



# Weekly Australian Climate, Water and Agricultural Update

No. 1/2025

# 9 January 2025

# Summary of key issues

- In the week ending 8 January 2025, low-pressure systems brought rainfall to the north, east, and west of Australia:
  - Many northern cropping regions recorded considerable rainfall totals (between 5– 50 millimetres across large areas of Queensland and northern New South Wales. Conditions across southern cropping regions were drier, generally receiving 0–25 millimetres.
  - For eastern areas that recorded significant rainfall this week, this has likely provided a boost to soil moisture levels, benefitting summer crop production.
- Over the coming days, low-pressure systems are expected to bring rainfall across the north and east of the country.
  - Across cropping regions, parts of Queensland and New South Wales are expected to receive up to 100 millimetres of rainfall. Little to no rainfall is expected in other cropping regions.
- Most of Australia received average to extremely good **rainfall over December 2024**, with well above average rainfall across much of the east and west. Parts of the south saw below average rainfall.
- **Pasture growth** for the three months to December 2024 has been mixed across Australia. Above average rainfall totals resulted in average to extremely high pasture growth across large parts of northern Australia. Below average to extremely low pasture growth was recorded across large areas of eastern and southern Australia.
- Soil moisture models continue to indicate low soil moisture levels in southern Australia, with above average soil moisture modelled in eastern Queensland, northern New South Wales, and large parts of Western Australia and the Northern Territory
- The **national rainfall outlook for February to April 2025** indicates an increased probability of above median rainfall across the east and west of the country.
  - There is a 75% chance of rainfall totals between 100–200 millimetres across Queensland and northern New South Wales. In southern and western areas of eastern regions, rainfall totals of between 50–100 millimetres are expected.
  - If realised, these rainfall totals should improve soil moisture profiles and support summer pasture growth. They should also provide a boost to soil moisture profiles and maintain above average yield expectations for summer crops in Queensland and northern New South Wales.
- No update on water markets and storage since previous publication

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# 1. Climate

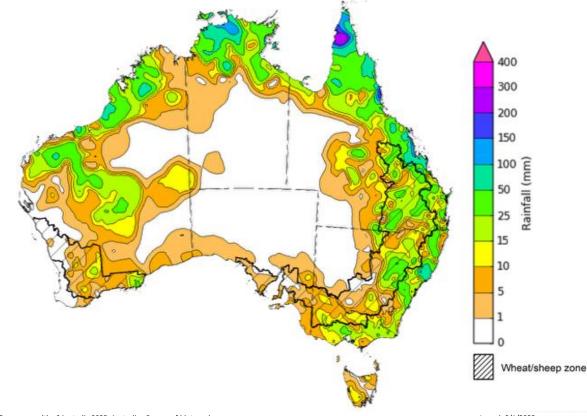
# **1.1.** Rainfall this week

In the week ending 8 January 2025, low-pressure systems and a series of troughs brought rainfall to much of the country, excluding central inland regions.

- Isolated areas of the **Northern Territory** and northern and coastal **Queensland** recorded falls of up to 150 millimetres; far-north Queensland recorded higher rainfall.
- Much of Western Australia and New South Wales, received between 5–100 millimetres; Victoria and southern Queensland received between 5–50 millimetres.
- South Australia and Tasmania recorded lower rainfall totals, up to 15 millimetres in isolated areas.

Rainfall totals were mixed across cropping regions:

- Southern cropping regions received little to no rainfall. This included much of Western Australia and southern New South Wales (0–25 millimetres), Victoria (5–25 millimetres), and South Australia (little to no rainfall).
- In the east, rainfall totals were generally higher, with Queensland and northern New South Wales recording between 5–50 millimetres. For areas that recorded significant rainfall this week, this will likely provide a boost to soil moisture levels, benefitting summer crop production.



### Rainfall for the week ending 8 January 2025

©Commonwealth of Australia 2025, Australian Bureau of Meteorology Issued: 8/1/2025 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/

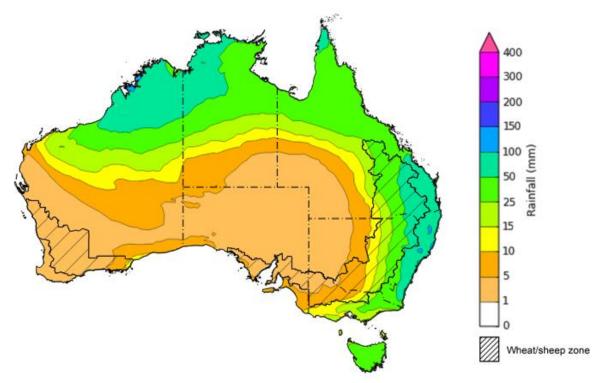
# 1.2. Rainfall forecast for the next eight days

Over the 8 days to 16 January 2025, low-pressure systems are expected to bring relatively high rainfall totals to northern and eastern parts of Australia.

- Falls of between 15–100 millimetres are likely for much of northern Western Australia, the Northern Territory, and northern Queensland. Higher rainfall totals are expected in isolated areas, with up to 150 millimetres forecast in scattered areas of eastern New South Wales and northern Western Australia. Between 15–100 millimetres of rainfall are forecast for much of eastern Queensland and eastern New South Wales.
- By contrast, lower rainfall totals are expected across the southeast including across eastern Victoria (15–50 millimetres) and Tasmania (50 millimetres). High-pressure systems are expected to keep the central and southwest largely dry.

Rainfall forecasts over the coming week are mixed across cropping regions:

- Low rainfall totals are expected in the south including across much of south Western Australia and South Australia (5 10 millimetres each) and Victoria (5–25 millimetres).
- Higher rainfall is expected in the east, with much of Queensland and eastern New South Wales likely to receive between 15–100 millimetres. Rainfall forecast for summer cropping regions in Queensland and New South Wales will likely provide a boost for soil moisture levels and support the germination and growth of crops already in the ground.



#### Total forecast rainfall for the period 9 January to 16 January 2025

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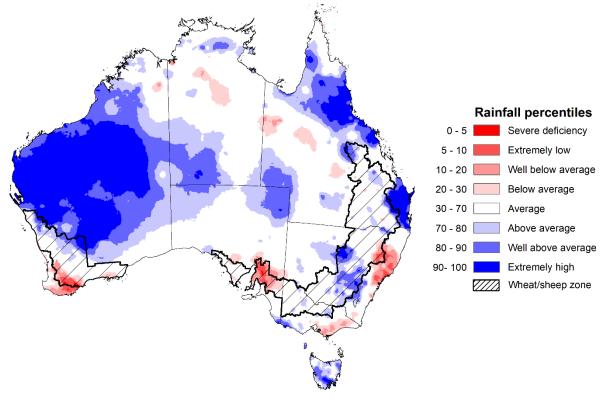
# 1.3. Monthly rainfall

Most of Australia received average to extremely good rainfall totals over December 2024, relative to historical December averages.

- Rainfall was **well above average** to **extremely high** across much of the west of the country, as well as the northern tropics, southeast Queensland, central New South Wales, and much of Tasmania.
- Above average to well above average rainfall was recorded in regions of central Australia, including the southern Northern Territory and northern South Australia.
- In contrast, southwest Western Australia, southern South Australia, southern Victoria, and eastern regions of New South Wales saw **below average** to **extremely low** rainfall.
- The remainder of Australia saw generally average November rainfall.

In cropping regions, December rainfall was mixed, with generally below average rainfall in the south and west, and average to above average in the east:

- Much of South Australia and southwest Western Australia observed well below average to extremely low rainfall, however, northern margins of Western Australia's cropping regions saw above average to extremely high rainfall.
- Central New South Wales and scattered areas of Queensland and Victoria recorded above average rainfall. Above average rainfall totals in Queensland and northern New South Wales are likely to support the build-up of soil moisture and benefit the sowing and establishment of summer crops.



#### **Rainfall percentiles for December 2024**

Note: Rainfall for December 2024 is compared with rainfall recorded for that period during the historical record (1900 to present). For further information, go to http://www.bom.gov.au/climate/austmaps/about-rain-maps.shtml Source: Bureau of Meteorology

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# **1.4 Monthly Soil Moisture**

In December 2024, modelled **upper layer soil moisture** was generally average to above average across much of the country.

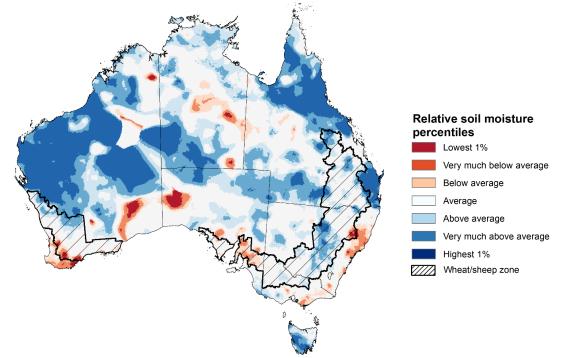
- Much of Western Australia, the southern Northern Territory, and northern and coastal Queensland saw very much above average soil moisture for the period.
- Very few parts of Australia recorded below average soil moisture, limited to isolated areas in southwest Western Australia, coastal New South Wales, and eastern regions of Victoria and South Australia.

At this time of year, upper layer soil moisture is important at the beginning of the summer cropping season and for pasture growth across northern Australia since plant germination and establishment utilise this moisture. It is also an important indicator of the ability to access paddocks for summer crop planting activities.

Across cropping regions, modelled **upper layer soil moisture** in December was generally above average across much of the east including central New South Wales and Queensland, as well as northern areas of Western Australia:

- In Western Australia, upper layer soil moisture varied considerably between northern (very much above average) and southern (very much below average) cropping regions.
- In **South Australia**, upper layer soil moisture was low in the east. **Victorian** soil moisture was broadly average over the period.

While average to above average upper layer soil moisture in New South Wales and Queensland would have supported the growth and establishment of summer crops already in the ground, it is likely to have interrupted harvest completion and access for ongoing summer crop planting.



#### Modelled upper layer soil moisture for December 2024

Note: This map shows the levels of modelled upper layer soil moisture (0 to 10 centimetres) during December 2024. This map shows how modelled soil conditions during December 2024 compare with December conditions modelled over the reference period (1911 to 2016). Dark blue areas on the maps were much wetter in December 2024 than during the reference period. The bulk of plant roots occur in the top 20 centimetres of the soil profile. Soil moisture in the upper layer of the soil profile is therefore useful indicator of the availability of water, particularly for germinating seed. Source: Bureau of Meteorology (https://awo.bom.gov.au/about/overview)

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Across much of Australia, modelled **lower layer soil moisture** in December 2024 was average to very much above average.

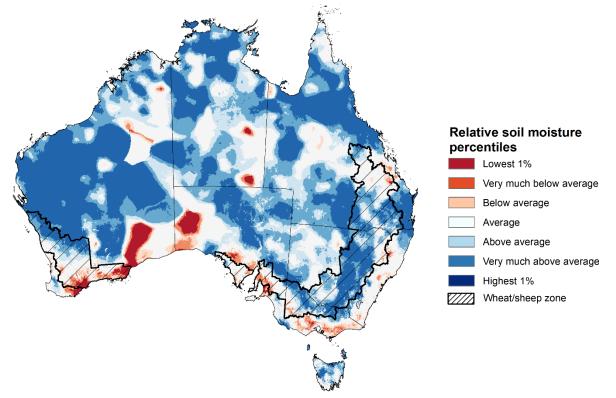
- Much of Western Australia, the Northern Territory, Queensland, Tasmania, central New South Wales, and much of northern Victoria and South Australia saw very high soil moisture levels.
- By contrast, parts of the far south, including southern Western Australia, South Australia, Victoria, and east cost of New South Wales were modelled as having very much below average soil moisture.

At this time of year increased levels of lower layer soil moisture will be important to support summer crops and pasture growth during a peak growth period.

Across cropping regions, modelled **lower layer soil moisture** was generally above average in the east with areas of extremely low conditions modelled in the west:

- Much of southern and central Queensland, New South Wales, and northern Victoria modelled very much above average soil moisture, as well as the northern margins of Western Australia.
- In contrast, parts of southern South Australia and southern Western Australia saw below average soil moisture for this time of year.

Average to above average lower layer soil moisture is likely to provide a reserve of plant-available water for summer crops later in the growing season. Agricultural regions across southern Australia with extremely low levels of stored soil moisture will require sufficient and timely rainfall over summer to arrest declining levels of pasture availability.



#### Modelled lower layer soil moisture for December 2024

Note: This map shows the levels of modelled lower layer soil moisture (10 to 100 centimetres) during December 2024. This map shows how modelled soil conditions during December 2024 compare with December conditions modelled over the reference period (1911 to 2016). Dark blue areas on the maps were much wetter in December 2024 than during the reference period. The dark red areas were much drier than during the reference period. The bulk of plant roots occur in the top 20 centimetres of the soil profile. The lower layer soil moisture is a larger, deeper store that is slower to respond to rainfall and tends to reflect accumulated rainfall events over longer time periods. Source: Bureau of Meteorology (https://awo.bom.gov.au/about/overview)

# 1.4 Pasture Growth

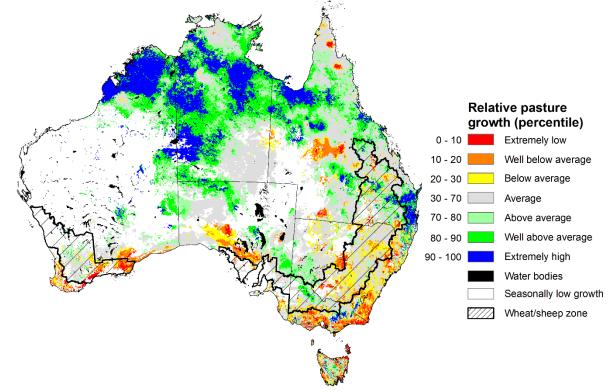
Pasture growth for the three months to December 2024 has been mixed across much of Australia, with northern parts of the country experiencing stronger pasture growth:

- Average to extremely high pasture growth was modelled across much of northern and central Australia, including the Northern Territory, eastern Queensland, northern Western Australia and northern South Australia.
- Average to above average pasture growth was observed in south-eastern Queensland, northern South Australia, and central Tasmania.

Pasture growth is expected to support farmers maintaining stock numbers, provide opportunities to build standing dry matter availability and replenish fodder supplies during late spring and early summer. By contrast, large areas of eastern and southern Australia saw relatively low pasture growth for this time of year:

• Extremely low to below average pasture growth was modelled across much of central and south-eastern New South Wales, Victoria, southern South Australia and part of southern Western Australia.

Expected lower pasture availability will likely see graziers in affected regions more reliant on supplemental feed to maintain current stocking rates and production.



#### Relative pasture growth for 3-months ending December 2024 (1 October to 31 December 2024)

Notes: AussieGRASS pasture growth estimates are relative to the long-term record and shown in percentiles. Percentiles rank data on a scale of zero to 100. This analysis ranks pasture growth for the selected period against average pasture growth for the long-term record (1957 to 2016). Pasture growth is modelled at 5km2 grid cells. Source: Department of Environment, Science and Innovation

# 1.4. National Climate Outlook

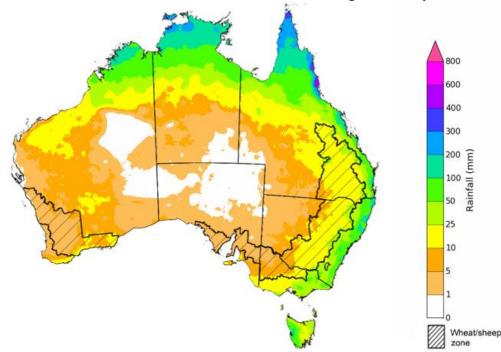
The El Niño Southern Oscillation (ENSO), Southern Annular Mode (SAM), and Indian Ocean Dipole (IOD) climate drivers are currently neutral and having minimal influence on Australian rainfall. The IOD and SAM are likely to remain neutral over the coming weeks, however, indicators suggest that chances of a La Nina event are strengthening.

The most recent **rainfall outlook for February 2025** provided by the Bureau of Meteorology indicates that much of eastern Australia, including eastern Queensland and New South Wales, as well as parts of Western Australia are likely to see above median rainfall. For the remaining regions, rainfall is expected to be average.

- The Bureau of Meteorology's climate model predicts a 75% chance of February rainfall totals between 50–200 millimetres across much of the north, including northern Western Australia and the Northern Territory. Parts of northern Queensland are expected to see as much as 400 millimetres.
- Lower rainfall totals are expected across eastern areas, with much of southern Queensland, New South Wales, Victoria and Tasmania likely to see between 5–100 millimetres. In South Australia and southern Western Australia, little to no rainfall is expected.

Across cropping regions, there is a 75% chance of:

- Relatively strong rainfall across much of New South Wales (between 10–25 millimetres) and Queensland (between 25–100 millimetres). If realised, this rainfall is likely to support above average yield prospects for summer crops and average or better levels of pasture production in affected areas.
- Little to no rainfall is expected across remaining southern cropping regions. This forecast is typical for this time of year, expected to lead to continued low levels of pasture growth and increased livestock turn-off.



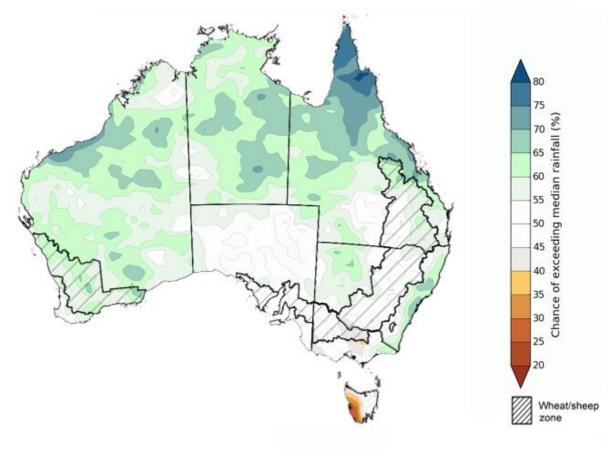
#### Rainfall totals that have a 75% chance of occurring in February 2025

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The **rainfall outlook for February to April 2025** indicates an increased probability of above average rainfall across large areas of eastern, northern and western Australia. Much of the south of the country is equally likely to receive above or below median rainfall, except western Tasmania, which is unlikely to see median rainfall over the period.

Across cropping regions, the chance of receiving above median rainfall is between 55–75% across much of Queensland, with New South Wales, Victoria, and Western Australia having a 55–65% chance of above median rainfall. In South Australia, the chances of receiving above or below median rainfall are approximately equal.



#### Chance of exceeding the median rainfall February 2025 to April 2025

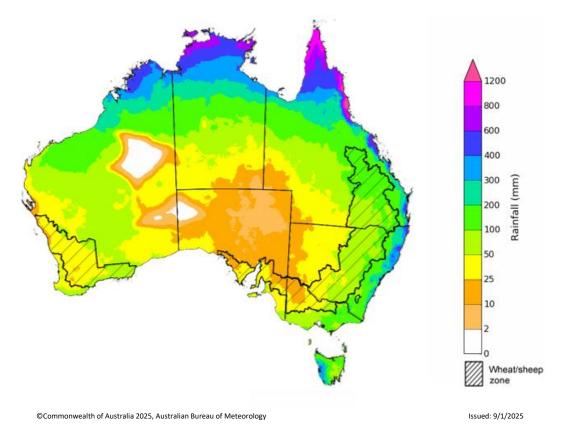
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The outlook for February through to April suggests a 75% chance of receiving rainfall totals of between 200–600 millimetres across northern Western Australia, the Northern Territory, and Queensland, with rainfall greater than 600 millimetres expected in far-north Queensland and the Northern Territory. Between 50–200 millimetres of rainfall is forecast across much of southern Queensland, New South Wales, Victoria and Tasmania, with rainfall totals exceeding 200 millimetres likely across coastal and alpine areas. The far southwest of Western Australia is likely to receive rainfall totals of between 50–100 millimetres over this period, while South Australia is likely to receive between 25–50 millimetres.

In summer cropping regions, there is a 75% chance of receiving between 100–200 millimetres of rainfall across much of Queensland and northern New South Wales. If realised, these forecast rainfall totals are likely to be sufficient to support summer pasture growth across eastern and northern Australia. Additionally, these expected falls are likely to provide a boost to soil moisture profiles and maintain above yield expectation for summer crops in Queensland and northern New South Wales. In the south, rainfall totals are likely to be lower, with between 25–100 millimetres forecast for much of Western Australia and Victoria, and between 10–50 millimetres in South Australia.



Rainfall totals that have a 75% chance of occurring February 2025 to April 2025

# 2. Water

## 2.1. Water markets – current week

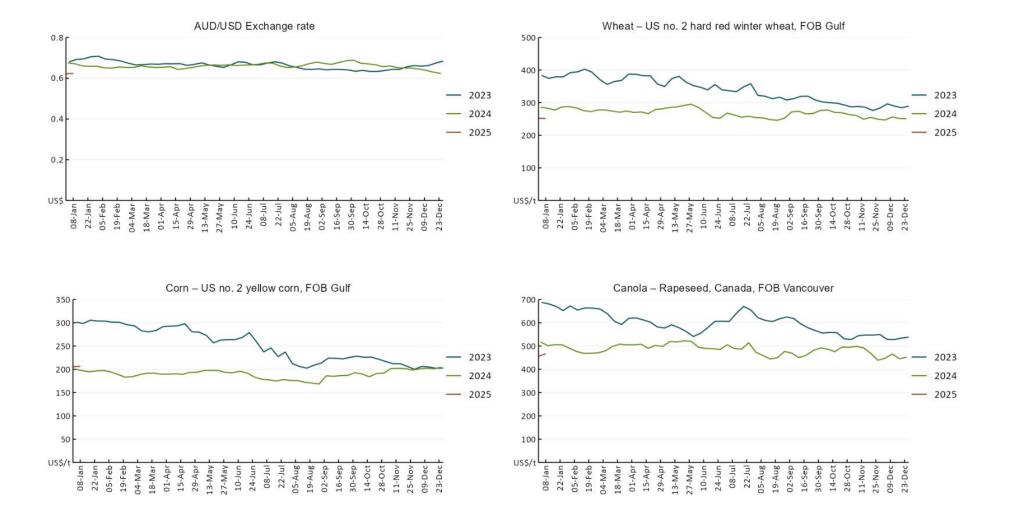
No update has been made to water markets and storage since the prior publication.

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-090124">https://www.agriculture.gov.au/abares/products/weekly\_update/weekly\_update-090124</a>

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Indicator	Week average	Unit	Latest Price	Previous Week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices					0	0	0
AUD/USD Exchange rate	08-Jan	A\$/US\$	0.62	0.62	0%	0.66	-6%
Wheat – US no. 2 hard red winter wheat, FOB Gulf	08-Jan	US\$/t	252	252	0%	284	-12%
Corn – US no. 2 yellow corn, FOB Gulf	08-Jan	US\$/t	207	206	1%	197	5%
Canola – Rapeseed, Canada, FOB Vancouver	08-Jan	US\$/t	467	456	2%	505	-7%
Cotton – Cotlook A Index	08-Jan	USc/lb	79	79	0%	92	-15%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	08-Jan	USc/lb	19	19	0%	22	-13%
Wool – Eastern Market Indicator	18-Dec	Ac/kg clean	1,154	1,140	1%	1,192	-3%
Wool – Western Market Indicator	18-Dec	Ac/kg clean	1,298	1,284	1%	1,312	-1%
Selected Australian grain export prices							
Australian Premium White (APW) Wheat, FOB Port Adelaide, SA	08-Jan	A\$/t	405	408	-1%	444	-9%
Australian Standard White (ASW) Wheat, FOB Port Adelaide, SA	08-Jan	A\$/t	395	398	-1%	422	-6%
Feed Barley – FOB Port Adelaide, SA	08-Jan	A\$/t	369	371	-1%	375	-2%
Canola – FOB Kwinana, WA	08-Jan	A\$/t	851	855	0%	742	15%
Grain Sorghum – FOB Brisbane, QLD	08-Jan	A\$/t	401	399	0%	478	-16%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	08-Jan	Ac/kg cwt	715	660	8%	618	16%
Mutton – Mutton indicator (18–24 kg fat score 2–3), VIC	08-Jan	Ac/kg cwt	437	362	21%	263	66%
Lamb – National Trade Lamb Indicator	08-Jan	Ac/kg cwt	829	925	-10%	740	12%
Pig – Eastern Seaboard (60.1–75 kg), NSW buyer price	27-Nov	Ac/kg cwt	454	446	2%	408	11%
Live cattle – Light steers to Indonesia	18-Dec	Ac/kg lwt	350	350	0%	298	17%
Global Dairy Trade (GDT) weighted average prices							
Dairy – Whole milk powder	08-Jan	US\$/t	3,804	3,809	0%	3,322	15%
Dairy – Skim milk powder	08-Jan	US\$/t	2,682	2,757	-3%	2,626	2%
Dairy – Cheddar cheese	08-Jan	US\$/t	4,728	4,682	1%	4,191	13%
Dairy – Anhydrous milk fat	08-Jan	US\$/t	7,169	7,267	-1%	5,719	25%

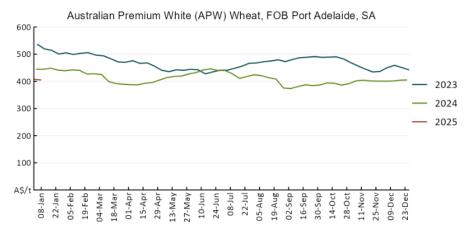
# 3. Commodities

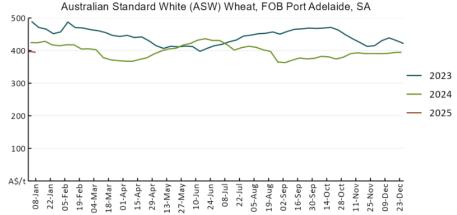
## 3.1. Selected world indicator prices

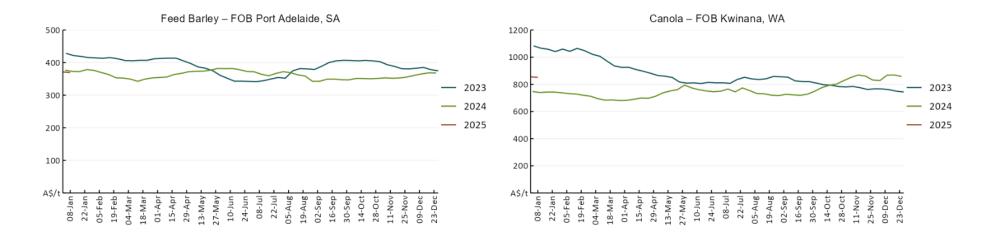


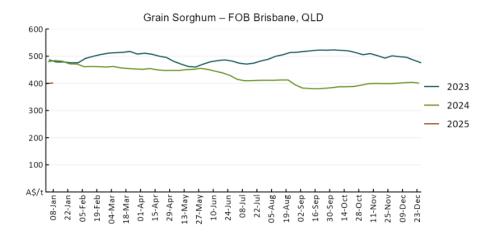
# **3.2 Selected domestic crop indicator prices**





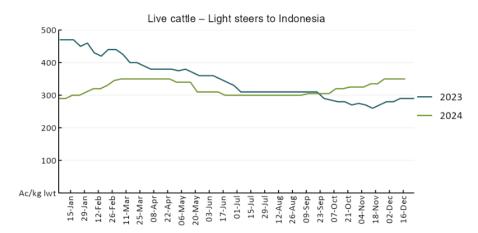


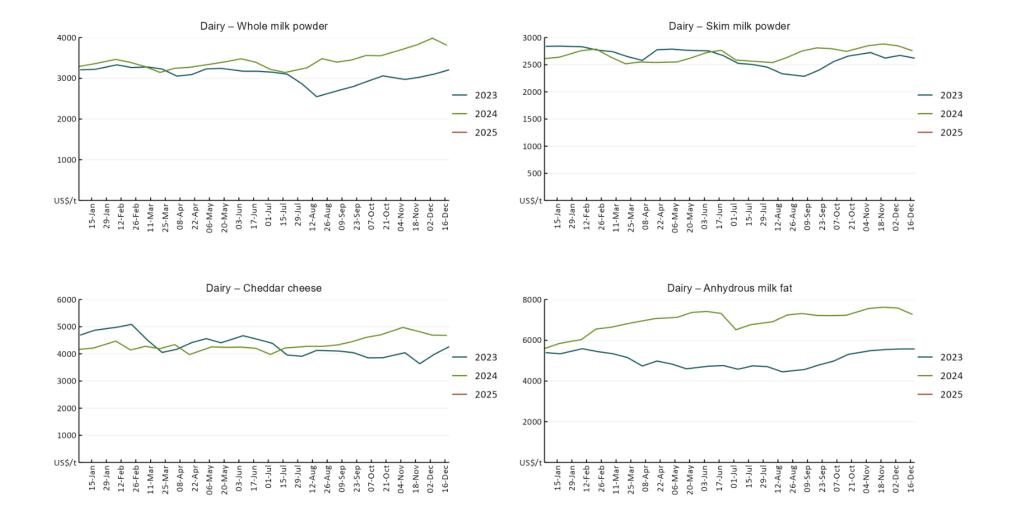




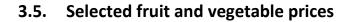


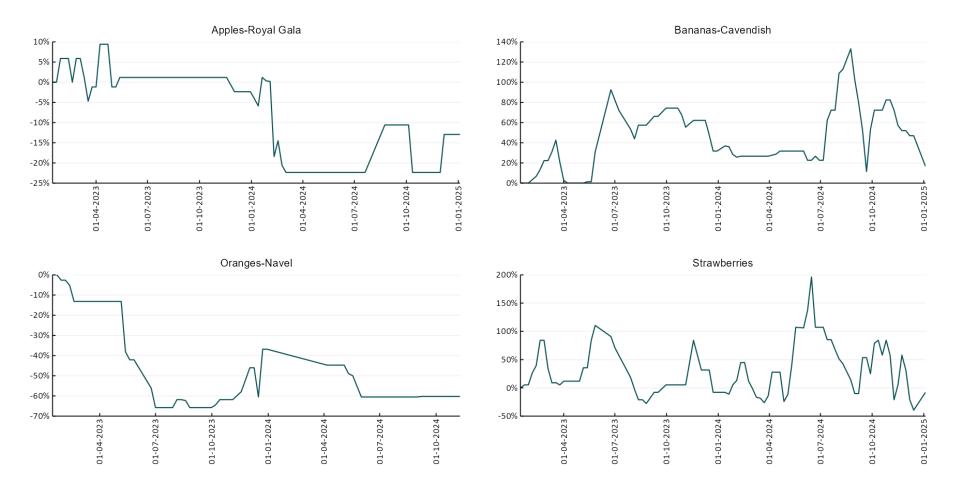
## 3.3. Selected domestic livestock indicator prices

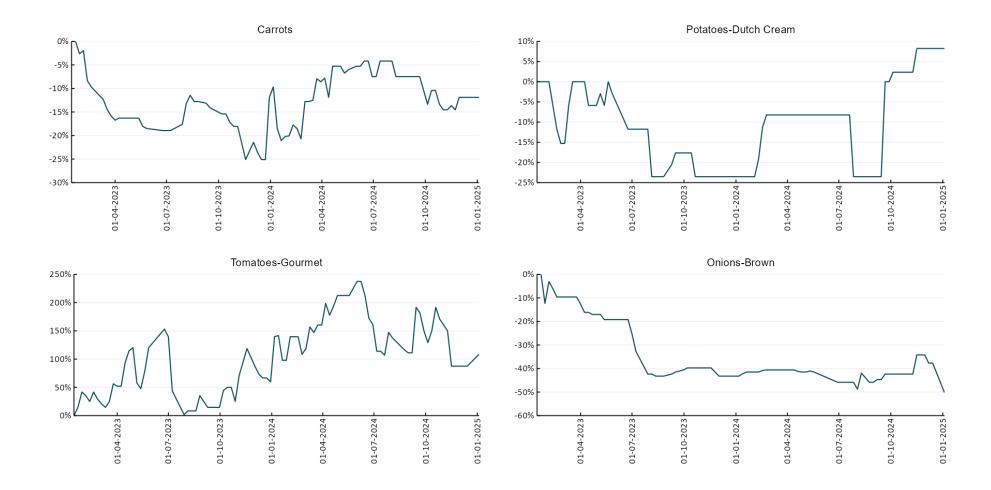


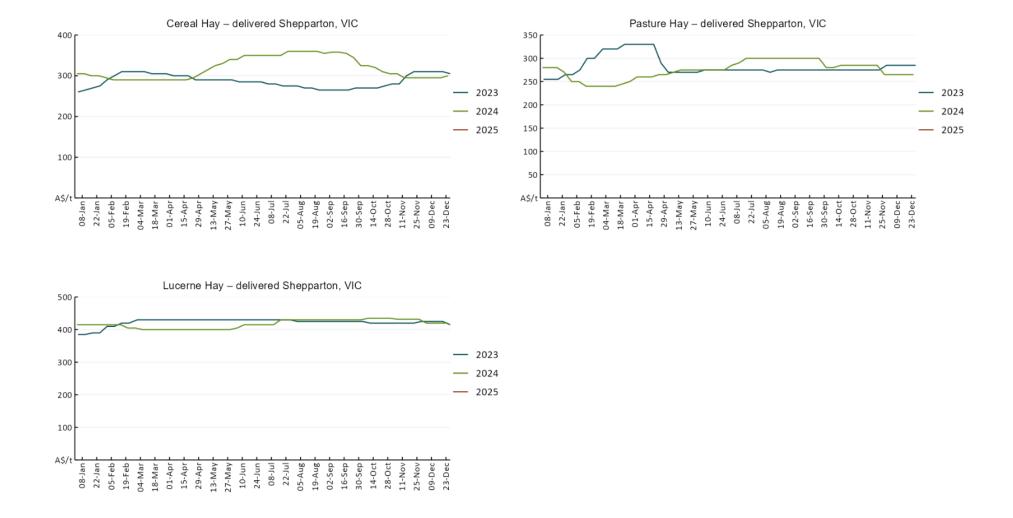


## 3.4. Global Dairy Trade (GDT) weighted average prices









## 3.6 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: https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx
- Autumn break: Pook et al., 2009, <u>https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833</u>

#### Water

- Prices
- Waterflow: <u>https://www.waterflow.io/</u>
- Ruralco: <u>https://www.ruralcowater.com.au/</u>
- Bureau of Meteorology:
- Allocation trade: <u>http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at</u>
- 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: <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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Department of Agriculture, Fisheries and Forestry

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web agriculture.gov.au/abares

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