

**Required Report:** Required - Public Distribution **Date:** November 20, 2023

**Report Number:** AS2023-0022

**Report Name:** Dairy and Products Annual

**Country:** Australia

Post: Canberra

**Report Category:** Dairy and Products

Prepared By: Zeljko Biki

Approved By: Gerald Smith

## **Report Highlights:**

Milk production for 2024 in Australia is forecast to increase by 0.6 percent to 8.50 million metric tons (MMT) after stabilizing in 2023 at an estimated 8.45 MMT from previous years of declining production. The forecast is amid an El Niño weather pattern in late 2023, likely to continue into 2024. The end to economic circumstances that encouraged dairy farmers' diversification toward beef cattle production has strongly contributed to the stabilization of milk production. Factory use consumption of milk is forecast to increase to 5.847 MMT from an estimated 5.817 MMT in 2023, and fresh milk consumption is forecast to continue its gradual annual decline to 2.41 MMT. A new record cheese production of 445,000 metric tons is forecast for 2024, and the export of cheese is forecast to rise by 28 percent. The volume of butter, skim milk powder, and whole milk powder production are all forecast to decline moderately in 2024. However, exports for these three dairy commodities are also forecast to remain stable.

### **EXECUTIVE SUMMARY**

Milk production for 2024 in Australia is forecast to increase by 0.6 percent to 8.50 million metric tons (MMT) after stabilizing in 2023 at an estimated 8.45 MMT from previous years of declining production. Despite an El Niño weather pattern (dryer and hotter than usual) in the spring of 2023, the Australia Bureau of Meteorology is expecting these conditions to continue into 2024.

Importantly, a key factor contributing to the decline in milk production in recent years now appears to have abated. Beef cattle prices have fallen 70 percent from record levels over the last 20 months. Along with this, labor shortages have eased, and milk prices have hit record levels over the last year. This combination of circumstances has halted the financial incentive for dairy farmers' diversification toward beef cattle production. This has strongly contributed to the stabilization of milk production from recent decline.

Although most dairying regions have had well below-average rainfalls since July 2023, some of the major dairy-producing areas received substantial, well-timed rains in early October. This led to a much better-than-expected hay and silage production in the current spring period, enabling most dairy farmers to establish good fodder stocks for 2024. Despite the dry conditions in recent months, winter grain crops (now at the beginning of the harvest season) are likely to produce wheat and barley crops at near long-term average levels. With adequate feed grain supply forthcoming, current prices are only marginally above the previous five-year average. Also, with irrigation dams nearly full, ample water is expected to be available for irrigators for the remainder of the current irrigation season and for the start of the 2024/25 season.

Fresh milk consumption in 2024 is forecast to continue its general trend over the last five years, with a 0.6 percent decrease to 2.41 MMT. With a modest increase in milk production forecast, fresh milk consumption is expected to be 28.4 percent of overall milk production. Factory use consumption of milk is forecast to increase slightly to 5.847 MMT, from an estimated 5.817 MMT in 2023, due to a slight increase in overall milk production. Factory use of milk is partially offset by a small forecast increase in fresh milk exports to 250,000 metric tons (MT) in 2024, from an estimated 210,000 MT in 2023.

Australia continues to focus its processed milk products towards cheese production, which is forecast to reach a new record of 445,000 MT in 2024 from the 2023 estimate of 425,000 MT. The forecast cheese production for 2024 equates to utilizing 42 percent of total fluid milk production, by far the highest use of Australia's annual milk production. Export of cheese is forecast to rise by 28 percent, reaching 160,000 MT for 2024, from an estimated 125,000 MT in 2023. With the industry focusing on cheese production, the volume of butter, skim milk powder (SMP), and whole milk powder (WMP) production are all forecast to decline moderately in 2024. However, exports for these three dairy commodities are also forecast to remain stable in 2024.

## **DAIRY INDUSTRY SUMMARY**

The dairy industry has been one of the major agricultural industries in Australia for many decades. The milking herd size peaked in 2002 at 2.369 million head, and milk production also peaked in the same year at 11.608 MMT (see Figure 1). This development was merely two years after the government deregulated dairy industry. This deregulation involved breaking down the state-based regulated liquid milk market, which strongly benefitted smaller milk-producing states. In such states, a high proportion of their milk went toward the much higher value regulated liquid milk market and little or none to the manufactured milk sector which was more exposed to the domestic and export markets. As part of the deregulation process, dairy farmers were paid a substantial lump sum compensation (by the Federal Government), calculated based on the individual farms' level of dependence on the regulated liquid milk market.

Dairy deregulation enabled some dairy farmers to invest in their businesses and others to sell and step away from the industry. It also enabled the industry to gradually right-size, and those farms that were in less efficient producing areas and were not competitive in the free-market arrangement could step away from the industry, allowing it to consolidate. Broadly, this resulted in a greater reduction in dairy farm numbers in the more northern tropical and sub-tropical regions than in the more southern temperate regions. Between 2002 and 2023, the industry has reduced the milking herd size by 46 percent to 1.27 million head and reduced dairy farm numbers by 60 percent to 4,163. However, there have been substantial productivity improvements, with milk production declining by only 27 percent, from 11.6 MMT in 2002 to around 8.5 MMT in 2023. During this period, the average milking herd size increased by about 50 percent from 200 head to 300 head. At the same time, average milk production per cow has increased by around 36 percent from approximately 4.9 metric tons (MT) per cow to almost 6.7 MT per cow.

Almost two-thirds of milk production is from the southern state of Victoria (see Figure 2), which has a temperate climate. The north of the state, known as the Murray Dairy region, has traditionally been very dependent upon irrigation but has been forced to adapt as irrigation water prices have broadly increased and availability diminished due to competition from the horticulture sectors. The two southern dairy regions known as West Vic Dairy and Gipps Dairy are pasture-based, relying on natural rainfall with only small pockets able to access irrigation water. Tasmania also contributes around 11 percent of overall national milk production. It's similar to the two southern Victorian regions, is pasture-based, and fed by natural rainfall and little irrigation. Milk production in New South Wales is mainly in the central and southern coastal areas and the southern irrigation area adjacent to the Murray Dairy irrigation region in northern Victoria.

**Herd Size and Production Trend** 2,500 17,500 No. of Farms & Milk Production ('000 MT) Milking Herd Size Milk Production 2,000 14,000 Number of Farms Herd Size ('000 Head) 10,500 1,500 1,000 7,000 500 3,500 2017 2018 2019 2020 2021 2021 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2013 2014

Figure 1 – Australian Dairy Herd Size, Farm Numbers and Milk Production

Source:

Dairy Australia / ABS / PSD / FAS/Canberra

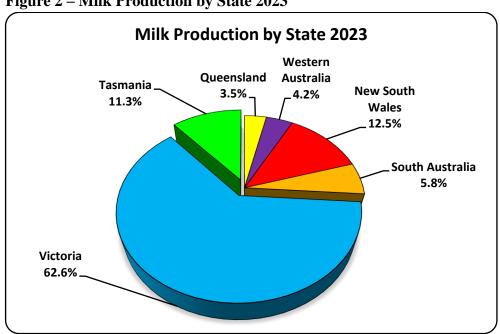


Figure 2 – Milk Production by State 2023

Source: Dairy Australia

Data is based on January to September 2023 *Note:* 

Across the major dairying areas in the southern states, around 60 to 65 percent of the dairy herd feed requirements come from grazing pastures and some fodder crops. The balance of feed requirements comes from supplementary feed, mainly grains, hay, and silage. Very few dairy farms are entirely reliant on grazing. The shift over time towards increased supplemental feeding has contributed to the increase in average per cow production along with herd genetic gains, predominantly through decades of artificial insemination typically using U.S. genetics. In recent years, genotyping has fast-tracked genetic gains.

Unlike the United States, there are very few free-stall barn dairy farms in Australia. Although a few notable large-scale feedlots have been in operation for some time, there has been growth in recent years. Some of the free-stall barns in the planning and development process are incorporating robotic milking equipment to address the increasing challenge of sourcing suitable labor for milking parlor duties. Most of the growth in free-stall barns and robotic milking facilities is in northern Victoria, which, along with southern New South Wales, is most suited to growing fodder crops for silage and is also close to feed-grain producing areas. Dairy operation experts report that the return on capital for a dairy farm with robotic milking is lower than that for a similar scale farm with a rotary milking parlor. However, there is an improvement in the ease of managing the dairy farm operation, mainly from removing the rising challenges of sourcing and maintaining good quality staff for milking parlor duties.

### **FLUID MILK**

#### **Production**

FAS/Canberra forecasts Australia's milk production to increase by 0.6 percent to 8.50 MMT for 2024 from the upward revised estimate of 8.45 MMT for 2023. The stabilization of milk production in 2023 from previous years of declining milk production is a positive sign for the Australian dairy industry. The forecast of continued stable production in 2024 is despite the current El Niño drought conditions, which would typically limit fodder production in the current spring months of 2023, which would be carried into 2024 to support milk production. Such drought conditions would also usually result in below average winter crop production for 2023, typically reducing supply and increasing feed grain prices for 2024. Despite these conditions, fodder production (supported by ample irrigation water availability) is reported to be good. Winter crop production is expected to be near the long-term average, so milk production is not anticipated to be restricted by these factors in 2024.

A key factor contributing to the decline in milk production in recent years now appears to have abated. Beef cattle prices began to rise strongly in 2020 and reached an extraordinary peak level in January 2022, during a period when labor availability was very low. With beef cattle farming being far less labor intensive, some dairy farms had responded by partially or fully transitioning to beef cattle production. After this transition established momentum, milk prices for 2022/23 rocketed to a historic high and a strong price has continued into 2023/24. Over the last 20 months, beef cattle prices have slumped and

during the same period the shortage of labor has eased. This dramatic shift in circumstances has arrested the decline in milk production, but the shortage of labor remains a limitation to expanding production.

### Near Record Milk Price

Dairy farmers benefit from the second-highest milk price on record for the July 2023 to June 2024 season forecast by the Australian Bureau of Agriculture Resources, Environment and Sciences (ABARES), following the highest milk price on record in the preceding 12-month period. This price is 38 percent above the previous 10-year average farm gate milk price (see Figure 3). This strong price is despite a substantial decline in world dairy commodity prices, which have approximately halved from their peak in April 2022. This high milk price forecast is driven by domestic competition from processors due to the dwindling supply of milk over recent years. With the now much lower world dairy commodity prices, imported dairy products are expected to be very competitive against domestically produced products, forcing a likely decline in farm gate milk prices for the second half of 2024.

Domestic milk prices vary from one manufacturer to the next and from region to region. Areas that almost exclusively supply the liquid milk market for domestic consumption receive the highest milk prices, whereas for those regions where most of the milk is used for manufactured products, the milk price to dairy farmers is lowest.

After implementing the Dairy Industry Code of Conduct from January 1, 2020, milk processors must publicly release standard forms of agreement on June 1 each year. This primarily relates to the initial milk price offered for the upcoming period of July 1 to June 30. As domestic and world market prices change for manufactured goods, processors typically offer multiple increases to milk prices during the year which are retrospective from July 1. These are referred to as 'step-ups'. Retrospective 'step-downs' are prohibited under the code, and since the opening price for the 2023/24 season has been established, the milk price forecast by ABARES has a significant degree of certainty, irrespective of any downside to world dairy commodity prices throughout this 12-month period.

With a long-term trend of decreasing milk production, maintaining utilization of milk processor facilities has become more challenging. But also, with this trend, the Australian dairy industry is becoming less exposed to the export market, providing scope for domestic processors to pass on higher costs to domestic wholesale prices, particularly for short shelf-life products that have limited competition from imports. These combined effects have resulted in very strong competition for the supply of milk, contributing to higher-than-expected milk prices in the current and previous season. This is highlighted by comparing farm gate milk prices for Australian and New Zealand dairy farmers. New Zealand exports around 90 percent of its milk production compared to 35 percent for Australia. As such, New Zealand farm gate milk prices are highly driven by world export prices compared Australia's. For the current July 2023 to June 2024 milk price and the previous 12-month period, the Australian farm gate milk price is around 30 percent higher than New Zealand's (see Figure 4).

Weighted Average Farm Gate Milk Price 80 Milk Price (AU cents per liter) 70 38% Increase 60 50 40 30 20 10 0 2023/2019 2018/19 2015/16 2016/17 2017/18 2019/20 2020/22 2021/22 2021/23(8)

Figure 3 - Farm Gate Milk Price - Recent History and Forecast

Source: Australian Bureau of Agricultural and Resource Economics and Sciences

*Note:* (e) = estimate, (f) = forecast

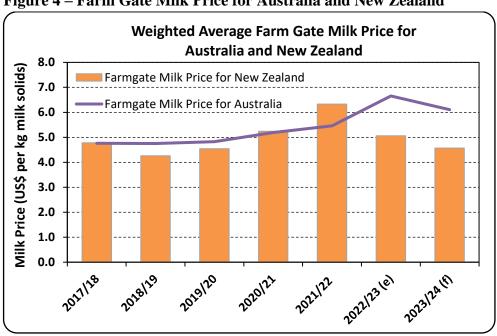


Figure 4 – Farm Gate Milk Price for Australia and New Zealand

Australian Bureau of Agricultural and Resource Economics and Sciences / Dairy Source:

Australia / interest.co.nz

*Note:* (e) = estimate, (f) = forecast

## Halt of Dairy Conversions to Beef

The economic incentive for dairy farmers to transition in full or in part toward beef cattle farming has all but ceased over the last year. The main driver was the extraordinary rise in cattle prices in recent years and the corresponding lack of available labor, caused by the COVID-19 pandemic, which occurred prior to the rise in milk prices to record levels.

Beef cattle prices in Australia have fallen 70 percent over the last 20 months from their dizzying record peak in early January 2022 (see Figure 5). Beef cattle prices rose to record highs in recent years due to an industry herd rebuild phase after numbers were decimated by a multi-year drought in the major beef-producing regions from 2017 to 2019. The national beef herd size has been rebuilt, and the supply of cattle for processing has replenished to a point whereby over recent months more beef cattle available than processing capacity. This has driven beef cattle prices to relatively low levels.

Labor shortages became an issue for dairy farmers due to the international border closures triggered by the COVID-19 pandemic. Dairy farmers, along with other agricultural producers typically sourced some of their labor from working holidaymakers. Since the reopening of Australia's international borders at the beginning of 2022, the number of working holiday visa holders has increased to pre-pandemic levels. Australian agriculture also sources some of its labor needs from the Pacific Australia Labor Mobility (PALM) scheme. Many of these workers work in the horticulture sector, but some also support the dairy industry's labor needs. The number of PALM workers in Australia is now at record levels. Industry sources report that the strains on labor for the dairy industry, although ever-present, have substantially alleviated.

The combined effects of the big decline in beef cattle prices and the substantial improvement in labor availability, as mentioned, record milk prices over the last two years, have extinguished the economic incentive for dairy farmers to transition to beef cattle farming.

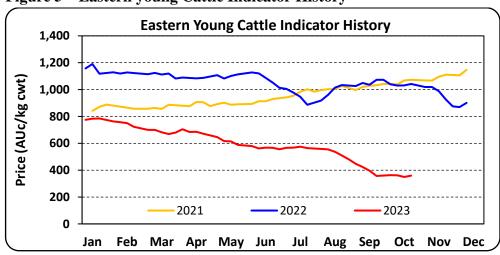


Figure 5 – Eastern young Cattle Indicator History

Source: Meat and Livestock Australia

## Plenty of Irrigation Water at Low Cost

The major water storages influencing irrigated dairy farming regions were all at or near capacity at the end of October 2023, well into the start of the 2023/24 irrigation season. In the middle of October 2023, dairy farmers had full irrigation water allocations for the third successive year (see Figure 6). This has supported fodder production in the irrigated dairy farming areas in this current 2023 spring period, mainly supporting milk production for 2024. With such high-water storage levels, even if there was to be lower than usual rainfall over the next year, there are likely good water allocations for the 2024/25 season to support milk production at the tail end of 2024.

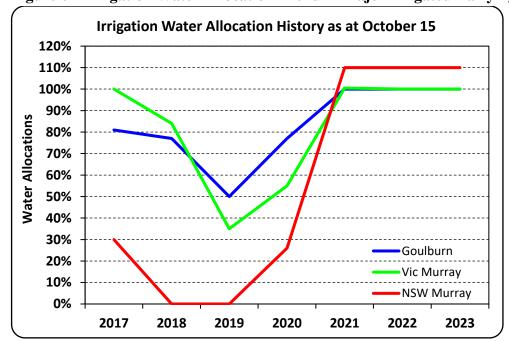


Figure 6 – Irrigation Water Allocation Trend in Major Irrigated Dairying Regions

Source:

Victoria Department of Environment Land Water and Planning / NSW Department of

Planning Industry and Environment

Notes:

Goulburn and Murray Vic system allocations are High Reliability Water Shares NSW Murray system allocations are General Security

With a plentiful supply of irrigation water, the price of traded irrigation water has been very low in recent years. But, with the announcement of an El Niño, the price of traded irrigation water has increased in recent months, but a price that will not hinder spring fodder production.

For the Goulburn irrigation system, which supplies the largest irrigation-dependent dairy farming region in northern Victoria, traded water in the current 2023/24 irrigation season has risen to around AU\$160/million liters (ML) (US\$100/ML) – far below the peak of over AU\$600/ML (US\$390/ML) during the drought in 2019 (see Figure 7). Although this is substantially higher than the previous two seasons, now that the spring fodder production period is near complete, any further rise in the price of traded irrigation water will have little impact on dairy farmers, who generally do not have perennial pastures requiring

irrigation. But it will impact those who irrigate corn and alfalfa crops over the summer months for silage production.

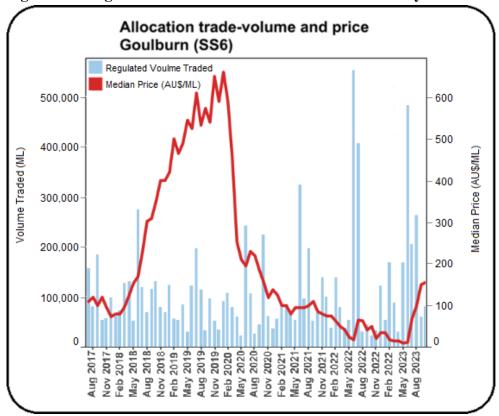


Figure 7 – Irrigation Water Trade Volume and Price History

Source: Australian Bureau of Meteorology

# **Drought Conditions**

From July to October 2023, virtually all the dairy farming regions in Australia have had well below-average rainfalls (see Figure 8). The Australian Bureau of Meteorology announced an El Niño weather event in September 2023 for Australia, bringing warmer and drier than usual conditions.

Although drier-than-usual conditions are typically beneficial during the winter months, as even average rainfall in the main dairy farming regions can be somewhat detrimental to pastures and animal health. The main concern is inadequate rainfall for good fodder production in spring. The hay and silage produced in spring 2023 (mainly October and November) would mostly be carried over into 2024. Typically, with such low rainfall over the winter and spring months, it would be expected that there would be a poor fodder production season this year. However, industry sources indicate that for the main dairy farming regions of Victoria, Tasmania and southern New South Wales, fodder production has in fact been good. Some of these regions benefited from very good rainfalls in early October 2023.

Despite the current El Nino, conditions have been better than expected for fodder production, but it has also been beneficial to dairy cow health for the 2023 production season.

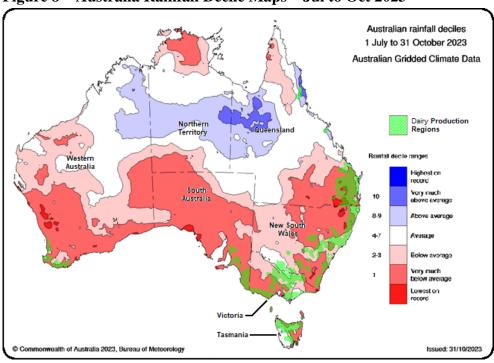


Figure 8 – Australia Rainfall Decile Maps – Jul to Oct 2023

Source: Australian Bureau of Meteorology / Dairy Australia

The Australian Bureau of Meteorology has not indicated how long the current El Niño will last. The forecast for the three-month summer period from December 2023 to February 2024 is an average to below-average chance of exceeding median rainfall across the major dairying regions (see Figure 9). This indicates an expectation of average to below-average rainfalls. If such conditions prevail, this would be manageable without any significant detrimental impacts to milk production for the start of 2024.

If the current El Niño persists into fall, then the 2024 milk production forecast has a significant downside risk. A lack of rainfalls during the fall will substantially impact pasture production and require dairy farmers to draw on their fodder reserves more heavily and increase the need to purchase additional fodder. But it will also significantly affect the area and overall production of winter crops in 2024, which would likely drive up the price of feed grains.

However, the US National Oceanic and Atmospheric Administration's Climate Prediction Centre predicts that El Niño will diminish in the fall of 2024 and that there is a higher probability of returning to neutral conditions for the May to July 2024 period. If this prediction happens, the current drought conditions will be short-lived and will not substantially impact milk production in 2024.

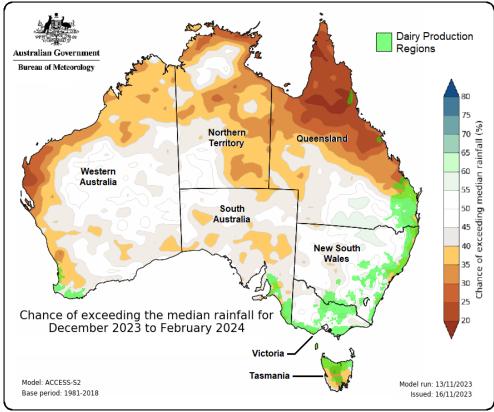


Figure 9 - Chance of Above Average Rainfall - Dec 2023 to Feb 2024

Source: Australian Bureau of Meteorology / Dairy Australia

# Good Fodder and Grain Supplies

Despite the well-below-average rainfalls experienced across the dairy industry regions from July to October 2023, industry sources report that the amount of hay and silage being produced this spring is good. This is particularly the case for the Gippsland (southeast Victoria), northern Victoria, and southern New South Wales, which experienced very good and timely rainfalls in early October 2023. Fodder production in other key regions in southwestern Victoria and northern Tasmania is below average but surprisingly better than expected, given that dry conditions have persisted since July 2023. As mentioned, fodder produced in spring 2023 will mainly be carried forward and used to support milk production for 2024.

Indicative of the reported good fodder production this spring is that the average price of hay in Victoria over recent weeks, in the lead-up to the main hay and silage production period (October and November), has declined towards the previous five-year average price (see Figure 10). The big rise in the average price of hay in Victoria from late October 2022 and well into 2023 is associated with major flooding events caused by excessive rainfalls in October 2022. This substantially impacted fodder production to well below normal levels.

Although there are a range of dairy production systems in Australia from entirely pasture based to highly intensive free stall barns, dairy farmers broadly meet around 60-65 percent of the needs from pasture and the balance from fodder (hay and silage) and grains. As such, the supplementary feeds constitute a substantial portion of the input costs of producing milk.

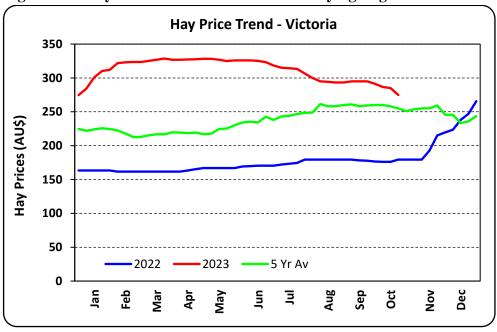


Figure 10 – Hay Price Trends in Victorian Dairying Regions

Source: Dairy Australia

For feed grains, Australia anticipates wheat production at around the long-term average and barley at a little below the long-term average. These crops had good fall rainfalls during planting and had the benefit of high soil moisture reserves from the well above average, and in some areas, flooding, rainfalls in the previous spring (September and October 2022). With little rainfall from July to October 2023, there is confidence that these crops will produce a near-average production result now that harvest has commenced. This grain production result would offer ample feed grain supply for the livestock industries in Australia over the coming year.

Feed grain (typically wheat and barley) prices for dairy farmers are influenced by world grain prices due to the high volumes exported by Australia. However, average grain prices for dairy farmers across Victoria have been relatively stable throughout 2023 and, in the lead-up to the grain harvest are a little above the previous five-year average (see Figure 11). This indicates that there will be ample supply of feed grains for 2024. Other than any unexpected world feed grain production or supply shocks in 2024, grain prices are not expected to vary greatly, providing further confidence that there will be adequate feed grains at satisfactory prices to support the forecast milk production for 2024.

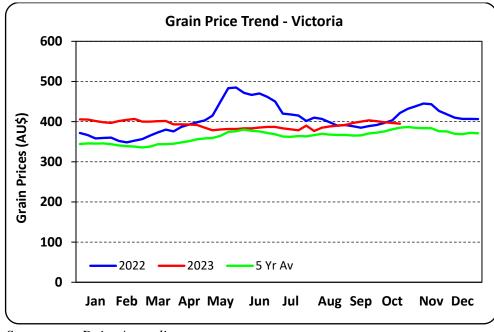


Figure 11 – Grain Price Trends in Victorian Dairying Regions

Source:

Dairy Australia

### Still Short on Labor

Sourcing labor is expected to continue as a key limiting factor in the 2024 forecast year. Two of the main sources of labour for dairy farmers are temporary visa holders. They are working holidaymakers to Australia and workers from the Pacific Australia Labor Mobility (PALM) scheme. The government reports that working holidaymaker numbers in Australia are at pre-pandemic levels, and PALM numbers are at record levels. Despite this, industry sources indicate that even though labor pressures have eased somewhat, this remains a key limiting factor for dairy farmers seeking to expand their production.

Over the last year, Australia's unemployment rate has been at around 3.4 to 3.7 percent, levels not seen in the economy for around 50 years. Despite migration to Australia over the last year also substantially ramping up, the unemployment rate has remained very low. This economy-wide competition for labor at a time of recent record milk prices has hindered the capacity of the dairy industry to grow its milk production.

Dairy farmers report that their greatest difficulty is finding suitable employees for milking parlor duties. For other tasks on dairy farms, sourcing employees remains challenging but is more manageable. The current temporary visa schemes do not have a pathway to permanent residency. Some dairy farmers have indicated that they could attract suitable labor from Southeast Asian nations with good animal husbandry skills, if the federal government were to establish some form of visa with a pathway to permanent residency.

FAS/Canberra's milk production estimate for 2023 is upward revised to 8.45 MMT from the official USDA estimate of 8.20 MMT. Milk production for the first half of 2023 was weaker than expected compared to the prior year, which triggered the lower forecast (see Figure 12). However, since May 2023, milk production has been tracking slightly stronger than for 2022, and with good momentum leading into the last three months of 2023, expectations are for a strong finish.

The near-record 2023 milk price for dairy farmers has supported a strong supplementary feeding program in the second half of the year, overcoming the dry winter and spring months so far which has limited pasture production. A typical benefit of the drier-than-usual conditions, particularly during winter, is improved animal health. When paddocks and laneways are saturated, cows tend to suffer greater instances of lameness, which can lead to other health issues and depressed milk production.

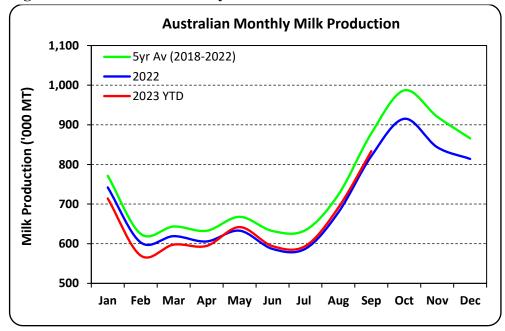


Figure 12 – Australian Monthly Milk Production

Source: Dairy Australia

### Consumption

A moderate decline of fluid milk consumption is forecast by FAS/Canberra in 2024 to 2.41 MMT, from an upward revised estimate of 2.43 MMT for 2023. This aligns with a consistent trend over the last five years or more. This consumption is forecast to equate to 28.4 percent of milk production and the per capita consumption remains high by world standards.

Milk consumption has been falling at a rate of a little over one percent per annum over recent years, but the rate of decline has been slowed by population growth. Per capita consumption of milk has been declining at over two percent per annum. In 2017/18, consumption was over 100 liters per person per year and five years later, consumption is estimated to have fallen to 90 liters per person per year.

In Australia, there has been strong growth in the consumption of milk substitute products, mainly soy, almond, oat and rice milk. Over recent years, as the range of plant-based milk substitutes has increased, so too has the growth in this sector. Over recent years, consumption of plant-based milk substitutes has been accelerating and is now estimated to be growing at over 15 percent per year. However, overall consumption of milk substitutes is still less than 10 percent of cows' milk, and their rapid growth in popularity is not enough to compensate for the decline in the per capita consumption of cow's milk (see Figure 13).

The recent growing popularity of plant-based milk substitutes is despite multiple scientific studies identifying that cow's milk has a substantially better nutritional profile. Some plant-based milk substitutes are fortified with micronutrients to improve their nutritional profile, but studies have found that they are less bio-available than to micronutrients from cows' milk. Some plant-based milk substitutes have added refined sugars, perhaps to enhance flavor, which is less healthy than the natural lactose sugar in cow's milk. Nevertheless, plant-based milk substitutes can be a good alternative for people with lactose intolerance, vegans, or those who have ethical concerns regarding consuming animal products.

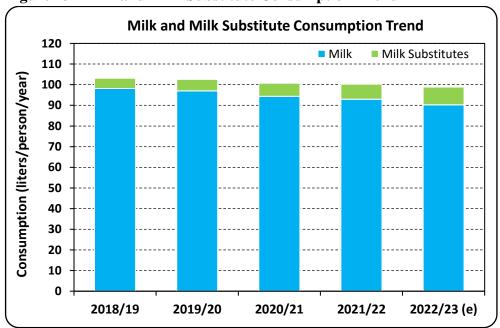


Figure 13 -Milk and Milk Substitute Consumption Trend

Source: Australian Bureau of Statistics / Dairy Australia

Note: (e) = estimate, Milk Substitutes for 2021/22 is an estimate

Overall, drinking milk consumption in Australia remains high compared to world levels. Full-fat milk consumption remains the highest at 56 percent, albeit slowly declining over recent years. Still there is also a slow shift away from reduced-fat and no-fat milk consumption towards the convenience of UHT

milk. Flavored milk sales are almost ten percent of overall drinking milk consumption and have shown small growth over recent years.

FAS/Canberra forecasts factory milk consumption in 2024 to reach 5.847 MMT from the upward-revised 2023 estimate of 5.817 MMT. The FAS/Canberra 2023 factory milk consumption estimate is almost six percent higher than the official USDA estimate of 5.505 MMT. This is due to a substantial improvement in the overall milk production estimate for 2023.

### **Trade**

### **Exports**

FAS/Canberra forecasts fluid milk exports to reach 250,000 MT in 2024, a 19 percent increase over the heavily downward revised 2023 estimate of 210,000 MT. Although this is a substantial growth forecast, the volume of exports remains well below the peak of 414,520 MT achieved in 2021. A major impediment to fluid milk market exports over the last two years has been the big rise in farmgate milk prices, particularly the premium for Australian dairy farmers compared to its competitors, such as New Zealand as previously mentioned. This has resulted in a competitiveness loss for Australian fluid milk in the export market. In addition, changing consumer preferences in China, Australia's major fluid milk trading partner, is also influencing the forecast.

The biggest fluid milk export market for Australia by far is China, which has accounted for nearly half of Australia's overall exports over recent years. Exports to China have plummeted by 58 percent from January to September 2023 compared to the same period in the previous year. The volume of trade to Malaysia, Vietnam, and Singapore has also fallen substantially (see Figure 14). Given the trade impacts are far broader than just a drop in exports to China, this supports industry reports that the reduced competitiveness of Australian fluid milk has been a big factor in the fall in trade. As mentioned earlier, the farmgate milk price for 2024 is expected to remain relatively high. However, this is due to the high price milk processors have already committed to for 2023/24. Due to the decline in Australia's competitiveness for exported dairy products, there will likely that there will be a substantial fall in farmgate milk prices for 2024/25. With this, the competitiveness of Australian fluid milk is expected to improve in the second half of 2024, and as a result, an improvement in fluid milk exports is forecast.

As mentioned, the major trading partner for Australian fluid milk is China. Although there have been domestic disruptions associated with the COVID-19 pandemic in recent years, changes in consumer preferences will have an influence on their future fluid milk demands from Australia. FAS/China reports that Chinese consumers see imported UHT milk (Note: around 98 percent of Australia's fluid milk exports are UHT milk) as higher quality than their domestic product. As a result, import demand will continue in the coming years. However, FAS/China also reports that Chinese consumers are starting to prefer pasteurized milk over UHT milk, which is now at around 15 percent of their overall fluid milk consumption. With this changing consumer preference in China, it is unlikely that their import demand for UHT milk will recover to recent past peaks.

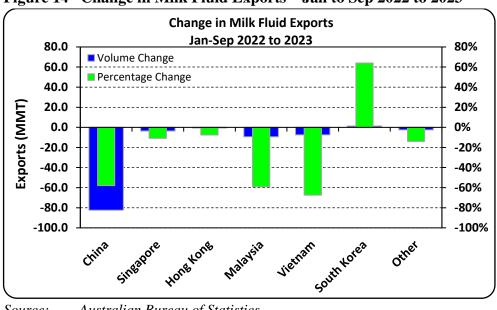


Figure 14 - Change in Milk Fluid Exports - Jan to Sep 2022 to 2023

Australian Bureau of Statistics Source:

The FAS/Canberra 2023 milk export estimate is 210,000 MT, 30 percent below the official USDA estimate of 300,000 MT. For the January to September 2023 period, 137,900 MT has been exported, and the past seasonality of exports shows an expectation of about 25 percent of annual exports in the final three months, which supports the downward revised estimate.

## **Imports**

Fluid milk imports by Australia are forecast to remain stable at a very low level of 7,000 MT in 2023. This level of imports has remained relatively constant over recent years.

Table 1 - Production, Supply, and Distribution of Dairy, Milk, Fluid

Dairy, Milk, Fluid	20	22	2023 Jan 2023		2024 Jan 2024	
Market Year Begins	Jan 2	2022				
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk (1000 HEAD)	1335	1335	1325	1270	0	1250
Cows Milk Production (1000 MT)	8455	8455	8200	8450	0	8500
Other Milk Production (1000 MT)	0	0	0	0	0	0
Total Production (1000 MT)	8455	8455	8200	8450	0	8500
Other Imports (1000 MT)	7	7	5	7	0	7
Total Imports (1000 MT)	7	7	5	7	0	7
Total Supply (1000 MT)	8462	8462	8205	8457	0	8507
Other Exports (1000 MT)	335	335	300	210	0	250
Total Exports (1000 MT)	335	335	300	210	0	250
Fluid Use Dom. Consum. (1000 MT)	2450	2450	2400	2430	0	2410
Factory Use Consum. (1000 MT)	5677	5677	5505	5817	0	5847
Feed Use Dom. Consum. (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	8127	8127	7905	8247	0	8257
Total Distribution (1000 MT)	8462	8462	8205	8457	0	8507
(1000 HEAD), (1000 MT)						

#### **CHEESE**

### **Production**

FAS/Canberra forecasts cheese production to continue to forge ahead and reach a new peak of 445,000 MT in 2024, a five percent increase on the upward revised 2023 estimate of 425,000 MT. If realized, they would be the first and second highest levels of cheese production on record. The current record of 413,000 MT was set in 2002 when milk production in Australia was at its peak and 37 percent higher than now. The primary reason for the higher expectation is directly related to the small increase in forecast milk production, but also a continuation of the trend over recent years of milk processors channeling more and more milk towards cheese production at the expense of other processed dairy products.

Cheese production is forecast to account for 42 percent of total fluid milk production. After accounting for forecast domestic fluid milk consumption and fluid milk exports, it represents 62 percent of fluid milk available for manufacturing products (see Figure 15). Since 2015, there has been a clear trend of cheese production becoming of increasing focus by processors, when cheese accounted for only 28 percent of national fluid milk production and 39 percent of fluid milk used for manufacturing products. Cheese by far, accounts for more milk usage in Australia than any other dairy product. The next highest use is for domestic fluid milk consumption, which is forecast to equate to 28 percent of national milk production.

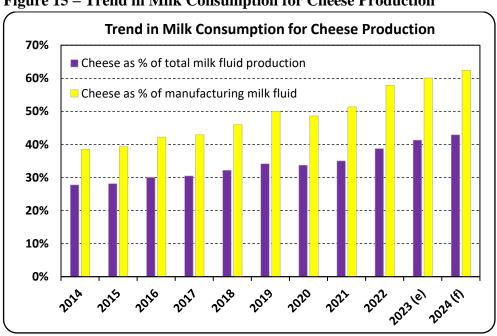


Figure 15 – Trend in Milk Consumption for Cheese Production

Source: Dairy Australia / Dairy Manufacturers

For the last five years, Australian cheese manufacturers have been focusing on increasing cheese production at the expense of other dairy commodities. The focus has been on cheddar, semi-hard and

hard grating cheeses, with little change to producing soft cheeses (see Figure 16). However, Dairy Australia data shows that for 2022/23, even though the overall cheese production increased by over six percent, cheddar cheese production fell by three percent. This may mark a turning point towards producing more of specialized cheddar varieties.

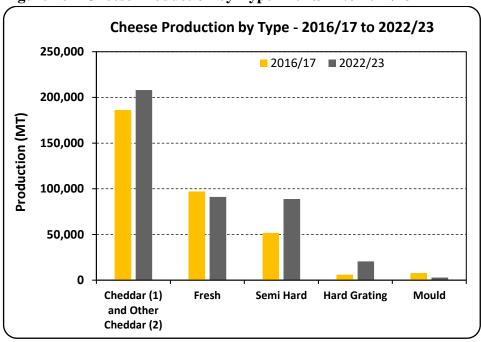


Figure 16 – Cheese Production by Type - 2016/17 to 2022/23

Source:

Dairy Australia / Dairy Manufacturers

Notes:

(1) Includes vintage

(2) Includes Cheedam, Colby, Cheshire, Gloucester, Lancashire, Nimbin and semi processed cheddar

FAS/Canberra's cheese production estimate for 2023 is revised up to 425,000 MT from the official USDA estimate of 380,000 MT. The Dairy Australia data for January to June 2023 cheese production shows a growth of over six percent compared to the same period in 2022. This is despite overall milk production estimated to remain essentially unchanged for 2023. Still, the volume of milk for factory use has increased by an estimated two and a half percent, mainly due to substantially lower milk fluid exports. The bigger growth in cheese production highlights the Australian dairy industry focus towards greater cheese production.

## Consumption

FAS/Canberra forecasts cheese consumption to continue to grow in 2024 at 380,000 MT, 15,000 MT above the 2023 estimate. Despite inflationary pressures expected by the Australian government to continue well into 2024, which will continue to impact consumers' disposable income, overall cheese consumption is expected rise.

Australia is one of the wealthiest nations in the world, and according to the Global Wealth Report 2023 by Credit Suisse, Australia ranked second in the world based on median wealth per adult in 2022. Combined with this, according to the Organisation for Economic Co-Operation and Development (OECD), household expenditure on food and restaurants in Australia is among the highest in the world. Still, a proportion of overall household expenditure is amongst the lowest in the world. This situation indicates that Australian consumers are prepared to purchase high-value foods but also have more capacity to do so than consumers from most other nations.

Ongoing inflationary pressures, greatly impact lower-income households, and a far higher proportion of their overall expenditure is on food than those on higher incomes. These consumers have some scope to respond to the impacts of the rising cost of living, by adjusting their purchasing behaviour by such measures as dining out less and instead opting for more take-away (to go) (for instance swapping out higher end cheeses used in restaurant dishes to the likes of mozzarella on pizzas) and purchasing block cheese rather than sliced cheese.

With this, there is substantial scope for Australian consumers to adjust their spending patterns on the type and level of convenience packaging to minimize the impact of inflationary pressures and continue to raise overall cheese consumption.

FAS/Canberra estimates consumption of cheese in 2023 at 365,000 MT, 25,000 MT above the official USDA estimate. This is a 15,000 MT increase over the 2022 outcome and is related to an anticipated improvement in domestic demand following an increasing population due to an accelerated migration program.

## **Trade**

### **Exports**

Cheese exports in 2024 are forecast by FAS/Canberra to increase by 28 percent to 160,000 MT from the 125,000 MT estimate for 2023. This is not an export growth trend but rather a return to recent past levels. The 2023 estimate is a drop in exports from past levels, which is associated with the reduced competitiveness of Australian cheeses on the export market due to high farmgate milk prices, as previously mentioned.

Australia is a net exporter of cheese, which is the largest dairy product exported. In 2022, around 36 percent of all cheese produced in Australia was exported. With overall milk production stabilizing, even with manufacturers favoring further gradual growth in cheese production, the scope for any substantial growth in exports in the coming years is limited.

Japan has consistently, and by far, been the largest market for Australian cheese over the last decade, and in recent years has accounted for near 40 percent of exports (see Figure 17). The top five destinations, including China, Malaysia, South Korea and the Philippines in recent years, have

consistently accounted for almost three-quarters of overall exports. For 2023, there has been a decline in cheese exports to all of these countries. For the January to September 2023 period, exports of cheese to four of these nations were the same or a little less than for the same period in the previous year.

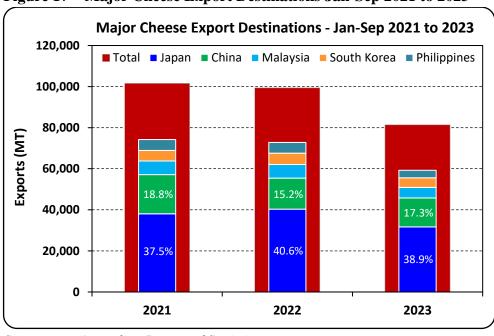


Figure 17 – Major Cheese Export Destinations Jan-Sep 2021 to 2023

Source: Australian Bureau of Statistics

FAS/Canberra estimates cheese exports at 125,000 MT in 2023, 5,000 MT higher than the official USDA estimate. Exports for the January to September 2023 period are at 91,618 MT. Past trends are for 27 percent of overall exports in the final quarter. Based on the results to date, and the anticipation of the usual pace of exports for the final quarter, a slightly upward-revised estimate for 2023 is expected to be achieved.

## **Imports**

FAS/Canberra forecasts cheese imports in Australia to decline by 10 percent to recent past levels of 100,000 MT for 2024, from an upward revised estimate of 110,000 MT for 2023. This is primarily due to the expectation that farmgate milk prices for the second half of 2024 will decline, enabling milk processors to produce cheeses at a more competitive price to displace the rise of imported cheeses in 2023.

For many years, three-quarters of all cheese imports were from New Zealand and the United States. Although New Zealand is the largest source of imports at 43 percent for the January to September 2023 period and 33 percent for the United States, over the last two years the balance has shifted away from New Zealand towards the United States. This was especially the case in 2022 when for the first time the United States was the biggest source of imported cheese. This balance has shifted back to New Zealand

for the January to September period of 2023 after a 62 percent increase compared to a 13 percent increase for the United States (see Figure 18).

Unlike New Zealand's other major trading partners, Australia is a net exporter of cheese and can supply much of its domestic needs. Imports of New Zealand cheese to Australia have typically been the lower value cheddar type cheeses, while Australian processors increasingly focus on producing more specialized cheeses for export. But as previously mentioned, the farmgate milk price for New Zealand dairy farmers across 2023 is substantially lower than for Australian dairy farmers. This situation has given New Zealand cheese processors a significant competitive advantage.

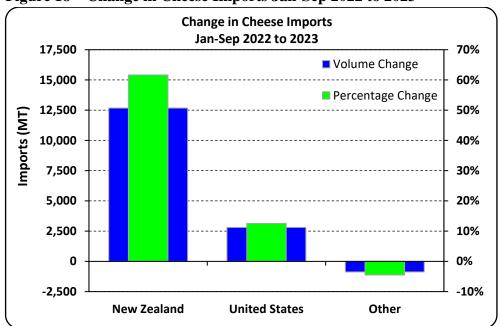


Figure 18 – Change in Cheese Imports Jan-Sep 2022 to 2023

Source: Australian Bureau of Statistics

FAS/Canberra's import estimate for 2023 has been upward revised to 110,000 MT from the official USDA estimate of 100,000 MT. For January to September 2023, imports are at 84,596 MT, around 14,600 MT higher than the same period in 2022, when overall imports for the entire year were 96,000 MT. The higher rate of imports in 2023 compared to recent past years is due to the lower competitiveness of domestically produced cheeses compared to imported products.

Table 2 - Production, Supply, and Distribution of Dairy, Cheese

Dairy, Cheese	2022		2023		2024	
Market Year Begins	Jan	2022	Jan 2023		Jan 2024	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	41	41	42	42	0	87
Production (1000 MT)	400	400	380	425	0	445
Other Imports (1000 MT)	96	96	100	110	0	100
Total Imports (1000 MT)	96	96	100	110	0	100
Total Supply (1000 MT)	537	537	522	577	0	632
Other Exports (1000 MT)	145	145	120	125	0	160
Total Exports (1000 MT)	145	145	120	125	0	160
Human Dom. Consumption (1000 MT)	330	350	340	365	0	380
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	350	350	340	365	0	380
Total Use (1000 MT)	495	495	460	490	0	540
Ending Stocks (1000 MT)	42	42	62	87	0	92
Total Distribution (1000 MT)	537	537	522	577	0	632
(1000 MT)						

### **BUTTER**

## **Production**

FAS/Canberra forecasts butter production in 2024 to decline to 45,000 MT from the 2023 estimate of 50,000 MT. The forecast decline in butter production is part of a broader trend over almost the last decade, partly driven by declining overall milk production (although now stabilizing), but also processors seeking higher value opportunities from the available milk supply.

For decades prior to 2018, butter production exceeded 100,000 MT, peaking at 180,000 MT in 2000. The forecast production 24 years after the peak is merely one-quarter of that level. Australia's milk processors have opted to focus their efforts away from butter and have chosen to produce greater volumes of cheese instead. With this shift in the use of processed milk, Australia became a net importer of butter in 2017 and now exports less than 20 percent of the volume of imports (see Figure 19).

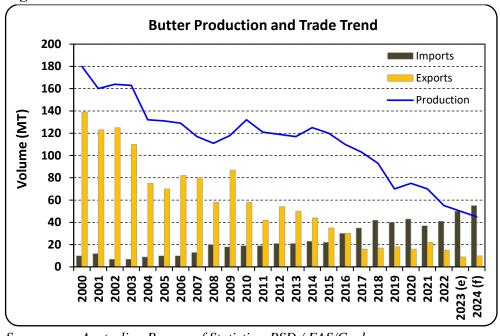


Figure 19 – Butter Production and Trade Trend - 2000 to 2024

Source: Australian Bureau of Statistics, PSD / FAS/Canberra

Note: (e) = estimate, (f) = forecast

FAS/Canberra estimates butter production in 2023 at 50,000 MT, in line with the USDA estimate, but also 5,000 MT below the production in 2022. This estimate is based on Dairy Australia's reported production data for the January to June 2023 period, which has butter production around 13 percent below the same period for 2022. This substantial drop in butter production estimate for 2023 is largely related to the industry's focus on increased cheese production.

### Consumption

FAS/Canberra forecasts butter consumption to increase slightly in 2024 at 95,000 MT, 3,000 MT higher than the 2023 estimate. Dairy Australia's per capita consumption results indicate that butter consumption has been declining in past years, but the rate of decline is anticipated to slow. With a rise in population expected, as reported by the federal government due to a strong migration program in 2023 and well into 2024, expectations are for a modest increase in overall butter consumption.

Butter volume includes butteroil and anhydrous milk fat in butter equivalent terms. Anhydrous milk fat is essentially dehydrated butter used in food manufacturing, such as bakery and confectionery products. Although butter is also used in food manufacturing, it is primarily sold through retail channels and used by the food service sector.

### **Trade**

# **Exports**

Butter exports are forecast by FAS/Canberra to essentially remain stable at 10,000 MT in 2024, from the 2023 estimate of 9,000 MT. If realized, this would be the lowest level of butter exports in almost four decades. This very low level of exports is due to the declining production over the last two decades or more, and along with an increasing domestic consumption due to rising population over time, this has resulted in far less butter available for export. A further contributing factor, as mentioned previously, is that high farmgate milk prices have made Australian dairy commodities less competitive. However, this situation will ease somewhat in the second half of 2024. Australia is a net importer of butter, consuming far more butter than it produces.

In recent years, Thailand has been the major export destination for around 20 percent of Australian butter. However, China, Singapore, and Malaysia are also significant destinations. Exports to Australia's key markets in 2023 have fallen or remained stable due to reduced competitiveness associated with high farmgate milk prices. As mentioned earlier, Australian farmgate milk prices are expected to become more competitive in the second half of 2024 and move closer to that of its major southern hemisphere competitor, New Zealand.

Butter exports for the January to September 2023 period are at 6,249 MT, equating to around half of that for the same period in the prior year. The fall is largely due to substantial declines in exports to Thailand, China, and Singapore but has partially been offset by increased exports to the Philippines.

### **Imports**

FAS/Canberra forecasts butter imports to increase to 55,000 MT in 2024 from the 50,000 MT estimate for 2023. The forecast increase in butter imports is mainly due to the anticipated 5,000 MT decrease in butter production.

The major source of butter imports is from New Zealand, which accounts for around 85 percent of overall imports, which has been the case for many years. This is expected to continue in the coming years, with New Zealand being a major dairy producer and near Australia.

Butter imports for the January to September 2023 period are at 35,272 MT, some 11,000 MT higher than the result for the same period in 2022, with an outcome of 41,467 MT for the year. With three months remaining in 2023, full-year exports are approximately on track to reach the estimated 50,000 MT, 5,000 MT lower than the official USDA estimate.

Table 3 - Production, Supply, and Distribution of Dairy, Butter

Dairy, Butter	2022 Jan 2022		2023 Jan 2023		2024 Jan 2024	
Market Year Begins						
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	67	67	57	57	0	56
Production (1000 MT)	55	55	50	50	0	45
Other Imports (1000 MT)	41	41	55	50	0	55
Total Imports (1000 MT)	41	41	55	50	0	55
Total Supply (1000 MT)	163	163	162	157	0	156
Other Exports (1000 MT)	15	15	9	9	0	10
Total Exports (1000 MT)	15	15	9	9	0	10
Domestic Consumption (1000 MT)	91	91	92	92	0	95
Total Use (1000 MT)	106	106	101	101	0	105
Ending Stocks (1000 MT)	57	57	61	56	0	51
Total Distribution (1000 MT)	163	163	162	157	0	156
(1000 MT)						

#### SKIM MILK POWDER

#### **Production**

FAS/Canberra forecasts skim milk powder (SMP) production in 2024 to decline moderately to 140,000 MT from the 2023 estimate of 145,000 MT. SMP and butter are typically produced as part of the same manufacturing process. However, manufacturers can vary the amount of alternate butterfat-based product production, such as cream and sour cream, which changes the amount of butterfat used for butter production. The primary reason for the forecast decline is the expectation that dairy processors will continue focusing on increasing cheese production at the expense of other major dairy commodities.

The fat content of milk is initially reduced and then dried to produce SMP. According to industry report of the extracted milk fat from the production of SMP, approximately one-quarter is used to produce cream (including sour cream) and three-quarters is further processed to produce butter, the mix of which manufacturers can readily alter.

Like butter, SMP production is now well below past levels which for almost a decade prior to 2018 was typically well more than 200,000 MT, peaking at around 265,000 MT in the early 2000s when milk production was at its highest. Over almost the last decade, the rate of SMP and butter production decline has been greater than the decline in milk production. Milk has been channelled towards cheese production over the last decade (see Figure 20).

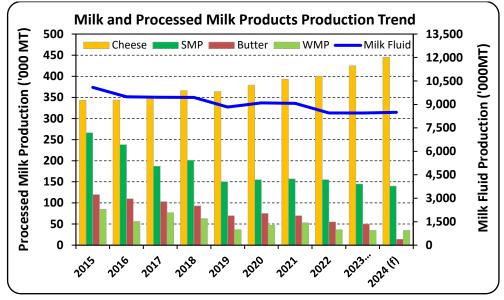


Figure 20 - Milk and Processed Milk Products Production Trend 2015 to 2024

Source:

PSD / FAS/Canberra

*Note:* 

(e) = estimate, (f) = forecast

FAS/Canberra estimates SMP production in 2023 at 145,000 MT, 5,000 MT lower than the official USDA estimate. Dairy Australia reports SMP production for the first half of 2023 to be around 2,000 MT lower than for the same period in the previous year. Seasonally, about 60 to 65 percent of production is in the second half of the year, which has triggered FAS/Canberra's downward revision of the estimate.

## Consumption

SMP consumption in 2024 is forecast by FAS/Canberra at 30,000 MT, in line with the 2023 estimate. The expectation of stronger-than-usual population growth starting in 2023 and continuing well into 2024 is expected to have an upward impact on domestic SMP consumption. However, this is expected to be balanced by the increasing living cost pressures that are expected to continue in the forecast year.

Skim milk powder has a wide range of uses in the food manufacturing sector as an additive product, such as:

- breads, cakes and biscuits (improving volume and binding capacity, browning, freshness extension);
- beverages, confectionary (such as milk chocolate to add a milky texture and flavour);
- dry mixes and infant products (assists with adding a dairy flavour, texture and aroma to foods);
- prepared foods such as processed meats and seafoods, seasoning and flavours (adding texture and flavor and acting as a flavour carrier);
- snacks:
- animal feeds.

SMP can also be reconstituted to produce yogurts, dairy desserts, ice creams, and skim milk, particularly in countries without adequate refrigerated food chain networks.

FAS/Canberra estimates SMP consumption in 2023 at 30,000 MT, in line with the official USDA estimate.

#### **Trade**

# **Exports**

FAS/Canberra forecasts exports of SMP in 2024 at 125,000 MT, which is in line with the prior year estimate. Export demand for Australian SMP is expected to improve somewhat for the forecast year compared to 2023, which is impacted by diminishing competitiveness associated with high farmgate milk prices as previously discussed. With improved competitiveness in the second half of 2024, from the expectation of lower farmgate milk prices, the export volume in the forecast year is expected to remain strong. With gradually declining SMP production and Australia already exporting a large proportion of the SMP that it produces, there needs to be more scope to increase exports further.

Over the last five years, China has been an increasingly important SMP destination and has risen to account for over half of overall exports for the first nine months of 2023. Although of diminishing importance, Indonesia, is still a significant destination at 15 to 20 percent over recent years. Export volumes to China have been relatively stable from 2021 to 2023 despite Australia's decreasing SMP production (see Figure 21). This is despite China's increasing domestic dairy production and a small decrease in forecast SMP imports. FAS/China reports that Chinese consumers consider imported milk powders to be of higher quality compared to domestic production. This supports continued strong SMP exports from Australia to China in the forecast year.

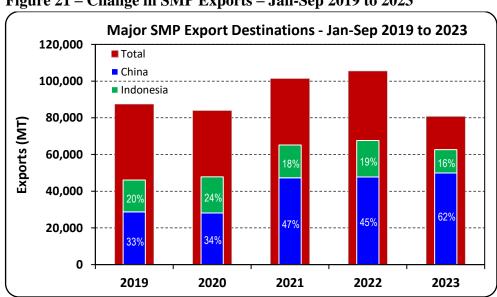


Figure 21 – Change in SMP Exports – Jan-Sep 2019 to 2023

Source: Australian Bureau of Statistics

### **Imports**

SMP imports are very low, and FAS/Canberra forecasts it to remain relatively stable at 15,000 MT in 2023. Australia is a large net exporter of SMP, and there has been little variance in import volumes over recent years.

SMP imports for the January to September period in 2023 are 9,580 MT, very similar to the same period in the previous year which achieved a full-year outcome of 15,047 MT. Accordingly, the FAS/Canberra estimate remains unchanged and in line with the official USDA estimate for 2023.

Over many years, the primary source of SMP imports has been from New Zealand, with a lower volume from Germany and small volumes from Austria and the United States. In the January to September 2023 period, imports from Germany have declined and this has increased imports from New Zealand, Austria, and United States.

Table 4 - Production, Supply, and Distribution of Dairy, Milk, Nonfat Dry

Dairy, Milk, Nonfat Dry	2022 Jan 2022		2023 Jan 2023		2024 Jan 2024	
Market Year Begins						
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	29	29	17	15	0	20
Production (1000 MT)	155	155	150	145	0	140
Other Imports (1000 MT)	15	15	15	15	0	15
Total Imports (1000 MT)	15	15	15	15	0	15
Total Supply (1000 MT)	199	199	182	175	0	175
Other Exports (1000 MT)	154	154	130	125	0	125
Total Exports (1000 MT)	154	154	130	125	0	125
Human Dom. Consumption (1000 MT)	28	30	30	30	0	30
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	28	30	30	30	0	30
Total Use (1000 MT)	182	184	160	155	0	155
Ending Stocks (1000 MT)	17	15	22	20	0	20
Total Distribution (1000 MT)	199	199	182	175	0	175
(1000 MT)						

#### WHOLE MILK POWDER

#### **Production**

FAS/Canberra forecasts 2024 WMP production to remain stable at 35,000 MT relative to the upward revised 2023 estimate. If realised, they will become the equal lowest WMP production levels for at least 40 years. With milk production stabilizing, WMP production may also stabilize at a very low level.

Peak WMP production in Australia was in 2002 at 239,000 MT and has gradually declined to a forecast 35,000 MT in 2024. With Australian manufacturers channelling greater volumes of milk towards cheese production, the reduced volumes of WMP have been focused on producing more specialized higher value powders such as infant milk formula.

The FAS/Canberra WMP production estimate for 2023 is at 35,000 MT and is 5,000 MT higher than the official USDA estimate of 30,000 MT. Dairy Australia data for the January to June 2023 period shows production at 16,077 MT. It is almost identical to the same period in the previous year, which produced a full-year result (for 2022) marginally higher than the 2023 estimate.

### Consumption

FAS/Canberra forecasts WMP domestic consumption in 2024 to remain at 40,000 MT, in line with the upward revised 2023 estimate. Due to the nature of the use of WMP in manufactured products, major changes in consumption from year to year are not expected.

WMP is an important ingredient for a wide range of manufactured food products, and it can be reconstituted to produce milk drinks, yogurts, and ice cream. In the food manufacturing sector, it is used similarly to SMP in baking products, such as breads, cakes and biscuits, beverages, confectionaries, dry mixes and prepared foods. But a key difference is that WMP is also used to produce infant milk formula, whereas SMP is not.

### Trade

## **Exports**

Exports of WMP in 2024 are forecast by FAS/Canberra at 40,000 MT, in line with the 2023 estimate. With decreasing production and a growing population. Australia is expected to become a net importer of WMP for the second time in 2023 after briefly reaching this point in 2020 (see Figure 22). However, this is now anticipated to continue into the forecast year and beyond.

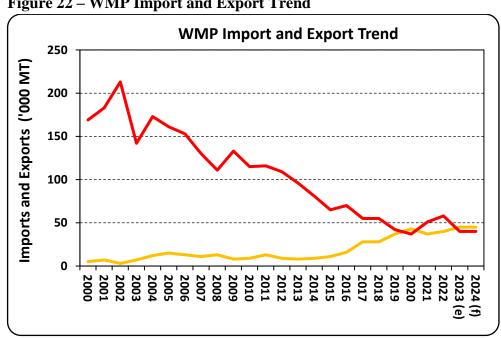


Figure 22 – WMP Import and Export Trend

Australian Bureau of Statistics Source:

With relatively low WMP production, Australian manufacturers focus on producing higher-value WMP predominantly for export, while imported product is primarily used as an ingredient in manufactured products.

In recent years, China and Thailand have consistently been strong WMP export destinations, but the United Arab Emirates has also emerged as a strong destination (see Figure 23). For the January to September 2022 and 2023 periods, these three nations accounted for around 70 percent of overall WMP exports.

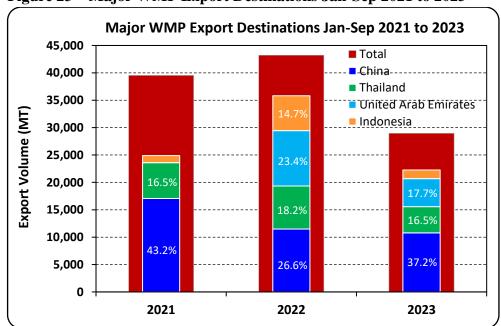


Figure 23 – Major WMP Export Destinations Jan-Sep 2021 to 2023

Source: Australian Bureau of Statistics

WMP exports for the January to September 2023 period are at 28,964 MT. Past trends indicate that around one-quarter of overall exports occur in the final three months of the year, and if this trend continues for 2023, trade is on track to reach near the 40,000 MT estimate for the full year.

### **Imports**

FAS/Canberra forecasts WMP imports of 45,000 MT in 2024, in line with the estimate for 2023. With the forecast of stable production, domestic consumption, and exports of WMP for 2024, the forecast level of imports to meet domestic demand is also anticipated to remain unchanged from the 2023 estimate.

Unlike butter, the majority of WMP imports to Australia are from New Zealand, the volume and proportion of which have crept up in recent years to now being around 90 percent. Due to New Zealand

being a large producer of milk, and their milk production seasonality has a big peak in the spring months, their processors are forced by these circumstances to produce large volumes of milk powders. Due to their scale of milk powder volumes, they are efficient producers. In this circumstance, it is logical that Australia has reduced its focus on WMP production to higher-value specialized products for export, and instead imports a large proportion of its domestic needs from New Zealand, which is nearby.

The FAS/Canberra import estimate of WMP in 2023 is 45,000 MT, 5,000 MT higher than for 2022. WMP imports in the first nine months of 2023 are at 34,580 MT and approximately 4,500 MT higher than for the same period in 2022. The results to date for 2023 are on track to reach the full-year estimate.

Table 5 - Production, Supply, and Distribution of Dairy, Dry Whole Milk Powder

Dairy, Dry Whole Milk Powder	2022 Jan 2022		2023 Jan 2023		2024 Jan 2024	
Market Year Begins						
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	36	36	20	20	0	20
Production (1000 MT)	37	37	30	35	0	35
Other Imports (1000 MT)	40	40	45	45	0	45
Total Imports (1000 MT)	40	40	45	45	0	45
Total Supply (1000 MT)	113	113	95	100	0	100
Other Exports (1000 MT)	58	58	40	40	0	40
Total Exports (1000 MT)	58	58	40	40	0	40
Human Dom. Consumption (1000 MT)	35	35	35	40	0	40
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	35	35	35	40	0	40
Total Use (1000 MT)	93	93	75	80	0	80
Ending Stocks (1000 MT)	20	20	20	20	0	20
Total Distribution (1000 MT)	113	113	95	100	0	100
(1000 MT)						

## **Attachments:**

No Attachments