



Australian Government

Australian Bureau of Agricultural and
Resource Economics and Sciences



Australian crop report

7 December 2010 no. 156

www.abares.gov.au

Science and economics for decision-makers

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ISSN 1447-8358

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The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) was formed following the merger of the Australian Bureau of Agricultural and Resource Economics (ABARE) and the Bureau of Rural Sciences (BRS) in 2010–11.

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The next issue of the *Australian crop report* is scheduled to be released in February 2011.

in the next issue ...

- 2010–11 summer crop area and production estimates
- 2010–11 winter crop area and production estimates updated

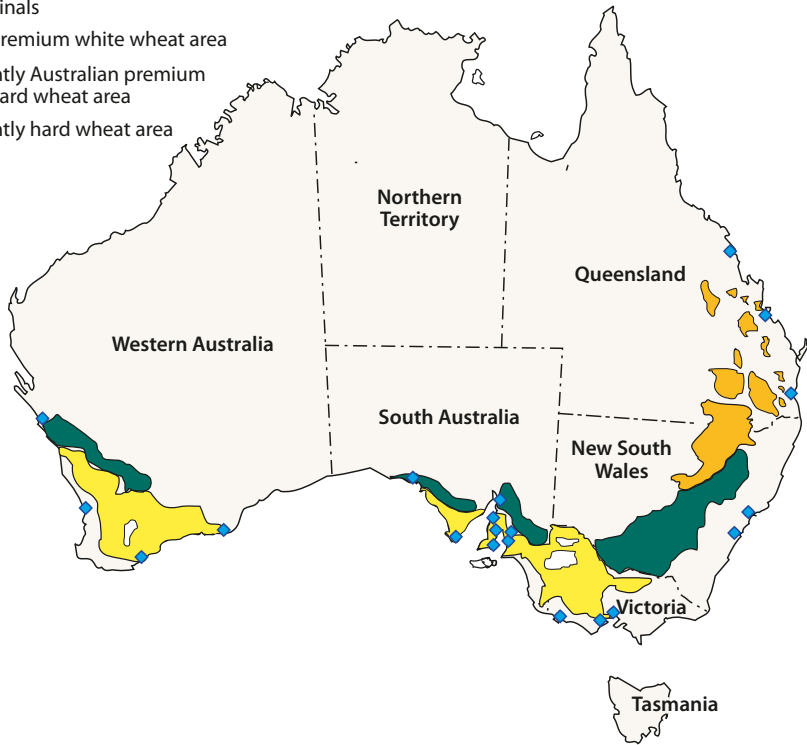
ABARES project 43005

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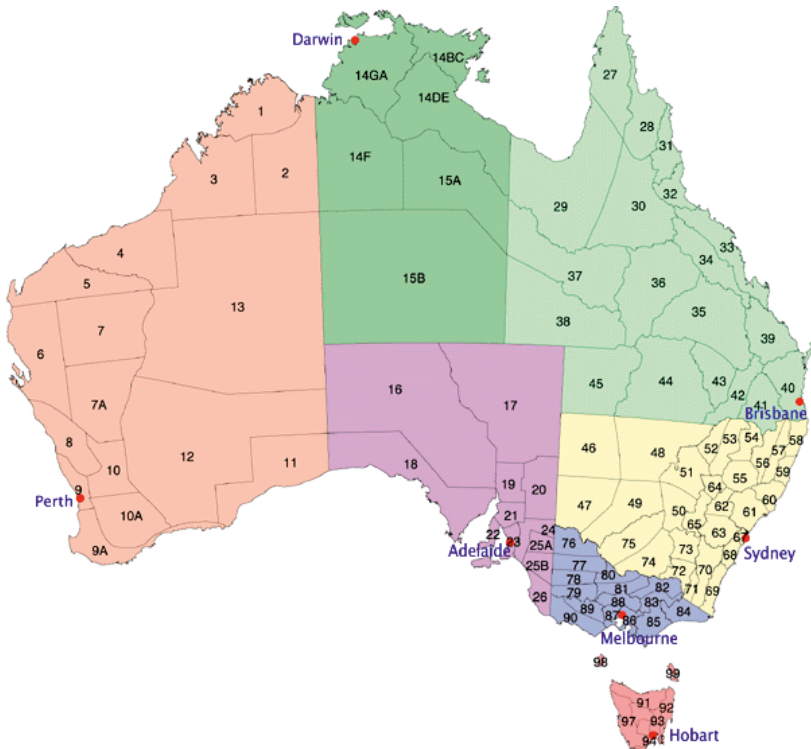
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Australian wheat growing regions

- ◆ Wheat terminals
- Australian premium white wheat area
- Predominantly Australian premium white and hard wheat area
- Predominantly hard wheat area



Australian meteorological districts



Overview

Despite the adverse effect of the recent rain in eastern Australia on the quality of winter crops, it is forecast that record yields will still be achieved in most of the eastern grains belt. Up until recently, there have been near ideal growing conditions in the eastern states for most of the season, with excellent planting conditions early in the season, followed by a wet spring.

The wettest spring on record in eastern Australia was followed by heavy rainfall in December, particularly in New South Wales, where some flooding has occurred in the central and southern areas of the state. Although above average rainfall was welcome in early spring, recent heavy rainfall has caused harvest delays and has reduced the quality of winter crops that were due to be harvested.

In regions that have recently received heavy rainfall, the chance of achieving prime milling grades of wheat has been reduced for crops yet to be harvested. Wet weather causes softening of the grain and lowers protein levels, and can result in the grain germinating ('shot and sprung'). As a result, some of the rain-affected grain will only be suitable for stock feed purposes. The wet weather will also diminish the ability of barley crops to achieve malt grade, meaning a higher proportion of the barley crop will be feed grade quality, compared with last season. The full effect of the downgrade in quality of wheat and barley will not be known until more of the harvest is complete in southern regions.

The wet conditions have also been a significant problem for pulse crops (such as chickpeas) in the eastern states throughout the 2010–11 season. The recent rainfall has meant that large areas of pulse crops in Queensland and northern New South Wales will not be harvested, as the wet conditions have caused fungal diseases. Pulse crops account for around 4 per cent of the national winter crop production.

In contrast to the eastern states, Western Australia has remained dry throughout 2010 and, as a result, winter crop production in that state is forecast to be less than half of last season's crop.

Although winter crop production in Western Australia is forecast to be well down on last season and the quality of the crop in the eastern states has been adversely affected by late rainfall, overall Australian winter crop production is forecast to rise by 22 per cent compared with last season to 43.2 million tonnes. The forecast is an upward revision of 6 per cent or around 2.5 million tonnes on the ABARES forecast in September 2010 because of record crop yields. This forecast is based on the assumption that the weather conditions will allow crops to be harvested.

The most significant rise in production is expected in New South Wales, where the 2010-11 winter crop production is forecast to more than double to 17.1 million tonnes because of record crop yields.

Of the major winter crops, wheat is estimated to reach a record production of 26.8 million tonnes in 2010–11, 22 per cent or almost 5 million tonnes higher than in 2009–10. Barley production is estimated to rise by 24 per cent to 9.8 million tonnes and canola production is estimated at 2.0 million tonnes, 7 per cent higher than last year.

There have been very few reports of locust crop damage to date, but locusts remain a threat because of the delayed harvest. In some regions, there is still the potential for a significant outbreak of locusts in the next several weeks and over summer, which could also affect summer crops. However, as reported in the ABARES September forecast, in previous outbreaks locusts had a limited overall effect on national crop production.

The significant rainfall over Queensland and northern New South Wales has provided full soil moisture profiles and boosted water storages. This has provided a strong outlook for summer crops in 2010–11. The total area planted to summer crops in 2010–11 is forecast to rise by 67 per cent from last season, to 1.5 million hectares. This would be the largest area since 2001–02.

High cotton prices and abundant supplies of irrigation water in most cotton growing regions are forecast to result in around a 130 per cent increase in Australian cotton production in 2010–11, to 894 000 tonnes. If realised, this would represent the largest Australian cotton harvest on record, exceeding the previous high of 818 000 tonnes produced in 2000–01.

The area planted to rice in 2010–11 is forecast to be over four times last season's area, at 89 000 hectares. A substantial rise in the availability of irrigation water supplies has driven the increase in plantings. Assuming average yields, rice production is forecast to rise to around 800 000 tonnes in 2010–11, which would be the highest production since 2005–06.

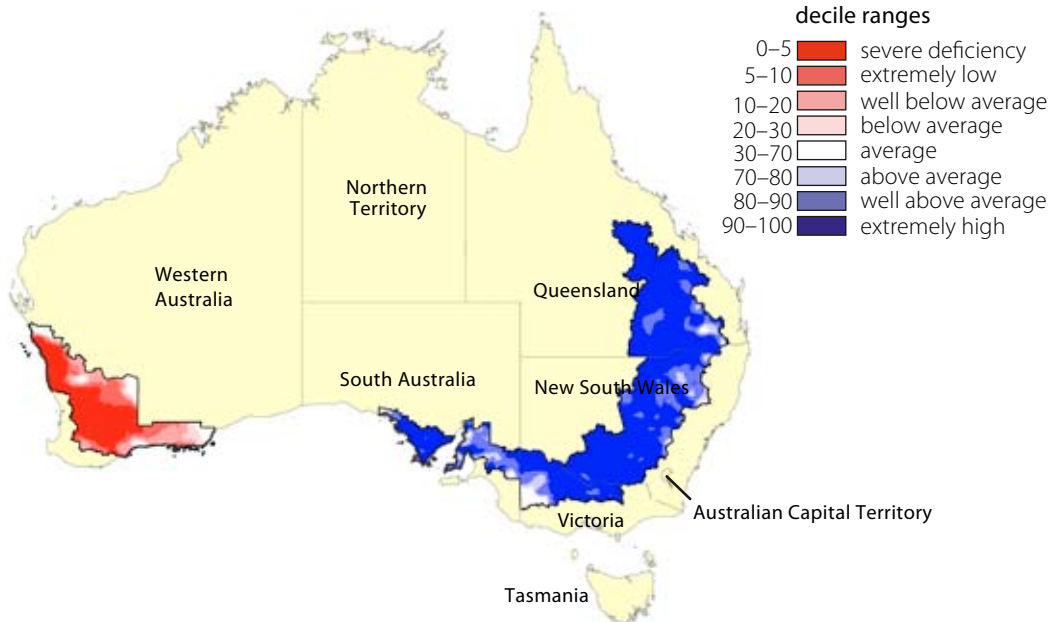
Compared with last season, grain sorghum plantings are forecast to rise by 35 per cent to 697 000 hectares in 2010–11. With the GM cotton planting window closed, it is forecast that summer plantings of grain sorghum will increase significantly. However, the large supply of feed grain from this season's winter crop is expected to temper a more substantial rise in grain sorghum plantings. Production is forecast to rise to almost 2 million tonnes in 2010–11, 22 per cent higher than last season.

Rainfall

Rainfall received in cropping areas over the September to November period is shown in map 1. Winter cropping regions of Queensland, New South Wales, Victoria and South Australia have all received above average to very much above average spring rainfall, with some areas receiving their highest spring rainfall on record. Although the rainfall was welcome in early spring, it is now problematic, causing significant harvest delays and adversely affecting grain quality.

In contrast to the eastern states, Western Australia has experienced a long period of dry weather over the cropping season. Spring rainfall has been very much below average or the lowest on record across most of the grains belt, following an extremely dry winter. The severe rainfall deficiency has had a significant effect on the 2010 winter cropping season, with production estimated to be the lowest since 1987–88.

map 1 Australian rainfall deciles – 1 September to 30 November 2010



Rainfall percentiles displayed for wheat–sheep zone only.

Source: Bureau of Meteorology.

Details of rainfall received over the winter grain growing season (April–October) are provided in table A. Rainfall in the eastern states has been significantly above the long-term average. Queensland and New South Wales were the wettest states, with the Central Highlands in Queensland recording rainfall 262 per cent above average and the North West Slopes in New South Wales recording rainfall 158 per cent above average. Rainfall over Victoria and South Australia has been average to above average. In contrast, Western Australia’s rainfall has been well below the long-term average—for example, the central coast region received only 44 per cent of its long-term average.

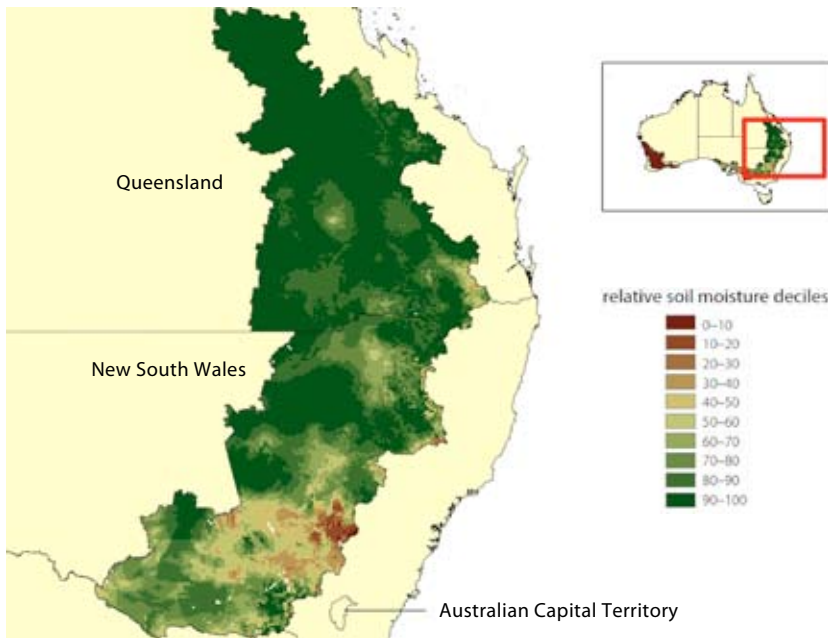
The Australian Bureau of Meteorology’s latest (23 November 2010) seasonal rainfall outlook for summer indicates an increased chance of wetter than normal conditions in south-east Queensland, eastern New South Wales and most of Western Australia. In comparison, the outlook indicates an increased chance of drier conditions in south-east South Australia, western Victoria and northern Tasmania.

The chances of receiving above average rainfall over summer are more than 60 per cent in south-east Queensland, eastern New South Wales and most of Western Australia. The odds increase to more than 80 per cent in western parts of Western Australia. In south-eastern South Australia, western Victoria and northern Tasmania the odds of exceeding average rainfall are below 40 per cent, indicating an increased risk of drier than average conditions in these areas.

The outlook for maximum and minimum temperatures over summer indicates an increased chance of warmer than average temperatures over southern New South Wales. In contrast, in the southern half of Queensland and north-east New South Wales, the outlook indicates an increased chance of cooler daytime temperatures.

Maps 2 and 3 show the relative levels of modelled upper layer (~0.2 metres) soil moisture and lower layer (~0.2 to ~1.5 metres) soil moisture at the end of November 2010 for the wheat–sheep and high-rainfall zones over Queensland and New South Wales. These data are from a collaborative project between the Bureau of Meteorology, the CSIRO and ABARES to develop estimates of soil moisture and other components of the water balance at high resolution across Australia. These maps show soil moisture estimates relative to the long-term record. Moisture estimates are ranked in percentiles, where the darkest green areas (90th to 100th percentile) indicate that the soil moisture falls into the 10 wettest years of the past century, while the darkest brown (0 to 10th percentile) means that soil moisture levels fall into the 10 driest years of the past century.

map **2** Lower soil moisture, November 2010



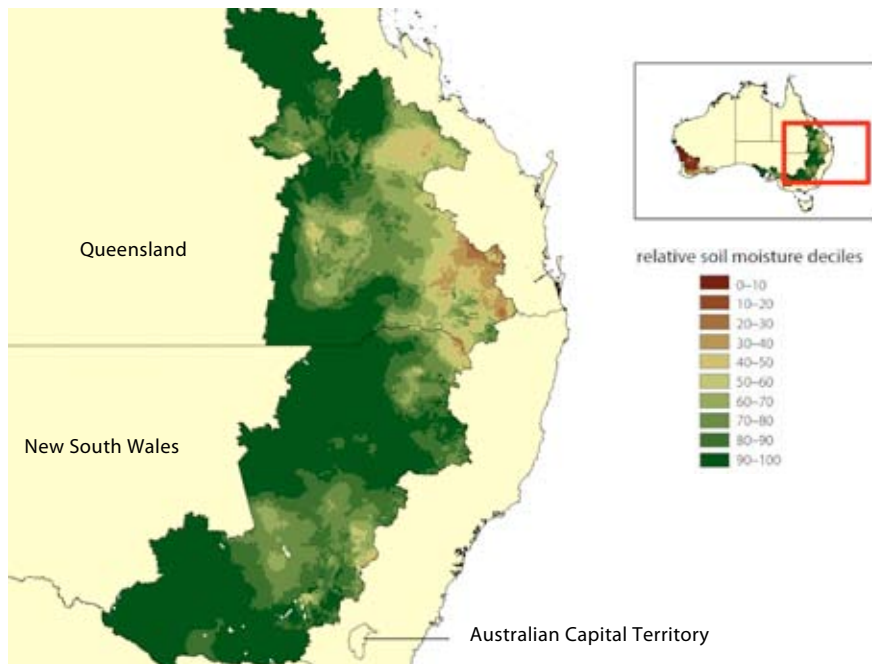
Soil moisture at lower layer displayed for wheat–sheep zone only.

Sources: ABARE–BRS; CSIRO; Bureau of Meteorology (Australian water availability project).

Map 2 shows that for the summer cropping regions of Queensland and northern New South Wales lower layer soil moisture at the end of November 2010 is near or at the maximum for the time of year, which bodes very well for summer crops.

At the end of November 2010, upper layer soil moisture levels (map 3) for the summer cropping regions of northern New South Wales and southern Queensland were mostly near or at the maximum for the time of year. This was because of above average rainfall over these regions for the three months to November 2010. The upper layer soil moisture responds quickly to seasonal conditions and will often show a pattern that reflects the rainfall and temperature events of the same month. Lower layer soil moisture is a larger, deeper store that is slower to respond and tends to reflect accumulated events over seasonal and longer time scales.

map **3** Upper soil moisture, November 2010

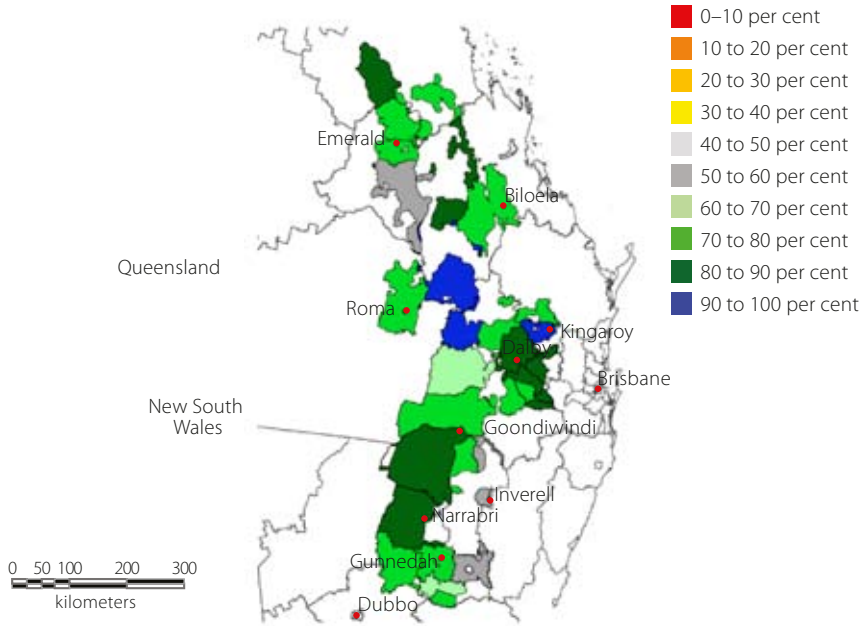


Soil moisture at upper layer displayed for wheat–sheep zone only.

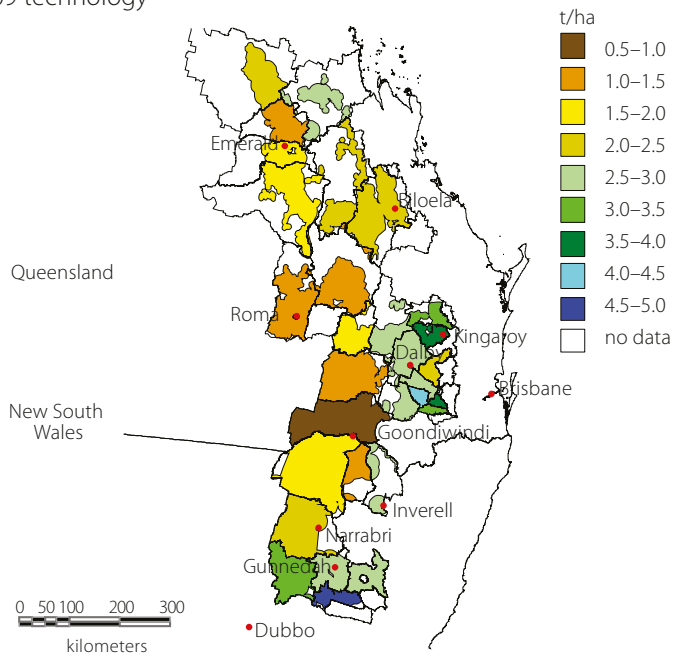
Sources: ABARE–BRS; CSIRO; Bureau of Meteorology (Australian water availability project).

A number of organisations provide forecast yields for grains, including wheat and grain sorghum. The shire scale sorghum forecasting system of the Queensland Department of Primary Industries and Fisheries combines starting soil moisture conditions with the seasonal outlook, including the most recent trend in the Southern Oscillation Index (SOI). At the beginning of December, the probability of exceeding average grain sorghum yields (map 4) is at least between 70 and 90 per cent in all but a few of the summer cropping regions of Queensland and northern New South Wales. This is a reflection of the widespread and above average rainfall recorded over these regions throughout spring.

map **4** Probability of exceeding the long-term median shire grain sorghum yield, given the SOI phase was 'consistently positive' at the end of November 2010



map **5** Simulated long-term median grain sorghum yield, by shire (1901–2008) using 2009 technology



A April to October rainfall in major grain growing regions ^a

	average ^b mm	2008 mm	2009 mm	2010 mm	2008 % of average	2009 % of average	2010 % of average
Queensland							
Central Highlands (35)	212	215	132	557	101	62	262
Maranoa (43)	229	215	178	352	94	78	154
West Darling Downs (42)	238	215	213	364	90	89	153
East Darling Downs (41)	292	198	229	414	68	78	142
Moreton South Coast (40)	453	351	448	507	77	99	112
New South Wales							
North West Plains (W) (52)	240	219	269	339	91	112	141
North West Plains (E) (53)	278	226	243	405	81	87	146
North West Slopes (N) (54)	310	228	232	491	73	75	158
North West Slopes (S) (55)	326	316	267	427	97	82	131
Northern Tablelands (N) (56)	366	289	373	500	79	102	137
Central West Plains (S) (50)	261	215	178	352	82	68	135
Central West Plains (N) (51)	246	187	269	339	76	109	138
Central West Slopes (N) (64)	319	279	229	414	87	72	130
Central West Slopes (S) (65)	334	278	257	458	83	77	137
Central Tablelands (N) (62)	340	289	373	500	85	110	147
Central Tablelands (S) (63)	465	353	372	460	76	80	99
Riverina (W) (75)	222	133	180	372	60	81	167
Riverina (E) (74)	295	164	229	409	56	78	139
South West Slopes (N) (73)	367	259	317	467	71	86	127
South West Slopes (S) (72)	543	364	539	671	67	99	123
Southern Tablelands (GM)(70)	369	252	321	403	68	87	109
Victoria							
North Mallee (76)	202	130	215	290	64	106	144
South Mallee (77)	235	153	242	297	65	103	126
North Wimmera (78)	281	181	291	320	65	104	114
South Wimmera (79)	359	252	389	422	70	108	118
Lower North (80)	282	154	228	390	55	81	139
Upper North (81)	342	201	302	480	59	88	140
Lower North East (82)	547	362	565	730	66	103	133
Upper North East (83)	756	413	609	701	55	81	93
North Central (88)	494	294	404	611	59	82	124
Central Western (89)	421	293	409	520	70	97	123
South Australia							
Upper South East (25B)	310	232	326	335	75	105	108
Murray Mallee (25A)	210	148	208	255	71	99	122
Murray River (24)	226	169	233	290	75	103	128
East Central (23)	454	337	467	438	74	103	96
West Central (22)	332	281	426	418	85	128	126
Lower North (21)	317	219	345	331	69	109	104
Upper North (19)	222	128	196	276	58	88	124
Western (18)	246	127	209	292	52	85	119
Western Australia							
North Coast (8)	322	284	294	190	88	91	59
Central Coast (9)	728	577	540	317	79	74	44
Northern Central (10)	276	273	244	147	99	88	53
South Coast (9A)	749	625	591	372	83	79	50
South Central (10A)	337	349	262	182	104	78	54
South East (12)	157	107	121	121	68	77	77
Tasmania							
Northern (91)	712	572	911	752	80	128	106
Midlands (93)	329	229	528	359	70	160	109

^a Australian meteorological districts are shown in map on page iv.

^b Average from 1913 to 2010.

Winter crop production

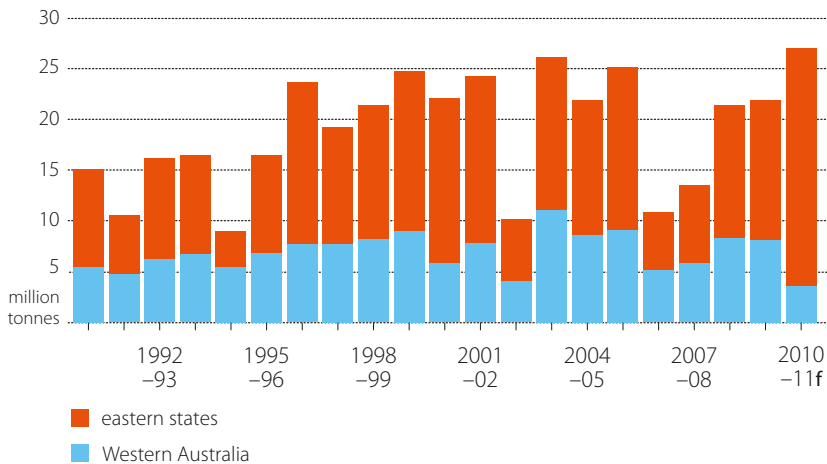
Total winter crop production in 2010–11 is estimated at a near record 43.2 million tonnes. This is an upward revision from the ABARES September forecast and 22 per cent higher than last season. Above average spring rainfall has resulted in a further upward revision for forecast production for New South Wales, Victoria and South Australia. Conversely, continued dry conditions have led to a further downward revision for Western Australia, where winter crop production is estimated to be the lowest since 1987–88.

The rainfall over late spring and into early December in the eastern states has delayed harvest and lowered crop quality, with reports of lower protein wheat, a higher proportion of feed barley and sprouting of grain in some regions. The full extent of the quality downgrade will not be known until more of the harvest is complete in southern regions. Given the total area sown to winter crops in 2010–11 is estimated to have decreased by 4 per cent to around 22 million hectares, much higher than average crop yields account for the forecast higher production as compared with last season.

Wheat production in 2010–11 is forecast to be a record 26.8 million tonnes, compared with 21.9 million tonnes in 2009–10. The proportion of wheat produced in the eastern states compared with Western Australia over the past 20 years is shown in figure a. The very dry conditions in Western Australia have significantly reduced the proportion of wheat produced in 2010–11 and, as a result, Western Australia’s share of production is forecast to decline to 13 per cent, compared with an average share of 40 per cent over the past two decades.

Barley production is forecast to reach 9.8 million tonnes, 24 per cent higher than in 2009–10 and canola production is forecast to rise by 7 per cent to 2.0 million tonnes in 2010–11.

a Wheat production in Western Australia compared with eastern Australia



B Winter crop production – Australia ^a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia
	kt	kt	kt	kt	kt	kt
1997–98	8 558	3 398	1 637	12 097	5 360	31 116
1998–99	9 718	3 495	2 322	12 232	6 305	34 147
1999–00	11 495	5 139	2 222	13 311	4 751	36 980
2000–01	10 834	6 232	1 340	8 726	7 486	34 696
2001–02	11 171	5 873	1 142	12 050	8 927	39 240
2002–03	3 505	1 955	836	6 812	4 227	17 402
2003–04	10 768	6 945	1 473	16 683	7 451	43 394
2004–05	10 724	4 204	1 383	12 983	5 338	34 710
2005–06	11 983	6 270	1 435	13 947	7 520	41 236
2006–07	3 796	1 751	926	8 279	2 793	17 588
2007–08	4 007	4 700	1 196	10 761	4 706	25 422
2008–09	9 441	3 890	2 326	13 784	4 864	34 386
2009–10 ^s	7 771	5 890	1 636	13 003	7 101	35 474
2010–11 ^{previous}	14 505	6 692	2 022	9 711	7 655	40 656
2010–11 ^f	17 114	8 625	1 748	5 995	9 655	43 158
<i>% change 2009–10 to 2010–11</i>	<i>120</i>	<i>46</i>	<i>7</i>	<i>-54</i>	<i>36</i>	<i>22</i>

^a State production includes wheat, barley, oats, triticale, canola, lupins, field peas, chickpeas, faba beans and lentils. Australian totals also include linseed and safflowerseed. ^f ABARES forecast. ^s ABARES estimate.

Note: Previous refers to the numbers published in the previous issue of the *Australian crop report*.

C Winter crop area – Australia ^a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
1997–98	4 543	2 315	1 213	7 141	3 047	18 260
1998–99	4 927	2 454	1 420	7 419	3 376	19 582
1999–00	4 955	2 670	1 337	7 464	3 342	19 763
2000–01	5 398	2 706	1 126	7 390	3 667	20 280
2001–02	5 309	2 684	788	7 173	3 866	19 817
2002–03	4 782	2 928	774	7 174	3 965	19 623
2003–04	6 070	3 126	1 039	7 688	4 034	21 982
2004–05	6 456	3 130	878	7 936	4 018	22 445
2005–06	5 599	2 984	971	7 408	3 874	20 864
2006–07	5 684	3 096	813	6 479	4 146	20 245
2007–08	6 325	3 392	879	7 266	4 132	22 017
2008–09	6 295	3 495	1 212	7 901	3 979	22 910
2009–10 ^s	6 215	3 472	1 189	8 263	3 833	22 996
2010–11 ^{previous}	6 320	3 058	1 168	7 482	3 989	22 039
2010–11 ^f	6 338	3 058	1 193	7 489	3 987	22 086
<i>% change 2009–10 to 2010–11</i>	<i>2</i>	<i>-12</i>	<i>0</i>	<i>-9</i>	<i>4</i>	<i>-4</i>

^a State areas include wheat, barley, oats, triticale, canola, lupins, field peas, chickpeas, faba beans and lentils. Australian totals also include linseed and safflower. ^f ABARES forecast. ^s ABARES estimate.

Note: Previous refers to the numbers published in the previous issue of the *Australian crop report*.

Summer crop production

Above to very much above average rainfall in key summer crop growing regions of New South Wales and southern Queensland throughout both winter and spring is forecast to result in a significant increase in the area planted to cotton, rice and grain sorghum.

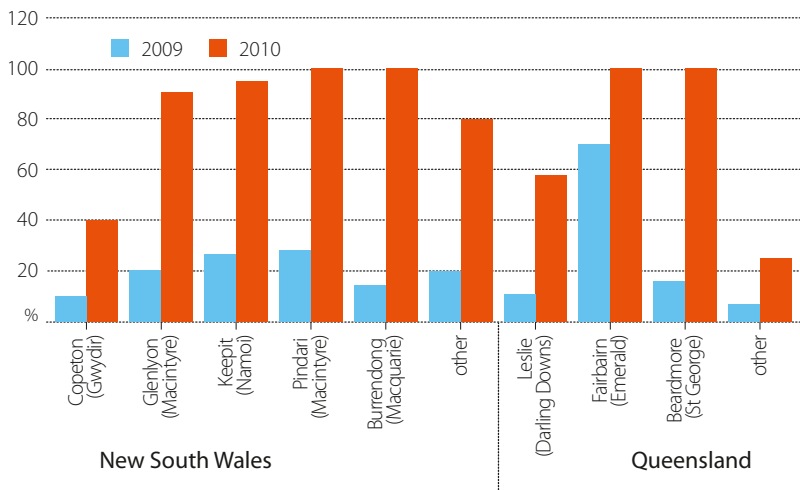
The rain has recharged soil moisture profiles and resulted in the highest water storage levels seen for a numbers of years, giving summer crops a very good start to the season. Summer crop production is forecast to rise by around 60 per cent to 4.6 million tonnes in 2010–11.

Australian cotton production is forecast to increase by around 130 per cent in 2010–11, to 894 000 tonnes, based on a forecast increase of around 170 per cent in irrigated and dryland cotton plantings. The forecast increase reflects a combination of high cotton prices, a marked recovery in irrigation water supplies and favourable soil moisture levels for dryland cotton crops. Implicit in the forecast is record plantings of dryland cotton of 203 000 hectares in 2010–11. The planting window for 2010–11 genetically modified (GM) cotton plantings closed at the end of November 2010, because of restrictions placed on the use of the GM cotton varieties that now make up around 95 per cent of total Australian cotton plantings.

At 1 December 2010, the storage level of the main irrigation dams serving the cotton regions was 78 per cent of capacity, compared with 20 per cent at the same time in 2009 and 32 per cent in mid-June 2010.

Rice plantings in 2010–11 are expected to increase to around 89 000 hectares, which is more than four times that planted last season, because of the greater water availability. Assuming average yields, rice production in 2010–11 is forecast to reach more than 800 000 tonnes.

b Capacity, major irrigation dams for cotton
as at 3 December 2010



Grain sorghum plantings are forecast to rise by 35 per cent to 697 000 hectares in 2010–11. Grain sorghum production in 2010–11 is forecast to increase by 22 per cent to 2 million tonnes.

D Summer crop plantings and production – Australia ^a

	New South Wales		Queensland		Australia	
	'000 ha	kt	'000 ha	kt	'000 ha	kt
1997–98	617	2 588	640	1 139	1 336	3 820
1998–99	885	3 228	721	1 712	1 742	5 097
1999–00	742	2 882	771	2 031	1 592	5 026
2000–01	825	3 366	816	1 786	1 761	5 286
2001–02	777	3 146	794	1 772	1 640	5 029
2002–03	509	1 582	521	1 199	1 098	2 871
2003–04	436	1 766	708	1 806	1 212	3 679
2004–05	436	1 766	708	1 806	1 337	3 889
2005–06	765	2 770	602	1 447	1 434	4 327
2006–07	332	1 033	520	1 087	916	2 186
2007–08	378	1 650	756	2 826	1 205	4 583
2008–09	395	1 426	700	2 300	1 157	3 798
2009–10 ^s	368	1 439	489	1 332	922	2 860
2010–11 previous	539	1 973	664	1 709	1 271	3 767
2010–11 ^f	679	2 475	796	2 008	1 540	4 581
% change 2009–10 to 2010–11	84	72	63	51	67	60

^a State production includes sorghum, rice, cottonseed, maize and sunflowers. Australian production also includes soybeans, peanuts, mung beans and navy beans. ^f ABARES forecast. ^s ABARES estimate.

Note: Previous refers to the numbers published in the previous issue of the *Australian crop report*.

New South Wales

New South Wales has experienced five consecutive months of above average rainfall since July. Although the rainfall was very welcome in early spring it is now causing significant harvest delays, increasing the threat of fungal disease and causing significant damage to grain quality. Widespread rainfall in late November and early December has been untimely as most crops are ready to be harvested. It has severely impacted grain quality and, in some cases, resulted in crop loss.

Rainfall over the first weekend of December resulted in flooding in a number of regions, including Cootamundra, Harden, Gundagai and Young. Widespread flooding will mean some crops will be lost and a significant amount of 2010–11 winter crops will be downgraded from prime milling wheat and malting barley to grain suitable for stock feed purposes only, significantly reducing the overall value of the crop.

Nevertheless, the total winter crop production in New South Wales in 2010–11 is estimated at a record 17.1 million tonnes. Widespread and significantly above average rainfall across the winter

cropping zone throughout the growing season has resulted in a significant increase in yield estimates for the state.

The area planted to **wheat** in New South Wales in 2010–11 is estimated to have decreased by around 5 per cent to 3.9 million hectares, reflecting unattractive prices at the time of planting. Total wheat production is estimated at a record 11.9 million tonnes, an upward revision of around 2 million tonnes from the September forecast, reflecting continued above average rainfall. Although the yield estimate for New South Wales wheat is a record 3 tonnes a hectare, compared with the 10-year average of 1.55 tonnes a hectare, the crop quality has been affected by the heavy rainfall.

The area planted to **barley** in 2010–11 is estimated to have increased by 5 per cent to slightly more than 1 million hectares. Above average rainfall during the growing season is forecast to result in a yield of around 2.9 tonnes a hectare, well above the 10-year average of 1.6 tonnes a hectare. Reflecting the increased yield potential, barley production is estimated to have more than doubled in 2010–11 to a record 3 million tonnes. However, widespread rainfall at the time of harvest has restricted the ability of barley crops to achieve malt grade, resulting in more feed grade barley being produced than in previous seasons.

Canola production is estimated at 650 000 tonnes in 2010–11, more than double what was produced last season and well above mid-year expectations. A widespread frost in late September had the potential to negatively impact yields, but has largely been offset by above average rainfall and mild conditions. Most canola crops were windrowed before the recent rainfall, and as such may be less susceptible to moisture damage.

Grain sorghum plantings in New South Wales in 2010–11 are forecast to be 195 000 hectares, 15 per cent more than the area planted last season because of a limited availability of fallow land and ongoing delays to the winter crop harvest as a result of wet weather. Only 30 per cent of expected grain sorghum area has been planted to date. If intended plantings are realised, grain sorghum production in New South Wales in 2010–11 is forecast to reach 637 000 tonnes.

The area planted to **rice** in 2010–11 is forecast to be around 89 000 hectares, which is a substantial increase from the 19 000 hectares planted in 2009–10. The increase in area planted is a result of increased availability of irrigation water. Assuming average yields, rice production in 2010–11 is forecast to reach slightly more than 800 000 tonnes, around four times that produced last season.

Production from **cotton** growing in New South Wales is forecast to increase by 165 per cent in 2010–11, to 551 000 tonnes of **cotton lint** and 780 000 tonnes of **cottonseed**. If realised, this would be a record New South Wales cotton harvest, exceeding the previous record output of 533 000 tonnes in 2000–01. The production forecast is based on the expectation of an almost doubling of irrigated cotton plantings and a 470 per cent increase in dryland cotton plantings compared with 2009–10. Soil moisture is likely to remain favourable for dryland cotton production in the New South Wales regions that receive reliable summer rainfall.

Winter crop estimates, 2010–11, New South Wales

	area	yield a	production	production change from 2009–10
	'000 ha	t/ha	kt	%
Wheat	3 950	3.00	11 850	122
Barley	1 020	2.95	3 009	140
Canola	310	2.10	650	131

a Yields are based on area planted.

Summer crop forecast, 2010–11, New South Wales

	area	yield a	production	area change from 2009–10
	'000 ha	t/ha	kt	%
Sorghum	195	3.27	637	15
Sunflowers	25	1.32	33	32
Cottonseed	328	2.38	780	165
Cotton lint	328	1.68	551	165
Rice	89	9.00	800	368

a Yields are based on area planted.

Victoria

Highly favourable growing conditions were recorded across the major Victorian cropping regions over spring. Spring rainfall over the cropping regions was above to very much above average for the Mallee, Wimmera and Western District, and yields are forecast to reach new records as a result. If there is further rainfall in the coming weeks, it may have adverse effects on the quality of this season's winter crop.

The Mallee region recorded around 30 per cent more rainfall in September than the monthly average. This was followed by a very favourable October, where nearly double the monthly rainfall was recorded. The Wimmera region recorded similar conditions but had more consistent rainfall. However, further rainfall was recorded in November and early December in both major cropping regions and is expected to affect crop quality and slow the harvest. Harvest activities are not expected to be complete until late January 2011.

Winter crop production in Victoria is estimated to have increased by 46 per cent from last season to 8.6 million tonnes. The 2009–10 crop was adversely affected by a heatwave and subsequent heavy rainfall this time last year.

Wheat production in 2010–11 is estimated to be 49 per cent higher at 4.4 million tonnes. An estimated 18 per cent decline in area planted is expected to be more than offset by a record yield of 3 tonnes a hectare. However, the rainfall has reduced protein levels and, as a result, higher protein wheat will account for a smaller proportion of the crop compared with previous seasons.

Despite a 13 per cent decline in planted area, **barley** production is estimated to have increased by 40 per cent to 2.6 million tonnes in 2010–11. Similar to wheat, barley yields are expected to reach a record of 3.1 tonnes a hectare. The rainfall has caused some malting barley being downgraded to feed quality.

Canola production is forecast to rise to a record 498 000 tonnes following a 13 per cent rise in plantings because of higher expected relative returns compared with cereals at the time of planting. Canola plantings increased significantly in the Mallee and Wimmera regions, which are traditionally dominated by cereals. Water logging in September in the Western District damaged some crops and, as a result, production in that region is expected to be lower than previously forecast. The overall favourable conditions in the Mallee and Wimmera are expected to result in higher yields in these regions and an increase in canola production in Victoria this season. Based on early harvest results, oil content is very positive and ranges between 44 and 47 per cent.

Winter crop estimates, 2010–11, Victoria

	area	yield ^a	production	production change from 2009–10
	'000 ha	t/ha	kt	%
Wheat	1 476	3.00	4 428	49
Barley	853	3.10	2 644	40
Canola	262	1.90	498	49

^a Yields are based on area planted.

Queensland

Very much above average rainfall was recorded in Queensland for the three months to November, with some regions recording the highest rainfall on record. September was the wettest month in spring, with the Central Highlands recording nearly eight times the monthly average for that region and the Darling Downs recording around three times the average. In addition, temperatures were cooler than average during this period, which affected the final stages of crop growth and has slowed the harvest.

This season's **wheat** harvest is all but complete in central Queensland and, while yields have been high, crop quality has been affected by the high rainfall. The majority of the wheat has been downgraded as feed. The proportion of Australian Prime Hard wheat is reported to be significantly lower than in previous years. This is because of the cooler weather during the flowering and grain fill stages, and consistent heavy rain during harvest.

In southern Queensland, the heavy rainfall, particularly from November to early December, has resulted in the quality of wheat and chickpea crops being downgraded to feed. The rainfall has also significantly delayed the harvest in this region, which is usually complete by late November. Harvesting of cereals is only around 50 per cent complete as at early December. Further rainfall over the next few weeks will further reduce crop quality and could cause more sprouted grain, and may lead to crop losses.

Queensland winter crop production is estimated to be 1.7 million tonnes in 2010–11, 7 per cent higher than last season's drought-affected crop. Wheat production is forecast to be around 1.4 million tonnes in 2010–11, an increase of 5 per cent from 2009–10.

Barley production is forecast to be around 175 000 tonnes in 2010–11, reflecting an increase in yields and planted area. However, the quality downgrade because of heavy rainfall in spring and early December is expected to result in a smaller proportion of malting barley being produced than in previous years.

The wet and cold conditions throughout spring, particularly in central Queensland, had a major effect on **chickpea** production. Pod fill occurred late this season, harvest finished later than usual, and the persistent rain damaged the crop. In addition, ascochyta blight, a fungal disease, has affected a significant proportion of the chickpea crop, particularly in southern Queensland. This renders the seed unsuitable for human consumption. Production is now forecast to be 112 000 tonnes, which is 19 per cent below last season. The chickpea crop this season has been disappointing after a record area was planted as prices were attractive during the planting stage.

The substantial rainfall recorded over spring has provided a full soil moisture profile for the benefit of the summer crops. **Grain sorghum** plantings are forecast to rise by 45 per cent to 500 000 hectares in 2010–11, after adverse weather affected planting during the spring and summer windows last season. However, the larger proportion of feed grade grain from this season's winter crop and a significant increase in cotton plantings has tempered the increase in grain sorghum plantings. Production in Queensland is forecast to be 1.3 million tonnes, around 35 per cent higher than last season.

Production from **cotton** farming in Queensland is forecast to increase by more than 170 per cent in 2010–11, to 342 000 tonnes of **cotton lint** and 484 000 tonnes of **cottonseed**. If realised, this would be a record Queensland cotton harvest, exceeding the previous record production of 297 000 tonnes of cotton lint in 2004–05. The production forecast is based on the expectation of an around 130 per cent increase in irrigated cotton plantings and an almost tripling in dryland cotton plantings.

Winter crop estimates, 2010–11, Queensland

	area	yield ^a	production	production change from 2009–10
	'000 ha	t/ha	kt	%
Wheat	900	1.60	1 440	5
Barley	106	1.65	175	55

^a Yields are based on area planted.

Summer crop forecast, 2010–11, Queensland

	area	yield a	production	area change from 2009–10
	'000 ha	t/ha	kt	%
Sorghum	500	2.62	1 311	45
Sunflowers	10	1.30	13	30
Cottonseed	229	2.12	484	171
Cotton lint	229	1.50	342	171

a Yields are based on area planted.

Western Australia

Winter crop prospects in Western Australia continued to deteriorate throughout spring, with most areas receiving below average rainfall. After a dry autumn and dry start to winter, parts of the Geraldton port zone received above average rainfall in August. However, this was followed by below average rainfall in spring. In the Kwinana port zone (central wheat belt), rainfall was mostly below average throughout the growing season. Rainfall in the Albany port zone was generally below average, but coastal areas fared better, mostly receiving average rainfall. In contrast, the Esperance port zone had above average rainfall in May, followed by average to below average monthly rainfall until November. As a result of the adverse seasonal conditions in the main wheat growing areas, state average yields are expected to be very low.

Compared with last season, winter crop production is estimated to fall by 54 per cent to 6 million tonnes in 2010–11, as a result of both a lower area planted to crops and poor seasonal conditions. As of 6 December, the Co-operative Bulk Handling Group reported that around 4.9 million tonnes of grains had been received. Harvesting across the state is expected to be completed by the end of December, after an early start.

Wheat production is estimated to be around 3.6 million tonnes in 2010–11, with a statewide average yield (planted area basis) of 0.74 tonnes a hectare, the lowest yield since 1969–70. No major diseases have been reported and early reports of grain quality are mixed. Protein is generally holding up, but screenings are being reported as higher than usual.

Barley production is estimated to fall to around 1.1 million tonnes in 2010–11. The largest barley producing zones in Western Australia are the Albany and Esperance port zones, where growing conditions have been slightly better than further north. Reports suggest that most barley is achieving feed and Malt 2 grades, and screenings are being reported as higher than usual.

Canola production is estimated to fall to around 600 000 tonnes. As is the case with barley, much of the canola is grown in the Albany and Esperance port zones, where conditions have been slightly better than further north. Reports suggest that oil content is averaging just below 40 per cent.

Winter crop estimates, 2010–11, Western Australia

	area	yield a	production	production change from 2009–10
	'000 ha	t/ha	kt	%
Wheat	4 850	0.74	3 600	-56
Barley	990	1.11	1 100	-57
Canola	875	0.69	600	-42
Lupins	391	0.69	270	-58

a Yields are based on area planted.

South Australia

Planting of 2010–11 winter crops across South Australia was completed by June. In July, rainfall was below average in most of the cropping areas in South Australia, but improved in August to above average. Most major cropping regions received well above average rainfall in September, followed by average rainfall in October. The higher rainfall and cool to mild spring weather provided ideal growing conditions with record yield potential.

The harvest of winter crops in South Australia started later than usual, with only around 20 to 25 per cent of crops estimated to have been harvested by the end of November. This compares with around 30 to 40 per cent at the same time last year.

Total area planted to winter crops in South Australia is estimated to increase by 4 per cent to nearly 4 million hectares in 2010–11. Total winter crop production is estimated to increase by 36 per cent in 2010–11 to 9.7 million tonnes, which is almost double the five-year average.

Cool damp conditions and spraying activities have so far resulted in very few reports of locust damage. Precautionary spraying for fungal diseases earlier in the season has significantly reduced the amount of leaf disease in South Australia. In addition, good control measures have reduced mice numbers to manageable levels.

The area planted to **wheat** in South Australia in 2010–11 is estimated at 2.2 million hectares, an increase of 2 per cent on last year. Wheat production is forecast at a record 5.5 million tonnes in 2010–11. The favourable conditions have significantly improved yields; however, protein levels are expected to be down and the proportion of higher protein wheats may be lower than last season.

The area planted to **barley** in 2010–11 is estimated to have increased by 9 per cent to 1.1 million hectares. Owing to favourable conditions, yields are forecast to be a record 2.6 tonnes a hectare, double the five-year average of 1.64 tonnes a hectare. Barley production in 2010–11 is expected to be the second highest on record at 2.86 million tonnes.

Canola production is also expected to be the second highest on record, estimated at 350 000 tonnes for 2010–11. The majority of windrowing is now complete and awaiting warmer weather. The area planted to canola has increased by 6 per cent from last year, to 195 000 hectares, and record average yields of 1.79 tonnes a hectare are expected. However, owing to some water logging in the south east, canola yields in this region are expected to be lower compared with the rest of South Australia.

Winter crop estimates, 2010–11, South Australia

	area	yield a	production	production change from 2009–10
	'000 ha	t/ha	kt	%
Wheat	2 190	2.50	5 475	35
Barley	1 100	2.60	2 860	38
Canola	195	1.79	350	33

a Yields are based on area planted.

1 Australian crop production

at 7 December 2010

	area planted			yield			production					
	Five-year average a	2008-09	2009-10	2010-11 f	Five-year average a	2008-09	2009-10	2010-11 f	Five-year average a	2008-09	2009-10	2010-11 f
	'000 ha	'000 ha	'000 ha	t/ha	t/ha	t/ha	t/ha	t/ha	kt	kt	kt	kt
Wheat	12 875	13 530	14 028	13 374	1.43	1.58	1.56	2.01	18 577	21 420	21 923	26 824
Barley	4 590	5 015	4 446	4 077	1.60	1.59	1.78	2.41	7 361	7 997	7 909	9 813
Oats b	981	870	865	937	1.29	1.33	1.36	1.87	1 256	1 160	1 180	1 753
Triticale	359	323	350	330	1.32	1.12	1.56	2.35	477	363	545	776
Sorghum b	721	767	516	697	3.05	3.51	3.10	2.80	2 258	2 692	1 598	1 951
Maize	61	65	59	63	5.47	5.82	5.56	5.82	338	376	328	367
Canola	1 341	1 693	1 712	1 642	1.03	1.09	1.12	1.25	1 394	1 844	1 920	2 047
Sunflower	45	52	27	35	1.27	1.07	1.54	1.31	53	55	41	46
Cottonseed c	183	164	208	557	2.74	2.84	2.64	2.27	487	466	550	1 264
- lint	183	164	208	557	1.97	2.01	1.86	1.61	349	329	387	894
Rice	30	8	19	89	9.03	8.18	10.84	8.99	291	65	206	802
Lupins d	715	577	698	568	1.10	1.23	1.18	0.91	790	708	823	517
Field peas d	325	300	285	292	0.98	0.79	1.25	1.50	317	238	356	437
Chickpeas d	285	338	363	546	1.10	1.31	1.23	0.76	316	443	445	415
Faba beans d	151	125	129	145	1.23	1.08	1.68	1.83	185	135	217	266
Lentils d	147	117	104	159	0.95	0.55	1.38	1.87	133	64	143	297

a Based on data from ABS, *Principal Agricultural Commodities*, cat. no. 7111.0, five years to 2009-10; ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0; Pulse Australia. b Area harvested for grain.

c Cottonseed area is estimated harvested area. d Source: Pulse Australia. s ABARES estimate. f ABARES forecast.

Note: The crop year refers to crops planted during the 12 months to 31 March. Winter crops are generally both sown and harvested within the nominated 12 month period. Slight discrepancies may appear between table 1 and tables 2 and 3 as a result of the inclusion of the Australian Capital Territory and Northern Territory in the Australian totals. Area and production estimates are from the sources detailed in footnotes to tables 2 and 3. Coverage is for all farms with an estimated value of agricultural operations of more than \$5000.

2 State production – principal crops

at 7 December 2010

	New South Wales		Victoria		Queensland		Western Australia		South 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												
2010–11 f	3 950	11 850	1 476	4 428	900	1 440	4 850	3 600	2 190	5 475	8	31
2009–10 as	4 095	5 348	1 793	2 974	984	1 374	5 001	8 148	2 148	4 052	8	27
2008–09	4 322	6 963	1 534	1 756	1 020	2 016	4 542	8 274	2 104	2 376	9	35
Five-year average to 2009–10 a	3 915	5 081	1 501	2 103	818	1 268	4 518	7 293	2 116	2 805	8	28
Barley												
2010–11 f	1 020	3 009	853	2 644	106	175	990	1 100	1 100	2 860	8	25
2009–10 s	972	1 254	985	1 891	69	113	1 400	2 552	1 012	2 071	9	27
2008–09	977	1 449	1 136	1 461	92	173	1 559	3 007	1 240	1 877	11	29
Five-year average to 2009–10 a	1 000	1 321	1 001	1 550	97	135	1 310	2 497	1 172	1 833	9	24
Oats b												
Five-year average to 2009–10 a	314	219	167	297	13	5	268	506	99	146	4	7
Lupins c												
2010–11 f	90	96	27	43	0	0	391	270	60	108	0	0
2009–10 s	103	77	35	31	0	0	506	639	53	75	0	0
2008–09	44	37	36	18	0	0	444	600	53	52	0	0
Five-year average to 2009–10 a	67	44	38	25	0	0	540	649	69	70	0	0
Canola												
2010–11 f	310	650	262	498	0	0	875	600	195	350	0	0
2009–10 s	303	281	232	335	3	1	988	1 037	184	263	1	2
2008–09	300	228	285	233	3	2	920	1 175	184	204	2	2
Five-year average to 2009–10 a	278	191	217	221	2	1	670	795	173	185	1	1
Sorghum												
2010–11 f	195	637	1	1	500	1 311	1	1	0	0	0	0
2009–10 s	169	623	0	0	346	975	1	0	0	0	0	0
2008–09	227	919	2	1	538	1 771	0	1	0	0	0	0
Five-year average to 2009–10 a	233	817	1	1	486	1 439	1	1	0	0	0	0
Cottonseed d												
2010–11 f	328	780	0	0	229	484	0	0	0	0	0	0
2009–10 s	124	365	0	0	84	185	0	0	0	0	0	0
2008–09	88	252	0	0	76	214	0	0	0	0	0	0
Five-year average to 2009–10 a	115	326	0	0	68	161	0	0	0	0	0	0

a Based on data from ABS, *Principal Agricultural Commodities*, cat. no. 7111.0, five years to 2009–10; ABS, *Agricultural Commodities*, Australia, cat. no. 7121.0. **b** Area harvested for grain; current season estimates, by state, are no longer produced because of difficulties in obtaining consistent data at the state level. **c** Includes albus lupinus. **Source:** Pulse Australia. **d** Cottonseed area is estimated harvested area. **s** ABARES estimate. **f** ABARES forecast
 Note: Zero area or production estimates may appear as a result of rounding to the nearest whole number, if production or area estimates are less than 500 tonnes or 500 hectares.

3 State production – other major crops ^a

at 7 December 2010

	New South Wales		Victoria		Queensland		Western Australia		South 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
Field peas												
2010–11 f	57	55	45	68	0	0	72	66	118	248	0	0
2009–10 as	46	33	52	75	0	0	60	65	127	183	0	0
2008–09	29	16	68	25	0	0	81	82	121	114	0	1
Five-year average to 2009–10 a	40	24	78	67	0	0	70	71	137	154	0	1
Maize												
2010–11 f	23	185	1	7	42	171	1	4	0	0	0	0
2009–10 as	20	172	1	6	37	146	1	4	0	0	0	0
2008–09	14	115	0	3	49	255	0	2	0	0	0	0
Five-year average to 2009–10 a	21	164	1	8	39	164	1	3	0	0	0	0
Chickpeas												
2010–11 f	335	234	25	48	168	112	9	5	10	17	0	0
2009–10 as	213	269	21	19	114	139	2	3	14	16	0	0
2008–09	199	292	44	17	86	126	3	4	6	4	0	0
Five-year average to 2009–10 a	173	199	30	18	73	90	2	2	6	6	0	0
Sunflowerseed												
2010–11 f	25	33	0	0	10	13	0	0	0	0	0	0
2009–10 as	19	31	0	0	8	10	0	0	0	0	0	0
2008–09	34	36	0	0	17	19	1	0	0	0	0	0
Five-year average to 2009–10 a	34	39	0	0	11	14	0	0	0	0	0	0
Faba beans												
2010–11 f	40	52	45	77	3	4	3	3	55	130	0	0
2009–10 as	45	65	22	35	2	3	4	5	57	110	0	0
2008–09	29	35	36	27	0	0	2	4	58	68	0	0
Five-year average to 2009–10 a	31	47	42	35	1	1	4	4	74	98	0	0
Lentils												
2010–11 f	1	0	75	132	0	0	0	0	83	164	0	0
2009–10 as	0	0	52	50	0	0	0	0	52	93	0	0
2008–09	0	0	71	25	0	0	0	0	45	39	0	0
Five-year average to 2009–10 a	0	0	86	64	0	0	2	3	59	66	0	0

a Source: Pulse Australia. **s** ABARES estimates. **f** ABARES forecast.

Note: Zero area or production estimates may appear as a result of rounding to the nearest whole number, if production or area estimates are less than 500 tonnes or 500 hectares.

4 Australian rainfall comparisons for principal cropping districts

	July			August			September			October		
	average a	2009	2010	average a	2009	2010	average a	2009	2010	average a	2009	2010 p
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Queensland												
Central Highlands (35)	26	0	21	21	1	68	23	5	178	42	21	51
Maranoa (43)	33	3	41	25	2	57	27	15	107	46	25	58
West Darling Downs (42)	34	6	48	25	3	65	28	19	93	48	17	82
East Darling Downs (41)	40	8	58	31	3	87	37	21	110	62	26	88
Moreton South Coast (40)	54	3	38	37	5	84	44	26	118	76	38	161
New South Wales												
North West Plains (W) (52)	36	13	80	27	4	49	29	29	58	42	37	67
North West Plains (E) (53)	42	18	83	33	5	56	34	33	82	48	39	70
North West Slopes (N) (54)	46	19	93	37	7	67	40	33	100	61	35	83
North West Slopes (S) (55)	53	31	107	46	10	71	51	53	54	75	48	83
Northern Tablelands (N) (56)	48	24	92	43	14	84	44	38	99	61	60	96
Central West Plains (S) (50)	36	24	68	36	10	44	32	19	58	43	36	82
Central West Plains (N) (51)	35	15	78	30	4	46	30	31	54	41	54	60
Central West Slopes (N) (64)	47	23	98	42	6	71	42	39	60	53	42	71
Central West Slopes (S) (65)	49	38	86	48	14	79	43	30	69	55	38	79
Central Tablelands (N) (62)	49	37	91	48	12	83	46	31	72	58	47	80
Central Tablelands (S) (63)	64	48	82	65	29	101	60	43	60	74	56	80
Riverina (W) (75)	31	20	42	31	15	52	30	24	50	37	12	97
Riverina (E) (74)	43	29	46	44	25	63	40	37	57	47	23	125
South West Slopes (N) (73)	56	52	75	55	27	91	49	41	79	58	42	104
South West Slopes (S) (72)	87	87	84	90	91	149	75	88	106	82	73	192
Southern Tablelands (GM)(70)	50	35	51	50	33	66	51	52	51	63	62	79
Victoria												
North Mallee (76)	30	29	26	31	21	56	30	54	43	32	18	64
South Mallee (77)	35	42	31	37	33	79	35	48	45	37	16	59
North Wimmera (78)	44	54	39	45	47	91	42	54	56	40	20	49
South Wimmera (79)	59	81	59	60	77	122	53	69	69	49	26	57
Lower North (80)	42	41	39	43	27	92	41	42	49	43	23	94
Upper North (81)	53	56	54	54	47	107	49	57	75	50	26	104
Lower North East (82)	91	99	91	91	95	162	77	103	113	79	67	177
Upper North East (83)	126	105	80	130	107	165	105	124	116	106	89	143
North Central (88)	79	74	68	82	75	133	72	90	101	69	36	118
Central Western (89)	64	79	53	70	92	154	65	79	72	61	29	81
Western Australia												
North Coast (8)	71	86	50	52	47	57	28	34	15	18	11	3
Central Coast (9)	164	139	96	123	116	64	75	82	26	49	13	11
Northern Central (10)	58	68	41	45	45	29	26	28	14	19	12	2
South Coast (9A)	155	125	105	123	91	62	87	106	35	63	19	26
South Central (10A)	67	55	44	54	47	27	38	43	13	29	13	8
South East (12)	26	25	20	22	16	19	14	14	35	14	7	10
South Australia												
Upper South East (25B)	49	73	33	52	53	93	46	63	56	40	24	29
Murray Mallee (25A)	31	31	23	33	23	52	32	54	55	31	19	41
Murray River (24)	35	41	27	36	28	56	34	51	65	31	23	44
East Central (23)	79	108	50	75	63	109	64	80	96	51	39	40
West Central (22)	60	96	54	55	56	92	44	62	91	35	22	35
Lower North (21)	52	49	28	52	37	68	48	78	75	41	38	51
Upper North (19)	36	30	23	36	24	42	33	39	62	31	25	52
Western (18)	45	48	32	41	22	42	33	35	69	27	14	43
Tasmania												
Northern (91)	126	184	106	119	266	160	97	126	129	90	52	93
Midlands (93)	47	51	29	50	149	76	47	111	51	53	33	48

a Average rainfall is the simple arithmetic average of rainfall over the period 1913 to 2010. p Preliminary.

Note: Numbers in parentheses indicate meteorological districts (see map on page iv).

Source: Bureau of Meteorology monthly district rainfall reports (various issues).

5 Australian supply and disposal of wheat, oilseeds and pulses ^a

	2005–06	2006–07	2007–08	2008–09	2009–10 ^s	2010–11 ^f
	kt	kt	kt	kt	kt	kt
Wheat						
Production	25 150	10 822	13 569	21 420	21 923	26 824
Domestic use ^b	6 623	7 416	6 511	7 294	5 110	5 237
– flour	2 245	2 286	2 337	2 470	2 500	2 550
– residual (incl. feed) ^{cd}	3 788	4 501	3 498	4 134	1 940	2 000
– seed	590	629	677	689	669	687
Exports	15 969	8 685	7 444	14 707	14 753	16 000
Change in stocks	2 558	–5 279	–386	–581	2 060	5 587
Canola						
Production	1 419	573	1 214	1 844	1 920	2 047
Apparent domestic use	525	592	692	660	688	722
– seed	5	6	8	7	8	8
– other	520	586	684	653	680	714
Exports	831	228	472	1 067	1 187	1 548
Pulses – major crops						
Production						
lupins	1 285	470	662	708	823	517
field peas	585	140	268	238	356	437
chickpeas	150	229	313	443	445	415
Apparent domestic use ^c						
lupins	551	437	665	499	350	262
field peas	214	114	189	123	238	295
chickpeas	9	20	22	24	31	36
Exports						
lupins	494	93	77	304	342	255
field peas	252	138	141	137	171	245
chickpeas	161	241	222	506	481	375

^a Production, use and export data are on a marketing year basis: October–September for wheat; November–October for canola, peas and lupins. Production may not equal the sum of apparent domestic use and exports in any one year because of reductions or increases in stocks. ^b Some ABARES estimates have been revised based on additional industry information. ABARES is continuing to investigate data. ^c Calculated as a residual: production less exports less change in stocks less seed and flour use. ^d Does not include imports. ^s ABARES estimate. ^f ABARES forecast.

Note: The export data refer to market year export periods, so are not comparable with financial year export figures published elsewhere. *Sources:* Australian Bureau of Statistics; ABARES.

6 Australian supply and disposal of coarse grains ^a

	2005–06	2006–07	2007–08	2008–09	2009–10 ^s	2010–11 ^f
	kt	kt	kt	kt	kt	kt
Barley						
Production	9 482	4 257	7 160	7 997	7 909	9 813
Apparent domestic use	2 764	3 171	2 491	2 521	2 554	2 673
– seed	188	221	226	200	183	188
– other	2 576	2 950	2 265	2 321	2 370	2 485
Export	5 917	2 563	4 054	3 891	4 655	5 757
– feed barley	3 191	1 192	2 303	2 254	2 688	3 494
– malting barley	2 067	659	1 083	980	1 248	1 435
– malt (grain equivalent)	660	712	668	658	720	828
Oats						
Production	1 688	748	1 502	1 160	1 180	1 753
Apparent domestic use	1 497	713	1 321	998	963	1 495
– seed	48	59	42	42	45	45
– other	1 449	654	1 279	957	918	1 450
Export	191	35	181	161	210	256
Triticale ^b						
Production	830	199	450	363	545	776
Apparent domestic use	830	199	450	363	545	776
– seed	18	18	16	18	17	17
– other	812	181	434	345	529	759
Grain sorghum						
Production	1 929	1 283	3 790	2 692	1 598	1 951
Apparent domestic use	1 845	1 173	2 833	1 694	1 139	1 479
– seed	3	5	4	2	3	4
– other	1 841	1 168	2 829	1 692	1 136	1 475
Export ^c	83	110	957	998	399	471
Maize						
Production	362	239	387	376	328	367
Apparent domestic use	352	229	296	341	294	333
– seed	1	1	1	1	1	1
– other	351	227	294	339	293	332
Export ^c	10	11	92	36	33	34
Total coarse grains						
Production	14 291	6 727	13 289	12 587	11 560	14 659
Apparent domestic use	7 287	5 485	7 390	5 918	5 494	6 755
– seed	258	304	288	262	249	255
– other	7 029	5 180	7 102	5 653	5 245	6 501
Export	6 202	2 719	5 284	5 087	5 297	6 517

^a Production, use and export data are on a marketing year basis: market years are November–October for barley, oats and triticale; March–February for sorghum and maize. The sum of domestic use and exports may differ from production as a result of changes in grain stock levels. ^b Excludes small quantities of triticale for export. ^c Exports reflect the volume of grain exported from the respective crops harvested. For example, the volume of exports reported for sorghum in 2002–03 were actually shipped in the period March 2003 to February 2004.

^s ABARES estimate. ^f ABARES forecast.

Sources: Australian Bureau of Statistics; ABARES.

7 Australian grain prices ^a

	2009				2010		
	Jan–Mar	Apr–Jun	Jul–Sep	Oct–Dec	Jan–Mar	Apr–Jun	Jul–Sep
	A\$/t	A\$/t	A\$/t	A\$/t	A\$/t	A\$/t	A\$/t
Wheat							
Domestic							
feed – Sydney	271	277	265	235	233	215	275
International							
US no.2 hard red winter, fob Gulf b	371	340	258	240	230	217	293
Barley							
Domestic							
2 row feed – Sydney	240	241	250	218	216	201	246
Export c							
feed (bulk)	201	214	208	202	179	182	201
malting (bulk)	402	316	267	230	226	209	215
International							
feed – France Rouen d	230	208	178	170	158	155	249
Grain sorghum							
Domestic							
feed – Sydney	227	235	242	235	236	201	240
Export c	293	233	231	222	425	290	234
International							
US del. Gulf b	258	234	195	201	194	184	197
Oats							
Domestic							
feed – Sydney	238	257	247	212	205	200	210
Export c	369	310	278	242	241	229	235
International							
US CBOT oats nearby contract e	203	196	171	192	175	168	217
Maize							
Domestic							
feed – Sydney	317	328	334	308	300	311	335
International							
US no.2 fob Gulf b	251	232	184	185	180	179	202
Oilseeds							
Domestic							
canola – del. Melbourne	547	546	485	414	415	418	487
sunflower – del. Melbourne	560	550	550	550	550	550	454
International							
soybeans – US cif Rotterdam b	592	605	542	482	460	462	500
Pulses							
Domestic							
lupins – del. Perth	245	na	247	216	214	199	224
chickpeas – del. Melbourne	400	446	457	434	426	421	424
field peas – del. Melbourne	431	417	386	303	288	276	273
Export c							
chickpeas	576	555	602	514	570	573	590
field peas	497	515	426	382	345	347	331

a Prices refer to bulk sales of grain delivered to Sydney region. Export prices for coarse grains are the average unit fob value of Australian exports recorded by the Australian Bureau of Statistics. Prices quoted only for months in which sizable export volumes were recorded. International prices are obtained from the Unicom Newswire service in US\$ and converted to A\$ using monthly average of daily exchange rates. **b** Average of daily offer prices made in US\$, converted to A\$ using monthly average of daily exchange rates. **c** Export unit values reflect the average price received for grain exported over the quarter, not current market prices. There can be a long lag time between when prices were negotiated by exporters and the physical export of product. **d** World feed barley indicator price as of this edition of the *Australian crop report*. **e** World oats indicator price as of this edition of the *Australian crop report*.

Note: Prices used in these calculations exclude the GST.

RESEARCH FUNDING ABARES relies on financial support from external organisations to complete its research program. As at the date of this publication, the following organisations had provided financial support for Bureau research in 2009–10 and 2010–11. We gratefully acknowledge this assistance.

AusAID	Fisheries Research and Development Corporation
Australia Indonesia Governance Research Partnership (ANU)	Forest & Wood Products Australia
Australian Competition & Consumer Commission	Goulburn-Murray Water
Australian Fisheries Management Authority	Grains Research and Development Corporation
Australian Government Department of Innovation, Industry, Science and Research	Grape and Wine Research and Development Corporation
Australian Government Department of Climate Change and Energy Efficiency	Horticulture Australia Limited
Australian Government Department of Resources, Energy and Tourism	Industry & Investment NSW
Australian Government Department of Sustainability, Environment, Water, Population and Communities	Meat & Livestock Australia
Australian Government Department of the Treasury	Murray–Darling Basin Authority
Australian National University	New Zealand Institute of Veterinary, Animal and Biomedical Sciences
Cooperative Research Centre for National Plant Biosecurity	Plant Health Australia
CSIRO	Queensland Competition Authority
Dairy Australia	Queensland Department of Employment, Economic Development and Innovation
Ensis (joint venture between the CSIRO (Aust) and Scion (NZ))	Rural Industries Research and Development Corporation
	Sinclair Knight Mertz
	Southern Cross University
	University of Melbourne