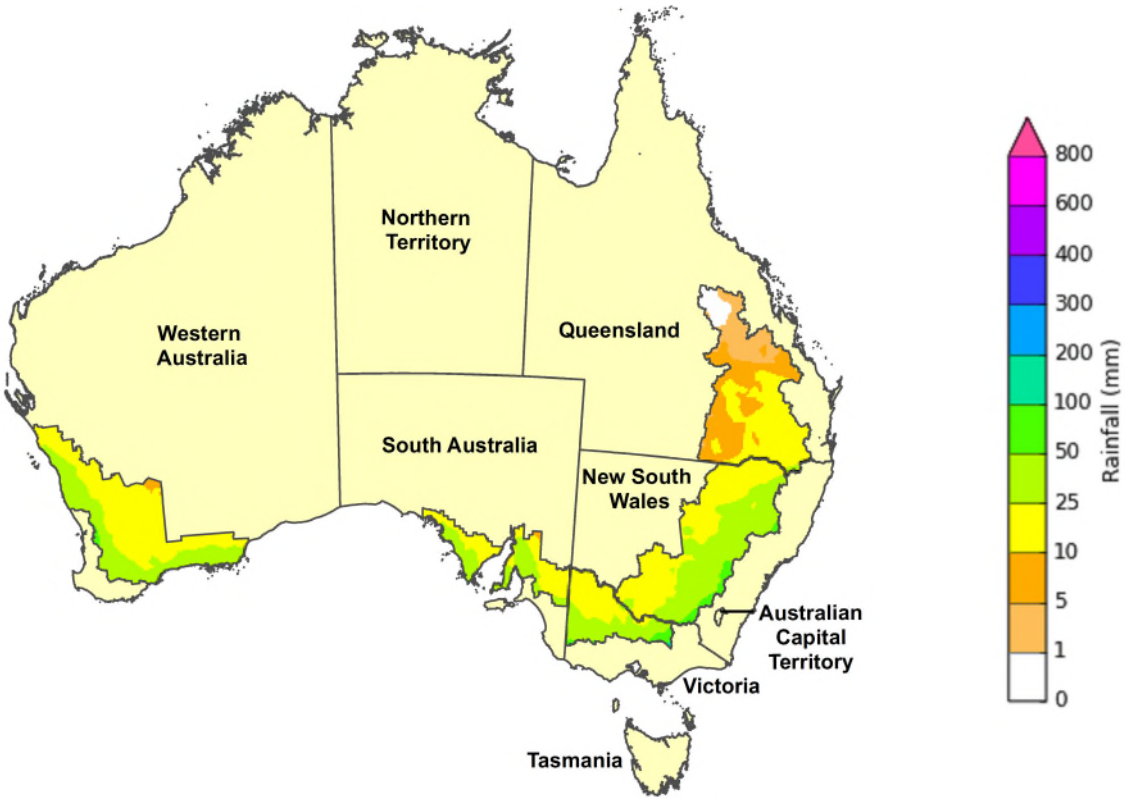
The rainfall outlook for September 2018 indicates that cropping regions in New South Wales and Western Australia have a 50% chance of recording close to median rainfall for the month, and cropping regions in Victoria, South Australia and Queensland have a 50% chance of recording half their median rainfall. This means cropping areas in Western Australia have a 50% chance of receiving between 10 and 25 millimetres in the east and between 25 and 50 millimetres in the south-west in September (Map 5).

In New South Wales it means cropping regions have a 50% chance of receiving between 10 and 25 millimetres in the west and between 25 and 50 millimetres of rain in the east during September 2018. In Victoria, cropping regions have a 50% chance of receiving between 10 and

25 millimetres in the north and between 25 and 50 millimetres in the south. In South Australia, cropping regions have a 50% chance of receiving between 10 and 25 millimetres in the east and north and between 25 and 50 millimetres of rain in southern regions. The south-east of the Queensland cropping region have a 50% chance of receiving between 10 and 25 millimetres, the remainder of the Queensland cropping region has a 50% chance of between 0 and 1, 1 and 5, or 5 and 10 millimetres.

Given the relatively low level of soil moisture in most summer cropping regions of northern New South Wales and Queensland, this rainfall outlook scenario would suggest that planting opportunities are likely to be limited during September 2018.

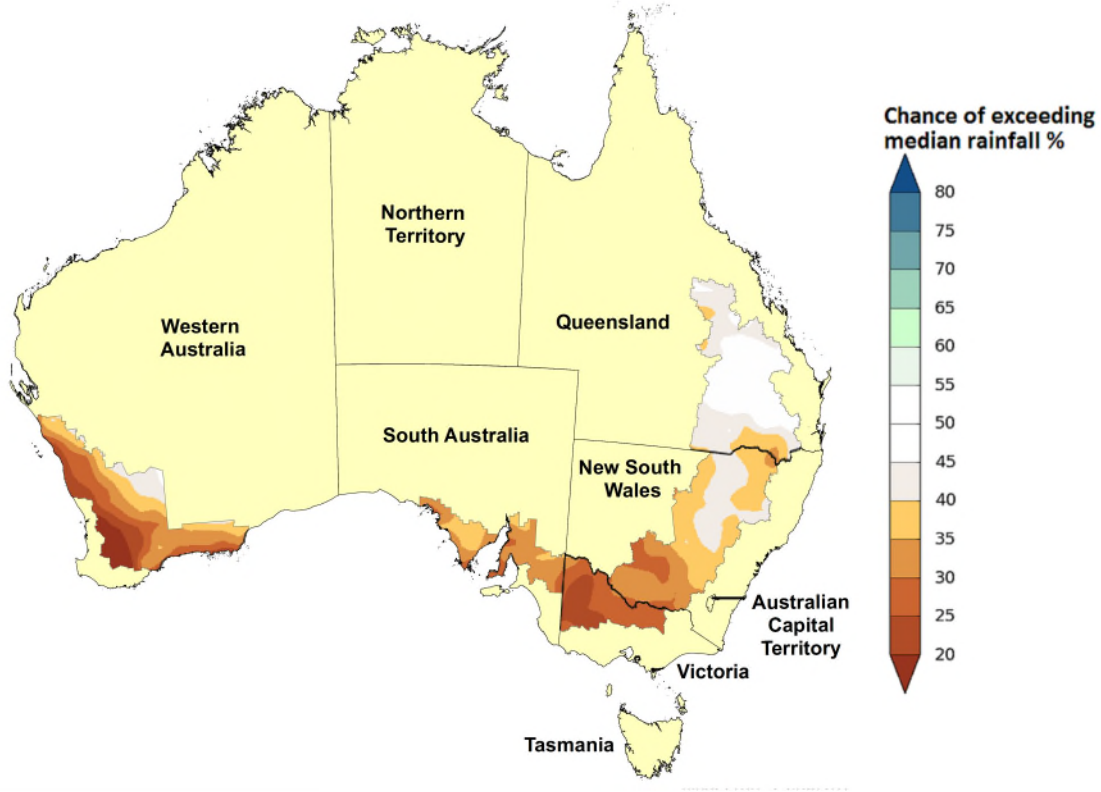
Map 5 Rainfall outlook scenario, 50% chance of totals occurring for September 2018



Note: Rainfall outlook scenario is displayed for cropping regions only.
Source: Bureau of Meteorology.

The Bureau of Meteorology's seasonal rainfall outlook for September to November 2018 indicates that a drier than average spring is more likely for most western and southern Australian cropping regions (Map 6). The highest chance of exceeding average spring rainfall is in cropping regions in Queensland and northern New South Wales. Maximum temperatures are likely to be higher than average across most Australian cropping regions.

Map 6 Rainfall outlook, September to November 2018

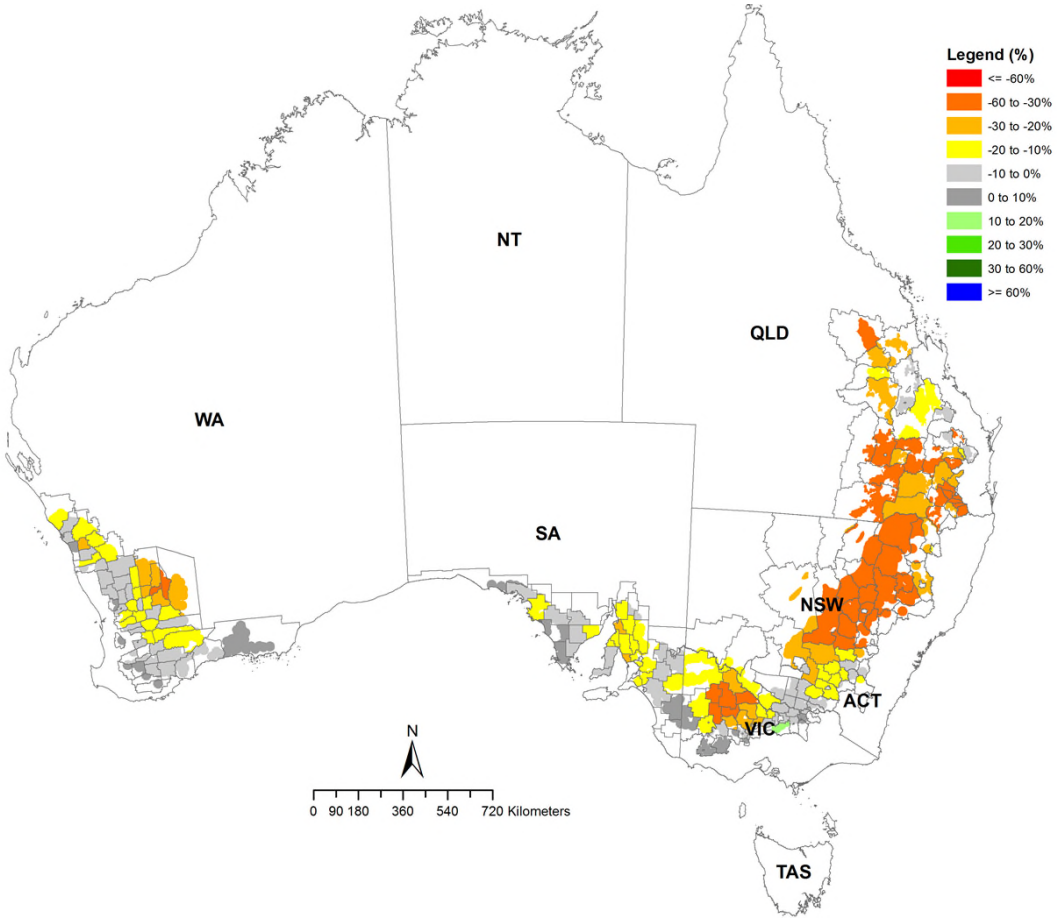


Note: Rainfall outlook is displayed for cropping regions only.
Source: Bureau of Meteorology

Map 7 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). QAAFI uses the most recent trends in the SOI to calculate probabilities of receiving particular amounts of rainfall at a shire level over the next few months. This is different to the methodology used by ABARES and there are regional differences between the QAAFI and ABARES yield forecasts, particularly for Western Australia.

At the beginning of September 2018, the departure of the forecast shire median yield from the long-term median wheat yield, is expected to be high (between 30 and 60%) in most cropping regions in central and northern New South Wales, southern and northern Queensland, central Victoria and some eastern cropping regions in Western Australia. Some central and northern cropping regions in Western Australia, parts of central Queensland, southern New South Wales, northern Victoria and scattered shires in South Australia show slightly reduced chances of exceeding the long-term median wheat yield (between 10 and 20%).

Map 7 Percentage departure of the forecast shire median yield from the long-term median



Note: Percentage departure of the forecast shire median yield from the long-term shire median wheat yield, given SOI phase was "rapidly falling" during July-August. 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, June 2018 to August 2018

District	District no.	June median mm	June 2018 mm	July median mm	July 2018 mm	August median mm	August 2018 mm
New South Wales							
NW Plains (W)	52	33	8	30	5	19	18
NW Plains (E)	53	37	9	36	10	30	30
NW Slopes (N)	54	38	7	41	29	37	37
NW Slopes (S)	55	43	11	42	11	41	28
N Tablelands (N)	56	43	12	44	43	42	30
CW Plains (S)	50	38	35	36	2	30	13
CW Plains (N)	51	33	26	28	2	23	15
CW Slopes (N)	64	40	24	44	5	36	30
CW Slopes (S)	65	47	27	50	5	45	26
C Tablelands (N)	62	42	29	45	9	45	35
C Tablelands (S)	63	54	45	56	10	59	36

continued ...

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

District	District no.	June median mm	June 2018 mm	July median mm	July 2018 mm	August median mm	August 2018 mm
Riverina (W)	75	32	30	30	8	32	9
Riverina (E)	74	44	36	41	14	43	17
SW Slopes (N)	73	57	53	59	16	62	27
SW Slopes (S)	72	92	90	102	54	114	82
Victoria							
N Mallee	76	26	30	28	11	30	20
S Mallee	77	33	32	33	20	36	27
N Wimmera	78	42	35	42	36	43	51
S Wimmera	79	56	50	65	63	65	79
Lower North	80	41	33	40	23	40	26
Upper North	81	54	40	55	32	53	43
Lower North East	82	107	96	113	66	118	97
North Central	88	80	72	83	61	85	75
Western Plains	89	57	54	60	72	67	65
West Coast	90	85	87	90	108	93	99
Queensland							
Central Highlands	35	28	19	16	8	13	9
Maranoa	43	25	18	23	9	20	23
W Darling Downs	42	27	15	28	16	20	33
E Darling Downs	41	29	11	31	22	24	19
Moreton S Coast	40	37	22	37	20	29	17
South Australia							
Upper South East	25B	50	43	53	47	57	66
Murray Mallee	25A	31	26	30	18	35	28
Murray River	24	28	23	27	14	30	28
East Central	23	73	53	77	49	75	83
Yorke Peninsula	22A	53	31	57	38	54	81
Lower North	21	42	34	44	26	47	42
Upper North	19	25	22	27	10	27	23
Western Agricultural	18	30	25	29	18	28	53
Western Australia							
North Coast	8	70	47	65	85	48	61
Central Coast	9	141	115	142	148	113	146
Northern Central	10	53	39	50	62	43	59
South Central	10A	55	47	60	60	52	57
South East	12	19	17	18	11	16	21

Note: Median rainfall is calculated over the period 1900 to August 2018. Australian rainfall districts are shown in Map 8 of the Australian crop report.
Source: Bureau of Meteorology monthly district rainfall reports

Map 8 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 winter were hotter and drier than average in cropping regions in New South Wales. Total winter rainfall was 54% below average. In parts of the western districts there was the lowest winter rainfall on record. The well below average rainfall during the planting window resulted in much less area planted to winter crops than was initially intended. The majority of planted area, and crops with reasonable prospects, are in southern New South Wales where June rainfall facilitated winter crop planting and subsequent seasonal conditions were more favourable than further north. However, timely spring rainfall will be important for the ongoing development of these crops.

Winter crop production in New South Wales is forecast to fall by 46% in 2018–19 to around 3.9 million tonnes, the lowest level since 2006–07. Area planted to winter crops is estimated to have fallen by 37% to 3.4 million hectares. The area planted to wheat, barley, canola and chickpeas are estimated to have fallen significantly, reflecting the lowest rainfall from January to August in New South Wales since 1965.

According to the latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 30 August 2018, spring rainfall is likely to be below average in cropping areas in southern and inland New South Wales.

Wheat production is forecast to be 2.5 million tonnes in 2018–19, a fall of 44%. Yields are forecast to be around 40% below the ten year average to 2017–18 at 1.2 t/ha. Significantly below average rainfall in autumn and June did not allow planting intentions to be realised in central and northern cropping regions. Prospects for wheat crops in the south east cropping regions of New South Wales are currently better than in the south west, central and northern cropping regions. The area planted to wheat is estimated to have fallen by 32% to 2.1 million hectares.

Barley production is forecast to fall by 36% in 2018–19 to 762,000 tonnes. Area planted to barley is estimated to have fallen by 24% to 600,000 hectares, which reflects the below average rainfall.

Canola production is forecast to fall by 51% in 2018–19 to 300,000 tonnes. Below average rainfall combined with a number of frost events, particularly in late August are expected to result in well below average yields. The area planted to canola is estimated to have fallen 38% in 2018–19 to 400,000 hectares, reflecting a combination of the very dry start to the season, higher expected returns for cereal crops and rotational constraints.

Chickpeas production is forecast to fall by 92% in 2018–19 to 32,000 tonnes with area planted estimated to have fallen by over 91% to around 40,000 hectares. The fall reflects below average rainfall early in the winter cropping season, lower expected returns from chickpeas relative to cereal crops and rotational constraints following three consecutive years of significant increases in planted area.

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

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	2,100	1.20	2,520	–32	–44
Barley	600	1.27	762	–24	–36
Canola	400	0.75	300	–38	–51

Note: Yields are based on area planted.

In 2018–19 area planted to **summer crops** in New South Wales is forecast to decrease by 27% to 449,000 hectares. This forecast assumes that spring and early summer rainfall will be adequate for planting grain sorghum and dryland cotton. Soil moisture levels are currently below average and not ideal for summer crop planting. Total summer crop production is forecast to fall by 20% to around 1.9 million tonnes.

Area planted to **grain sorghum** in 2018–19 is forecast to be around the five year average to 2017–18 of 156,000 hectares. Due to prolonged periods of below average rainfall, soil moisture levels in New South Wales are currently below average. Spring and early summer rainfall will be a key determinant of the final area planted. Availability of fallow land is high due to the poor winter cropping season in northern New South Wales. An increased feed grain demand and favourable prices will provide a strong incentive to plant grain sorghum if adequate rainfall is received. Assuming average yields, grain sorghum production is forecast to be around 488,000 tonnes.

Area planted to **cotton** is forecast to fall by almost 50% to 161,000 hectares in 2018–19. Soil moisture levels are very low due to below average rainfall from January to August. This is expected to limit planting to irrigated areas. Cotton production in New South Wales is forecast to decline by 44% in 2018–19 to 389,000 tonnes of cotton lint and around 550,000 tonnes of cottonseed.

Area planted to **rice** is forecast to fall by 10% to 54,000 hectares in 2018–19 in response to reduced supplies of irrigation water. Water storage levels in the Murrumbidgee valley were at 64% in early September 2018, compared to 74% at the same time last year.

Table 7 Summer crop forecasts, New South Wales, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Grain sorghum	156	3.12	488	4	14
Cotton lint	161	2.42	389	-48	-44
Cottonseed	161	3.42	550	-48	-44
Rice	54	10.25	554	–10	–12

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

Queensland

Winter rainfall in most cropping regions in Queensland was average to very much below average, which decreased crop prospects. The dry conditions and low levels of soil moisture limited opportunities for late planting in southern Queensland and reduced potential yields across the state.

Winter crop production in Queensland is forecast to fall by 38% in 2018–19 to around 900,000 tonnes, which would be the lowest winter crop production in over 10 years and is similar to production in 2006–07. The small crop forecast reflects a large fall in planted area, with below average autumn rainfall limiting the ability to plant crops. Yields are expected to be relatively unchanged from the well-below average levels achieved in 2017–18.

Wheat production in 2018–19 is forecast to decline by 23% to around 525,000 tonnes. Area planted to wheat is estimated to have fallen by 25% to around 460,000 hectares—the lowest since 1995–96—due to low levels of soil moisture.

Chickpea production is forecast to fall by 62% to 245,000 tonnes in 2018–19. This reflects a similar percentage fall in area planted to chickpeas in response to lower demand for chickpeas from India and falling prices.

Barley production in 2018–19 is forecast to fall by 14% to around 104,000 tonnes. This reflects a 15% fall in planted area and a marginal increase in the average yield.

Table 8 Winter crop forecasts, Queensland, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	460	1.14	525	-25	-23
Barley	75	1.39	104	-15	-14
Chickpeas	220	1.11	245	-62	-62

Note: Yields are based on area planted.

Area planted to **summer crops** in Queensland is forecast to fall by 14% in 2018–19 to around 615,000 hectares. This reflects a large forecast fall in area planted to irrigated cotton. Summer crop production is forecast to fall by 12% to 1.6 million tonnes.

In its latest three-month rainfall outlook (September to November 2018), issued on 30 August 2018, the Bureau of Meteorology forecast the chance of spring rainfall exceeding the median at between 50% and 35% in Queensland's cropping region.

In 2018–19 area planted to **grain sorghum** is forecast to rise by 8% to 410,000 hectares. This is slightly above the five-year average to 2017–18, and reflects an expected grower response to very high prices for feed. While the Bureau of Meteorology's outlook for spring rainfall indicates a drier-than-average September and October is likely, the planting window for sorghum is wide, extending into February in central Queensland. As a result, it is possible that the planted area could far exceed this forecast if a sufficient level of soil moisture can be achieved over spring or early summer. Sorghum production in 2018–19 is forecast to rise by 6% to around 1.1 million tonnes.

In 2018–19 area planted to **cotton** is forecast to fall by more than 50% to 89,000 hectares. Production is forecast to fall by 45% to 191,000 tonnes of cotton lint and around 270,000 tonnes of cottonseed.

Table 9 Summer crop forecasts, Queensland, 2018–19

Crop	Area	Yield	Production	Area change	Prod. Change
	'000 ha	t/ha	kt	%	%
Grain sorghum	410	2.60	1,067	8	6
Cotton lint	89	2.2	191	-53	-45
Cottonseed	89	3.03	270	-53	-45

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

Victoria

Seasonal conditions in Victorian cropping regions during winter were mixed for crop establishment and development. In the Mallee, below average winter rainfall and low soil moisture levels reduced yield prospects. Average to above average winter rainfall in the Wimmera and western districts resulted in crops in these regions being in good condition at the end of winter with good yield prospects. Crops in these regions are expected to boost Victorian winter crop production but not offset the expected production falls in the Mallee. Dry and cool conditions have delayed crop development in some cropping regions, which reduces the risk of damage from frost events but increases the risk of heat stress during spring in the event of warmer and drier than average seasonal conditions.

According to the latest three-month rainfall outlook (September to November 2018), issued by the Bureau of Meteorology on 30 August 2018, there is a low likelihood of spring rainfall exceeding median in the major cropping regions of Victoria. If this is realised, Victorian winter crop production is likely to deteriorate, particularly in the Mallee. It is likely that maximum temperatures in spring will be above average.

The timeliness of spring rainfall will be critical in areas where soil moisture levels are low.

In 2018–19 total **winter crop** production is forecast to decrease by 29% to 5.4 million tonnes, due to lower average yields. This is mostly because of unfavourable growing conditions in the Mallee. Planted area is estimated to be unchanged at 3.3 million hectares.

Wheat production in 2018–19 is forecast to decrease by 33% to 2.7 million tonnes. The average yield is forecast to fall by 33% to 1.7 tonnes per hectare. Planted area is estimated to increase marginally to 1.6 million hectares

In 2018–19 **barley** production is forecast to fall by 21% to 1.7 million tonnes. The average yield is forecast to decrease by 29% to 1.9 tonnes per hectare. This is expected to be partially offset by an estimated 10% increase in planted area, in response to favourable expected returns.

Canola production in 2018–19 is forecast to decrease by 27% to 550,000 tonnes. Planted area is estimated to decrease by 4% due to lower expected returns relative to cereals. Average yields are forecast to fall by 23% to 1.3 tonnes per hectare.

Table 10 Winter crop forecasts, Victoria, 2018–19

Crop	Area	Yield	Production	Area change	Prod. Change
	'000 ha	t/ha	kt	%	%
Wheat	1,570	1.72	2,700	1	–33
Barley	880	1.88	1,650	10	–21
Canola	430	1.28	550	–4	–27

Note: Yields are based on area planted.

South Australia

Crop conditions and prospects varied widely in South Australia at the start of spring because of highly varied seasonal conditions over winter.

Timely rainfall in August boosted yield prospects in many cropping regions following below average rainfall and warmer than average temperatures in June and July. Above average August rainfall in Lower Eyre Peninsula, lower Yorke Peninsula, the lower north, the central east and the south east significantly increased soil moisture levels in these regions. Yields are expected to be above average.

In other cropping regions seasonal conditions during winter were less favourable. Autumn and winter rainfall was below average in most northern cropping regions, which significantly hampered crop development and contributed to some crop failures in these regions. Timely winter rainfall was enough to sustain established crops in significant parts of the upper Eyre Peninsula, the Upper and Mid North and the Murray Mallee, despite below average levels of lower layer soil moisture. Nevertheless, some crop failures occurred in parts of these regions. Timely spring rainfall will be critical for crops in these regions. Yields are expected to be below average.

According to the climate outlook for spring, issued by the Bureau of Meteorology on 30 August 2018, there is a below average chance of exceeding median rainfall in all cropping regions in September and October. There is a below average chance of above median temperatures in September and an above average chance in most cropping regions in October.

In 2018–19 total **winter crop** production in South Australia is forecast to fall by 5% to 6.6 million tonnes, driven by forecast falls in wheat and canola production.

Wheat production in 2018–19 is forecast to fall by 10% to 3.7 million tonnes as a result of a 13% decline in the average yield. Area planted to wheat is estimated to have increased by 4% to almost 2.1 million hectares largely because of an increase in area planted to wheat on the Eyre Peninsula.

In 2018–19 **barley** production is forecast to increase by 6% to 1.9 million tonnes. Area planted is estimated to have increased by 12% due to higher expected returns and drier than average seasonal conditions during the planting window. Barley is more tolerant of drier conditions than other winter crops.

Canola production in 2018–19 is forecast to fall by 7% to 298,000 tonnes. Area planted is estimated to have fallen by 5% due to unfavourable expected returns at the time of planting. The average yield is forecast to fall by 2%. Below average yields forecast in northern cropping regions are expected to more than offset above average yields in southern cropping regions.

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	1.80	3,694	4	–10
Barley	890	2.15	1,914	12	6
Canola	238	1.25	298	–5	–7

Note: Yields are based on area planted.

Western Australia

Winter rainfall was average to above average in most cropping areas in Western Australia. Many locations had more winter rainfall this year the previous 20 winters. This followed a timely season break in late May, and means that most crops in Western Australia were in good to excellent condition at the start of spring with good prospects for high yields. The favourable conditions over winter mean that many crops are expected to achieve good yields even without further significant rainfall. If average rainfall is received over spring, there is considerable upside potential, especially for cereal crops. Frost events and prolonged above average temperatures do present a downside risk to yields. However, many crops have developed at a slower than average rate this year, which will somewhat mitigate the risk of damage from any frost events but could increase the risk of heat stress during spring if warmer and drier than average seasonal conditions occur.

According to the latest three-month climate outlook (September to November 2018), issued by the Bureau of Meteorology on 30 August 2018, below average spring rainfall is likely in cropping regions in Western Australia. It is likely that maximum and minimum temperatures will exceed median during spring.

Winter crop production in Western Australia is forecast to rise by 12% in 2018–19 to 16.3 million tonnes, driven by forecast rises in wheat and barley production.

Wheat production is forecast to increase by 21% to 9.6 million tonnes in 2018–19. An average yield of around 2.0 tonnes a hectare is expected, which reflects favourable crop prospects in most areas of the state.

Barley production is forecast to increase by 4% to 3.9 million tonnes. The average yield is forecast to decrease slightly compared to 2017–18. The average barley yield in 2017–18 was the second-highest on record for Western Australia, and is unlikely to be achieved again given the 8% rise in planted area in 2018–19.

Canola production is forecast to decrease by 17% to 1.6 million tonnes. This reflects both an 8% fall in planted area and a 10% decrease in the average yield following a poorer start and less favourable early growing conditions for canola.

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	1.99	9,610	–3	21
Barley	1,510	2.56	3,863	8	4
Canola	1,270	1.29	1,638	–8	–17
Lupins	380	1.45	550	9	25

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	11,023	31,819	21,244	19,096
Barley	4,834	3,878	3,964	13,506	8,928	8,327
Canola	2,681	2,729	2,341	4,313	3,669	2,789
Chickpeas	1,069	1,116	327	2,004	1,148	351
Faba beans	233	220	171	484	330	225
Field peas	230	222	170	415	289	208
Lentils	276	353	297	680	485	369
Lupins	515	518	498	1,031	631	689
Oats	1,028	742	680	2,266	1,119	1,048
Triticale	62	77	69	150	114	123

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, 2016–17 to 2018–19

Crop	Area			Production		
	2016–17	**2017–18s**	**2018–19 f**	**2016–17**	**2017–18 s**	**2018–19 f**
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Grain sorghum	368	531	568	994	1,439	1,559
Cottonseed **a**	557	500	250	1,260	1,477	820
Cotton lint **a**	557	500	250	891	1,044	580
Rice	82	60	54	807	630	554
Corn (maize)	68	57	55	436	392	383
Soybeans	17	37	26	31	63	44
Sunflower	16	17	19	17	31	24

a Cotton area is estimated harvested area. **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; Cotton Australia.

Table 15 Production, major crops, Australian states, 2016–17 to 2018–19

Winter crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt
Wheat												
2018–19 **f**	2,100	2,520	1,570	2,700	460	525	2,052	3,694	4,832	9,610	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**	600	762	880	1,650	75	104	890	1,914	1,510	3,863	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**	400	300	430	550	1	1	238	298	1,270	1,638	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**	200	140	130	220	39	21	48	87	260	574	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, 2016–17 to 2018–19 (continued)

Summer crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		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												
2018–19 **f**	156	488	1	2	410	1,067	0	0	1	2	0	0
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
Five-year average to 2017–18	156	485	0	1	379	1,053	0	0	1	3	0	0
Cottonseed a												
2018–19 **f**	161	550	0	0	89	270	0	0	0	0	0	0
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
Five-year average to 2017–18	245	733	0	0	139	392	0	0	0	0	0	0
Rice												
2018–19 **f**	54	554	0	0	0	0	0	0	0	0	0	0
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
Five-year average to 2017–18	62	640	0	2	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

Table 16 Production, other crops, Australian states, 2016–17 to 2018–19

Winter crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt
Chickpeas												
2018–19 **f**	40	32	35	30	220	245	24	32	8	12	0	0
2017–18 **s**	450	407	55	60	575	638	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	444	32	39	352	531	20	22	4	6	0	0
Field peas												
2018–19 **f**	31	33	50	55	0	0	69	76	20	44	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**	2	3	125	100	0	0	159	254	11	13	0	0
2017–18 **s**	22	29	150	200	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	126	0	0	128	232	2	2	0	0
Lupins												
2018–19 **f**	40	46	30	35	0	0	48	58	380	550	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, 2016–17 to 2018–19 (continued)

Summer crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		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
Corn (maize)												
2018–19 **f**	21	200	1	6	31	165	0	0	2	12	0	0
2017–18 **s**	20	178	1	7	35	195	0	0	2	12	0	0
2016–17	23	203	8	69	35	146	0	1	2	17	0	1
Five-year average to 2017–18	21	201	4	47	31	165	0	0	1	9	0	0
Soybeans												
2018–19 **f**	16	29	1	1	9	14	0	0	0	0	0	0
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
Five-year average to 2017–18	16	28	0	1	7	12	0	0	0	0	0	0
Sunflower												
2018–19 **f**	10	15	0	0	8	9	0	0	0	0	0	0
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
Five-year average to 2017–18	10	15	0	0	7	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
	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	6,784	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	637
– field peas	130	145	175	124	72	148
– chickpeas	93	1	0	1	1	1
Exports						
– lupins	565	169	340	243	254	395
– field peas	215	177	169	168	134	268
– 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.

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
	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	2,034	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	2,210	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, fourth quarter 2016 to second quarter 2018

Crop	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2
	A$/t	A$/t	A$/t	A$/t	A$/t	A$/t	A$/t
Wheat							
Domestic: feed, del. Sydney	238	271	226	260	262	209	334
International: US no. 2 hard red winter, fob Gulf **a**	253	288	274	277	283	268	322
Barley							
Domestic: 2 row feed, del. Sydney	183	237	210	243	252	183	324
Export: feed **b**	232	278	225	235	274	225	297
Export: malting **b**	267	318	261	244	263	243	304
International: feed, fob Rouen **a**	204	228	217	222	241	214	277
Grain sorghum							
Domestic: feed, del. Sydney	234	259	265	306	313	245	366
Export **b**	284	290	331	323	493	333	334
Oats							
Domestic: feed, del. Sydney	194	218	165	190	188	152	275
International: CME oats nearby contract	200	184	221	229	230	224	216
Corn (maize)							
Domestic: feed, del. Sydney	346	351	352	375	382	360	400
International: US no. 2 yellow corn, fob Gulf **a**	204	222	211	193	195	213	230
Oilseeds							
Domestic: canola, del. Melbourne	548	536	529	523	543	539	525
International: Europe rapeseed, cif Hamburg	578	548	563	539	561	586	544
International: US no. 2 soybeans, fob Gulf **a**	521	482	481	479	490	518	539
Pulses							
Domestic: lupins, del. Kwinana	272	298	267	296	286	234	322
Domestic: chickpeas, del. Melbourne	776	993	1,034	869	763	827	645
Domestic: field peas, del. Melbourne	355	555	362	318	298	343	378
Export: chickpeas **b**	968	904	1,024	1,012	957	942	737
Export: field peas **b**	506	590	458	416	389	444	426

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