

# Seven key drivers

of the Australian Dairy Industry



### Global supply

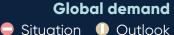
Milk production has increased across several key exporting regions, largely due to a mild winter in the northern hemisphere. Increased exportable product, particularly out of Europe and the United States, has led to a significant commodity price downturn.

### **Australian market**

🕀 Situation 🛑 Outlook



While the total value sold has surged across the four major dairy categories, consumers are seeking ways to lessen financial pain. For many this has involved shopping between several different retailers to find the best deals on the shelves. Private label products continue to be prioritised, with product loyalty declining.



Dairy demand continues to mellow around the world, as many find themselves battling against inflation and slowed economic growth. With importing activity increasingly financially focused, buyers continue to purchase 'as needed'. Additionally, importing from Chinese buyers remains quiet; after easing COVID-19 control measures.

### Inputs

Situation Outlook

Post-harvest, a greater supply of feed grain has become available and yet, fodder prices have risen significantly. Wet weather continues to improve water availability, with temporary water prices sitting below average in both the northern Victorian and Murray Irrigation systems. Fertiliser prices are beginning to ease but remain above long-term averages.



### Global economy



Inflation and the continuing war in Ukraine remain the key hindrances for economic growth. Whilst the International Monetary Fund (IMF) suggests global inflation will fall in 2023, it will remain significantly above pre-pandemic levels.

### **Australian production**



In light of high land values, strong beef prices, labour challenges, high input costs and the significant impact of recent flood events, Dairy Australia has revised its production forecast for the 2022/23 season to a 4% to 6% decline.



O



### **Exchange rates**



The Australian dollar (A\$) experienced some volatility in the opening months of 2023, averaging A\$/US\$0.69. Improvement in the Chinese economy is likely to underpin further appreciation, however, this could slow as the Reserve Bank of Australia tempers further interest rate rises.





## **Executive summary**

Amid a global environment of change, Australia's dairy industry is supported by unique local circumstances.

Retail prices for dairy in Australia continue to grow, with significant value being injected back into the domestic supply chain. Globally commodity values have retreated and, as most countries are on the brink of recession, international demand for dairy has fallen. As milk production grows in many key exporting regions, the Australian milk pool is contracting. However, competitive pressure among domestic processors will continue to support local farmgate milk prices.

Inflation has eroded consumer demand globally, and dairy ingredient buyers are increasingly looking for the cheapest product. Exchange rate volatility is a challenge for both importers and exporters. Consumers are more careful about how they spend their money. On the positive side, shipping congestion has eased and freight costs have fallen.

Global dairy buyers seem keen to wait until prices are deemed low enough, and purchase on an 'as needs' basis. This is particularly prevalent in Southeast Asia and other price sensitive markets. Purchasing interest has remained quiet in China, and while domestic milk production remains strong, it will take time to work through product stockpiles as consumption progressively rebounds.

Milk production in several key exporting regions is increasing, after remaining stagnant for some time, leaving them exposed as demand falls.

A mild northern hemisphere winter has been a key contributor to this shift, particularly in parts of Europe and the United States (US).

Despite total milk production for these regions in 2022 being below, or on par with the previous calendar year, changes to domestic and international dairy consumption have boosted exportable surpluses. Further dairy production growth is likely through spring,

notwithstanding continued challenges such as labour shortages, high input costs, and medium-term pressures including the impacts of carbon emission policies in Europe. In the US, snowpacks are at record levels and likely to improve water availability in the warmer months as they melt.

There have been signs of rebounding production in New Zealand, but product availability remains tight. After wet conditions in the first half of the season, warmer summer temperatures and excess moisture have supported pasture growth. Challenges include unseasonable rainfall, floods, a cyclone across the North Island and drier conditions in the south. However, local analysts suggest some production growth is likely in the first few months of this year, compared with lower production last season.

Increased production out of these exporting regions has created significant competitive pressure, resulting in a commodity price correction.

In response, farmgate milk prices have also fallen in a number of countries. For Australia however, the commodity downfall has been relatively marginal. There has been late season farmgate milk price increases as processors scramble to secure more milk. Simply put, Australian dairy exports are extracting a larger-thanusual premium on the global stage, held firm by limited product availability.

A growing price disparity between Australian exports and product from other countries is not infinitely sustainable. However, importers will currently pay such premiums for the Australian product as they rely on it to adhere to manufacturing specifications or provenance marketing.

Ultimately, the downward pressure on dairy commodity prices, to which the majority of Australian milk is exposed, will flow through to farmgate milk prices moving into the 2023/24 season – especially for the southern, more export focused states. However, this impact will be moderated by continuing constraints on milk availability and competition at the farmgate.

Dairy Australia's current forecast suggests the Australian milk pool will contract between 4% to 6% this season, impacted by the ongoing worker shortages, competition for land and resources, as well as more immediate factors such as a wet spring and significant flooding in many regions.

The floods were also the catalyst for a surge in fodder prices. With grain offering more attractive returns, Australia's hay supply leading into the harvest period was already under strain. As untimely rain impacted hay-making operations, most bales produced were weather damaged. Consequently, good quality and protein hay varieties remain scarce and in high demand, particularly as autumn calving begins in some regions.

Demand for feed byproducts has also risen but prices for some types have eased in line with grain values, due to impressive yields this harvest, particularly in Western Australia. However, international demand for Australian grain remains strong, regardless of the substantial volumes of downgraded grain produced this season. Fertiliser prices have eased, especially for urea, as natural gas prices fall in the northern hemisphere and importing demand softens. Despite cost reductions in both grain and fertiliser, prices are still above long-term averages. With little sign of tensions in Ukraine easing anytime soon, this likely to remain the case in the short term.

Increased on-farm and manufacturing costs continue to flow through to the supermarket shelves, and interest rate rises squeeze the savings and budgets of consumers.

Recent data from NielsenIQ indicates more Australian households (33.8%) are shopping between four retailers, as they look for cheaper options. Opting for private label (PL) products continues as a key cost saving strategy. While the volume of milk sold has dropped slightly by 1.5%, the volume of PL products sold rose 1.1% in the 52 weeks to 29 January 2023, further increasing the portion sold compared to branded milk. Volumes of cheese and butter also falling, but yoghurt continues to buck the trend, growing 1.71%. Despite higher retail prices and financial pressures facing consumers, dairy remains a staple product and trust in the dairy industry is at an all-time high at 76%<sup>2</sup>.

The lack of milk production growth in Australia has helped insulate the industry from some of the pressures emerging overseas. However, global economic and geopolitical developments, and a growing surplus of dairy on international markets will inevitably exert influence. Nevertheless, the current domestic operating environment is underpinned by high farmgate milk prices, strong retail and export commodity values for Australian dairy.

<sup>1</sup> NielsenIQ 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 NielsenIQ through its Homescan Service for the milk, cheese, yoghurt and yellow spreads categories for the 52-week period ending 29/01/2023, for the total Australia market, according to the NielsenIQ standard product hierarchy. Copyright © 2023, Nielsen Consumer LLC.

<sup>2</sup> Dairy Australia Trust Tracker, 2022



### Milk flows on the go slow

The overall size and direction of Australia's milk pool has become a consistently more mainstream topic of conversation over the past few months. Speculation and divination around our national milk output are not new.

Twenty years ago, the disastrous 2002/03 drought shook the industry abruptly off its all-time high of 11.2 billion litres in the wake of deregulation. Ten years ago, the Horizon 2020 project mapped out four production scenarios ranging from 'cohesion' to 'implosion'. Shortly after that, came the infamous suggestion from a commercial player that Australia needed to grow its milk pool to 15 billion litres 'quickly'. More recently, the Australian Dairy Plan committed to an ambitious set of goals aimed at creating a more profitable, confident, and united industry in the expectation that growth would naturally follow.

However, milk production is drifting downwards, adding only 0.6% in 2020/21, followed by a contraction of 3.4% in 2021/22, and is forecast to decrease by a further 4 to 6% in 2022/23. Compared with 2002/03, the weather has been relatively benign for the most part, and milk prices are at record levels – having tracked above the 10-year (even 5-year) average each of the past three years.

Despite intense and volatile cost pressures, the current season commenced with farmers in a strong position financially. Farmer confidence, as measured by the National Dairy Farmer Survey (NDFS) was firm, with the share of farmers feeling positive about the industry reaching 68% in 2022. Additionally, 82% of farmers expressed confidence about their own business.

Nevertheless, there have certainly been headwinds for milk production. Competition for land, high beef prices, a shortage of labour and ongoing risk aversion remain barriers between confidence and growth. In particular, staffing constraints are holding back potential expansion plans across the country. The inability to secure, or in some cases retain staff, is contributing to exits or reductions in herd size; fatigued farmers are taking advantage of good margins to run a smaller herd (thus lowering workload) or realise the rapid gains in asset values after reducing debt. This dynamic is not expected to change in the short term.

Based on the balance of these factors, Dairy Australia initially forecast a steady milk pool overall in 2022/23, with a slow start offset by a later recovery.



Figure 1 Milk production over recent seasons

Source: Dairy manufacturers, Dairy Australia

Since then, spring has generated some additional, immediate challenges for many farmers. Wet conditions across all dairy regions, except parts of southwest Western Australia (WA), delayed fertiliser applications, silage cuts, and amplified all the usual issues associated with managing dairy herds in muddy conditions. These include pasture damage, mastitis and lameness, among others. Many farmers wound up fatigued and facing a strong incentive (if not necessity) to operate at conservative stocking rates, reducing herd numbers to take pressure off pastures and staff.

The impact of spring flooding in New South Wales (NSW), northern Victoria and Tasmania was particularly acute, especially for farmers directly in the water's path. With the disruption occurring at the peak period of the season and following extended wet conditions that precluded silage cuts for many farmers, the productive impact is unlikely to be reversed between now and June.

Equally significantly, the floods (on top of the extended wet period) caused a range of issues that affected a much wider set of farmers. This includes the damage to grain and fodder crops, which added a significant source of domestic market pressure to input costs that were already at very high levels due to global market influences.

Flooding of built-up areas also exacerbated the shortage of housing in many regional areas, a key constraint to alleviating dairy workforce shortages. In the immediate term, floods disrupted the ability of many staff to access the farm at which they are employed, exacerbating the workload and fatigue of farmers through the crisis period.

Although the wet conditions caused substantial challenges, there are potential positive factors that may be supportive for milk production over the balance of the season (and into the next). As rainfall and soil moisture levels have gradually tapered over the summer months, many farms experienced an extended growing season, allowing the opportunity to partly 'catch up' homegrown feed production.

Additionally, irrigation storages are full, and drawdown started very late in the season. For farmers in northern Tasmania and the Macalister Irrigation District of Gippsland, ample irrigation water was assured, regardless of rainfall over the balance of the season. For farmers in the Murray Dairy region, allocations and irrigation water pricing are virtually guaranteed to be non-issues this season, next season, and quite likely the following one.

In a region where these are critical limitations to growth, short-medium term confidence around water is valuable.

Despite the positives, the 2022/23 milk production outlook has become more negative than it was in June. The weight of pre-existing pressures and acute challenges created by the wet spring, led to Dairy Australia's recent forecast revision from 0% to a contraction of between 4% and 6%. This implies a season total of between 8.0 and 8.2 billion litres.

It's noteworthy that milk production recovered sharply from November to December – a decrease of 9.7% giving way to a more modest -6.5% year on year (YoY) change. Whilst still negative, this was largely a return to the pre-flooding trend, suggesting farmers, processors and the wider industry responded well to the immediate challenges, limiting the damage in very difficult circumstances. January production represented a significantly smaller year on year reduction, but this was largely due to a weak comparable month in January 2022.

The challenges of staffing constraints, competition for land, high beef prices, succession, and efficiently pricing and managing risk are more difficult to overcome. These are likely to keep milk production growth subdued into the medium term, and will remain the topic of much industry discussion regardless of weather conditions.

### SO WHAT?

Australia's milk pool continues to drift downwards, but not for a lack of discussion about the topic. This season, wet conditions and flooding had severe impacts on many farmers, who face a substantial recovery period. Decreases in milk production are only partly attributable to these seasonal challenges however, with medium term drivers (in many cases exacerbated by the floods) remaining the underlying drivers. Subdued rates of growth can be expected to continue until pressures around labour, land, market signals and succession begin to be alleviated.



### Fodder and the floods

The flood events of last year brought a great deal of both uncertainty and anticipation to the fodder market. Prices rose significantly in January for most hay types and in most regions, bringing an end to the two-year run of stable pricing.

This period also saw higher than usual demand for purchased feed, as many farmers were unable to produce homegrown feed to a standard or quantity they were expecting. Now with supply shortages well established, prices have begun to stabilise, and each region has their own impacts to grapple with.

Various regions across Queensland (QLD) have faced heavy rainfall and repeated flooding throughout the season. Wet conditions significantly delayed sowing programs and reduced the expected hay volumes planted, creating expectations of shortages prior to the tail end of the year. Whilst this summer, local demand is slow, recent heavy rainfall (particularly in southern QLD) is tipped to bring more into the market.

Across the dairying regions of NSW, limited hay and silage production is still occurring when weather allows, however, concerns remain around quality. At the same time, improved water availability has helped keep pastures growing under irrigation over the summer months, suppressing demand for fodder. For the Bega Valley, this is alongside good on-farm stocks of silage.

This is a similar story across Victoria, where relatively favourable conditions are supporting pasture growth under irrigation, alongside continued hay and silage production. Demand for purchased feed has been somewhat mitigated in recent weeks by summer forage crops now coming off, reasonable on-farm hay stores and supportive weather for both lucerne and cereal hay cutting and baling. Despite this, across Victoria, average cereal hay prices are 56% above January of last year.

In southeast and central South Australia (SA), though cereal hay is being made post grain harvest, both regions have faced the most markable price increases, sitting 71% and 63% above January last year, respectively. Additionally, some hay crops on irrigation are also being baled as silage, filling any shorter-term fodder gaps.

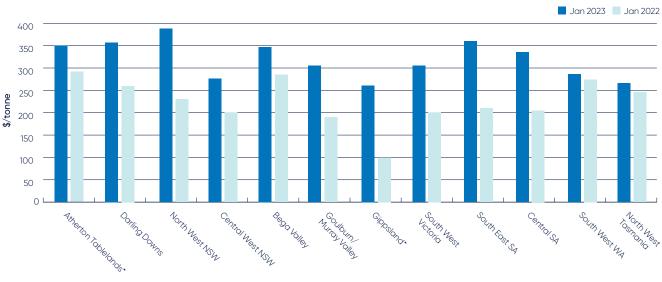


Figure 2 Cereal hay prices by region

Source: Dairy Australia, Australian Fodder Industry Association (AFIA).
\*Atherton Tablelands and Gippsland are pasture hay.

In comparison to other areas along the east coast, northwest Tasmania has felt minimal impacts of wet weather within local fodder markets. Many farmers in the region have been able to produce homegrown feed as expected, reducing reliance on purchased feed markets. This is in addition to good rainfall continuing to support pasture growth over the last few months. It's a similar story in southwest WA, who have also had an average hay production season on-top of a bumper grain harvest. In these regions, cereal hay prices are only 8% and 4% above last year in northwest Tasmania and southwest WA respectively.

Slow but steady hay production and good pasture growth have helped to mitigate demand for purchased fodder in recent weeks, but it is no surprise that prices are sitting at significantly higher levels than before the flood events and resultant supply pressure.

Many farmers have used the summer months to assess short to medium term requirements against expected conditions over autumn and into winter. This is all contributing to steadying demand and more stable prices.

In light of the altered fodder outlook caused by the flood events that occurred late last year across eastern Australia, Dairy Australia commissioned the Australian Fodder Industry Association (AFIA) to produce a Fodder Insights Report (Spring-Summer 2022) to provide a detailed analysis of the current situation and the outlook for the coming months.

Access the full report.



## Global fundamentals

### Fundamentals drive commodity divide

Despite weathering an unpredictable and at times, bleak last couple of years, dairy markets look set to be tested again during a time of low economic growth.

Many around the world are beginning to feel the squeeze of inflation and the looming threat of a recession. The current global environment is driving changes to dairy purchasing, with consumers starting to look at mitigating costs where possible. At the same time, global milk production is now growing, generating an increase in the amount of product available for export. These pressures have created a challenging environment to operate in and will likely define dairy markets over the balance of 2023.

Inflation and suppressed consumer spending are beginning to dominate demand for dairy around the world. A result of low economic growth, importing activity has started to reflect a more 'as needed' approach to purchasing, as consumers have started to change the way they spend their money. The optimism associated with China removing strict COVID-19 control measures was abruptly curtailed by stockpiled product and strong local milk production, which have conferred no real need to import product. Expectations persist of a return to much more vibrant Chinese buying later this year, as the country's economic recovery continues and domestic stockpiles are utilised.

Alongside this quieter demand, is both a rebound in milk production across the United States (US) and Europe and more product becoming available for export as a result of softer domestic markets. Building on growth recorded over several months, milk production out of both the US and Europe increased 0.8% and 1% YoY, respectively, in December. Recent production growth can be largely attributed to mild conditions over the winter.

After milk production in New Zealand (NZ) lagged in the first half of the season, January figures showed a YoY increase of 1.9%. This has largely been a result of strong pasture growth and improved feed availability in some regions. Whilst local analysts tip more growth is likely to be reported in February, there are still some longer-term constraints on milk production (such as labour, high input costs and climate emissions policies), not to mention the damages caused by cyclone Gabrielle. As such, NZ milk production remains likely to end the season down roughly 2%. Recent production growth out of the US, Europe, and NZ, coupled with quiet demand, has been a key driver in the downturn of international commodity prices in recent months.

Figure 3 Global indicative skim milk powder export prices



Source: Dairy Australia, GDT, AMI, USDA, CME group

Back home, and in contrast to other exporting regions, Australian production has been falling. In December, milk production was 6.5% below that of the previous year – partly a result of repeated flood events across the country. Continued farm exits, reductions in herd size, labour availability and competitive beef prices all continue to weigh on production over the longer-term.

As a consequence of this, and an increasingly competitive milk pool, limited product availability for Australian dairy commodities, is keeping our prices at a premium compared to product of other origins.

While this is currently being supported by a reliance on our product and Australian exporters being well sold ahead, Australian commodity prices are still facing some downward pressure. In some cases, this is driving the re-prioritisation of milk into the domestic market due to firmer pricing. Although this is a longer-term legacy of a shrinking milk pool and growing population, in the current market, this shift is being driven by returns.

Many Australian processors and exporters are under pressure in the current market due to high farmgate milk prices. Unlike competing exporting regions where milk prices can rise and fall alongside commodity movements, Australian minimum prices remain set for the entirety of the season.

So, while Australian dairy commodities are still weathering the impacts of a global market at the mercy of low economic growth, there are still some supportive forces at play for the moment. With a robust domestic market there to help weather the storm, the opportunity to capitalise on firm domestic pricing is helping to mitigate the suppressive global market fundamentals currently impacting competing exporting regions.

### SO WHAT?

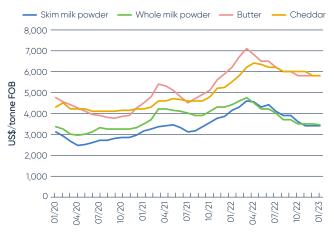
The opportunity to extract firm prices from a strong domestic market is a good outcome for Australian processors and exporters while they face subdued global conditions. This is especially true while operating in an increasingly pressurised farmgate milk market.



### **Market dashboard**

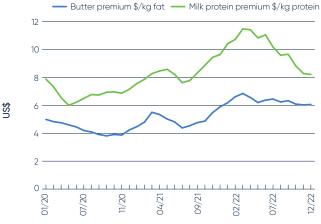
### **Commodity prices**

Figure A1 Key dairy commodity price indicators



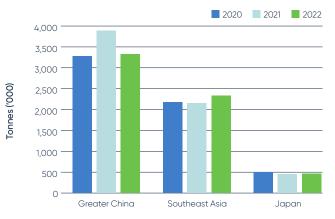
Source: Dairy Australia

Figure A2 Dairy fat and protein – pricing relative to substitutes



Source: Dairy Australia, Oil World

### **Figure A4** Global exports to key markets (MAT to October)



Source: Dairy Australia, TDM

### **Australian market**

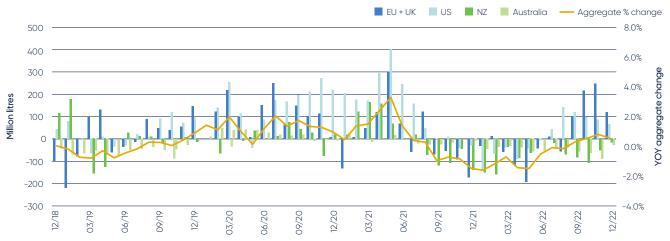
Figure A5 Australian retail sales

		Take home volume		Take home value \$m	
0	<b>Milk</b> As of 29/01/23	1,414m. L	<b>↓</b> -1.5%	2,695	<b>↑</b> 10.3%
6	<b>Cheese</b> As of 01/01/23	164kt	<b>↓</b> -2.2%	2,565	<b>↑</b> 6.1%
	Yellow spreads As of 29/01/23	91kt	<b>↓</b> -3.4%	938	<b>↑</b> 10.5%
T	<b>Yoghurts</b> As of 01/01/23	181kt	<b>↑</b> 1.7%	1,251	<b>↑</b> 8.3%

Source: Dairy Australia calculation based in part on data reported by NielsenIQ through its Homescan Service for the milk, cheese, yellow spreads and yoghurt categories to 29 Jan 2023, for the Total Australia market, according to the NielsenIQ standard hierarchy. © 2023, Nielsen Consumer LLC product.

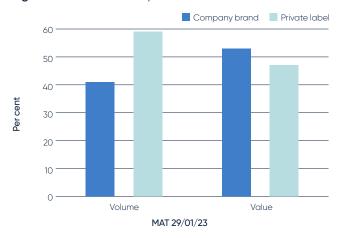
### Global supply and demand

Figure A3 Milk production trends for key dairy exporters



Source: AHDB, Dairy Australia, DCANZ, Eurostat, USDA

Figure A6 Retail sales - private label share



Source: Dairy Australia calculation based in part on data reported by NielsenIQ through its Homescan Service for the milk categories to 29 Jan 2023, for the Total Australia market, according to the NielsenIQ standard hierarchy. © 2023, Nielsen Consumer LLC product.

### Inputs



### Hay and grain

Αι	ıstralian dairy regions			%	0000		%
1	Atherton Tablelands	\$350	<b>1</b>	+21	\$407	<b>1</b>	+2
2	Darling Downs	\$358	<b>1</b>	+38	\$400	<b>1</b>	+34
3	North coast NSW	\$388	<b>1</b>	+69	\$401	<b>1</b>	+43
4	Central west NSW	\$276	<b>1</b>	+38	\$401	<b>1</b>	+42
5	Bega Valley	\$347	<b>1</b>	+22	\$408	<b>1</b>	+16
6	Goulburn/Murray Valley	\$305	<b>1</b>	+61	\$391	<b>1</b>	+10
7	Gippsland*	\$261	<b>1</b>	+161	\$419	<b>1</b>	+11
8	South-west Victoria	\$305	<b>1</b>	+52	\$398	<b>1</b>	+12
9	South-east SA	\$360	<b>1</b>	+71	\$373	<b>1</b>	+8
10	Central districts SA	\$335	<b>1</b>	+63	\$402	<b>1</b>	+16
11	South-west WA	\$286	<b>1</b>	+4	\$346	<b>↑</b>	+7
12	North-west Tasmania	\$266	<b>1</b>	+8	\$509	<b>1</b>	+9



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



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

Prices are estimates in \$/tonne at January 2023. Compared to equivalent date January 2022.

\*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**

<b>Urea</b> (granular Black Sea)	DAP (US Gulf)	MOP (granular Vancouver)		
444 US\$/t	631 US\$/t	563 US\$/t		
<b>↓</b> -48% LY	<b>↓</b> -10% LY	↑ +155% LY		
↑ +16% 5Y	↑ +32% 5Y	↑ +95% 5Y		

Price is January 2023 average, compared to the January 2022 average (LY) and 5-year (5Y) January average.

Source: World Bank



### Cows

### Cull cows

237 c/kg (lwt) 62,894 head -8.6% LY -9% LY +7% 5Y -9% 5Y

Dairy cattle exports +55% LY 136,868 head +43% 5Y

Price is January 2023 average (c/kg liveweight), compared to January 2022 (LY) and 5-year (5Y) average. Number of head is last 12 months (cull cows to January 2023, dairy cattle exports to December 2022) compared to year earlier (LY) and 5-year (5Y) average.

Source: NLRS, ABS



#### Water

Northern Victoria	Murray Irrigation System
34 \$/ML	12 \$/ML
<b>◆</b> -60% LY	<b>◆</b> -71% LY
<b>◆</b> -86% 5Y	<b>●</b> -92% 5Y
2,693,180 ML	221,298 ML
↑ +7% LY	↑ +8% LY
↑ +15% 5Y	↑ +59% 5Y

### Monthly average (12 months)

47 \$/ML	16 \$/ML
224,432	18,442

Price of water traded is January 2023 average compared to January last year (LY) and 5-year (5Y) average. Volume of water is 12 month total, to January 2023, 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 January. Northern Victoria prices are averaged from three key trade zones, details can be found in the monthly Production Inputs Monitor report: dairyaustralia.com.au/industry-statistics/industry-reports/ production-inputs-monitor

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/industry-statistics/industryreports/production-inputs-monitor

Dairy Australia Limited ABN 60 105 227 987

E enquiries@dairyaustralia.com.au