



# Weekly Australian Climate, Water and Agricultural Update

No. 20/2024

30 May 2024

# Summary of key issues

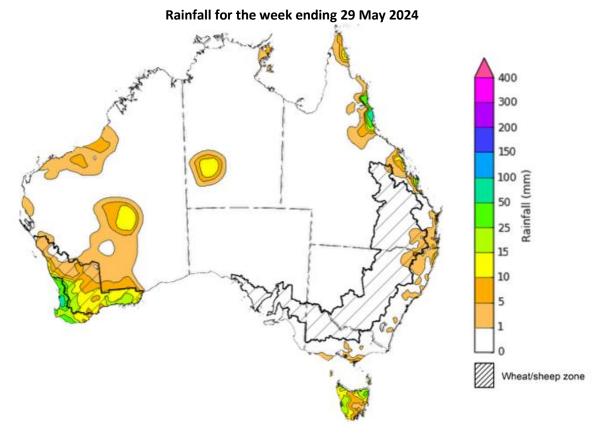
- In the week ending 29 May 2024, a high-pressure system kept much of Australia dry. Exceptions
  were southwest parts of Western Australia and Tasmania receiving up to 100 millimetres from
  cold front and northeast Queensland receiving up to 50 millimetres of rainfall from a lowpressure system.
  - Across cropping regions, up to 50 millimetres in the west and 25 millimetres of rainfall in southern parts of Western Australia was recorded. This would have benefited germination of dry sown winter crops.
  - Lack of rainfall in Victoria and South Australia would delay the germination of winter crops and result in further declines in soil moisture but benefit field access in Queensland and New South Wales for summer crop harvest and winter crop planting activities.
- Over coming days, a northwest cloud band extending from northwest to southeast Australia is
  expected to bring severe weather and thunderstorms across its passage, generating rainfall
  totals of up 100 millimetres. Cold fronts are expected to bring rainfall totals of up to 100
  millimetres in Tasmania and southwest Western Australia and up to 25 millimetres in South
  Australia.
  - Across cropping regions, widespread falls are expected in most areas. The heaviest falls are expected across New South Wales, southern Queensland, Victoria, and the west of Western Australia, with these areas likely to receiving between 10 and 50 millimetres.
     Parts of eastern Victoria can record up to 100 millimetres of rainfall. Up to 25 millimetres is expected across much of South Australia.
  - o This expected rainfall will be highly beneficial for winter crops.
- The national rainfall outlook for June to August is for above median rainfall for much of the southern half of Australia, with exceptions in coastal Victoria, South Australia, and Tasmania.
  - Across cropping regions, the probability of exceeding median rainfall is between 40% and 75%. Below median rainfall is likely in scattered areas of South Australia. Expected rainfall totals will likely be sufficient to support growth and establishment of winter crops and will assist in maintaining above average forecasts of winter crops yields.
- Water storage levels in the Murray-Darling Basin (MDB) increased between 23 May 2024 and 30 May 2024 by 99 gigalitres (GL). Current volume of water held in storage is 16 825 GL, equivalent to 76% of total storage capacity. This is 14 percent or 3,300 GL less than at the same time last year. Water storage data is sourced from the BOM.
- Allocation prices in the Victorian Murray below the Barmah Choke remained at \$22 between 23
  May 2024 and 30 May 2024. Prices are lower in the Murrumbidgee due to the binding of the
  Murrumbidgee export limit.

# 1. Climate

# 1.1. Rainfall this week

For the week ending 29 May 2024, a high-pressure system brought dry conditions to much of Australia. In Western Australia, a cold front brought rainfall totals of up to 100 millimetres in isolated areas across the southwest coast. In the northeast Queensland, a low-pressure system brought rainfall totals of up to 100 millimetres in scattered areas. Tasmania recorded a maximum of 50 millimetres of rainfall.

Across cropping regions, isolated falls of between 10 and 50 millimetres were recorded in southern Western Australia. Little to no rainfall was recorded across the remainder of Australian cropping regions this week. Mostly dry conditions in New South Wales and Queensland would have allowed planting of winter crops and harvest of summer crops to continue without delay. Across Victoria and South Australia, the lack of rainfall would have continued to delay the germination of winter crops and resulted in a continual decline in soil moisture. Rainfall in southern Western Australia will likely support the germination and establishment of crops and pastures growth.



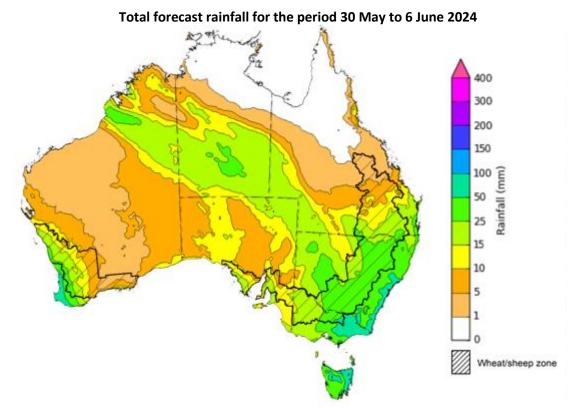
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Note: The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited quality control. They are intended to provide a general overview of rainfall across Australia as quickly as possible after the observations are received. For further information go to http://www.bom.gov.au/climate/rainfall/

# 1.2. Rainfall forecast for the next eight days

Over the 8 days to 6 June 2024, a northwest cloud band extending from northwest to southeast Australia is expected to bring severe weather and thunderstorms across its passage. This weather system is expected to result in rainfall totals of up to up 50 millimetres in northern areas of Western Australia, southern areas of Northern Territory and south-western Queensland, and up to 100 millimetres in New South Wales and Victoria. Cold fronts are expected to bring rainfall totals of up to 100 millimetres in south-western Western Australia and Tasmania and up to 25 millimetres in South Australia.

Across cropping regions, widespread falls are expected in most areas. The heaviest falls are expected across New South Wales, southern Queensland, Victoria and the western parts of Western Australia, with these areas likely to receiving between 10 and 50 millimetres. Parts of eastern Victoria can record up to 100 millimetres of rainfall. Up to 25 millimetres is expected across much of South Australia, while remaining areas in Western Australia and northern Queensland are expected to receive up to 10 millimetres. If realised, this rainfall will provide relief to cropping regions in Western Australia, South Australia and Victoria, allowing germination of dry sown crops. However, excessive rainfall across southern Queensland and northern New South Wales, is likely to interfere with the harvesting of summer crops and delay planting activities of winter crops.



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Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

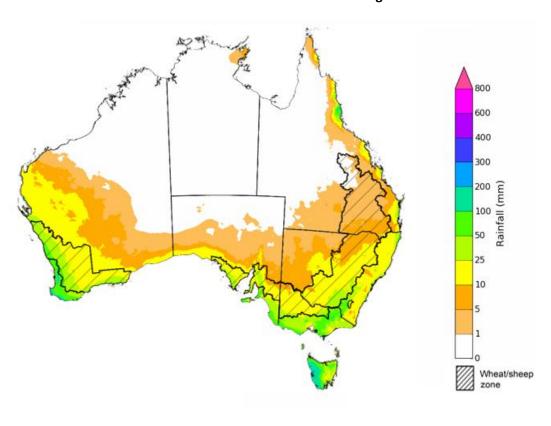
# 1.3. National Climate Outlook

The most recent rainfall outlook for June 2024 provided by the Bureau of Meteorology indicates an increased likelihood of below median rainfall across large areas of eastern, southern and northern Australia. Above median rainfall is more likely across western parts of Western Australia and in isolated areas in the tropics and southern Tasmania. There is an equal chance of either above or below median rainfall likely elsewhere.

According to Bureau of Meteorology's climate model, for June 2024 there is a 75% probability of rainfall totals between 25 to 50 millimetres across parts of New South Wales and coastal Queensland and much of Victoria, and southern South Australia. High elevation and coastal areas may receive up to 100 millimetres of rainfall in these states. The far southwest of Western Australia and western Tasmania are anticipated to receive up to 200 millimetres of rainfall. Northern Australia is expected to remain largely dry, typical of this time of the year.

Across cropping regions, there is a 75% chance of rainfall totals between 10 to 50 millimetres in New South Wales, Victoria, South Australia and up to 100 millimetres in Western Australia. In Queensland, a maximum of 10 millimetres is expected. If realised, these expected rainfall totals should be sufficient to allow for the germination and establishment of winter crops.

# Rainfall totals that have a 75% chance of occurring in June 2024



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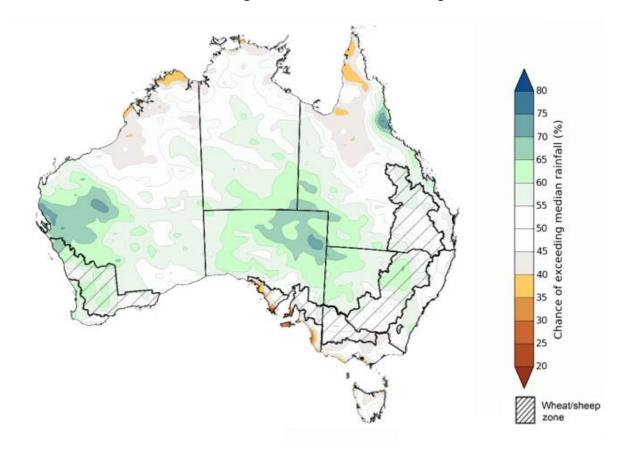
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The El Niño Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) climate drivers are currently neutral and having minimal influence on Australian rainfall.

The rainfall outlook for June through August indicates that above median rainfall is more likely across much of the southern half of Australia, with exceptions of Victoria and Tasmania, and southern parts of South Australia where below median to median rainfall is more likely. Remaining areas have an equal chance of having above or below median rainfall.

Across cropping regions, the probability of exceeding median rainfall is between 40% and 60% in Queensland and Victoria, while Western Australia and New South Wales cropping regions have a higher probability (between 50 and 70%) of receiving above median rainfall. Below median rainfall is likely in scattered areas of South Australia.

# Chance of exceeding the median rainfall June to August 2024



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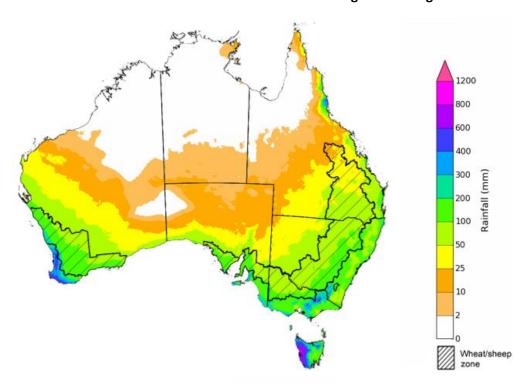
The outlook for June to August 2024 suggests there is at least a 75% chance of rainfall totals of up to 200 millimetres across much of southern Australia, with up to 400 millimetres likely in high elevations of New South Wales and Victoria. In western Tasmania, rainfall is expected to reach up to 800 millimetres over the period. The far southwest of Western Australia is likely to receive up to 600 millimetres of rainfall. In contrast, northern Australia is likely to remain largely dry, typical of this time of the year.

In cropping regions, there is at least a 75% chance of receiving between 100 and 200 millimetres across much of South Australia, Western Australia, Victoria and New South Wales. Geraldton area in Western Australia has a 75% chance of receiving up to 300 millimetres of rainfall. Up to 100 millimetres of rainfall is expected in Queensland.

If realised, these expected rainfall totals will likely be sufficient to support growth and establishment of winter crops, particularly in South Australia, Western Australia and western parts of Victoria where soil moisture levels are currently well below average. Expected rainfall across remaining cropping regions will further boost soil moisture profile and will assist in maintaining above average forecast winter crops yields.

Livestock producers, especially those in the south, are expected to experience close to average pasture production on the back of the improving rainfall outlook over the June to August period.

Rainfall totals that have a 75% chance of occurring June to August 2024



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# 2. Water

# 2.1. Water markets – current week

Water storage levels in the Murray-Darling Basin (MDB) increased between 23 May 2024 and 30 May 2024 by 99 gigalitres (GL). Current volume of water held in storage is 16 825 GL, equivalent to 76% of total storage capacity. This is 14 percent or 3,300 GL less than at the same time last year. Water storage data is sourced from the BOM.

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15K

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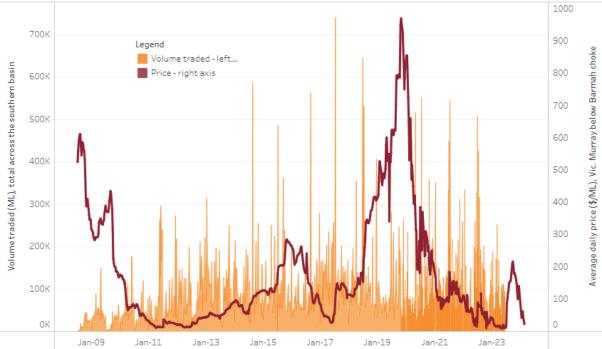
Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 Jan-19 Jan-20 Jan-21 Jan-22 Jan-23 Jan-24 Water storage data is sourced from the Bureau of Meteorology.

Water storages in the Murray-Darling Basin, 2013–2024

Allocation prices in the Victorian Murray below the Barmah Choke remained at \$22 between 23 May 2024 and 30 May 2024. Prices are lower in the Murrumbidgee due to the binding of the Murrumbidgee export limit.

Region	\$/ML
NSW Murray Above	20
NSW Murrumbidgee	10
VIC Goulburn-Broken	16
VIC Murray Below	22

# Surface water trade activity, Southern Murray-Darling Basin



The trades shown reflect estimated market activity and do not encompass all register trades. The price is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior to the 30 October 2019 reflect recorded transaction prices as sourced from Ruralco. Prices after the 30 October 2019 are sourced from Waterflow. Data for volume traded is sourced from the BOM water register. Only the price data shown is current on 30 May 2024.

To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit <a href="https://www.agriculture.gov.au/abares/products/weekly-update/weekly-update-30524">https://www.agriculture.gov.au/abares/products/weekly-update-30524</a>

# 3. Commodities

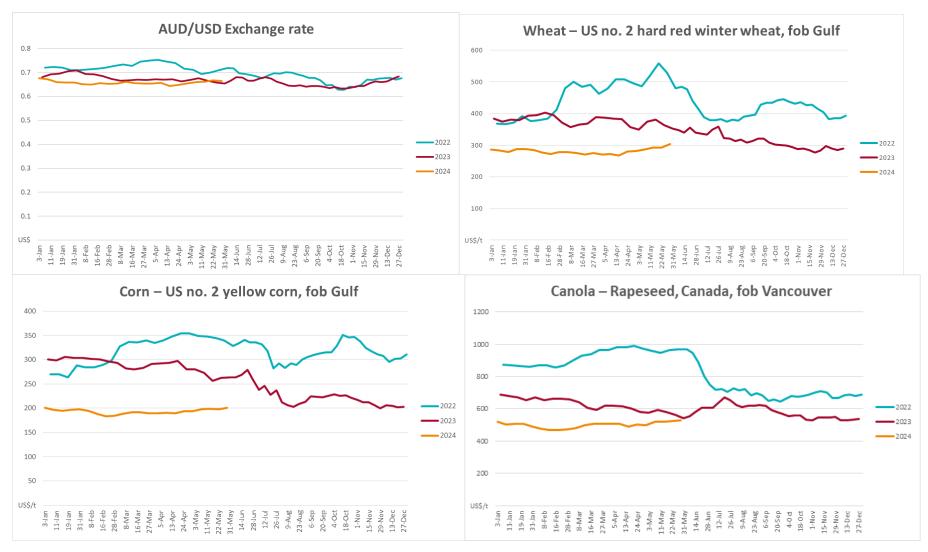
Indicator	Week average	Unit	Latest Price	Previous Week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices						5	
AUD/USD Exchange rate	29-May	A\$/US\$	0.66	0.67	0%	0.67	0%
Wheat – US no. 2 hard red winter wheat, fob Gulf	29-May	US\$/t	304	292	4%	347	-13%
Corn – US no. 2 yellow corn, fob Gulf	29-May	US\$/t	201	197	2%	264	-24%
Canola – Rapeseed, Canada, fob Vancouver	29-May	US\$/t	528	522	1%	555	-5%
Cotton – Cotlook 'A' Index	29-May	USc/lb	90	86	5%	95	-6%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	29-May	USc/lb	18.7	18.8	0%	25	-25%
Wool – Eastern Market Indicator	29-May	Ac/kg clean	1,137	1,130	1%	1,300	-13%
Wool – Western Market Indicator	29-May	Ac/kg clean	1,269	1,262	1%	1,462	-13%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	29-May	A\$/t	426	418	2%	442	-4%
Feed Wheat – ASW, Port Adelaide, SA	29-May	A\$/t	416	406	3%	412	1%
Feed Barley – Port Adelaide, SA	29-May	A\$/t	383	375	2%	352	9%
Canola – Kwinana, WA	29-May	A\$/t	795	758	5%	811	-2%
Grain Sorghum – Brisbane, QLD	29-May	A\$/t	456	450	1%	479	-5%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	29-May	Ac/kg cwt	597	624	-4%	582	2%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	29-May	Ac/kg cwt	312	309	1%	360	-13%
Lamb – National Trade Lamb Indicator	29-May	Ac/kg cwt	679	658	3%	570	19%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	29-May	Ac/kg cwt	407	407	0%	357	14%
Goats – Eastern States (12.1–16 kg)	27-Dec	Ac/kg cwt	180	180	0%	350	-49%
Live cattle – Light steers to Indonesia	29-May	Ac/kg lwt	310	310	0%	360	-14%
Global Dairy Trade (GDT) weighted average prices <sup>a</sup>							

<sup>9 |</sup> ABARES Weekly Australian Climate, Water and Agricultural Update • 30 May 2024

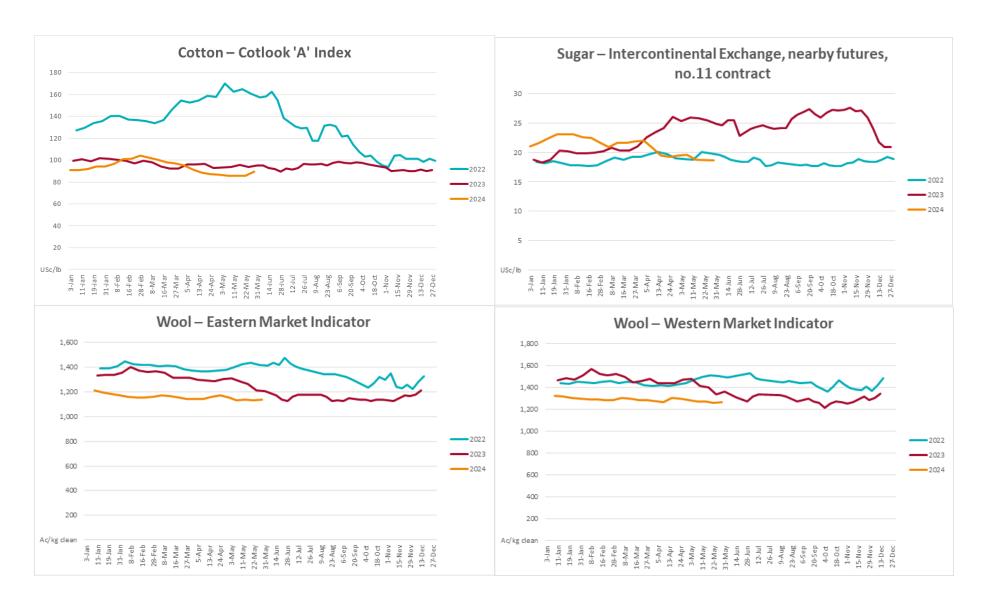
Dairy – Whole milk powder	22-May	US\$/t	3,408	3,350	2%	3,230	6%
Dairy – Skim milk powder	22-May	US\$/t	2,629	2,551	3%	2,787	-6%
Dairy – Cheddar cheese	22-May	US\$/t	4,239	4,257	0%	4,561	-7%
Dairy – Anhydrous milk fat	22-May	US\$/t	7,365	7,124	3%	4,832	52%

a Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.

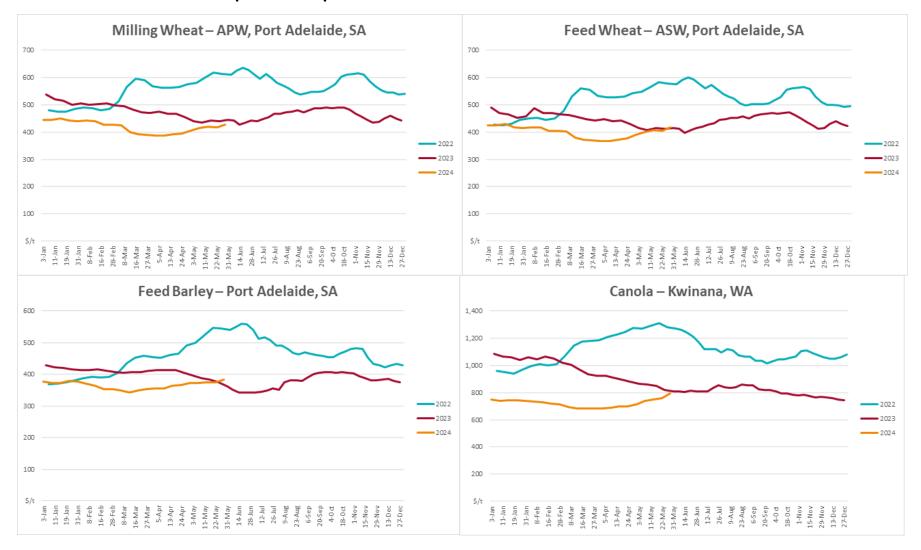
# **3.1.** Selected world indicator prices



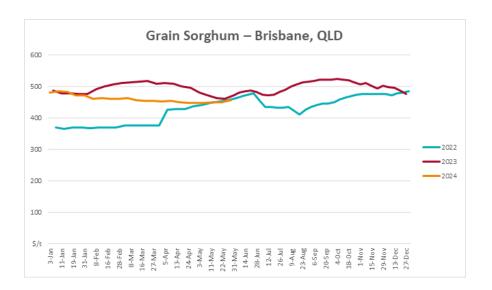
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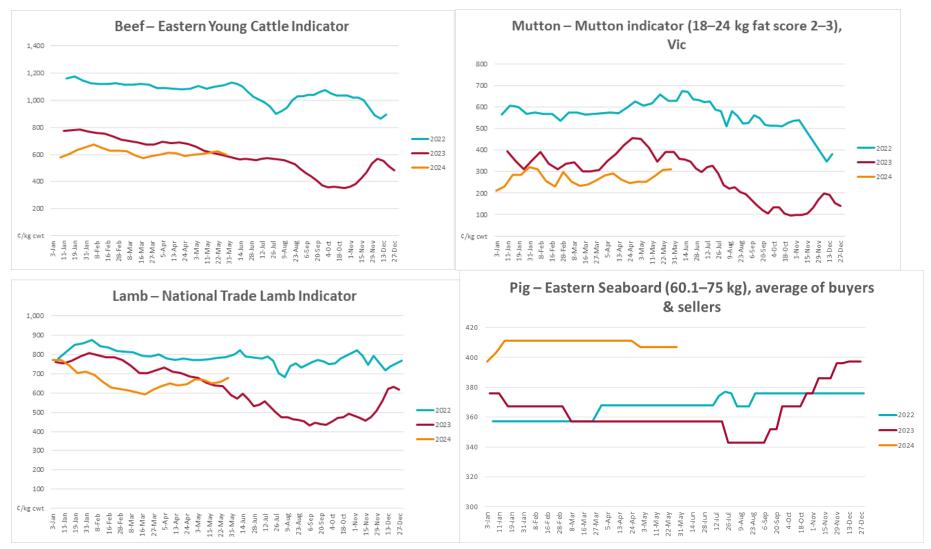
# 3.2. Selected domestic crop indicator prices



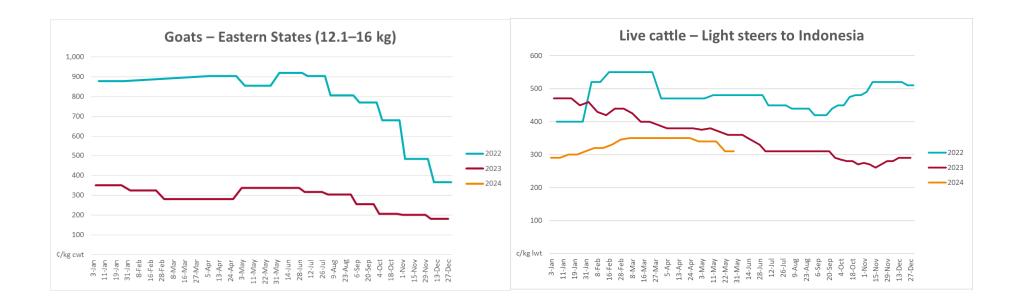
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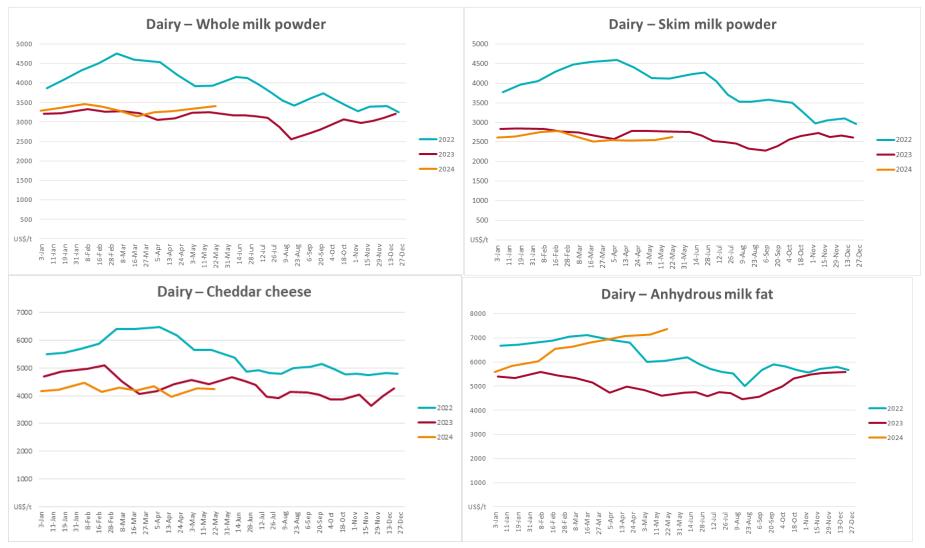
# 3.3. Selected domestic livestock indicator prices



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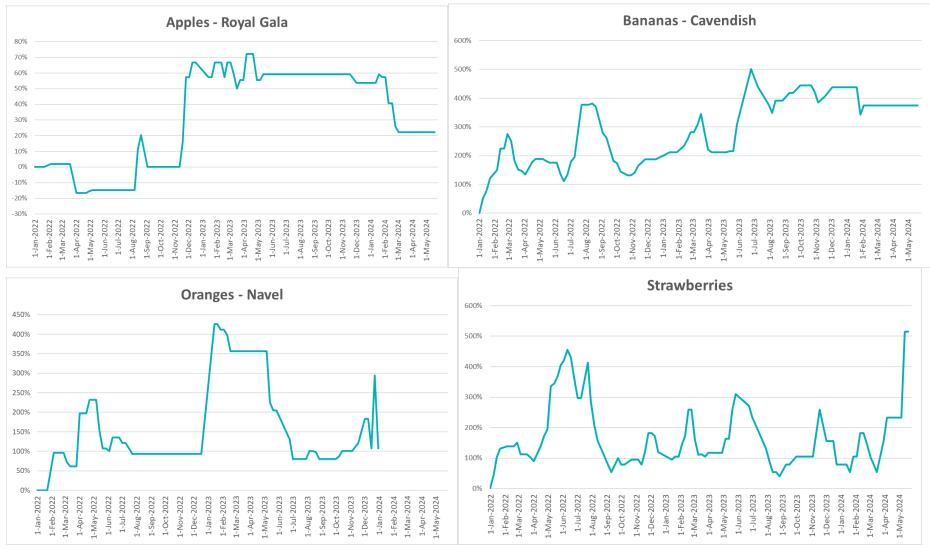


# 3.4. Global Dairy Trade (GDT) weighted average prices

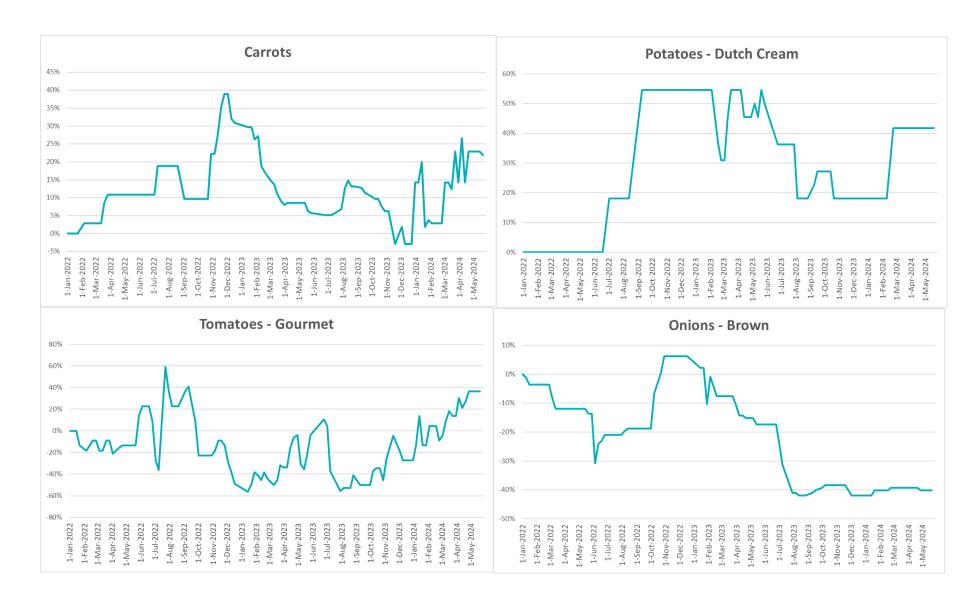


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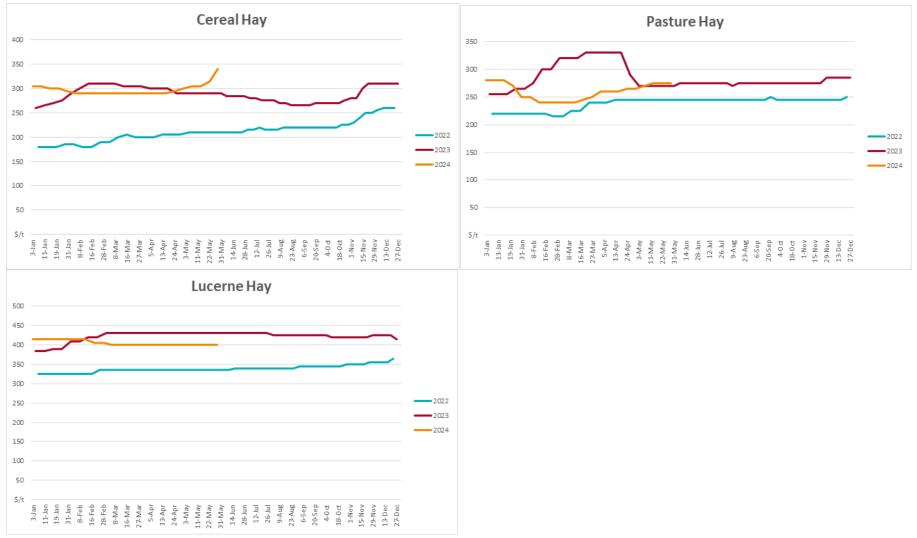
# 3.5. Selected fruit and vegetable prices



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# 3.6 Selected domestic fodder indicator prices



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# 4. Data attribution

### Climate

Bureau of Meteorology

- Weekly rainfall totals: <u>www.bom.gov.au/climate/maps/rainfall/</u>
- Monthly and last 3-month rainfall percentiles: <u>www.bom.gov.au/water/landscape/</u>
- Temperature anomalies: <u>www.bom.gov.au/jsp/awap/temp/index.jsp</u>
- Rainfall forecast: www.bom.gov.au/jsp/watl/rainfall/pme.jsp
- Seasonal outlook: <u>www.bom.gov.au/climate/outlooks/#/overview/summary/</u>
- Climate drivers: <a href="http://www.bom.gov.au/climate/enso/">http://www.bom.gov.au/climate/enso/</a>
- Soil moisture: <u>www.bom.gov.au/water/landscape/</u>

# Other

- Pasture growth: <u>www.longpaddock.qld.gov.au/aussiegrass/</u>
- 3-month global outlooks: <u>Environment and Climate Change Canada</u>, <u>NOAA Climate Prediction Center</u>, <u>EUROBRISA</u>
   <u>CPTEC/INPE</u>, <u>European Centre for Medium-Range Weather Forecasts</u>, <u>Hydrometcenter of Russia</u>, <u>National Climate Center Climate System Diagnosis and Prediction Room (NCC)</u>, <u>International Research Institute for Climate and Society</u>
- Global production: <a href="https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx">https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx</a>
- Autumn break: Pook et al., 2009, <a href="https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833">https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833</a>

### Water

Prices

Waterflow: https://www.waterflow.io/

• Ruralco: https://www.ruralcowater.com.au/

Bureau of Meteorology:

- Allocation trade: <a href="http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at">http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at</a>
- Storage volumes: <a href="http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage">http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage</a>

Trade constraints:

- Water NSW: https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee
- Victorian Water Register: <a href="https://www.waterregister.vic.gov.au/TradingRules2019/">https://www.waterregister.vic.gov.au/TradingRules2019/</a>

### **Commodities**

Fruit and vegetables

Datafresh: <u>www.freshstate.com.au</u>

Pigs

Australian Pork Limited: <u>www.australianpork.com.au</u>

Dairy

Global Dairy Trade: www.globaldairytrade.info/en/product-results/

World wheat, canola

International Grains Council

World coarse grains

• United States Department of Agriculture

World cotton

• Cotlook: <u>www.cotlook.com/</u>

World sugar

• New York Stock Exchange - Intercontinental Exchange

Wool

Australian Wool Exchange: www.awex.com.au/

Domestic wheat, barley, sorghum, canola and fodder

• Jumbuk Consulting Pty Ltd: <a href="http://www.jumbukag.com.au/">http://www.jumbukag.com.au/</a>

Cattle, beef, mutton, lamb, goat and live export

• Meat and Livestock Australia: <u>www.mla.com.au/Prices-and-market</u>

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# Acknowledgements

This report was prepared by Kavina Dayal, Holly Beale and Matthew Miller.

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