



Weekly Australian Climate, Water and Agricultural Update

No. 12/2024

28 March 2024

Summary of key issues

- In the week ending 27 March 2024, widespread rainfall and isolated thunderstorms associated with monsoonal activity, ex-Tropical Cyclone Megan, and series of troughs were recorded across northern, central and eastern Australia.
 - Across cropping regions, rainfall totals up to 150 millimetres were recorded across Queensland and up to 100 millimetres recorded across parts of northern New South Wales. Heavy falls in Queensland would have disrupted harvest of summer crops.
- Over the coming days, showers and storms associated with a low-pressure system are expected to result in rainfall totals of up to 100 millimetres in the northern tropics and up to 50 millimetres in the central and eastern parts of the country.
 - A wet week in much of Queensland's cropping region will likely interrupt harvest of summer crops but boost soil moisture levels for winter crops, including in Victoria and New South Wales.
 - A drier week is expected in remaining cropping regions and will likely see a decline in soil moisture levels.
- The national rainfall outlook is for a heightened probability of below average rainfall for much of Australia over the next three months.
 - Considering the recent declines in upper layer soil moisture levels and the heightened probability of below average rainfall over the next three months, livestock producers, especially those in southern Australia, are expected to experience below-average pasture production.
 - However, availability of accumulated standing dry matter and ample conserved fodder is likely to enable most livestock producers to maintain current production levels and stocking rates.
- Water storage levels in the Murray-Darling Basin (MDB) decreased between 21 March 2024 and 28 March 2024 by 152 gigalitres (GL). Current volume of water held in storage is 17 114 GL, equivalent to 77% of total storage capacity. This is 13 percent or 2645 GL less than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke increased from \$30 on 21 March 2024 to \$37 on 28 March 2024. Prices are lower in the Murrumbidgee and regions above the Barmah choke due to the binding of the Murrumbidgee export limit and Barmah choke trade constraint.

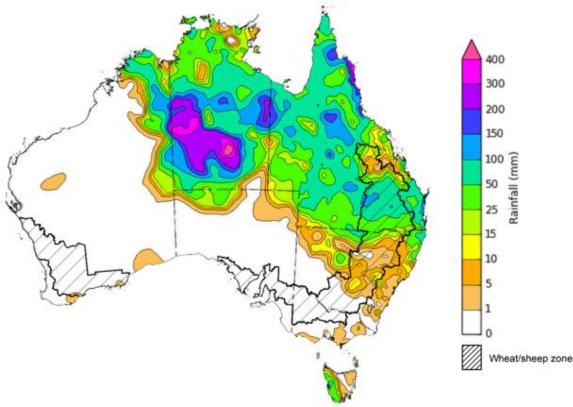
1. Climate

1.1. Rainfall this week

For the week ending 27 March 2024, widespread rainfall of up to 400 millimetres and isolated thunderstorms associated with monsoonal activity and ex-Tropical Cyclone Megan were recorded across northern Australia. A series of troughs moved across eastern parts of the country, bringing moderate rainfall totals. High-pressure systems in the south kept South Australia, Victoria and Western Australia and southern parts of New South Wales generally dry.

In Tasmania, a cold front brought rainfall to the west coast exceeding 50 millimetres in some areas.

Across cropping regions, rainfall totals up to 150 millimetres were recorded across Queensland and up to 100 millimetres recorded across parts of northern New South Wales. Heavy falls in Queensland would have disrupted harvest of summer crops. No rainfall was recorded across remaining cropping areas and would rely on autumn break to prepare the soil moisture levels for winter crops.



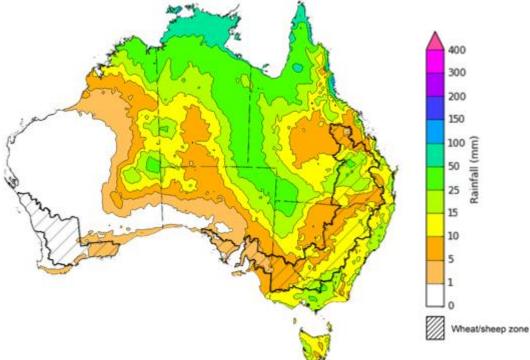
Rainfall for the week ending 27 March 2024

©Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued: 27/03/2024 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 4 April 2024, showers and storms associated with a low-pressure system are expected to result in rainfall totals of up to 100 millimetres in the northern tropics and up to 50 millimetres in the central and eastern parts of the country. A high-pressure system is expected to keep the west generally dry. A cold front is expected to bring rainfall totals of up to 25 millimetres in Tasmania and 50 millimetres in Victoria.

Across cropping regions, rainfall totals of up to 50 millimetres are forecast for central Queensland cropping regions and up to 25 millimetres across New South Wales and Victoria. Little to no rainfall is expected in the remaining cropping areas. Rainfall in Queensland is likely to disrupt harvest of summer crops. Dry conditions in Western Australia will likely see a decline in soil moisture levels.



Total forecast rainfall for the period 28 March to 4 April 2024

©Commonwealth of Australia 2024, Australian Bureau of Meteorology Issued 28/03/2024 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.

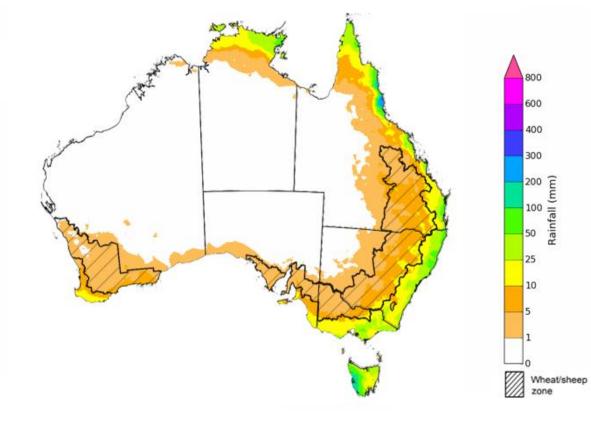
1.3. National Climate Outlook

The most recent rainfall outlook for April 2024 provided by the Bureau of Meteorology indicates a high likelihood (60 to 80% chance) of below-median rainfall across a significant portion of Australia. Notable exceptions being southern Tasmania, and eastern parts of Queensland, which are showing a probability of slightly above median rainfall.

According to Bureau of Meteorology's climate model, there is a 75% probability of rainfall totals up to 200 millimetres in western Tasmania, and parts of northern coastal Queensland for April 2024. Up to 100 millimetres of rainfall is likely in coastal parts of New South Wales, Victoria, and the northern tropics.

Within cropping regions, there is at least 75% chance of rainfall totals up to 25 millimetres expected along the eastern fringes of New South Wales, Victoria, and parts of Queensland. The remaining cropping regions have a 75% chance of receiving up to 10 millimetres of rainfall.

A lack of sufficient rainfall in April is likely to result in an increased disconnect between upper- and lower-layer soil moisture, meaning that there would be limited opportunities to plant winter crops under ideal conditions. This may see many grain producers opt to dry sow crops, which presents some production risk outcomes if May rainfall is not sufficient to support germination and establishment.



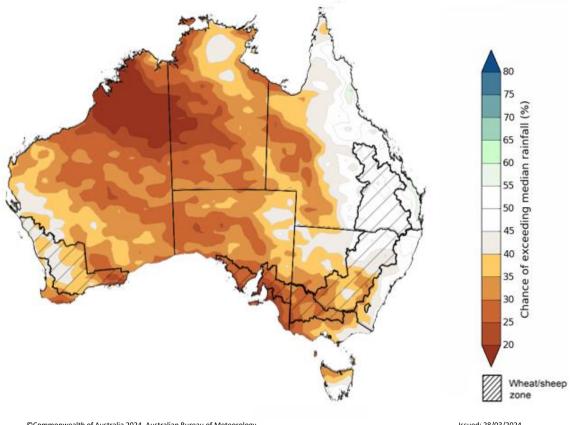
Rainfall totals that have a 75% chance of occurring in April 2024

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The El Niño event of 2023 is nearing its end, with the anticipation of returning to neutral ENSO conditions during the current 2024 autumn. The rainfall outlook for April through June 2024 indicates a probability of below-median rainfall across much of Australia.

Across cropping regions, there is an equal chance of rainfall being above median in Queensland and northern New South Wales. Below median rainfall is expected in the remaining cropping areas. This presents a risk for declining upper layer moisture levels that is necessary for winter crop plantings.



Chance of exceeding the median rainfall April to June 2024

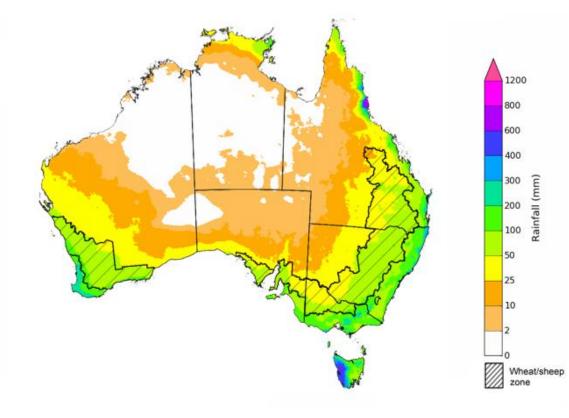
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The outlook for April to June 2024 suggests there is at least 75% chance of rainfall exceeding 25 millimetres throughout much of southern and eastern Australia, with notable exceptions in large sections of the interior and northern regions where rainfall below 25 millimetres is more likely. Along isolated parts of Australia's eastern and southern coastline, as well as western Tasmania, rainfall totals in excess of 200 millimetres are expected during this period.

Across cropping regions, there is at least a 75% chance of receiving 25 millimetres or more.

Considering the recent declines in upper layer soil moisture levels and the heightened probability of below average rainfall over the next three months, livestock producers, especially those in southern Australia, are expected to experience below-average pasture production. However, the availability of accumulated standing dry matter and ample conserved fodder is likely to enable most producers to maintain current production levels and stocking rates.



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

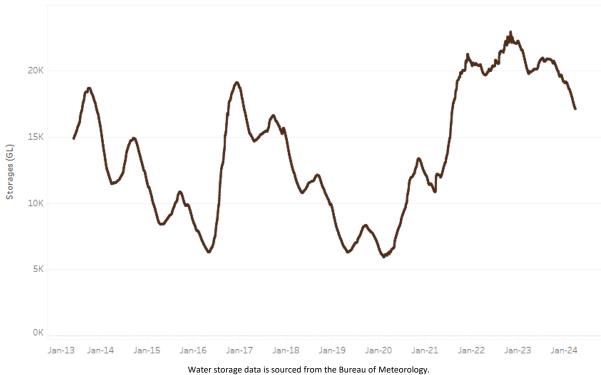
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2. Water

2.1. Water markets – current week

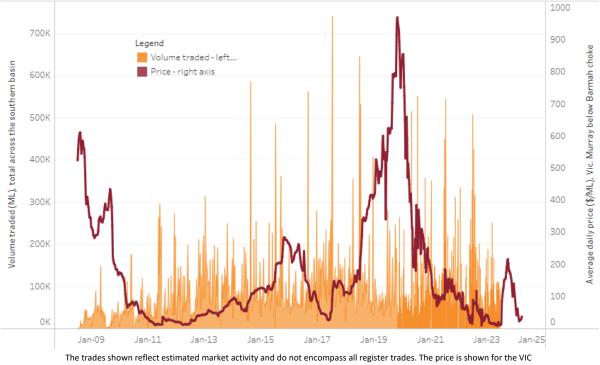
Water storage levels in the Murray-Darling Basin (MDB) decreased between 21 March 2024 and 28 March 2024 by 152 gigalitres (GL). Current volume of water held in storage is 17 114 GL, equivalent to 77% of total storage capacity. This is 13 percent or 2645 GL less than at the same time last year.



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

Allocation prices in the Victorian Murray below the Barmah Choke increased from \$30 on 21 March 2024 to \$37 on 28 March 2024. Prices are lower in the Murrumbidgee and regions above the Barmah choke due to the binding of the Murrumbidgee export limit and Barmah choke trade constraint.

Region	\$/ML
NSW Murray Above	18
NSW Murrumbidgee	23
VIC Goulburn-Broken	28
VIC Murray Below	37



Surface water trade activity, Southern Murray–Darling Basin

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 28 March 2024.

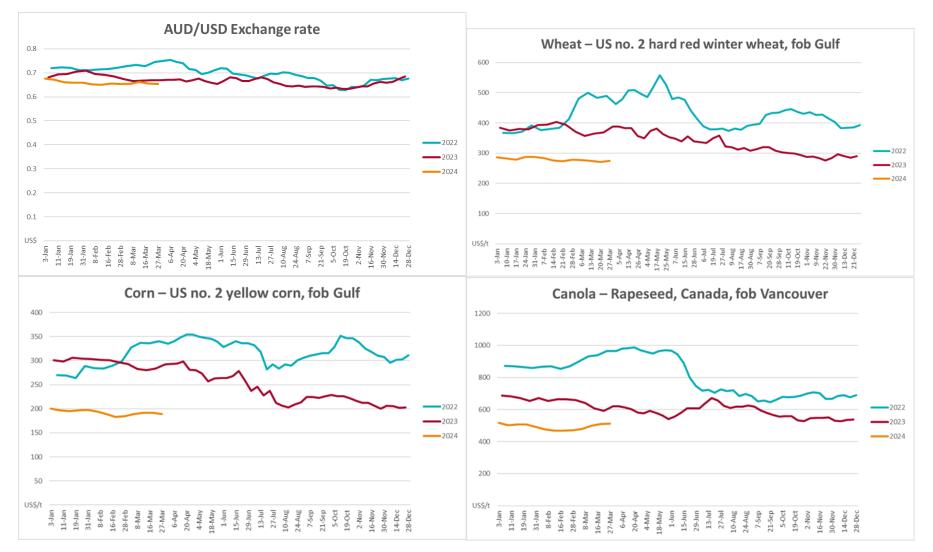
To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit https://www.agriculture.gov.au/abares/products/weekly_update/weekly_update-28324

Indicator	Week ended	Unit	Latest Price	Previous Week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	27-Mar	A\$/US\$	0.65	0.66	0%	0.67	-3%
Wheat – US no. 2 hard red winter wheat, fob Gulf	27-Mar	US\$/t	274	271	1%	387	-29%
Corn – US no. 2 yellow corn, fob Gulf	27-Mar	US\$/t	189	192	-2%	293	-36%
Canola – Rapeseed, Canada, fob Vancouver	27-Mar	US\$/t	512	508	1%	621	-18%
Cotton – Cotlook 'A' Index	27-Mar	USc/lb	97	98	-1%	96	1%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	27-Mar	USc/lb	21.8	21.6	1%	23	-3%
Wool – Eastern Market Indicator	27-Mar	Ac/kg clean	1,142	1,152	-1%	1,400	-18%
Wool – Western Market Indicator	27-Mar	Ac/kg clean	1,284	1,289	0%	1,475	-13%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	27-Mar	A\$/t	390	392	0%	476	-18%
Feed Wheat – ASW, Port Adelaide, SA	27-Mar	A\$/t	370	372	0%	447	-17%
Feed Barley – Port Adelaide, SA	27-Mar	A\$/t	353	350	1%	413	-15%
Canola – Kwinana, WA	27-Mar	A\$/t	682	685	0%	926	-26%
Grain Sorghum – Brisbane, QLD	27-Mar	A\$/t	455	455	0%	511	-11%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	27-Mar	Ac/kg cwt	582	575	1%	675	-14%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	27-Mar	Ac/kg cwt	252	241	4%	348	-28%
Lamb – National Trade Lamb Indicator	27-Mar	Ac/kg cwt	613	591	4%	731	-16%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	13-Mar	Ac/kg cwt	411	411	0%	357	15%
Goats – Eastern States (10.1–12 kg)	27-Dec	Ac/kg cwt	170	170	0%	350	-51%
Live cattle – Light steers to Indonesia	27-Mar	Ac/kg lwt	350	350	0%	380	-8%
Global Dairy Trade (GDT) weighted average prices ^a							

3. Commodities

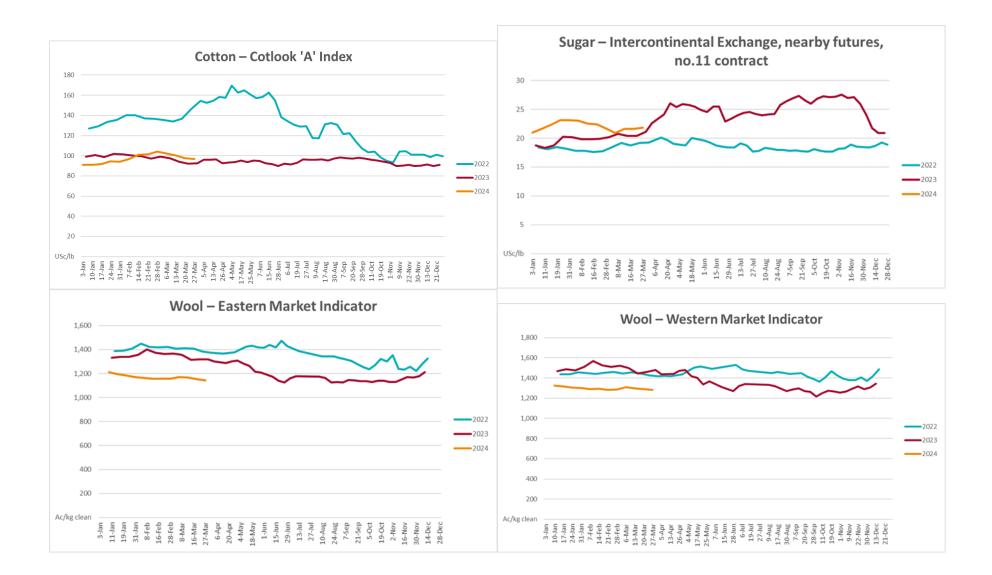
Dairy – Whole milk powder	20-Mar	US\$/t	3,143	3,286	-4%	3,277	-4%
Dairy – Skim milk powder	20-Mar	US\$/t	2,517	2,640	-5%	2,739	-8%
Dairy – Cheddar cheese	20-Mar	US\$/t	4,192	4,277	-2%	4,509	-7%
Dairy – Anhydrous milk fat	20-Mar	US\$/t	6,794	6,637	2%	5,340	27%

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

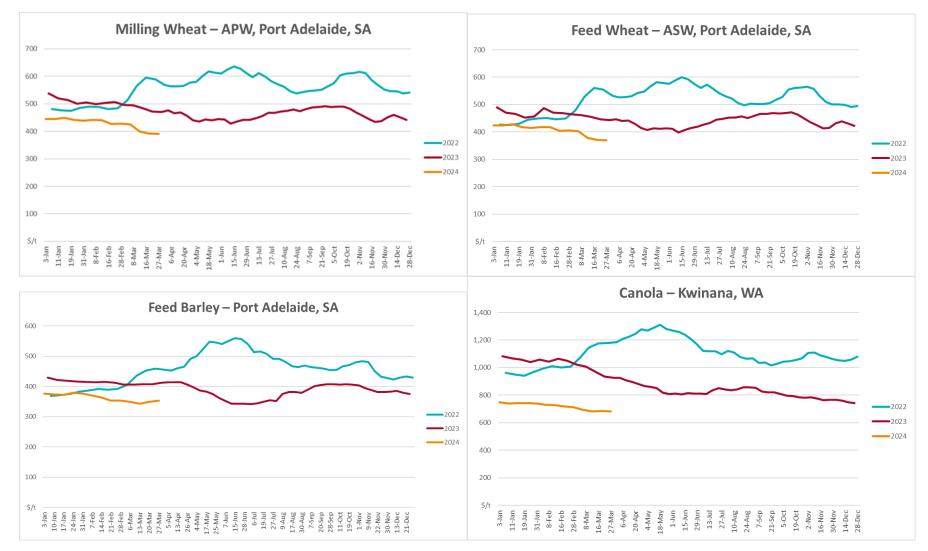


3.1. Selected world indicator prices

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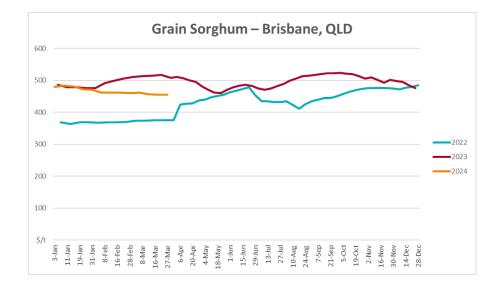


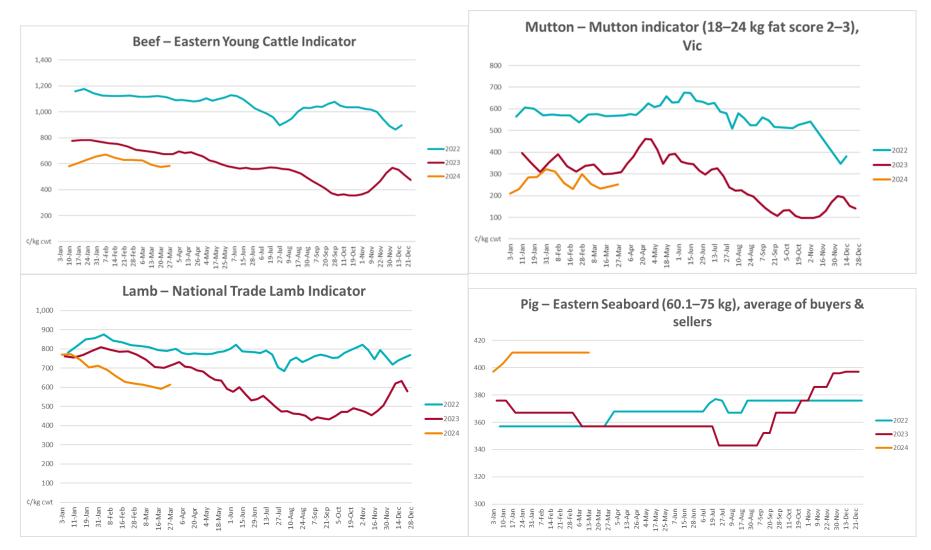
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3.2. Selected domestic crop indicator prices

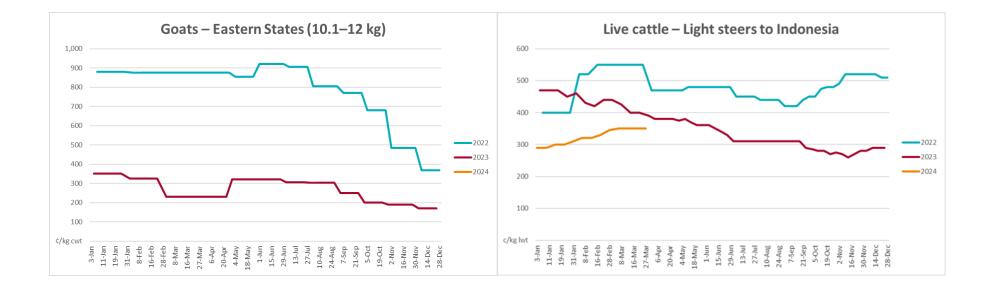
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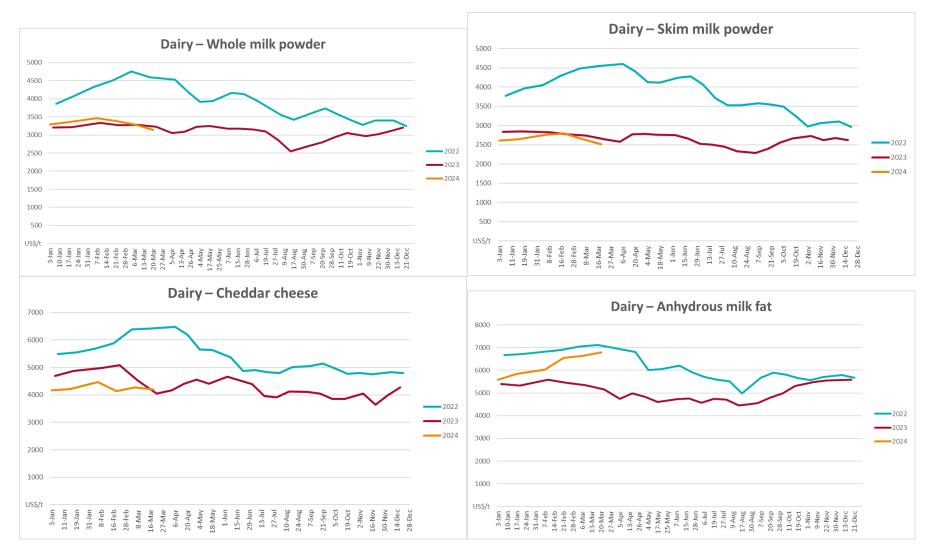




3.3. Selected domestic livestock indicator prices

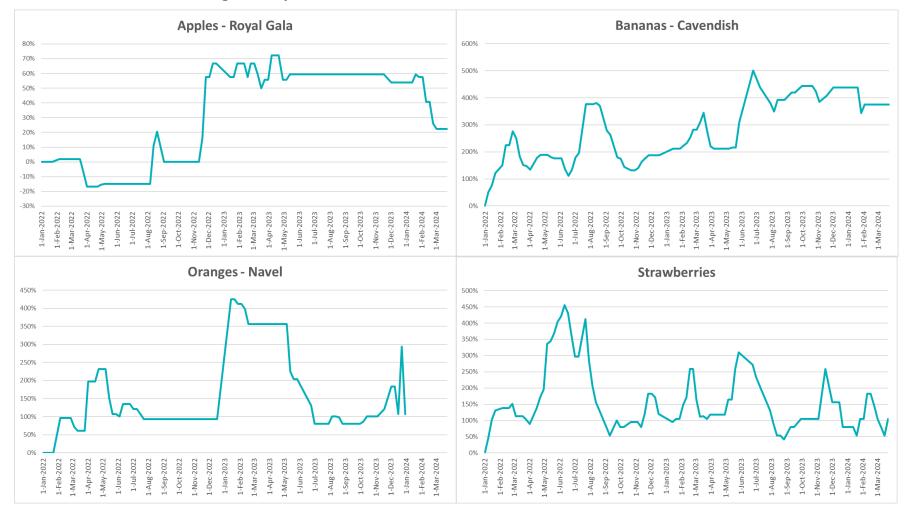
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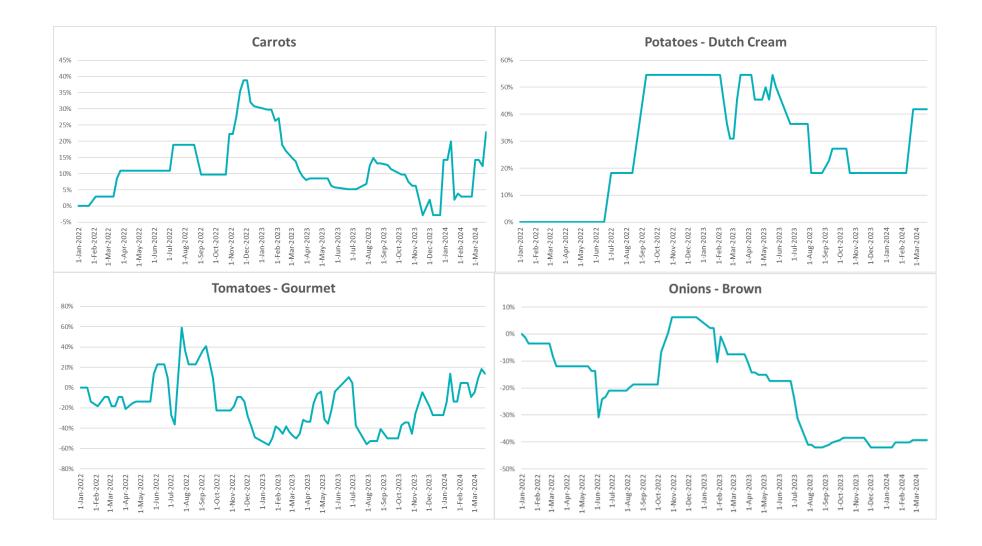


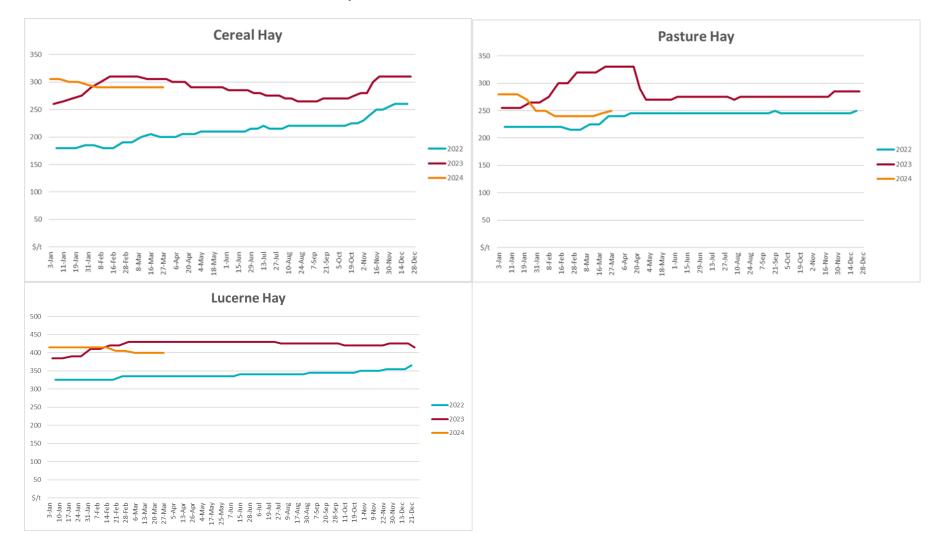
3.4. Global Dairy Trade (GDT) weighted average prices

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3.5. Selected fruit and vegetable prices





3.6 Selected domestic fodder indicator prices

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: <u>www.bom.gov.au/jsp/watl/rainfall/pme.jsp</u>
- Seasonal outlook: www.bom.gov.au/climate/outlooks/#/overview/summary/
- Climate drivers: <u>http://www.bom.gov.au/climate/enso/</u>
- 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</u> <u>Climate System Diagnosis and Prediction Room (NCC)</u>, <u>International Research Institute for Climate and Society</u>
- Global production: <u>https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx</u>
- Autumn break: Pook et al., 2009, https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833

Water

Prices

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

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: <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: <u>www.awex.com.au/</u>
- Domestic wheat, barley, sorghum, canola and fodder
 - Jumbuk Consulting Pty Ltd: <u>http://www.jumbukag.com.au/</u>
- 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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