Summary of key issues

- During the week ending 29 March 2017 rainfall was recorded in eastern, northern and south-eastern Australia, as well as central and northern parts of Western Australia.

- On March 28 Tropical Cyclone Debbie made landfall south of Bowen. According to the Bureau of Meteorology winds exceeded 250 kilometres per hour in some places and heavy rainfall was recorded with daily observations exceeding 200 millimetres. While the full extent of damage to crops is yet to be counted, the heavy rainfall associated with this event will increase some dam storage levels, soil moisture levels and pasture and crop production opportunities.

- During the week ending 28 March 2017 maximum temperatures were between 2°C and 8°C above average in parts of central and Australia, and were between 2°C and 8°C below average in central and western parts of Western Australia. Minimum temperatures were between 2°C and 4°C above average across most of central and south-eastern Australia, and between 2°C and 4°C below average in parts of Western Australia.

- Rainfall is likely to be below average across much of central and southern Australia and above average across northern Australia and parts of eastern Australia during April 2017.

- The rainfall outlook for April to June 2017 indicates that below average rainfall is likely across most of Australia with the exception of Far North Queensland and the Top End in the Northern Territory, where above average rainfall is more likely.

- The forecast for the next eight days indicates that rainfall in excess of 15 millimetres is expected across eastern parts of New South Wales, eastern and northern Queensland, western Tasmania and northern parts of Western Australia and the Northern Territory. Little to no rainfall is forecast for much of the remainder of the country. Weekly totals are forecast to exceed 150 millimetres in parts of south-eastern Queensland and north-eastern New South Wales.

- Water storage levels in the Murray–Darling Basin (MDB) decreased during the week ending 30 March 2017 by 304 gigalitres (GL) to 15,345 GL and are at 68 per cent of total capacity.

- The Indian Government has reinstated a 10 per cent import tariff on wheat imports.
1. Climate

1.1. Rainfall this week

During the week ending 29 March 2017 rainfall totals in excess of 200 millimetres, associated with Tropical Cyclone Debbie, were recorded along the east coast of Queensland between Bowen and Gladstone. Rainfall in excess of 200 millimetres was also recorded on the Pilbara coast of Western Australia. The highest recorded weekly total was 683 millimetres at Plane Creek Sugar Mill, at Sarina in the Mackay region of Queensland.

On 24 March Tropical Cyclone Debbie developed offshore of Australia and intensified as it approached the north Queensland coast. The category four cyclone made landfall on 28 March south of Bowen. According to the Bureau of Meteorology winds exceeded 250 kilometres per hour in some places.

While the full extent of the damage is yet to be counted, there are reports of damage to the region’s 2017 sugarcane crop which may lead to yield losses. Other major agricultural commodities in the Mackay region potentially affected include vegetables and mangoes. While there have been reports of damage to crops in the region, the heavy rainfall associated with this event will increase dam storage levels, soil moisture levels and pasture and crop production opportunities.

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/

Rainfall for the week ending 29 March 2017
1.2. Temperature anomalies this week

During the week ending 28 March 2017 maximum temperatures were between 2°C and 8°C above average in parts of central and Australia, with parts of north-western New South Wales and south-western Queensland between 8°C and 10°C above average. Maximum temperatures were between 2°C and 8°C below average in central and western parts of Western Australia.

Minimum temperatures were between 2°C and 4°C above average across most of central and south-eastern Australia, with temperatures between 4°C and 8°C above average across inland northern New South Wales and Queensland. In parts of Western Australia minimum temperatures were between 2°C and 4°C below average for this time of year.

Note: Spatial temperature analyses are based on historical weekly temperature data provided by the Bureau of Meteorology. These temperature anomaly maps show the departure of the maximum and minimum temperatures from their long-term averages. Temperature anomalies are calculated using high-resolution gridded datasets from 1911 onwards. For further information go to [http://www.bom.gov.au/jsp/awap/temp/index.jsp](http://www.bom.gov.au/jsp/awap/temp/index.jsp).
1.3. National Climate Outlook to the end of June

The rainfall and temperature outlooks presented below show the likelihood, represented as a percentage, of experiencing wetter or drier (and warmer or cooler) than median climatic conditions for the given outlook periods. Climate outlooks are generated by the Predictive Climate Ocean Atmosphere Model for Australia (POAMA), a dynamical (physics-based) climate model developed by the Bureau of Meteorology and CSIRO Marine and Atmospheric research division.

For further information, go to http://www.bom.gov.au/climate/ahead/about/

The El Niño–Southern Oscillation (ENSO) remains neutral, but the tropical Pacific Ocean has been steadily warming. The Bureau of Meteorology suggest El Niño conditions have an increased chance of developing during winter. However, models have lower accuracy at this time of year in forecasting El Niño. El Niño typically brings drier winter-spring conditions over much of eastern Australia.

The Indian Ocean Dipole (IOD) remains neutral and has little influence on Australia from December to April. Outlooks indicate the IOD will remain neutral for the next three months.

During April 2017 rainfall is likely to be below average across much of central and southern Australia. Rainfall is likely to be above average across northern Australia and parts of eastern Australia during this period. For the remainder of the country there are roughly equal chances of a wetter or drier than average April (Bureau of Meteorology ‘National Climate Outlook’, 30 March 2017).

![Chance of exceeding the median rainfall April 2017](image)
The rainfall outlook for April to June 2017 indicates that below average rainfall is likely across most of Australia with the exception of Far North Queensland and the Top End in the Northern Territory, where above average rainfall is more likely (Bureau of Meteorology ‘National Climate Outlook’, 30 March 2017).

Chance of exceeding the median rainfall April to June 2017
The temperature outlook for April to June 2017 indicates maximum and minimum temperatures are likely to be above the median for most of Australia. Maximum and minimum temperatures are more likely to be below the median parts of northern Queensland and the Top End in the Northern Territory (Bureau of Meteorology ‘National Climate Outlook’, 30 March 2017).

**Chance of exceeding the median maximum temperature April to June 2017**

**Chance of exceeding the median minimum temperature April to June 2017**
1.4. Rainfall forecast for the next 8 days

The forecast for the next eight days indicates that rainfall in excess of 15 millimetres is expected across eastern parts of New South Wales, eastern and northern Queensland, western Tasmania and northern parts of Western Australia and the Northern Territory. Little to no rainfall is forecast for much of the remainder of the country (see map below).

The highest forecast totals are for south-eastern Queensland and north-eastern New South Wales, where rainfall totals are expected to exceed 150 millimetres in some areas. These falls are associated with Ex-Tropical Cyclone Debbie as it moves across inland areas of eastern Queensland and north-eastern New South Wales.

This rainfall forecast is produced from computer models. As it contains no input from weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

Total forecast rainfall (mm) for the period 30 March to 6 April 2017
2. Water

2.1. Water availability

Water storage levels in the Murray–Darling Basin (MDB) decreased during the week ending 30 March 2017 by 304 gigalitres (GL) to 15,345 GL and are at 68 per cent of total capacity. This is 37 percentage points or 8,271 GL more than at the same time last year.

Information on irrigation water available in the Murray–Darling Basin from 1 January 2001 to 30 March 2017 is shown above. The top horizontal (short dash) line indicates the storage level during a similar time last year. The bottom horizontal (long dash) line indicates the amount of ‘dead’ or unusable storage.
3. Commodities

3.1. Market focus

Indian wheat imports

The Indian Government reinstated a 10 per cent import tariff on wheat with immediate effect on 28 March 2017. The duty was eliminated in December 2016 to encourage imports following a low quality harvest and a drawdown in stocks. The availability of wheat in India will increase when the domestic harvest begins in April. Australia exported more than $500 million of wheat to India between July 2016 and January 2017.
## Selected World Indicator Prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Dollar - AUD/USD Exchange Rate</td>
<td>29-Mar</td>
<td>US$/A$</td>
<td>0.76</td>
<td>0.77</td>
<td>-1%</td>
<td>0.76</td>
<td>0% ●</td>
</tr>
<tr>
<td>Wheat - US no. 2 hard red winter wheat, fob Gulf</td>
<td>28-Mar</td>
<td>US$/t</td>
<td>191</td>
<td>197</td>
<td>-3%</td>
<td>205</td>
<td>-7% ●</td>
</tr>
<tr>
<td>Coarse Grains - US no. 2 yellow corn, fob Gulf</td>
<td>29-Mar</td>
<td>US$/t</td>
<td>156</td>
<td>159</td>
<td>-2%</td>
<td>163</td>
<td>-4% ●</td>
</tr>
<tr>
<td>Canola - Rapeseed, Europe, fob Hamburg</td>
<td>28-Mar</td>
<td>US$/t</td>
<td>440</td>
<td>446</td>
<td>-1%</td>
<td>405</td>
<td>9% ●</td>
</tr>
<tr>
<td>Cotton - Cotlook 'A' Index</td>
<td>29-Mar</td>
<td>USc/lb</td>
<td>86.9</td>
<td>87.2</td>
<td>&lt;1%</td>
<td>65.9</td>
<td>32% ●</td>
</tr>
<tr>
<td>Sugar - Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>23-Mar</td>
<td>USc/lb</td>
<td>17.4</td>
<td>17.7</td>
<td>-2%</td>
<td>15.9</td>
<td>9% ●</td>
</tr>
<tr>
<td>Wool - Eastern Market Indicator</td>
<td>23-Mar</td>
<td>Ac/kg clean</td>
<td>1,546</td>
<td>1,546</td>
<td>0% ●</td>
<td>1,239</td>
<td>25% ●</td>
</tr>
<tr>
<td>Wool - Western Market Indicator</td>
<td>24-Mar</td>
<td>Ac/kg clean</td>
<td>1,534</td>
<td>1,554</td>
<td>-1% ●</td>
<td>1,281</td>
<td>20% ●</td>
</tr>
</tbody>
</table>

## Selected domestic crop indicator prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milling Wheat - ASW1, track quote, Port Adelaide, SA</td>
<td>29-Mar</td>
<td>A$/t</td>
<td>184</td>
<td>184</td>
<td>0% ●</td>
<td>243</td>
<td>-24% ●</td>
</tr>
<tr>
<td>Feed Wheat - General purpose, Sydney, NSW</td>
<td>29-Mar</td>
<td>A$/t</td>
<td>211</td>
<td>211</td>
<td>0% ●</td>
<td>256</td>
<td>-18% ●</td>
</tr>
<tr>
<td>Feed Barley - Sydney, NSW</td>
<td>29-Mar</td>
<td>A$/t</td>
<td>192</td>
<td>190</td>
<td>1% ●</td>
<td>227</td>
<td>-15% ●</td>
</tr>
<tr>
<td>Canola - Portland, Vic.</td>
<td>27-Mar</td>
<td>A$/t</td>
<td>520</td>
<td>510</td>
<td>2% ●</td>
<td>517</td>
<td>&lt;1% ●</td>
</tr>
<tr>
<td>Grain Sorghum - Sydney, NSW</td>
<td>29-Mar</td>
<td>A$/t</td>
<td>247</td>
<td>249</td>
<td>&lt;1% ●</td>
<td>228</td>
<td>8% ●</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>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef - Eastern Young Cattle Indicator</td>
<td>24-Mar</td>
<td>Ac/kg cwt</td>
<td>619</td>
<td>611</td>
<td>1% ●</td>
<td>589</td>
<td>5% ●</td>
</tr>
<tr>
<td>Mutton - Mutton indicator (18-24 kg fat score 2-3), Vic</td>
<td>24-Mar</td>
<td>Ac/kg cwt</td>
<td>467</td>
<td>443</td>
<td>5% ●</td>
<td>304</td>
<td>54% ●</td>
</tr>
<tr>
<td>Lamb - Eastern States Trade Lamb Indicator</td>
<td>23-Mar</td>
<td>Ac/kg cwt</td>
<td>632</td>
<td>622</td>
<td>2% ●</td>
<td>522</td>
<td>21% ●</td>
</tr>
<tr>
<td>Pig - Eastern Seaboard (60.1-75 kg), average of buyers &amp; sellers</td>
<td>10-Mar</td>
<td>Ac/kg cwt</td>
<td>326</td>
<td>347</td>
<td>-6%</td>
<td>389</td>
<td>-16% ●</td>
</tr>
<tr>
<td>Goat - Eastern States (12.1-16 kg)</td>
<td>20-Mar</td>
<td>Ac/kg cwt</td>
<td>655</td>
<td>655</td>
<td>0% ●</td>
<td>525</td>
<td>25% ●</td>
</tr>
<tr>
<td>Live cattle - Light steers ex Darwin to Indonesia</td>
<td>18-Mar</td>
<td>Ac/kg lwt</td>
<td>345</td>
<td>375</td>
<td>-8%</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Live sheep - Live wether (Muchea WA saleyard) to Middle East</td>
<td>13-Mar</td>
<td>$/head</td>
<td>115</td>
<td>104</td>
<td>11% ●</td>
<td>93</td>
<td>23% ●</td>
</tr>
</tbody>
</table>

## Global Dairy Trade (GDT) weighted average prices

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy - Whole milk powder</td>
<td>21-Mar</td>
<td>US$/t</td>
<td>2,855</td>
<td>2,782</td>
<td>3% ●</td>
<td>1,971</td>
<td>45% ●</td>
</tr>
<tr>
<td>Product</td>
<td>Date</td>
<td>Unit</td>
<td>Price</td>
<td>Previous Price</td>
<td>Change</td>
<td>Percentage Change</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------------</td>
<td>--------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Dairy - Skim milk powder</td>
<td>21-Mar</td>
<td>US$/t</td>
<td>1,948</td>
<td>2,118</td>
<td>-8%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Dairy - Cheddar cheese</td>
<td>21-Mar</td>
<td>US$/t</td>
<td>3,406</td>
<td>3,435</td>
<td>&lt;1%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Dairy - Anhydrous milk fat</td>
<td>21-Mar</td>
<td>US$/t</td>
<td>5,799</td>
<td>5,635</td>
<td>3%</td>
<td>92%</td>
<td></td>
</tr>
</tbody>
</table>

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

- **World wheat indicator price**
  - US No. 2, hard red winter wheat, fob Gulf
  - Week ended 28 March 2017

- **World coarse grains indicator price**
  - US corn No. 2, fob Gulf
  - Week ended 29 March 2017

- **World canola indicator price**
  - Europe fob Hamburg
  - Week ended 28 March 2017

- **World cotton indicator price**
  - Cotlook ‘A’ index
  - Week ended 29 March 2017
### 3.3. Global Dairy Trade (GDT) weighted average prices

#### Whole milk powder price
- **21 March 2017**

#### Skim milk powder price
- **21 March 2017**

#### Cheddar cheese price
- **21 March 2017**

#### Anhydrous milk fat price
- **21 March 2017**
3.4. Selected domestic crop indicator prices

Grain sorghum indicator price
Sydney, NSW
Week ended 29 March 2017

Feed barley indicator price
Sydney, NSW
Week ended 29 March 2017

Feed wheat indicator price
General Purpose, Sydney, NSW
Week ended 29 March 2017

Milling wheat indicator price
ASW1, track quote, Port Adelaide, SA
Week ended 29 March 2017
3.5. Selected domestic livestock indicator prices

Eastern Young Cattle Indicator
Week ended 24 March 2017

Eastern States Trade Lamb Indicator
Week ended 23 March 2017

Mutton indicator price in Victoria
(18–24 kg fat score 2–3)
Week ended 24 March 2017

Pig indicator price Eastern Seaboard
(60.1–75 kg)
Week ended 10 March 2017
3.6. Movements in selected fruit and vegetable prices – week ended 25 March 2017

Weekly wholesale prices for blueberry, pineapple (smoothleaf), watermelon (seedless) & banana (cavendish)

Weekly wholesale prices for kiwifruit (hayward), strawberry, apple (royal gala) & avocado (hass)

Weekly wholesale prices for onion (brown), cauliflower, potato (white, brushed) & tomato (field gourmet)

Weekly wholesale prices for broccoli, lettuce (iceberg), pumpkin (grey bulk) & bean (round stringless)
4. Data attribution

Climate
Bureau of Meteorology

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

Canola
- Weekly Times: hardcopy

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