



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. 189

February 2019



© Commonwealth of Australia 2019

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 4.0 International Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 4.0 International Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. See the [summary of the licence terms](#) or the [full licence terms](#).

Cataloguing data

ABARES 2019, *Australian crop report*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, February. CC BY 4.0. <https://doi.org/10.25814/5c63543a223b0>

ISSN 1447-8358

ISBN 978-1-74323-417-4

ABARES project AWP12

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 +612 6272 2010

Email info.abares@agriculture.gov.au

Web agriculture.gov.au/abares

Inquiries about the licence and any use of this document should be emailed to copyright@agriculture.gov.au.

The Australian Government acting through the Department of Agriculture and Water Resources, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture and Water Resources, ABARES, its employees and advisers disclaim all liability, including for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on information or data in this publication to the maximum extent permitted by law.

The next issue of *Australian crop report* is scheduled to be released on Wednesday 12 June 2019.

In the next issue:

2019–20 winter crop area and production forecasts

2018–19 summer crop area and production estimates updated

Acknowledgements

This report was prepared by Amelia Brown, Andrew Cameron, Benjamin K Agbenyegah, Charley Xia and Matthew Miller.

Contents

National overview	1
Climatic and agronomic conditions	5
Crop conditions and production forecasts, by state	12
New South Wales	12
Queensland	13
Victoria	14
South Australia	15
Western Australia	15
Statistical tables	17

Tables

Table 1 Summer crop area and production, Australia, 2008–09 to 2018–19	2
Table 2 Winter crop production, Australia, 1998–99 to 2018–19	3
Table 3 Winter crop area, Australia, 2008–09 to 2018–19	4
Table 4 Rainfall in major cropping districts, median and actual, November 2018 to January 2019	9
Table 5 Summer crop forecasts, New South Wales, 2018–19	12
Table 6 Winter crop estimates, New South Wales, 2018–19	13
Table 7 Summer crop forecasts, Queensland, 2018–19	14
Table 8 Winter crop estimates, Queensland, 2018–19	14
Table 9 Winter crop estimates, Victoria, 2018–19	15
Table 10 Winter crop estimates, South Australia, 2018–19	15
Table 11 Winter crop estimates, Western Australia, 2018–19	16
Table 12 Winter crop production and area, Australia, 2016–17 to 2018–19	17
Table 13 Summer crop production and area, Australia, 2016–17 to 2018–19	17
Table 14 Production, major crops, Australian states, 2016–17 to 2018–19	18
Table 15 Production, other crops, Australian states, 2016–17 to 2018–19	20
Table 16 Supply and disposal of wheat, canola and pulses, Australia, 2012–13 to 2017–18	22
Table 17 Supply and disposal of coarse grains, Australia, 2012–13 to 2017–18	23
Table 18 Grain, oilseed and pulse prices, second quarter 2017 to fourth quarter 2018	24

Maps

Map 1 Australian rainfall percentiles, 1 November 2018 to 31 January 2019	5
Map 2 Upper layer soil moisture, January 2019	6
Map 3 Lower layer soil moisture, January 2019	7
Map 4 Rainfall outlook, March to May 2019	8
Map 5 Forecast median grain sorghum yield ranked relative to all years, 5 February 2019	9
Map 6 Rainfall districts, Australia	11

National overview

Drier and warmer than average seasonal conditions in the cropping regions in Queensland and northern New South Wales during December and January reduced prospects of summer crop production in 2018–19. The unfavourable seasonal conditions curtailed the planting of dryland summer crops in the latter part of the planting window, lowered soil moisture levels and reduced yield prospects of dryland crops. Soil moisture levels are well below average in many summer cropping regions and sufficient and timely rainfall over the remainder of the season will be important to the ongoing development of dryland crops.

According to the latest three-month rainfall outlook (March to May), issued by the Bureau of Meteorology on 14 February 2019, rainfall in most cropping regions in Queensland and northern New South Wales is more likely to be below average than above average but this likelihood is generally stronger in Queensland. There is no strong tendency toward either above or below average rainfall in the remaining summer cropping regions.

Planting of **summer crops** is now largely complete and total area planted to summer crops is estimated to have decreased by 23% in 2018–19 to around 1.0 million hectares. This is a 6% downward revision from the forecast ABARES published in the December 2018 *Australian crop report*. The lower estimate of planted area resulted from forecast planting of grain sorghum late in the planting window not taking place because of unfavourable seasonal conditions. Total summer crop production is forecast to decrease by 33% to around 2.7 million tonnes.

Area planted to **grain sorghum** is estimated to have risen marginally in 2018–19 to 537,000 hectares. Late season planting was minimal because of low soil moisture levels and unfavourable seasonal conditions in Queensland. Generally unfavourable conditions in most summer cropping regions are expected to constrain the average yield and production is forecast to fall by 9% to 1.3 million tonnes.

Area planted to **cotton** is forecast to fall by 44% in 2018–19 to 280,000 hectares. This is due to below average rainfall in 2018 resulting in a significant fall in water levels in irrigation dams serving cotton-growing regions and low soil moisture levels preventing the planting of dryland cotton. Cotton production is forecast to fall by 42% to 581,000 tonnes of cotton lint and 821,000 tonnes of cottonseed.

Rice production is forecast to fall by 83% to 104,000 tonnes in 2018–19 because of low water allocations and high water prices in southern New South Wales.

Table 1 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	2,262	711	1,814	1,335	4,103
2018–19 f	419	1,238	606	1,475	1,034	2,743
% change 2017–18 to 2018–19	–32	–45	–15	–19	–23	–33

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. Area based on planted crop that is harvested, fed off or failed.

Harvesting of 2018–19 winter crops is largely complete and better than expected yields in Western Australia boosted production above the forecast ABARES published in the December 2018 edition of *Australian crop report*. However, crop yields in other states are estimated to have been well below average.

Total Australian **winter crop** production is estimated to have decreased by 20% in 2018–19 to 30.4 million tonnes. This estimate represents a 4% upward revision to the December 2018 *Australian crop report* forecast, driven by the better than expected production in Western Australia.

Production of all the major crops is estimated to have fallen, **wheat** by 19% to 17.3 million tonnes, **barley** by 7% to 8.3 million tonnes and **canola** by 41% to 2.2 million tonnes. Amongst other crops, **chickpea** production is estimated to have fallen by 76% to 281,000 tonnes and **oats** production by 21% to 888,000 tonnes.

Winter crop area is estimated to have fallen by 18% in 2018–19 to 18.2 million hectares.

Table 2 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	3,507	2,323	6,304	12,233	34,160
1999–00	kt	11526	5,252	2,221	4,770	13,312	37,143
2000–01	kt	10829	6,266	1,339	7,429	8,724	34,663
2001–02	kt	11170	5,893	1,156	8,796	12,042	39,134
2002–03	kt	3485	1,943	829	4,223	6,812	17,361
2003–04	kt	10795	6,961	1,450	7,359	16,676	43,315
2004–05	kt	10712	4,214	1,391	5,298	12,978	34,671
2005–06	kt	11981	6,267	1,433	7,518	13,945	41,226
2006–07	kt	3794	1,748	924	2,793	8,278	17,580
2007–08	kt	3999	4,692	1,194	4,706	10,761	25,415
2008–09	kt	9438	3,887	2,326	4,863	13,785	34,378
2009–10	kt	7787	5,889	1,617	7,035	12,943	35,344
2010–11	kt	14784	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 ^s	kt	2,867	3,744	717	5,273	17,712	30,406
% change 2017–18 to 2018–19		-60	-51	-51	-24	21	-20
% change 2018–19 to lowest production		-18	93	-13	25	160	75

^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 3 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 ^s	'000 ha	2,943	2,903	717	3,315	8,297	18,198
% change 2017–18 to 2018–19		–46	–13	–45	–5	–2	–18

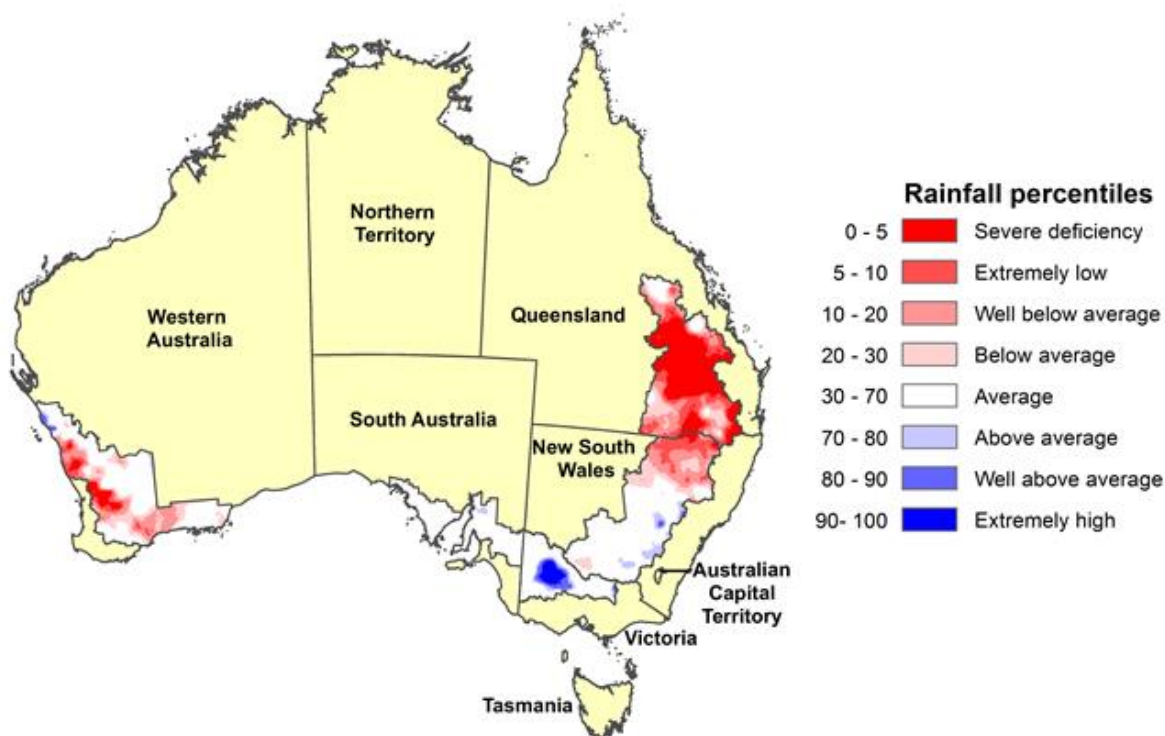
^s ABARES estimate.

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 based on planted crop that is harvested, fed off or failed.

Climatic and agronomic conditions

During the period November 2018 to January 2019, rainfall was severely deficient to well below average in cropping regions in Queensland and extremely low to below average in northern New South Wales. Rainfall was mostly average or above in cropping areas in New South Wales, Victoria, South Australia and much of Western Australia (**Map 1**).

Map 1 Australian rainfall percentiles, 1 November 2018 to 31 January 2019



Note: Rainfall percentiles are displayed for cropping regions only.

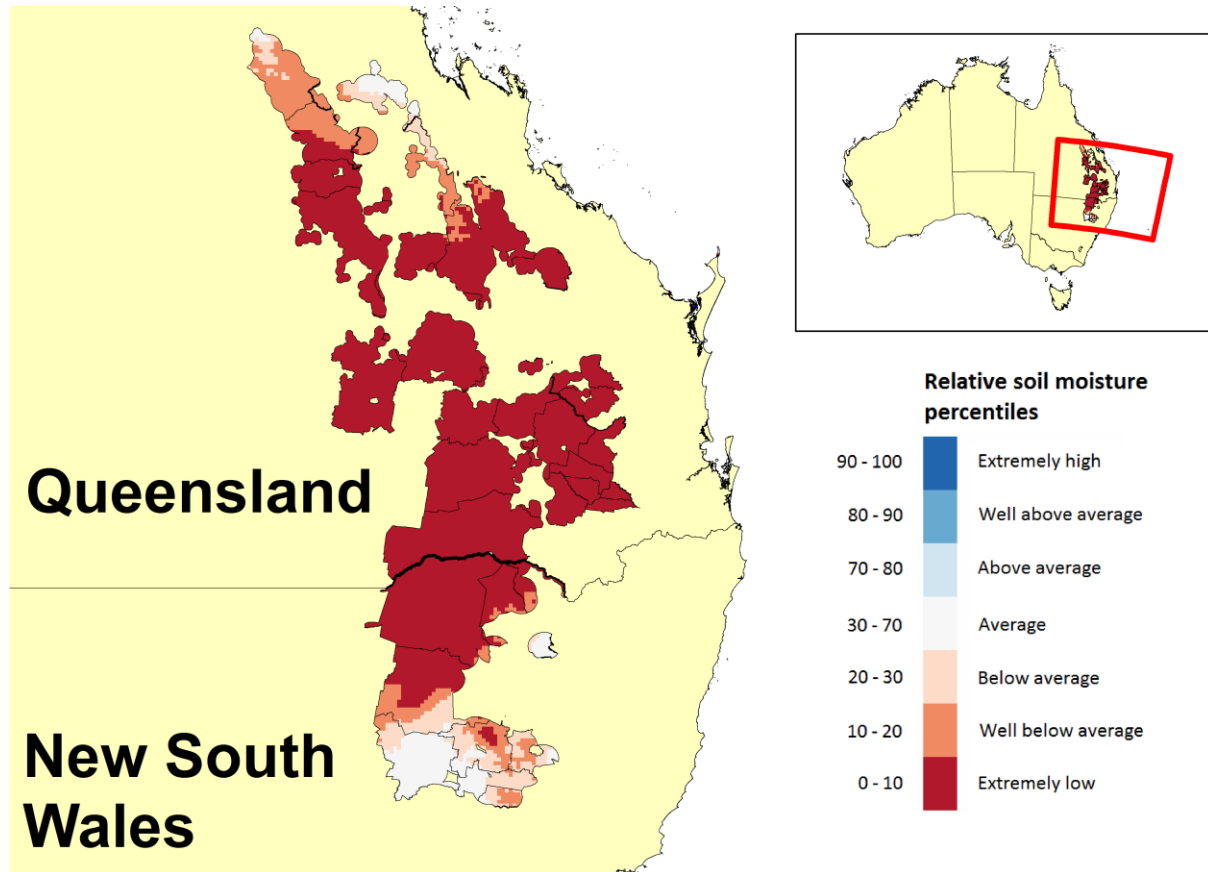
Source: Bureau of Meteorology

Map 2 and **Map 3** 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 January 2019. 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 in January 2019 (**Map 2**) in Queensland and northern New South Wales was mostly extremely low to well below average. In the remaining parts of these summer cropping regions, upper layer soil moisture was average to below average.

Map 2 Upper layer soil moisture, January 2019

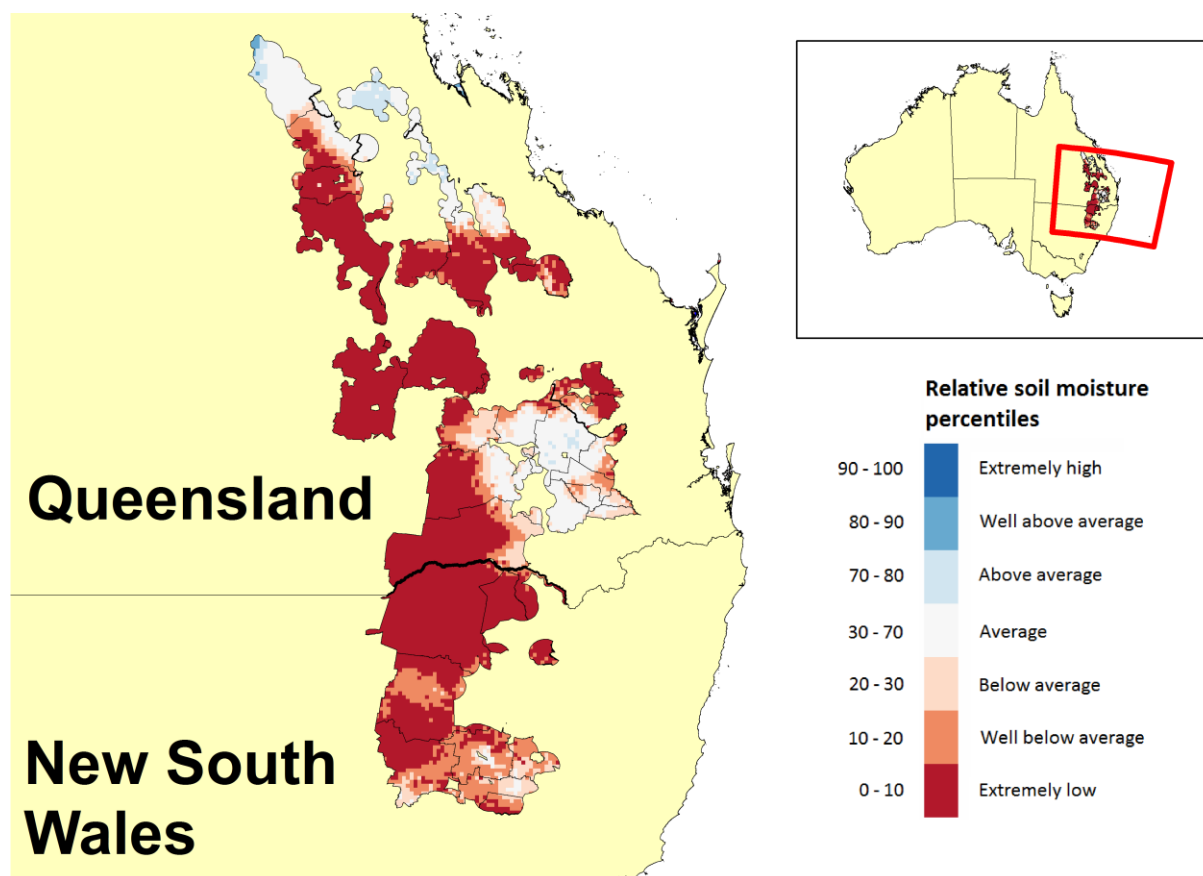


Note: Relative upper layer soil moisture is displayed for grain sorghum growing regions only. The extremely high band indicates where the estimated soil moisture level for January 2019 fell into the wettest 10 per cent of estimated soil moisture levels on that day each year between 1910 and 2015. The extremely low band indicates where the estimated soil moisture levels for January 2019 fell into the driest 10 per cent of estimated soil moisture levels on that day between 1910 and 2015.

Source: Bureau of Meteorology.

Relative lower layer soil moisture in January 2019 was extremely low to well below average in nearly all cropping regions in northern New South Wales and large segments of cropping regions in Queensland. Lower layer soil moisture in the remaining cropping regions in Queensland was mostly average but in some regions it was above average (**Map 3**).

Map 3 Lower layer soil moisture, January 2019

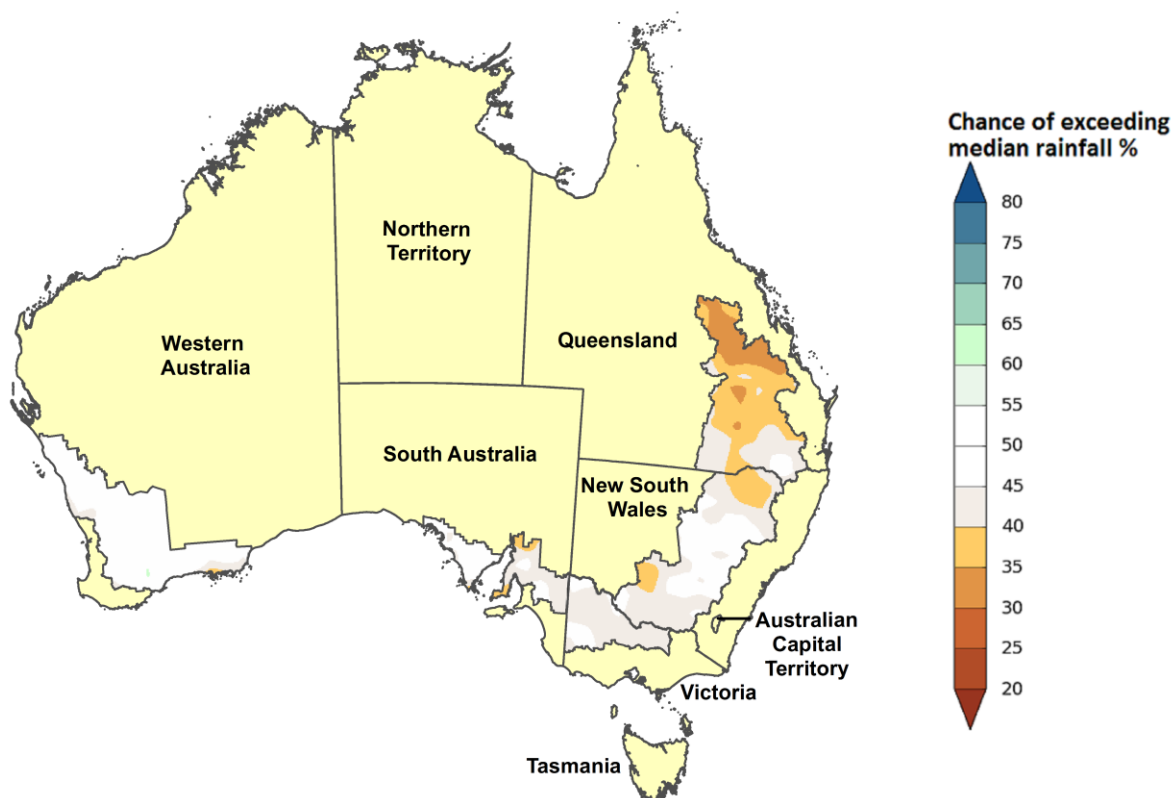


Note: Relative lower layer soil moisture is displayed for grain sorghum growing regions only. The extremely high band indicates where the estimated soil moisture level for January 2019 fell into the wettest 10 per cent of estimated soil moisture levels on that day each year between 1910 and 2015. The extremely low band indicates where the estimated soil moisture levels for January 2019 fell into the driest 10 per cent of estimated soil moisture levels on that day between 1910 and 2015.

Source: Bureau of Meteorology.

According to the latest three-month rainfall outlook (March to May), issued by the Bureau of Meteorology on 14 February 2019, rainfall in most cropping regions in Queensland and northern New South Wales is more likely to be below average than above average but this likelihood is generally stronger in Queensland. There is no strong tendency toward either above or below average rainfall in the remaining summer cropping regions (**Map 4**).

The outlook for maximum and minimum temperatures for March to May 2019 indicates hotter than average daytime and night-time temperatures are likely in cropping regions in northern New South Wales and Queensland.

Map 4 Rainfall outlook, March to May 2019

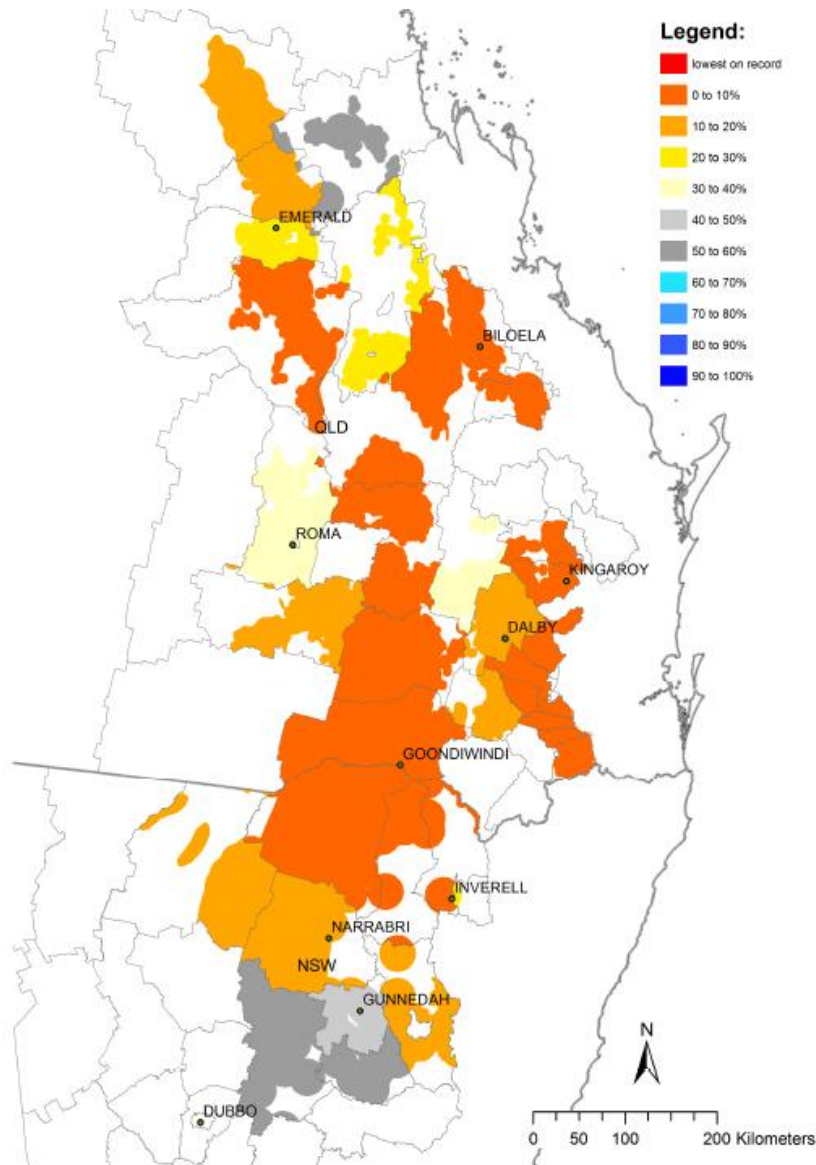
Note: Rainfall outlook is displayed for cropping regions only.

Source: Bureau of Meteorology

Map 5 shows the shire-scale forecast of grain sorghum 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). It is important to note that final sorghum crop yield is affected more by in-crop rainfall and temperatures during crop growth than by the soil moisture at time of sowing.

At the beginning of February 2019, the forecast indicated a variable and generally poor outlook for the 2018–19 sorghum crop. Forecast yield outcomes in central Queensland are low and falling into the 10th to 30th percentile when compared to the historical median. In southern Queensland and areas of northern New South Wales forecast yield outcomes are even lower, falling into the 0 to 20th percentile when compared to the historical median.

Map 5 Forecast median grain sorghum yield ranked relative to all years, 5 February 2019



Note: Forecast median grain sorghum yield ranked relative to all years (%), given SOI phase was “rapidly falling” at the end of January.

Source: Queensland Alliance for Agriculture and Food Innovation

Table 4 Rainfall in major cropping districts, median and actual, November 2018 to January 2019

District	District no.	November median mm	November 2018 mm	December median mm	December 2018 mm	January median mm	January 2019 mm
New South Wales							
NW Plains (W)	52	39	42	47	18	48	5
NW Plains (E)	53	51	57	57	31	61	15
NW Slopes (N)	54	64	66	78	44	78	25
NW Slopes (S)	55	66	75	75	56	71	36
N Tablelands (N)	56	82	63	97	66	97	54

District	District no.	November median mm	November 2018 mm	December median mm	December 2018 mm	January median mm	January 2019 mm
CW Plains (S)	50	30	65	35	26	33	33
CW Plains (N)	51	33	49	42	23	41	28
CW Slopes (N)	64	50	60	47	56	60	61
CW Slopes (S)	65	44	87	45	42	46	56
C Tablelands (N)	62	62	70	59	72	59	110
C Tablelands (S)	63	62	106	67	72	74	100
Riverina (W)	75	23	38	24	24	17	10
Riverina (E)	74	34	56	31	31	22	12
SW Slopes (N)	73	48	69	46	48	37	58
SW Slopes (S)	72	74	142	68	83	55	49
Victoria							
N Mallee	76	20	14	16	44	13	3
S Mallee	77	23	16	19	82	13	3
N Wimmera	78	25	25	20	82	15	2
S Wimmera	79	32	32	28	58	20	1
Lower North	80	29	31	21	61	22	8
Upper North	81	34	42	28	62	26	10
Lower North East	82	67	88	63	108	45	29
North Central	88	55	63	51	74	37	12
Western Plains	89	47	41	36	60	28	3
West Coast	90	53	44	44	58	30	2
Queensland							
Central Highlands	35	53	29	76	35	89	20
Maranoa	43	54	44	61	31	62	1
W Darling Downs	42	50	34	70	48	64	3
E Darling Downs	41	58	30	81	84	67	6
Moreton S Coast	40	79	30	108	107	118	9
South Australia							
Upper South East	25B	28	31	22	35	15	1
Murray Mallee	25A	22	27	17	26	12	1
Murray River	24	21	28	16	22	13	2
East Central	23	30	50	24	29	16	1
Yorke Peninsula	22A	20	32	16	15	9	1
Lower North	21	25	47	20	17	13	2
Upper North	19	18	25	18	14	13	4
Western Agricultural	18	18	39	13	11	9	4
Western Australia							
North Coast	8	6	9	5	7	6	1

District	District no.	November median mm	November 2018 mm	December median mm	December 2018 mm	January median mm	January 2019 mm
Central Coast	9	16	5	8	3	4	5
Northern Central	10	9	16	7	6	8	1
South Central	10A	16	19	10	7	8	1
South East	12	13	42	17	26	13	3

Note: Median rainfall is calculated over the period 1900 to January 2019. Australian rainfall districts are shown in **Map 6** of the Australian crop report.

Source: Bureau of Meteorology monthly district rainfall reports

Map 6 Rainfall districts, Australia



Note: Displayed for major cropping districts only. See table 4 for district names and observed district rainfall.

Source: Bureau of Meteorology.

Crop conditions and production forecasts, by state

New South Wales

Seasonal conditions during December and January were generally unfavourable for summer crop planting. Below to very much below average December and January rainfall and prolonged heatwave conditions depleted soil moisture levels and reduced yield prospects for dryland crops. Sufficient and timely rainfall over the remainder of the season will be important for ongoing development of dryland crops, particularly those planted late.

According to the latest three-month rainfall outlook (March to May), issued by the Bureau of Meteorology on 14 February 2019, below average rainfall is slightly more likely than above average rainfall in most summer cropping regions in New South Wales (**Map 4**). All summer cropping regions are forecast to be hotter than average.

Area planted to **summer crops** in New South Wales is estimated to have decreased by 32% in 2018–19 to 419,000 hectares, reflecting low supplies of irrigation water and insufficient soil moisture in many regions for planting dryland crops. Total summer crop production is forecast to fall by 45% to around 1.2 million tonnes.

Area planted to **grain sorghum** in 2018–19 is estimated to be around 150,000 hectares, 17% below the 10 year average to 2017–18. Soil moisture levels were well below average at the start of summer and significant widespread rainfall was needed for planting intentions to be realised. However, December and January rainfall was below average. Prolonged heatwave conditions in late December and January further depleted soil moisture levels. Yields are forecast to be below average, resulting in grain sorghum production of 375,000 tonnes, 13% lower than in 2017–18.

Area planted to **cotton** is estimated to have declined by 44% to 174,000 hectares in 2018–19. Cotton production is forecast to fall by 43% to 371,000 tonnes of cotton lint and around 524,000 tonnes of cottonseed in 2018–19. The average yield is forecast to increase by 1% because area planted to lower yielding dryland cotton fell from 106,000 hectares last year to zero this year.

Area planted to **rice** is estimated to have fallen by 83% to 10,000 hectares in 2018–19 reflecting low water allocations in the Murray Valley and the Murrumbidgee Irrigation Area. As a result, rice production is forecast to fall by 84% to 104,000 tonnes.

Table 5 Summer crop forecasts, New South Wales, 2018–19

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Grain sorghum	150	2.50	375	0	-13
Cotton lint	174	2.13	371	-44	-43
Cottonseed	174	3.01	524	-44	-44
Rice	10	10.38	104	-83	-84

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed.

Total **winter crop** production in New South Wales is estimated to have decreased by 60% to around 2.9 million tonnes in 2018–19, the lowest level of production since 1994–95. There was a significant fall in planted area because many crops planted for grain production were cut for hay.

Wheat production in 2018–19 is estimated to have fallen by 60% to around 1.8 million tonnes, reflecting a 31% fall in the average yield and a 42% fall in planted area.

Barley production is estimated to have decreased by 47% in 2018–19 to around 630,000 tonnes. The average barley yield is estimated to have fallen by 30%. Area planted to barley fell by 24% to 600,000 hectares.

Canola production is estimated to have fallen by 75% in 2018–19 to around 152,000 tonnes. Planted area fell by 71% to 190,000 hectares reflecting insufficient soil moisture at the time of planting. Significant frost events resulted in a further loss of area as many frost damaged crops were cut for hay. The average canola yield is the lowest in 10 years at 0.80 tonnes per hectare.

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

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	1,800	1.00	1,800	–42	–60
Barley	600	1.05	630	–24	–47
Canola	190	0.80	152	–71	–75

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed.

Queensland

Seasonal conditions in December 2018 and January 2019 were unfavourable in cropping regions in Queensland. Rainfall in most cropping regions was very much below average and temperatures above average. These conditions reduced soil moisture levels to below average in most cropping regions and area planted to dryland summer crops. Additionally, yields are expected to be below average.

According to the latest three-month rainfall outlook (March to May), issued by the Bureau of Meteorology on 14 February 2019, rainfall in most cropping regions in Queensland is more likely to be below average than above average.

Area planted to **summer crops** in Queensland is forecast to fall by 15% in 2018–19 to around 606,000 hectares. This reflects a significant fall in area planted to cotton.

Area planted to **cotton** is estimated to have declined by 44% to 106,000 hectares in 2018–19. Cotton production is forecast to fall by 39% to 210,000 tonnes of cotton lint and around 297,000 tonnes of cottonseed in 2018–19. The average yield is forecast to increase by 9% because area planted to lower yielding dryland cotton fell from 58,000 hectares last year to zero this year.

Area planted to **grain sorghum** is forecast to increase marginally to 385,000 hectares in 2018–19, which is well below the 10-year average to 2017–18 of 407,000 hectares. Production is forecast to fall by 8% to 924,000 tonnes in 2018–19. The average yield is expected to fall by 9%.

Table 7 Summer crop forecasts, Queensland, 2018–19

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. Change %
Grain sorghum	385	2.40	924	1	-8
Cotton lint	106	1.98	210	-44	-39
Cottonseed	106	2.80	297	-44	-39

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed.

Harvesting of **winter crops** in Queensland is now largely complete. Total winter crop production in 2018–19 is estimated to have fallen by 51% to around 717,000 tonnes, largely driven by a significant fall in production of chickpeas. Forecast winter crop production will be the lowest since 1994–95. The decline in production in 2018–19 was largely due to significant falls in planted area.

Wheat production is estimated to have fallen by 41% to 400,000 tonnes. The area planted to wheat is estimated to have declined by 34% to 400,000 hectares and the average yield is estimated to have fallen by 11% to 1.00 tonne per hectare.

Chickpea production is estimated to have fallen by 70% in 2018–19 to 190,000 tonnes. This is a downwards revision of around 22% from the forecast presented in the December 2018 edition of *Australian crop report*. This is because frost damage in Central Queensland and the impact of drier than average seasonal conditions was greater than previously assessed.

Barley production is estimated to have fallen by 22% to 95,000 tonnes, largely driven by a 20% fall in planted area to 70,000 hectares.

Table 8 Winter crop estimates, Queensland, 2018–19

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	400	1.00	400	-34	-41
Barley	70	1.35	95	-20	-22
Chickpeas	200	0.95	190	-65	-70

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed.

Victoria

Winter crop production in Victoria is estimated to have decreased by 51% in 2018–19 to around 3.7 million tonnes, the lowest since 2015–16. Planted area is estimated to have fallen by 13% because significant area planted to wheat and canola for grains and oilseed production was cut for hay.

Wheat production is estimated to have declined by 51% in 2018–19 to around 2 million tonnes. The average yield is estimated to have fallen by 46% from the high level achieved in 2017–18.

In 2018–19 **barley** production is estimated to have fallen by 48% to 1.1 million tonnes mainly because of a 46% decline in the average yield.

Canola production is estimated to have decreased by 60% in 2018–19 to 300,000 tonnes because of a 40% fall in the average yield and a 33% fall in planted area.

Table 9 Winter crop estimates, Victoria, 2018–19

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. Change %
Wheat	1,400	1.39	1,950	-10	-51
Barley	770	1.43	1,100	-4	-48
Canola	300	1.00	300	-33	-60

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed.

South Australia

Winter crop production in South Australia is estimated to have decreased by 24% in 2018–19 to around 5.3 million tonnes, the lowest since 2008–09.

Winter crop area in South Australia is estimated to have fallen by around 5%, largely because some area planted to cereal crops for grain production was cut for hay. The main regions in which this occurred were in the upper Eyre Peninsula, upper Yorke Peninsula, lower to mid north, southern Mallee and upper south east.

Wheat production is estimated to have fallen by 28% in 2018–19 to around 3 million tonnes largely because of a fall in the average yield. Forecast production is the lowest since 2008–09. Wheat quality was generally good with high protein levels and relatively few screenings.

Barley production is forecast to decrease by 15% in 2018–19 to around 1.5 million tonnes. An above average share of harvested barley crop has been graded as malting quality because of relatively few screenings.

Canola production is forecast to fall by 19% in 2018–19 to 260,000 tonnes, largely due to a 20% decline in planted area. Less area was planted at the beginning of the season and some of this was cut for hay. Oil content was lower than average, with many crops recording oil content of between 35% and 40%.

Table 10 Winter crop estimates, South Australia, 2018–19

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	1,850	1.59	2,950	-6	-28
Barley	820	1.87	1,535	3	-15
Canola	200	1.30	260	-20	-19

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed.

Western Australia

Winter crop production in Western Australia is estimated to have reached 17.7 million tonnes in 2018–19. This is the second largest Western Australian crop on record and is a 9% increase on the estimate published in the December edition of *Australian crop report*. Seasonal conditions were generally favourable until rainfall deficiencies in September and frost events in some areas during spring threatened to put this result out of reach. However, the finish to the season was extremely favourable and boosted production more than was initially expected.

Publically reported winter crop receivals were at 16.4 million tonnes at the conclusion of the harvest.

Wheat production is estimated to have increased by 28% to 10.2 million tonnes in 2018–19, largely because of an estimated 36% increase in the average yield. Area planted is estimated to be 4.7 million hectares, which is slightly lower than the 10-year average to 2017–18 and reflects a partial shift from wheat to barley production by many producers.

Barley production is estimated to have increased by 33% to 4.9 million tonnes. This represents the largest barley crop ever grown in Western Australia and exceeds the previous record high by almost 800,000 tonnes. Planted area increased by 25%, largely at the expense of area planted to wheat.

Canola production is estimated to have decreased by 26% to 1.5 million tonnes in 2018–19. This reflects a 13% fall in planted area and an estimated 15% decrease in the average yield. This outcome resulted from unfavourable seasonal conditions during the planting window for canola and its early growing phase.

Table 11 Winter crop estimates, Western Australia, 2018–19

Crop	Area	Yield	Production	Area change	Prod. change
	'000 ha	t/ha	kt	%	%
Wheat	4,700	2.16	10,150	-6	28
Barley	1,750	2.81	4,916	25	33
Canola	1,200	1.22	1,464	-13	-26
Lupins	380	1.58	600	9	36

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed.

Statistical tables

Table 12 Winter crop production and area, Australia, 2016–17 to 2018–19

Crop	Area			Production		
	2016–17	2017–18 s	2018–19 s	2016–17	2017–18 s	2018–19 s
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Wheat	12,191	12,237	10,159	31,819	21,244	17,298
Barley	4,834	3,878	4,019	13,506	8,928	8,310
Canola	2,681	2,729	1,893	4,313	3,669	2,180
Chickpeas	1,069	1,116	275	2,004	1,148	281
Faba beans	233	220	171	484	330	199
Field peas	230	222	179	415	289	152
Lentils	276	353	303	680	485	323
Lupins	515	518	500	1,031	631	693
Oats	1,028	742	634	2,266	1,119	888
Triticale	62	77	60	150	114	82

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. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; Australian Bureau of Statistics; Pulse Australia

Table 13 Summer 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
Grain sorghum	368	531	537	994	1,439	1,303
Cottonseed a	557	500	280	1,260	1,414	821
Cotton lint a	557	500	280	891	1,000	581
Rice	82	60	10	807	630	104
Corn (maize)	68	57	51	436	392	339
Soybeans	17	37	26	31	63	42
Sunflower	16	17	19	17	31	23

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. Area based on planted crop that is harvested, fed off or failed.

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

Table 14 Production, major crops, Australian states, 2016–17 to 2018–19

Winter 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
Wheat												
2018–19 s	1,800	1,800	1,400	1,950	400	400	1,850	2,950	4,700	10,150	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 s	600	630	770	1,100	70	95	820	1,535	1,750	4,916	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 s	190	152	300	300	1	1	200	260	1,200	1,464	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 s	200	140	130	140	39	21	47	80	215	500	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 14 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	150	375	1	2	385	924	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	174	524	0	0	106	297	0	0	0	0	0	0
2017–18 s	310	927	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	721	0	0	139	392	0	0	0	0	0	0
Rice												
2018–19 f	10	104	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. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; Australian Bureau of Statistics

Table 15 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 s	22	22	20	32	200	190	25	25	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 s	39	29	50	35	0	0	70	50	20	38	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 s	7	5	125	105	0	0	160	200	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 s	50	38	30	20	0	0	40	35	380	600	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 15 Production, other crops, Australian states, 2016–17 to 2018–19 (continued)

Summer 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
Corn (maize)												
2018–19 f	18	162	1	6	30	159	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	27	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	14	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. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; Australian Bureau of Statistics; Pulse Australia

Table 16 Supply and disposal of wheat, canola and pulses, Australia, 2012–13 to 2017–18

Crop	2012–13 kt	2013–14 kt	2014–15 kt	2015–16 kt	2016–17 kt	2017–18 <i>s</i> kt
Wheat						
Production	22,855	25,303	23,743	22,275	31,819	21,244
Apparent domestic use	6,451	6,784	7,154	7,231	7,805	7,609
– seed	631	619	564	610	612	635
– other a	5,820	6,165	6,590	6,621	7,193	6,973
Exports b	18,644	18,612	16,587	16,116	22,636	13,820
Imports b	17	20	22	25	25	28
Canola						
Production	4,142	3,832	3,540	2,775	4,313	3,669
Apparent domestic use a	631	969	915	1,088	972	900
Exports	3,512	2,863	2,626	1,857	3,458	2,406
Pulses						
Production						
– lupins	459	626	549	652	1,031	631
– field peas	320	342	290	205	415	289
– chickpeas	813	629	555	875	2,004	1,148
Apparent domestic use a						
– lupins	290	286	306	398	637	249
– field peas	145	175	124	72	148	144
– chickpeas	1	0	1	1	1	1
Exports						
– lupins	169	340	243	254	395	382
– field peas	177	169	168	134	268	147
– chickpeas	853	629	663	1,145	2,293	761

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 17 Supply and disposal of coarse grains, Australia, 2012–13 to 2017–18

Crop	2012–13 kt	2013–14 kt	2014–15 kt	2015–16 kt	2016–17 kt	2017–18 s kt
Barley						
Production	7,472	9,174	8,646	8,992	13,506	8,928
Apparent domestic use	2,182	2,218	2,714	2,651	3,633	2,432
– seed	172	184	185	180	169	196
– other a	2,011	2,034	2,529	2,471	3,464	2,236
Export	5,289	6,957	5,932	6,342	9,873	6,496
– feed barley	2,972	3,944	3,070	4,351	6,364	3,641
– malting barley	1,512	2,273	2,149	1,394	2,826	2,084
– malt (grain equivalent)	805	740	713	596	683	771
Oats						
Production	1,121	1,255	1,198	1,300	2,266	1,119
Apparent domestic use	884	1,001	960	1,074	1,708	967
– seed	34	41	39	44	36	30
– other a	850	960	920	1,030	1,672	936
Export	237	253	238	226	558	152
Triticale						
Production	171	126	143	127	150	114
Apparent domestic use	171	126	143	127	150	114
– seed	4	4	4	5	4	3
– other a	167	122	139	122	146	111
Export	0	0	0	1	0	0
Grain sorghum						
Production	2,229	1,282	2,210	1,791	994	1,439
Apparent domestic use b	1,060	1,083	885	572	878	739
– seed	3	3	4	3	2	3
– other a	1,056	1,080	881	569	875	737
Export b	1,179	1,146	397	1,638	913	277
Corn (maize)						
Production	506	390	495	400	436	392
Apparent domestic use b	347	401	331	432	337	367
– seed	1	1	1	1	1	1
– other a	346	400	330	431	336	366
Export b	106	106	60	64	63	68

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 18 Grain, oilseed and pulse prices, second quarter 2017 to fourth quarter 2018

Crop	2017 Q2 A\$/t	2017 Q3 A\$/t	2017 Q4 A\$/t	2018 Q1 A\$/t	2018 Q2 A\$/t	2018 Q3 A\$/t	2018 Q4 A\$/t
Wheat							
Domestic: feed, del. Sydney	226	261	262	209	334	406	445
International: US no. 2 hard red winter, fob Gulf a	274	277	283	268	322	332	331
Barley							
Domestic: 2 row feed, del. Sydney	210	243	252	183	324	389	427
Export: feed b	225	235	274	225	299	336	353
Export: malting b	261	244	263	243	304	346	365
International: feed, fob Rouen a	217	222	241	214	277	320	330
Grain sorghum							
Domestic: feed, del. Sydney	265	306	313	245	366	388	409
Export b	331	323	493	333	333	362	583
Oats							
Domestic: feed, del. Sydney	165	190	188	152	275	351	390
International: CME oats nearby contract	221	229	230	224	216	233	275
Corn (maize)							
Domestic: feed, del. Sydney	352	375	382	360	400	421	445
International: US no. 2 yellow corn, fob Gulf a	211	193	195	213	230	217	228
Oilseeds							
Domestic: canola, del. Melbourne	529	523	543	539	525	568	636
International: Europe rapeseed, cif Hamburg	563	539	561	586	544	588	599
International: US no. 2 soybeans, fob Gulf a	481	479	490	518	537	448	456
Pulses							
Domestic: lupins, del. Kwinana	267	296	286	234	323	330	na
Domestic: chickpeas, del. Melbourne	1,034	869	763	827	645	729	772
Domestic: field peas, del. Melbourne	362	318	298	343	378	415	511
Export: chickpeas b	1,024	1,012	957	942	737	595	732
Export: field peas b	458	416	389	444	425	257	494

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