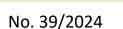




Weekly Australian Climate, Water and Agricultural Update



10 October 2024

Summary of key issues

- In the week ending 9 October 2024, several cold fronts and low-pressure systems brought rainfall to scattered areas northern, western and eastern Australia, with other areas largely dry.
 - Across cropping regions, some rainfall was recorded this week, but falls were generally below 10 millimetres in most areas.
 - In areas where stored soil moisture has declined to low levels across parts of southeastern and south-western Australia, little to no rainfall has likely led to continued reductions in yield potential, exacerbated by severe frosts in September.
- Over coming days, low-pressure and frontal systems are expected to bring showers and storms
 to parts of western, northern and eastern Australia. High-pressure systems are expected to keep
 remaining areas largely dry.
 - Across cropping regions, some rainfall is expected across southern growing regions, with heavier falls expected in the east. Rainfall totals of between 5 and 25 millimetres are expected in Queensland, while falls of between 10 and 50 millimetres are expected Victoria and New South Wales. Lighter falls of between 5 and 15 millimetres expected in South Australia and southern Western Australia.
 - O If realised, these falls across eastern Australia may be sufficient to stabilise winter crop yields across some growing regions. However, in parts of western Victoria, South Australia and Western Australia these falls will likely be insufficient to prevent further declines in crop yields compared to those expected at the end of August, following very dry conditions during September and recent severe frost events.
- The national rainfall outlook for November 2024 to January 2025 indicates an increased probability of above median rainfall across much of the country.
 - Across most cropping regions there is a 50% or greater chance of receiving above median rainfall. Higher than average rainfall is expected in northern Queensland, New South Wales, Victoria and South Australia.
 - There is 75% chance of rainfall totals being between 50 to 200 millimetres across most southern and eastern cropping regions, with higher rainfall expected in Queensland and northern New South Wales. If realised, these expected rainfall totals will likely improve soil moisture profiles, support late spring and summer pasture growth and provide a favourable start to the summer cropping season across eastern Australia.
- Water storage levels in the southern Murray-Darling Basin (MDB) have not been updated by the Bureau of Meteorology since 2 October 2024. Current volume of water held in storage is 17 779 GL, equivalent to 80% of total storage capacity. This is 12 percent or 2,784GL less than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke decreased from \$143 on 3 October 2024 to \$140 on 10 October 2024. Prices are lower in the Murrumbidgee due to the binding of the Murrumbidgee export limit.

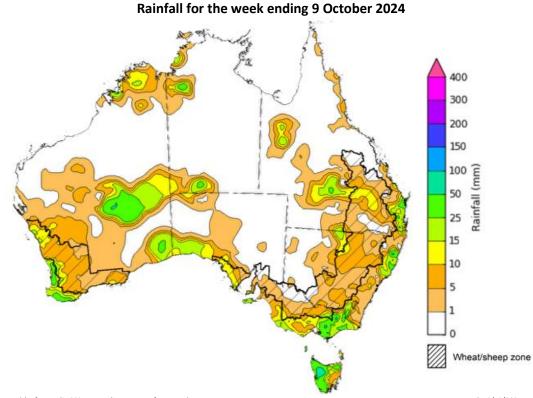
1. Climate

1.1. Rainfall this week

For the week ending 9 October 2024, several cold fronts and a low-pressure trough moved through southern Australia, bringing showers and isolated thunderstorms. Rainfall totals of up to 50 millimetres were recorded across parts of southern and northern New South Wales, southern Victoria, western South Australia and scattered areas of Queensland, Western Australia and the Northern Territory. In Tasmania, cold fronts brought rainfall totals of up to 100 millimetres in the west. High pressure systems saw much of the remainder of the country record little to no rainfall.

Across cropping regions, rainfall totals of between 1 and 15 millimetres was recorded across most areas this week. Across the south-east rainfall totals were significantly less then what was forecast for the week, and as such a reduction in the yield potential of winter crops across most southern growing regions has likely continued in the past week.

In regions where average levels of stored soil moisture were available, crops and pastures would have been able to draw on these reserves to maintain current yield potentials. However, in areas where stored soil moisture levels are low, little to no rainfall has likely to lead to reduced yield potential, exacerbated by severe frosts during September.



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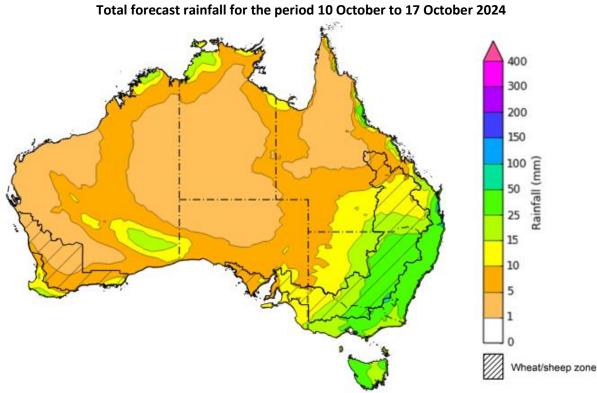
Note: The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited quality control. They are intended to provide a 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 17 October 2024, low-pressure and frontal systems are expected to bring showers and storms over parts of western, northern and eastern Australia. Up to 50 millimetres is forecast for Victoria, much of New South Wales and south-eastern Queensland. Falls of between 5 and 25 millimetres expected across parts of western and south-eastern South Australia, parts of southern and northern Western Australia and isolated areas of tropical northern Australia. Rainfall totals of between 15 and 50 millimetres are forecast for Tasmania. High pressure systems are expected to keep much of north-eastern and central Australia largely dry.

Across cropping regions, some rainfall is expected across southern growing regions, with heavier falls expected in the east. Rainfall totals of between 5 and 25 millimetres are expected in Queensland, while falls of between 10 and 50 millimetres are expected Victoria and New South Wales. Lighter falls of between 5 and 15 millimetres expected in South Australia and southern Western Australia.

If realised, these falls across eastern Australia may be sufficient to stabilise winter crop yields across some growing regions. However, in parts of western Victoria, South Australia and Western Australia these falls will likely be insufficient to prevent further declines in crop yields compared to those expected at the end of August, following very dry conditions during September and recent severe frost events.



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

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1.3. National Climate Outlook

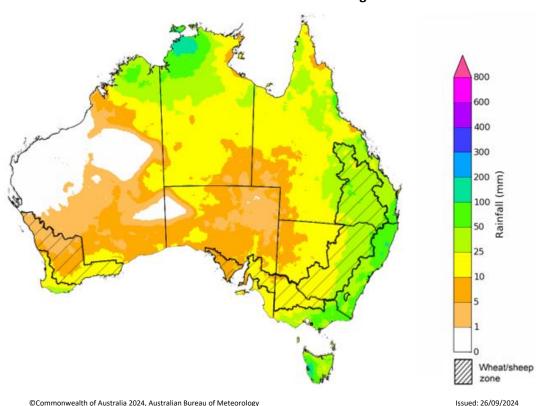
The El Niño Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) climate drivers are currently neutral and having minimal influence on Australian rainfall. The Southern Annular Mode (SAM) has been negative for several weeks (as at 28 September). Forecasts indicate it is likely to become neutral over the coming week. A neutral SAM has no strong relationship to forecast climate conditions.

The most recent rainfall outlook for November 2024 provided by the Bureau of Meteorology indicates that much of New South Wales, southern Queensland, northern Victoria, South Australia and northern areas of Western Australia are likely to see above median rainfall (between 55 to 70% chance). There is a roughly equal probability of either above or below median rainfall across large areas of western, central and northern Australia.

According to Bureau of Meteorology's climate model, for November 2024, there is a 75% probability of rainfall totals of between 10 and 50 millimetres across much of eastern and central New South Wales, Victoria, eastern Queensland, the far south-west of Western Australia, eastern agricultural areas of South Australia, and much of the tropical north. Meanwhile, Tasmania and parts of eastern New South Wales, eastern Victoria and the north of the Northern Territory are expected to see falls of between 25 and 200 millimetres. Much of western and central Australia is expected to receive little to no rainfall.

Across cropping regions, there is a 75% chance of receiving between 10 and 50 millimetres of rainfall across much of Queensland and New South Wales, with higher rainfall totals expected in eastern regions. In South Australia, Victoria and southern Western Australia, rainfall totals are expected to be between 5 and 25 millimetres. These relatively low expected rainfall totals across much of southern Australia continue to represent a significant downside production risk for both winter crop production and pasture growth, particularly given the lack of rainfall in recent weeks and declining soil moisture levels across large areas. However, if forecast rainfall totals are realised across much of New South Wales and Queensland, these falls are likely to be sufficient to support above average yield prospects for winter and summer crops and average or better levels of pasture production.

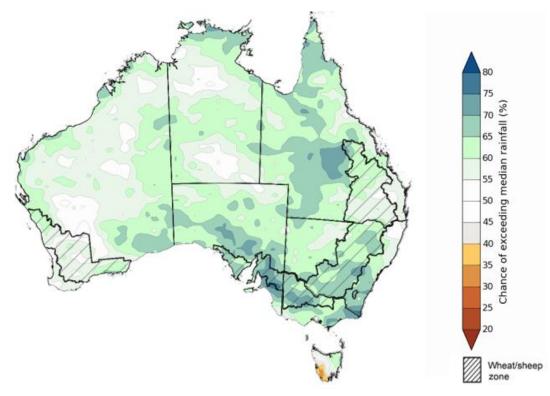
Rainfall totals that have a 75% chance of occurring in November 2024



The rainfall outlook for November 2024 to January 2025 indicates an increased probability of above average rainfall across much of the country. In contrast, below median rainfall is more likely across isolated areas of south-western Tasmania.

Across cropping regions, the probability of receiving above median rainfall is between 50% and 65% in Queensland and Western Australia. In New South Wales, Victoria and South Australia, the probability of above median rainfall is between 60% to 75%. If above median rainfall is realised, this rainfall is likely to support the storage of soil moisture in eastern regions for the summer cropping period and contribute to improving soil moisture in south-eastern regions.

Chance of exceeding the median rainfall November 2024 to January 2025

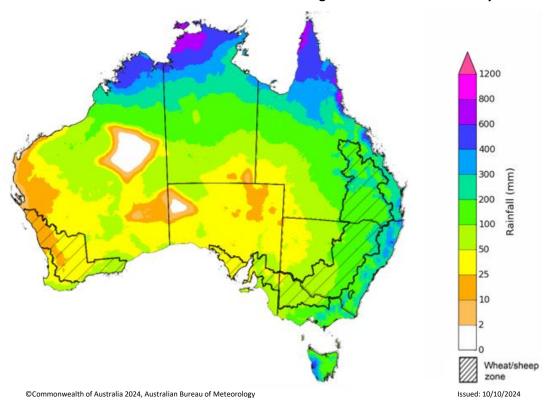


The outlook for November through to January suggests a 75% chance of rainfall totals between 50 and 300 millimetres across much of New South Wales, Queensland, Victoria, Tasmania and the Northern Territory, and across parts of South Australia and Western Australia. Rainfall totals in excess of 300 millimetres are forecast for alpine regions of Victoria and New South Wales, isolated coastal areas of eastern New South Wales and Queensland, western Tasmania and the tropical north of Queensland, Western Australia and the Northern Territory.

In cropping regions, there is a 75% chance of receiving between 100 and 300 millimetres of rainfall across much of Queensland, and between 50 and 200 millimetres across New South Wales and Victoria. Conditions are expected to be drier in Western Australia and South Australia, with forecast rainfall to between 10 and 100 millimetres, and 25 to 100 millimetres, respectively.

Given harvest will be well underway across several regions, November through to January rainfall will have little influence on winter crop production prospects, other than its influence on harvest progress. Meanwhile, if the forecast November through to January rainfall totals are realised, they are likely to be sufficient to support late spring and summer pasture growth across eastern and northern Australia. Additionally, these expected falls are likely to be sufficient to maintain above yield expectation for summer crops.

Rainfall totals that have a 75% chance of occurring November 2024 to January 2025



2. Water

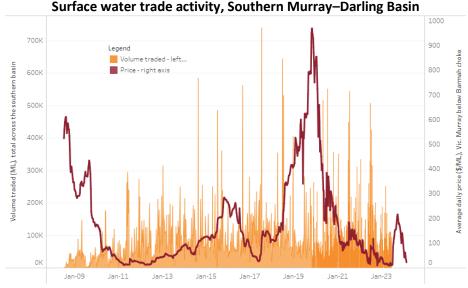
2.1. Water markets – current week

Water storage levels in the southern Murray-Darling Basin (MDB) have not been updated by the Bureau of Meteorology since 2 October 2024. Current volume of water held in storage is 17 779 GL, equivalent to 80% of total storage capacity. This is 12 percent or 2,784GL less than at the same time last year. 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 decreased from \$143 on 3 October 2024 to \$140 on 10 October 2024. Prices are lower in the Murrumbidgee due to the binding of the Murrumbidgee export limit.



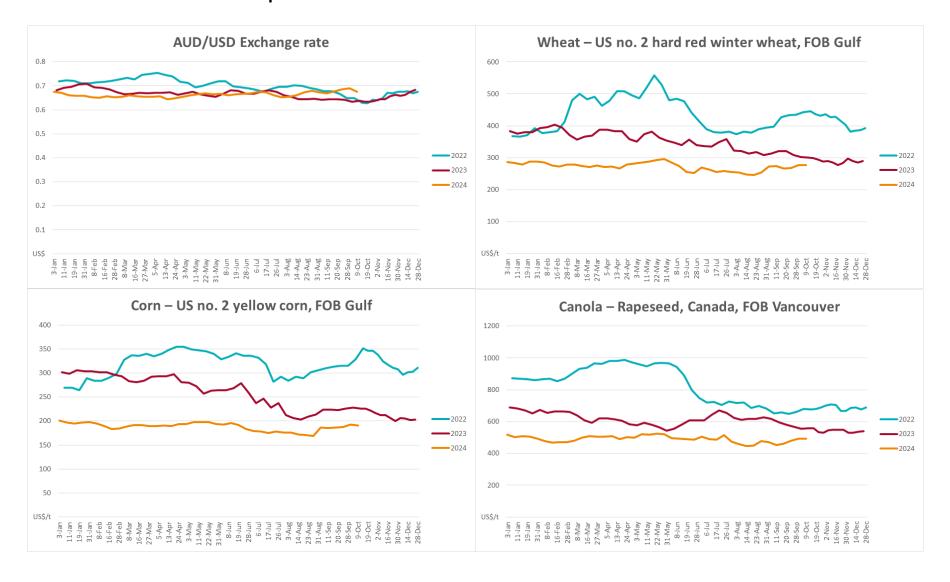
The trades shown reflect estimated market activity and do not encompass all register trades. The price is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior 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 10 October 2024.

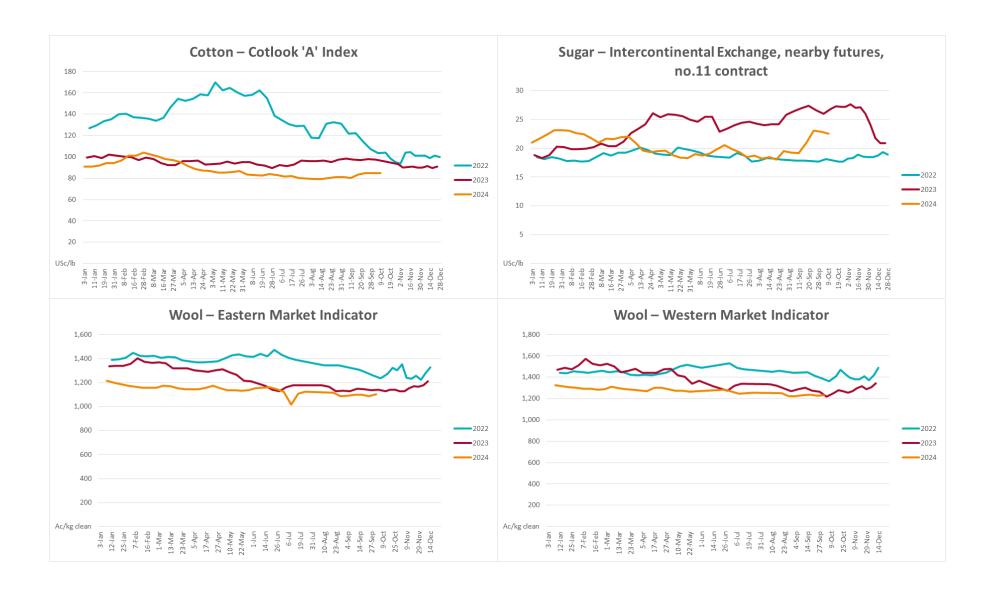
To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit https://www.agriculture.gov.au/abares/products/weekly-update/weekly-update-101024

3. Commodities

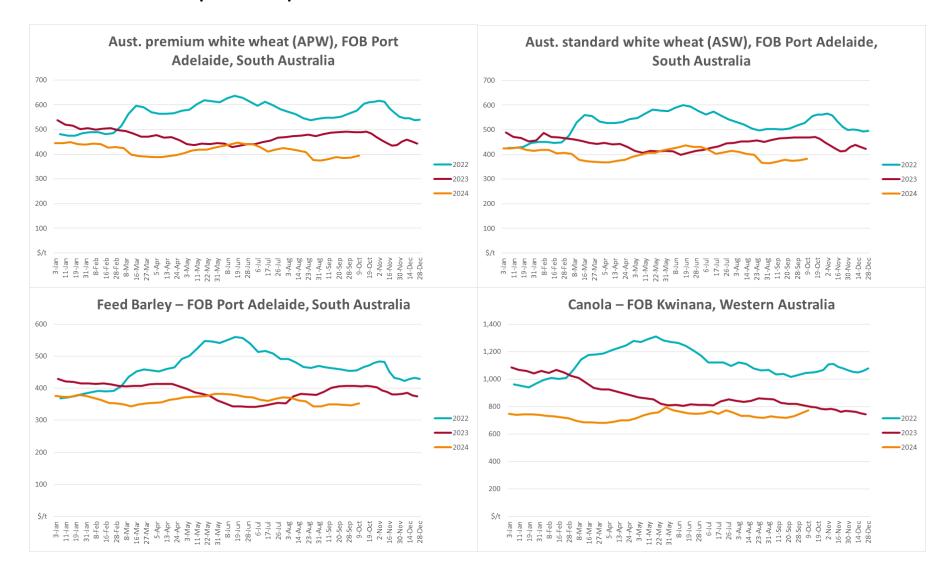
Indicator	Week	Unit	Latest Price	Previous Week	Weekly change	Price 12 months ago	Annual change
	average						
Selected world indicator prices							
AUD/USD Exchange rate	09-Oct	A\$/US\$	0.67	0.69	-2%	0.63	6%
Wheat – US no. 2 hard red winter wheat, FOB Gulf	09-Oct	US\$/t	277	276	0%	299	-7%
Corn – US no. 2 yellow corn, FOB Gulf	09-Oct	US\$/t	191	193	-1%	226	-16%
Canola – Rapeseed, Canada, FOB Vancouver	09-Oct	US\$/t	493	492	0%	558	-12%
Cotton – Cotlook 'A' Index	09-Oct	USc/lb	85	85	0%	95	-11%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	09-Oct	USc/lb	22.5	22.9	-2%	27	-17%
Wool – Eastern Market Indicator	02-Oct	Ac/kg clean	1,104	1,087	2%	1,163	-5%
Wool – Western Market Indicator	02-Oct	Ac/kg clean	1,230	1,228	0%	1,271	-3%
Selected Australian grain export prices							
Aust. premium white wheat (APW), FOB Port Adelaide, South Australia	09-Oct	A\$/t	394	386	2%	490	-20%
Aust. standard white wheat (ASW), FOB Port Adelaide, South Australia	09-Oct	A\$/t	383	376	2%	471	-19%
Feed Barley – FOB Port Adelaide, South Australia	09-Oct	A\$/t	352	347	1%	407	-13%
Canola – FOB Kwinana, Western Australia	09-Oct	A\$/t	772	750	3%	794	-3%
Grain Sorghum – FOB Brisbane, Queensland	09-Oct	A\$/t	388	384	1%	520	-25%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	09-Oct	Ac/kg cwt	627	643	-2%	364	72%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	09-Oct	Ac/kg cwt	294	293	0%	106	178%
Lamb – National Trade Lamb Indicator	09-Oct	Ac/kg cwt	785	776	1%	473	66%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	25-Sep	Ac/kg cwt	425	419	1%	367	16%
Live cattle – Light steers to Indonesia	09-Oct	Ac/kg lwt	305	305	0%	280	9%
Global Dairy Trade (GDT) weighted average prices ^a							
Dairy – Whole milk powder	02-Oct	US\$/t	3,559	3,448	3%	2,799	27%
Dairy – Skim milk powder	02-Oct	US\$/t	2,795	2,809	0%	2,400	16%
Dairy – Cheddar cheese	02-Oct	US\$/t	4,606	4,441	4%	4,044	149
Dairy – Anhydrous milk fat	02-Oct	US\$/t	7,213	7,220	0%	4,787	51%

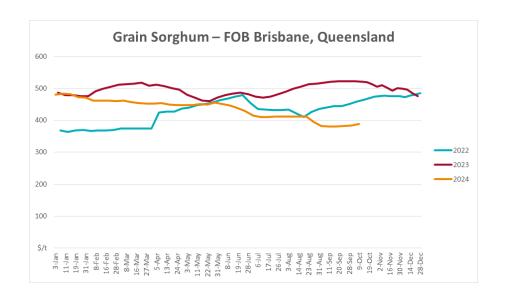
3.1. Selected world indicator prices



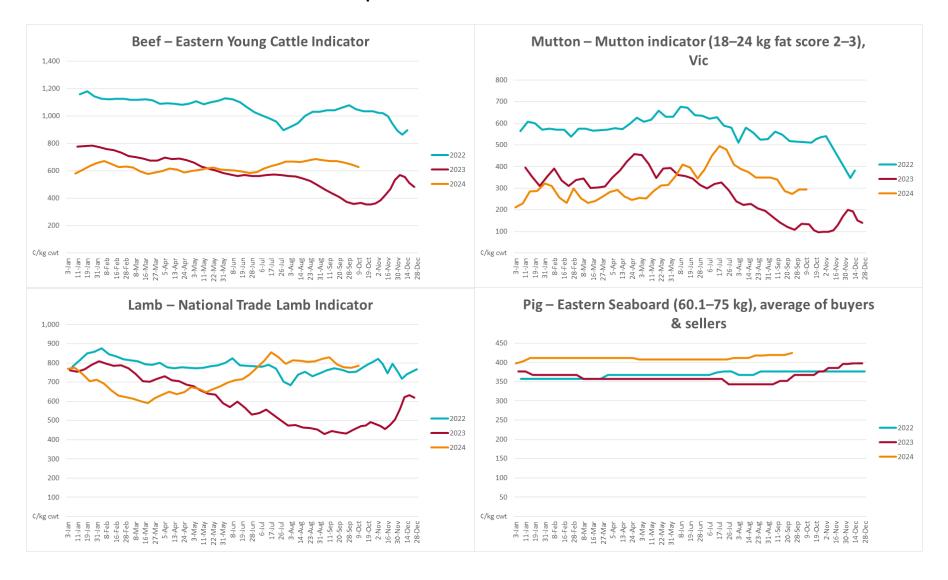


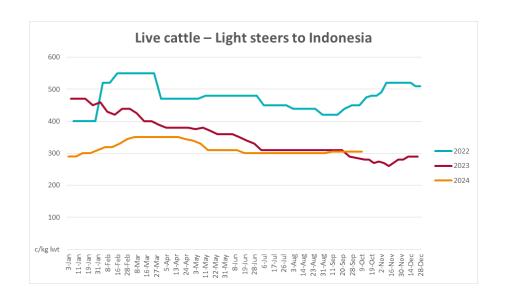
3.2 Selected domestic crop indicator prices



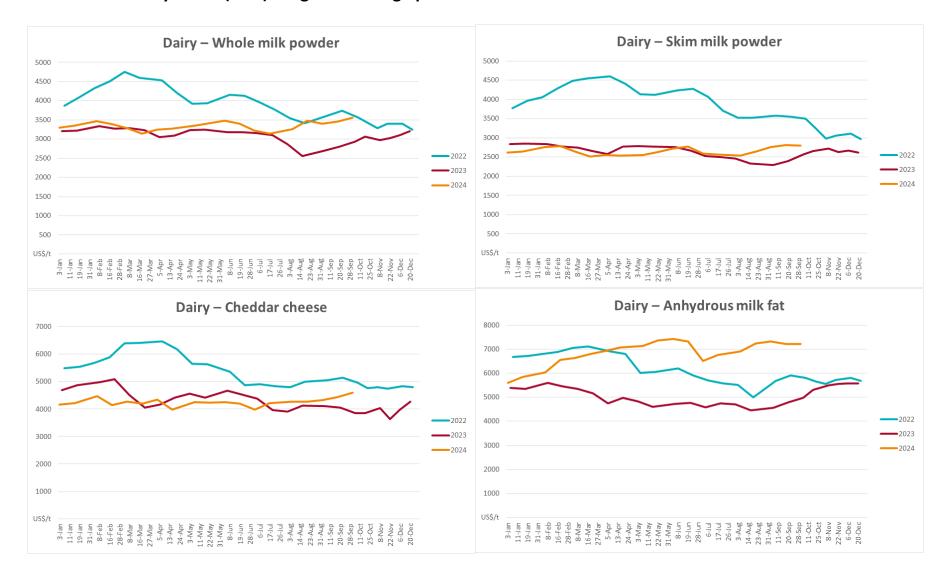


3.3. Selected domestic livestock indicator prices

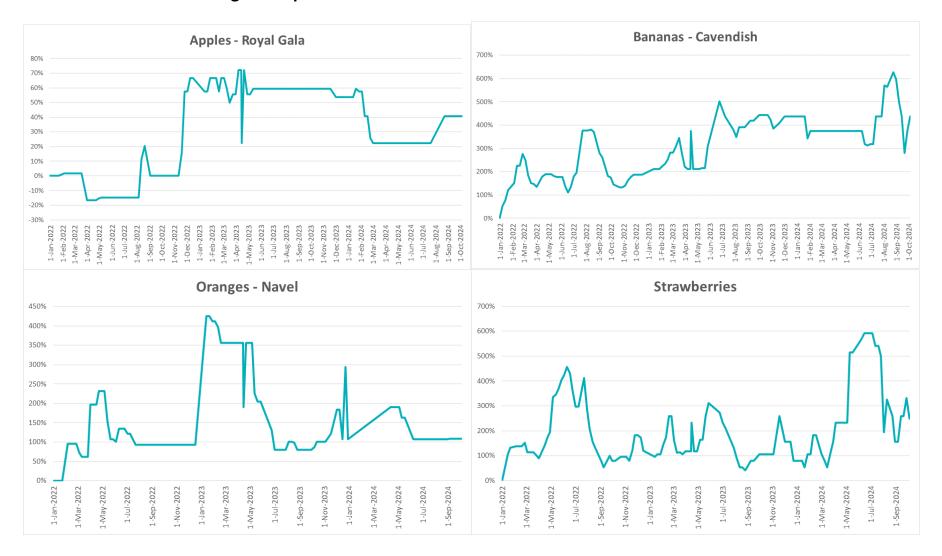


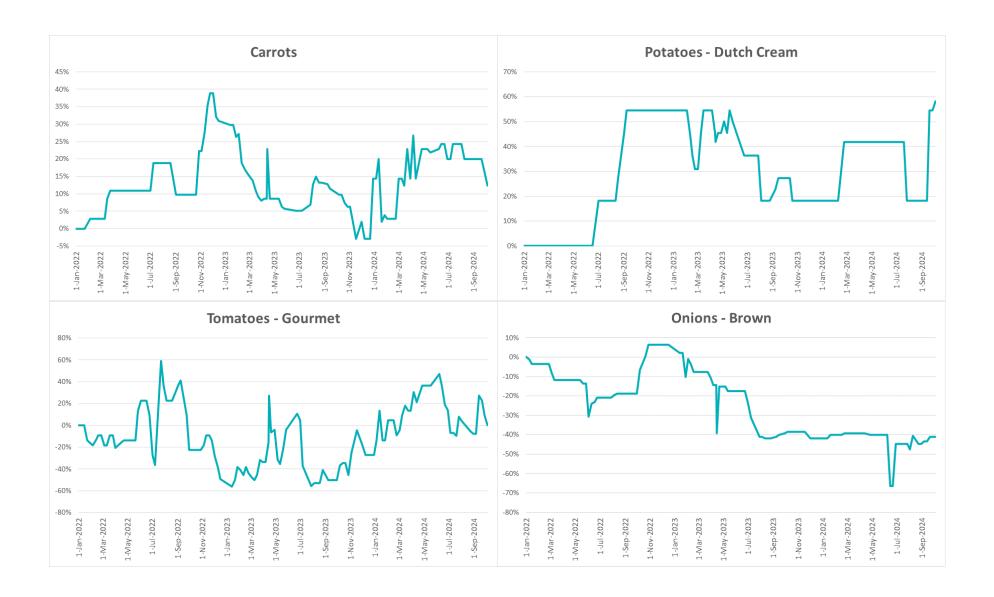


3.4. Global Dairy Trade (GDT) weighted average prices

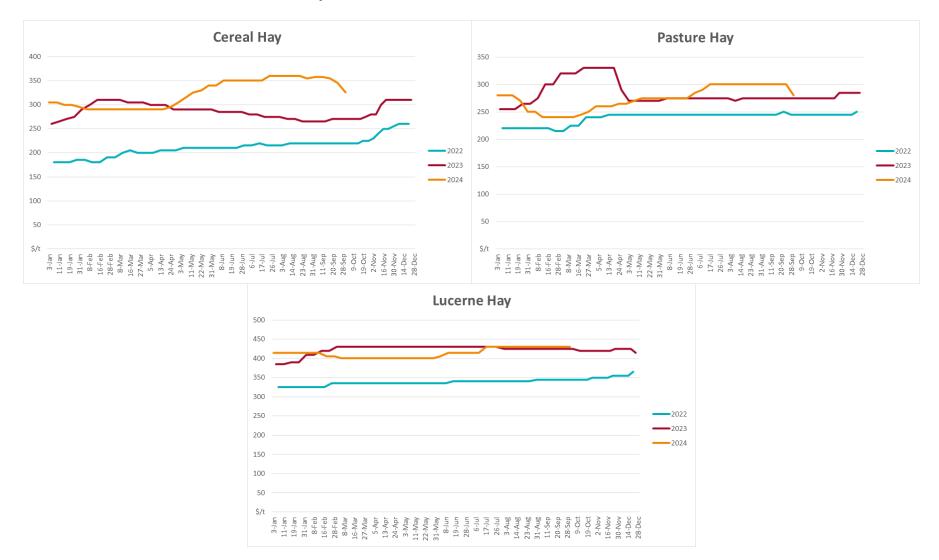


3.5. Selected fruit and vegetable prices





3.6 Selected domestic fodder indicator prices



4. Data attribution

Climate

- Bureau of Meteorology
- Weekly rainfall totals: www.bom.gov.au/climate/maps/rainfall/
- Monthly and last 3-month rainfall percentiles: <u>www.bom.gov.au/water/landscape/</u>
- Temperature anomalies: www.bom.gov.au/jsp/awap/temp/index.jsp
- 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: http://www.bom.gov.au/climate/enso/
- Soil moisture: www.bom.gov.au/water/landscape/
- 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</u>
 <u>Climate System Diagnosis and Prediction Room (NCC)</u>, <u>International Research Institute for Climate and Society</u>
- Global production: https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx
- Autumn break: Pook et al., 2009, https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833

Water

Prices

- Waterflow: https://www.waterflow.io/
- Ruralco: https://www.ruralcowater.com.au/
- Bureau of Meteorology:
- Allocation trade: http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at
- Storage volumes: http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage
- Trade constraints:
- Water NSW: https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee
- Victorian Water Register: https://www.waterregister.vic.gov.au/TradingRules2019/

Commodities

- Fruit and vegetables
- Datafresh: www.freshstate.com.au
- Pigs
- Australian Pork Limited: <u>www.australianpork.com.au</u>
- Dairy
 Global D
- Global Dairy Trade: <u>www.globaldairytrade.info/en/product-results/</u>
- 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: http://www.jumbukag.com.au/
- 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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