

Situation and Outlook

September 2023



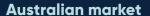
Seven key drivers

of the Australian Dairy Industry



Global supply

While growing production and exportable surpluses have been a key feature out of the northern hemisphere in recent months, this trend is slowing. Additionally, New Zealand's recent recovery has also been curtailed by a cold, wet winter and falling farmgate milk price, the latter now featuring across Europe and the United States as well.



Situation Outlook



Financial pain remains at the forefront of consumers' minds. As such, affordability continues to steer purchasing behaviour and the volume of dairy imported into Australia continues to rise. While demand for dairy remains robust overall, private label products and sale promotions are providing a crutch for many.



Global demand

Situation Outlook

Demand remains one of the biggest concerns in the global market. Importing activity remains quiet as financial pressures curtail consumer spending in key markets. With ample product available for export, commodity prices have continued to dive. Inventories are beginning to build for both exporters and importers.

Inputs

Situation Outlook

El Niño-related impacts over spring remain likely, while weather conditions have already varied greatly across dairying regions so far this year. Therefore, grain yields and feed availability are now likely to be below average this season. Despite this, fodder prices have been trending down and temporary water values remain well below long-term averages. Global indicative fertiliser prices have steadied over recent months, but price pressures remain domestically.



Global economy

Situation Outlook



Economic forecasts envisage a prolonged period of inflation, with the International Monetary Fund (IMF) expecting a gradual decline over the coming years. China's recovery has been weaker than expected, the war in Ukraine shows no sign of ending soon, and high

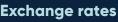
rates globally continue to temper spending.

Australian production

Situation Outlook

While Australian milk production ended 2022/23 5% below the previous season, some stability is tipped for 2023/24. Favourable conditions in some regions and easing of some input cost pressures are likely to provide support against the longer-term headwinds (high land prices, labour challenges and farm exits) that constrain growth.





Situation 🕕 Outlook



The outlook for the Australian dollar (A\$) remains weak, mainly driven by high interest rates overseas (especially the United States) and lower commodity prices. While this is positive for our competitiveness on the global stage, optimism about China's short to medium term economic prospects continues to diminish.









Executive summary

The Australian dairy industry is not immune to global market dynamics.

In other key dairy exporting regions, commodity and farmgate milk prices have dropped significantly. Australian farmgate milk prices have remained high, and significantly cheaper international dairy products are undermining the competitiveness of Australian dairy. Rising farm input costs remain a challenge, due to both international and domestic pressures.

The good news is farmgate milk prices set for the season will help to lessen the impact of rising input costs.

Competition for milk amongst processors was fierce following the announcement of minimum milk prices at the start of June; milk flows contracted 5 per cent over the 2022/23 season, after wet weather, flooding, labour challenges, competition for resources and farm exits impacted the national milk pool. In the final months of the season however, some growth was recorded (mainly against lower comparable figures) on the back of favourable autumn conditions leading into winter. As the season moves into spring, the Australian milk pool is likely to see further year-on-year growth, after devastating floods dampened production during last season's shoulder.

Other key global dairy exporting regions, including New Zealand (NZ), the United States and Europe, recorded production growth over the first half of 2023 but are now showing signs of stabilisation. Variable weather conditions and declining herd numbers are key drivers, with tightening margins exacerbating the trajectory.

Farmgate milk prices have significantly declined around the globe; in some places the inability of farmers to break even is in the spotlight. The most notable example is NZ, where milk prices have rapidly retreated to a midpoint around A\$6.65/kg MS, far below Australia's farmgate milk prices.

Weakened global demand, particularly from China, has weighed substantially on dairy export prices. Despite inflation easing in some parts of the world, cost pressures continue to drive consumer behaviour. Many are still spending cautiously, and importers continue to buy in a hand to mouth fashion.

Australian export commodity prices have followed the downwards trajectory. Stiff competition from NZ and the northern hemisphere on product sales and high Australian farmgate milk prices, present a difficult situation for exporters. Domestic dairy returns are also facing competition from cheaper international product. For processors, the Australian market has held more attractive returns compared to exportable commodities, however with local buyers importing 17.3 per cent more dairy (over 2022/23), domestic Australian dairy prices are now increasingly under pressure as well. While this has been predominantly for the ingredient and foodservice sectors, the appetite from retailers is likely to grow as consumers continue to look to save costs.

Dairy is a prominent product category for Australian retailers and more so during this cost-of-living crisis; as a staple food consumed widely across the country, it brings in significant revenue.

Compared to a year ago, fresh milk is the third largest contributing category to total retail market value growth, with cheese following close behind in 4th place and yoghurt in 9th.* Dairy retail prices have increased at the fastest rate compared to all other food groups, with the total value of dairy products sold offsetting any declines in volume sold.

After easing over the first half of 2023, Australian farm input costs have started to climb again. A significant proportion of world fertiliser and grain trade remains caught up in the conflict in Ukraine, particularly since Russia's recent exit from the Black Sea grain corridor deal. International demand has returned for Australian grain, as crop production prospects are diminished by unfavourable conditions in the northern hemisphere, and China lifts tariffs from Australian barley. While global indicative fertiliser prices have eased, the Australian market tells a different story. Reports have surfaced of some suppliers rationing urea to customers in the face of growing demand.

Turning to homegrown feed, average yields are expected overall, but a range of heightened risks and increased regional variation pose challenges. While urea shipments are expected through September, they may arrive past the critical point of the growing period.



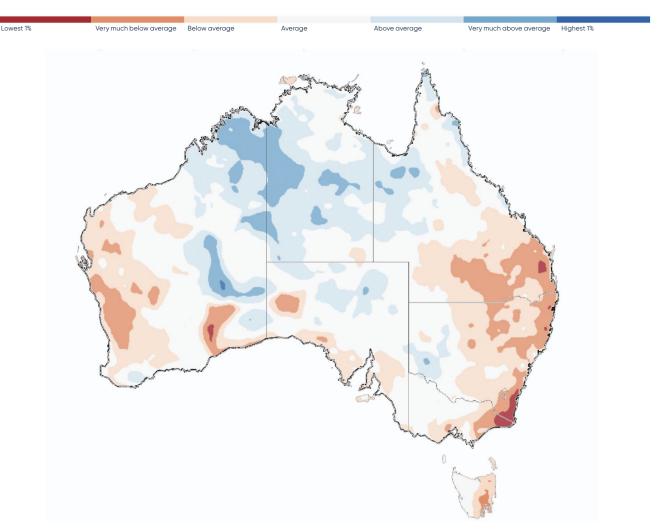
Inputs

Seasonal variability to drive feed availability

The growing season is approaching a critical phase as region-by-region interactions between longer term soil moisture stores, rainfall to date, and spring weather conditions play out. The drying effect of El Niño is predicted for much of the country, yet current seasonal conditions vary widely.

In some regions, the legacy of three past wet seasons has already started to fade. However, high crop prices and record farm cash incomes have spurred large planted areas. As such, the step back from record to average production levels will likely be driven by lower-than-average yields overall, amidst huge regional variation.

Figure 1 National relative root zone soil moisture percentiles



Source: Bureau of Meterology (BOM).

In New South Wales (NSW) and southern Queensland (QLD) particularly, below average rainfall has been a reality for many areas over the last six months. Crop condition is especially mixed across northern and central NSW, and with the rapidly depleting soil moisture levels, production concerns continue to build. There are reports of farmers in these areas pivoting to barley plantings in place of wheat this season, due to both the crop's greater resilience in dry years and the recent removal of China's barley tariff.

According to The Bureau of Meteorology (BOM), root zone relative soil moisture across NSW is currently very much below average at 10 percentile. This is a similar story to QLD, with average root zone soil moisture also at a very low 16 percentile. In light of this, future crop yields, and homegrown feed production in these areas are now heavily dependent on rainfall throughout spring.

However, with the long-term rainfall forecast remaining unchanged, the below average rainfall expected is unlikely to restore soil moisture that can support crops through to maturity. Therefore, cuts to initial yield expectations are becoming increasingly apparent, with yield prospects falling from initial projections for both grain crops and homegrown fodder. There are increased reports of fodder supplies moving north from Victoria and southern NSW, as on-farm stores built up at the start of this year begin to deplete.

Table 1 Cereal hay and wheat prices compared to last year (LY) and the five-year average (5YA).

		Aug 23 (\$/t)	% change LY	% change 5YA
Northern Australia	Cereal hay	330	1 8	4 1
	Wheat	384	1 4	1 8
	Cereal hay	314	↑ 59	1 30
Southern Australia	Wheat	378	0	1 7
Western Australia	Cereal hay	288	1 3	V 5
	Wheat	368	4 5	1 8

Source: Australian Fodder Industry Association (AFIA), Profarmer

Reference regions for above are north coast New South Wales, Goulburn/Murray Valley and southwest WA.

This is a different story to southeastern Australia, where Victoria and parts of southern NSW have benefitted from above average rainfall over the autumn break and again in June. This has kept soil moisture levels above average in some regions, after a wet past three years. Relative root zone soil moisture is within the 50 percentile across both western and northern Victoria but is beginning to also deplete in some parts of Gippsland.

This has helped many farmers to deliver on full planting intentions, keeping expectations on track for an average season for both crop and homegrown fodder production.

Due to this differing interaction between relative soil moisture and above average rainfall in comparison to the more northern dairying regions, even with the increased chance of below average rainfall in spring, there are still expectations that crops in the southeastern areas will be sustained through spring and into harvest. This will likely help to offset the declining yields that may eventuate out of the north.

In South Australia (SA), winter crop production expectations are broadly in line with the historical 10-year average, according to the Australian Bureau of Agricultural and Resource Economics (ABARES). As is the case for many regions, declining yield expectations are being driven by the strong likelihood of below average rainfall over the coming months. However, average root zone soil moisture across the state remains at 41 percentile, and both pastures and crops in the central and southeastern regions are looking promising.

In a similar dynamic to SA, regions in Western Australia (WA) that have experienced favourable conditions over the last few months are likely to provide somewhat of a buffer against those areas with a heavy reliance of well-timed rainfall at this critical point of the season. Relative root zone soil moisture is within the 10 to 20 percentiles across the south of the state. While seasonal conditions are therefore highly variable, this interaction of a dry autumn break, below average soil moisture levels and the dry outlook for spring are contributing to the below average cereal crop yields now expected.

The current fodder situation differs however, with rainfall in recent weeks over the southwest keeping pastures green and protein hay plantings looking promising. Both of these are currently tempering demand for supplementary feed and likely to help fill the shortfall of last year. Nonetheless, with drier conditions continuing further north, increased demand is likely to continue moving product into these areas, as other livestock producers battle poor pasture growth.

In Tasmania, relative soil moisture also differs substantially, ranging from between 50–80 percentile in the northwest, to 10–20 percentile across the eastern half of the state. Pasture growth and green feed availability therefore remain strong in the northwest, as wet conditions continue to support growth and mitigate demand for purchased fodder.

However, in almost a direct contrast to the other dairying regions, wet conditions are beginning to have an adverse impact on the region's crops. The prolonged rainfall and cold temperatures are causing concern around the viability of crops and the inability to conduct maintenance activities and apply fertiliser. However, with the gradual move into warmer spring temperatures and plentiful moisture stores in these areas, there is still potential for average crop yields and homegrown feed production.

While the interaction between soil moisture, rainfall over recent months and the dry outlook for spring differs significantly between regions, the relative impact on both grain and fodder prices really rides on overall supply and demand dynamics. Declining yields will likely push both grain and hay prices up against increased demand - the severity of which will vary between regions. The extent of this product movement and how farmers can maximise homegrown feed stores will really be the key impetus behind how prices move at the end of this growing season.

SO WHAT?

The level of feed availability is going to vary significantly between dairying regions this season. That being said, the net impact is likely to ride on the balance between favourable yields and conditions in some regions, and the challenges faced in others. Therefore, while cost and supply pressures might be acute in some regions, the opposite could prove true elsewhere, and inter-regional trade will be key to smoothing the overall market.

Global supply

One less thing to worry about?

The news across the world's major economies isn't great at the moment, as inflation and tightening monetary policy weigh on the minds of consumers and businesses alike.

Indications suggest Chinese milk production is still growing, demand is soft, and stockpiles burdensome. Additionally, demand in developed markets remains quiet as economic concerns mount.

China in particular, is likely to experience a protracted downturn in dairy imports, meaning that hopes for a demand-led recovery in global indicators are faint in the short term. But what about supply-side influences?

Looking back to the last major downturn, rapid growth in global milk production (especially in Europe) greatly exacerbated the market challenges of 2015/16, piling on product even as sales in China and Russia successively dried up. Conversely, slow growth in production carried dairy prices through the otherwise tumultuous COVID-19 pandemic, avoiding precipitous falls that could otherwise have been experienced given the enormous demand shocks that occurred.

Echoes of both periods are visible today, however, and it might just be that COVID-19 and the continuing aftershocks of Russia's actions in 2014 have caught up with dairy markets. The former has contributed significantly to weaker demand in China, whilst the full-scale invasion of Ukraine has piled inflationary pressure onto developed markets.

Fortunately, milk production growth in Europe is not at the runaway levels of 2014, but recent months have averaged just under 1% year on year increases this calendar year. Of the top six producers, Germany has generated the most additional milk, notching up 3% growth in the year to June against a drought-impacted 2022. Notwithstanding the controversy around government policies on nitrogen reduction, the Netherlands has matched Germany's year to date growth rate, whilst Polish milk production increased by 2% over the same period. Ireland, France and Italy recorded decreases of 1%, 2% and 2% respectively. The United Kingdom (UK) has averaged close to 1% growth for the year to date; potential gains from a dry 2022 having been muted by variable conditions in 2023 – most recently a particularly wet July.

Across the 27 member European Union, farmgate prices are almost 4% below prior year levels and easing slowly, but nearly 25% below recent peaks. In the UK, prices are around 16% below the same time last year, but still above the five-year average. With farmgate prices drifting lower and the northern hemisphere production season well into its shoulder period, Europe as a whole looks unlikely to flood markets with additional milk anytime soon.

Milk production in the United States (US) dipped 0.5% in July, compared with the same month in 2022. California lost 5.5% year on year, and won't be helped by recent storms, whilst Wisconsin is still showing modest growth, up 0.9%.

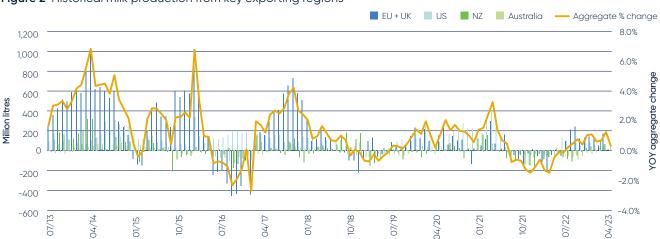


Figure 2 Historical milk production from key exporting regions

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

The most recent expansionary phase started earlier in the US than in Europe (June versus August 2022), but now appears to have largely petered out – for 2023 to date, milk intakes are up 0.5%. Notably, the US dairy herd contracted slightly in June and July after nine months of modest year on year growth. The latest USDA World Agricultural Supply and Demand Estimates (WASDE) report tipped full year growth of only 0.5% in US milk production – and even this might prove optimistic as lower milk prices and climatic challenges weigh in.

Dairy farmers in New Zealand (NZ) have been grappling with wet conditions and rapidly declining farmgate price forecasts. The former has hampered pasture growth and had knock on effects for winter milk production, while the latter has dented confidence as farm finances look increasingly under pressure. Against this context, a forecast El Niño weather pattern with drier conditions into spring has not caused significant local concern. NZX are tipping year on year milk production increases through spring, and a 1.1% full season increase (to May 2024).

The NZ shoulder period from December onwards will be a critical period; challenging farm economics would not support heavy supplementary feeding if pasture growth slows early. If this eventuates, milk production could drop quickly in the latter part of the season.

On the whole, milk supply growth in the major dairy exporting regions is tepid at best, and already slowing. The trend is unlikely to reverse in a hurry, as farmgate prices continue to fall faster than costs, and longer-term policy headwinds in countries such as the Netherlands begin to bite.

SO WHAT?

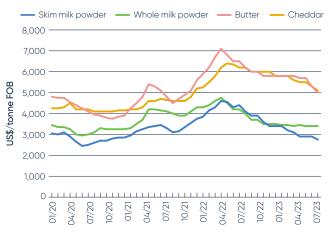
Milk production amongst the major dairy exporting countries is only one part of a global market equation that overall is currently well out of balance. Weak import demand is driving dairy commodity prices lower, creating a huge challenge for the industry as inflationary pressure pushes costs higher. Milk production trends are not quick to reverse, even in a downturn; the lack of ongoing growth at this critical point in the market cycle is a welcome break from the otherwise gloomy news.



Market dashboard

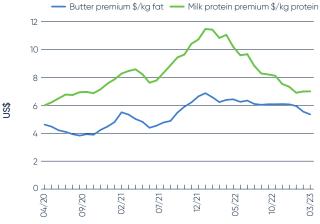
Commodity prices

Figure A1 Key dairy commodity price indicators



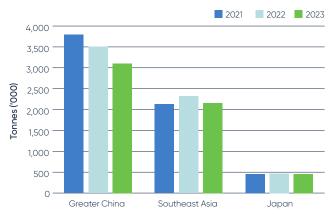
Source: Dairy Australia

Figure A2 Dairy fat and protein – pricing relative to substitutes



Source: Dairy Australia, Oil World

Figure A4 Global exports to key markets (MAT to May)



Source: Dairy Australia, TDM

Australian market

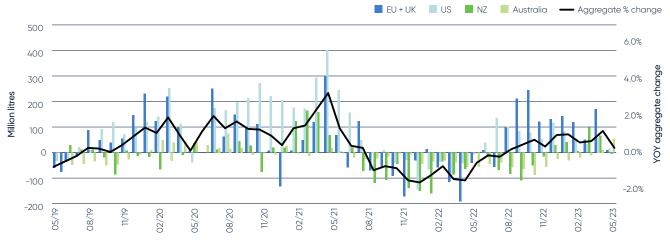
Figure A5 Australian retail sales

		Take home volume		Take home value \$m	
0	Milk As of 16/07/23	1,404m. L	↓ -2.6%	2,846	↑ 13.2%
	Cheese As of 18/06/23	163kt	↓ -2.0%	2,774	↑ 10.4%
	Yellow spreads As of 16/07/23	59kt	↓ -2.6%	758	↑ 13.2%
T	Yoghurts As of 18/06/23	187kt	↑ 2.9%	1,394	↑ 11.9%

Source: Dairy Australia calculation based in part on data reported by NielsenIQ through its Homescan Service for the fresh and long life milk categories, and dairy spreads to 16 Jul 2023, and yoghurt and cheese categories to 18 Jun 2023, for the Total Australia market, according to the NielsenIQ standard hierarchy. Copyright © 2023, Nielsen Consumer LLC. product.

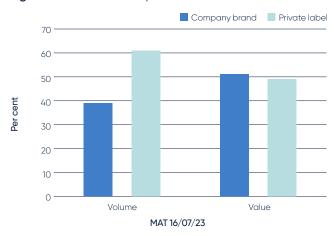
Global supply and demand

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 fresh and long life milk categories to 16 Jul 2023, for the Total Australia market, according to the NielsenIQ standard hierarchy. Copyright © 2023, Nielsen Consumer LLC. product.

Inputs



Hay and grain

Australian dairy regions			%	0000		%
1 Atherton Tablelands	\$369	1	5	\$409	Ψ	-7
2 Darling Downs	\$308	1	15	\$453	↑	13
3 North coast NSW	\$330	1	8	\$384	1	4
4 Central west NSW	\$303	1	46	\$359	Ψ	-7
5 Bega Valley	\$314	1	7	\$404	1	5
6 Goulburn/Murray Valley	\$314	1	59	\$378	→	0
7 Gippsland*	\$265	1	96	\$396	Ψ	-5
8 South-west Victoria	\$308	1	50	\$381	Ψ	-7
9 South-east SA	\$311	1	24	\$391	Ψ	-8
10 Central districts SA	\$318	1	41	\$391	Ψ	-4
11 South-west WA	\$288	1	13	\$368	Ψ	-5
12 North-west Tasmania	\$268	1	2	\$486	Ψ	-4



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)

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

Urea (granular Black Sea)	DAP (US Gulf)	MOP (granular Vancouver)
335 US\$/t	459 US\$/t	341 US\$/t
Ψ -44% LY	↓ -41% LY	→ -39% LY
Ψ -10% 5Y	→ -7% 5Y	↑ +8% 5Y

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

Source: World Bank



Cows

Cull cows	
182 c/kg (lwt)	56,781 head
↓ -31% LY	Ψ -16% LY
◆ -3% 5Y	→ -16% 5Y
Dairy cattle exports	↑ +12% LY
110,407 head	↑ +14% 5Y

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

Source: NLRS, ABS



Water

Northern Victoria	Murray Irrigation System
83 \$/ML	47 \$/ML
↑ +24% LY	↑ +3% LY
→ -63% 5Y	◆ -85% 5Y
2,417,725 ML	224,765 ML
→ -20% LY	↓ -17% LY
→ 0% 5Y	↑ +46% 5Y
Monthly average (12 months)	

32 \$/ML 18 \$/ML 201,477 18,730

Price of water traded is July 2023 average compared to July last year (LY) and 5-year (5Y) average. Volume of water is 12 month total, to July 2023, 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 July. 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 and the monthly Production Inputs Monitor via dairyaustralia.com.au/industrystatistics/industryreports or the byproducts report dairyaustralia.com.au/industrystatistics/industryreports/byproducts-report

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