Summary of key issues

- During the week ending 16 September 2020, troughs and cold fronts moved over southern Australia and moist onshore flow developed along the east coast of Queensland, bringing moderate rainfall to small parts of Australia. Moderate falls across parts of eastern Australia cropping regions are likely to support current yields and boost soil moisture as the winter cropping season begins to wrap up (see Section 1.1).

- Global crop production conditions continue to be favourable, with the exception of mixed conditions persisting across parts of the European Union, the United Kingdom, Ukraine, Argentina, Vietnam, China and south of the Russian Federation (see Section 1.2).

- August rainfall percentiles and current production conditions presented here were used to formulate ABARES forecasts of global grain supplies and the impact on world prices in its September 2020 edition of Agricultural commodities (see Section 1.2).

- The global climate outlook indicates that average to above average rainfall is more likely between October and December 2020 for most of the world's major grain- and oilseed-producing regions. If realised, this is likely to benefit winter wheat and canola development leading into dormancy and the development of corn, soybeans, sunflower, rice and cotton in the northern hemisphere, and winter wheat and canola production and corn, cotton, soybeans, sunflower planting in Australia (see Section 1.2).

- Over the next eight days, a complex cut-off low-pressure system is expected to bring showers and storms to much of south-eastern Australia (see Section 1.3). Across cropping regions, rainfall of between 10 and 50 millimetres is expected across Victoria, South Australia and much of New South Wales. These falls are likely to support favourable winter crop yields and boost soil moisture in south-eastern Australia during the final stages of winter crop development.

- Water storage levels in the Murray-Darling Basin (MDB) increased between 8 September 2020 and 15 September 2020 by 33 gigalitres (GL). The current volume of water held in storage is 14,055 GL which represents 56 per cent of total capacity.

- Allocation prices in the Victorian Murray below the Barmah Choke decreased from $310 per ML from 10 September 2020 to $300 per ML 17 September 2020. Prices are lower in the Goulburn-Broken, Murrumbidgee and regions above the Barmah Choke, due to binding of the Goulburn intervalley trade and Murrumbidgee export limits, and the Barmah Choke trade constraint.
1. Climate

1.1. Rainfall this week

During the week ending 16 September 2020 troughs and cold fronts moved over southern Australia and moist onshore flow developed along the east coast of Queensland, bringing moderate rainfall to small parts of Australia. Rainfall totals of between 10 and 50 millimetres were recorded across parts north-eastern New South Wales, eastern Queensland, southern and western Victoria, western and northern Tasmania and isolated parts of south-eastern South Australia and southern Western Australia. Rainfall in excess of 50 millimetres was recorded across isolated parts of north-eastern Queensland and western Tasmania.

In Australia’s cropping regions, rainfall totals of between 10 and 50 millimetres were recorded across parts of north-eastern New South Wales, central Queensland and south-western Victoria. Little to no rainfall was recorded across remaining cropping regions during the week ending 16 September 2020. The falls in parts of eastern cropping regions are likely to support current yields and boost soil moisture. In contrast, in regions that recorded below average rainfall during winter and have low soil moisture reserves, particularly Western Australia, these dry conditions are likely to be a concern for yield prospect and pasture production as temperatures increase.

Rainfall for the week ending 16 September 2020

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Issued: 16/09/2020

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. Global production conditions and climate outlook

Crop production is affected by long-term trends in average rainfall and temperature, interannual climate variability, shocks during specific growth stages, and extreme weather events (IPCC 2012). Some crops are more tolerant than others to certain types of stresses, and at each growth stage, different types of stresses affect each crop type in different ways.

The precipitation anomalies and outlooks presented here give an indication of the current and future state of production conditions for the major grain and oilseed producing countries which are responsible for over 80% of global production. This is an important input to assessing the global grain supply outlook. The August rainfall percentiles and current production conditions presented here were used to formulate ABARES forecasts of global grain supplies and the impact on world prices in its September 2020 edition of Agricultural commodities.

August rainfall percentiles and current production conditions

As of the end of August 2020, rainfall was generally favourable for the world’s major grain and oil producing regions.

In the Northern Hemisphere, August rainfall was above average in parts of the United Kingdom, eastern and central Europe, south-east of the United States, the central-west and south-east of Russia, north-eastern China, central Africa, western and central India and parts of northern Southeast Asia. Rainfall was below average across parts of the central plains of the United States and southern Canada, northern Mexico and Ukraine.

In the southern hemisphere, August rainfall was generally average across Australia and Indonesia, and below average across parts of northern Brazil and western Argentina.

Global precipitation percentiles, August 2020

Note: The world precipitation percentiles indicate a ranking of precipitation for August, with the driest (0th percentile) being 0 on the scale and the wettest (100th percentile) being 1 on the scale. Percentiles are based on precipitation estimates from the NOAA Climate Prediction Center’s Climate Anomaly Monitoring System Outgoing Precipitation Index dataset. Precipitation estimates for August 2020 are compared with rainfall recorded for that period during the 1981 to 2010 base period.

Source: International Research Institute for Climate and Society

As at 28 August 2020 global production conditions were generally favourable.

In the southern hemisphere, conditions for wheat crop development were generally favourable for Australia and mixed for Argentina. In the northern hemisphere, conditions have been variable with dryness decreasing winter wheat yields in the United Kingdom, the European Union, and southern
Growing regions of Ukraine and the Russian Federation. Conditions were generally favourable for winter wheat harvesting and spring wheat growth in Kazakhstan, Canada and the United States and spring wheat harvesting in China.

Growing conditions for maize were generally favourable for harvest of the autumn-winter crop and for sowing of the spring-summer crop in Mexico. Harvest of the summer-planted crop was well underway in Brazil under mainly exceptional conditions, except for in the south where dry conditions have impacted crop development. Conditions were generally favourable for the United States, Canada, the European Union and India, although there were some mixed conditions due to dryness in parts of the United States, France, Ukraine and the Russian Federation and flooding in China.

Conditions were generally favourable for wet-season rice in Thailand, Japan and the Philippines and for the growth of single-season and late-season rice in China. In the United States, conditions were also favourable. The majority of rice transplanting in India was completed under favourable conditions. In Vietnam, conditions are generally favourable as planting continues in the north and harvest continues in the south, with slightly reduced yields in the south due to dry conditions. In Indonesia, the harvest of dry-season crops is ongoing with reduced yields due to a delayed rainfall onset. At the same time, dry-season crop sowing continues due to unusually high dry-season rainfall delaying planting.

Growing conditions for soybeans were generally favourable in the United States, Canada, Ukraine, China and India for crops due to be harvested in the northern hemisphere autumn, with some mixed conditions due to dryness in the United States and Ukraine. In Australia, growing conditions have been favourable for canola.
## Rainfall outlook and potential impact on the future state of production conditions between October and December

<table>
<thead>
<tr>
<th>Region</th>
<th>October-December rainfall outlook</th>
<th>Potential impact on production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Above average rainfall is more likely for large parts of eastern and southeastern Canada between October and December 2020.</td>
<td>Average to above average rainfall is likely to benefit corn, soybeans and sunflower maturing leading up to harvest in November.</td>
</tr>
<tr>
<td>United States</td>
<td>Above average rainfall is more likely for parts of the northern US and below average rainfall is more likely for much of the central-southern US.</td>
<td>Average to above average rainfall is likely to benefit winter wheat and canola development leading up to dormancy in December, below average rainfall is likely to adversely impact this development.</td>
</tr>
<tr>
<td>Brazil</td>
<td>Above average rainfall is more likely across much of northern and central Brazil and below average rainfall is more likely across parts of southern Brazil between October and December 2020.</td>
<td>Above average rainfall across much of Brazil is likely to benefit soybean planting and development in the central-west between October and December. Below average rainfall in parts of southern Brazil may adversely affect the development of corn and soybeans from October, and the planting and development of groundnuts, sorghum, cotton, sunflower, rice and millet from November.</td>
</tr>
<tr>
<td>Argentina</td>
<td>Below average rainfall is more likely for parts of the north-east and south-west of Argentina between October and December 2020.</td>
<td>Below average rainfall is likely to adversely affect the development of wheat leading up to harvest in December. These conditions may also impact the planting and development of corn, cotton, soybeans, sunflower, rice, sorghum and millet between October and December 2020.</td>
</tr>
<tr>
<td>Europe</td>
<td>Average rainfall more likely for most of Europe between October and December 2020.</td>
<td>Average rainfall is likely to support winter wheat and canola planting in October and November leading up to dormancy in December.</td>
</tr>
<tr>
<td>South Asia (India)</td>
<td>Above average rainfall is likely across parts of north-western and central India and below average rainfall is likely across isolated parts of the north-east and south-east.</td>
<td>Average to above average rainfall is likely to benefit winter wheat and canola planting and development from November. Generally average rainfall in the south is likely to support cotton development leading up to harvest in December.</td>
</tr>
<tr>
<td>Southeast Asia (SEA)</td>
<td>Above average rainfall is likely for much of SEA, with a strong likelihood of above average rainfall for Indonesia.</td>
<td>Above average rainfall in SEA is likely to support corn and rice yields as harvest beings in October.</td>
</tr>
<tr>
<td>Black Sea Region</td>
<td>Ukraine - Below average rainfall is likely across central Ukraine. Kazakhstan - Below average rainfall is likely across the south. Russia - Above average rainfall more likely for parts of northern and eastern Russia and below average for parts of south-eastern Russia.</td>
<td>Below average rainfall in the south is likely to adversely impact the filling of cotton in Central Asia, and corn and sunflower in October, as well as winter wheat and rapeseed development leading into dormancy in November.</td>
</tr>
<tr>
<td>China</td>
<td>Above average rainfall is more likely across parts of northern and central China and below average rainfall is more likely across parts of southern China between October and December 2020.</td>
<td>Above average rainfall in the north is likely to support the filling and maturing of late rice and the development of winter wheat and canola leading into dormancy in December. Below average rainfall in parts of southern China may adversely impact the development of these crops.</td>
</tr>
</tbody>
</table>
1.3. Rainfall forecast for the next eight days

A complex cut-off low-pressure system is expected to bring showers and storms to much of southeastern Australia during the week. Rainfall totals of between 10 and 50 millimetres are forecast for much of New South Wales, Victoria, South Australia and Tasmania, and parts of south-western and north-eastern Queensland and far south of Western Australia. Rainfall in excess of 50 millimetres is expected across western Tasmania and isolated parts of mainland alpine areas.

In cropping regions, rainfall of between 10 and 50 millimetres is expected across Victoria, South Australia and much of New South Wales. Rainfall totals of between 5 and 10 millimetres are expected across cropping regions in northern New South Wales, southern Queensland and far south-western and southern Western Australia during the next eight days.

These falls are likely to support favourable winter crop yields and boost soil moisture in south-eastern Australia during the final stages of winter crop development.

Total forecast rainfall (mm) for the period 17 September 2020 to 24 September 2020
2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 33 gigalitres (GL) between 8 September 2020 and 15 September 2020. The current volume of water held in storage is 14,055 GL, which represents 56% of total capacity. This is 33% or 3,481 GL more than at the same time last year.

Water storages in the Murray-Darling Basin, 2013–2020

![Water storages in the Murray-Darling Basin, 2013–2020](image)

Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke decreased from $310 per ML from 10 September 2020 to $300 per ML 17 September 2020. Prices are lower in the Goulburn-Broken, Murrumbidgee and regions above the Barmah Choke, due to binding of the Goulburn intervalley trade and Murrumbidgee export limits, and the Barmah Choke trade constraint.

<table>
<thead>
<tr>
<th>Region</th>
<th>$/ML</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Murray Above</td>
<td>200</td>
</tr>
<tr>
<td>NSW Murrumbidgee</td>
<td>170</td>
</tr>
<tr>
<td>VIC Goulburn-Broken</td>
<td>190</td>
</tr>
<tr>
<td>VIC Murray Below</td>
<td>300</td>
</tr>
</tbody>
</table>

Surface water trade activity, Southern Murray–Darling Basin

![Surface water trade activity, Southern Murray–Darling Basin](image)

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. Data shown is current at 17 September 2020.

# 3. Commodities

## Selected world indicator prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Previous week</th>
<th>Weekly change</th>
<th>Price 12 months ago</th>
<th>Annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUD/USD Exchange rate</td>
<td>16-Sep</td>
<td>A$/US$</td>
<td>0.73</td>
<td>0.73</td>
<td>1%</td>
<td>0.68</td>
<td>8%</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>246</td>
<td>244</td>
<td>1%</td>
<td>206</td>
<td>19%</td>
</tr>
<tr>
<td>Corn – US no. 2 yellow corn, fob Gulf</td>
<td>19-Aug</td>
<td>US$/t</td>
<td>150</td>
<td>145</td>
<td>3%</td>
<td>157</td>
<td>-4%</td>
</tr>
<tr>
<td>Canola – Rapeseed, Canada, fob Vancouver</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>378</td>
<td>401</td>
<td>-6%</td>
<td>361</td>
<td>5%</td>
</tr>
<tr>
<td>Cotton – Cotlook 'A' Index</td>
<td>16-Sep</td>
<td>USc/lb</td>
<td>71</td>
<td>70</td>
<td>0%</td>
<td>71</td>
<td>-1%</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>16-Sep</td>
<td>USc/lb</td>
<td>12</td>
<td>12</td>
<td>-2%</td>
<td>11</td>
<td>5%</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>09-Sep</td>
<td>Ac/kg clean</td>
<td>890</td>
<td>858</td>
<td>4%</td>
<td>1,754</td>
<td>-49%</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>09-Sep</td>
<td>Ac/kg clean</td>
<td>922</td>
<td>895</td>
<td>3%</td>
<td>1,995</td>
<td>-54%</td>
</tr>
</tbody>
</table>

## Selected Australian grain export prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Previous week</th>
<th>Weekly change</th>
<th>Price 12 months ago</th>
<th>Annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milling Wheat – APW, Port Adelaide, SA</td>
<td>16-Sep</td>
<td>A$/t</td>
<td>328</td>
<td>328</td>
<td>0%</td>
<td>368</td>
<td>-11%</td>
</tr>
<tr>
<td>Feed Wheat – ASW, Port Adelaide, SA</td>
<td>16-Sep</td>
<td>A$/t</td>
<td>313</td>
<td>313</td>
<td>0%</td>
<td>356</td>
<td>-12%</td>
</tr>
<tr>
<td>Feed Barley – Port Adelaide, SA</td>
<td>16-Sep</td>
<td>A$/t</td>
<td>270</td>
<td>266</td>
<td>1%</td>
<td>335</td>
<td>-19%</td>
</tr>
<tr>
<td>Canola – Kwinana, WA</td>
<td>16-Sep</td>
<td>A$/t</td>
<td>643</td>
<td>640</td>
<td>0%</td>
<td>659</td>
<td>-2%</td>
</tr>
<tr>
<td>Grain Sorghum – Brisbane, QLD</td>
<td>16-Sep</td>
<td>A$/t</td>
<td>345</td>
<td>353</td>
<td>-2%</td>
<td>426</td>
<td>-19%</td>
</tr>
</tbody>
</table>

## Selected domestic livestock indicator prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Previous week</th>
<th>Weekly change</th>
<th>Price 12 months ago</th>
<th>Annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef – Eastern Young Cattle Indicator</td>
<td>16-Sep</td>
<td>Ac/kg cwt</td>
<td>762</td>
<td>767</td>
<td>-1%</td>
<td>488</td>
<td>56%</td>
</tr>
<tr>
<td>Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic</td>
<td>09-Sep</td>
<td>Ac/kg cwt</td>
<td>512</td>
<td>549</td>
<td>-7%</td>
<td>605</td>
<td>-15%</td>
</tr>
<tr>
<td>Lamb – Eastern States Trade Lamb Indicator</td>
<td>09-Sep</td>
<td>Ac/kg cwt</td>
<td>680</td>
<td>682</td>
<td>0%</td>
<td>831</td>
<td>-18%</td>
</tr>
<tr>
<td>Pig – Eastern Seaboard (60.1–75 kg), average of buyers &amp; sellers</td>
<td>02-Sep</td>
<td>Ac/kg cwt</td>
<td>318</td>
<td>318</td>
<td>0%</td>
<td>357</td>
<td>-11%</td>
</tr>
<tr>
<td>Goat – Eastern States (12.1–16 kg)</td>
<td>09-Sep</td>
<td>Ac/kg cwt</td>
<td>843</td>
<td>843</td>
<td>0%</td>
<td>902</td>
<td>-7%</td>
</tr>
<tr>
<td>Live cattle – Light steers ex Darwin to Indonesia</td>
<td>09-Sep</td>
<td>Ac/kg lwt</td>
<td>355</td>
<td>355</td>
<td>0%</td>
<td>310</td>
<td>15%</td>
</tr>
<tr>
<td>Live sheep – Live wether (Muchea WA saleyard) to Middle East</td>
<td>11-Dec</td>
<td>$/head</td>
<td>105</td>
<td>140</td>
<td>-25%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Indicator</td>
<td>Week ended</td>
<td>Unit</td>
<td>Latest price</td>
<td>Previous week</td>
<td>Weekly change</td>
<td>Price 12 months ago</td>
<td>Annual change</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------</td>
<td>--------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Dairy – Whole milk powder</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>2,985</td>
<td>2,884</td>
<td>4%</td>
<td>2,958</td>
<td>1%</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>2,889</td>
<td>2,663</td>
<td>8%</td>
<td>1,972</td>
<td>47%</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>3,674</td>
<td>3,428</td>
<td>7%</td>
<td>3,663</td>
<td>0%</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>16-Sep</td>
<td>US$/t</td>
<td>3,910</td>
<td>3,852</td>
<td>2%</td>
<td>5,709</td>
<td>-32%</td>
</tr>
</tbody>
</table>

* Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.
3.1. Selected world indicator prices

- **AUD/USD Exchange rate**
  - 2018
  - 2019
  - 2020

- **Wheat – US no. 2 hard red winter wheat, fob Gulf**
  - 2018
  - 2019
  - 2020

- **Corn – US no. 2 yellow corn, fob Gulf**
  - 2018
  - 2019
  - 2020

- **Canola – Rapeseed, Canada, fob Vancouver**
  - 2018
  - 2019
  - 2020
3.2. **Selected domestic crop indicator prices**

![Milling Wheat - APW, Port Adelaide, SA](image1)

![Feed Wheat - ASW, Port Adelaide, SA](image2)

![Feed Barley - Port Adelaide, SA](image3)
3.3. Selected domestic livestock indicator prices

![Beef – Eastern Young Cattle Indicator](chart1)

![Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic](chart2)

![Lamb – Eastern States Trade Lamb Indicator](chart3)

![Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers](chart4)
3.4. Global Dairy Trade (GDT) weighted average prices

- **Dairy – Whole milk powder**
- **Dairy – Skim milk powder**
- **Dairy – Cheddar cheese**
- **Dairy – Anhydrous milk fat**

The graphs show the price trends for different dairy products over the period from January to December, with data for the years 2018, 2019, and 2020.
3.5. Selected fruit and vegetable prices

- WATERMELONS-Seedless-Kg
- KIWIFRUIT-Hayward-BulkPk
- BLUEBERRIES--125g
- STRAWBERRIES--250g
4. Data attribution

Climate
Bureau of Meteorology
- 3-month global outlooks: Environment and Climate Change Canada, NOAA Climate Prediction Center, EUROBRISA CPTEC/INPE, European Centre for Medium-Range Weather Forecasts, Hydrometcenter of Russia, National Climate Center Climate System Diagnosis and Prediction Room (NCC), International Research Institute for Climate and Society

Water
New South Wales
Queensland
- Sunwater: www.sunwater.com.au
- Seqwater: http://seqwater.com.au
South Australia
- South Australian Department of Environment, Water and Natural Resources: www.environment.sa.gov.au
Victoria
- Goulburn–Murray Water: www.g-mwater.com.au

Commodities
Fruit and vegetables
- Datafresh: www.freshstate.com.au
Pigs
- Australian Pork Limited: www.australianpork.com.au
Dairy
World wheat, canola
- International Grains Council
World coarse grains
- United States Department of Agriculture
World cotton
- Cotlook: www.cotlook.com/
World sugar
- New York Stock Exchange - Intercontinental Exchange
Wool
Milling wheat
- ProFarmer
Domestic wheat, barley, sorghum
- The Land: hardcopy or online at www.theland.farmonline.com.au/markets
Domestic canola
- The Weekly Times: hardcopy
Cattle, beef, mutton, lamb, goat and live export