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In the next issue:

2022–23 winter crop area and production estimates updated

2022–23 summer crop area and production forecasts updated

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About the Australian Crop Report

The *Australian Crop Report* contains ABARES forecasts for the area, yield and production of Australia's major winter and summer broadacre crops. Forecasts are made at the Australian state level.

The *Australian Crop Report* is released quarterly in March, June, September and December. The June edition contains ABARES first forecasts of Australian winter crop production at the state level for the next Australian financial year (July to June). It also contains updated estimates of previously released summer crop forecasts. The September edition contains ABARES first forecasts of Australian summer crop production at the state level for the current Australian financial year. It also contains updated estimates of previously released winter crop forecasts. The December and March editions contain updates to both winter and summer crop forecasts for that Australian financial year.

Underpinning the forecasts contained in the *Australian Crop Report* are ABARES assessments of both realised and forecast planting, growing and harvesting conditions in each major production region. This assessment would not be possible without the invaluable participation of a network of expert industry contacts who are confidentially consulted during the preparation of each edition of the *Australian Crop Report*.

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National overview

Key points

- National winter crop production in 2022–23 is forecast to reach the second highest on record at 62 million tonnes.
- Crop developments over spring have been mixed with improvements in large parts of the country expected to offset losses in parts of the eastern states.
- Planting of summer crops in 2022–23 is forecast to be well above average, supported by high soil moisture and significant areas of land left fallow during winter.

Mixed prospects around the country add up to second largest national winter crop

Winter crop production in Australia is forecast to total 62 million tonnes, the second highest on record. Production is expected to reach new records in Western Australia and South Australia following favourable spring conditions in these states. Crop prospects in the eastern states remain high overall including forecasts of record production in Victoria, but widespread losses are estimated in regions affected by untimely record spring rainfall.

Seasonal conditions over spring have resulted in mixed prospects for winter crop production around the country. National winter crop production has been revised higher overall due to improved prospects in large parts of the country, which are expected to offset reduced prospects and crop losses in parts of the eastern states caused by widespread flooding and waterlogging. Crop harvests in New South Wales and Victoria are also running much later than usual, with ongoing wet conditions over summer posing additional downside risks.

According to the latest three-month rainfall outlook (December to January), issued by the Bureau of Meteorology on 24 November 2022, there is a high chance that cropping regions in the eastern states and South Australia will exceed their median summer rainfall, posing further downside risks to production forecasts. Western Australian cropping regions are likely to receive average to below average summer rainfall.

Crop prospects in Western Australia and South Australia benefitted the most from spring conditions, with total production in both states forecast to reach new record levels. Consistently wet and cool conditions during spring have prolonged the grain filling period, while less severity and frequency of frost events have also contributed to record yield potentials in these states. Drier conditions in late spring compared to the eastern states have assisted most growers in Western Australia and South Australia with harvesting their crops.

Spring was mixed for the eastern states following well above average prospects at the end of winter. Total production in Queensland is forecast to reach the second highest on record, with record production forecast for most parts of the state expected to offset reduced plantings and flood losses in some parts of the Darling Downs. In Victoria, record levels of plantings and yields forecast for the majority of the state are expected to lift state production to a new record. Most parts of the Mallee are expected to harvest record crops, while prospects are well above average in large parts of the Wimmera. This will offset crop losses in central and northern border regions of Victoria caused by flooding and waterlogging during spring.

Record spring rainfall in New South Wales following well above average August rainfall has led to saturated soils in most cropping regions. Extensive crop losses are estimated, caused by widespread river flooding and damage to yield prospects for inundated crops in most parts of the state. Total production in New South Wales has been revised down by 2 million tonnes since the September edition of the *Australian Crop Report*.

Wheat production is forecast to reach a new record of 36.6 million tonnes, a 1% increase over the previous record set last year. **Barley** production is forecast to reach 13.4 million tonnes, the fourth largest on record. **Canola** production is forecast to also reach a new record at 7.3 million tonnes, a 4% improvement over the previous record set last year.

Area planted to winter crops in 2022–23 is estimated to reach 23.5 million hectares nationally, a slight fall from last year's record levels. This fall is driven by a 10% decrease in area planted in New South Wales and 9% in Queensland, caused by unfavourable wet conditions at the time of planting in southern Queensland, and northern and central New South Wales.

Crop abandonment in the eastern states due to flooding and extreme rainfall over spring is estimated to total around 16% of planted area in New South Wales, 7% in Victoria and 5% in Queensland. These abandonments are factored into ABARES forecasts through lower state-wide average crop yields, which are calculated on area planted rather than area harvested.

Qualities of grain and oilseeds in the eastern states have been mixed following ongoing wet conditions during spring, which prevented many growers from accessing their paddocks for fertilising and chemical application. Reduced capacity to manage weeds and fungal diseases such as stripe rust have contributed to more noticeable loss in yields than previous years. Crop yields in the eastern states have also been affected differently by the ongoing wet conditions, with cereals being more resilient than canola and pulse crops.

Summer crops

Key points

- Summer crop planting in 2022–23 is forecast to fall 9% due to excessively wet conditions and flooding across major production regions in New South Wales.
- Areas planted to cotton and rice are forecast to fall significantly, offsetting increases to grain sorghum area.

Area planted to summer crops in 2022–23 is forecast to fall by 9% to reach 1.4 million hectares, limited by excessively wet conditions and flooding across major production regions in New South Wales. This is expected to largely constrain plantings to cotton and rice crops in the state, despite favourable returns.

Area planted to sorghum crops is forecast to rise by 11%. This is supported by the combination of significant areas of land previously left fallow during winter in both New South Wales and Queensland, ample soil moisture availability for planting crops, and the drier conditions in November in these regions for planting sorghum. Sorghum production is forecast to reach the fourth highest on record at 2.6 million tonnes, remaining 4% below the record production of last season.

Australian cotton production is forecast to decrease 23% in 2022–23 to 4.3 million bales, following a record of 5.6 million bales in 2021–22. Excessively wet conditions and flooding across major production regions in New South Wales during spring have prevented planting. However, improved water storage levels in parts of Queensland are expected to add slightly to cotton production.

Rice production in Australia is forecast to fall by 51% in 2022–23 to 340,000 tonnes, largely driven by a 47% fall in plantings. This comes as widespread flooding in southern New South Wales and extreme rainfall in late spring have prevented many growers from accessing their paddocks. Wet and mild conditions extending to summer are also likely to result in poor emergence and yield prospects.

Crop forecasts by State

Queensland

Winter crop production in Queensland is forecast to increase 4% to 2.9 million tonnes in 2022–23, overtaking 2021–22 as the second largest winter crop on record. Well above average rainfall during the growing season is expected to secure record levels of production in most parts of the state. In Central Queensland, favourable conditions are expected to deliver the largest winter crop for the region in recent years, with an increase in planted area and strong yields. However, production prospects in the Darling Downs were hampered by wet autumn conditions that prevented plantings, as well as extreme rainfall and flooding during spring that have contributed to some crop losses in the region.

Back-to-back La Niña events and a negative Indian Ocean Dipole (IOD) contributed to the exceptionally wet conditions throughout the 2022–23 winter cropping season. Well-above average rainfall through late autumn, following heavy rainfall earlier in the year, interrupted the planting of winter crops across southern Queensland. Many growers were still able to plant a late crop, but some growers missed out and left paddocks fallow.

Untimely, heavy rainfall returned to Queensland cropping regions in early- to mid-spring, causing flooding and crop losses in the Goondiwindi region and parts of the Western Downs. An estimated 5% of state cropping area, mostly planted to wheat and barley, is expected to be abandoned as a result. The rainfall also reduced grain quality for early planted, mature crops across Queensland, especially in Central Queensland. However, dry conditions through late spring allowed harvesting of winter crops and the planting of summer crops across Queensland. Harvest results to-date indicate strong yields across the state, along with better-than-expected grain quality.

Queensland winter cropping area is estimated to have decreased 9% in 2022–23, due to wet conditions preventing field access in parts of southern Queensland. The decrease in area was somewhat offset by increased area in Central Queensland and more marginal country in the south-west. Favourable wheat prices early in the season favoured the planting of wheat across Queensland cropping regions, with wheat area remaining steady compared to 2021–22. However, barley and chickpea area declined year-on-year. Relatively weak barley prices saw growers switch towards wheat in southern Queensland. Likewise, weak chickpea prices and exceptionally wet conditions discouraged chickpea planting across southern Queensland, while chickpeas remain more of a rotational necessity in Central Queensland.

Summer crop production is forecast to increase 5% in 2022–23 to 2.6 million tonnes. Despite a decrease in international cotton prices since last season's crop, margins remain favourable. The availability of irrigation water across Queensland production regions is expected to produce another large irrigated cotton crop in 2022–23. Recent heavy rainfall also topped up storages in western districts, which are likely to see an expansion of irrigated cotton. Sorghum area is also forecast to increase in 2022–23, with many dryland growers looking to make the most of current soil moisture levels, especially those that missed a winter crop.

Wet conditions throughout early- to mid-spring delayed the harvesting of winter crops and the planting of summer crops across southern Queensland. The delays left a tight window in which to plant cotton. Hot, dry conditions allowed significant planting progress through November, however, the return of rainfall at the end of November may limit planting activity. The

dissipation of the negative IOD and La Niña events by early 2023 decrease the likelihood of above average rainfall towards the end of the summer cropping season.

Winter crop forecasts, Queensland, 2022–23

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	830	2.59	2,150	0	18
Barley	130	2.69	350	-11	-11
Chickpeas	205	1.71	350	-30	-30

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

Summer crop forecasts, Queensland, 2022–23

Crop	Area '000 ha	Yield t/ha	Production Kt	Area change %	Prod. Change %
Grain sorghum	500	3.80	1,900	11	7
Cotton lint	228	1.99	455	6	8
Cottonseed	228	2.40	547	6	8

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

New South Wales

Winter crop production in New South Wales is forecast to reach 13.2 million tonnes in 2022–23. This forecast is 18% above the 10-year average to 2021–22 but 30% below the near-record production of last year. An exceptionally wet start to the season in the Central West and north of the state significantly delayed planting, resulting in some fields being left fallow. The wet weather in the Central West and north also limited growers' ability to manage crops and it is expected that crops planted in these regions will have lower yield potential. However, expected drier weather over the summer months may partly offset this providing some upside to yield potentials in these regions. An excellent start to the winter cropping season in southern regions had helped many growers to fully realise their planting intentions. High levels of soil moisture at the time of planting were expected to support very high yield potentials in southern parts of the state. However, recent flooding across the Riverina and Murray has limited growers' ability to manage crops, damaged infrastructure, delayed harvest and significantly lowered yields.

Area planted to winter crops in New South Wales is forecast to be 5.6 million hectares, 3% above the 10-year average to 2021–22 but falling by 10% compared to last year. Increased area planted was supported by autumn rainfall in most cropping regions reaching above the 80th percentile of historical years, providing timely and solid conditions for the planting of winter crops and allowing expansion into some marginal areas. However, in large parts of Central Western and Northern New South Wales, heavy and ongoing rainfall during late autumn and winter limited access to fields which prevented growers from planting a full program. Waterlogging issues have persisted in these areas and some fields have been left fallow. It is expected that many of these will be planted to summer crops, if drier weather over December enables growers to access fields to sow.

Seasonal conditions have allowed growers to focus plantings to wheat and canola, driven by higher prices of these crops relative to others. Area planted to wheat is expected to reach 3.5 million hectares, a 7% fall from last year. This fall is mostly due to a greater focus in Central and Northern New South Wales on canola and reduced areas planted in some parts due to heavily saturated soils. Despite this, area planted to canola is also forecast to fall by 4% to 850,000 hectares due to widespread flooding which limited access to fields at the time of planting. Above average rainfall has delayed the harvest, and a greater proportion of low-protein wheat and damaged and downgraded grain can be expected.

Total summer crop production is estimated to fall 34% in 2022–23 to 1.9 million tonnes, around the 10-year average to 2021–22. Many growers that missed a winter crop in 2022–23 are likely to take advantage of high levels of soil moisture and plant fields that were fallow over winter to sorghum. However, sorghum seed availability is expected to limit area expansion in 2022–23. Cotton production in New South Wales is forecast to decline by 40% in 2022–23. Well above average rainfall and flooding across major production regions throughout spring have impeded the ability of many growers to access fields for soil preparation and planting. Even as conditions improved towards the end of spring, yield penalties due to late planting has discouraged growers. Rice production is forecast to fall 51% in 2022–23 to 334,000 tonnes due to flood impacts causing widespread reductions in area planted. A continuation of the current wet conditions through early summer could prevent field access, presenting a large downside risk to summer crop production. However, for summer crops that are sown to schedule, high water availability and a favourable rainfall outlook will support strong yields across dryland plantings.

Winter crop forecasts, New South Wales, 2022–23

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. Change %
Wheat	3,450	2.65	9,140	-7	-28
Barley	740	2.73	2,020	-18	-33
Canola	850	1.53	1,300	-4	-35

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

Summer crop forecasts, New South Wales, 2022–23

Crop	Area '000 ha	Yield t/ha	Production Kt	Area change %	Prod. Change %
Grain sorghum	190	3.80	722	12	-24
Cotton lint	246	2.04	502	-40	-40
Cottonseed	246	2.46	604	-40	-40
Rice	35	9.56	334	-48	-51

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

Victoria

Victorian winter crop production is forecast to reach a record, increasing 15% to 10.7 million tonnes in 2022–23. This forecast incorporates current estimates of crop losses due to flooding events following record October rainfall across Victoria. Record production is driven by record

levels of area planted and yield across most cropping regions offsetting the impact of crop losses due to floods. Although there are reports of crop losses across many parts of Victoria due to persistent waterlogging, it is unclear how severe and widespread these concerns are. As a result, the full extent of crop lost in Victoria is uncertain, presenting further downside risk for this forecast.

Agriculture Victoria estimate 176,501 hectares of field crops lost due to recent flooding events (as of 29 November 2022). Current reports indicate losses are most heavily concentrated in regions including the Goulburn Broken and North Central. For these regions, the areas most impacted are near the lower and middle reaches of river systems including the Avoca, Loddon, Goulburn, and Campaspe.

Winter crops yields are forecast to reach record levels, driven by the Mallee which is estimated to account for more than 40% of area planted to wheat and barley across the state. Crops in this region are expected to yield approximately twice as much as last year due to the favourable start to the season and timely rainfall throughout the growing period. Although recent hail has impacted crops in the Mallee, the extent of this damage is assessed to be localised and will not manifest in significant yield reductions for the state. Crop losses are expected for lentils and faba beans due to the impact of prolonged wet weather. Lentils have poor tolerance for prolonged waterlogging and crop loss is expected particularly for the Wimmera, which is a major lentil growing region. Wet conditions for faba beans have resulted in diseases, including chocolate spot, decreasing production.

Harvest activity is now underway in all regions in Victoria, however, the prospect of further rainfall will influence the progress of harvest and quality of grain harvested. The latest rainfall outlook, issued by the Bureau of Meteorology on 24 November 2022, indicates rainfall across cropping regions in Victoria is likely to exceed the median in December. Excessive rainfall over December may further delay harvest activity and lead to a higher proportion of low-protein wheat.

Winter crop forecasts, Victoria, 2022–23

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. Change %
Wheat	1,550	3.46	5,370	2	29
Barley	850	3.42	2,910	-7	8
Canola	615	2.28	1,400	2	4

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

South Australia

South Australian winter crop production is expected to rise to a record 11.2 million tonnes in 2022–23, up from 8.5 million tonnes in 2021–22. This will be driven by a rise in average yields for wheat, barley, and canola, as well as a rise in area planted to wheat and canola.

Total area planted to winter crops is estimated to have risen by 4% to 3.9 million hectares in 2022–23. For the three major crops, estimates of area planted in 2022–23 remain unchanged from the September 2022 edition of the *Australian Crop Report*. Area planted to wheat and canola is estimated to have risen in response to high international prices in early 2022. Some of

these plantings are estimated to have come at the expense of barley, since prices for barley did not rise as sharply as prices for wheat and canola at the beginning of 2022.

Yields for wheat, barley, and canola have been revised up since the September 2022 edition of the *Australian Crop Report*. Yields for these crops are now expected to rise year-on-year. Some cropping regions had a late start to the season, such as the Eyre Peninsula, but high rainfall in September and October has driven an upward revision to yields. However, recent storms have led to some reports of hail damage on the Eyre Peninsula. There have also been reports of South Australian lentil crops yellowing or wrinkling because of heavy rain. Nonetheless, the storm's impacts are expected to be localised and are not expected to weigh significantly on state-wide crop yields.

Winter crop forecasts, South Australia, 2022–23

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	2,200	3.10	6,820	6	45
Barley	830	3.20	2,660	–2	18
Canola	290	2.10	610	7	13

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES

Western Australia

Winter crop production in Western Australia is forecast to reach a record high of 23.8 million tonnes in 2022–23, surpassing the previous record of 23.1 million tonnes in 2021–22. Seasonal conditions have been favourable across the state and winter crop yields are expected to be significantly above average.

Following the excellent start to the winter cropping season, soil moisture levels were sufficient to sustain crops through drier conditions in June and early July. Timely rainfall from mid-July boosted crop prospects and ideal spring conditions established strong yield potentials. Rainfall in late August and early September, mild spring temperatures and minimal frost events have contributed to very much above average yields. The slow finish to the season has benefitted crops by aiding grain fill and further lifting yield potential.

However, November rainfall has caused harvest delays and the continued wet conditions across southern parts of the state are likely to result in some quality downgrades. Severe storms and hail events across central cropping regions in November have caused significant damage to some areas. Despite crop losses due to hail damage, the impact on production for the affected regions is likely to be more than offset by exceptionally high yields in other areas.

The Bureau of Meteorology's rainfall outlook for December suggests below average rainfall is likely for cropping regions in Western Australia. This should provide favourable conditions for crop maturation and allow the harvesting of winter crops to progress with minimal interruption.

Area planted to winter crops in Western Australia is expected to increase to a new record of 9 million hectares. Excellent conditions during the planting window and high expected margins resulted in a significant increase in canola plantings, particularly in low-rainfall zones. Area planted to canola is estimated to be 1.9 million hectares, up 23% compared to 2021–22. The

forecast increase in total winter crop area is also supported by area expansion in eastern regions.

Winter crop forecasts, Western Australia, 2022–23

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	4,950	2.63	13,000	1	2
Barley	1,550	3.48	5,400	-3	-2
Canola	1,900	2.11	4,000	23	27
Lupins	270	2.22	600	-23	-20

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Source: ABARES