

# DAIRY SITUATION AND OUTLOOK

DECEMBER 2020





# SEVEN KEY DRIVERS

## OF THE AUSTRALIAN DAIRY INDUSTRY



### Global supply

🟡 Situation 🟠 Outlook

For the first time since 2014, milk production in the four largest dairy exporting regions has been increasing for more than four months in a row. Milk supply growth is especially strong in the US, and as local demand looks set to contract, this is predicted to see additional milk challenge the global market balance.

### Australian market

🟢 Situation 🟡 Outlook

Retail demand for dairy products remains elevated, with sales of milk and yellow spreads growing 4.6% and 8.7% respectively in the twelve months to November. The easing of COVID-19 restrictions has seen foodservice demand rebound as people enjoy new freedoms, however consumers have continued to focus on buying larger pack sizes, usually priced at a discount.



### Global demand

🟢 Situation 🟠 Outlook

Strong Chinese demand for dairy has continued to keep the market relatively well balanced and been the main driver of a 3.8% increase in global dairy trade in the 12 months to August. Milk powder demand has been particularly strong, with WMP exports growing 6.5%. As new lockdowns are implemented in the northern hemisphere and stimulus packages are phased out, demand is expected to come under pressure.

### Inputs

🟢 Situation 🟢 Outlook

The ongoing La Nina event has further improved soil moisture levels and replenished water storage sites this spring. Whilst wet conditions interrupted hay making, caused weather damage and delayed the grain harvest, the weather has further improved feed production outlooks for this season and seen input costs ease.



### Global economy

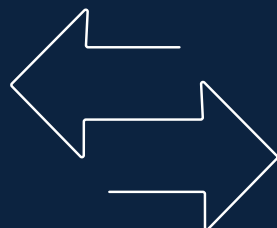
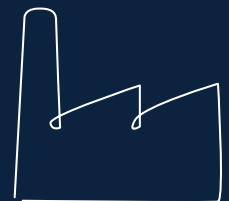
🟠 Situation 🟠 Outlook

The International Monetary Fund (IMF) forecasts that the global economy will contract 4.4% in 2020. Whilst this is somewhat better than previous estimates, the surge in COVID-19 infection rates in the northern hemisphere has slowed, and in some instances, reversed the economic recovery. The ongoing pandemic is likely to constrain any economic improvement for the foreseeable future.

### Australian production

🟢 Situation 🟡 Outlook

Milk production conditions have continued to improve over spring, however, the Australian milk pool has plateaued as a smaller national dairy herd and issues around labour availability have added production limitations this season. Dairy Australia expects milk production to track towards the lower end of the current 1% to 3% growth range for 2020/21.



### Exchange rates

🟠 Situation 🟡 Outlook

The \$US has continued to depreciate against the Australian dollar, as record low interest rates, comparatively weaker economic growth and concerns about a rising fiscal debt is weighing on the value of the \$US. Whilst the \$US also weakened against other major dairy exporters currencies, a stronger Chinese yuan is making dairy imports comparatively cheaper in China.

# EXECUTIVE SUMMARY

As the proverb says, 'make hay while the sun shines'. This spring, plentiful pasture growth, wet weather and warm days have resulted in a significant surge in feed production, taking the edge off hay and grain prices. Milk production conditions are generally favourable across the country and have improved over spring. Whilst milk volumes for the season to date are above prior season levels, growth has slowed down in recent months as a smaller national herd, a drop in farm numbers and labour challenges create tangible limitations. At the same time, the easing of COVID-19 restrictions has unleashed months of pent-up consumer demand and seen foodservice sales rebound.

The reopening of foodservice operations in Victoria, and relaxed capacity limits in other states, have seen Australians flock to restaurants and cafes. This is having a positive impact on dairy demand from non-grocery channels while at the same time, retail stores continue to report elevated sales. Dairy products, particularly cheese and drinking milk, have remained some of the key drivers behind this growth in demand.

**In the 12 months to November, sales of butter and milk increased 8.7% and 4.6% respectively<sup>1</sup>.**

Whilst ongoing strength in demand is encouraging, consumers are also leaning towards larger pack sizes, usually priced at a discount, and some premium lines have come under pressure. As consumers start to come down from the 'sugar high' created by the easing of restrictions, and income pressures from the broader economic recession take hold, price-focused purchasing may become more dominant.

With state borders set to reopen and restrictions easing, people have been quick to head out to enjoy the summer weather. Spring has so far been warmer than usual and the ongoing La Nina event has continued to drive wetter than average conditions in most regions. Favourable weather has seen water storage sites replenished and the cost of temporary irrigated water has decreased further.

Whilst the wet weather interrupted hay making in southern regions, there has been a significant amount of fodder produced this year. As pasture growth has been plentiful, demand for purchased hay remains subdued. As a result, prices have eased in most regions, and many growers have invested in additional undercover storage, as demand is not expected to pick up anytime soon. Grain prices have also decreased in all regions since the start of spring, as an above average crop is expected this season. The harvest in New South Wales (NSW) is forecast to be especially large, where timely winter rain provided a good start to the winter cropping season.

Given the increase in feed supply, easing of input costs and favourable weather, milk production conditions have further improved this spring. However, Australia's national milk production has plateaued, and year-on-year growth rates have come under pressure as a smaller national herd, fewer farm businesses, labour availability and business costs add production limitations. In October Australia's milk production decreased slightly, down 0.3%, with year-to-date numbers showing a 1.6% increase in the national milk pool.

Analysis of data from the Dairy Farm Monitor Project (DFMP) offers some detail around the lagged recovery often experienced. In short, it takes time to achieve optimal business efficiencies and free up resources to invest after consecutive challenging years. As insights from the DFMP demonstrate, investments on farm usually suffer during a drought or period of a low farmgate milk price. As a result, milk production growth often takes a back seat until debt reduction and reinvestment requirements have been met.

<sup>1</sup> Source: Nielsen Homescan based on a continuous panel of 10,000 households; excludes non-private dwellings and businesses, non-permanently occupied households and out-of-home/impulse purchasing. DAIRY AUSTRALIA calculation based in part on data reported by Nielsen through its Homescan Service for the dairy category for the 52-week period ending 01/11/2020, for the total Australian market, according to the Nielsen standard product hierarchy. Copyright (c) 2020, The Nielsen Company.

In light of a weaker than expected spring peak, Dairy Australia predicts milk production will end at the lower end of the forecast range of 1% to 3% growth this season. Milk production continues to increase in Tasmania and has picked up momentum in South Australia and western Victoria this season. In comparison, growth rates have stagnated in the other Victorian regions and slowed in NSW, as a smaller national dairy herd, and decrease in farm businesses from production constraints this season. Similarly, a large drop in Queensland's state dairy herd continues to see milk production contract, whilst dry weather in Western Australia has kept feed costs elevated and growth muted.

Globally, dairy commodity prices have appeared almost immune to the volatility brought on by COVID-19 and the contracting world economy so far this year. Relatively balanced supply and demand fundamentals have kept dairy commodity prices supported. Whilst milk supply growth is picking up momentum, demand from China has continued to underpin these values and Australian dairy exports to China remain steady. However, following the announcement of new lockdowns in Europe, this market balance is starting to come under serious pressure. Milkfat products have been the hardest hit, as foodservice outlets traditionally make up a large share of butter sales. Therefore, the closure of these channels has weighed on overall demand. Cheese, and especially mozzarella, prices have also come under pressure in light of a reduction in the United States (US) Government purchase programs. At the same time, Australian exporters are working through logistical challenges with containers being held up at ports, adding complications, delays and costs to exports.

As the economic pressures brought on by this pandemic are beginning to crystallise, global milk supply continues to grow. For the first time since 2014, milk production in the four largest dairy exporting regions has been increasing for more than four months in a row. Whilst global demand has so far efficiently soaked up the additional supply, production growth is especially strong in the US, up 2.3% in October. As the US dollar has consistently depreciated against other major currencies, US dairy exports have become relatively more price competitive in overseas markets. In Europe, milk production has also continued to grow, up 1.3% in September. The final Brexit negotiation remain a key focus, and as a 'hard Brexit' is looking increasingly possible, major exporters in Ireland are actively looking for new trade partners. This may further increase competition in some of Australia's major exporting regions. In New Zealand (NZ), milk production has increased, albeit some drier weather slowed growth rates in October, to 0.8% on a volume basis (0.3% on a milk solids basis). Following rain in the middle of November, production is expected to ramp up with analysts predicting 1.2% growth this season. This additional milk is likely to challenge the global market balance in the months ahead.



The global dairy market has sailed through 2020 without too many bumps and bruises, but significant downside risks remain as the COVID-19 pandemic rages. Amidst this, Australian farmers face a strange set of market signals this season, including the effective price floor created by early competition for milk, and likely static farmgate market until June 2021.

**With Australian consumers set to eat and drink their way through a more liberated festive season, domestic demand is likely to provide a valuable hedge in the next few months.**

Many farmers are still dealing with past and emergent challenges, but with easing input costs and increased home grown feed production, should have an opportunity to recover some lost ground. For processors and those downstream, the catch is the longer than expected supply response. Nonetheless, with weather forecasts remaining mostly sunny, there may still be an opportunity to make more hay before the end of this season.





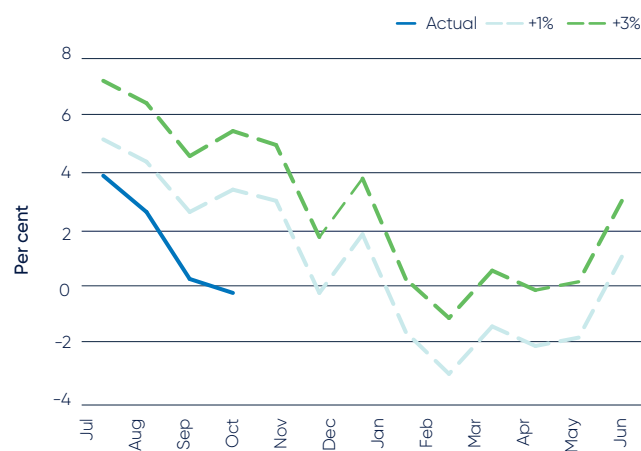
# MILK PRODUCTION

## HEADWINDS ABATE BUT HANDICAPS REMAIN

Year-on-year growth in Australia's milk production has faltered through the 2020/21 spring peak, following a period of strong recovery in early 2020. Although Dairy Australia's production forecast for this season has been at the conservative end of market expectations, recent developments warrant a review.

Of particular note is the timing of the slowdown in growth. September and October were weak months during the 2019/20 season, with widespread continuation of weather challenges and low farmer confidence – albeit increasingly mitigated by relatively high farmgate prices. This situation extended through to January, after which steady growth was recorded as seasonal conditions improved dramatically. With strong monthly totals from February 2020 onwards, a slowdown in year-on-year growth from February 2021 was expected; and factored into current forecasts. What has been observed in September and October 2020 is an earlier slowdown, against relatively weak prior-season numbers.

**Figure 1** YOY changes in milk production: Actual vs forecast band



Source: Dairy Australia

### So what's going on?

Farmgate milk prices for 2020/21 are well below last season's record level for most farmers, though competition for milk saw several early upward revisions as the season commenced, despite ongoing global uncertainty. The preclusion of downward adjustments for the balance of the season has guaranteed an effective price floor until June 2021. At the same time, costs of key inputs continue to be reduced by favourable weather.

In addition to good pasture growth, timely rainfall has led to an above average Australian winter grain crop for this season (pending untimely rainfall during harvest). With ABARES predicting a significant (+64%) increase compared to the poor harvest last year, grain prices have eased across all regions since June. Wheat prices are now trading below the five year average in all regions except for Western Australia and Tasmania, where the cost of grain remains elevated. A sustained high grain price may somewhat reduce feeding rates in these states this season.

With hay making well underway in most regions, fodder industry contacts are comparing this season to the record production year of 2016/17. As with the grain crop, late rain has begun to create some challenges and weather damaged hay will also be common. Overall, however, the increase in fodder production has seen prices ease in most regions, except for in WA, Tasmania and the Bega Valley where prices remain historically high. In WA, fodder production is expected to be below average this year. Overall, demand for traded fodder is likely to remain weaker than average, due to the elevated level of hay and silage production on most dairy farms.

Wetter weather and improved soil moisture have also seen irrigation water prices ease. Temporary water prices in northern Victorian and southern New South Wales are now trading below \$200/ML, less than half last year's level. This is critical to the health of dairy businesses in the MurrayDairy region, which has continued to see high levels of farm exits.

Farm exits are a significant challenge in Victoria, where preliminary data suggests around 11% of dairy farmers chose not to renew their licence for the 2020/21 season. This is a significant increase compared to the long term trend (4%), and higher than the rate of exits in 2018/19. Whilst national data is not yet available, anecdotal reports suggest elevated figures are likely to be mirrored in other regions. Exits can represent both consolidations and the removal of productive capacity, however, given these exit levels, there is undoubtedly an upper limit on milk production growth for this and future seasons.

A key challenge for many farmers this season is the availability of labour. With closed national borders, the pool of international workers, both skilled and casual 'working' holiday staff, has dried up. Internal border closures have added further challenges and limited many farm businesses staffing options. This is posing a significant constraint to milk production, by adding to the incentive for affected farmers to adopt more conservative stocking rates.

From a forecasting perspective, the milk prices, input costs, seasonal conditions, farm numbers and labour availability discussed above ultimately boil down to two key measures: dairy cow numbers, and per cow milk production.

Our estimates suggest Australia's national dairy herd shrank 8% in 2019/20 during peak production months, driven by high culling rates at the first half of the season. This varies by state, with higher culling rates reported in Queensland and Victoria. During the second half, culling eased as more favourable weather and a high milk price prompted farmers to hold onto cows. Data suggests that culling in the last quarter of the year dropped more than 30% compared to the same time last year and there is anecdotal evidence that some farmers have started to rebuild herds following years of destocking. However, for obvious biological reasons the severe reduction the national herd during 2019/20 remains a significant limitation for at least the short term. Our baseline forecast assumes Australia's national dairy herd will continue to stabilise in 2020/21 but still end the season down 0.6% compared to last, largely as a result of ongoing farm exits and associated culling.

A small increase in per-cow yields in line with the long-term average is expected. This varies regionally however, with a boost anticipated in some areas due to lower feed costs boosting margins and hence feeding decisions, whilst others will be flat due to lower quality feed, persistent high grain costs and/or financial constraints limiting options.

With the global dairy market outlook remaining bearish, an abundance of high-quality grain and hay at attractive prices, plus a continuation of good pasture growth remain the most likely drivers of a lift in milk production this season. However, damaged balance sheets, exiting farms and labour shortages are weighing on cow numbers, and the impact of these constraints is unlikely to be reversed in the immediate term. Hence, the weaker than expected spring peak is likely to herald a fairly measured full season outcome. Dairy Australia's view maintains an opportunity for growth, but recognises the spring milk flow data as an indication of the significance of the ongoing constraints. We expect milk production will track towards the lower end of our forecast range of 1% to 3% growth (8.87 to 9.04 billion litres) this season.

#### SO WHAT?

While a return to better weather and healthier margins has been welcome news for farmers, the flow on impact of recovering milk production has reignited the interest in Australia as a supplier of choice for key dairy buyers. With ongoing constraints reasserting themselves in the form of more muted growth through spring, this recovery will again be questioned. If farmer profitability can be preserved, many limitations can be overcome with time.





# DAIRY FARM MONITOR PROJECT

## WHAT IS THE DFMP TELLING US ABOUT THE REASONS FOR SLOW MILK RECOVERY?

### 2019/20 Summarised

In 2019/20, dairy farmers' financial performance, as measured and reported by the Dairy Farm Monitor Project (DFMP), improved considerably relative to the year prior. The severe drought increased the cost of production by reducing the availability of feed and negatively impacted milk flows in most parts of the country during the first half of the season. However, a strong autumn break brought some much-needed relief and helped improve operating conditions in many regions. Favourable seasonal conditions helped to begin a recovery in Australia's national milk pool and were reflected in the DFMP results, with farm profit in every region<sup>2</sup> improving on the previous season.

### The Hangover

Whilst the weather has been generally favourable so far this season, regional milk production will often remain stagnant for a period of time after widespread low farm profitability. This is due to several factors, the most prevalent being a decrease in farm numbers, smaller regional herd sizes and costs becoming embedded in farming systems.

Out of these factors, higher embedded costs is most relevant for an individual farmer, being under more direct control than others mentioned. Higher embedded costs may come after a period of drought, or consecutive years of cost cutting in the business due to unfavourable market conditions.

In 2016, there were numerous media articles focusing on the necessity of 'cost cutting' for dairy farms to survive the farmgate milk price drop. Five years later, some regions are only just emerging from a widespread and severe drought that shortly followed this price event.

Farmers are generally effective at cutting costs if necessary, to deal with the volatile nature of both climate and the markets they operate in. Farmers can cut costs during challenging years through reducing repairs and maintenance, lowering reinvestment in the business while cash flow is restricted, reducing stocking rate and increasing imputed labour.

While all the above methods can be viable short-term options in a cash constrained environment, advice

to farmers should bear in mind that none of them are sustainable over consecutive years. In fact, cutting costs in these areas over numerous years often result in longer term upward pressure to businesses cost of production in subsequent years. Whilst necessary in a time of poor cashflow, this will result in a 'lag' period before farmers realise the full benefit of better operating conditions.

This lag period can be reflected in national and regional milk production, as it can cause a delayed response on farm to either an increase in milk price or improvement in climatic operating conditions.

Therefore, there may be cause to shift the conversation away from 'cost cutting' during challenging years to 'cost management', and the long-term adjustment to a farmers operating system. The idea behind this is that improvements made in profitable years will maximise a farmer's margin to a point they can reduce the need to 'cut costs' in poor years, and allow them to exploit favourable market and/or climate conditions much earlier.

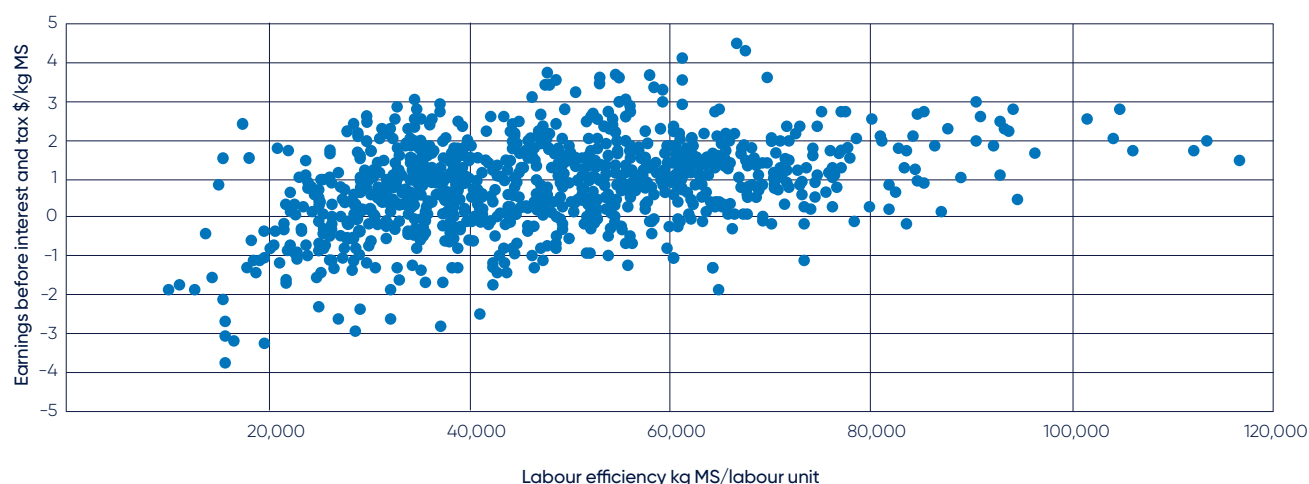
The conversation around costs should take into consideration the long-term structural increase in farm input costs. Unavoidable increases to costs per unit for inputs such as labour, power, rates and feed form a constant pressure on farms to become more efficient over time.

**Many high performing farmers in the DFMP point to reinvestment coupled with a constant focus on improvements across all areas of their business as a crucial way to reduce costs over time whilst improving profit margins.**

This can be clearly demonstrated in the relationship of labour efficiency and Earnings Before Interest and Tax (EBIT). Labour (paid plus imputed) costs make up around 25% of the average Australian dairy farm's cost of production (COP), a significant portion in any year.

<sup>2</sup> This contains preliminary profit estimates for South Australia and Tasmania

**Figure 2** Labour Efficiency vs Earnings before interest and tax (Australian DFMP participants, 2015/16 – 2018/19)



Source: Dairy Farm Monitor Project

High labour efficiency does not necessarily result in a farmer being more profitable, but it does significantly reduce their risk, as the greater margin will allow them to reduce the exposure to market or climate volatility. The link between labour efficiency and profitable dairy farm systems demonstrate the impact that short term cost cutting can have on long term profitability if it is to the detriment of farm efficiency.

### Attitude to risk

The growth of an individual's business can also be affected by another variable, being their own appetite for risk. During a particularly difficult period of time, a farmer's long-term strategy may change. The risk appetite of an individual is highly dependent on the person in question and will often change over their lifetime. The level of debt a farmer is comfortable carrying may decrease after a poor run of seasons, to reduce their financial risk for future volatility.

Many farmers will pay down debt whenever possible, and this will sometimes come before investing in strategic growth.

### SO WHAT?

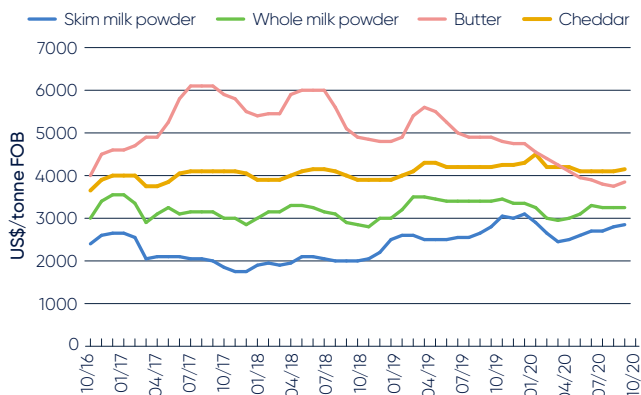
Despite favourable weather and a relatively strong farmgate milk price, national milk production can lag, especially if these improvements come after a sustained period of challenging operating conditions. If investments on farm has suffered during a drought, it generally takes time to rediscover business efficiencies, and free up resources to invest. Many farmers in regions that have been affected by drought will currently be weighing up options, which will be a fine balance between reinvestment in their business, debt reduction to reduce risk, and production growth. Growth may take a back seat until debt reduction and reinvestment requirements have been met.



# MARKET DASHBOARD

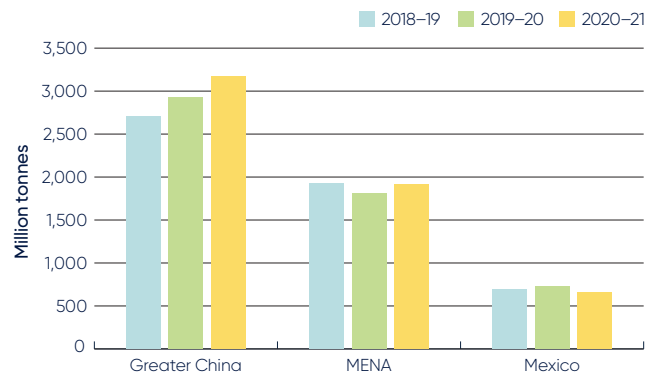
## Commodity prices

Figure A1 Key dairy commodity price indicators



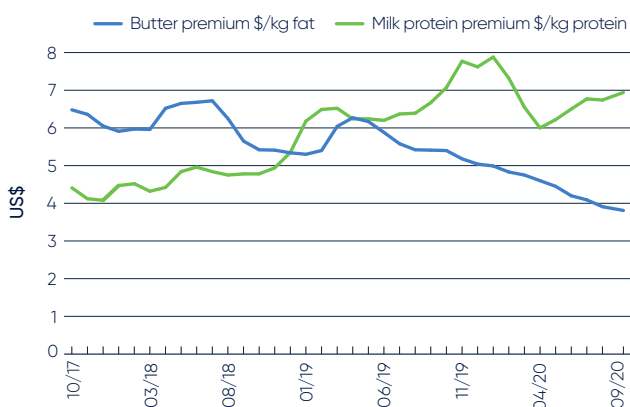
Source: Dairy Australia

Figure A2 Exports to key markets



Source: Dairy Australia, TDM. Data represents 12-months to August 2020

Figure A3 Dairy fat and protein – pricing relative to substitutes



Source: Dairy Australia, Oil World

## Australian market

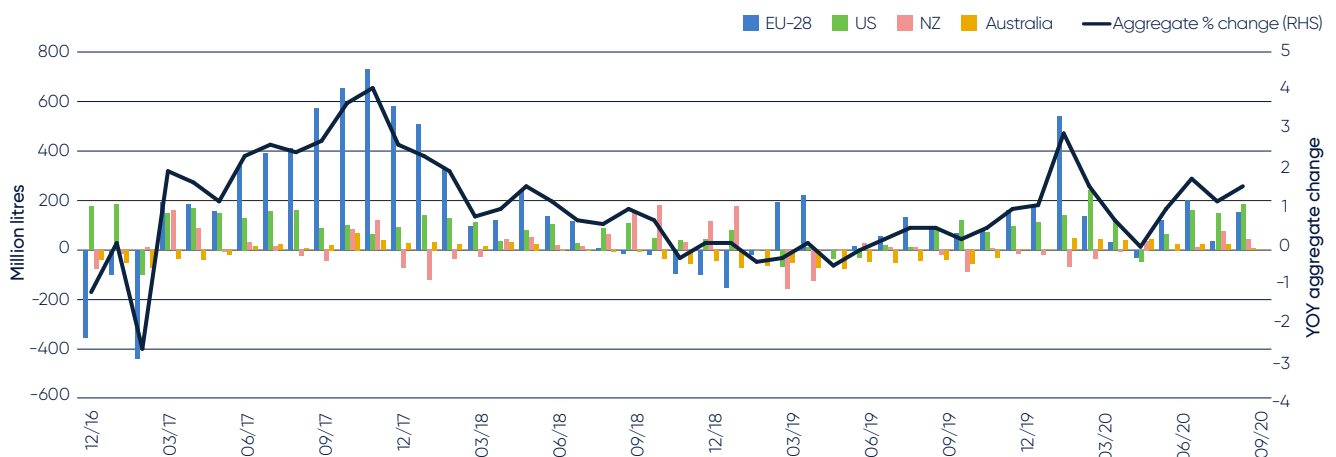
Figure A4 Australian retail sales

	Take home volume	YoY growth	Take home value \$m	YoY growth
<b>Milk</b> As of 01/11/20	1,538m. L	↑ 4.6%	2,657	↑ 13.0%
<b>Cheese</b> As of 27/06/20	163kt	↑ 6.4%	2,275	↑ 14.1%
<b>Yellow spreads</b> As of 01/11/20	96kt	↑ 8.7%	826.1	↑ 13.0%
<b>Yoghurts</b> As of 27/06/20	173kt	↑ 5.3%	1,150	↑ 7.5%

Source: Nielsen Homescan based on a continuous panel of 10,000 households; excludes non-private dwellings and businesses, non-permanently occupied households and out-of-home/impulse purchasing. DAIRY AUSTRALIA calculation based in part on data reported by Nielsen through its Homescan Service for the dairy category for the 52-week period ending 27/06/2020 and 01/11/2020, for the total Australian market, according to the Nielsen standard product hierarchy. Copyright (c) 2020, The Nielsen Company.

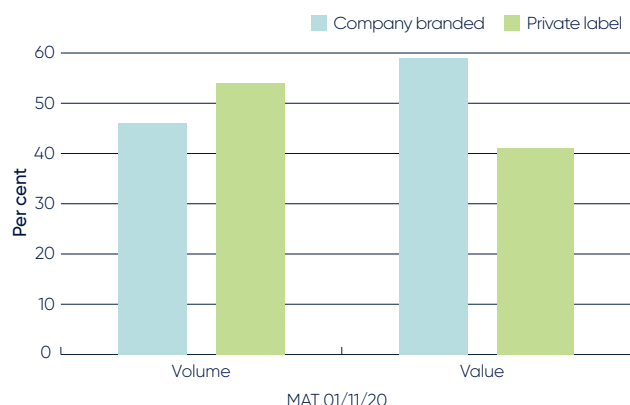
## Global supply and demand

Figure A5 Milk production year-on-year changes



Source: USDA, DCANZ, Eurostat, Dairy Australia

**Figure A6** Retail sales – private label share



Source: Nielsen Homescan based on a continuous panel of 10,000 households; excludes non-private dwellings & businesses, non-permanently occupied households & out-of-home/impulse purchasing. DAIRY AUSTRALIA calculation based in part on data reported by Nielsen through its Homescan Service for the dairy category for the 52-week period ending 01/11/2020, for the total Australian market, according to the Nielsen standard product hierarchy. Copyright (c) 2020, The Nielsen Company.

## Inputs

Hay and grain					
Australian dairy regions			%		%
1 South-west WA	\$350	↑	3	\$317	↑ 16
2 Central districts SA	\$225	←	0	\$295	↑ 2
3 South-east SA	\$235	↓	-24	\$298	↓ -5
4 South-west Victoria	\$215	↓	-26	\$278	↓ -37
5 Goulburn/Murray Valley	\$205	↓	-34	\$283	↓ -23
6 Gippsland*	\$140	↓	-72	\$312	↓ -16
7 North-west Tasmania	\$250	↑	4	\$408	↓ -11
8 Bega Valley	\$375	↓	-3	\$303	↓ -27
9 Central west NSW	\$307	↓	-23	\$243	↓ -34
10 North coast NSW	\$298	↓	-32	\$257	↓ -41
11 Darling Downs	\$310	↓	-27	\$310	↓ -26
12 Atherton Tablelands*	\$290	↓	-33	\$350	↓ -20



Shedded cereal hay: mid-range product without weather damage, of good quality and colour



The relevant stockfeed wheat available in a region (ASW, AGP, SFW1 or FED1)

Hay quoted is sourced and delivered locally, GST exclusive unless stated otherwise. Prices are estimates in \$/tonne at October 2020, compared to equivalent date October 2019.

\*Note that all regions other than Atherton Tablelands and Gippsland is cereal hay. \*Atherton Tablelands and Gippsland is pasture hay.

Source: Australian Fodder Industry Association (AFIA), Profarmer



## Fertiliser

Urea (granular Black Sea)	DAP (US Gulf)	MOP (granular Vancouver)
245 US\$/t	357 US\$/t	203 US\$/t
↑ +3% LY	↑ +29% LY	↓ -24% LY
↑ +8% 5Y	↑ +8% 5Y	↓ -14% 5Y

Price is October 2020 average, compared to the 2019 October average (LY) and 5-year (5Y) October average.

Source: World Bank



## Cows

### Cull cows

568 c/kg	81,255 head
↑ +30% LY	↓ -18% LY
↑ +32% 5Y	← 0% 5Y

### Dairy cattle exports

92,402 head	↓ -10% LY
	↑ +25% 5Y

Price is October 2020 average, compared to October last year (LY) and 5-year (5Y) average. Number of head is last 12 months (cull cows to October 2020, dairy cattle exports to September 2020) compared to year earlier (LY) and 5-year (5Y) average.

Due to the ongoing impact of COVID-19 there has been changes to the reporting mechanism of saleyard cattle which may account for some variation in reported figures

Source: NLRS, ABS



## Water

### Northern Victoria

188 \$/ML
↓ -74% LY
↓ -33% 5Y

2,255,650 ML

↑ +19% LY
↑ +9% 5Y

### Murray Irrigation System

163 \$/ML
↓ -74% LY
↓ -11% 5Y

48,193 ML

↓ -24% LY
↓ -62% 5Y

### Monthly average(12 months)

385 \$/ML	299 \$/ML
187,971	4,016

Price of water traded is October average compared to October last year (LY) and 5-year (5Y) average. Volume of water is 12 month total, to October 2020, and compared to same period last year (LY) and last 5 year (5Y) average. Monthly average is the average price and volume over the past 12 months to October.

Source: Victorian Water Register, Murray Irrigation Ltd

For ongoing information and updates on farm inputs, readers can subscribe to Dairy Australia's weekly Hay and Grain Reports, or the monthly Production Inputs Monitor, found on the Dairy Australia website [dairyaustralia.com.au/hayandgrain](http://dairyaustralia.com.au/hayandgrain) [dairyaustralia.com.au/industry-statistics/industry-reports](http://dairyaustralia.com.au/industry-statistics/industry-reports)