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The next issue of the *Australian Crop Report* is scheduled to be released on Tuesday, 2 December 2003

IN THE NEXT ISSUE ...

- 2003-04 winter crop production forecasts updated, and estimates of 2003-04 summer crop areas and production forecasts.

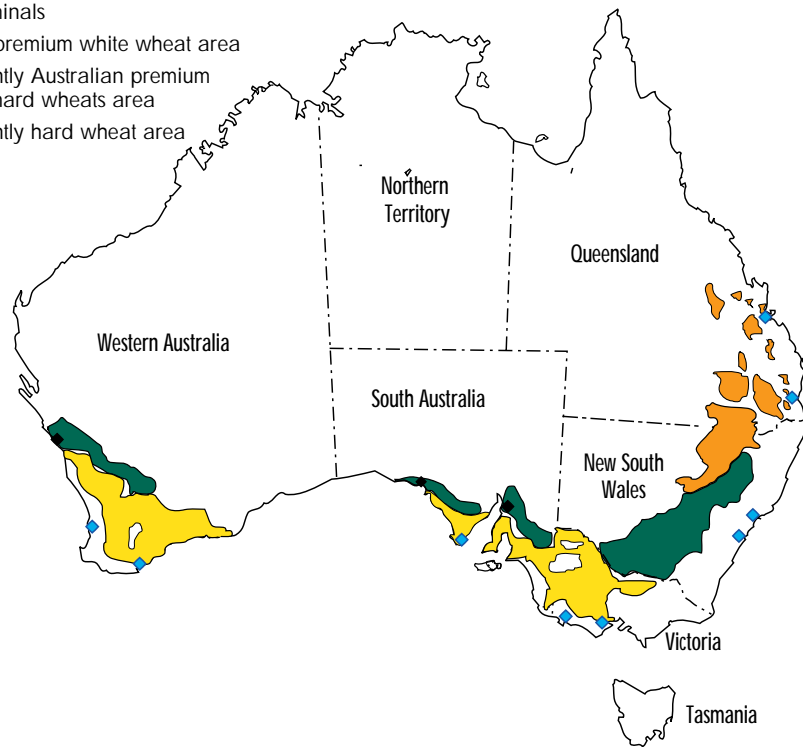
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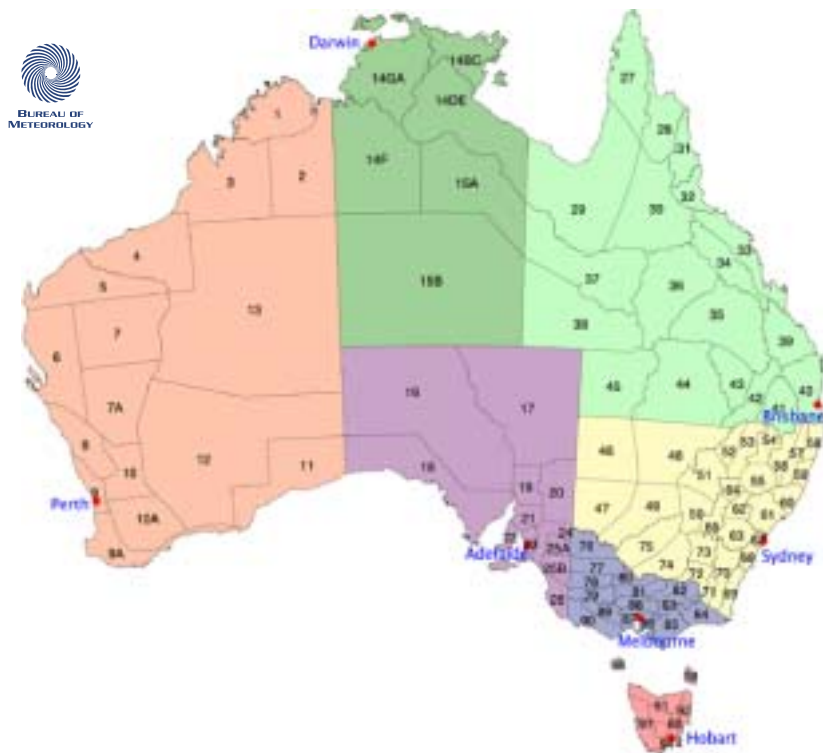
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Wheat growing regions

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



Australian meteorological districts



overview

- Widespread rains throughout most of the Australian grain belt during late July and August have significantly enhanced winter grain crop prospects in 2003-04, with production forecast to more than double to over 37.1 million tonnes, 21.6 million tonnes above last season's drought affected crop.
- Large increases in production are forecast for most regions across Australia, with the possible exception of Queensland where only limited improvement in production is forecast particularly in the Central Highlands and eastern Darling Downs regions of the state.
- The increase in winter grains production is forecast to be greatest in New South Wales, with production to rise from 2.6 million tonnes in 2002-03 to 9.5 million tonnes in 2003-04, and Western Australia with production rising from 6.2 million tonnes to 13.0 million tonnes.
- Of the major winter grains, wheat production is forecast to increase by around 14.7 million tonnes to 24.1 million tonnes, barley up 4.1 million tonnes to 7.3 million tonnes, canola up 0.6 million tonnes to 1.4 million tonnes and lupins up 0.5 million tonnes to 1.1 million tonnes.
- Total summer crop area is forecast to rise by 38 per cent to 1.27 million hectares despite possible shortages of irrigation water that are likely to result in decreased plantings of cotton in 2003-04. The area planted to rice is forecast to increase marginally from the very low plantings of the previous season.

Seasonal conditions

While aggregate rainfall in the winter cropping areas since April has been below long term averages in some states (Western Australia and Queensland in particular), most of the Australian grain belt has received good falls of rain, particularly in April, June and August (see appendix table 4). Many cropping districts in New South Wales and Victoria also received good July rains. This has provided considerable optimism for a much improved winter crop in 2003-04.

Queensland's fortunes have been mixed, with above average rains in April, June and August being offset by below average rains in May and July. The above average rainfall received in August has revived crops in most of the grain growing regions in Queensland apart from the eastern Darling Downs. However, earlier dry conditions and low subsoil moisture meant that not all of the prospective crop area was sown and that many crops in Queensland that were sown will struggle to reach average yields. For the period April–August 2003 as a

whole, the crop growing areas of Queensland received nearly 90 per cent of the long term average rains for that period.

Although a significant improvement on the amounts received last year, rainfall in nearly all of the grain growing areas in New South Wales has been variable over the past five months. However, a common factor has been the widespread rains that were received over nearly all of the grain belt during August. Most of the northern grain areas received above average rainfalls in April and August, but in the period between these months received around 60–90 per cent of the long term average. Most of the central and southern grain growing areas received average to above average rainfalls in the past three months after below average rains in April and May. For the period as a whole, rainfall was just above the long term average across the grain belt of New South Wales.

In Victoria in the period April–August 2003, rainfall was around or above the long term average in every month except May, when rainfall received was around 80 per cent of the long term average.

While the South Australian grain belt received below average rainfall in April and July, rainfall in all other months was above the long term average. For the five month period to August as a whole, rainfall in the South Australian grain belt was just above the long term average.

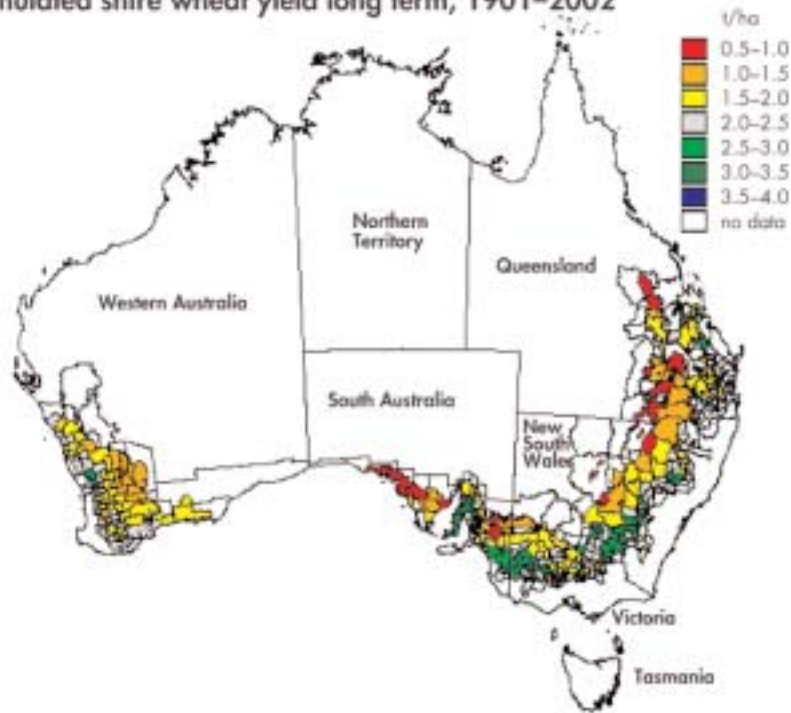
Although receiving 70–90 per cent of long term average rainfall in the May–July period, the Western Australian grain belt received 10 per cent above average rains in both April and August. However, for the April–August 2003 period as a whole, the crop growing areas in south west Western Australia recorded just below 90 per cent of the long term average.

As part of its research into yield forecasting, the Queensland Department of Primary Industries' Agricultural Production Systems Research Unit (APSRU) has mapped long term median wheat yields (map 1) and estimates of the probability of those median yields in the current season (map 2). The information in map 2 reveals the high probability of yields exceeding the long term median across most of the grain growing regions of Australia. The main exceptions are the New South Wales/Queensland border regions, parts of southern New South Wales, the northern part of the Central Highlands region in Queensland and a small part of the Western Australian grain belt.

Three month rainfall outlook

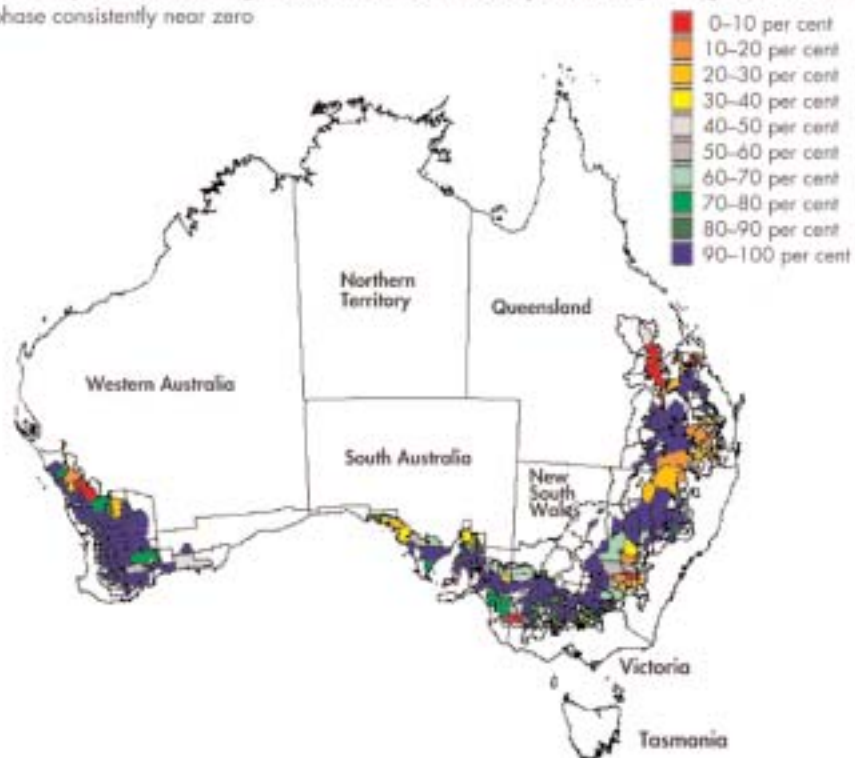
The National Climate Centre's latest seasonal rainfall outlook for September–November 2003 indicates that there is a moderate swing toward wetter conditions in the south west corner of Western Australia, with the chance of receiving above average median rainfall being 60–70 per cent ([click here for map](#)). However, average monthly rainfall in this period is usually less than half the average monthly rainfall received in the April–August period. For much of the remainder of the country there is a 40–50 per cent probability of receiving median rainfall, with no big swings toward either wetter or drier conditions, across any state or territory.

1 Simulated shire wheat yield long term, 1901–2002



2 Probability of exceeding median shire wheat yield, July/August, 2003

SOI phase consistently near zero



© State of Queensland, Dept. of Primary Industries. This seasonal climate forecast is based on historical data, the state of the El Niño Southern Oscillation phenomenon and the STIN (Stress Index) agro-climatic model developed by AGWEST which is sensitive to a water deficit or excess during the growing season.

According to the Bureau of Meteorology, the Southern Oscillation Index (SOI) continues in a neutral phase. The SOI for August was -2 , five points below the July value of $+3$. Most computer predictions indicate that the current neutral conditions in the Pacific will continue through to the southern hemisphere summer. The possibility of an El Niño or a La Niña event this year also remains low, with all models indicating neutral conditions to continue until at least April 2004.

Winter crop production

Australian winter crop production is forecast to be nearly 37.1 million tonnes, up 21.6 million tonnes from last season's drought affected crop, but below the record production of 39.3 million tonnes harvested in 2001-02. These forecasts are based on an assumption of average rainfall for the remainder of the growing season and an absence of any serious frost damage to crops in the coming months.

The sowing of winter crops in 2003 was delayed in many areas because of the late arrival of presowing rains, with the worst affected areas being in central and southern New South Wales and central Queensland. Overall the area sown to winter crops is estimated to have been 19.4 million hectares, 9 per cent higher than last season.

Yield forecasts in this report are based on estimates provided by APRSU. The forecasts assume neutral weather conditions for the remainder of the growing season, and yields being slightly over long term median yields in most regions.

While early season rainfall in eastern Australia was below average in many regions, more widespread rains particularly in late July and above average rains in many regions throughout August have boosted the prospects of winter crops in 2003. Widespread rains have meant that large increases in production are forecast in most regions of Australia, with the excep-

A Australian winter crop production ^a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia
	Mt	Mt	Mt	Mt	Mt	Mt
1993-94	7.51	4.37	0.83	9.85	4.84	27.79
1994-95	1.47	1.80	0.31	7.91	2.98	14.70
1995-96	6.74	4.35	0.74	10.22	5.16	27.79
1996-97	11.27	4.55	2.59	11.32	5.36	35.85
1997-98	8.29	3.21	1.63	12.06	5.22	31.12
1998-99	9.52	3.56	2.57	12.12	6.24	34.74
1999-2000	11.07	4.86	2.22	13.30	4.63	36.94
2000-01	10.50	5.91	1.34	8.70	7.33	34.70
2001-02 p	10.83	5.57	1.14	12.01	8.75	39.27
2002-03 p	2.56	1.80	0.72	6.19	3.83	15.48
2003-04 f	9.45	5.63	1.28	13.00	6.92	37.06
<i>% change</i>	269	213	77	110	80	139

^a State areas include wheat, barley, oats, canola, lupins, field peas, chickpea, faba beans and lentils. Australian totals also include triticale, linseed, safflower and vetch. **p** ABARE preliminary estimate. **f** ABARE forecasts.

tion of Queensland where only limited improvement in production is forecast particularly in the Central Highlands and eastern Darling Downs regions.

Winter pulse production is forecast to increase from just over 1 million tonnes in 2002-03 to 2.1 million tonnes in 2003-04, with lupins increasing by 96 per cent to over 1 million tonnes (mainly from Western Australia) and field peas rising by 165 per cent from 160 000 tonnes in 2002-03 to 424 000 tonnes in 2003-04, mainly from Victoria and South Australia.

Summer crop production

The total summer crop area is forecast to rise by 37 per cent to 1.27 million hectares in 2003-04. This is despite possible shortages of irrigation water, which are likely to constrain plantings of cotton and rice in 2003-04. Given average seasonal conditions and yields, summer crop production in 2003-04 is forecast to increase by 52 per cent to 3.6 million tonnes. Reduced availability of irrigation water for cotton production is forecast to lead to the area sown to cotton declining by 34 per cent to 135 000 hectares and cotton seed production falling by 29 per cent to 321 000 tonnes. Rice production is forecast to rise by 13 per cent to 440 000 tonnes.

Given satisfactory planting rains in northern cropping areas, the area planted to the major

B Australian summer crop plantings and production ^a

	New South Wales		Queensland		Australia	
	'000 ha	Mt	'000 ha	Mt	'000 ha	Mt
1993-94	516	1.84	598	1.15	1 172	3.09
1994-95	527	2.25	727	1.31	1 317	3.63
1995-96	576	2.30	802	1.58	1 466	3.98
1996-97	655	2.78	689	1.49	1 429	4.37
1997-98	625	2.61	631	1.14	1 341	3.84
1998-99	889	3.25	680	1.67	1 709	5.07
1999-2000	728	2.88	737	2.03	1 550	5.01
2000-01	825	3.39	802	1.76	1 761	5.27
2001-02 p	770	3.14	773	1.77	1 632	5.03
2002-03 p	395	1.34	453	0.91	926	2.35
2003-04 f	463	1.83	729	1.61	1 267	3.56
<i>% change</i>	<i>17</i>	<i>37</i>	<i>61</i>	<i>76</i>	<i>37</i>	<i>52</i>

^a State production includes sorghum, rice, cottonseed, maize and sunflowers. Australian production also includes soybeans, peanuts, mung beans and navy beans. **p** ABARE preliminary estimate. **f** ABARE forecast.

summer broadacre crops of sorghum and maize is forecast to increase by around 59 per cent to 0.9 million hectares in 2003-04.

New South Wales

- The prospects for winter crops in many of the major cropping areas of New South Wales improved significantly with widespread rains in August. Rain in July enabled some additional late plantings of winter cereals to take place, particularly in the north western, central and southern areas of the state.
- In the northern region, crop conditions are variable with some of the central and eastern areas of the region receiving good winter rains and subsoil moisture levels being recharged. The condition of crops in the western grain growing areas has generally been poor, with inadequate planting rains and below average winter rainfall. Rains in July enabled around 40 per cent of normal sowings in the area west of Moree. However, in the far west, around Coonamble and Walgett, the sown area will be well down on normal plantings, with the prospect of below average yields.
- Although much of the crop in the central grain growing areas was sown dry or on marginal soil moisture, crop prospects were substantially improved with rain in July and August. However, yields are still expected to be below average. In the southern cropping areas the mid to late winter rains boosted crop prospects considerably, with yields expected to be above average.
- Wheat production is forecast to increase by 268 per cent to 7.2 million tonnes in 2003-04.
- The rains at the end of June and early July enabled some late plantings of **barley**. The area planted to barley is estimated rise by 63 per cent to 650 000 hectares in 2003-04. With yields expected to exceed the long term average, barley production is forecast to increase significantly to 1.3 million tonnes in 2003-04.
- In general, the winter rains were too late to allow farmers to fully plant their intended areas of

New South Wales winter crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Production change from 2002-03
	'000 ha	t/ha	kt	%
Wheat	3 400	2.11	7 170	268
Barley	650	1.96	1 274	311
Canola	200	1.50	300	200

s ABARE estimate.

New South Wales summer crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Area change from 2002-03
	'000 ha	t/ha	kt	%
Sorghum	240	3.26	783	50
Sunflowers	30	1.10	33	114
Cotton seed	83	2.60	217	-45
Cotton lint	83	1.84	53	-45
Rice	45	9.78	440	18

s ABARE estimate.

canola this year. Consequently, the area planted is estimated to have fallen by 50 per cent to 200 000 hectares. However, with the expectation of increased yields, canola production is forecast to increase by 200 per cent to 300 000 tonnes.

- With recent good rains in some of the northern cropping areas and associated replenishment of subsoil moisture, the planting prospects are favorable for nonirrigated summer crops. With adequate planting rains, the area sown to **sorghum** is forecast to increase by 50 per cent to 240 000 hectares in 2003-04.
- The area planted to **rice** in 2003-04 is likely to again be affected by the lack of irrigation water, with water allocations being much the same as in 2002-03. As at the end of August, water availability in the two storages supplying irrigation water to rice growers in the Murrumbidgee and Colleambly Irrigations Areas, Blowering and Burrinjuck dams, represented 36 per cent and 16 per cent respectively of the dams' storage capacities, compared with 31 per cent and 29 per cent twelve months ago.
- The availability of irrigation water in **cotton** producing areas is currently much lower than twelve months ago and without substantial rains to improve the storage situation over the next few months, further reductions in the area sown to cotton are expected in 2003-04. The area planted to cotton is forecast to decline by 45 per cent to 83 000 hectares in 2003-04.

Victoria

- In Victoria, almost all of the major cropping areas received good rainfall in August, after mostly adequate rains earlier in the season. Crop development has proceeded well, with low levels of fungal disease reported. As sheep numbers were reduced during last season's drought, growers have planted a record area to grains in order to boost farm incomes.
- The area sown to winter grains in Victoria is estimated to have increased by 7 per cent in 2003-04. However, the planting of some crops was affected by the late break. This resulted in a shift away from canola and boosted plantings of barley and wheat in some regions. Assuming average rainfall in September and October and an absence of late damaging frosts, total winter crop production in Victoria is estimated to be around 5.6 million tonnes in 2003-04, or more than three times last season's drought affected crop.
- The area planted to **wheat** in Victoria is estimated to be up by 12 per cent to around 1.4 million hectares in 2003-04, with production forecast at 3.2 million tonnes. The area planted to **barley** is estimated to be 11 per cent higher at around 720 000 hectares in 2003-04 with production forecast to be around 1.35 million tonnes.
- More favorable growing conditions have also ensured that Victorian **canola** yields will improve on last year's drought affected outcomes. Despite the lower area planted (estimated at around 230 000 hectares due to the lateness of planting rains) the canola crop is forecast to come in at around 350 000 tonnes in 2003-04, almost double the production of the previous year.

Victorian winter crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Production change from 2002-03
	'000 ha	t/ha	kt	%
Wheat	1 400	2.29	3 200	237
Barley	720	1.87	1 346	206
Canola	230	1.52	350	94

s ABARE estimate.

Queensland

- Total winter crop production in Queensland is forecast to increase by 77 per cent to 1.28 million tonnes. Most of the major cropping areas received average to above average rainfall in April, June and August. However, the eastern area of the Darling Downs received below average rainfall in May, July and August, and this has adversely affected yield prospects. Subsoil moisture is variable across the southern Queensland cropping areas and further spring rain is required to finish the crops.
- **Wheat** production is forecast to rise by 82 per cent to 1.0 million tonnes in 2003-04, reflecting a 55 per cent increase in the area planted and an expectation of average yields. Crop growing conditions in the western Darling Downs region have been favorable, with the expectation of average yields being achieved. Some frosts occurred in late July and early August in the western Darling Downs, damaging early sown crops. There was insufficient rain in the northern areas of central Queensland to enable substantial plantings to take place and as a result wheat production is expected to be well below average in this region.
- **Barley** production is forecast to double to 187 000 tonnes in 2003-04, reflecting an increase in the area planted and improved seasonal conditions compared with the previous year.
- Given adequate planting rains the area sown to summer crops is forecast to be well above last year's, which was affected by drought. The area planted to **sorghum** is forecast to increase by 65 per cent to 560 000 hectares. With a poor winter crop in prospect for Central Queensland, it is likely that a relatively large sorghum crop will be planted in this region if there are adequate rains.
- Low water availability in the main storage dams is expected to again restrict the area planted to **cotton** in 2003-04. The area planted is forecast to fall slightly to 52 000 hectares, well below the record area of 185 000 hectares harvested in 2000-01.

Queensland winter crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Production change from 2002-03
	'000 ha	t/ha	kt	%
Wheat	720	1.39	1 000	82
Barley	120	1.56	187	108

s ABARE estimate.

Queensland summer crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Area change from 2002-03
	'000 ha	t/ha	kt	%
Sorghum	560	2.24	1257	65
Sunflowers	53	0.94	50	108
Cotton seed	52	2.00	104	-2
Cotton lint	52	1.42	73	-2

s ABARE estimate.

Western Australia

- Seasonal conditions have been excellent in Western Australia, with winter crops generally having been sown early and good followup rains have occurred during the season. In particular, above average rains in August across all grain growing areas have boosted winter crop prospects. Regular and widespread rains across all the major grain growing areas have meant that submoisture profiles are generally good.
- **Wheat** production is forecast to rise by 131 per cent to 9.0 million tonnes in 2003-04 reflecting an increase in area sown and the prospect of above average yields. However, prospects vary considerably across different parts of the state. Plantings did not occur until late June in the north eastern shires — with overall plantings in the region around 10 per cent below average. While rain in August significantly improved crop conditions in the north east, yields are likely to be below average. In the western, south coast and Esperance regions there have been instances of waterlogging. The major risk to the crop for the remainder of the growing season is likely to be frost. However, the chances of a severe frost occurring after mid-September are usually regarded as being minimal.
- Production of **barley** is forecast to increase by 89 per cent to 2.18 million tonnes – just below the record harvest of 2.26 million tonnes in 2001-02. The increase in production reflects an expansion in the area sown combined with well above average yields. Ideal growing conditions have been experienced across all the main growing regions, with the prospect of a relatively high proportion of malting barley being produced.
- **Canola** production is forecast to rise by 35 per cent to 445 000 tonnes in 2003-04. The excellent growing conditions are expected to lead to well above average oil content in the crop this year.
- While the area planted to **lupins** in Western Australia in 2003-04 is estimated to have fallen by 37 per cent to around 500 000 hectares, production is forecast to rise by 89 per cent to 851 000 tonnes.

Western Australia winter crop estimates, 2003-04

	Area s	Yield s	Pro- duction s	Production change from 2002-03
	'000 ha	t/ha	kt	%
Wheat	4 650	1.94	9 000	131
Barley	1 100	1.98	2 178	89
Canola	370	1.20	445	35
Lupins	500	1.70	851	89

s ABARE estimate.

South Australia

- There were good rains across most of the major cropping areas in South Australia in August. These followed useful (though patchy) rains in the preceding months. Conditions have ranged from wet in some of the central coastal regions to dry in the upper north and far west of the state. Farmers were unable to fulfil their planting intentions in some of the drier regions. Despite the recent rains, wind erosion has remained a problem in some of the drier parts of the Murray Mallee, Northern York Peninsula and Eyre Peninsula.
- Crop development throughout the state has largely been good and has been aided by the rainfall in most regions during August. Reported incidents of disease have been low. Assuming average growing conditions for the remainder of the season, total winter crop production in South Australia is forecast to be around 6.92 million tonnes, an 80 per cent improvement the previous year's crop.
- South Australian **wheat** plantings are estimated to be largely unchanged at around 2.0 million hectares in 2003-04. However, wheat production is forecast to be around 3.7 million tonnes, some 84 per cent higher than last season.
- The area planted to **barley** is estimated to be up 8 per cent from last season, at around 1.05 million hectares, with production in 2003-04 forecast to be up by around 85 per cent to 2.31 million tonnes.
- The area planted to **canola** is estimated to be around 183 000 hectares. Early dry conditions resulted in the area sown to canola being scaled back in favor of barley, wheat and other crops. Canola production is forecast to be around 273 000 tonnes, up 52 per cent from last year.
- Of the pulse crops, the area planted to **lentils** is estimated to be about 63 000 hectares, down 10 per cent from last season. However, lentil production is forecast to be 67 per cent higher in 2003-04. Field pea production is estimated to be up 43 per cent to 156 000 tonnes in 2003-04, with the area planted similar to that of the previous year.

South Australia winter crop, 2003-04

	Area s	Yield s	Pro- duction s	Production change from 2002-03
	'000 ha	t/ha	kt	%
Wheat	2 000	1.84	3 680	84
Barley	1 050	2.20	2 310	85
Canola	183	1.50	273	52

s ABARE estimate.

I Crop production in Australia

At 3 September 2003

	Area planted				Yield				Production			
	Five year average a	2002-03 current	2003-04 previous	2003-04 current	Five year average a	2002-03 current	2003-04 previous	2003-04 current	Five year average a	2002-03 current	2003-04 previous	2003-04 current
	'000 ha	'000 ha	'000 ha	'000 ha	t/ha	t/ha	t/ha	t/ha	kt	kt	kt	kt
Wheat	11 564	10 831	11 856	12 176	1.93	2.11	1.83	1.98	22 371	9 385	21 662	24 078
Barley	3 289	3 062	3 513	3 653	1.97	2.23	1.89	2.01	6 505	3 268	6 657	7 331
Oats b	773	718	816	831	1.82	1.83	1.64	1.73	1 407	725	1 337	1 434
Triticale	382	264	279	341	1.99	2.10	1.83	1.95	761	269	511	663
Sorghum b	659	503	800	800	2.75	2.46	2.56	2.56	1 809	1 065	2 048	2 048
Maize	72	60	93	93	5.00	5.51	5.36	5.36	363	316	499	499
Canola	1 331	1 190	996	983	1.28	1.32	1.28	1.39	1 701	790	1 274	1 368
Sunflower	105	40	80	83	1.09	0.97	1.00	1.00	119	25	80	83
Cottonseed c	480	204	162	135	2.18	2.58	2.18	2.37	1 036	455	353	321
– lint	480	204	162	135	1.55	1.82	1.54	1.68	735	322	250	227
Rice	151	38	58	45	8.93	8.50	8.62	9.78	1 348	391	500	440
Lupins d	1 299	930	1 004	638	1.14	1.07	1.02	1.65	1 499	537	1 028	1 052
Field peas d	357	312	346	301	1.09	1.53	1.32	1.41	388	160	456	424
Chickpeas d	251	201	195	162	0.87	1.32	1.05	1.13	207	136	205	182
Faba beans d	165	157	155	155	1.51	1.94	1.76	1.83	252	108	273	283
Lentils d	95	165	133	128	1.13	1.68	1.33	1.62	121	67	177	207

a Based on data from ABS, *Principal Agricultural Commodities*, cat. no. 7111.0; ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0; and ABARE estimates. **b** Area harvested for grain. **c** Cottonseed area is estimated harvested area. **d** Source: Pulse Australia for 2001-02, 2002-03 and 2003-04; ABARE for previous years.

Note: 'Previous' estimates are from the previous issue of the *Australian Crop Report*. The crop year refers to crops planted during the twelve months to 31 March. Winter crops are generally both sown and harvested within the nominated twelve 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 3 September 2003

	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												
2003-04 - current ABARE estimate	3 400	7 170	1 400	3 200	720	1 000	4 650	9 000	2 000	3 680	6	28
2003-04 - previous ABARE estimate	3 100	5 700	1 550	3 350	600	744	4 600	8 420	2 000	3 420	6	28
2002-03 - latest ABARE estimate	2 950	1 950	1 250	950	465	550	4 150	3 900	2 010	2 000	6	35
Five year average to 2001-02 a	3 330	7 396	1 064	2 296	945	1 458	4 417	7 695	1 803	3 505	5	20
Barley												
2003-04 - current ABARE estimate	650	1 274	720	1 346	120	187	1 100	2 178	1 050	2 310	13	36
2003-04 - previous ABARE estimate	600	1 110	700	1 232	100	132	1 100	2 167	1 000	1 980	13	36
2002-03 - latest ABARE estimate	400	310	650	440	80	90	950	1 150	970	1 250	12	28
Five year average to 2001-02 a	619	1 257	633	1 263	127	213	890	1 647	1 010	2 098	10	27
Oats b												
2002-03 - latest ABARE estimate	290	100	135	200	8	3	190	320	88	90	7	12
Lupins c												
2003-04 - current ABARE estimate	42	58	30	51	0	0	500	851	65	93	0	0
2003-04 - previous ABARE estimate	58	62	30	40	0	0	850	850	65	75	0	0
2002-03 - latest ABARE estimate	34	21	30	8	0	0	800	450	65	57	0	0
Five year average to 2001-02 a	104	148	37	42	0	0	1 080	1 202	79	107	0	0
Canola												
2003-04 - current ABARE estimate	200	300	230	350	0	0	370	445	183	273	0	0
2003-04 - previous ABARE estimate	229	320	210	294	0	0	400	440	158	221	0	0
2002-03 - latest ABARE estimate	400	100	250	180	0	0	400	330	140	180	0	0
Five year average to 2001-02 a	444	667	221	303	1	1	521	529	143	199	1	1
Sorghum												
2003-04 - current ABARE estimate	240	783	0	3	560	1 257	0	4	0	0	0	0
2003-04 - previous ABARE estimate	240	778	0	3	560	1 262	0	4	0	0	0	0
2002-03 - latest ABARE estimate	160	360	0	0	340	700	3	5	0	0	0	0
Five year average to 2001-02 a	211	709	2	4	444	1 092	2	3	0	0	0	0
Cottonseed d												
2003-04 - current ABARE estimate	83	217	0	0	52	104	0	0	0	0	0	0
2003-04 - previous ABARE estimate	63	152	0	0	99	201	0	0	0	0	0	0
2002-03 - latest ABARE estimate	151	349	0	0	53	105	0	0	0	0	0	0
Five year average to 2001-02 a	322	713	0	0	155	322	0	0	0	0	0	0

a Based on data from ABS, *Principal Agricultural Commodities*, cat. no. 7111.0; ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0; and ABARE estimates. **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 abax lupinus. **d** Cottonseed area is estimated harvested area. **s** ABARE estimate. **f** ABARE 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 At 3 September 2003

	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												
2003-04 - current estimate a	27	33	109	154	0	0	51	81	114	156	0	0
2003-04 - previous estimate a	27	33	109	144	0	0	91	101	119	178	0	0
2002-03 - latest ABARE estimate	12	9	110	11	0	0	71	31	119	109	0	0
Five year average to 2001-02 b	20	22	144	132	1	0	58	49	134	199	1	1
Maize												
2003-04 - current estimate	40	306	1	7	50	180	2	6	0	0	0	0
2003-04 - previous estimate	40	306	1	7	50	180	2	6	0	0	0	0
2002-03 - latest ABARE estimate	25	212	1	5	32	90	2	9	0	0	0	0
Five year average to 2001-02 b	25	190	1	7	46	165	1	4	0	0	0	0
Chickpeas												
2003-04 - current estimate a	66	76	6	7	81	91	6	5	3	3	0	0
2003-04 - previous estimate a	81	91	7	7	96	96	6	5	5	6	0	0
2002-03 - latest ABARE estimate	71	51	9	0	111	81	6	2	4	3	0	0
Five year average to 2001-02 b	86	85	61	35	46	44	50	36	7	7	0	0
Sunflowerseed												
2003-04 - current estimate	30	33	0	0	53	50	0	0	0	0	0	0
2003-04 - previous estimate	22	25	0	0	58	55	0	0	0	0	0	0
2002-03 - latest ABARE estimate	14	12	0	0	26	13	0	0	0	0	0	0
Five year average to 2001-02 b	33	42	2	3	67	72	0	0	1	1	0	0
Faba beans												
2003-04 - current estimate a	15	17	50	90	0	0	7	10	83	166	0	0
2003-04 - previous estimate a	15	17	50	80	0	0	7	10	83	166	0	0
2002-03 - latest ABARE estimate	17	18	50	5	0	0	7	2	83	83	0	0
Five year average to 2001-02 b	29	43	53	75	2	2	20	16	61	115	0	0
Lentils												
2003-04 - current estimate a	2	2	60	100	0	0	3	3	63	102	0	0
2003-04 - previous estimate a	2	2	60	70	0	0	3	3	68	102	0	0
2002-03 - latest ABARE estimate	2	1	90	4	0	0	3	2	70	61	0	0
Five year average to 2001-02 b	2	2	67	73	0	0	3	2	24	45	0	0

a Source: Pulse Australia for 2001-02, 2002-03 and 2003-04; ABARE for previous years. **b** Based on data from ABS, *Principal Agricultural Commodities*, cat. no. 7112.0; ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0 and ABARE estimates. **s** ABARE estimates. **f** ABARE 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 Rainfall comparisons for principal Australian cropping districts

	May			June			July			August		
	Normal a	2002	2003	Normal a	2002	2003	Normal a	2002	2003	Normal a	2002	2003 p
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Queensland												
Central Highlands (35)	34	22	11	29	48	30	27	2	9	21	38	33
Maranoa (43)	34	11	11	31	32	50	34	7	26	25	41	35
West Darling Downs (42)	37	11	10	33	38	51	35	4	24	25	59	37
East Darling Downs (41)	43	10	20	41	37	48	42	2	26	31	50	18
Moreton South Coast (40)	85	36	52	68	68	42	56	2	26	37	91	33
New South Wales												
North West Plains (W) (52)	38	6	10	34	20	23	37	2	30	27	18	52
North West Plains (E) (53)	44	7	15	39	22	34	43	4	39	33	24	50
North West Slopes (N) (54)	46	6	10	42	23	36	47	3	36	38	29	36
North West Slopes (S) (55)	49	9	14	50	27	45	54	5	35	46	16	69
Northern Tablelands (N) (56)	44	16	27	46	30	41	48	4	30	43	35	36
Central West Plains (S) (50)	40	27	16	38	13	27	36	7	50	36	10	77
Central West Plains (N) (51)	39	10	18	36	15	38	35	1	28	30	6	72
Central West Slopes (N) (64)	45	19	12	46	33	47	47	4	33	42	7	99
Central West Slopes (S) (65)	48	37	12	49	21	48	49	15	49	48	11	82
Central Tablelands (N) (62)	47	39	22	47	28	54	49	8	36	48	10	99
Central Tablelands (S) (63)	67	46	50	71	32	57	65	23	48	66	20	73
Riverina (W) (75)	35	21	24	32	20	29	31	8	55	31	14	55
Riverina (E) (74)	43	20	31	44	31	48	43	16	68	45	17	69
South West Slopes (N) (73)	51	38	20	53	46	62	56	29	62	55	28	76
South West Slopes (S) (72)	73	49	40	81	98	90	88	64	86	90	51	130
Southern Tablelands (GM)(70)	53	30	43	54	36	45	50	24	36	51	25	59
Victoria												
North Mallee (76)	31	22	31	28	24	43	30	15	33	30	16	52
South Mallee (77)	36	27	32	33	29	51	35	15	43	36	19	55
North Wimmera (78)	41	29	38	41	34	60	44	25	37	45	23	68
South Wimmera (79)	52	37	42	53	42	90	59	48	56	59	35	80
Lower North (80)	43	19	41	41	32	45	42	15	63	44	16	62
Upper North (81)	50	25	52	51	50	58	53	22	71	54	25	79
Lower North East (82)	74	48	64	83	118	100	90	62	133	90	49	153
Upper North East (83)	106	52	73	115	126	104	128	63	129	132	46	134
North Central (88)	70	45	53	73	71	74	79	40	90	83	41	98
Central Western (89)	58	43	32	57	56	76	63	62	67	70	42	79
Western Australia												
North Coast (8)	53	25	56	80	47	58	72	48	48	53	38	84
Central Coast (9)	113	53	89	172	127	134	168	111	119	126	79	113
Northern Central (10)	46	15	54	62	36	47	59	35	42	45	30	67
South Coast (9A)	118	56	83	157	98	104	159	109	125	126	94	108
South Central (10A)	54	22	52	70	44	49	68	48	56	55	39	68
South East (12)	28	11	26	32	12	17	26	9	16	23	10	29
South Australia												
Upper South East (25B)	46	41	44	46	41	75	50	38	49	52	29	69
Murray Mallee (25A)	31	23	42	30	22	42	31	17	23	33	15	53
Murray River (24)	33	34	45	33	31	50	35	25	25	36	16	57
East Central (23)	70	66	72	74	65	107	79	63	59	75	33	87
West Central (22)	50	48	74	56	44	96	60	63	58	54	40	73
Lower North (21)	47	48	55	49	49	61	53	39	35	53	23	71
Upper North (19)	33	27	35	34	20	25	37	18	17	36	11	44
Western (18)	37	27	20	43	28	32	46	27	25	42	17	54
Tasmania												
Northern (91)	97	59	87	104	141	182	126	151	158	116	116	172
Midlands (93)	42	20	49	43	56	77	47	44	57	48	47	104

a The definition of normal rainfall reflects a simple arithmetic average of rainfall over the period 1913 to 2002. 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 Supply and disposal of Australian wheat, oilseeds and pulses ^a

	1998-99	1999-00	2000-01	2001-02	2002-03 ^s	2003-04 ^f
	kt	kt	kt	kt	kt	kt
Wheat						
Production	21 464	24 758	22 108	24 299	9 385	24 078
Domestic use	5 006	5 257	5 328	4 872	5 701	5 638
– human and industrial	2 117	2 181	2 206	2 229	2 253	2 276
– feed ^b	2 341	2 530	2 600	2 700	2 900	2 809 ^c
– seed	548	546	522	496	548	553
Exports	16 391	17 784	16 085	16 304	8 734	15 200
Change in stocks	68	1 717	695	3 123	-5 050	3 240
Canola						
Production	1 690	2 426	1 775	1 756	790	1 368
Domestic use	355	369	286	440	445	458
– crushers	345	362	279	434	440	450
– seed	10	7	7	6	5	8
Exports	1 355	2 033	1 392	1 380	478	910
Pulses – major crops						
Production						
Lupins	1 696	1 968	1 055	1 215	537	1 052
Field peas	298	357	455	513	160	424
Chickpeas	188	230	162	258	136	182
Apparent domestic use ^b						
Lupins	643	584	403	390	370	378
Field peas	31	68	93	75	68	73
Chickpeas	28	26	23	24	20	26
Exports						
Lupins	1 053	1 384	652	830	167	675
Field peas	267	289	362	428	150	383
Chickpeas	120	243	176	272	116	156

^a Wheat and legume export figures are for winter crop years defined as follows: 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 due to reductions or increases in stock levels. ^b Calculated as a residual: production less exports less other domestic uses less change in stocks. ^c Does not include imports. ^s ABARE estimate. ^f ABARE 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; ABARE.

6 Supply and disposal of Australian coarse grains ^a

	1998-99	1999-00	2000-01	2001-02	2002-03 ^s	2003-04 ^f
	kt	kt	kt	kt	kt	kt
Barley						
Production	5 987	5 032	6 743	8 280	3 268	7 331
Domestic use	2 158	2 011	2 325	2 499	2 129	2 365
– as malt and other human use	151	154	158	161	165	168
– feed	1 890	1 700	2 000	2 200	1 800	2 050
– seed	117	157	168	138	164	147
Export	4 765	3 325	4 567	5 274	2 320	4 772
– feed barley	2 607	1 524	2 143	2 971	564	2 173
– malting barley	1 635	1 234	1 824	1 705	546	1 964
– malt (grain equivalent)	525	569	602	600	588	635
Oats						
Production	1 798	1 118	1 050	1 434	725	1 434
Domestic use	1 550	983	964	1 244	586	1 233
– human	116	119	122	125	128	131
– feed	1 406	833	805	1 085	419	1 069
– seed	28	31	37	34	40	34
Export	248	135	86	190	155	327
Triticale ^b						
Production	708	764	841	860	269	663
Domestic use	708	758	840	860	269	663
– feed	690	744	826	847	252	651
– seed	18	14	14	13	17	12
Sorghum						
Production	1 891	2 116	1 935	2 021	1 065	2 048
Domestic use	1 399	1 452	1 433	1 646	990	1 651
– feed	1 396	1 448	1 429	1 644	986	1 647
– seed	3	4	4	3	4	4
Export	493	665	501	375	71	397
Maize						
Production	338	406	345	457	316	499
Domestic use	302	353	300	396	273	452
– human, industrial	94	96	99	101	104	106
– feed	206	256	200	293	168	345
– seed	1	1	1	1	1	1
Export	36	53	45	118	34	45
Total coarse grains						
Production	10 722	9 436	10 914	13 052	5 643	11 976
Domestic use	6 116	5 557	5 863	6 645	4 247	6 365
– human, industrial	361	369	378	387	396	406
– feed	5 588	4 981	5 261	6 069	3 624	5 762 ^c
– seed	167	207	224	189	227	198
Export	5 543	4 177	5 199	5 957	2 580	5 542

^a Market years are November–October for barley, oats and triticale, and March–February for sorghum and maize. This means that the 2001-02 barley crop harvested in November 2001 to January 2002 is marketed from November 2001 to October 2002. The 2001-02 sorghum crop harvested in March to May 2002 is marketed from March 2002 to February 2003. 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 Does not include imports. ^s ABARE estimate. ^f ABARE forecast.

Sources: Australian Bureau of Statistics; ABARE.

7 Australian grain prices ^a

	2002				2003		
	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	223	221	277	347	326	288	239
Export							
Australian standard white b	302	274	340	375	252	260	170
International							
US no.2 hard red winter, fob Gulf b	250	239	301	330	270	223	148
Barley							
Domestic							
2 row feed – Sydney	213	205	258	332	337	292	263
Export c							
Feed (bulk)	221	237	191	223	250	223	195
Malting (bulk)	274	303	245	250	311	286	264
International							
Feed – US no. 2 fob Portland b	216	200	222	241	221	199	192
Sorghum							
Domestic							
Feed – Sydney	187	195	256	331	313	255	199
Export c	185	182	224	244	307	254	211
International							
US del. Gulf b	189	173	205	209	196	177	154
Oats							
Domestic							
Feed – Sydney	205	211	272	350	358	356	277
Export c	231	337	245	220	388	312	279
International							
US heavy white, del. Portland b	316	303	299	303	293	276	270
Maize							
Domestic							
Feed – Sydney	236	239	292	380	390	311	291
International							
US no.2 fob Gulf b	176	164	197	195	179	167	151
Oilseeds							
Domestic							
Canola – del. Melbourne	389	388	501	544	451	401	395
Sunflower – del. Melbourne	360	380	404	428	448	463	425
Soybeans – US cif Rotterdam b	379	390	414	428	425	405	353
Pulses							
Domestic							
Lupins – del. Perth	219	215	235	284	270	260	263
Field peas – del. Melbourne	327	327	340	397	397	430	369
Chickpeas – del. Melbourne	508	520	521	523	523	495	451
Export c							
Chickpeas	622	615	708	598	570	634	562
Field peas	336	345	395	404	388	392	423

^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 do not reflect current market prices but the average price received for grain exported over the quarter. Generally, there can be a long lag time between when prices were negotiated by exporters and the physical export of product. **s** ABARE estimate. **na** Not available.

Note: Prices used in these calculations exclude the GST.