

Dairy Farm Monitor Project

Western Australia
Annual Report 2024-25

Delivering
for Dairy

Acknowledgements

Participants

Western Dairy would like to gratefully acknowledge the cooperation, patience and goodwill of the farmers who willingly supplied their farm information.

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Report

The report was prepared by Sarah Lang (Regional Finance Hub) in conjunction with Dairy Australia.

Contributors/data collectors

We acknowledge the work of dairy consultants Sarah Lang, Kirk Reynolds, Dan Parnell, Colin Bosustow and Steve Hossen who collected farm data, provided feedback and data validation.

We also acknowledge the work of Dairy Australia's farm analysts Fiona Smith and Kerry Kempton, who conducted the data checking, validation and analysis.

Appendix tables

The appendices at the end of this report provide detailed metrics on the historical physical and financial performance and efficiency for the average of the Western Australian project participants.

Further information

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Executive summary

In 2024-25 the average Western Australia Dairy Farm Monitor profitability was the third lowest in the 12-years of the project at \$1.64/kg MS (accounting for inflation).

Average milk price increased to \$9.63 per kilograms of milk solids (\$/kg MS) or 70.2 cents per litre (c/L).

Additional beef sales and higher prices, increased livestock trading profit to \$1.40/kg MS (10.2c/L). Total Gross Farm income increased to \$11.13/kg MS or 81.1c/L in 2024-25 from \$10.75 (\$/kg MS) or 77.7c/L in 2023-24.

41 per cent of participants recorded a higher ROE than ROTA meaning they were able to grow their business in 2024-25.

Gross farm income rose by 4 per cent to \$11.13/kg MS, primarily reflecting a 1 per cent increase in the milk price and a 21 per cent uplift in livestock trading profit, attributable to stronger beef sales and higher market prices.

A 3 per cent increase in overhead costs was offset by a 6 per cent reduction in variable costs, primarily fodder purchases.

Average Total EBIT increased 57 per cent from last year, adjusted for inflation.

Average return on equity (ROE) in 2025 was 2.4 per cent in comparison to the previous year at negative 0.8 per cent.

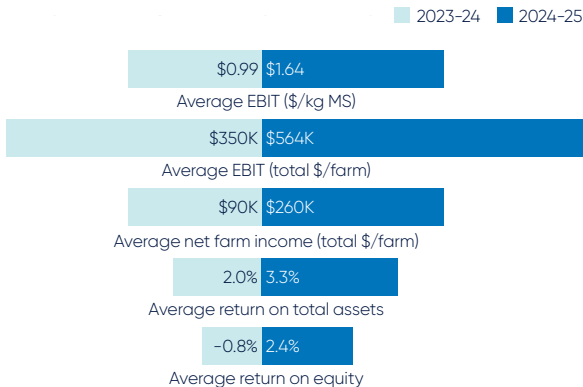
Rainfall in 2024-25 was 5.3 per cent below the long-term average. Monthly rainfall across the year broadly followed seasonal expectations, with peak falls in August exceeding long-term averages, supporting early pasture growth. However, total annual rainfall was 874mm which is below the long-term average of 923mm.

The amount of grazed pasture increased by 0.2 t DM/milking ha to 3.3 t DM/milking ha and conserved feed increased by 0.4 t DM/milking ha. The proportion of grazed feed consumed in the diet increased by 4 per cent, decreasing homemade hay and silage as a proportion of the diet.

Despite gross farm income being the third highest, profitability (average EBIT per kilogram of milk solids) was the third lowest (accounting for inflation) in the 12-year history of the project.

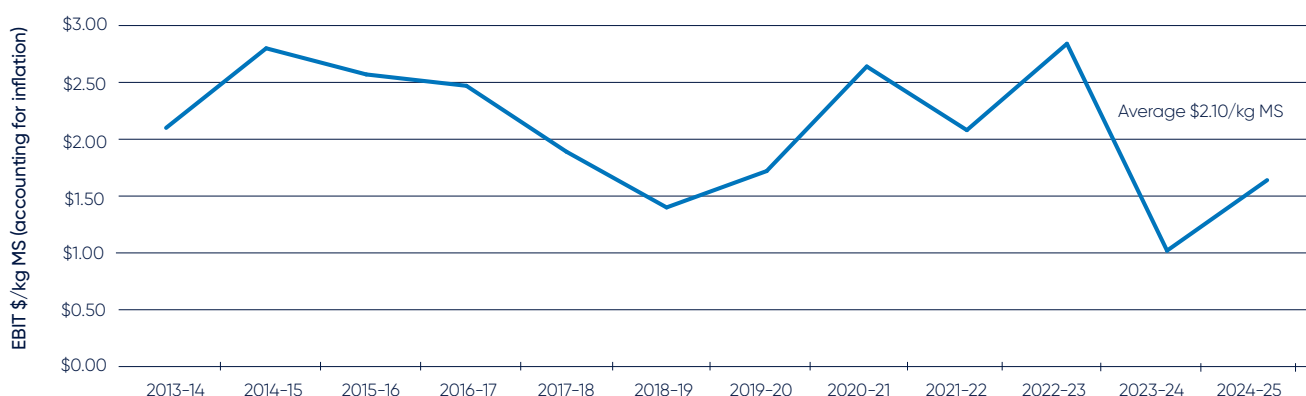
Net farm income increased to \$0.45 (\$/kg MS) or 3.4c/L compared to negative \$0.12 (\$/kg MS) or negative 0.8c/L in 2023-24.

Western Australia



How does 2024-25 compare?

Historical profitability



Average profit (per kg milk solids) in 2024-25 was \$1.64/kg MS (12.0c/L) which was below the long-term average of \$2.10/kg MS for Western Australia.

Profit results per farm (average \$563,801) across the state, was lower than the 12-year long term average of \$638,856, and the fifth lowest in the 12 years of the project.

Milk price

Milk price increased by 1 per cent from 2023-24. Milk income contributed on average, 87 per cent of gross farm income compared to 89 per cent in 2023-24, due to a higher livestock profit.



Western Australia ↑ 1%
to \$9.63/kg MS 70.2 c/L

Expectations for profit in 2025-26

Participant farmers were more optimistic in their outlook for farm business returns in the coming 12 months than last year with 64 per cent of participants expecting better returns in 2025-26, up from 62 per cent in 2023-24 and nil expecting a decline, down from 4 per cent in 2023-24. Milk price (55 per cent) followed by input costs (18 per cent) were identified by participants as the greatest risk to their business over the next 12 months, followed by climate/seasonal conditions and pasture/fodder (9 per cent respectively).

Greenhouse gas emissions

The average carbon footprint for Western Australian dairy farm participants was 5,315 tonnes of carbon dioxide equivalents per farm in 2024-25. Average farm GHG emissions increased from last year, mostly due to larger herd sizes and greater milk production per farm. Average net emissions have largely followed the trends of average milk production over the past five years across the participant farms.

Western Australia overview

State-wide, average profitability in Western Australia was the third lowest in the 12-years of the project despite 91 per cent of participants recording a profit. Average profits were 66 per cent higher to \$1.64/kg MS or 12.0c/L. Slightly higher prices received for milk and higher livestock profit increased profitability.

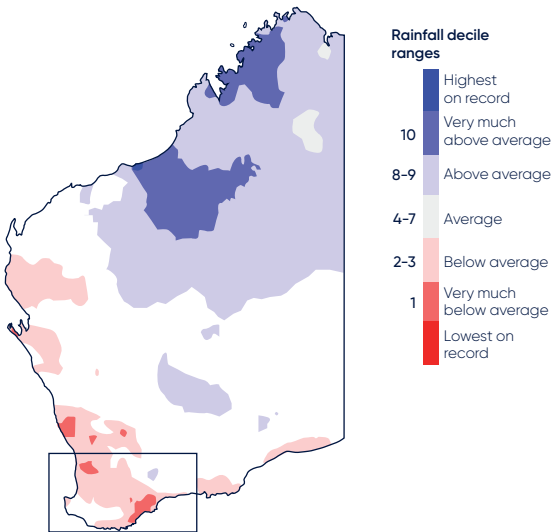
Fodder conservation increased compared to last year, supported by a wet winter growing season that promoted early pasture growth and enabled farms to secure higher volumes of quality homegrown feed.

Dairying in Western Australia



There were approximately **99 dairy farm businesses** in WA that produced **331 million litres** or **4 per cent** of Australia's national milk production in 2024-25.

Dairy Farm Monitor Project farm locations and rainfall in 2024-25

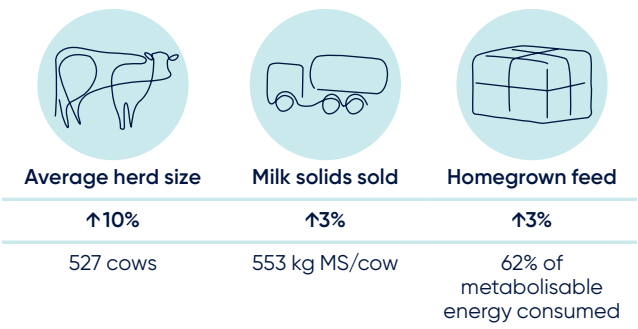


Note: The box on the above map indicates the area where the participant farms are situated.

Physical farm characteristics

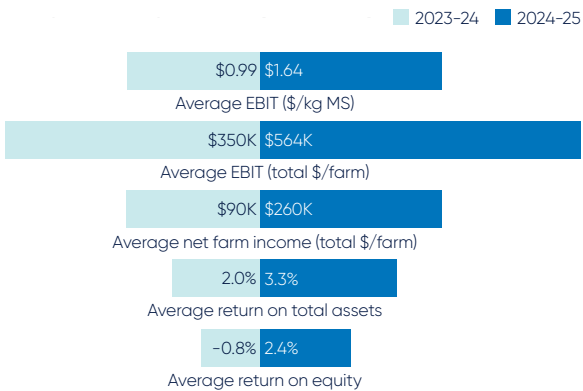
The average herd size of DFMP participants in Western Australia increased to 527 cows, as did milk produced per cow, increasing from 539kg MS/cow to 553kg MS/cow.

Farms grazed more feed on their milking areas this year, supported by higher average rainfall across most participant farms and increased fertiliser use, which together drove a rise in overall home-grown feed compared to last year.



Profitability

In 2024-25, 91 per cent of WA participants recorded a profit



In 2024-25 farm profitability for the state has been influenced by:



↑ 1%

in average milk price to **\$9.63/kg MS**
(70.2c/L)



↑ 21%

in livestock trading profit to **\$1.40/kg MS**
(10.2c/L)



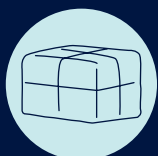
↑ 15%

in herd costs to **\$0.38/kg MS** (2.8c/L)



↑ 8%

in shed costs to **\$0.39/kg MS** (2.8c/L)



↓ 9%

in total feed costs to **\$4.83/kg MS**
(35.2c/L)



↑ 3%

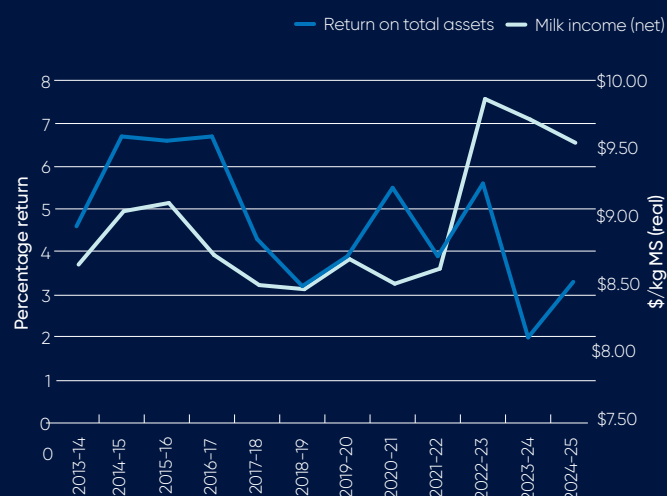
in overhead costs to **\$3.89/kg MS**
(28.3c/L)

Improved profitability was driven by a higher milk price, increased livestock trading profit, and reduced variable costs—primarily from lower purchased feed and stronger feed reserves—resulting in an increase in EBIT. The state-wide average EBIT per kilogram milk solids was the third lowest on record, accounting for inflation.

A 7 per cent increase to finance and lease costs was driven by an increase in equipment loans and current liabilities.

The increase in EBIT was partially offset by higher finance and lease costs resulting in net farm income rising to \$0.45 (\$/kg MS) or 3.4c/L compared to negative \$0.12 (\$/kg MS) or negative \$0.8c/L in 2023-24.

Return on total assets and milk price



The milk price in \$/kg Ms (real) accounts for inflation.

Physical parameters and seasonal conditions

In 2024–25, 68 per cent of farms experienced below-average rainfall; however, an excellent early winter supported strong pasture growth, enabling increased production of homegrown fodder despite the below-average rainfall.

The excellent early winter resulted in an increase in homegrown feed on milking platforms, with more spent on fertiliser as a result.

Farm systems have remained similar, although the average herd size increased to 527 in 2024–25 from 478 in 2023–24.

WA pasture based dairy production

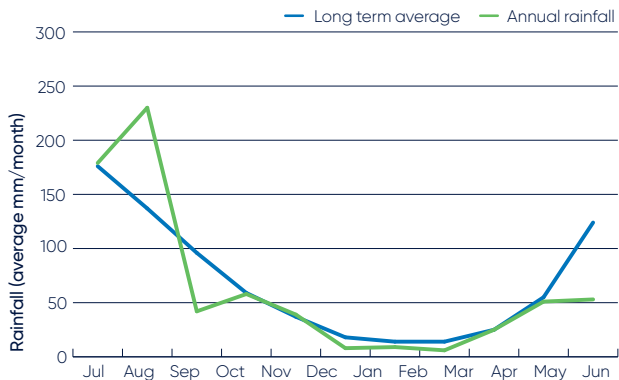
Dairying in Western Australia is predominantly pasture based, with 62 per cent of all consumed metabolisable energy home grown across participant farms. Spring and Autumn rainfall are important as is the availability of adequate water across irrigation areas.

Rainfall

Rainfall in 2024–25 was 5.3 per cent below the long-term average (Figure 1). The wet winter growing season across Western Australia encouraged early pasture growth, which significantly boosted fodder conservation compared to last year. This reduced the need for purchased feed, lowering input costs and improving financial outcomes for farmers.

The preceding conditions as well as the conditions prevalent in a particular month influence feed availability and conditions to harvest pastures and crops as well as their timely renovation or sowing.

Figure 1 Monthly rainfall 2024–25



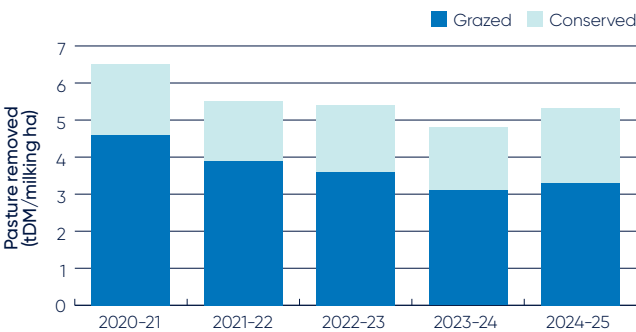
Feed consumption and harvest

Seasonal conditions increased the ability to grow, graze and harvest feed with more homegrown feed availability across the state in comparison to last year. The amount of grazed pasture increased by 0.2 t DM/milking ha to 3.3 t DM/milking ha and conserved feed increased by 0.3 t DM/milking ha to 2.0 t DM/milking ha (Figure 2).

Farmers were able to grow and harvest more feed due to favourable winter rainfall, which supported strong pasture growth. Taking advantage of the good seasonal conditions, they also applied additional fertiliser to maximise yields, further boosting fodder availability compared to previous years.

As a proportion of the diet, homegrown feed (grazed and conserved pasture) accounted for 62 per cent of the metabolisable energy consumed, compared to 60 per cent in the previous year.

Figure 2 Estimated tonnes of homegrown feed removed

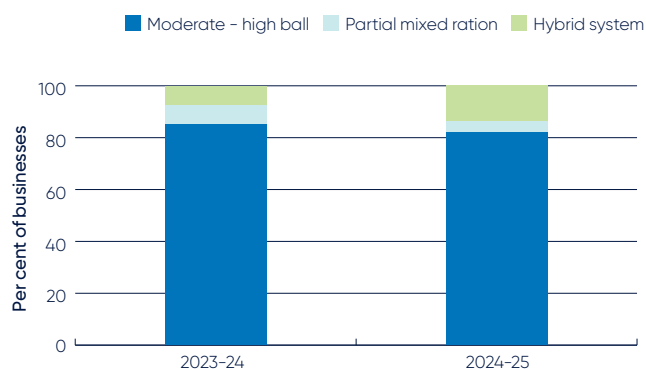


Feeding system

Moderate to high bail feeding systems were the most popular feeding system in 2024-25 (Figure 3). The move from a moderate-high bail ration system to a hybrid system from 2023-24 is largely due to a change in participant farms rather than showing a particular trend in the Western Australian farming systems. This year there were 82 per cent of farms with a moderate-high bail system and 18 per cent utilising either a hybrid system or partial mixed ration.

Western Australia is predominantly reliant on annual pasture species, comprising approximately 92 per cent of pastures on average, with the remaining portion made up of perennials.

Figure 3 Type of feeding systems



Information on feeding systems was first collected in 2020-21 and the purpose is to capture the intensification of dairy feeding systems in Western Australia over time. The type of feeding system employed reflects a longer-term decision made by the business operator to manage a certain type of feeding system, rather than a short term one to manage adverse seasonal conditions in a given year, i.e., wet soils management or drought.

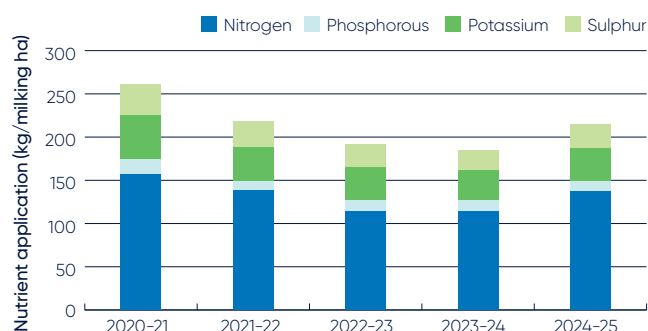
Fertiliser application

Total nutrient application on the milking area increased by 16 per cent to 215 kg/milking ha. The favourable winter rainfall resulted in farmers applying 16 per cent more fertiliser than last year.

In comparison to the previous year, Figure 4 shows that in 2024-25:

- Nitrogen applied was 137 kg/ha, a 20 per cent increase.
- Phosphorous applied was 12 kg/ha, an 8 per cent reduction.
- Potassium applied was 38 kg/ha, a 9 per cent increase.
- Sulphur applied was 28 kg/ha, a 22 per cent increase.

Figure 4 Nutrient application

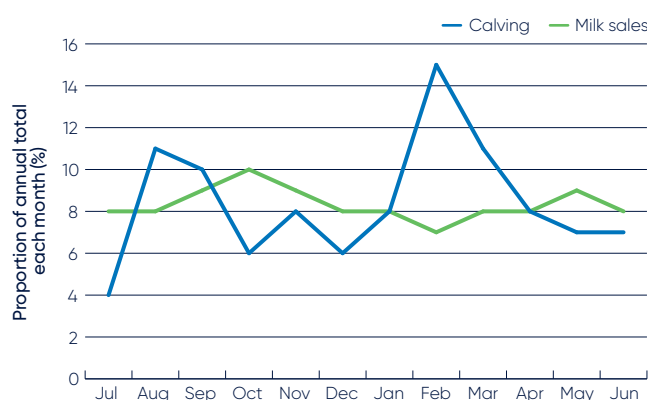


Milk solids sold

Milk production reflects the seasonal nature of calving. Calving pattern determines milk production and subsequently the milk payment system available to participant farms (Figure 5).

Total milk production (kg/MS) increased on Western Australian participant farms due to an increase in herd size, and an increase in per cow production.

Figure 5 Monthly distribution of milk sales and calving



Calving pattern

Western Australia is characterised by split calving (spring and autumn) as shown in Figure 5. Many factors influence choice of calving pattern on individual farms, including matching feed supply with animal demand, receiving seasonal milk price, rainfall and irrigation, ease of management and herd fertility management.

The lowest proportion of cows calving occurs across July and December.

Whole farm analysis

In 2024-25 the highest milk price (nominal) was recorded in the 12 years of DFMP at \$9.63 kg/MS or 70.2c/L.

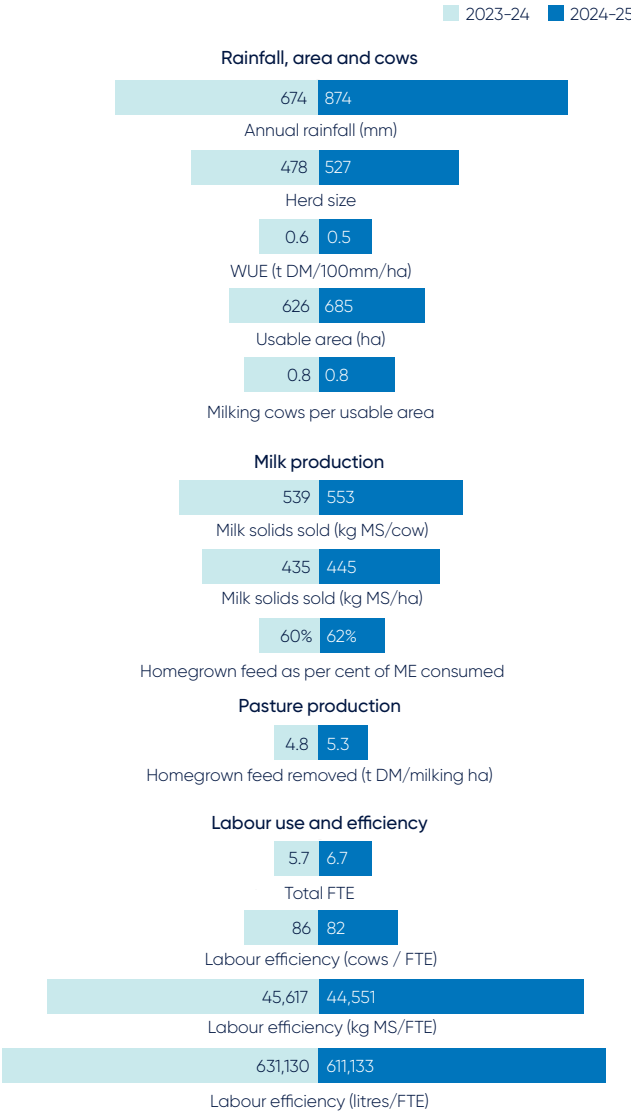
On average, farm profitability (\$/kg MS) increased by 66 per cent in 2024-25 from the previous year. Earnings before Interest and Tax (EBIT) was positive for 91 per cent of participating farms.

Livestock trading profit increased 21 per cent due to increased prices and higher numbers sold.

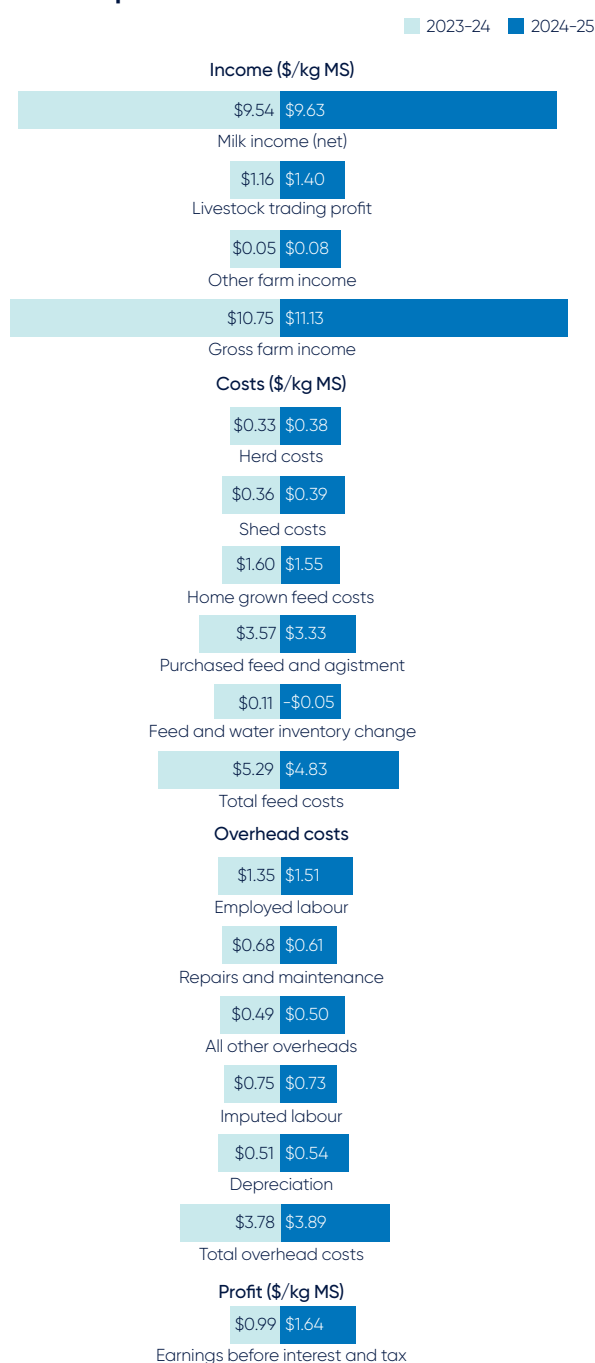
Repairs and maintenance costs reduced by 10 per cent, with the savings offset by an increase in equipment loans.

Variable costs decreased by 6 per cent (primarily due to lower feed costs and higher conserved feed), with overhead costs also lower by 3 per cent.

Physical parameters



Financial parameters



Gross farm income

A 4 per cent increase in gross farm income to \$11.13/kg MS or 81.1c/L was recorded in 2024-25 from the previous year. When accounting for inflation, it is the third highest over the 12 years of the DFMP. The key driver was an increase in livestock profit.

Variable costs

Variable costs decreased 6 per cent or \$0.38/kg MS (2.4c/L) with lower purchased feed costs and building of feed inventory across the year being the largest components.

Fodder purchases fell by \$0.18/kg MS (1.3c/L), driven primarily by the increased availability of home grown feed from the strong growing season. Fuel & oil decreased by \$0.04/kg MS (0.03c/L).

The favourable winter rainfall resulted in an increase in feed on hand by year end. Participants applied more fertiliser due to favourable growing season rainfall.

Whilst herd costs and shed costs increased this year this was offset by a decrease in total feed costs.

Overhead costs

Total overhead costs increased on average by 3 per cent in 2024-25.

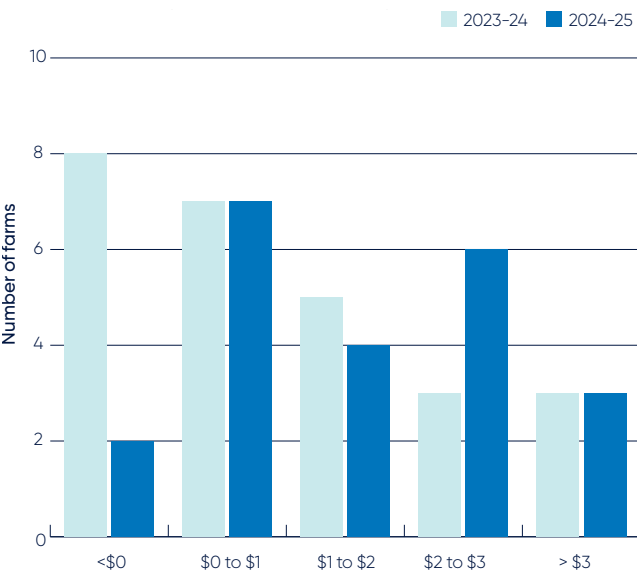
Repairs and maintenance decreased by 10 per cent to 0.61/kg MS (4.5 c/L) and increased depreciation costs accounted for \$0.54/kg MS (3.9 c/L). It is worth noting that average equipment finance loans across participant farms doubled compared to 2023-24, resulting in increased finance costs despite assisting with lower repair bills.

Spending on employed labour increased 12 per cent or \$0.16/kg MS (1.2c/L). Availability of labour and accommodation were frequently raised by farmers as a prominent issue.

Earnings before interest and tax

In 2024-25, 91 per cent of participants had a positive EBIT (Figure 6). Average EBIT per farm (total dollars) was the fifth lowest in the 12 years of the DFMP, accounting for inflation. Average EBIT (\$1.64/kg MS) was 61 per cent higher in comparison to 2023-24 predominantly influenced by increase in livestock profit.

Figure 6 Average EBIT per kg MS



Return on total assets and equity

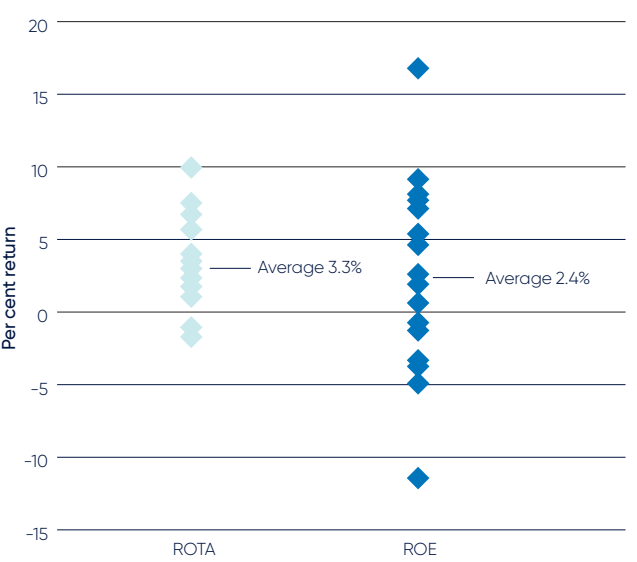
Return on total assets was the third lowest in the 12-years of the project and return on equity was the second lowest.

A positive return on total assets (ROTA) was recorded for 91 per cent of participants (Figure 7). In 2024-25 average ROTA increased to 3.3 per cent compared to 2.0 per cent the previous year. The higher returns were a result of higher total EBIT across participant farms.

Average return on equity (ROE) in 2024-25 was 2.4 per cent in comparison to the previous year at negative 0.8 per cent. Equity levels increased on 64 per cent of farms during the last 12 months due to positive EBIT.

Nine participants recorded a higher ROE than ROTA meaning they were able to grow their business in 2024-25.

Figure 7 Average returns ROTA and ROE





Business confidence

Participant farmers were more confident in their outlook for farm business returns in the coming 12 months (2025-26) than they were last year.

All participants expected milk price to either increase (45 per cent) or remain stable (55 per cent), and 64 per cent of farms are expecting milk production to increase.

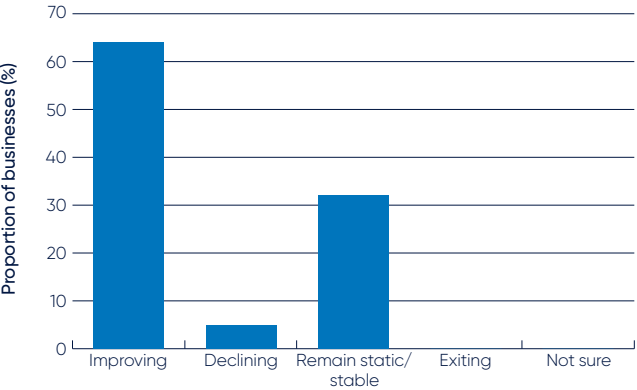
Milk price remains the major issue for the coming 12 months and five years, followed by input costs and pasture/fodder.

In 2025-26, the majority of farms are expecting costs to remain stable across all categories except labour which majority expected to increase.

Expectations for business profit 2025-26

The participant survey considers different aspects of farming, from climate outlook to expectations about market conditions for dairy products. Expectations for business profit in the coming year were more positive than last year with 64 per cent of farms expecting an increase in returns and 32 per cent expecting returns to remain stable. Only one farm is expecting returns to decrease (Figure 8).

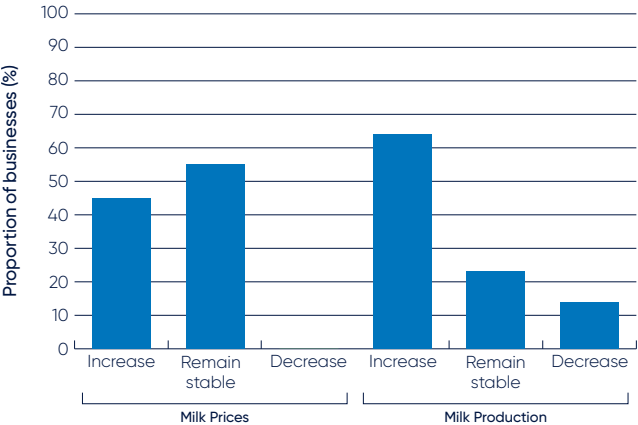
Figure 8 Expected change to farm business profit in 2025-26



Price and production expectations – milk

Majority of participants were neutral in their outlook for milk price, but positive in their milk production outlook for 2025-26. Forty-five per cent of respondents were expecting milk price to increase with the remaining 55 per cent expecting it to remain stable. Around 64 per cent were expecting milk production to increase while 23 per cent expected it to remain stable in the coming year. Fourteen per cent predicted milk production would decrease in 2025-26 which is higher than last year (Figure 9).

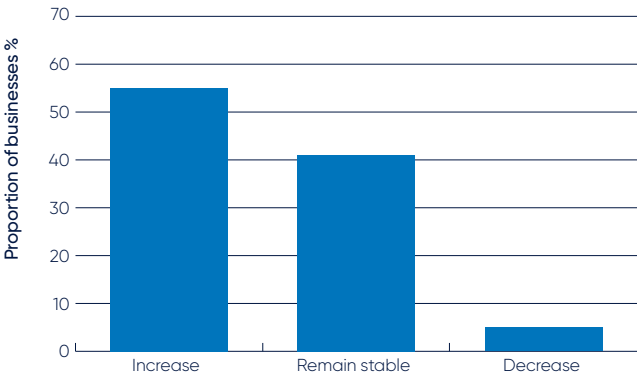
Figure 9 Producer expectations of milk prices and production in 2025-26



Production expectations – fodder

Fodder production in 2025-26 is expected to increase for 55 per cent of participant farms with a further 41 per cent expecting stable fodder production. Only 5 per cent of farms are expecting a decrease in fodder production (Figure 10).

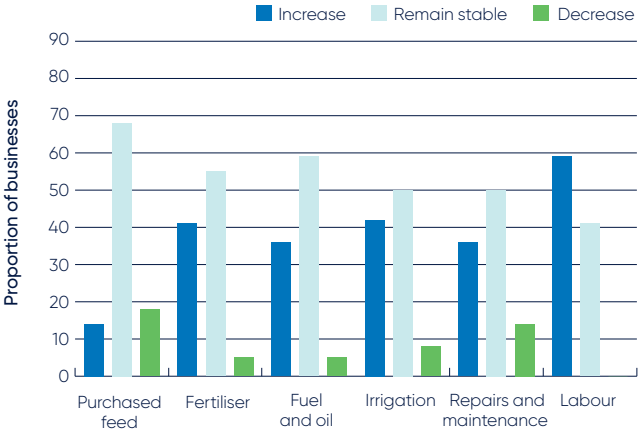
Figure 10 Producer expectations of fodder production in 2025-26



Cost expectations

In 2025-26, the majority of participants are expecting purchased feed, fertiliser, fuel and oil, irrigation and repairs and maintenance to remain stable (Figure 11). No participants expect labour costs to decrease. Eighteen per cent of participants are expecting purchased feed costs to decrease.

Figure 11 Producer expectations of costs for the dairy industry in 2025-26



Comments from participants

Respondents are hoping for at least an average rainfall during the growing season after a drier start to winter last year.

A key concern is that milk and cattle prices must rise at a rate that more than keeps pace with increasing production costs, to ensure farm businesses remain viable.

Others expressed concern about the future of dairying in Western Australia, noting the ongoing exit of dairy farmers from the industry and the potential impact this trend may have on long term sector viability.

Some farmers are looking to expand and purchase more land, but high land prices combined with rising finance costs are a challenge.

Another key concern was around continued lack of available employees. A shortage of available accommodation was again noted as being a barrier for attracting full time staff.

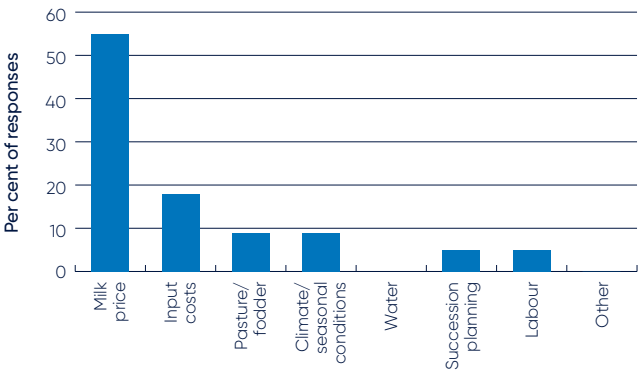
Issues of importance to dairy businesses

Participants were asked to rank issues based on the level of importance to their business – with a ranking of (1) being most important and (8) being least important. The results are shown in Figure 12 for the short-term issues and Figure 13 for medium term issues.

Short term issues – Next 12 months

The most important issue in the coming 12 months was milk price with 55 per cent of respondents ranking this as number 1. Input costs (ranked number 2 by 18 per cent of respondents) was then ahead of climate/seasonal conditions and pasture/fodder (9 per cent respectively) as being major issues.

Figure 12 Major issues for individual businesses – 12 month outlook



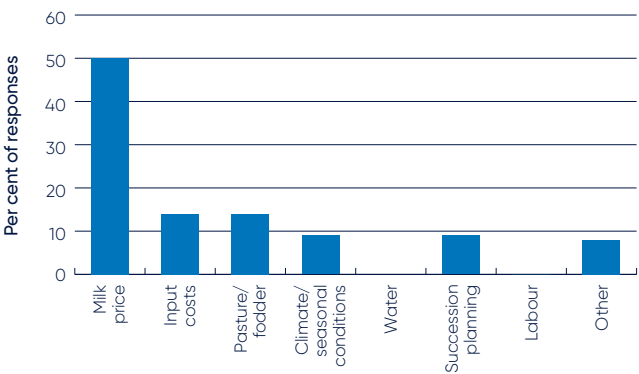
Medium to long term issues – Next five years

Milk price remains the major consideration for 50 per cent of participants farms which is higher than the 46 per cent in 2023-24, followed by input costs and pasture/fodder climate/seasonal conditions (14 per cent respectively) as considerations over the coming five years.

Succession planning has emerged as a growing issue, with concern levels rising from 5 per cent over the next 12 months to 9 per cent when looking ahead five years, highlighting its increasing importance for the long term sustainability of the dairy sector.

Nil respondents indicated labour as a major concern, which is likely due to their acceptance of where labour costs and availability sit in Western Australia due to competition from sectors such as mining over the long term.

Figure 13 Major issues for individual businesses – 5 year outlook



2024-25 Greenhouse gas emissions

The average carbon footprint for Western Australian dairy farm monitor farms was 5,315 tonnes of carbon dioxide equivalents (t CO₂-e) per farm in 2024-25.

Methane from cow rumination (enteric) accounted for 68 per cent of on-farm emissions (average).

Emissions intensity was 0.96 t CO₂-e/FPCM (Milk) which was slightly higher than the previous year.

Notes on GHG emission estimates

The greenhouse gas (GHG) emissions data presented in this project provides valuable insight for those calculating GHG emissions while also informing options for emission reduction.

Greenhouse gas emission estimates are calculated using the Australian Dairy Carbon Calculator V5.1 embedded within DairyBase. Data from all years was analysed using the same accounting framework.

Tracking an individual dairy farm's GHG emissions over time provides reliable, farm-specific data for developing strategies to reduce their carbon footprint. These estimates reflect a range of DFMP participant farm profiles and should not be taken as representative of the dairy industry.

Total emissions

In 2024-25, the average carbon footprint (net GHG emissions) for WA participants was estimated to be 5,315 t CO₂-e/farm (FIGURE 14). Prior to 2020-21 average farm GHG emissions had been trending upwards, mostly due to larger herd sizes and greater milk production per farm. Since 2020-21 there was a change in data capture including carbon sequestration in trees and in 2022-23 user defined inputs for manure management were captured rather than utilising state defaults, accounting for some of the variation in total farm emissions.

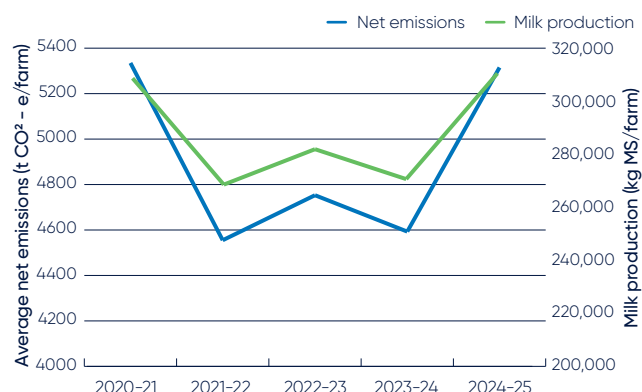
In 2024-25, there was an increase in farm emissions largely due to higher milk production from a larger average herd. There was an increase in pre-farm emissions (fertiliser manufacture, production of purchased fodder, grain and concentrates), nitrous oxide emissions (gas produced from wastes – dung/urine, applied fertiliser and effluent ponds), carbon dioxide emissions from fossil fuel consumption (electricity, petrochemicals and/or fuel from contractors).

While the use of purchased fodder, grain, and concentrates decreased, this was offset by larger herd sizes, greater milk production per farm and increased home grown feed, all of which contributed to higher overall farm emissions.

The change in data capture in 2022-23 to include an estimate for the fuel used by contractors on farm for activities such as fodder conservation and sowing has also contributed to the increase from 2021-22 to 2024-25.

Enteric methane increased on the previous year accounting for approximately 68 per cent of emissions and is sensitive to changes in livestock weights and numbers on individual farms.

Figure 14 Estimated average net farm GHG emissions and milk solid production between 2020-21 and 2024-25 (CO₂ equivalent)



Emissions intensity

The emissions intensity allocated to milk production (once meat production is considered), increased to 0.96 t CO₂-e/t FPCM from 0.94 in 2023-24 (Figure 15 and Table 1). Emissions intensity is calculated by dividing total emissions by the amount of fat and protein corrected milk (FPCM); standard of 4.0% fat and 3.3% protein. Regional and farm variation was also observed over this period.

Note

Greenhouse gas emission estimates are calculated using the **Australian Dairy Carbon Calculator** embedded within DairyBase.

Figure 15 Estimated average emissions intensity between 2020-21 and 2024-25 (CO₂ equivalent)

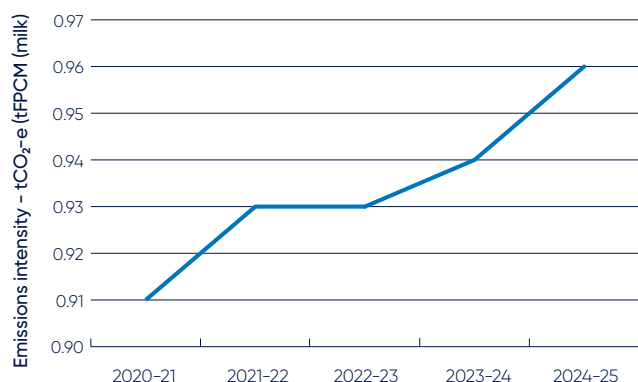


Table 1 Estimated average GHG emissions and intensity between 2020-21 and 2024-25 (CO₂ equivalent)

Emission source	Units	2020-21	2021-22	2022-23	2023-24	2024-25
Sample size		21	26	23	26	22
Methane	t CO ₂ -e/farm	3,653	3,129	3,349	3,205	3,612
Pre-farm	t CO ₂ -e/farm	635	540	558	562	681
Nitrous oxide	t CO ₂ -e/farm	736	605	612	577	697
Carbon dioxide	t CO ₂ -e/farm	312	283	347	353	434
Tree carbon	t CO ₂ -e/farm	N/A	-1	-113	-105	-109
Net GHG emissions	t CO ₂ -e/farm	5,335	4,555	4,753	4,593	5,315
Emissions intensity	t CO ₂ -e/FPCM (milk)	0.91	0.93	0.93	0.94	0.96
Emissions intensity	t CO ₂ -e/t MS (milk)	12.8	13.1	13.1	13.3	13.6
Emissions intensity	t CO ₂ -e/kg lwt (meat)	4.3	5.1	6.2	7.2	6.9

How does 2024-25 compare?

An increase in milk prices in 2024-25 and higher livestock profits improved average profitability from last year.

In 2024-25 the average Western Australian Dairy Farm Monitor profitability was the third lowest, on a \$/kg Ms basis in the 12-years of the project (accounting for inflation) despite 91 per cent of participants recording a profit.

Profit results per farm (average \$563,801) across the state, was below the 12-year long term average of \$638,856 (accounting for inflation).

Farm profit (EBIT \$/kg Ms) in 2024-25 was the third lowest (accounting for inflation) since the start of the DFMP in 2013-14 (Figure 16). Average Total EBIT was the fifth lowest at \$563,801 in 2024-25, compared to the long-term average of \$638,856. Average net farm income was \$260,149 in 2024-25, compared to the long-term average of \$415,655.

Average ROTA was 3.3 per cent in 2024-25, increasing from 2.0 per cent the previous year (Figure 17), which is the third lowest in the last 12 years. This is compared to the long-term average of 4.7 per cent.

The average ROE increased to 2.4 per cent in 2024-25 up from negative 0.8 per cent in 2023-24 (Figure 17), which is the second lowest in the 12-year history. This is compared to the long-term average of 6.8 per cent.

A higher livestock profit and increased milk price increased profitability across the state compared to last year.

This increased EBIT was sufficient to offset an increase in finance and lease costs improving net farm income to \$0.45/kg MS compared to negative \$0.12/kg MS in 2023-24.

Figure 16 Farm profitability between 2013-14 and 2024-25

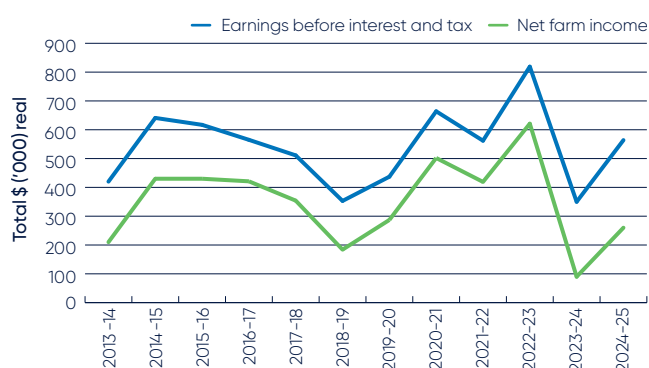
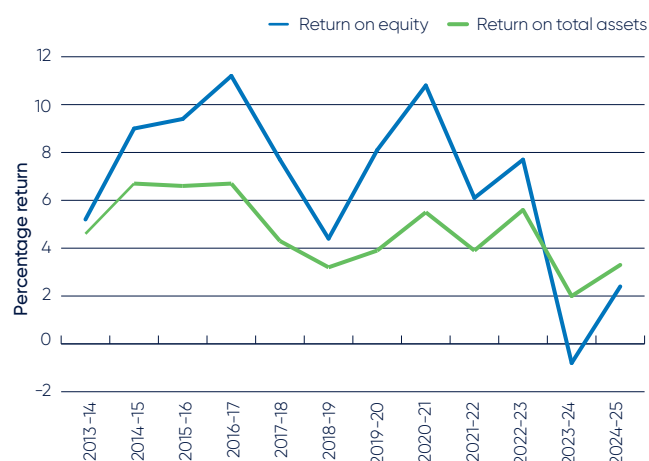


Figure 17 Whole farm performance between 2013-14 and 2024-25



Appendices



Table A6 Capital structure

Farm assets					Other farm assets (per usable hectare)				
	Land value	Land value	Permanent water value	Permanent water value	Plant and equipment	Livestock	Hay and grain	Other assets	Total assets
	\$/ha	\$/cow	\$/ha	\$/cow	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Average	13,006	17,551	438	503	1,568	2,984	117	40	18,153
Top 25%	11,039	13,050	310	255	1,149	3,153	172	69	15,892

Liabilities				Equity	
	Liabilities per usable hectare	Liabilities per milking cow	Liabilities per kgMS	Equity per usable hectare	Average equity
	\$/ha	\$/cow	\$/kgMS	\$/ha	%
Average	5,610	7,285	13.87	12,544	69
Top 25%	4,790	5,663	10.50	11,102	70

Table A7 Historical data – average farm income, costs and profit per kg of milk solids

Income					Variable costs							
Milk income net		Gross farm income			Herd costs		Shed costs		Feed costs		Total variable costs	
Year	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS
2013–14	6.62	8.74	7.75	10.23	0.24	0.32	0.26	0.34	3.29	4.35	3.79	5.01
2014–15	7.07	9.12	8.26	10.66	0.25	0.32	0.26	0.34	3.31	4.27	3.82	4.93
2015–16	7.22	9.19	8.29	10.56	0.26	0.33	0.24	0.31	3.45	4.39	3.95	5.03
2016–17	7.05	8.81	8.12	10.15	0.26	0.32	0.26	0.32	3.24	4.05	3.76	4.70
2017–18	7.00	8.59	8.16	10.02	0.26	0.31	0.27	0.33	3.52	4.32	4.05	4.97
2018–19	7.07	8.56	8.25	9.98	0.28	0.34	0.27	0.33	3.85	4.66	4.40	5.33
2019–20	7.35	8.78	8.74	10.45	0.27	0.33	0.28	0.33	3.86	4.62	4.41	5.27
2020–21	7.30	8.60	9.17	10.80	0.29	0.34	0.25	0.29	3.38	3.98	3.93	4.63
2021–22	7.72	8.71	10.02	11.30	0.33	0.37	0.31	0.35	4.14	4.67	4.79	5.40
2022–23	9.30	9.95	11.37	12.17	0.34	0.36	0.35	0.37	4.41	4.72	5.10	5.46
2023–24	9.54	9.80	10.75	11.04	0.33	0.34	0.36	0.37	5.29	5.43	5.98	6.14
2024–25	9.63	9.63	11.13	11.13	0.38	0.38	0.39	0.39	4.83	4.83	5.60	5.60
Average		9.04		10.71		0.34		0.34		4.52		5.21

Table A7 Historical data – average farm income, costs and profit per kg of milk solids (continued)

Year	Overhead costs						Profit							
	Cash overhead costs		Non-cash overhead costs		Total overhead costs		Earnings before interest and tax		Interest and lease charges		Net farm income		RoTA %	RoE %
	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS	Nominal \$/kgMS	Real \$/kgMS		
2013–14	1.50	1.98	0.86	1.14	2.36	3.11	1.59	2.10	0.65	0.85	1.01	1.33	4.2	4.2
2014–15	1.47	1.89	0.8	1.03	2.26	2.92	2.17	2.80	0.59	0.76	1.66	2.14	6.3	8.2
2015–16	1.51	1.93	0.82	1.04	2.33	2.97	2.02	2.57	0.53	0.68	1.54	1.96	6.4	9.1
2016–17	1.56	1.96	0.83	1.04	2.39	2.99	1.98	2.47	0.53	0.66	1.48	1.85	6.5	18.3
2017–18	1.53	1.87	0.52	0.64	2.57	3.16	1.54	1.89	0.53	0.65	1.01	1.24	4.3	7.7
2018–19	1.71	2.07	0.98	1.19	2.69	3.25	1.16	1.40	0.60	0.72	0.56	0.68	3.2	4.4
2019–20	1.84	2.19	1.05	1.26	2.89	3.45	1.44	1.72	0.56	0.67	0.88	1.05	3.9	8.1
2020–21	2.12	2.50	0.88	1.04	3.00	3.53	2.24	2.64	0.52	0.61	1.72	2.03	5.5	10.8
2021–22	2.16	2.44	1.23	1.39	3.39	3.82	1.84	2.08	0.54	0.61	1.30	1.47	3.9	6.1
2022–23	2.32	2.48	1.30	1.39	3.62	3.87	2.65	2.84	0.81	0.87	1.84	1.97	5.6	7.7
2023–24	2.52	2.59	1.26	1.29	3.78	3.88	0.99	1.02	1.10	1.13	-0.12	-0.12	2.0	-0.8
2024–25	2.62	2.62	1.27	1.27	3.89	3.89	1.64	1.64	1.18	1.18	0.45	0.45	3.3	2.4
Average		2.21		1.14		3.40		2.10		0.78		1.34	4.6	7.2

Note: 'Real' dollar values are the nominal values converted to 2024–25 dollar equivalents by the consumer price index (CPI) to allow for inflation. From 2016–17 Gross farm income does not include feed inventory changes and changes to the value of carry-over water. These are included in feed costs.

Table A8 Historical data – average farm physical information

Year	Total usable area	Milking area	Total water use efficiency	Number of milking cows	Milking cows	Milk sold	Milk sold	Estimated grazed pasture*	Estimated conserved feed*	Home-grown feed	Concentrate price	
	ha	ha	t DM/100mm/ha	hd	hd/ha	kg MS/cow	kg MS/ha	t DM/ha	t DM/ha	% of ME	Nominal \$/t DM	Real \$/t DM
2013–14	606	280	0.4	522	0.9	505	453	3.3	1.5	62	418	552
2014–15	625	296	0.6	543	0.9	535	486	3.6	1.7	64	421	543
2015–16	575	283	0.5	545	1.0	557	541	4.1	1.7	59	445	567
2016–17	499	268	0.6	498	1.0	558	570	5.1	1.3	63	404	505
2017–18	586	277	0.5	497	0.9	580	521	4.0	1.9	59	429	527
2018–19	579	286	0.6	497	0.9	566	515	4.2	1.6	62	488	591
2019–20	582	273	0.7	481	0.9	561	507	4.2	1.6	64	507	606
2020–21	678	312	0.6	524	0.8	569	471	4.6	1.9	69	494	582
2021–22	603	284	0.5	471	0.8	557	464	3.9	1.6	67	513	579
2022–23	628	296	0.5	490	0.8	548	456	3.6	1.8	65	532	569
2023–24	626	288	0.6	478	0.8	539	435	3.1	1.7	60	573	588
2024–25	685	290	0.5	527	0.8	553	445	3.3	2.0	62	563	563
Average	606	286	0.5	506	0.9	552	489	3.9	1.7	63		564

* Milking area



Appendix A Glossary of terms, abbreviations and standard values

All other farm income	Income to the farm from all sources except milk. Includes livestock trading profit, dividends, interest payments received, and rent from farm houses.	Feeding systems	<p>Low bail Low bail is defined by the one-tonne annual cap of grain or concentrates fed in the dairy bail – i.e. cows are fed up to one tonne of grain and concentrate in the dairy at milking time throughout lactation and livestock graze pasture all year round.</p> <p>Moderate – High bail The level of grain or concentrate fed in the bail is more significant than one tonne per annum, and livestock graze pasture all year round.</p> <p>Partial mixed ration In the partial mixed ration (PMR) system, livestock animals graze on pasture for most of the year, if not all of the year, while being fed a PMR on a feed pad.</p> <p>Hybrid system Hybrid systems are classified as grazing pasture for fewer than nine months of the year while feeding a partial mixed ration on a feed pad with grain or concentrates.</p> <p>Total mixed ration A total mixed ration or TMR is classified by zero-grazing, where cows are contained and fed a TMR throughout the year.</p>
Allocation	Water that is actually available to use or trade in any given year, including new allocations and carryover. Previously known as temporary water. Full allocation means irrigators receive 100 per cent of their HRWS.		
Allocation trade	The transfer of a volume of allocation water between a seller and buyer. Water is traded within a current irrigation season. Previously this was known as trading of temporary water entitlement and some irrigators still use this term.		
Appreciation	An increase in the value of an asset in the market, often only applicable to land value.		
Asset	Anything managed by the farm, whether it is owned or not. Assets include owned land and buildings, leased land, plant and machinery, fixtures and fittings, trading stock, farm investments (i.e., Farm Management Deposits), debtors, and cash.		
Cash overheads	All fixed costs that have a cash cost to the business. Includes all overhead costs except imputed labour costs and depreciation.	Finance costs	See interest and lease costs.
Cost structure	Variable costs as a percentage of total costs, where total costs equal variable costs plus overhead costs.	Full time equivalent (FTE)	Standardised labour unit. Equal to 2,400 hours a year. Calculated as 48 hours a week for 50 weeks a year.
Concentrates	Refers to feeds with a concentrated source of energy such as grains, pellets and other grain mixes.	Grazed pasture	Calculated using the back-calculation approach. Grazed pasture is calculated as the difference between total metabolisable energy required by livestock over the year and amount of metabolisable energy available from other sources (hay, silage, grain, and concentrates). Total metabolisable energy required by livestock is a factor of age, weight, growth rate, pregnancy, and lactation requirements, walking distance to shed, terrain and number of animals. Total metabolisable energy available is the sum of metabolisable energy from all feed sources except pasture, calculated as (weight (kg) x dry matter content (DM per cent) x metabolisable energy (MJ/ kg DM)).
Debt servicing ratio	interest and lease costs as a percentage of gross farm income.		
Depreciation	Decrease in value over time of capital asset, usually as a result of using the asset. Depreciation is a non-cash cost of the business but reduces the book value of the asset and is therefore a cost.		
Earnings before interest and tax (EBIT)	Gross income minus total variable and total overhead costs.		
Employed labour cost	Cash cost of any paid employee, including on-costs such as superannuation and Workcover.	Gross farm income	Farm income including milk sales, livestock trading and other income such as income from grants and rebates.
Equity	Total assets minus total liabilities. Equal to the total value of capital invested in the farm business by the owner/operator(s).	Gross margin	Gross farm income minus total variable costs.
Equity per cent	Total equity as a percentage of the total assets owned. The proportion of the total assets owned by the business.	Herd costs	Cost of artificial insemination (AI) and herd tests, animal health and calf rearing.
Feed costs	Cost of fertiliser, irrigation (including effluent), hay and silage making, fuel and oil, pasture improvement, fodder purchases, grain/concentrates, agistment and lease costs associated with any of the above costs, and feed inventory change.	Imputed	An estimated amount introduced into economic management analysis to allow reasonable comparisons between years and between other businesses.
Feed inventory change	An estimate of the feed on hand at the start and end of the financial year to capture feed used in the production of milk and livestock.	Imputed labour cost	An allocated allowance for the cost of owner/operator, family, and sharefarmer time in the business.

Interest and lease costs	Total interest plus total lease costs paid.
Labour cost	Cost of the labour resource on farm. Includes both imputed and employed labour costs.
Labour efficiency	FTEs per cow and per kg MS. Measures productivity of the total labour resources in the business.
Liability	Money owed to someone else, e.g., family or a financial institute such as a bank.
Livestock trading profit	An estimate of the annual contribution to gross farm income by accounting for the changes in the number and value of livestock during the year. It is calculated as the trading income from sales minus purchases, plus changes in the value and number of livestock on hand at the start and end of the year, and accounting for births and deaths.
Milk income	Income from the sale of milk. This is net of compulsory levies and charges.
Milking area	The area of land grazed by milking cows to produce milk.
Net farm income	Earnings before interest and tax (EBIT) minus interest and lease costs. The amount of profit available for capital investment, loan principal repayments and tax.
Nominal terms	Dollar values or interest rates that include an inflation component.
Number of milkers	Total number of cows milked for at least three months.
Other income	Income to the farm from other farm owned assets and farm business related external sources. Includes milk factory dividends, interest payments received, and rent from farm cottages.
Overhead costs	All fixed costs incurred by the farm business that do not vary with the level of production. These include cash overhead costs such as employed labour and non-cash costs such as imputed owner-operator labour, family labour and depreciation of plant and equipment. It excludes interest, lease costs, capital expenditure, principal repayments, drawings, and tax.
Real terms	Dollar values or interest rates that have no inflation component.
Return on equity (ROE)	Net farm income divided by the value of total equity.
Return on total assets (ROTA)	Earnings before interest and tax divided by the value of total assets under management, including owned and leased land.
Shed costs	Cost of shed power and dairy supplies such as filter socks, rubberware, vacuum pump oil etc.
Top 25%	Regional or State average for the Top 25% of participant farms ranked by return on total assets; can also be referred to as the top group, top performers within a region or the state.
Total income	See gross farm income.

Total usable area	Total hectares managed minus the area of land which is of little or no value for livestock production e.g., house and shed area.
Total water use efficiency	Homegrown feed consumed or harvested per 100mm water 'applied' (rainfall and irrigation) to the usable hectares on the farm.
Variable costs	All costs that vary with the size of production in the enterprise e.g., herd, shed and feed costs (including feed and water inventory change).
Water inventory change	An estimate of the values irrigation water on hand at the start and end of the financial year to capture water used in the production of pasture and crops.

List of abbreviations

AI	Artificial insemination
CH ₄	Methane
CO ₂	Carbon dioxide
CO ₂ -e	Carbon dioxide equivalent
CoP	Cost of production
DFMP	Dairy Farm Monitor Project
DM	Dry matter of feed stuffs
DJPR	Department of Jobs, Precincts and Resources, Victoria
EBIT	Earnings before interest and tax
FPCM	Fat and protein corrected milk
FTE	Full time equivalent
ha	Hectare(s)
hd	Head
HRWS	High Reliability Water Shares
kg	Kilograms
LRWS	Low Reliability Water Shares.
ME	Metabolisable energy (MJ/kg DM)
MJ	Megajoules of energy
ML	Megalitres
mm	Millimetres. 1mm is equivalent to 4 points or 1/25th of an inch of rainfall
MS	Milk solids (protein and fat)
N ₂ O	Nitrous oxide
Q1	First quartile, i.e., the value of which one quarter, or 25 per cent, of data in that range is less than the average
Q3	Third quartile, i.e., the value of which one quarter, or 25 per cent, of data in that range is greater than the average
ROTA	Return on total assets
ROE	Return on equity
t	Tonne = 1,000kg

Standard values

Pasture consumption

The pasture consumption calculation assumes 11 ME for homegrown feed.

Livestock values

The standard vales used to estimate the inventory values of livestock were determined by breed and liveweight. Example values for Friesians were:

Category	Opening value (\$/hd)	Closing value (\$/hd)
Mature cows (550kg)	\$2,200	\$2,200
2-year-old heifers	\$1,650	\$2,200
1-year old heifers	\$825	\$1,650
24-25 calves		\$825
Mature bulls	\$3,300	\$3,300

Imputed owner/operator and family labour

In 2024-25, the imputed owner/operator and family labour rate was \$36/hr based on a full time equivalent (FTE) working 48 hours/week for 50 weeks of the year.

Disclaimer

The content of this publication is provided for general information only and has not been prepared to address your specific circumstances. We do not guarantee the completeness, accuracy or timeliness of the information.

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